A student-centred feedback model for educators

Joy Rudland, Faculty Education Unit, Faculty of Medicine, University of Otago, New Zealand
Tim Wilkinson, Medical Education Unit, University of Otago, Christchurch, New Zealand
Andy Wearn, Clinical Skills Centre, Faculty of Medical & Health Sciences, University of Auckland, New Zealand
Pam Nicol, School of Paediatrics and Child Health, University of Western Australia, Perth, Australia
Terry Tunny, School of Biomedical Sciences, University of Queensland, Brisbane, Australia
Cathy Owen, Rural Clinical School, ANU Medical School, Australian National University, Canberra, Australia
Maree O'Keefe, Teaching and Learning, Faculty of Health Sciences, University of Adelaide, Australia

SUMMARY

Background: Effective feedback is instrumental to effective learning. Current feedback models tend to be educator driven rather than learner-centred, with the focus on how the supervisor should give feedback rather than on the role of the learner in requesting and responding to feedback.

Context: An alternative approach emphasising the theoretical principles of student-centred and self-regulated learning is offered, drawing upon the literature and also upon the experience of the authors.

Innovation: The proposed feedback model places the student in the centre of the feedback process, and stresses that the attainment of student learning outcomes is influenced by the students themselves. This model emphasises the attributes of the student, particularly responsiveness, receptiveness and reflection, whilst acknowledging the important role that the context and attributes of the supervisor have in influencing the quality of feedback.

Implications: Educational institutions should consider strategies to encourage and enable students to maximise the many feedback opportunities available to them. As a minimum, educators should remind students about their central role in the feedback process, and support them to develop confidence in meeting this role. In addition, supervisors may need support to develop the skills to shift the balance of responsibility and support students in precipitating feedback moments. Research is also required to validate the proposed model and to determine how to support students to adopt self-regulatory learning, with feedback as a central platform.

Effective feedback is instrumental to effective learning

> Educators have almost lost sight of the learner's role as the main driver and influencer of the value of feedback.

INTRODUCTION

Effective feedback is important for learning,[1] and occurs when learners gain insight into the difference between their perception of performance and that of another person. This acts as a driver for change in the learner's development.

Current practice in giving feedback draws substantially on models such as Pendleton,[2] and Silverman,[3] which have been described as interactions that are primarily 'educator-driven, one-way processes'.[4] In considering 'what the supervisor should do', educators have almost lost sight of the learner's role as the main driver and influencer of the value of feedback.

Although established models support an active role for students, the structured methodology and teacher-centred nature of the interaction undermines this objective. Anecdotal experience from students often portrays feedback as something done *to* them, rather than a mature exchange between two or more people. This runs counter to active student-centred and self-regulated learning theory, and may create passivity in students. Furthermore, it assumes feedback can only occur when a supervisor makes it happen, yet we know that learners receive feedback in many ways in many different contexts. Archer's focus on culture and the continuum of feedback does give consideration to the feedback process; however, the student role and voice is still felt to be diluted.[4]

A NEW FEEDBACK MODEL

An alternative approach to feedback that emphasises the theoretical principles of student-centred and self-regulated learning resonates more readily with adult learning principles, rather than a teacher-derived and -driven process. Self-regulated learners are more motivated to learn, adopt better learning strategies and respond more appropriately to situational demands.[5]

The following model proposes that students should take more responsibility for seeking (student-centred) and responding (self-regulation) to feedback, and thereby for their learning (Figure 1). Putting the student at the centre of the feedback process may influence the dynamic of the interaction, the process and in turn the outcome of learning. Throughout this article the term student is used for the person receiving the feedback, and the term supervisor is used for the individual giving the feedback.

Student

In this model the student is a central and recurring element. This model indicates the student's dominant role in preparing for feedback, seeking feedback and maximising the potential of any feedback received. The ideal feedback recipient is identified as being receptive, reflective and responsive, demonstrating self-efficacy.

