

Feedback and Reflection: Teaching Methods for Clinical Settings

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ABSTRACT

Feedback and reflection are two basic teaching methods used in clinical settings. In this article, the authors explore the distinctions between, and the potential impact of, feedback and reflection in clinical teaching.

Feedback is the heart of medical education; different teaching encounters call for different types of feedback. Although most clinicians are familiar with the principles of giving feedback, many clinicians probably do not recognize the many opportunities presented to them for using feedback as a teaching tool.

Reflection in medicine—the consideration of the larger context, the meaning, and the implications of an experience and action—allows the assimilation and re-ordering of concepts, skills, knowledge, and values into pre-existing knowledge structures. When used well, reflection will promote the growth of the individual. While feedback is not used often enough, reflection is probably used even less.

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Feedback and reflection are two basic teaching methods used in clinical settings. Although most clinicians are familiar with the principles of giving feedback, the general complaint from medical students and residents is, “I never receive any feedback.”^{1–3} There are several explanations for this perceived lack of feedback: actual lack of feedback, students’ not realizing that they have been getting feedback, or problems with data collection on feedback received by students. We hypothesize that clinicians do not appreciate the role of feedback as a fundamental clinical teaching tool, and do not recognize the many opportunities for using that tool. Reflection is probably employed even less commonly in clinical teaching, although it too is a fundamental and truly powerful teaching tool. We suspect that a minority of clinical teachers understand how to use reflection. Additionally, the teacher may need to make a choice between using feedback or reflection during

clinical teaching encounters. In this brief paper we explore the distinctions between and the potential impacts of feedback and reflection in clinical teaching.

FEEDBACK

Ende’s classic paper provides the principles for using feedback in clinical teaching (List 1).⁴ We think that there are three general categories of feedback. *Brief feedback* is the kind that one might give while demonstrating the physical examination or during someone’s presentation of a patient’s history. Brief feedback disciplines the teacher to make highly concrete, useful suggestions. An example would be, “Let me show you a better way to distinguish the S4 from the split S1.” If such highly specific teaching interventions are preceded by the phrase, “Let me give you some feedback,” they become brief feedback. The student or resident then knows that she or he has received feedback.

Formal feedback is provided when one sets aside a period of time, usually five to 20 minutes, labeled as formal feedback, to deliver useful feedback to the learner. For example, formal feedback might be given to an intern following an outpatient teaching encounter, or to a ward team, consisting of four or five learners, following the presentation of a case. Formal feedback may also be given related to a medical mistake, to the handling of a particularly difficult or vexing case,

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List 1

Principles of Giving Feedback*
<i>Work as an ally of the student.</i>
Set a time—major feedback should not take the student by surprise.
Have mutual agreement on time and place.
Solicit feedback of your own performance.
Have the student give an assessment of his or her performance (self feedback) before giving one's opinion.
Use well-defined, mutually-agreed-upon goals as a guide for the student's performance and as the subject of feedback.
<i>Base feedback on observed incidents and on modifiable behaviors.</i>
Give feedback on specific behaviors, not general performance.
Give feedback on decisions and actions, not on one's interpretations of the student's motives.
Subjective data should be labeled as such.
<i>Give feedback in small, digestible quantities.</i>
<i>Use language that is non-evaluative and nonjudgmental.</i>
<small>*Adapted from Ende J. Feedback in medical education. JAMA. 1983;250:777-81. Used with permission.</small>

or after an elaborately structured teaching exercise, such as interviewing a patient for the purpose of giving bad or sad news. The teacher should ensure that the setting and the time put aside are appropriate and conducive to the feedback being given. For example, whereas the busy outpatient conference room might suffice for a feedback session given to a medical student or intern after seeing a patient in the outpatient setting, one would prefer more privacy when giving feedback about a medical mistake.

In providing formal feedback, we advocate in general, exceptions allowed, using a sequence beginning with "How did this encounter go for you?" and proceeding to "What went well, and what could you have done better?" By thus engaging the learner, the teacher elicits *self-feedback*. This often brings up precisely the points the teacher wants to make. If not, self-feedback raises issues to which the teacher should respond, beginning the session as a dialogue. Points made by the learner during self-feedback can then be reinforced, rather than presented to the learner as a list, which is often experienced as being overwhelming. Also, when providing feedback on sensitive topics, such a medical mistake, eliciting self-feedback softens the perception that the feedback was overly harsh. Thus, in principle, formal feedback should be interactive.

