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TITLE: '*Just engage in it or not, you get out what you put in': student and staff experiences of feedback and feedforward in workplace-based learning environments*

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ABSTRACT

Feedback is central to student learning in the veterinary workplace. "Feedforward", a related concept, is used to describe the way in which information about a student's performance may be used to improve their future performance. Feedback and feedforward practices are diverse, with varied student and staff understandings of the nature and purpose of feedback ('feedback literacy'). This study compared the practices of feedback and feedforward in a range of programmes in one institution, during student transitions from the classroom to workplace-based learning environments. The study adopted a broad interprofessional approach to include Healthcare programmes as well as Social Work and Theatre and Performance Studies. Profession-specific focus groups were conducted with contribution from 28 students and 31 staff from five different professions. Thematic analysis revealed that students and staff shared an understanding of the concepts of feedback and feedforward, and both groups recognised the importance of emotional and relational aspects of the process. Students and staff across all professions recognised the impact of time constraints on the feedback process, although this was particularly highlighted in the Health Science professions. Social Work and Theatre and Performance Studies students demonstrated a more nuanced understanding of the emotional and relational aspects of feedback and feedforward. Overall, the approach highlighted similarities and differences in practices and experiences in different workplace contexts, creating opportunities for cross-disciplinary learning, which may have relevance more widely in Higher Education programmes with workplace-based elements. The study underpinned the development of the LeapForward feedback training resource https://bilt.online/the-leapforward-project/

Key words: feedback literacy; feedforward; student transitions; workplace feedback; interprofessional education

INTRODUCTION

Feedback has the potential to be a powerful part of the assessment cycle (1-4) and is highly valued by students (5). Within Higher Education (HE) settings, concepts of feedback have changed in recent years, shifting from a model in which teachers are positioned as drivers of the process to a shared model in which students have responsibility for directing their own learning through generating and soliciting their own feedback (6, 7). Feedback can be complex and challenging, particularly in the clinical workplace setting, with students and staff often varying in their understanding of the purposes and processes of feedback (8, 9). If the benefits of feedback are to be realised, developing feedback literacy (the understandings, capacities and dispositions required for effective feedback) in both staff and students is key (8, 10).

Conceptualising feedback as a dialogue between learners and teachers is considered to result in more meaningful, personalised feedback interactions (6, 11, 12). Additionally, for feedback to be effective, it needs to incorporate a plan for future development (6, 13). The use of the term "feedforward" is emerging in the educational literature (14, 15), defined as 'the application of developmental feedback from one assessment to the next, to enable sustained improvement, with the goal of a fostering a more integrated rather than piecemeal approach' (14). This is particularly relevant to feedback in workplace-based learning environments where professional and practical skills are being developed and where feedforward may encourage students to engage with the process of self-evaluation and learning and ultimately improve their performance in the workplace.

In veterinary education, alongside other healthcare and practice-based professions, workplace-based learning is integral to the curriculum. The transition from any classroom to workplace-based learning environment can be challenging (Kohn, 2015; Kramer-Simpson, 2016; Kramer-Simpson, 2018), with effective feedback integral to developing students' professional and workplace skills. Challenges relating to feedback practice, both verbal and written, in the veterinary clinical workplace have been explored (16-20) identifying constraints relating to time, workplace culture, and the dynamics of interpersonal relationships. In wider healthcare settings, the importance of student reflection and self-assessment as part of feedback have been highlighted (7, 21, 22). Beyond healthcare professions, feedback practices in higher education have been explored in, for example, performing arts courses (23), education (24, 25), and engineering design (26), demonstrating similar challenges relating to workload, varied understandings between staff and students, communication, emotions and relational aspects of feedback.

