

Lecture

# ***Motivating Adult Learners with Effective Feedback***

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Keywords: motivation, adult learners, feedback, goal-setting, clinical instructors, perfusion technology students, teaching, learning, positive clinical environment

## ***Abstract***

Although students are ultimately responsible for their own motivation, instructors can use techniques of goal-setting and clear, constructive negative and positive feedback to give learners an accurate sense of their own competence and to help stimulate them to reach their full potential. Many perfusion technology instructors fail to use these techniques effectively.

Clinical objectives are devised in such a way to make it immediately clear whether the student's performance measures up. The learner, the instructor or both can develop these job-oriented objectives.

Some believe that feedback is the number one motivator of people. Negative and positive feedback techniques

and ways to defuse defensiveness are discussed. Feedback should be objective, timely, accurate and based on first-hand data. Feedback should be focused on the behavior, not the person. "Gunnysacking," "pimping" and other destructive feedback should be avoided because evidence suggests that it de-motivates adult learners. Any emotional response on the part of the instructor should be communicated in an "I message." Feedback provided to students should deal with specific behaviors, not generalizations. Self-assessment and life-long learning skills can be fostered in learners by asking them to appraise their own performance and suggest ways they think such performance might be improved.

## ***Introduction***

Surveys of award-winning medical school teachers show that one of the major dissatisfactions they have with teaching is unmotivated students.\* Perfusion technology instructors have similar concerns. Although a student's lack of motivation can certainly be frustrating for the instructor, the problem doesn't end there; given two students with equal knowledge and skills, the one with the higher motivation will likely learn more. Motivation to learn ultimately is the student's responsibility, but how instructors interact with their students can help motivate or de-motivate their students. (1)

One of the most powerful tools available to the teacher is clear and appropriate positive and negative feedback. Feedback has been called the number one motivator of people. (2) Constructive feedback about progress energizes students into

improvement. Precise, appropriate negative feedback based on an objective evaluation of students' inability to demonstrate skills to preset standards can give learners important clues about how to improve their proficiency the next time. Positive feedback for good performance is also motivating: when people do a good job and are told so, they are motivated to try even harder. (1)

But medical teachers, including clinical perfusion technology instructors, often fail to use feedback effectively. Some medical teachers tend to avoid using negative feedback because they want to be liked by the students, because they feel uncomfortable discussing negative behavior or because they feel the student will be hurt. (3) Some instructors feel that

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\* Whitman N, Ferrey A. Effective medical teaching as characterized by medical school teaching award winners. Presented at Annual Meeting of the American Educational Research Association. San Francisco, April 16, 1992.

delivering negative feedback is the job of the program officials or someone else "in charge" of the students. Other instructors tend to give students negative feedback even when positive feedback is called for, in a well-intentioned but mistaken effort to "keep the student on his toes." (1) But absent or second-hand feedback of either kind can mislead students, failing to give them a clear picture of what they are doing right and wrong, making teaching and learning random at best. (4) Without timely feedback, mistakes go uncorrected, good performance is not reinforced, and clinical competence is achieved by trial and error, or not at all. (3)

## ***Goals and Objectives:***

### ***Precursors to Feedback***

Before any feedback can be given, clear target goals and objectives for the student's performance must be set. An educational objective is simply a measurable, observable goal. Without a yardstick it is difficult to measure anything.

Goals and objectives can be externally imposed by the instructional staff, designed by the student or jointly devised. Perfusion students most often have educational goals and objectives set for them. ("The student will be able to set up the pump in X minutes by the end of week Y.")

Adult learning theory suggests that it may be beneficial to involve perfusion technology students to some extent in the identification of their individual goals. Adults prefer to be recognized as individuals and participate in the assessment of their own needs and in the development of learning objectives. (4, pp. 45-51) Keller (5) suggests helping students build upon their prior knowledge and giving them as much control as possible, in order to increase their involvement and participation. To help adult learners meet these needs it might be helpful to engage students in goal-setting followed by a more strenuous analysis of specific behaviors which are necessary to accomplish the goal. Although it is probably neither wise nor practical to allow perfusion students to set all their own goals, it may be possible to allow them to set a few broad key goals for themselves.

