15 Feedback and Remediation: Reinforcing Strengths and Improving Weaknesses

Denise M. Connor, Calvin L. Chou, and Denise L. Davis

"Feedback is the heart of medical education" [1]

Abstract

Remediation imparts information that can change the trajectory of a learner's academic progress. Feedback is both the valuable information and the complex process that can help trainees and practicing professionals improve their performance. Effective feedback is nonjudgmental and requires skill development in many different domains, including characterizing the learner's problem, overcoming resistance, and coaching for success. The authors draw on current literature about feedback to construct a model designed to help mentors bridge gaps in their knowledge base and build confidence in giving feedback to learners who fail to meet educational standards. This chapter provides a four-phase primer with step-by-step guidance for mentors who are remediators.

15.1 Introduction

On a busy post-call day, you go to see Mr. Smith, an elderly patient suffering from dementia. His son, also a doctor, pulls you aside to say, "There's something I need to tell you about your resident." He describes an insensitive interaction between your senior resident Michael and the patient's wife, in which Michael forcefully suggested the patient should not be resuscitated. In a loud voice, Michael said, "you are just making him suffer," and then briskly exited the room, leaving the patient's wife in tears. Later that day, a bedside nurse remarks to you that Michael is "horrible" at returning pages and was very "rude" to the nursing assistant, yelling at her when the sheet recording inputs/outputs was not fully updated and telling her to "just do your job." There have been other negative off-the-cuff comments from faculty members about this resident, though no formal complaints have

(continued)

D.M. Connor, M.D. • C.L. Chou, M.D., Ph.D. (✉)
D.L. Davis, M.D.
University of California San Francisco,
San Francisco, CA, USA
e-mail: calvin.chou@ucsf.edu

A. Kalet and C.L. Chou (eds.), *Remediation in Medical Education: A Mid-Course Correction*,
DOI 10.1007/978-1-4614-9025-8_15, © Springer Science+Business Media New York 2014

been filed, and no plans have been made to assess the trainee. Your own experience with Michael has been positive; he is smart, thorough, and efficient and often brings in literature to review with the team on rounds—but you have not had the opportunity to observe his bedside manner or interactions with colleagues in other disciplines. It is clear that someone has to talk to Michael, and you are probably that "someone."

Scenarios like this one are common at every level in medical education. What you do next will affect the quality of patient care, interprofessional team function, and the teaching and learning environment. Not addressing Michael's behavior directly, like many before you, implies endorsement of his negative behaviors and counters core principles of medical professionalism. Since society gives us the privilege to regulate our own professional conduct, we must guide our learners with clarity, skill, emotional maturity, and courage.

Feedback has been defined as specific, nonjudgmental information given with the aim of improving a trainee's performance [2], and feedback is an essential skill in remediation: the message must be instructive, relevant, and motivating. However, the feedback process is extremely complex, with myriad individual factors influencing its effectiveness. These factors include the skills and experience of the person giving feedback (for the remainder of the chapter, we will call this person a "guide"), the existing relationship between the learner and guide, gender roles, cultural contexts, timing, personality, and the presence or absence of impairment in the learner or guide. Because of this complexity, there is no "one-size-fits-all" approach. Instead, for feedback to be truly meaningful, the guide must tailor the approach to the learner, the message, and the goal. This chapter will introduce strategies of facilitative feedback designed to improve the performance of trainees and, ultimately, the care provided to those we serve, our patients.

15.2 The Essentials: A Guide

The parallels between effective remediation and the skills needed for competent patient care are strong. For example, a foundational aspect of motivational interviewing, an evidence-based process that increases the chance that patients will initiate change to improve their health, is respect for patient autonomy. Similarly, faculty members must also respect learner autonomy to participate in remedial activities in a way that is fully authentic. This stance of respect allows faculty to remain aligned with and genuinely empathetic to the learner and his struggles, while at the same time upholding professional standards.

As much as we may desire collaboration with our learners, it is our job to ensure that our learners are aware of the consequences of how others perceive their behavior. If the behavior does not meet professional standards, the consequences can be significant and may include remedies such as medical or psychological leave from the training program, probation, suspension, or dismissal. Fairly implementing these remedies, requires that the guide has a description of the worrisome behaviors, a clear understanding of the standards of professionalism, and a working knowledge of institutional policies regarding consequences.

There are four steps critical to providing the empathy, nurturing, and guidance needed to help trainees make the changes they desire. Bienstock [3] describes these four basic phases of giving effective feedback as:

1. *Setup*
2. *Observation*
3. *Feedback delivery*
4. *Accountability and next steps*

In this chapter, we will describe the steps of a comprehensive feedback encounter for remediation. Table 15.1 summarizes fundamental principles, goals, and examples for feedback.