Feedback should not be a passive activity: the student should actively identify learning needs and seek ways to meet these needs, which may or may not require feedback from another party (supervisor). The student must also demonstrate receptiveness, including a readiness to receive feedback, the ability to use appropriate senses (auditory, visual and sensory) and openness to opportunities where feedback is available. Receptiveness may also include the value students place on the feedback, the situation and its
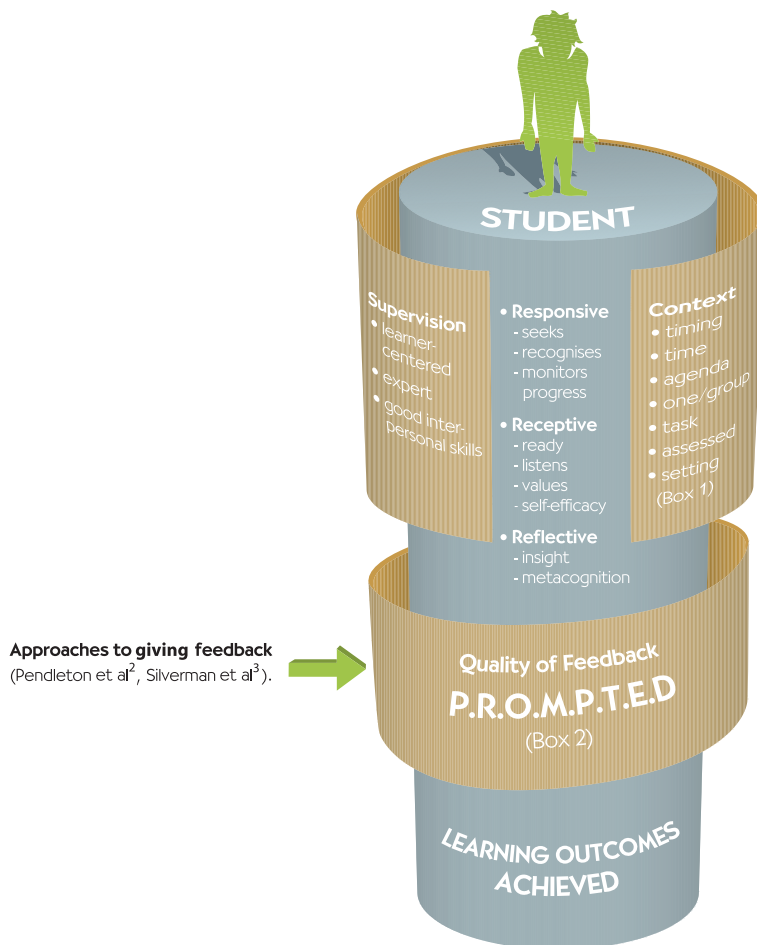
Figure 1. Student-centred model of feedback

Approaches to giving feedback
(Pendleton et al[2], Silverman et al[3]).

STUDENT

Supervision
• learner-centered
• expert
• good inter-personal skills

• Responsive
- seeks
- recognises
- monitors progress

• Receptive
- ready
- listens
- values
- self-efficacy

• Reflective
- insight
- metacognition

Context
• timing
• time
• agenda
• one/group
• task
• assessed
• setting
(Box 1)

Quality of Feedback
P.R.O.M.P.T.E.D
(Box 2)

LEARNING OUTCOMES ACHIEVED

Box 1. Context issues that effect feedback

a. **The timing of the feedback:** feedback should be received in a timely manner, usually soon after the event.[7] However on occasion feedback maybe more effective when dissociated in time from the event.[8]

b. **The amount of time** (especially inadequate time): time shortfall may dictate direct, teacher-driven feedback, given quickly and directly (though not insensitively or harshly).

c. **Agenda formality:** learning may take place opportunistically or in clearly prescribed sessions.

d. **One/group:** if peers are present they might also contribute to the feedback process.

e. **Nature of task:** feedback needs to match complexity of task.

f. **Assessment:** assessment and feedback are intertwined and influence each other.

g. **Setting:** feedback will differ in a public or private space.

Box 2. Good feedback should be PROMPTED

- **P** recise with attention to the specific

- **R** elevant to practice

- **O** utcome based with clear aims

- **M** easurable where improvements can be assessed

- **P** ossible/attainable

- **T** ime determined, a clear period to achieve the outcome/s

- **E** ncouraging and constructive

- **D** escriptive

outcomes or the person giving the feedback.

The receptive student also needs to monitor the required learning and demonstrate self-efficacy, which involves the ability to self-reflect and learn from experience.[6]

Context
The context, as highlighted in Box 1, has been well documented, and influences the value of feedback.

Supervisor
The characteristics of the supervisor influence the effectiveness of feedback. The relationship between the student and supervisor is among the most crucial elements in effective feedback.[7]

The student and supervisor should ideally develop a relationship, promoting a safe educational environment in which to learn. Although the supervisor is usually a subject expert they should also encourage a student-centred learning experience. Strategic questions about the students' goals, their feedback preferences and desired outcomes for a teaching moment can empower students to have conversations about learning rather than be the passive subject of feedback.

