



Warman, S. M., Laws, E., Crowther, E., & Baillie, E. S. (2014). Initiatives to Improve Feedback Culture in the Final Year of a Veterinary Program. *Journal of Veterinary Medical Education*, 41(2), 162-171. DOI: 10.3138/jvme.1013-142R

Peer reviewed version

Link to published version (if available):
[10.3138/jvme.1013-142R](https://doi.org/10.3138/jvme.1013-142R)

[Link to publication record in Explore Bristol Research](#)
PDF-document

This is the author accepted manuscript (AAM). The final published version (version of record) is available online via UTP Journals at DOI: 10.3138/jvme.1013-142R. Please refer to any applicable terms of use of the publisher.

University of Bristol - Explore Bristol Research

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available:
<http://www.bristol.ac.uk/pure/about/ebr-terms.html>

“Improving feedback culture” initiatives in the final year of a veterinary programme

Sheena M Warman, Emma Laws, Emma Crowther, Sarah Baillie

School of Clinical Veterinary Science, University of Bristol, Langford House, Langford, Bristol BS40
5DU, UK

Abstract

Despite the recognised importance of feedback in education, student satisfaction with the feedback process in medical and veterinary programmes is often disappointing. We undertook various initiatives to try to improve the “feedback culture” in the final clinical year of our veterinary programme, focussing on formative verbal feedback. The initiatives included emailed guidelines to staff and students, a faculty development workshop, and a reflective portfolio task for students. Following these initiatives, staff and students were surveyed regarding their perceptions of formative feedback in clinical rotations, and focus groups were held to explore issues further. The amount of feedback appeared to have increased, along with improved recognition of feedback by students and increased staff confidence and competence in the process. Other themes that emerged included inconsistencies in feedback amongst staff and between rotations, difficulties with giving verbal feedback to students particularly when it relates to professionalism, the consequences of feedback for both staff and students, changes and challenges in students’ feedback-seeking behaviour, and the difficulties in providing accurate, personal end-of-rotation assessments. This project has helped improve the feedback culture within our clinics; the importance of sustaining and developing this further is discussed.

Keywords: Feedback, veterinary education, clinical workplace, faculty development

Introduction

Feedback is an essential and powerful influence on learning, and has been defined as “a process whereby learners obtain information about their work in order to appreciate the similarities and differences between the appropriate standards for any given work, and the qualities for the work itself, in order to generate improved work”^[1]. In recent years, there has been a shift in emphasis from the perception that feedback is a unidirectional, teacher driven process to that of a feedback dialogue between trainer and trainee ^[2-6]. However its effectiveness is dependent on the type of feedback and the way in which it is delivered ^[4, 7-10].

It is widely reported within the medical education literature that student satisfaction with the feedback process is suboptimal. This is supported by the results of the National Student Survey (NSS; available at <http://www.thestudentsurvey.com/>) where final year students at universities in the United Kingdom are asked to comment on their experiences across a range of categories, via a 5-point Likert scale. The results are used to inform national league tables. One of the categories relates to feedback and assessment, and veterinary and medical programmes usually score poorly on questions relating to feedback compared to other courses ^[11, 12].

There are many possible reasons for poor student satisfaction with feedback, including lack of recognition of verbal feedback by students, and lack of staff time, motivation and skill in giving feedback ^[13-16]. Additionally, students entering veterinary courses are typically high achievers with ambitious expectations of themselves and others, and who may have been used to receiving high levels of attention whilst at school ^[12]. Various initiatives for improving the feedback experience in the clinical workplace have been described, including faculty development initiatives ^[13, 17] and training of students in the feedback process ^[18-20]. Additionally, the importance of a culture of feedback within the workplace is paramount ^[4, 21-23].

The aims of this project were to evaluate the impact of “Improving Feedback” initiatives introduced to staff and students in the final clinical year of the veterinary programme at the University of Bristol, and to further understand staff and student perceptions of formative verbal feedback in the clinical environment. Ethical approval for the study was sought and received from the University of Bristol Faculty of Medical and Veterinary Sciences Research Ethics Committee (Study ID 942).

Methods

Initiatives to improve feedback

Students undertook the first six weeks of their final year clinical rotations in May/June 2012. This was followed by a 14 week summer vacation before rotations recommenced in October, and continued until mid-March 2013 (immediately prior to the Easter vacation). During the autumn of 2012 (i.e. approximately mid-way through the rotation year), 3 different initiatives were delivered.