Certainly objective-setting is possible on a clinical case-by-case basis. Before the case begins the student can be asked to identify one or two objectives for that case. The student might choose communication ("I want to respond to everything the surgeon says today without prompting") or a technical skill ("I want to try to come off bypass without you talking me through it today") or some other issue the student is concerned about.

Whether the goals and objectives are developed by the student, the instructor, or both of them together, specific behavior and how it will be measured must be absolutely clear to both the instructor and the student. (2) With a vague goal ("I want to communicate better") it is difficult to assess whether

the goal has been met or not. But more precise objectives, like the ones used as examples above, are no more complicated but make it simpler to evaluate the student's performance. The wording of the objective itself helps the instructor provide precise feedback and a clearer picture in the student's mind of how he is doing. Learning becomes less efficient when the student isn't sure exactly when the correct performance is occurring. Without adequate feedback, de-motivation may actually occur, (1,4) or, even worse, the student may assume that inappropriate behavior or technique is correct or at least acceptable.

## ***Feedback Techniques and***

### ***Importance of Effective Feedback***

Effective positive and negative feedback techniques go a long way toward creating a positive clinical environment right from the start. Research shows that the tone of the teaching setting (positive or negative, accepting or belittling) is a key element of learning and includes whether students are stimulated and attentive, and whether or not they feel comfortable to participate and reveal their strengths and weaknesses. (1) A positive and supportive environment will help students develop a positive attitude toward the profession and contribute to their feeling satisfied and rewarded. (6) In addition, a positive clinical environment makes the teaching/learning process more rewarding for those who interact with the students. (6) Enthusiastic students help keep instructors enthusiastic. (1) The role played by the clinical instructor does not automatically imply being the villain and wearing a "black hat."

Blanchard and Johnson, authors of a popular management book called *The One Minute Manager*, describe a positive feedback technique they believe is most effective when used with a new employee or someone who is starting on a major new project, certainly criteria which would apply to the beginning perfusion technology student. They suggest that the manager try to "catch them doing something right" by comparing the employee's behavior with objectives which have been set up. The manager first praises any behavior that is approximately right and then raises the standards as the employee becomes more proficient and exhibits behavior closer and closer to the criteria described in the objective. (2)

Thus, the very first feedback an employee or learner gets from the manager or teacher is positive. (2) It is unavoidable that the teacher will subsequently give less-positive feedback, but by then it will not be the first feedback that the student has received from the instructor. This reservoir of good will helps let learners know that feedback-givers are fair; that the instructors "call 'em the way they see 'em." This process may help head off the defensiveness that can result even from constructive negative feedback in the ego-intensive environment of the medical field where learners are accustomed to exhibiting top

performance. (1, pp. 69-71) When feedback fails it is usually because it led to anger, defensiveness, or embarrassment on the part of the trainee. (3)

If instructors feel resistance from students during the delivery of negative feedback, they should stop and listen to the student. Resistant learners have stopped paying attention and are formulating a response. Allowing them to respond can start a dialogue which will get them involved again. (4, pp. 45-51)

Defensiveness may also be defused by using a technique known as the "ego sandwich," sandwiching negative feedback in between positive feedback. (4) ("I like the way your perfusion record is very complete. It's hard to read, though, and I'd like to see you make it neater next time. But it's obvious you paid close attention to what was going on during the case.")

Although this technique can make negative feedback more palatable, care must be taken when using it to avoid sending a mixed message, which could result in the learner's perceiving the whole "sandwich" as insincere. An impression of dominance and insincerity may be projected to the learner when the instructor displays a negative facial expression along with a positive verbal statement, a real possibility when the instructor is angry about the behavior but is struggling to say something nice to soften the blow. Nonverbal cues congruent with the verbal statement are essential with any feedback. Positive body language with a negative verbal message equals sarcasm. (4, pp. 19-27)