Table 15.1 Fundamental principles, goals, and examples for feedback

Principle	Goals/rationale	In practice
Remain nonjudgmental	• Decreases defensiveness • Critique is about behavior, not the person • Keeps alive hope for the possibility of change	• "Your scores are not what you hoped for, and this is a problem we can work together to solve"
Attend to emotions	• Humanistic and effective teaching takes into account the emotions of all parties involved • Parallel process with patient-centered care • Requires emotional intelligence	• "If I'm reading your facial expressions correctly, this is hard news to hear. How can I be helpful to you?"
Attend to timing	• Temporally related to the actual teachable moment • Feedback given at a time of receptivity for the learner • Major feedback likely not effective after a long, grueling hospital shift	• "I hope you got a decent night's rest. Could we meet in my office this morning to go over what happened last night in the emergency department?"
Elicit learner's goals before giving feedback	• Increases psychological "buy in" • Emphasizes autonomy	• "What are your goals for the clerkship?" • "If our meeting were wildly successful, what information would you leave with today?"
Gauge the amount of feedback the learner can incorporate during each session	• Too much information leads to overload • Too little feedback is a missed opportunity	• "Do you have the band width to hear one more item of corrective feedback about your performance, or shall we stop here?" (very important to pay attention to nonverbal cues)
Use objective information, ideally firsthand. Be specific	• "Observations are the currency of feedback" [6]. The goal is twofold: (a) behaviors are remediable while personality is not, so framing feedback in an objective way is much more likely to empower learners to improve their performance and grow, and (b) specific observations are critical to reducing the emotional response to corrective feedback by distancing the actions from the learner's self-concept • Avoids inference and personal judgments which can create defensive barriers	• "I saw the patient look away from you when you started to talk about medication changes"
Listen for cues about openness or resistance and readiness for change	• "Diagnose" the cognitive stage of the learner: pre-contemplative vs. action	• "So it sounds like you are still skeptical about the efficacy of recommending complete abstinence to patients with alcohol problems"
Use partnership: learner and teacher working "as allies" [6] with a "mutual agenda" [3] and with the learner's best interest and success as the shared goal	• Reduces defensiveness by approaching feedback from a place of genuine caring and concern • Enhances credibility of feedback—students "need to believe that the feedback was delivered from a position of beneficence" in order to find it credible [7]	• Simply stating our intentions and goals can set the tone—"I care about your growth as a doctor, and I think working on X is going to be critical for you as you continue to develop" • Long-term, longitudinal relationships naturally lend themselves to this spirit, and much work demonstrates how these kinds of relationships foster a culture of constructive feedback [5]

(continued)

Table 15.1 (continued)

Principle	Goals/rationale	In practice
Prepare (both teacher and learner)	• Provides time to create a mutual agenda for the feedback session	• Ask the learner to create a list of their key learning objectives and to reflect on their progress
	• Ensures the confidence of the teacher in delivering especially difficult corrective feedback, avoiding the phenomenon of "vanishing" feedback [6]	• Involves spending time gathering objective observations and consulting with colleagues about how to deliver difficult feedback
	• Allows time to consider the best strategy for facilitating feedback in way that can be heard and utilized by the learner	• Avoid presenting an overwhelming laundry list of issues without allowing time for reaction, reflection, and discussion
Label subjective feedback	• Identifies the feedback as the teacher's own reaction, rather than suggesting that the learner's deficit was so obvious as to be "broadcasted" for "all to see" [6]	• "When I heard you say 'XYZ,' I was concerned that the patient would not feel that they were being heard" vs. "You seem to lack empathy"
	• While our goal should be to focus on objective behaviors, at times more subjective feedback is needed. To maintain a nonjudgmental and constructive tone, labeling this feedback as subjective can be helpful and can improve the credibility of the feedback	• As Ende describes, language, such as "watching this video tape, I began to feel that you were not comfortable talking about the patient's cancer," is superior to "you looked uncomfortable talking about the patient's cancer"
Plan next steps	• Links feedback to concrete action planning and thereby demonstrates its real-world relevance to learners, increasing its acceptability [12]	• "Are there ways you can think of to work on your cardiac exam during your next rotation?"
	• Keep the tenet of active engagement in mind, much as we do in clinical encounters: a useful action plan is generally one arrived at by the learner [3]	• "How can I help you achieve your goals?"
Establish accountability and follow-up	• Much like counseling a patient in smoking cessation, the success of feedback depends on ensuring a follow-up plan; without this step, the learner may lose accountability to their plan and miss out on opportunities to ask for ongoing support	• "How might you work on your cardiac exam in your next rotation?"
	• In situations in which the learner is not able or willing to change, consequences related to falling below the standard are discussed and probation or dismissal is openly addressed	• "What do you think might happen if you are unable to follow the remediation plan or make the changes we've talked about?" • "Given the seriousness of your deficiencies, we will meet every 2 weeks for the next 3 months. If you are not able to earn a passing score on the clinical examination, the next step is probation. Can you please tell me what you just heard so that I can be sure that I was clear?"("teachback")

