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Learning to give feedback in medical education

Rahul Roy Chowdhury and Gregory Kalu

Giving feedback is an essential part of medical education but it is a responsibility that teachers often avoid. Constructive feedback is a generic skill that can be learned. In this article we highlight various methods of giving this constructive feedback.

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Introduction

Undergraduate and postgraduate students often receive feedback that leaves them feeling bruised, demoralised and lacking in self-worth. It is not surprising then, that medical teachers brought up in this environment, avoid giving feedback – especially if it is 'corrective'. Hewson *et al.*[1] describe how, in faculty development courses, clinical teachers frequently indicate that their greatest need is to learn how to give feedback effectively. This difficulty in giving feedback may be based on reluctance to give offence or provoke undue defensiveness.[2]

What is feedback and is it necessary?

Rocket engineers developed the concept of feedback in the 1940s where the system used information to reach its goal.[2]

Most people have a basic need to know how well they are doing, as the expectation of success is fundamental to motivation and effort.[3] Both increase when we expect to succeed but decrease or cease when the goal is perceived as almost certain or impossible.[4]

Effective feedback occurs when the trainees are offered insight into their actions and the consequences thereof. Such insight is valuable because it highlights the difference between the intended and the actual result, and provides an impetus for change.[5]

Feedback, therefore, drives learning and progress and is essential in allowing a student to remain on course in reaching a goal. On the teacher's part, it also conveys an attitude of concern for the progress and development of the person in a real sense and not just as a function of grades or test scores.[2] If handled incorrectly, it may damage the student–teacher relationship and inhibit giving or receiving feedback in the future. In such situations, the student may view feedback as a statement about his or her personal worth or potential, whereas in reality feedback presents information, not judgement.[6]

Guidelines for giving feedback

The process of feedback is informed; non-evaluative, objective appraisal of performance. It is intended to improve skills or change behaviour, rather than being an estimate of the students' worth.

When feedback fails, it is because the process was handled poorly, causing defensiveness and embarrassment to the learner and leaving them feeling demoralised and rejected. Teachers are often not able to clearly distinguish between non-evaluative and evaluative feedback, more commonly termed feedback and summative assessment. For example, if a house officer finds it difficult to prioritise a patient's symptoms, making him aware of this deficit and working out a definite plan on how to correct it constitutes non-evaluative feedback. Summative assessment, on the other hand, tells the learner how they performed: "You have corrected your problems" or "You need to continue working on it". This should follow feedback.

Ende *et al.*[7] have produced guidelines for constructive feedback in medical education, which have their origins in personnel management,[4,8] group dynamics[9] and education.[10] These are shown in Box 1.

How to phrase feedback

Based on Ende's principles, feedback should be descriptive and non-judgemental. Phrasing feedback as "That was awful" will always create defensiveness. A description of what happened might be more helpful, such as: "When she was telling you about her stomach pains, I noticed that you were concentrating on the GP's letter,

Author details

Rahul Roy Chowdhury MRCOG, *Senior Trust Grade Doctor*, Department of Obstetrics and Gynaecology, Brighton and Sussex University Hospitals NHS Trust, Princess Royal Hospital, Lewes Road, Haywards Heath, RH16 4EX, UK. email: rroychowdh@aol.com (corresponding author)

Gregory Kalu MRCOG LLM, *Consultant*, Brighton and Sussex University Hospitals NHS Trust, Haywards Heath, UK.

Box 1. Feedback

Feedback should be:

- undertaken with the teacher and the trainee working as allies towards a common goal
- expected
- at a mutually agreed time and place
- close in time to the episode on which it is sought
- based on specific behaviour rather than general performance and should have been ideally observed at first hand
- given in small quantities and limited to remediable behaviours
- descriptive, non-evaluative and non-judgemental
- composed of subjective data, which should be labelled as such
- given on decisions and actions and not on one's interpretation of the student's motives.

[Adapted, with permission, from Ende[2]]

which prevented eye contact between you". This is non-judgemental, descriptive feedback.

Non-specific praise such as "You appeared empathic", without a description of the episode being referred to, is of no use. It is better to point out a specific behaviour; for instance, "Your facial expression changed when you were listening to the woman's story, which highlighted that you were empathising with her", helps the learner to look at the skills they used to express empathy and at the concept of empathy itself.

Feedback should describe behaviour, which can be changed, rather than personality. The process should help the learner and not provide a platform for the facilitator to promote their knowledge, superiority or power. It should also be about sharing information. Feedback is not a prescription for change. Changes that need to be made ought to be decided by the learner, thus allowing them to preserve their self-esteem. It may even be useful to encourage the student to undertake an assessment of their own performance and suggest remedial measures, as this often brings up the points that the teacher is trying to make and reduces the perceived harshness of the feedback, especially when it involves sensitive topics. Sometimes the student may raise issues not thought of by the teacher, which then need to be addressed. This makes the process of feedback interactive.