A one page document titled “Suggestions for seeking and providing feedback in the clinic environment” was circulated by email to all staff and clinical students in October 2012. This document introduced the collegiate culture of approachability and accessibility, and outlined the importance and advantages of informal, verbal feedback. It encouraged students to take personal responsibility for maximising their learning in rotations, and gave students tips for seeking feedback from staff (e.g. asking open questions following a procedure to elicit a more detailed response). It also offered advice to staff on giving feedback, for example using the positive critique approach of asking the students what they thought they did well, and then asking what they thought they needed to work on. This document has been revised since this study was undertaken and is available from the authors on request.

Secondly, a workshop on “Formative assessment – how to give constructive feedback to students” was delivered as part of Bristol Veterinary School’s “Teaching and Learning” workshop series for clinical staff. Three separate opportunities were available to attend the workshop (two evenings and

one lunchtime in November/December 2012); attendance was supported and strongly encouraged by senior management and in total 61 of 87 clinical staff took part. The workshop included taught elements and group work covering the importance and consequences of formative feedback, barriers to giving effective feedback in the clinic, and tips for giving effective feedback.

Finally, a task relating to feedback in clinics was introduced within the students' Final Year Professional Studies reflective portfolio. Students were asked to reflect on both verbal and written feedback received during a recent rotation, and describe what actions they had subsequently taken to further improve their skills. Portfolios were required to be completed by early March 2013. For reasons of confidentiality, these portfolios were not available to the authors for analysis.

Data collection: Survey

In order to evaluate the effect of these initiatives, two surveys (one for students and one for staff) were developed using web-based software (Bristol Online Surveys; <http://www.survey.bris.ac.uk/>). These were circulated to all clinical staff (n=87) and final year students (n=99) via an email link in early March 2013, i.e. several months following the introduction of the initiatives. A draw for a gift voucher was offered as an incentive to participate. Two email reminders were sent. Participants were invited to give their email address in order to be eligible for the prize draw, but this information was removed prior to data analysis to maintain anonymity. The staff survey collected demographic data regarding gender, role (intern/resident, staff veterinarian, nurse or other), and age. The student survey collected data regarding gender and level of study (undergraduate, completed an intercalated BSc, or post-graduate). Both staff and students were asked about the frequency of formative verbal feedback they had given/received pre and post interventions. Staff were asked to rate their competence at giving feedback before and after the initiatives as unconsciously incompetent, consciously incompetent, consciously competent, or unconsciously competent ^[24], a concept that had been introduced in the workshop.

Respondents were asked to rank the strength of their agreement with various statements (Table 1) using a 5-point Likert scale (Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree). Staff were asked whether they felt more confident giving verbal feedback than they did prior to the initiatives, and whether becoming more engaged with the feedback process had improved their ability to assess students in rotations. Students were asked whether they were more aware of when they were being given formative verbal feedback than they had been a few months ago. All respondents (staff and students) were asked questions regarding whether they thought that staff were making more of an effort to give verbal feedback, whether staff had difficulty finding time to give feedback, whether students had become more proactive in seeking feedback, and whether giving formative verbal feedback resulted in a perceived improvement in students' skills. Respondents were also asked to rank the usefulness of any of the initiatives they had seen/attended. There was also a free-text question asking for any other comments relating to the way formative feedback is given in clinical rotations.

Data collection: Focus Groups

Staff and students who had completed the survey and included their email address were invited to attend a focus group facilitated by one of the investigators (EC). The focus groups explored the issues identified in the surveys around giving and receiving formative feedback in clinics. Staff were asked what had contributed to the changes in the quantity of feedback, the quality of feedback, the skills and attributes they give feedback on, the sustainability and consequences of the improvements, and the subsequent accuracy of written feedback. Students were asked about the changes in provision of feedback, the effect of feedback, the role of students in seeking feedback, their awareness of feedback, accuracy of feedback, the role of veterinarians and nurses in providing feedback, and the reflective portfolio task. All participants gave informed consent for anonymous inclusion of their data in the project.

Data analysis

Results from the survey were analysed using SPSS Statistics Version 19. Between group comparisons were made using the Mann-Whitney U (MWU) test for ordinal data from two unrelated samples (staff and student), and the Wilcoxon signed rank (WSR) test for ordinal data from two related samples (pre and post the initiatives).