The "ego sandwich" technique should not be used if the weight of the negative feedback would overwhelm any positive comments that could be made. ("I like your nice, neat perfusion record. It really bothers me, though, that you pumped air today, but you cleaned up the pump meticulously.") Obviously in a case like this the "ego sandwich" becomes a "bologna sandwich." (7)

Timing of the feedback is important as well. Feedback should be given as soon as possible after the behavior occurs. Obviously, time constraints of the teacher and the learner have to be considered, but it has been suggested that in the clinical setting any event over 48 hours old is "ancient history" to the learner. (1, pp. 69-71) Feedback has far more impact on future performance if delivered immediately. (7)

Giving negative feedback immediately helps instructors avoid "gunnysacking." This phenomenon occurs when instructors store up observations of poor behavior. Some day, perhaps at evaluation time, or perhaps when frustration or anger makes it impossible for them to desist any longer, they dump their gunnysacks on the students and tell them everything they have done wrong for the last few weeks or months. (2) Students are often surprised, and rightly so, at their poor evaluations. (7, pp. 7-8) Ongoing, consistently fair feedback deals with this communication problem.

This is not to say that the instructor's anger or frustration has no place in the feedback process; however, the emotional aspect of the feedback should be couched in an "I message." ("I'm upset because you didn't watch your line pressure when the surgeon put the cross clamp on the aorta. We've talked about this several times. I expect you to do better next time. I'm wondering whether you remember why it is so important.") If either party is too upset to have a rational discussion at the time of the event, it may be wisest to delay giving feedback to let strong emotions cool down. If this is the case, an indication should be given to the learner that feedback will be forthcoming in the next day or two. (1, pp. 69-71) It may be prudent to find a private place to discuss the matter, as no one benefits from public criticism.

If anger, frustration, or just ignorance on the part of the instructor result in negative feedback demeaning or belittling to the individual, most students will become defensive or "gun shy." (7, pp. 7-8) Insults or ridicule do not improve learning; usually feelings are remembered longer than the fact. Threats of failure or punishment create antagonism, and very little learning takes place in a negative environment (4, pp. 45-51) except that the student learns to avoid that instructor at all costs.

Destructive feedback, defined as "using feedback to embarrass or blame the recipients or to release anger rather than helping them improve," (8) occurs when individuals in authority criticize subordinates only when they're so angry that they can no longer keep their tempers in check. The resulting negative, and often explosive, feedback is neither specific (focused on a particular behavior) nor considerate, but is typically biting and sarcastic and may include threats or other negative features. Furthermore, such criticism often attributes poor performance by the recipient to internal causes such as lack of motivation or ability (8) rather than addressing the specific evaluated behavior which was not found satisfactory by the instructor.

Research shows that subjects reacted negatively to destructive criticism, becoming significantly more angry and tense after destructive criticism than after constructive criticism. Subjects faced with destructive criticism reported less ability to do a clerical task or proofread. Furthermore, they reported that they set lower and more easily achievable goals for themselves and felt less confident and capable, consequences which the researchers concluded may have affected their task performance. (8)

Some perfusion technology instructors, in an effort to ensure that students are "toughened up" before they graduate, tolerate or even engage in problematic behavior toward students in order to allow them to "learn how to get along with people like that." While it is certainly necessary for students to learn to deal with the occasional "sharks" (9) encountered in medical waters, it is counterproductive for perfusion tech-

nology instructors themselves to engage in this type of "pimping" behavior, which can "rid the student of needless self-esteem," (10) because adult learning theory suggests that destructive feedback is de-motivating for the adult learner. (11) Hazing has long since been discredited and is illegal in most states. Rites of passage have no place in medical higher education.

Adult learning experts state that the most potent adult-learner motivators are internal: self-esteem, recognition, greater self-confidence, self-actualization, and the like. (11) The instructor should place a purposeful emphasis on developing the learner's sense of competence and self-esteem (4, pp. 19-27) in the interest of helping students remain motivated and confident to deal with the challenges ahead of them. The best way to equip the learner with an accurate sense of competence is the use of clear, constructive, honest and objective feedback based on exhibited competency.