A third category of feedback we call *major feedback*. By this we mean scheduled sessions to provide feedback at the

midpoint of a learning experience, such as being assigned to a ward team or outpatient rotation. These sessions are always held in private and typically last for 15 to 30 minutes. The learner knows that feedback will be given, so she or he will have had the opportunity to reflect on performance. The principles and sequence for giving feedback are similar to those outlined above. Major feedback is conducive to mid-point corrections, and also may apply to addressing major issues, such as inadequate performance or unprofessional behavior.

Many clinicians do not clearly distinguish between feedback and evaluation. Major feedback regarding inadequate performance provides an example. Suppose an intern finds it difficult to prioritize between urgent symptoms and the ubiquitous list of minor complaints that most patients bring to the clinical encounter. If the purpose of the session is to correct this deficit, then one is giving feedback. Feedback would be designed, first, to make the learner aware and accepting of his or her deficit by imparting a clear understanding of what that deficit is. Feedback would then proceed to suggestions on how to correct the deficit, with potential remedies suggested, such as asking the learner to write down the list of clinical problems, prioritize them according to importance, and present them to the teacher after each encounter, or observe an expert teacher in action to see how he or she hones in on key issues, and so forth. Such a major feedback session should end with a plan of action. It would follow all the principles for giving feedback and probably the sequence that we outlined by beginning the session with self-feedback.

Evaluation, on the other hand, tells the learner how she or he has performed. In our example, evaluation should follow efforts at remedying the learners' problem and would provide the learner with an assessment, i.e., either "You have corrected the problem," "You need to continue working on it," or "You are unable to correct it and might consider alternative teaching arrangements or even a different career." The teacher must know ahead of time whether he or she is giving feedback or evaluation.

Can the two be mixed? Suppose we are addressing unprofessional behavior. The more serious the infraction the more likely the session is to be purely evaluative. Some medical educators prefer to begin every evaluation session with self-evaluation. Even when addressing serious infractions, they might begin with a comment such as "So, before I share my views, how did you view your performance?" The alternative is to use a more direct approach. One might, for example, begin with a blunt statement of the problem rather than self-feedback. One might provide some feedback (i.e., suggestions for "doing things differently"), but state clearly that unprofessional behavior is not acceptable and a repeat will result in suspension from the program. In this case, we suggest making a clear distinction between "I am now going to

give you suggestions for improvement,” and “I am now going to tell you what the consequences of repeat behavior of this type will be.”

We think that feedback is the heart of medical education. Brief feedback needs to be given liberally. Formal feedback should be employed far more often than most teachers currently do, even routinely after learning interactions with patients. Major feedback is owed to the learner, and it should be given at the midpoint of every clinical rotation. We have found that learners are highly appreciative of major feedback sessions, but to hold such sessions requires that teachers discipline themselves to observe their learners carefully, and even take notes on the observations in order to be able to make helpful concrete suggestions.

REFLECTION

Reflection has been defined as “a thought, idea, or opinion formed, or a remark made, as a result of meditation.”⁵ We define reflection in medicine to include consideration of the larger context, the meaning, and the implications of an experience or action. In learning theory, reflection integrates a concept or a combination of skills, knowledge, attitudes, and values with the learners’ cognitive framework.^{6–8} So, reflection allows assimilation and reordering or reworking of concepts, skills, knowledge, and/or values into pre-existing knowledge structures.

Newly learned approaches become assimilated into one’s repertoire. Some have said that the difference between a professional and a technician is that the professional knows the larger context of his or her work and uses this knowledge for lifelong learning, as opposed to the technician, whose knowledge is limited to performing a specific task.⁹ Others have shown that psychological growth occurs only when reflection is a component of an educational program.¹⁰ Thus, reflection leads to growth of the individual—morally, personally, psychologically, and emotionally, as well as cognitively—whereas feedback tends to promote technical proficiency. One might therefore assume that reflection is essential to educating the physician and should be employed frequently.