Transcriptions from the focus groups were coded independently by two researchers (SW and EC) using NVivo10. The codes were subsequently discussed and a consensus agreed; from these data common themes were identified.

Results

Survey results

Demographics

The survey response rate was 42% for students and 38% for staff. Of the thirty three members of staff who responded, 26 were female and 7 male; of the 39 students, 33 were female and 6 male.

The staff group comprised 13 staff veterinarians, 11 interns/residents, 7 veterinary nurses/technicians, and 2 other clinical teaching staff. The age distribution of staff respondents was 20-29 years (n=13), 30-39 years (n=14), 40-49 years (n=4), and 50-59 years (n=2).

Frequency of feedback (Figure 1)

Prior to the initiatives, staff reported giving feedback more frequently than students reported receiving it (MWU test, $P=0.044$). Both staff and students perceived a significant increase in the frequency of feedback given/received following the initiatives (WSR test, staff $P=0.002$; students $P=0.000$); following the initiatives there was no significant difference between staff and students' perception of the frequency of feedback (MWU test, $P=0.243$).

Staff perceptions of competence (Figure 2)

There was a significant improvement in staff members' perception of their competence in giving verbal feedback following the initiatives (WSR test, $P=0.000$).

Attitudes to feedback (Table 1)

Results of the questions relating to attitudes to feedback are shown in Table 1. Staff reported increased confidence in giving feedback following the initiatives. Students were more aware of when they were being given feedback. Both veterinarians and nurses reported making an effort to give more feedback; students only recognised this increased effort in relation to veterinarians but not to veterinary nurses ($P=0.001$). Neither staff nor students perceived time as a major limitation to giving verbal feedback. Staff did not perceive a major increase in students requesting feedback; the response from students was bimodal with a minority of students reporting that they had become more proactive in seeking feedback. Staff felt better able to assess students' performance following the initiatives, and both staff and students agreed that formative feedback helps improve students' skills.

Usefulness of specific initiatives (Figure 3)

Twenty-four (73%) of staff respondents and 23 (59%) of student respondents had read the emailed guidelines; 88% and 74% respectively found them to be useful. Of the 26 staff completing the survey who had attended the workshop, 96% found it useful. All students had completed the portfolio task; 26% found it useful.

Free text responses

Only two members of staff made additional comments when prompted; these related to signposting of feedback and lack of confidence in giving feedback on anything other than clinical skills. Eleven students made comments including a desire for more individual feedback, concerns over perceived inaccuracies in written feedback, lack of consistency between staff members in the amount of feedback given, and the importance of constructive feedback.

Focus group results

The student focus group was attended by 7 students (2 male; 5 female); the staff focus group was attended by 4 female veterinarians, all from different clinical rotations.

This section outlines the six common themes which were identified following coding of the focus groups. Themes are illustrated with representative quotes. These themes relate to:

- Increased awareness and signposting of verbal feedback
- Inconsistencies in provision of feedback
- Difficulties with giving feedback
- Consequences of giving/receiving feedback
- Students' feedback-seeking behaviour
- Challenges of achieving accuracy with formal written feedback

Additionally there was specific discussion of the reflective portfolio in the student group.

Increased awareness and signposting of verbal feedback

Staff were aware that they were making an effort to give more feedback to students, and in particular to signpost it. This was also reflected in the students' comments; however some students perceived that in some instances staff were inappropriately signposting interactions and conversations which were not perceived by students to truly represent feedback. Both staff and students commented on the importance of staff being in the habit of giving feedback. There were some suggestions for further increasing the feedback culture; some staff are good at speaking to students individually at the start of the rotation to ascertain individual learning aims; however the students did appreciate that this was a significant time commitment.

“There was more of it, staff were far more keen to point out that that's what they were doing. “

(student)

“I see feedback as one to one rather than it just being general interaction, which is what some clinicians seem to think it is.” (student)

“I think we do need to be more aware of doing it and raise our game as a culture thing” (staff)

Inconsistencies in provision of feedback

Students reported marked variation between the amount and quality of feedback amongst different clinical rotations, and different members of staff. Staff highlighted the importance of training, and valued the experience that the workshop had given them.