It is important to check that the learner understands the content of the feedback. The learner should be encouraged to check this by reiterating the contents to the facilitator. This prevents misunderstanding and distortion of feedback.

The feedback given should be limited to the amount of information that can be dealt with comfortably; excessive volumes of feedback may overwhelm the learner and prevent any changes from taking place. It should be a part of the learning contract between the learner and the facilitator; it should be solicited rather than imposed and given privately.

There is evidence that these principles and techniques work. Using both qualitative and quantitative approaches, Hewson and Little[1] showed that, when recommended techniques of feedback were used, recipients found the experience helpful. Feedback is more useful when it relates to a behaviour that can be changed rather than to something that cannot be changed. Many respondents mentioned that the feedback was helpful, even corrective feedback, if the recommended techniques were used. However, one respondent described an unhelpful feedback episode that consisted of non-specific praise, thus substantiating the importance of giving specific feedback based upon observations, even when these are favourable.

Unhelpful feedback

It has long been recognised that certain approaches to feedback may be counterproductive. Hewson and Little[1] highlight some of these. When a feedback episode did not elicit a learner's ideas, feelings or goals, it failed. For example, one respondent commented: "feedback was based on goals that were different from mine". It also failed when learners felt slighted, demoralised, blamed or rejected. Similarly, feedback conveying personal judgements was poorly received; for example, "You are obsessive–compulsive", "You are narrow minded"; as were insults such as "Doctors ought to shut up". Lectures or information that was regarded as redundant or gratuitous led to failure of feedback, as did giving feedback in inappropriate places.

Using a SET-GO method of giving feedback

By making feedback descriptive, it becomes non-judgemental, specific and directed towards behaviour. When the group or facilitator reflects back to the learner what they saw, it helps the learner to acknowledge the incident and reflect on it and find a solution to the problem. The description also provides information on the effect the incident had, which allows the learner to consider the desired outcome and the skills necessary to achieve it. This underpins the 'agenda-led, outcome-based' feedback method, discussed below.

SET-GO[11] is an *aide memoire* for the sequence of actions when giving descriptive feedback, and is shown in Box 2.

Models of giving feedback

The two most widely accepted models of giving feedback are adapted from the world of education. In medical education, Pendleton's rules are used as the conventional method of feedback.[12] An alternative approach, devised by Silverman, is known as agenda-led, outcome-based analysis or ALOBA.[13] They are similar in that they provide a safe environment for the learner, thus reducing defensiveness and making the experience constructive. Both methods are suitable for use in either a group or a one-to-one situation.

Pendleton's rules (Figure 1) are structured in such a way that the positives are highlighted first, in order to create a safe environment. Therefore the learner identifies the positives first. This is followed by the facilitator or group reinforcing these positives and discussing skills to achieve them. "What could be done differently?" is then suggested, first by the learner and then by the person or group giving feedback. The advantage of this method is that the learner's strengths are discussed first. Avoiding a discussion of weaknesses right at the beginning prevents defensiveness and allows reflective behaviour in the learner.

There are some deficiencies[14] in the rules. They create artificiality and rigidity by forcing a discussion of the learner's strengths first. Thus, an opportunity for an interactive discussion of topics that might be relevant to the learner is lost. There is also inefficient use of time because the same topic is discussed twice in its entirety: first to discuss the strengths and then the weaknesses. To someone expecting primarily negative feedback, the discussion of strengths may appear patronising, which makes the feedback more stressful and, perversely, a disproportionate amount of time may be spent discussing strengths to soften the impact of the negatives. A judgemental tone may also creep into the feedback when "What was done correctly and what was incorrect?" is discussed, which goes against the non-evaluative and formative nature of feedback.