Interprofessional approaches have previously yielded useful insights into perceptions and practices of feedback (27, 28), highlighting the importance of the individual traits of the learner, the characteristics of the feedback, and the culture of learning. However, feedback, particularly during the transition to the workplace setting, remains challenging. This study aimed to identify whether staff and students in different professions (Dentistry, Medicine, Social Work, Theatre and Performance Studies and Veterinary Science) shared understandings of feedback and feedforward. It also aimed to explore staff and student experiences with current feedback practices, with the perspective that there may be much that educators and students in different professions can learn from one another about effective feedback processes.

Whilst training in feedback was available for students and staff in some of the programmes (e.g. Veterinary Science), with additional training for staff available through centrally-run University workshops, there was a perceived need for improved training for staff and students in feedback practices across the programmes. The study underpinned the development of the LeapForward (Learning for Practice: Feedforward for effective transition to the workplace) training resource, available here: https://bilt.online/the-leapforward-project/

METHOD

Selection of degree programmes

A qualitative approach was adopted using focus group discussions to explore the practices and experience of students and staff from each of five programmes at the University of Bristol: Dental Surgery (BDS), Medicine (MBChB), Social Work (MSc), Theatre and Performance Studies (BA), and Veterinary Science (BVSc). These different professions offer diverse workplace learning environments. In the three Health Science professions (Dentistry, Medicine and Veterinary Science) placements occur in clinical and/or community settings and involve both verbal and written feedback

from clinical supervisors and other clinical staff. In Social Work, work placements make up much of the two-year postgraduate programme. Theatre and Performance Studies students organise their own work experience in the vacations at any point during the three-year programme; additionally, approximately half of their taught modules are practical (and therefore workplace-based) where students make or produce work for the theatre. Across the programmes, formative feedback was provided both verbally as part of workplace learning, and in written formats as part of placement assessments.

Research Team

The interprofessional team comprised two or more academic staff from each of the five programmes. This team assisted with an initial documentary analysis, piloted focus group plans, reviewed focus group outputs and member-checked and validated data analysis outputs. A research associate, unknown to participants, conducted the focus group sessions.

Focus Group Participants

Ethical approval was obtained from the Faculty of Health Sciences Research Ethics Committee (No. 59741). Students were recruited from year groups with a recent transition to workplace learning and had experienced a variety of workplace contexts. Staff members involved in giving feedback to students in these years were invited to participate. Recruitment to focus groups was organised via the programme representatives from the project team who advertised the project to relevant student and staff groups. Individuals expressing an interest were e-mailed a project information sheet, consent form, and link to a brief on-line demographic questionnaire, before attending one of ten scheduled focus groups (separate groups for students and staff in each of the five programmes). A total of 28 students and 31 staff volunteered to participate in focus groups ranging from 4 to 8 participants. Sample size was determined and limited by the number of students and staff who agreed to participate. Recruiting students was challenging due to high levels of demands on their time and the proximity of data collection to other institutional requests for student feedback. Student participants are summarised in Table 1.

INSERT TABLE 1 HERE

Staff participants were referred to as ‘practitioners’ for the purposes of the study (encompassing the roles of clinicians in Health Science subjects, Social Work teachers, and Theatre and Performance Studies teachers: see Table 2). The composition of staff focus groups was dependent on the availability of practitioners to attend focus groups, affected by widespread geographic locations of National Health Service (NHS) placements and by high staff workloads. In Medicine, for example, practitioners were NHS consultants and clinical teaching fellows, drawn from teaching academies at different hospitals across the region.

INSERT TABLE 2 HERE

Procedures

Focus group discussions were conducted during a two-month window midway through the academic year. Project team review of current feedback practices was used to design and develop focus group question schedules. Focus group sessions ranged from 37 to 59 minutes in duration (average 49 minutes). The sessions followed a semi-structured format, beginning with the researcher explaining the remit of the session. All participants were asked what they understood by feedback and feedforward, when they had experienced these practices in the workplace, who had been involved and what their own role had been. Additionally, groups were asked what they felt helped or hindered feedback processes and what training, if any, they had received in the practice of feedback or feedforward. The researcher’s involvement was minimal other than asking standardised questions and keeping the discussions on topic.