Constructive feedback is more effective when the description of the behavior is both accurate and precise. (4) Blanchard and Johnson emphasize that negative feedback should be given only after the manager has verified the facts, and only regarding behavior which the manager has observed, not on second-hand information. (2) Inaccurate feedback on misinterpreted or non-existent behavior is a waste of time at best. At worst, it can be confusing to the learner and damaging to the teacher/learner relationship.

Saying something vaguely negative ("That was terrible!") or vaguely positive ("Great job!") is not very helpful in terms of helping the student understand which specific behaviors you intend to comment upon. A more specific comment ("I saw that you watched the patient's filling pressures carefully today while you were weaning her off bypass.") makes it much easier for students to identify what they did right and makes it more likely that learners will repeat the behavior.

It is important that the feedback is descriptive of the behavior, not the person. (4,7) Students should not feel as if their personal worth is being attacked. An evaluative comment ("You sure are a klutz.") does not describe the behavior in question but instead makes a comment about the person's worth. A better feedback statement ("I've noticed that you seem to be having trouble getting that tubing out of the pump head. Why don't you try loosening the occlusion a little?") focuses on the behavior and gives the student a specific strategy for improvement. Blanchard and Johnson suggest following negative feedback with a positive statement of the person's worth as a reminder that it is the specific behavior that is the problem. This strategy is designed to help focus constructive negative feedback on the behavior. (2)

Positive feedback should also focus on the behavior. Personal praise ("You're terrific!") may give students an idea that their personal worth, not their behavior, is under scrutiny, and may even be embarrassing to the receiver. Focusing on the

behavior ("You remembered how to set up the balloon pump without any help!") bolsters pride in a job well done and lets the trainee's self-image develop accordingly, (3) based on actual performance, not on subjective generality.

Blanchard and Johnson state that precise positive feedback early on helps the employee "learn the ropes" more quickly. As the employee's skills develop, they learn to compare their own behavior with that expressed by the objectives and praise themselves when warranted. Concurrently, the manager's positive feedback becomes less frequent. Blanchard and Johnson's ultimate goal is for the employee to learn to "work for themselves." (2) Self-direction is certainly a goal we would claim for perfusionists, too.

Self-assessment is probably the most powerful kind of feedback. (7) Instructors can help students to become self-evaluating by asking learners for their own assessment of their performance. (1, pp. 69-71) This approach also assures that the instructor has a more complete view of the situation. It may even show that negative feedback is unnecessary because students are already aware of the negative behavior and have critiqued it themselves. (7) Sometimes investigation reveals that students are doing the right things for the wrong reasons, or the wrong things for the right reasons. (7)

Starting with the student's own assessment has the additional advantage of allowing the learner to solicit the instructor for feedback rather than having the instructor impose it upon the learner. (4) Feedback works best when it is solicited rather than imposed. (3)

Asking for the student's assessment provides instructors with an opportunity to find out how insightful learners are and enables students to initially develop and then enhance their own performance criteria. It also gives students the opportunity to invent strategies to correct their own shortcomings. (4) Becoming insightful about their work and performing self-assessment is essential to students' becoming lifelong learners. (1, pp. 69-71) Our goal as educators of 21st-century professionals is to create independent, inner-motivated individuals who will be career-long learners who are capable of self-assessment and self-correction.

## Summary and Conclusion

It may be helpful to keep in mind Ende's eight guidelines for feedback, (3) developed for medical school and residency teachers:

- Feedback should be undertaken with the teacher and trainee working as allies, with common goals.
- Feedback should be well-timed and expected.
- Feedback should be based on first-hand data.
- Feedback should be regulated in quantity and limited to behaviors that are remediable.
- Feedback should be phrased in descriptive nonevaluative

language.

- Feedback should deal with specific performances, not generalizations.
- Feedback should deal with decisions and actions, rather than assumed intentions or interpretations.

Although students are ultimately responsible for their own motivation, instructors can use techniques of goal and objective-setting as well as clear, constructive negative and positive feedback to give learners an accurate sense of their own level of competence and help motivate them to reach their full potential. If you know where you're going, it is easier to get there and easier to know when you've arrived.

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