15.3 The Setup Phase

15.3.1 Setting Up the Feedback: An Invitation to the Learner

> *I would like to learn more about your educational goals and help you to improve your clinical skills exam scores. Could we meet in my office tomorrow afternoon from 4 to 5?*

The setup is an invitation to collaboration and dialogue and establishes an effective learning environment. Successful guides avoid verbal dominance. In clinical practice, physicians who dominate with either tone of voice or number of words spoken during a patient interview are less likely to have patients rate the visit as satisfactory [4]; a similar dynamic occurs in the learner–guide relationship. Guides should give space to the learner, acting as facilitators and encouraging the learner to share insights, goals, regrets, and plans for improvement. A tool that successful guides can use to stimulate the learner's reflection, particularly for learners undergoing remediation, is "*I would like to meet with you to help you to improve your practice. In this spirit, before we meet, I would like you to think about the characteristics of exemplary physicians you have worked with and admired.*"

For learners who display resistance to the initial invitation or show avoidance behaviors, the guide may choose to use more directive, "warning shot" language—knowing that this power play at the outset of the relationship could affect the development of necessary rapport in the feedback process.

> "*Please come by my office at 4 pm. We need to discuss some reports I have received on your behavior. It will take an hour. Please take care of the time-sensitive tasks, let the interns know you will be unavailable and we can grab a cup of coffee and talk.*"

Specific features of the setup include:

1. Privacy. Remediation is accompanied by shame for many trainees; privacy is critical.
2. Timing. Educational literature suggests that immediate feedback, though sometimes desirable, may occasionally backfire, for example, when a learner is overwhelmed by emotion and cannot hear corrective feedback. (In the index case above, giving corrective feedback to Michael when he is sleep deprived will likely be ineffective.) On the other hand, waiting for the end of a clerkship to give major corrective feedback about an event that occurred 7 weeks prior will likely be less effective.
3. Space. If at all possible, these feedback sessions should not be rushed. Our experience is that 60–90 min allotted for the first session and 30–60 min for follow-up sessions give the feedback an expansive quality that increases effectiveness.
4. Control. As in the patient–physician relationship, an unbalanced locus of control can lead to a sense of powerlessness and potential nonadherence with a necessary course of action. Therefore, we advocate:
   (a) Eliciting the learner's goals
   (b) Communicating clear expectations for how long the meeting will last, whether or not you plan to offer multiple sessions; what information will be provided to other faculty and administrators; and how sharing that information might affect the mentoring relationship
   (c) Using empathic statements, even in this initial step, to reduce understandable anxiety and help create a collaborative atmosphere of trust that is critical to a successful remediation process: "*I can see you are working hard, and I imagine you had hoped for a better evaluation*"

15.3.2 Know Thyself: Preparation and Practice

Soberingly, the learners with the most need for improvement may end up being the ones who

receive the least constructive feedback. In a study of feedback given to residents by internal medicine faculty after encounters with standardized patients, Kogan et al. demonstrated that the faculty member's emotions influence feedback content and how it is delivered [5]. Often, to deal with the tension that faculty felt when confronted with poor performance, or when residents demonstrated limited insight into that performance, faculty minimized the corrective aspects of their feedback and overemphasized the positives. Furthermore, faculty often lacked a sense of efficacy in their ability to provide guidance to learners for how to improve, especially in areas such as professionalism and empathy; this lack of self-efficacy similarly led faculty to de-emphasize constructive feedback. Complicating matters further, feedback content was linked to the faculty's assessment of the learner's potential—specifically, learners deemed to have high potential were more likely to receive critical feedback compared to those felt to have lower potential.

Giving corrective feedback is challenging and requires courage, even when the guide approaches feedback with the best intentions. While initial emphasis on the positive is intended to support the learner's self-concept and strengthen the teacher's relationship with the learner, if it ends up leading to a "vanishing" message [6], we have benefited neither our trainees nor our patients. For example, consider the loss of message that can occur when using the typical "feedback sandwich": "*I like how you are always prepared for rounds and for teaching the team. Maybe it might help to pay a little more attention to how you are interacting with patients' families and nursing staff. But overall you are very thorough*." The key constructive message regarding professionalism can become lost in the sandwich.

Therefore, a critical step in maximizing the impact of difficult feedback is to understand one's own biases and emotional responses. Before sitting down to give challenging feedback, it is critical for us to first acknowledge our discomfort with communicating this kind of message, to commit to the importance of providing it despite this discomfort, and to consider how we might help learners develop a plan for improvement. Without taking these preparatory steps, we risk losing the opportunity to provide important feedback. At times, especially when dealing with a struggling learner, this need for preparation may require consulting with colleagues and brainstorming about strategies for improvement before meeting with the learner.

Recommendation: *For faculty members new to remediation*, *to reduce anxiety and improve performance*, *we strongly suggest practicing major corrective feedback in a safe setting with a peer or mentor before the high-stakes situation with the learner*.

