

## For the Office-based Teacher of Family Medicine

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**William Huang, MD**  
Feature Editor

*Editor's Note:* In this month's column, Hershey Bell, MD, of the Lake Erie College of Osteopathic Medicine discusses the importance of giving formative feedback to learners. He proposes a mnemonic FED to remind us of the appropriate content (feedback and direction) and an effective manner of communication (encouragement).

I welcome your comments about this feature, which is also published on the STFM Web site at [www.stfm.org](http://www.stfm.org). I also encourage all predoctoral directors to make copies of this feature and distribute it to their preceptors (with the appropriate *Family Medicine* citation). Send your submissions to [williamh@bcm.tmc.edu](mailto:williamh@bcm.tmc.edu). William Huang, MD, Baylor College of Medicine, Department of Family and Community Medicine, 3701 Kirby, Suite 600, Houston, TX 77098-3926. 713-798-6271. Fax: 713-798-7789. Submissions should be no longer than 3–4 double-spaced pages. References can be used but are not required. Count each table or figure as one page of text.

## Encouragement: Giving “Heart” to Our Learners in a Competency-based Education Model

**Hershey S. Bell, MD**

We have entered the era of competency-based education (CBE) in medicine.<sup>1</sup> Benjamin Bloom, an educational psychologist who made significant contributions to the classification of educational objectives and the theory of competency-based education, placed formative evaluation at the heart of his method.<sup>2</sup> Formative evaluation seeks to shape, grow, and develop an individual. It is distinct from summative evaluation, which summarizes progress made over a set period of time or course of study. Currently, in medical education, we tend to focus on summative evaluation (eg, end of rotation evaluations, quarterly reviews, and end-of-year

decisions regarding promotion or graduation). As many of us have experienced, relying on summative evaluation alone can be risky. If a learner experiences dissonance with the information presented, he/she can react unexpectedly, and that reaction can interfere with the learning process, as the following example demonstrates:

Alicia, a first-year family medicine resident, met with her faculty advisor to discuss the results of her in-training examination. Alicia's scores were very low. The faculty advisor commented to Alicia that her scores demonstrated a “global deficit” in knowledge. Alicia reacted angrily to this assessment and demanded a change in advisors. Alicia and her first advisor had no ongoing dialogue throughout the remainder of her residency, thus depriving Alicia of that faculty member's expertise and depriving

the faculty member of the experience of working with a challenging learner.

The advisor had been unaware of the fact that Alicia had been the first person in her family to finish high school, attend college, and then medical school. Alicia worked extremely hard in medical school and successfully completed the curriculum without any failures. Throughout medical school and into residency, she experienced insecurity regarding her “worthiness” to be a physician.

In the current medical education system, faculty interpret and evaluate data to arrive at a summative sense of a learner's performance. Learners are expected to accept this interpretation and to move forward based on the faculty member's analysis.

Formative evaluation uses an alternate approach. In a formative

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system, data is presented to learners as feedback. Feedback is defined by the American Heritage Dictionary as “the return of a portion of the output of the process or system to the input, especially when used to maintain performance or to control a system or process.”<sup>3</sup> Faculty may help learners interpret and analyze the data; however, the primary task of the teacher is to present high-quality feedback to the learner in an effort to stimulate his/her self-evaluation process. The learner’s task is to evaluate the meaning of the data as it relates to his/her specific pathway of development

### The FED Mnemonic

Supplying feedback is required to stimulate a person’s self-evaluative process; however, it is not sufficient. Two other ingredients are required as articulated by the FED mnemonic:

F: Feedback

E: Encouragement

D: Direction

When all three are active in a teacher-learner interaction, the teacher and learner have the best chance at achieving success in their educational pursuit. As discussed, feedback (F) requires giving highly valuable data to learners. Much of what we already use in summative evaluation can be reframed as data. For example, rather than interpreting low in-training exam scores as representative of a “global deficit,” faculty can simply offer the scores to learners as objective results of a test. Given this data, the learner can then develop insights and disclose issues that may explain the level of performance. When the insights come from the learner, the chance of the learner experiencing dissonance is minimal, and the risk of shutting down learning is gone.