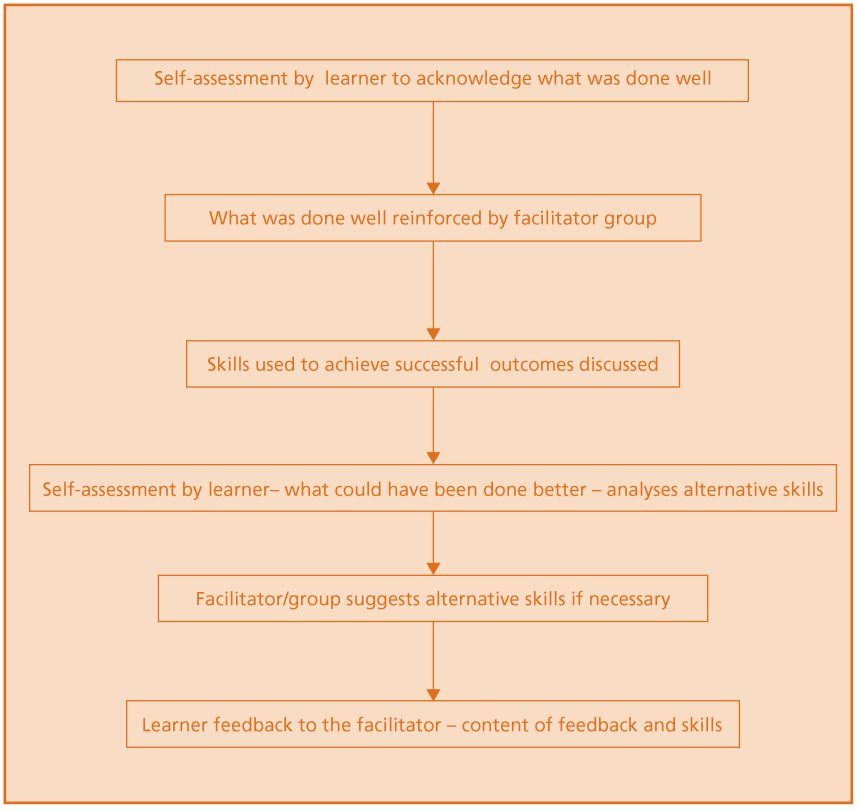

Figure 1. Pendleton's rules

Silverman tried to offset the disadvantages of Pendleton's rules by devising the ALOBA approach (Figure 2).[13] In this method, the principle is to identify what the learner wants help with. The discussion is then directed

Box 2. SET-GO

What I **S**aw – Describing what I saw.
What **E**lse did you see? What happened next.
What do you **T**hink? Reflect back to the learner.
What **G**oals are we trying to achieve?
Any **O**ffers on how to achieve the goals – suggestions regarding skills and rehearsals.

towards achieving the learner's goal by encouraging self-assessment and by opportunistically introducing the facilitator's agenda and discussion of new theories and concepts. This empowers the learner and reduces defensiveness, while allowing an opportunity for change in behaviour.

At the outset, the learner identifies the agenda and what they want help with. This early acknowledgement of difficulties removes defensiveness and allows the learner to concentrate on the feedback itself rather than being anxious about the nature of the negative feedback. In the next step, the facilitator tries to ascertain the outcome that the learner is trying to achieve. The discussion then concentrates on the skills necessary to achieve these outcomes and removes the judgemental (what was done well and what could have been better) and moral slant to the advice given. The process focuses on trying to achieve a desired outcome by using a set of skills, rather than criticising the learner about what was done wrongly. This signifies the true philosophy of feedback.

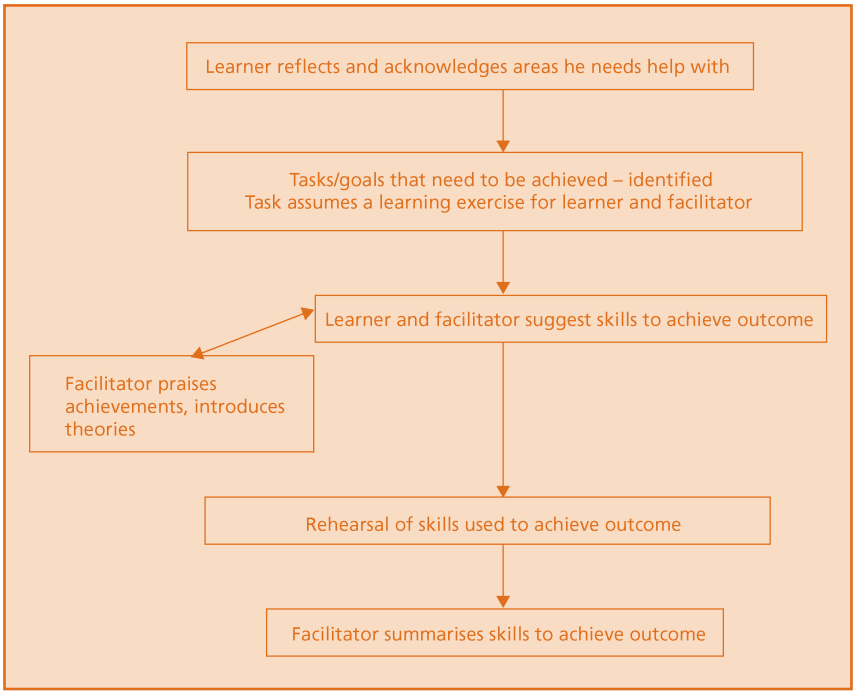

Figure 2. ALOBA principles

This is followed by self-assessment and self-problem-solving. This ensures that the learner is actively involved and is not merely a passive recipient of advice. Either the group or the facilitator feeds back to the learner (using the SET-GO principle), which enables the learner to acknowledge and reflect on the advice given and to identify the skills required to achieve the desired outcome.