Quality of feedback
The quality of the feedback is important, and will be influenced by the student, supervisor and context. Box 2 details some characteristics of good feedback.

In our model, the student is central in shaping the quality of the impact of the feedback by: seeking clarification when feedback may lack specificity, or ideas for improvement; evaluating or checking the feedback against their own views about their progress or the situation and its outcomes; seeking differing or corroborating opinions, and by selecting the most useful parts of the feedback offered.

Encapsulating environment
Ende discussed the confounding effects of the social context on feedback.[8] This model acknowledges the influence of the encapsulating environment, specifically the importance of practice that is influenced and socially mediated by an interprofessional component and complex work-based tasks.

IMPLICATIONS

Focusing specifically on the teacher's role in feedback may inadvertently have a detrimental effect on the student. The proposed model places the student firmly in the centre of the process, within the context of other encapsulating influences on feedback. Further work is now required to validate the model and to determine how students can be supported to adopt self-regulatory learning, with feedback as a central platform.

The implications of this model may require a 'hearts and minds' shift amongst teachers and students. However, as educators we have greater access to, and influence over, the students than we have with teachers.

What can be done:

- remind students about their central role in the feedback process;

- ask students to evaluate themselves *and* seek feedback from a range of people (pa-

The proposed model places the student firmly in the centre of the process

Educational institutions should consider how students are encouraged and enabled to maximise feedback opportunities

tients, staff and peers) as part of their learning cycle;

- develop students to be better at precipitating feedback moments, being more intuitive to situations and having the skills to decipher the 'good' from the 'poor' feedback, to maximise its use;

- instil in supervisors the need to shift the balance of responsibility.

Education may have become more of an entitlement, potentially putting greater pressure on teachers to be more accountable in a transparent and obvious way. This has the danger of students equating a 'good' education with spoon-feeding rather than placing a greater emphasis of responsibility on the student. This must be resisted.

The introduction of a student-centred and self-regulating empowering model of feedback has some inherent dangers. Students attend medical school to be guided in their learning from those with more experience. Poor articulation of the learning requirements or appreciation of these by students may leave them feeling rudderless, and encourage a focus on irrelevant aspects of learning. This may result in unacceptable inefficiencies as well as student anxiety.

Some students lack the confidence and self-esteem to take responsibility for feedback. Consequently, a more student-centred approach may require a shift in how students consider their educational experience. As this perception is influenced by current social norms and expectations, it will not shift suddenly. Small steps may be taken at local levels to consider the most appropriate implementation strategies and approaches, where patient and student safety is paramount.

This model has been proposed to highlight constructive feedback as an important aspect of learning, and to promote considered continued debate on the quality and value of feedback. Specifically, educational institutions should consider the role of their students in receiving feedback, and how they are encouraged and enabled to maximise the many feedback opportunities available to them.

REFERENCES

1. Nicol D, Macfarlane-Dick D. Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*. 2006;**31**:199–218.

2. Pendleton D, Schofield T, Tate P, Havelock P. *The New Consultation*. Oxford: Oxford University Press; 2003.

3. Silverman JD, Kurtz SM, Draper J. The Calgary–Cambridge approach to communication skills teaching. Agenda-led outcome-based analysis of consultation. *Educ Gen Pract* 1996;**7**:288–299.

4. Archer JC. State of the science in health professional education: effective feedback. *Med Educ* 2010;**44**:101–108.

5. Pintrich PR, Schunck DH. *Motivation in Education. Theory, research and applications*, 2nd ed. Englewood Cliffs, NJ: Prentice Hall; 2002.

6. Bandura A. *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company; 1997.

7. Rudland J, Bagg W, Child S, de Beer W, Hazell W, Poole P, Sheehan D, Wilkinson TJ. Maximising learning through effective supervision. *NZ Med J* 2010;**123**:117–126.

8. Ende J. Feedback in clinical education. *JAMA* 1983;**250**:777–781.

9. Clariana RB, Wagner D, Murphy LCR. Applying a connectionist description of feedback timing. *Educational Technology Research and Development* 2000;**48**:5–21.

Corresponding author's contact details: Joy Rudland, Director, Faculty Education Unit, Faculty of Medicine, PO Box 913, University of Otago, Dunedin, New Zealand. E-mail: joy.rudland@.otago.ac.nz