Direction (D) refers to the intention of teaching. In a competency-based education model, the direction or intended result of teaching is that the learner achieve the competencies. For example, an

in-training examination is largely a measure of the medical knowledge and patient care competencies. By discussing the objective results of the test in the context of the relevant competencies, learners can then anchor their self-evaluation and strive to become a competent physician in those areas.

### Encouragement

Perhaps the most overlooked task within the FED mnemonic is encouragement (E). Encouragement has its root in the French word for heart, “coeur.”

To encourage another is to “give heart” to them. The antonym to encouragement is “dishearten.” The implication is that the manner in which we provide F (feedback) and D (direction) is as critical as the content of that feedback and direction. When we create our own evaluations of data, and offer these evaluations to students, we run the risk of disheartenment. In contrast, when we share data with learners without our own interpretation and in a supportive manner, we encourage them.

To encourage another human being is to create an experience such that they believe that you are on their side and that you are a central part of their efforts toward success. An analogy that is useful is the idea of “rallying” in tennis. When two people rally, two goals simultaneously exist. First, rallying aspires to keep the ball in play. This differs from an actual game situation where the goal is to get the opponent out. Second, rallying involves pressing each other up against each person’s limits. In rallying, easy lobs are not served; rather, each player challenges the other with shots designed to further enhance the development and practice of higher levels of ability. When we encourage within a competency-based education model, we want to “keep the ball in play” by providing feedback and direction in a manner that inspires learners to self-

evaluate and disclose the essence of their learning. We also want to press people up against their limits so that they are motivated to grow and develop.

Some people may associate encouragement with being “soft.” That is, they may be reluctant to press people up against their growth potential for fear that it may be uncomfortable for the person. However, Czikszentmihalyi<sup>4</sup> describes a state of “arousal” rather than discomfort when humans are put into situations where their willingness to acquire new knowledge and skill slightly exceeds their current ability to demonstrate that knowledge and skill. When we encourage, we seek to create that perfect relationship between willingness and ability. If people’s willingness far exceeds their ability, they will be left with frustration. If people’s willingness is far below their ability, they will experience boredom. In both situations, learning is diminished. In the ideal flow state where willingness is slightly in excess of ability, students and residents are motivated to learn.

In addition to pressing learners slightly beyond the limits of their knowledge and skills, we can also encourage them by communicating that we are their partners as they experience either moments of joy or moments of disappointment while maturing into competent physicians. Coloroso<sup>4</sup> describes this aspect of encouragement in discussing how parents may encourage their children. She recommends phrases such as, “I believe in you,” “You are very important to me,” and “I know you can handle this.” What all of these phrases have in common is communicating that one person (the parent) is on the side of the other (the child). As teachers, we can use similar statements to assure medical students and residents of our interest and concern in their growth and development.

### Using the FED Model

Consider Alicia's situation again from a formative evaluation viewpoint.

Advisor: "Alicia, I have your in-training exam scores. Can you please review them? When you are ready, let's discuss what you've discovered. (F—feedback)

Alicia: "I see that I have some pretty low scores here. I try so hard to do well that I find myself adding pressure during tests and exams. I feel that I may not be up to par with the other residents here."

Advisor: "Let's take a look at the medical knowledge and patient care competencies. I'd like you to evaluate your in-training exam performance relative to what these competencies call for. (D—direction)

Alicia: "I've always prided myself on the fact that I do search for the latest evidence-based standards in patient care and that I have a lot of compassion for my patients. I do realize that I probably look up information more than others do, but at least I try. I can't do that during an exam."

Advisor: "Alicia, it's wonderful to hear that you value evidence-based medicine and compassion. Aspiring to these values will serve you well during your entire career. I also hear you saying that you recognize a need to look up information more than others. Again, I see it as a great positive that you see this in yourself, and you are working each day to improve your skills. How can I support you in these efforts?" (E—encouragement)

Alicia: "Well, I sometimes feel like I could benefit from a plan for studying. I really get overwhelmed with all of the work we need to do in residency. I always felt that I was behind in medical school."

Advisor: "Alicia, I'd be glad to help, and I have great confidence that you will be successful in your efforts." (E—encouragement)

### Summary

The shift in focus of medical education toward a competency-based model demands that teachers effectively utilize formative evaluation. Formative evaluation involves both

a content conversation (the provision of feedback and direction) as well as an effective process in delivering that content. Encouragement is a tool that faculty can use to facilitate the effect transmission of formative content.

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