“Until I had that [the workshop], I was doing it [feedback] but I wasn’t doing it in maybe the way that is best. So I think you need to be educating the people who are expected to be clinical teachers but have absolutely no previous experience” (staff)

When asked specifically about feedback from nurses, it was apparent that the students perceived a wide range of engagement with feedback and teaching; the “ones who do it do it well” and nurses “often have the better tips”.

Difficulties with giving verbal feedback

Staff reported concerns regarding the challenges of giving negative feedback to students, particularly when it related to matters of professional behaviour rather than practical skills or academic knowledge; they found it particularly difficult to give feedback to students who appeared disengaged. There was anticipation that an improved culture of feedback, and habituation with

receiving positive and negative feedback on all aspects of performance, would make this process easier for both staff and students in the future.

“With knowledge you can say ‘you know what, you graduate soon so maybe you should look something up’, but it’s much harder to change the behaviour patterns of a lifetime.” (staff)

Consequences of giving/receiving feedback

Students valued constructive criticism as it helped them focus on areas needing improvement; staff appreciated when students proactively sought follow-up discussions on specific suggestions for improvement. Students also particularly valued individualised verbal feedback from a senior clinician part way through a rotation, which provided an opportunity to improve performance prior to the final grade. Whilst initially these sessions could feel awkward, students commented that increased familiarity with an improved feedback culture would enhance the process: “if it’s a matter of protocol then you don’t feel like you’re being accosted when it does happen”. Staff perceived advantages in improved working relations with individual students, and enhancement of their ability to provide written feedback at the end of rotations.

“It gives you something to work towards, so if they've said 'that was good but you could have done this better next time' then you know what to do next time, whereas the clinicians who just go 'oh well that was good', that doesn't help because we all know we've all got stuff to learn and it's helpful to tell us what we need to do better” (student)

“It makes it easier when you go and do the written stuff that you’re required to do I guess because you’ve thought about it a bit more during the week.” (staff)

The students did not generally find the reflective task helpful; whilst one student commented that it “made you think about it [aspects of feedback]”, most felt that they already reflect on feedback, and that the task was not a good use of time.

Students’ feedback-seeking behaviour

Some students felt that it was difficult to ask staff for specific feedback for a variety of reasons, whether seeking positive or negative feedback. Some students felt intimidated, embarrassed, or worried about seeming “annoying”, and did not want to highlight deficiencies in their knowledge. Others were embarrassed to ask for feedback when they thought they had done well. However, both staff and students felt that students needed to be proactive if wanting additional feedback.

“I think some people might be a bit afraid to ask for feedback if they think that it's going to highlight something they've done poorly.” (student)

“But I would like them to take more of the responsibility for their learning and then ask me for my comments rather than me just presuming that I’ve said enough.” (staff)

Challenges of achieving accuracy with formal written feedback

Although the purpose of the focus groups was to discuss formative verbal feedback, both staff and students also mentioned the formal written feedback that students receive at the end of each rotation. Discussions highlighted students’ concerns over impersonal and occasionally inaccurate comments in some rotations, and staff highlighted difficulties in writing quality, personal feedback for each student. Strategies suggested to facilitate accurate written feedback included students wearing name badges and submitting log sheets, and staff keeping a notebook of student activity

and performance. There was an overall sense that the improved feedback culture (and a planned restructure of written assessment) would facilitate the process.

Study limitations

The feedback initiatives were developed and implemented in a short time-frame in response to an academic need; the decision to evaluate their effectiveness and further explore the culture of feedback was made retrospectively. The one-group post-test design of the surveys was not ideal, in that it cannot be certain that any improvement is attributable to the interventions specifically, rather than to competing factors such as maturation of students within the clinical environment ^[25]. It is also likely that there was some response bias both in terms of survey respondents and volunteers for focus groups; in particular staff with a particular interest in teaching could be considered more likely to respond.

Discussion

This study is the first to indicate the potential impact and benefits of easily implemented initiatives to improve the feedback culture in the final clinical year of a veterinary programme, and yields valuable information regarding both staff and student perceptions of the issues and challenges surrounding feedback. Whilst we acknowledge the limitations related to study design, it is of interest that Bristol Veterinary School's NSS results for Feedback and Assessment in 2013 indicated 64% satisfaction, compared to 51% in 2012 (statistically significant with a one-tailed test with a 95% confidence interval)

(<http://www.bristol.ac.uk/esu/ug/nss/safe/nss/nssresults/publishedresults.html>).