Data analysis

Focus groups were audio recorded and transcribed verbatim. From these transcripts, an initial summary of key findings within each profession was created. Transcripts were analysed using an inductive thematic analysis approach (29). One transcript from a staff focus group was coded independently by two members of the team to develop and agree an initial coding framework. The

remaining transcripts were coded by one of the team, with the final coding framework discussed and validated by the wider project team. Additionally, an analysis of themes by profession was produced which highlighted similarities and differences between the professions.

RESULTS

Focus group data analysis identified three main themes, summarised in Figure 1: conceptual understanding of feedback (feedback literacy); practicalities of workplace feedback; and emotional and relational aspects of feedback in workplace-based learning environments. Data are presented with reference to the three main themes, supported by quotations from focus group participants.

INSERT FIGURE 1 HERE

Conceptual understanding of feedback

Students and staff appeared to share similar levels of feedback literacy in that feedback, as a term, was well understood by both groups and was generally believed to be a process of reviewing past performance:

> I think that's a big journey for all of us, well it's been a big journey for me in terms of becoming more comfortable with having that more formalised feedback, so if someone is telling you things about yourself in ways that you can act differently to become a better practitioner, and learning to just take that a lot of the time and really use it to improve your practices. [Social Work STUDENT]

> It's a process I think both of giving them some help and information to see what they've achieved, not achieved, their abilities in loads of different ways, but also a better understanding of where they need to go to. [Dentistry STAFF]

The term "feedforward" was unfamiliar to students and staff, but they were able to make 'educated guesses' which neatly articulated the concepts, believing that feedforward may encompass planning ahead and is improvement-oriented:

> In a simplistic form feedback is a discussion about something that has happened and how it went, and feedforward is the process of discussion of how to do it better next time. [Dentistry STAFF]

> Feedback is a process of not innovating, but moving forward… so I think feedback and feedforward both things, that's their aim. [Theatre and Performance Studies STUDENT]

Differing expectations of feedback between students and staff were identified in dentistry, veterinary sciences and theatre studies, highlighting a potential disconnect between what students expect or find helpful, and the priorities of staff during feedback processes:

> If we give them very specific feedback, they like that but they only think we've seen them do one thing and if we give them very generic feedback, well, that's a sweeping generalisation and they want something specific. [Veterinary STAFF]

Practicalities of workplace feedback

This study focused on the student experiences of feedback in an important transitionary phase from classroom to workplace-based learning environments. As such the workplace context played a key role in students' experiences, and their discussions revealed similarities as well as differences in feedback practices across the professions.

The most valued forms of feedback were those considered to be verbal, personalised, and contemporaneous.

> Even just a minute conversation with your supervisor at the end can make the world of a difference. [Dentistry STUDENT]

> I think really just keeping it simple, doing it close to the action that you want feedback on and ideally face to face really. I think that was the most useful for me. [Veterinary STUDENT]

> I think probably verbal feedback right at the end, we have to give the written feedback as well, but I think that's what they kind of want to know how they've done. [Dentistry STAFF]

Practitioners had a well-developed sense of what constitutes helpful feedback for students:

> Structure for me is about balance really. Don't focus on just the negatives or just the positives. Make sure there is a balance to things. [Medicine STAFF]

Students recognised the 'balance' of positive and negative feedback, with differing opinions and personal preferences being expressed. Some students wanted to receive criticism first because they believed this to be the most useful source of learning:

> Negative feedback is always more constructive than positive feedback. I always find I remember better from the mistakes I've made than from people complimenting what I have done well. [Medicine STUDENT]

Other students saw positive feedback as an important way of developing their confidence:

> It's nice to have someone making an effort to notice the positive as well because they're trying to build you up. [Medicine STUDENT]

Overall, the notion that effective feedback should be constructive in nature was supported in student discussions:

> It's easier to receive if it's in a constructive way like if they do say you did this well but going ahead do this, rather than say you did this badly and then not really giving you movement to go forward differently. [Dentistry STUDENT]

Students and staff, across all professions, recognised the impact of time constraints on the feedback process, which was particularly marked in clinical settings.