Continuing to keep the focus on achieving the desired outcome, the group or facilitator explores alternative skills to try and reach the goal, rather than criticise the learner for their failures. As in the earlier example of the house officer unable to prioritise urgent symptoms, the facilitator or group works with the learner to find alternative ways of achieving their goals, rather than criticising the learner. This process should be descriptive, non-judgemental and pertaining to behaviour that is amenable to change. The suggestions generated can then be rehearsed to see whether they work. Experimentation may be undertaken in the safety of rehearsals and necessary changes in skills can be practised.

It is important that a balance is maintained while giving feedback. This is made simple in Pendleton's rules by the 'good' preceding the 'bad'. In ALOBA, the responsibility and judgement lie with the facilitator, and it is possible that an inexperienced facilitator may achieve the wrong balance. This may have a negative impact on the learner's experience of feedback. Thus, Pendleton's rules may be a safer alternative for inexperienced facilitators.

The other principle of ALOBA is to present a supportive environment by making offers and suggestions and giving alternatives. The exercise is interactive and becomes a learning opportunity for all. Everyone involved is an equal participant and contributor to the activity. In contrast, in Pendleton's method the learner is a passive recipient of suggestions from the facilitator or group – everyone makes suggestions to change the learner's behaviour.

This learning context allows the facilitator to introduce new concepts, research evidence and various principles of communication, and clarify specific skills through demonstration and discussion. In Pendleton's rules, this is not specified but can be undertaken by a skilful facilitator when they or the group are making suggestions for "What could have been done differently?".

Once the exercise has been completed, the entire session should be summarised into a concise format; the skills necessary to achieve a particular outcome should be highlighted and an overall conceptual framework built.

A critical analysis of Pendleton's rules and the ALOBA technique of feedback

Pendleton's approach has been criticised for its rigidity, the attachment of a moral slant to its advice and for not actively involving the learner in reaching their goal.[14] The ALOBA technique tries to rectify these shortcomings. A close

examination of ALOBA shows that, despite the focus being on achieving a particular goal, there is, nevertheless, a covert element of judgement attached to it. Ende[2] clarifies this by saying, 'Actually, there is almost always a judgement assigned to feedback information. Somehow, on the wards, positive feedback sounds good, while negative feedback sounds bad. There is simply no way you can inform a student that a differential diagnosis did not include the most likely disease without causing some disappointment or embarrassment. This does not mean that you shouldn't bring such information to the student's attention but, rather, that it should be done with some skill and understanding of the process'. The inflexibility of Pendleton's rules is apparent in the fact that good always precedes bad. This may lead to a disproportionate allocation of feedback time because of discussion of issues not important to the learner. In his defence, Pendleton has argued that his 'rules' are only guidelines and not diktats.[15] By continuing to follow the format of always discussing which goals were fulfilled, in the beginning, a better understanding of why certain tasks were achieved can be ascertained and subsequently reproduced at will. This helps to build the skill base. Also, maintaining a positive tone of feedback, both for achievements and for what could be done differently, helps to preserve and enhance the learner's self-esteem.

Some other models of giving feedback

Some other models of giving feedback have been discussed elsewhere.[16] These include the 'A five step microskills model of clinical teaching',[17] the SCOPME model,[18] the Chicago Model[19] and the six-step problem-solving model.[16] All these are adaptations of Pendleton's rules and the ALOBA technique.

Conclusion

Giving feedback, whether corrective or reinforcing, is an essential part of medical education, which helps to promote learning and ensures that standards are met. Unfortunately, it is also a difficult part of clinical teaching and trainers often avoid this aspect of their responsibilities.[2]

Given correctly, constructive feedback can improve learning outcomes and enable students to develop an analytical approach to learning. It can also improve competence, at least in the short-term.[20] A review in 1998 showed that constructive feedback produced significantly better learning outcomes in a wide variety of learning situations.[21] Knowles showed that adult learners welcome feedback when it is based on their performance and tailored to their goals.[22]

Giving feedback constructively is a generic skill that can be learned. It can be used in the context of formal educational supervision as well as in day-to-day situations with colleagues, staff and patients.

Ultimately, feedback is about communication. The key skills are to listen and ask, not to tell and provide solutions.[4] It is a skill that is not as rare as it used to be but there are still not enough trainers who understand the underlying principles of feedback in the modern clinical setting. Attending training programmes on how to give feedback should be essential for those who teach in medicine because, in trying to give feedback, we still make remarks that have the potential to undermine the learner's confidence completely. ■

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