Medical workplaces often lack a culture of feedback, which may be a result of the focus on patient care, practical limitations relating to time and space, and the traditional hierarchical approach to

teaching which can restrict dialogue around feedback ^[4, 20, 22]. Veterinary students in the early years of the curriculum expect at least the same amount of feedback as they received as high-achieving individuals at school ^[12]. The interventions (and potentially the study itself) helped generate discussion amongst staff and students of the importance of feedback, raising its profile as an essential skill and enhancing the competence and confidence of staff to engage in formative feedback. Verbal feedback, given in a constructive manner, encourages a “feedback dialogue”, enhancing a collaborative approach to learning between student and teacher ^[5, 26].

The role of faculty development in enhancing a culture of feedback has been highlighted ^[13, 17]. However staff training alone may be inadequate to deliver significant improvement unless it is embedded in a culture that facilitates the process, and rewards staff for teaching ^[4, 9, 21, 27]. The current study preceded significant changes to the structure and assessment processes of our final year which encourage more active engagement with formative feedback from both staff and students. For example our end-of-rotation assessment forms now have more emphasis on constructive feedback; staff report that increased verbal feedback during the week helps them construct specific, personalised written feedback and this requirement helps drive the feedback process. Additionally, our school gives the students opportunities to vote for several staff prizes to reward excellence in teaching.

A difference between staff and student perceptions of the amount of feedback given/received has been reported in previous studies ^[6, 14]. One effect of our interventions appeared to be to converge staff and student perceptions of the amount of feedback being given. Two factors are likely to have been responsible for this, namely increased signposting of feedback by staff, and increased awareness of what constitutes feedback by students ^[19]. Our findings differ from those in another study ^[13] where clinical supervisors were more likely to consider themselves to be successful adopters of new feedback strategies than were their trainees.

Giving verbal, face-to-face feedback is associated with specific challenges. Although it might be expected that time implications prevent verbal feedback, this was not perceived to be a significant issue by either staff or students. In line with other studies, students valued individual, personal feedback given in a timely manner, and both positive and negative feedback was perceived to be useful ^[12, 22]. Our students found it easier to seek constructive criticism than praise. Staff found it easier to give positive than negative feedback and found it particularly challenging to comment negatively on non-cognitive competencies, or criticise students whom they didn't believe have the potential to improve. Similar findings have been reported previously ^[28], and can result in an overemphasis on positive comments. This is particularly challenging in clinical rotations when staff and students may work together for only a few days, and there is little opportunity for a longitudinal staff-student mentoring relationship to develop ^[23]. Since this study, we have instituted mechanisms to improve our ability to identify students with repeated borderline performance, and can intervene with support and remediation at an appropriate time. The study identified a need for further training of staff in engaging in discussion with students around issues relating to professional behaviour; it can be anticipated that an improved culture of feedback within the community will make it easier for both staff and students to expect and engage in such a dialogue. Additionally, we plan to run workshops led by a clinical psychologist to help staff understand students' responses to criticism.

Student receptivity and responsiveness to feedback is a complex process, affected by various factors, in particular whether they believe the feedback to be credible, their motivations and emotional state ^[6, 29-31]. Our students highlighted the variation in the feedback received from different members of staff; credibility is enhanced when feedback is given by a respected clinician, who has directly observed the task, and who seems genuinely interested in the student as an individual ^[2, 22, 31, 32]. Senior students can be expected to value constructive criticism ^[15]; at this stage of training they are motivated not only by the need to pass examinations, but also the looming prospect of employment and the need to develop clinical competences, and most students reflect appropriately on negative feedback to improve their performance. Whilst students in our study were generally receptive to

negative feedback, some students, particularly those with lower self-regulating learning skills, can be negatively impacted by what is perceived as criticism; these students may actively avoid seeking further feedback, or make “excuses” for suboptimal performance ^[2, 30]. Assessment-motivated, competitive students may avoid seeking feedback due to a fear of highlighting deficiencies in competences ^[2, 12]. Again, developing a culture of feedback with skilled staff, along with robust support networks, can help overcome these problems.

It is important that health professionals seek feedback and accept responsibility for their own development ^[4, 27, 32], and this was supported by both students and staff in the current study.