But we think that reflection is rarely used in clinical settings, so that many opportunities are lost.^{11,12} There may even be a stunting or leveling off in personal, moral, and emotional growth during clinical training.¹³ Some evidence supports this sad possibility.^{14–21} If so, the lost opportunities for reflection may be central to a fundamental problem in medical education.^{13,22}

We do not offer a classification of opportunities for reflection. Instead, we would observe that most such opportunities occur after meaningful teaching encounters or so-called “teachable moments.” Reflection could occur

immediately, probably virtually in the hallway, after a ward team has seen a patient. Reflection could occur later, in the conference room, after an important event, such as a medical mistake, a challenging encounter with the patient, or even an amazing success in medical management. We think there are three keys to the successful use of reflection in clinical teaching—the teacher’s being a good role model, gaining the trust of the learners, and having the skills to facilitate reflection.

A good role model is the opposite of a bad role model.^{23–26} Bad role models do not like their work, make their dissatisfaction known, and have negative interactions with patients. Good role models embody the opposite qualities of enthusiasm for learning, high degrees of skills and knowledge, and, importantly, emphasizing the psychological and social aspects of medical care. Good role models, wishing to teach reflection, should then establish a reflective atmosphere with their learners. This process begins by winning the trust of the learners, generally by exhibiting clinical excellence and appropriate interest in and concern for the learners and patients. One may then attempt to enlarge the horizons of the learners by including the human and moral dimensions of care in learning encounters.²⁷

As mentioned above, reflection generally follows meaningful encounters or teachable moments. Skillful facilitation of reflection begins with recognizing the opportunities. Teachable moments that involve the human dimensions of care should be pointed out either in advance or as soon as possible to the learner. These encounters are fertile ground for what we have termed brief feedback. However, the skillful teacher may decide to substitute a time for reflection for formal feedback following the encounter. This choice is suggested when a particularly meaningful event or an event that enlarges the learner’s horizons has taken place. Then, one should suggest a pause for reflection using a statement like, “What actually occurred with this patient?” or “What did we accomplish with this interaction?”

Skills in facilitation are needed to keep reflection on a higher level rather than having it deteriorate into more mundane observations. Such deterioration is surely a tendency in medical discussions, where absolute pragmatism and concrete thinking generally prevail; thus, the facilitator may work with the group in a manner similar to that of a medical interviewer working with a patient who has psychological or social issues. The facilitative techniques resemble interviewing skills. One listens to the learners and picks up on clues as to their thoughts or feelings. One may follow up with a simple open-ended question such as “What did you mean by that?” Or, “Say more about that.” One may reflect words or thoughts back to the learner: “You say that was important,” or “You learned something, it was meaningful.” The facilitator should also track the group of learners, for example, by

acknowledging emotion in someone not participating in the conversation, or by providing the opportunity to a learner who seems eager to add to the discussion. It is a good general rule of facilitation to encourage discussion that elaborates on a topic, pushing it to a deeper or a more complex level, as opposed to discussion that continually raises many different topics, thereby, so to speak, remaining on the surface. In doing this, the facilitator should generally encourage discussion of higher levels of meaning—the moral, ethical, social, and/or professional issues. The facilitator is also aware of the setting and context of the discussion; therefore, some opportunities for reflection are quite brief, a few minutes, a few sentences, in the hallway after seeing a patient. Others could be with the group in private to address a particularly sensitive or meaningful interaction. The facilitator needs to match the timing and the setting with the needs of the group of learners and their clinical experiences.

Why is reflection done infrequently in clinical settings? A simple answer would be that there is no time. However, since we think reflection can occur in a short time. It seems more likely that clinical teachers are not skilled in facilitating reflection. Also, they, like their learners, are not in a reflective frame of mind while teaching on the wards. Another potential barrier may be personal discomfort with exploring emotions, since most physicians are trained to think concretely. This absence of reflection has been noted as a deficit in medical education.²² We suggest that clinical teachers first need to understand the importance of reflection in educational theory, as outlined above. They then must master the skills of being facilitative, which includes dealing with emotions, perhaps in faculty development courses.²⁷ Skills, plus the desire to use reflection, open a world of rich teaching interactions with learners.

The sequence goes like this: Pose a reflective question: "So what did we really learn from this encounter?" Observe the reaction of the learners. Expect to learn from them. They often will surprise you with their thoughts; they may be more reflective than you realize. Take advantage of this to go deeper. Time your interventions to match the setting and opportunities, and as you become more skillful and comfortable with this technique, and as your team grows to be more reflective, this method of learning will seem more natural, and your skills in facilitation will grow.

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