15.3.3 Consider the Learner

If as teachers we struggle with giving difficult feedback, we should not be surprised that receiving such feedback would be difficult for learners as well. Indeed, the learner's response is a key driver of faculty discomfort with giving corrective feedback. To accommodate our learner's responses, we must move beyond simply delivering bad news: we are called upon to become facilitators of feedback and growth. Through this facilitation process, we can help our learners acknowledge their initial emotional responses without judgment and to move beyond their initial gut feelings to more useful engagement with the feedback message. Practicing pausing after delivering feedback and following up with phrases like "*before I go on*, *I just want to take a moment to ask how this feedback is landing on you*" or "*it can be really hard to hear this kind of feedback—what's going through your mind right now*?" are useful ways to allow the learner to give voice to their emotional reactions and open the door to engaging with the feedback with less resistance.

Confidence is a necessary prerequisite for learners to accept constructive feedback [7], yet we encounter a paradox: while struggling learners

can benefit most from external feedback for growth, these same students and trainees, due to their lack of clinical confidence, are often the most poorly positioned to actually hear and incorporate it. On the other hand, overconfidence or inaccurate self-assessment can stand in the way of feedback, with learners tending to discount critical feedback as lacking credibility [7]. Cultivating a healthy, respectful teacher–learner relationship and including genuine reinforcing feedback are particularly important in ensuring that our learners' confidence is maintained and that the guide's credibility is strengthened, especially when giving major corrective feedback.

15.3.4 Prepare for the "Gut Reaction"

Cognitive behavioral theory suggests that we naturally protect and insulate ourselves from critique. In their self-assessments, students demonstrate a "tendency to trust positive outcomes/feedback while discounting negative ones" and to "attribute negative outcomes to situational (external) factors while attributing positive outcomes to [their] own skill" [7]. In preparing to give difficult feedback, it is useful to prepare for these kinds of natural responses. Giving learners the space to voice these initial responses, acknowledging their legitimacy, and then moving forward can help to minimize the possibility that these rationalizations will become permanent road blocks to personal growth and responsibility. It is useful to give learners the chance to expand on these external factors, for example, by saying "*I'm glad you're bringing up these systems issues—it is certainly true that many of our decisions and actions in medicine are complex, and at times are the result of factors beyond our control. Tell me more about the systems that you feel contribute to this issue*." After offering the space to discuss these external factors, learners may be more ready to hear, "*It is also worth thinking about how, even in this context, we as doctors must take matters into our own hands and bypass some of these road blocks. We are, after all, part of the system*."

15.4 The Observation Phase

Feedback provides a mirror in which the trainee can see specific behaviors that are either serving him/her well or need to be changed in order to meet a professional standard. In order to give truly specific feedback to a learner, an observer must have keen observation skills. It can be helpful to frame observations as specific objective behaviors that an observer sees, hears, or notices or as the guide's subjective reactions to one of those behaviors. The more "low inference" these observations are, the less the feedback may be perceived by trainees as whimsical, subjective, or unfairly judgmental.

Many times, course leaders, program directors, or department chairs must, by the nature of their roles, use information gleaned from trusted sources including faculty and other stakeholders in the healthcare system instead of using direct observations. Even given this limitation, descriptions of specific and observable behaviors are required, or the conversation can easily devolve into an argument over differences in perspective or lack of programmatic or faculty support [8]. The ultimate solution, of course, is to train all faculty members in effective feedback techniques so that learners can make appropriate corrections well before escalating to a meeting with a program leader.

15.5 Feedback Delivery Phase: The ART of Delivering the Message

You have invited the learner to a dialogue, you have arranged to meet privately, and you have set aside ample time for the discussion. You have gathered observations about the specific behaviors that require remediation as well as those that should be reinforced, and you may have your own notes, quotations from other stakeholders, or videotapes at hand that will provide the data the learner needs to make changes. How do you deliver the message?

We favor a three-step approach to the feedback conversation. By eliciting learners' perspectives first, attending to and empathizing with their responses, we signal that we are allying with them in their learning, and we are encouraging them to develop their own self-assessment skills.

The ART of Effective Feedback
Ask the learner about goals and self-assessment.
Respond to the learner's perspective.
Tell your perspective.

15.5.1 Ask the Learner for Goals and Self-Assessment

For reinforcing feedback: "*What did you do effectively in that procedure*?" "*I'm looking back at your goals for the clerkship, and you mentioned you wanted to work on your presentations. How do you feel your presentations have improved over the last couple of call cycles*?"

For corrective feedback: "*What might you have done differently*?" "*Given that your scores on the final exam for your surgery clerkship are two standard deviations below the mean, what could you have done differently to improve your score and pass the clerkship*?"

For your meeting with Michael:

"*I appreciate your making the time to meet with me. I have heard a couple of reports about your interactions with staff and patients' families, and I am eager to hear your perspective. Can you tell me about your interaction with Mr. Smith's wife*?"