Veterinary students are more likely to seek feedback if they feel part of the clinical team ^[31]. Whilst there is evidence that students can be trained to take a more active role in soliciting feedback ^[20], it is likely that the increase in feedback-seeking behaviour, whilst potentially impacted by the initiatives and improvement in feedback culture, may also have been a reflection on students’ maturation and increased experiences within the clinics over the course of the final year. Few of the students found the portfolio task to be useful; this may be due to pre-existing confidence in seeking and reflecting on feedback in the majority of senior students. There had also been considerable technical problems with the completion and submission of the online portfolio, which had been rolled out over the previous two years. This meant that there was a disproportionate level of resentment of the portfolios in general amongst this cohort of students, which makes it difficult to be sure how much our results were affected by technical frustrations. We have modified this task for the following cohort of students, and will continue to work with the professional studies team to determine issues more precisely, and tailor the task to the needs of students.

The initiatives and the study itself raised awareness of the importance of feedback within both staff and student populations. However, there is little doubt that there will be ongoing challenges in sustaining and furthering the improvement in the feedback culture within our clinics. The evaluation and resulting action plan for the current initiatives are summarised in Figure 4. The concept of

feedback as a dialogue, rather than a teacher-led interaction, needs to be promoted even more effectively and we are reviewing the content of our workshops to address this. These workshops continue to be run twice a year for new and existing staff, and the emailed advice is reviewed and circulated annually (and to new staff). Following identification of additional training needs and in collaboration with a clinical psychologist, we have also started a series of workshops discussing techniques for “Difficult Conversations” with students, with an emphasis on addressing problems relating to professionalism. It is apparent that students appreciate individual verbal feedback sessions with senior clinicians in addition to the routine patient-side interactions with staff, but with larger student cohorts taught in busy clinics this will continue to be a challenge for even the most motivated individuals.

We are developing training tools for students to be introduced in our “Classroom to clinic” module before the students start their clinical rotations, to support them in the feedback dialogue. We also need to emphasise the importance of the feedback dialogue in developing students’ self-evaluation skills^[33, 34]; students will be supported to self-assess their own clinical skills during student-selected rotations (“track” and “elective”) in the second part of their final year. Evaluation of our feedback culture is ongoing through online student surveys at a local level, as well as future NSS results.

Conclusion

The value of feedback in clinical settings is undisputed. We have established robust, practical training resources which are sustainable and can feed into an annual cycle of staff development, with continued evaluation and an annual benchmark via the NSS. In the era of increasing student fees, league tables and high student expectations, improving students’ (and staff) satisfaction with the feedback process is paramount. The limitations of this study notwithstanding, our initiatives appear to have enhanced the culture of feedback within the clinics. We have adapted our formal assessment procedures to reflect this, and both staff and students now expect to be involved in a feedback dialogue on a daily basis. Despite an increasing caseload, feedback has been prioritised by

an increased number of clinical staff who feel more confident in their feedback skills. This can only be a positive development, and one that we will continue to build on in the future.

Acknowledgements

The authors thank the staff and students involved in the project.

Author information

Sheena M. Warman BSc BVMS DSAM DipECVIM-CA FHEA MRCVS is Senior Clinical Fellow in Small Animal Medicine and Year 5 Lead at the School of Clinical Veterinary Sciences, University of Bristol, Langford House, Langford, Bristol, BS40 5DU, United Kingdom. E-mail:

sheena.warman@bristol.ac.uk. Her educational interests include faculty development, the role of tracking in veterinary education, workplace-based learning, and assessment.

Emma Laws: Emma J. Laws BSc BVSc (Hons) MRCVS recently graduated from the University of Bristol, where she did her elective in canine medicine, and is currently working in a first opinion hospital in Wiltshire. Email: emmalaws2@gmail.com. Her educational interests include the development of clinical skills labs and workplace-based learning

Emma Crowther, BVSc, MRCVS is a research assistant in veterinary education at the School of Veterinary Sciences, University of Bristol, Langford House, Langford, Bristol, BS40 5DU, United Kingdom. E-mail: Emma.Crowther@bristol.ac.uk. Her interests include the transition to practice, student support and clinical skills.

Sarah Baillie, BVSc, PhD, MRCVS, is Chair in Veterinary Education, School of Clinical Veterinary Sciences, University of Bristol Veterinary School, Langford House, Langford, Bristol, BS40 5DU, United Kingdom. E-mail: Sarah.Baillie@bristol.ac.uk. Her interests include curriculum development, clinical skills and simulation, professionalism, and the transition into practice.