> We just need more staff to allow us to have smaller groups, higher staff to student ratio and allow us more time to give more constructive feedback, whether it's written or verbal feedback, so that we have the time to give meaningful feedback. [Dentistry STAFF]

Correspondingly, students in all three Health Sciences professions clearly recognise this constraint:

> People finish clinic at different times whereas there's still patients going on and I think that's a supervisor's priority to finish off the patients and I think sometimes somehow the sessions just don't seem to be long enough either. [Dentistry STUDENT]

Theatre and Performance Studies and Social Work teachers did not specifically comment on time constraints during focus group discussions, however during project team reviews of the data, all staff groups recognised the theme as being relevant to feedback practices in workplace-based settings.

Most of the student focus groups (four of the five professions) recognised the importance of self-reflection and discussed its meaning for them, in terms appropriate to each profession. For example, in Theatre and Performance Studies, students had been introduced to a choreography-based critical response framework (23) and in the Social Work programme a range of critical reflection models were used, such as the CORBS model (Clear, Owned, Regular, Balanced and Specific) (30). The Social Work students were highly engaged in and valued self-reflection, perhaps influenced by the ethos and values of the profession, leading to the earlier description of feedback as a 'big journey' [Social Work STUDENT].

Elsewhere, in Health Sciences, students identified a growing trend in the use of self-reflection tools and practices being introduced.

> I've noticed recently that a lot of people are having me feedback on myself. [Medicine STUDENT]

Emotional and relational aspects of feedback

Both students and staff in this study recognised the emotional aspects of feedback:

> Feedback is an emotional process and it seems like in certain formal ways of getting feedback, we remove the emotionality from the process itself, or we just undervalue it, and it's not simplistic. [Social Work STUDENT]

> When you feel that you have spent so much time and energy and emotional energy giving that written feedback, and you hope it's been taken on board and you see the end result… and they have not. It is personally wounding. [Theatre and Performance Studies STAFF]

Social Work and Theatre and Performance Studies students demonstrated a particularly good understanding of the emotional and relational aspects of the process and articulated this well in focus group discussions. Clinical practitioners seemed to be aware of the influence of group dynamics and to recognise that some students might find it difficult to engage with feedback in front of their peers:

> You have to account for the fact that you're telling somebody something in front of one of their peers and must be aware of their feelings and their reactions along the way, but most of the time what we're saying is constructive and helpful and is not a problem. [Veterinary STAFF]

Conversely if members of the student group are willing to participate in feedback dialogue, this was perceived as useful:

> What's really helpful is having a good dynamic group there that are willing to assist with giving feedback and I think that as well as that, what comes with the group dynamic is there is a willingness and environment of being open and supportive rather than critical and negative. [Medicine STAFF]

There was recognition within all professions that students have a critical role in seeking, engaging with, and using feedback; however not all students are pro-active in this regard:

> I think a lot of people miss out on feedback that they need because they're not asking for it…. so it's like being active in asking is really important as well as just taking the feedback. [Theatre and Performance Studies STUDENT]

Overall engaged, self-reflective learners were perceived to gain the most from feedback interactions feedback in workplace-based learning environments:

> It's simple really. Just engage in it or not, you get out what you put in. [Social Work STUDENT]

Other teachers and practitioners in the study articulated well the need for teachers to act as role models in the feedback process.