15.5.2 Respond to the Learner's Perspective, *Even If the View Differs from Your Own*

This step requires close reflective listening and offers an opportunity to mirror the trainee's point of view. Mirroring does not mean you are endorsing the learner's perspective; it simply means you are listening. Occasionally, when listening to a dispassionate and accurate summary of what you heard, the learner will begin to reflect on their own behaviors (see Chap. 13, Metacognition, for more details).

"*I am hearing that you felt that the family's expectations for Mr. Smith's recovery were overly optimistic, and that it's hard for you to take care of patients with dementia who you feel inappropriately overuse the health care system. Is that accurate*?"

Empathic words can be very helpful (see text box below): "*I know that it was a busy call night, and I imagine that the juxtaposition of Mr. Smith's admission on the heels of that very difficult code in the ICU must have been very jarring*." [9, 10]

Empathic Feedback PEARLS [9, 10]
Partnership: I'm sticking with you through this process.
Empathy: I imagine it is frustrating to come this far and only now be told that you may not pass the clerkship.
Apology: I'm sorry it has been such a difficult time for you.
Respect: I give you a lot of credit for remaining open to the feedback I've shared with you.
Legitimation: Anyone in your position would feel worried about what comes next.
Support: I am committing to work with you, to providing you with my reflections, and to connect you with helpful resources.

When the learner is able to reflect mindfully on his/her errors, the response of the faculty mentor is strongly affirmative:

"*Yes, you are seeing it clearly. As you note, your strong feelings may have come across as harsh to Mrs. Smith, who has been trying very hard to keep her husband from suffering, at great emotional expense to herself. Let's work together to find a solution here. I am committed to helping you succeed.*"

You: "*So I'm hearing how frustrating it is to do our best for our patients when important data like ins and outs are incomplete.*"
Michael: "*Yeah. I do my job—they need to do theirs too.*"
You: "*I'm wondering what you think the impact of your interaction with the nursing assistant was.*"

15.5.2.1 Special Considerations for Challenging Corrective Feedback Scenarios

Hearing unexpected critical feedback will frequently trigger strong emotion, as noted in the setup section above. Taking the focus off of the learner as a person and onto a specific behavior or set of behaviors is essential to de-amplify the emotional component of corrective feedback, making the feedback easier to digest and less likely to directly attack the learner's self-concept. For particularly sensitive corrective feedback, making space for the learner to *voice their initial impressions and process their emotional reactions* is key to moving beyond these emotions and toward more cognitive engagement with the content.

You: "*That sounds like a great plan with Mrs. Smith: to hear the family's goals, to relate to them as people, and to apologize to her and her son. Thanks for discussing that so openly. I'm hoping to move on to another interaction that the nursing staff let me know about. About Ms. Fogerty's nurse?*"
Michael: "*Now THAT was unacceptable. We're trying to keep very close track of the ins and outs for Ms. Fogerty. Her congestive heart failure is so tenuous, and we made clear to the nursing staff that this is critical. It's going to make her hospital stay longer than it needs to be.*"

(continued)

Another useful framework for providing difficult corrective feedback draws on the model for behavior change often used in the clinical setting [9]. Considering the stages of change (pre-contemplation, contemplation, determination or preparation, action, maintenance, relapse) when providing feedback allows us to focus on realistic goal setting that meets our learners in their motivational process to change. As with prescribing nicotine patches for a patient who is pre-contemplative about smoking cessation, it is ineffective to suggest action plans for change to learners who have not yet even accepted the credibility of our feedback. Rather, if we focus on moving learners along in the stages of change, helping them to acknowledge and address barriers, and guiding them toward an understanding of the tension between their stated goals and their current behavior, we are not only being learner-centered, but we are also more likely to help our students achieve real and lasting growth. Further, if we recognize moving a student from one stage to the next as a success, we are less likely to feel defeated in what should be an iterative process of encouraging growth.

Michael: "*The hospital is just not committed to good nursing care.*"
You: "*You're sounding resigned.*"
Michael: "*I can't help it if they prioritize their work breaks over doing what's right for patient care.*"
You: "*I know the system seems inefficient. Do you think your response to the nurse is going to make it more or less likely that the ins and outs will get done appropriately?*"

(continued)

Michael: "*Well, less likely, I guess. But I'm not a nursing supervisor. I can't get them to do that.*"
You: "*So it sounds like you're feeling powerless to change the nursing practice, and at the same time, you might recognize a little bit that your response may not have been totally productive.*"

When using one or more of the tools outlined above, it is important to be mindful of the seductiveness of transitioning to a more directive style. It is not enough to simply give the learner time to talk at the beginning of the feedback session and then move back to a teacher-directed lecture. A truly facilitative approach requires teachers to maintain a two-way conversation throughout the feedback session by asking probing follow-up questions based on the learner's initial reactions, guiding the learner's understanding, and ensuring that the content communicated relates to the goals and self-assessment given by the learner. Our experience is that this facilitative approach maximizes the possibility that learners will internalize some of this critical feedback.