Table 1 Responses to survey questions Modal responses are in bold. P values are given where similar questions were asked to both groups and represent differences in opinions between staff and students (Mann Whitney U test).

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	
I feel more confident giving verbal feedback to students than I did before the initiatives	Staff	9	61	24	6	0	
Becoming more engaged with the feedback process has improved my ability to assess students' performance in rotations	Staff	0	45	39	15	0	
I am now more aware of when I am being given formative verbal feedback than I was a few months ago	Students	13	46	28	13	0	
I am making a conscious effort to give students more formative verbal feedback during rotations	Staff (vets)	17	71	8	4	0	P=0.323
Clinicians seem to be making more of an effort to give formative verbal feedback in recent months	Students	10	69	15	5	0	
I am making a conscious effort to give students more formative verbal feedback during rotations	Staff (nurses)	14	86	0	0	0	P=0.001
Nurses seem to be making more of an effort to give formative verbal feedback in recent months	Students	3	26	46	21	5	
I still find it difficult to find the time to give any formative verbal feedback to students	Staff	3	27	33	33	3	P=0.299
Staff seem to find it difficult to find the time to give any feedback at all to students	Students	8	23	18	44	8	
Students have become more proactive in asking for feedback in recent months	Staff	0	6	36	58	0	P=0.074
I have become more proactive in asking for feedback in recent months	Students	3	31	21	46	0	
Giving formative verbal feedback results in direct improvement in students' skills	Staff	0	61	39	0	0	P=0.111
Formative verbal feedback has directly helped me to improve my skills	Students	13	59	28	0	0	

Figure Captions

Figure 1 Frequency of formative verbal feedback given/received pre and post interventions. Data are presented as % of respondents.

Figure 2 Staff perceptions of their own competence in giving feedback, pre and post interventions. Data are presented as % of respondents.

Figure 3 Perceived usefulness of specific initiatives, in response to the question “Please rate how useful you found the following initiatives”. Data are presented as % of respondents who saw/attended the initiative.

Figure 4 Summary of feedback initiatives and evaluations

References

- 1 Boud D, Molloy E. What is the problem with feedback? In Boud D and Molloy E, eds. *Feedback in Higher and Professional Education: Understanding it and doing it well*. Abingdon: Routledge, 2013:1-10.
- 2 Molloy E, Boud D. Seeking a different angle on feedback in clinical education: the learner as seeker, judge and user of performance information. *Medical Education* 47(3): 227-229, 2013.
- 3 Price M, Rust C, O'Donovan B, Handley K. *Assessment Literacy: the foundation for improving student learning*. Oxford: The Oxford Centre for Staff and Learning Development, 2012.
- 4 Archer JC. State of the science in health professional education: effective feedback. *Medical Education* 44(1): 101-8, 2010.
- 5 Ajjawi R. Going beyond 'received and understood' as a way of conceptualising feedback. *Medical Education* 46(10): 1018-1019, 2012.
- 6 Murdoch-Eaton D. Feedback: the complexity of self-perception and the transition from 'transmit' to 'received and understood'. *Medical Education* 46(6): 538-40, 2012.
- 7 Hattie J, Timperley H. The power of feedback. *Review of Educational Research* 77(1): 81-112, 2007.

- 8 Veloski J, Boex JR, Grasberger MJ, Evans A, Wolfson DB. Systematic review of the literature on assessment, feedback and physicians' clinical performance: BEME Guide No. 7. *Medical Teacher* 28(2): 117-28, 2006.
- 9 Norcini J. The power of feedback. *Medical Education* 44(1): 16-17, 2010.
- 10 Shute VJ. Focus on formative feedback. *Review of Educational Research* 78(1): 153-189, 2008.
- 11 Anderson L. NSS Report: Medicine and Dentistry. Accessed 17th August 2013. 2012.
- 12 Hughes KJ, McCune V, Rhind SM. Academic feedback in veterinary medicine: a comparison of school leaver and graduate entry cohorts. *Assessment & Evaluation in Higher Education* 38(2): 167-182, 2013.
- 13 Jippes E, Steinert Y, Pols J, Achterkamp MC, van Engelen JML, Brand PLP. How Do Social Networks and Faculty Development Courses Affect Clinical Supervisors' Adoption of a Medical Education Innovation? An Exploratory Study. *Academic Medicine* 88(3): 398-404, 2013.
- 14 Liberman AS, Liberman M, Steinert Y, McLeod P, Meterissian S. Surgery residents and attending surgeons have different perceptions of feedback. *Medical Teacher* 27(5): 470-472, 2005.