> I feel when I am running practical sessions particularly that there's a responsibility on me to model good practice as a form of feedback. [Theatre Studies and Performance STAFF]

DISCUSSION & CONCLUSION

The practicalities of workplace feedback are reflective of the professions involved in this study and represent a novel interprofessional insight, from both students and teachers, into workplace-based feedback experiences. The findings indicate that students and teachers across the professions shared an understanding of the concept of feedback. Across the professions, preferences for verbal, personalised, balanced and timely feedback were identified, recognising the challenges of time constraints and the importance of self-reflection. Emotional and relational aspects of feedback were recognised across all professions. The interprofessional approach highlighted similarities as well as differences in practices and experiences in the professions studied, both of which are instructive for the HE institution. For example, whilst all professions struggle with practitioners' time constraints for feedback activities, this was particularly marked in the Health Science clinical workplaces. On the other hand, Social Work and Theatre and Performance Studies students presented a particularly good understanding of the emotional and relational aspects of the process and articulated this with

clarity. In this discussion, each theme is discussed in turn, highlighting any findings with potential to influence practice within veterinary and wider workplace-based education settings.

Staff and students generally had similar understandings of the purpose of feedback, with a focus on improving future practice. The term “feedforward” was unfamiliar, but understood to incorporate future-looking, improvement-oriented aspects of feedback. The preference for verbal, in-the-moment feedback and the recognition of the value of self-reflection suggest that staff and students have a relatively holistic concept of feedback, emphasising the role of the students in seeking and using feedback, and highlighting the importance of dialogue and trust between teacher and student (7, 31-33). Despite this shared understanding, and similar to other studies (25, 34), there was still some dissent over expectations of the content of feedback interactions, particularly the balance between specific and more generalised feedback. Encouraging staff and students to embrace feedback as learner-centred dialogue, incorporating self-assessment and reflection, should further close the gap in expectations and optimise the value of feedback interactions.

Students recognised the value of verbal feedback, delivered in a direct and timely manner by experienced teachers. The value of face-to-face verbal feedback as a necessary part of the improvement process has been highlighted in other studies in healthcare workplaces (35-37) as well as more widely in higher educational settings (38, 39). The time constraints of the clinical workplace in particular are recognized (16, 19, 40) and may limit teachers’ capacity to provide meaningful written feedback or engage students in meaningful feedback discussions. The students in our focus groups valued even very brief feedback conversations, highlighting that a focus on training students and staff in simple feedback models such as reflective conversations based on “Pendleton’s rules” (41), or the agenda-led, outcomes based (ALOBA) model (42, 43), have the potential to help support both staff and students in making optimal use of the limited time available.

The two programmes where students appeared to articulate the most mature understanding of their role in feedback processes actively promoted critical reflection tools as a framework for feedback. In Theatre and Performance Studies, students had been introduced to a choreography-based critical response framework (23). In the Social Work programme a range of critical reflection models, such as the CORBS model: Clear, Owned, Regular, Balanced and Specific (30), were used as a key component of professional training. It is recognised that learners are often inaccurate in their self-assessments (44-46). However, learners must develop skills in self-assessment and self-regulation as part of feedback processes and their professional development (39, 47, 48). It may be that more explicit engagement with specific critical reflection tools could yield value more widely in health science education.

Students recognised the centrality of their role in reflection and feedback dialogue. However, they also acknowledged that engagement with opportunities was at times limited. There are many reasons why students may be reticent to engage with feedback, not least the anticipated emotional challenges (10, 18, 35, 49, 50). Overcoming the emotional challenges inherent to feedback requires that attention is paid to socio-cultural aspects of feedback, at the level of both individual relationships (with both tutors and peers) and the wider institutional culture (7, 11, 16, 17, 51, 52). It is of note that both Social Work and Theatre and Performance students articulated a more nuanced understanding of the relational and emotional aspects of feedback; it may be that the critical reflection frameworks used in social work and theatre training, in combination with professional cultures of supervision and coaching, may have contributed to this finding. The post-graduate nature of the MSc Social Work, with students having more maturity and life experience, may also have played a role (53). The value of a coaching approach, focussing on relationship-building, has been highlighted in previous comparative studies exploring medicine, music and sports (27), and promoted in healthcare education through models such as “R2C2” (22, 54, 55).