15.5.3 Tell the Learner Your Perspective

Finally, after these loops of inquiry and response, guides can share insights and highlight key learning points to reinforce for learners what they should continue to do and what could be done differently: "*From my perspective, you've suffered from lack of preparation in your test taking. Asking your surgical chief resident and attending about what materials to study before the exam would have been enormously helpful to you. Does that ring true to you?*"

15.5.3.1 Tips for Reinforcing Feedback

It is worth spending some time considering the value of and the technique for reinforcing feedback. Reinforcing feedback is often in danger of being seen as simply the necessary packaging that allows the teacher to provide "important" corrective feedback. In fact, while reinforcing feedback does play a role in maintaining and fostering the learner's self-concept, it also serves a critical teaching role by highlighting behaviors that should be continued and developed. If we do not reinforce behaviors, those behaviors are at risk of extinguishing.

Therefore, it is critical when planning for a feedback session to spend just as much time thinking about what reinforcing points to address, as considering what corrective lessons to discuss. For reinforcing feedback to be meaningful, it must be genuine, thoughtful, and specific.

Contrast "*you have a great fund of knowledge*" or, worse, "*you are really smart*" to

> *Your understanding of the management principles of infections, particularly community acquired pneumonia and nosocomial UTIs, is solid, and shows a good foundation in clinical decision making. Going forward, I encourage you to continue to think critically, as you have this month, about how the management of hospital acquired and community acquired infections differ.*

It is crucial to focus on behaviors rather than personalities. While it is natural to want to say "*you're terrific!*" to learners who are doing great work, it is important to avoid implying that how they do is a direct reflection of their value as a person. Otherwise, when they perform less well, students and trainees may view their shortcomings as immutable character flaws and therefore may become more defensive and less able to incorporate corrective feedback in the future.

15.5.3.2 Openings to Corrective Feedback

To assess a learner's readiness to hear additional feedback, it is often helpful to ask for permission. "*Would you be open to hearing something I noticed about your presentation style?*" The inherent hierarchy in the guide–learner relationship typically results in agreement from the learner, but if the guide remains mindful of nonverbal expressions of resistance, the trusting

relationship can be maintained. Prefacing a piece of corrective feedback with words of support, such as "*I want you to be the best professional you can be*," hearkens back to a core principle of feedback: that it be given with the intent to improve performance.

The aim of corrective feedback is not simply to identify problems but also to help the learner identify a path to improvement [3]. It is useful to make clear links between specific behaviors and overall goals, either those goals previously stated by the learner or performance goals for the course of study, rotation, etc. Giving feedback that is relevant to the learner increases the likelihood that the learner will act upon it. By ignoring the learner's goals, guides risk meeting with defensiveness and rigidity rather than with learner engagement and participation. Alternatively, an explicit statement, such as "*the expectation for passing the clerkship is to present a patient case thoroughly and in an organized way. Lack of preparation slows down the clinical team during rounds, and as much as you may know, makes you appear less knowledgeable*," can demonstrate for the learner why feedback may be relevant for them. To simply say the student should spend more time preparing their presentations without explaining why makes the student more likely to disregard the feedback [8, 11].

Further, since the goal of feedback is facilitation of the learner's growth, it is wise to avoid addressing issues that the trainee cannot readily modify [6]. For example, consider a struggling student who is far weaker than his peers in generating a relevant differential diagnosis. Giving vague feedback about "*reading more*" and "*giving better presentations*" is much less helpful to the student than choosing a concrete issue to address, such as ordering a differential diagnosis list from most to least likely rather than presenting unlikely possibilities in no particular order.

Finally, subjective feedback can potentially be very helpful, particularly for "noncognitive" realms such as communication skills or professionalism. "*I felt concerned when I heard you raise your voice to Mr. Smith's wife, not only for her but also for you*," or "*I felt uncomfortable hearing from the nursing supervisor again about your not returning pages*." When delivering these more value-based or subjective pieces of feedback, it is useful to utilize the language of personal perspective. Compare "*You were not empathetic with that patient*" to "*When you were typing while Ms. X was discussing her sick husband, I was concerned that she might interpret your actions as unsupportive*."

15.6 The Next Step: Accountability

Accountability and follow-up are often neglected in the process of giving feedback. Because remediation is a high-stakes situation, sometimes putting the learner's academic progress and professional education on the line, accountability is especially important. After delivering feedback, work together to set up a clear plan for remediation.