- 15 Murdoch-Eaton D, Sargeant J. Maturational differences in undergraduate medical students' perceptions about feedback. *Medical Education* 46(7): 711-21, 2012.
- 16 Cantillon P, Sargeant J. Giving feedback in clinical settings. *BMJ* 337: a1961, 2008.
- 17 Steinert Y, Mann K, Centeno A, Dolmans D, Spencer J, Gelula M, Prideaux D. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Medical Teacher* 28(6): 497-526, 2006.
- 18 Crommelinck M, Anseel F. Understanding and encouraging feedback-seeking behaviour: a literature review. *Medical Education* 47(3): 232-241, 2013.
- 19 Rogers DA, Boehler ML, Schwind CJ, Meier AH, Wall JCH, Brenner MJ. Engaging medical students in the feedback process. *American Journal of Surgery* 203(1): 21-25, 2012.
- 20 Milan FB, Dyche L, Fletcher J. "How am I doing?" Teaching medical students to elicit feedback during their clerkships. *Medical Teacher* 33(11): 904-910, 2011.
- 21 Hauer KE, Kogan JR. Realising the potential value of feedback. *Medical Education* 46(2): 140-142, 2012.

- 22 Watling C, Driessen E, van der Vleuten CP, Vanstone M, Lingard L. Beyond individualism: professional culture and its influence on feedback. *Medical Education* 47(6): 585-94, 2013.
- 23 Bates J, Konkin J, Suddards C, Dobson S, Pratt D. Student perceptions of assessment and feedback in longitudinal integrated clerkships. *Medical Education* 47(4): 362-374, 2013.
- 24 Adams L. <http://www.gordontraining.com/free-workplace-articles/learning-a-new-skill-is-easier-said-than-done/>. Accessed 15th August 2013. Gordon Training International, 2011.
- 25 Norman G, Eva KW. *Quantitative research methods in medical education*. Chichester: Wiley-Blackwell, 2012.
- 26 Rhind SM, Pettigrew GW, Spiller J, Pearson GT. Experiences with Audio Feedback in a Veterinary Curriculum. *Journal of Veterinary Medical Education* 40(1): 12-18, 2013.
- 27 Pelgrim EAM, Kramer AWM, Mokkink HGA, van der Vleuten CPM. The process of feedback in workplace-based assessment: organisation, delivery, continuity. *Medical Education* 46(6): 604-612, 2012.
- 28 Kogan JR, Conforti LN, Bernabeo EC, Durning SJ, Hauer KE, Holmboe ES. Faculty staff perceptions of feedback to residents after direct observation of clinical skills. *Medical Education* 46(2): 201-215, 2012.

- 29 Sargeant J, Mann K, Sinclair D, Van der Vleuten C, Metsemakers J. Understanding the influence of emotions and reflection upon multi-source feedback acceptance and use. *Adv Health Sci Educ Theory Pract* 13(3): 275-88, 2008.
- 30 Eva KW, Armson H, Holmboe E, Lockyer J, Loney E, Mann K, Sargeant J. Factors influencing responsiveness to feedback: on the interplay between fear, confidence, and reasoning processes. *Adv Health Sci Educ Theory Pract* 17(1): 15-26, 2012.
- 31 Bok HGJ, Teunissen PW, Spruijt A, Fokkema JPI, van Beukelen P, Jaarsma DADC, van der Vleuten CPM. Clarifying students' feedback-seeking behaviour in clinical clerkships. *Medical Education* 47(3): 282-291, 2013.
- 32 Watling C, Driessen E, van der Vleuten CPM, Vanstone M, Lingard L. Understanding responses to feedback: the potential and limitations of regulatory focus theory. *Medical Education* 46(6): 593-603, 2012.
- 33 Molloy E, Boud D. Changing conceptions of feedback. In Boud D and Molloy E, eds. *Feedback in Higher and Professional Education: Understanding it and doing it well*. Abingdon: Routledge, 2013:11-33.
- 34 Nicol D. Resituating feedback from the reactive to the proactive. In Boud D and Molloy E, eds. *Feedback in Higher and Professional Education: Understanding it and doing it well*. Abingdon: Routledge, 2013:34-49.