There were several limitations to the study. The focus groups were self-selected; participants were engaged and interested in concepts of feedback dialogue, and may have brought a greater degree of feedback literacy to the focus group discussions than may be more widely apparent. The interprofessional nature of the study meant that different student groups at different stages of development were represented in the focus group discussions. Student experiences of workplace feedback occurred at different stages in their programmes, and in different learning environments, which may have produced a wide range of experiences of workplace-based feedback practices. Further research could be conducted on a broader sample of homogenous student groups at similar stages of development and in similar workplace-based settings.

This study aimed to provide insights into the experiences of learners and teachers, during an important student transition from classroom to workplace. Whilst there were many similarities across the professions, differences such as the clearly articulated awareness of emotional and relational aspects in the non-clinical professions have the potential to inform future developments in feedback literacy training for staff and students within clinical and wider higher education settings. The findings from this study underpinned the development of the LeapForward (Learning for Practice: Feedforward for effective transition to the workplace) training resource (https://bilt.online/the-leapforward-project/). The LeapForward resource comprises three workshops which can be adapted for staff or students in local contexts, supported by a "toolkit" for staff which provides an overview of published approaches to feedback and feedforward.

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Programme	Student profile	No of students
BDS	Year 3 students; undertaking clinical work placements in year 3 of a 5-year programme	6
BVSc	Year 5 students; 26 weeks of off-site (non-assessed) work placements dispersed through the programme and an entirely clinical final (5th) year based in University-run clinics	8
MB ChB	Year 4 students; undertaking clinical work placements in year 4 of a 5-year programme. Their first prolonged clinical placements were in year 3.	6
MSc Social Work	Year 2 of a two-year post-graduate programme; completing final year placement (100 days in Local Authority setting)	4
BA Theatre and Performance Studies	Year 3 students; varied experience of placements throughout the programme	4
	Total	28

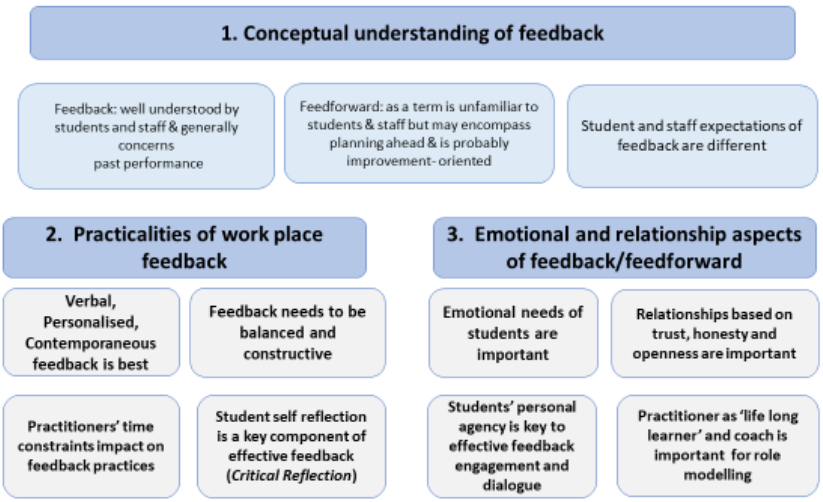
Table 1: Student recruitment profile

Programme	Staff profile	No of staff	Experience of workplace-based feedback in years *All staff*	
BDS	Clinicians involved in year 3 teaching	6		
BVSc	Clinicians involved in final year (year 5) teaching	7		
MB ChB	Clinicians involved in year 3-5 teaching and rotations	4	Up to a year	2
MSc Social Work	Teachers with experience of supervising placements	6	1 to 5 years	8
BA Theatre and Performance Studies	Teachers delivering practical sessions	8	5 to 10 years	11
			More than 10 years	10
		Total: 31		

Table 2: Staff recruitment profile

Figure Captions

Figure 1: Thematic Analysis Map (see jpeg file)



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