> You: "*Just so I can see if we're on the same page, will you recap for me our next steps based on our conversation today?*"
> Michael: "*About Mrs. Smith, I need to go in there and apologize for the words I used. I'm not going to apologize to the nurse for not doing ins and outs, but I will be careful about recognizing when I'm getting frustrated with the system and try not to lash out. I can't do anything about not answering pages when I'm in the middle of a code, but I'll follow up with the nursing supervisor to smooth over any rough edges. And you'll follow up with the hospital administration about nursing policy and recording necessary data.*"
> You: "*Sounds good. Before we end, I am curious to hear what, if anything, was helpful to you in our conversation today. I'd also like to set up a time to meet after we've each had a chance to follow through on our plan.*"

During the follow-up session it is essential to recognize progress with specific reinforcing feedback. For instance: "*I had occasion to speak with the nursing supervisor today, and she said that you two had a fruitful conversation. I know it might have been a little uncomfortable to do that, and I think it speaks well of your professionalism.*"

Should the learner fail to follow through with the agreed upon plan for remediation, it is the guide's responsibility to honestly and directly inform the learner about next steps in the remediation. Though difficult words to say, the following may be necessary:

> "*You did not follow up with Mrs. Smith or the nursing supervisor, and I continue to receive complaints from patients and staff about your lack of professionalism. Given that we agreed on these steps to address your professionalism, my role requires that I take this issue to the Committee on Resident Education. I will let you know the outcome of our deliberations as soon as I can, in the next two weeks. I remain committed to helping you and want to offer a visit with the Resident Well Being team. Would you like to talk with a counselor today about what has happened?*"

Strong emotions are inevitable for trainee and the guide alike at this stage of remediation, and both may benefit from support after a difficult conversation like the one just illustrated.

15.7 Summary Thoughts

For corrective feedback to truly become a natural part of the process of learning and professional development, the culture of medical education must change. A common theme in the feedback literature is that individuals and groups help to co-create a culture of feedback. Role modeling is a good place to begin. Should our students and trainees see us, their guides and teachers, not only seeking their feedback but also pushing ourselves to continually achieve our best by utilizing the advice and guidance of our own mentors, we may help to establish a more robust medical culture in which it is the norm to seek and incorporate meaningful feedback into our practices.

15.8 A Final Illustrative Case

> *Brook is a third-year medical student on her medicine clerkship who is struggling with her clinical reasoning. She is far behind her peers in being able to construct a reasonable differential diagnosis and plan for her patients. If she remains on her current trajectory, she will not pass the clerkship. As her ward attending, you must provide her with this crucial feedback.*
>
> You: "*Brook, I'd like to find a time this week when you and I can spend some time discussing your progress on the clerkship. I'd like to particularly discuss your clinical reasoning. Will Tuesday afternoon at 1p work for you?*"
>
> Brook: "*OK.*"
>
> You: "*I'd like you to spend some time thinking about your goals for the clerkship and where you are in being able to develop a differential diagnosis before we meet. Is there anything else you'd like to discuss?*"
>
> Brook: "*I'd also like to talk about my role on the team.*"
>
> You: "*Sounds good, I'll look forward to talking on Tuesday.*"
>
> You have now accomplished the setup and worked on a mutual agenda. Your next step is to prepare for the meeting by being sure that you have a set of concrete observations of Brook's weaknesses in terms of clinical reasoning and to consider what strengths she has demonstrated during the rotation. Because she wants to discuss her role on the team, you meet with your senior resident and interns to get their perspective on Brook's role.

(continued)

You: "*I'm glad you were able to set aside time to meet today, Brook. The main thing I want to discuss today is how you generate and present a differential diagnosis on your patients. I know you also wanted to discuss your role on the team. Is there anything else we should add to our agenda?*"
Brook: "*I don't think so.*"
You: "*OK, let's first reflect on your goals at the beginning of the rotation around clinical reasoning. What did you want to work on?*"
Brook: "*I wanted to get better at remembering a larger list of differential diagnosis for each patient's complaint.*"
You: "*How do you feel you're doing with that goal?*"
Brook: "*I can remember more of the unusual diagnoses, which I'm pretty happy about. I've been doing a lot of reading on some of the rare diseases.*"
You: "*I agree that you have demonstrated knowledge about some rare diagnoses in your presentations, which says a lot about your fund of knowledge and reading. Do you think there have been any potential downsides for you on focusing on the 'zebras'?*"
Brook: "*Well, my presentations are on the long side, and the things on my list don't seem to change the team's management plan, which has been frustrating.*"
You: "*It does seem that while you've been discussing a lot of unusual diseases, your presentations haven't fit into the timing goal for the clerkship of 15 minutes per new patient. Tell me more about your frustration with the management plans for your patients.*"
Brook: "*Like Mr. X, I really thought we should send metanephrines but the resident pretty much ignored me. I feel like she isn't taking me seriously and my patients aren't really my patients.*"

(continued)

You: "*So I'm hearing that you're feeling that you're not being heard, and your sense of ownership over your patients' management is suffering—that can definitely be one of the hard things about being a 3rd year. Do you have a sense of why the resident might not be taking your suggestions?*"
Brook: "*I don't know. She kind of just laughs me off sometimes.*"
You: "*That sounds frustrating.*"
Brook: "*It is—I'm just trying to contribute, and I feel like no one is listening to me.*"
You: "*I'm glad you're bringing this up—is this what you meant by wanting to talk about your role on the team?*"
Brook: "*Yes.*"
You: "*Well, let's try to think a little bit about why this might be happening. Sometimes it's helpful to think about things from the resident's perspective. What do you think her goals for the patients are?*"
Brook: "*She is usually focused on the treatment plan, I think.*"
You: "*And, how do you feel your differential diagnosis fits into her focus on treatment?*"
Brook: "*Well, I guess I don't usually think about treatment as much because I'm really interested in thinking about all of the different things they could have.*"
You: "*I think you're hitting on something really important here, and it's something medical students often struggle with. While the differential is fascinating and definitely important to think about, the goal of the presentation is to take all of the thought you've put into the differential and condense it down to what you think is most likely and why. Then, to best utilize the team's limited time on rounds, it's critical to state a succinct plan before the team leaves the bedside. How do you think you might combine your interest in a broad differential with the team's need to know what is most likely in each particular case?*"

(continued)

Brook: "*Well, I guess I could look through my list and organize it a bit more, and I could probably take out the things that seem very unlikely*."
You: "*I think that would be a great goal for your next presentation. How do you think you can go about choosing which diagnosis on your list seem to fit best with the patient*?"
Brook: "*I'm not sure. A lot of times the list just seems so long that without testing for different things, I can't be sure*."
You: "*The skill you're identifying is crucial to moving from textbook knowledge to clinical reasoning, and I think will be critical to helping you to be successful on this rotation and beyond. Let's think of a way to practice this before your next formal presentation*."
Brook: "*It would help to go over my presentation more before I give it on rounds I think, but I don't feel comfortable asking the resident, and the interns seem really busy*."
You: "*I am very committed to helping you work on this skill. Why don't you and I spend some time on the next call day discussing your differential and thinking through how you might organize it? You can page me after you get your first patient and have had time to work on your note a bit. How does that sound*?"
Brook: "*I think that would help*."
You: "*OK, I think we've talked about a lot of issues today. Let's make a plan to meet after your next formal presentation to debrief and talk about what our next steps will be and where things stand for you on the rotation. Can you summarize for me what you're going to take away from our talk today*?"
Brook: "*Well, it seems like while I do have a good amount of knowledge about the different diagnosis my patients could have, I need to work on narrowing and organizing*

(continued)

my list. We're going to meet before my next formal presentation to practice this, and then we'll meet on the post-call day to talk about how it went."
You: "*Sounds great. I know it can be hard to talk about areas where we are struggling, and it sounds like you've been feeling a lot of tension around not being heard on the team, so I really appreciate your openness to talking through this with me today. I think you may find that if we are able to work on matching your presentations a bit more with the goals of the team, you will also feel more heard. Is there anything I can do to help with the team dynamics*?"
Brook: "*I don't think so. Let's try this first*."
You: "*OK, I'm looking forward to working on this together*."

References

1. Branch Jr WT, Paranjape A. Feedback and reflection: teaching methods for clinical settings. Acad Med. 2002;77(12 Pt 1):1185–8. PMID: 12480619.
2. van de Ridder JMM, Stokking KM, McGaghie WC, ten Cate OTJ. What is feedback in clinical education? Med Educ. 2008;42(2):189–97. doi:10.1111/j.1365-2923.2007.02973.x.
3. Bienstock JL, Katz NT, Cox SM, Hueppchen N, Erickson S, Puscheck EE. To the point: medical education reviews—providing feedback. Am J Obstet Gynecol. 2007;196(6):508–13. PMID: 17547874.
4. Bertakis KD, Roter D, Putnam SM. The relationship of physician medical interview style to patient satisfaction. J Fam Pract. 1991;32(2):175–81. PMID: 1990046.
5. 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. Med Educ. 2012;46(2):201–15. doi:10.1111/j.1365-2923.2011.04137.x.
6. Ende J. Feedback in medical education. JAMA. 1983;250(6):777–81. PMID: 6876333.
7. 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. 2012;17(1):15–26. PMID: 21468778.

8. Watling C, Driessen E, van der Vleuten CPM, Vanstone M, Lingard L. Beyond individualism: professional culture and its influence on feedback. Med Educ. 2013;47(6):585–94. doi:10.1111/medu.12150.
9. Milan FB, Parish SJ, Reichgott MJ. A model for educational feedback based on clinical communication skills strategies: beyond the "feedback sandwich". Teach Learn Med. 2006;18(1):42–7. PMID: 16354139.
10. Clark W, Hewson M, Fry M, Shorey J, Egener B. Three function model tri-fold cards. McLean, VA: American Academy of Physician and Patient; 1998.
11. Moss HA, Derman PB, Clement RC. Medical student perspective: working toward specific and actionable clinical clerkship feedback. Med Teach. 2012;34(8):665–7. doi:10.3109/0142159X.2012.687849.
12. Archer JC. State of the science in health professional education: effective feedback. Med Educ. 2010; 44(1):101–8. doi:10.1111/j.1365-2923.2009.03546.x.