

Chapter 4: Role of informed self-assessment in coaching

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Take home points

1. Unguided self-assessment is flawed and should be avoided.
2. Coaches should focus on developing self-directed learning skills in students.
3. The informed self-assessment framework can be used to teach self-directed learning skills.
4. For students who are performing poorly and are unaware of their deficiencies, the focus should initially be on the process of the task or skill and not the outcome.
5. Coaches should be mindful of student's motivational needs when providing feedback.

Self-directed learning and self-assessment

A fundamental part of medical training is developing the skills necessary to become a self-directed learner in order to adapt with the continuously changing medical system.¹⁻³ Self-directed learning (SDL) encompasses the process of individuals taking the initiative to identify knowledge gaps, generate learning goals, take action on learning goals and evaluate learning outcomes to ensure future learning preparedness.⁴ The goal of medical school then is to develop what Cutrer et al has referred to as the Master Adaptive Learner, an individual with both developing mastery of the field and adaptive expertise to allow them to continue learning throughout their career.¹ This is a four-phased process rooted in self-regulated learning: planning, learning, assessing, and adjusting. Although many matriculating medical students possess emerging self-regulated learning tendencies with their high desire for learning, they often need support in managing their learning strategies such as time management and having a systematic approach as they transition to medical school.⁵ Further, studies demonstrate that even practicing physicians may not be prepared for future learning.^{2,5} Coaches are uniquely positioned to help learners develop and nurture self-directed learning skills to develop into Master Adaptive Learners.

Vignette

Joe is a first year medical student who is struggling with professionalism in his clinical skills course. He is consistently late to sessions, is disrespectful to staff, talks during patient panels, and dominates conversations in small groups. He has received a below average score for professionalism on his recent evaluation. His professor is meeting with him to review his performance. He is dismissive and says that he was scoring well on the quizzes and his peers seemed to like him.

Thought questions:

1. Is there an alternative approach to self-assessment?
2. What is the best way to approach a learner who is performing poorly but believes they are performing well?

One key step to becoming a self-directed learner is analysis of one's current state of learning to identify gaps, or, in other words, to perform a self-assessment. Studies have repeatedly demonstrated throughout medical training and in other fields that unguided self-assessments are flawed.⁶⁻⁹ Individuals are unable to independently accurately identify their weaknesses and the majority of students believe they are "above average," overestimating their performance. Thus, students often need support performing self-assessments, gathering and processing external feedback, and integrating this into subsequent learning plans.^{5,10,11} The informed self-assessment framework proposed by Eva et al. can serve as a guide to help coaches provide the scaffolding needed to promote the development of the master adaptive learner in medical students.¹²

Informed self-assessment: A framework for self- directed learning

The informed self-assessment framework consists of five dynamic components: seeking or receiving incoming sources of information, interpretation of information, response to information, filtering of information through internal and external conditions, and balancing of tensions arising from internal and external data.¹² The first three components in this iterative process deal with how data that inform a learner's self-assessment are accessed, interpreted, and utilized by the learner. The fourth component describes the filtering of information through various internal and external conditions and influences such as considering the relationship and credibility of the source of feedback. The fifth component addresses the balancing of tensions of internal view of self in contrast to the external data that might contradict or agree with the learner's view of himself or herself.

Each learner will bring different levels of experience with them and will therefore have differing needs in terms of what components they need assistance with in the informed self-assessment process. However, given that medical school is a new experience with different expectations and players, most students will need to start at the beginning. In the next few paragraphs we will outline how coaches can facilitate the use of the informed self-assessment framework.

Step 1: Identify sources of information

The majority of medical students have enjoyed academic success prior to medical school and are often performance oriented. They are used to receiving grades and trying to calibrate their performance to achieve the best grade possible. In other words, they are usually used to incorporating score performance into their self-assessments. The coach's job will likely be to help them move beyond the test scores and look for other sources of information. This includes both formal sources embedded in the curriculum such as clerkship comments, standardized patient examinations as well as informal sources like real time feedback from supervisors and comments from peers.

Sources of feedback to consider:



Course assessment
(including any written feedback)



Faculty verbal feedback



Quiz and examination
performance



Multisource feedback from peers,
inter-professional colleagues



Peer performance on examinations
(benchmarking data)



National Board Examinations



Performance on standardized
patient assessments



Self-testing of content

Some learners may require prompting to seek out some of the sources that are not automatically provided. In addition, not all the sources will be necessary for every student. For example, if a student is struggling with a course or clerkship they may need to seek out specific feedback from their course or clerkship director on how to improve whereas a student performing well will not need to seek out this feedback.

Step 2: Evaluate and interpret the feedback

An important part of the coaching role early in this process is to review some of the feedback with the student to help them determine credibility and quality. Not all feedback is created equal. As learners become more familiar with this process, the coach can ask them to review feedback independently prior to a coaching session. Initially when they are performing this independently, it can be useful to then review this with them when meeting to reinforce the process. In this step, they need to try to understand what the provider of feedback is saying about their performance.

Step 3: Balance tensions created by the information

After reviewing all available feedback and interpreting the information, there will likely be tensions created from this information that the student may need help balancing.¹³ The coach can help the learner become aware of their emotions and reactions to feedback and understand how that impacts their interpretation of the information. The coach does not need to be a therapist, but it may be necessary to help the student acknowledge that emotions play a role and help support them while they weigh competing internal and external data. For example, if a student is angry that they received a negative evaluation, they may discount this information. The coach's role is to point them to the objective data and prompt them to reflect on the information. It is important that there are several responses to feedback: filter out parts of the feedback, ignore feedback, seek further corroboration of data, and accept and incorporate the feedback.

Step 4: Create an action plan

The most important role for a coach is the last step which is to help the student develop a systematic approach to responding to this information. Initially, a coach needs to closely guide a student through this step but it is important that they eventually learn to perform it autonomously. The coach can start by supporting the student in the creation of an action plan in the form of learning goals.^{1,14–16} These should be specific, actionable, and timed.¹⁷ In addition, the coach should help the student limit learning goals to an achievable number. For example, a coach can help the learner identify high quality learning resources to fill learning gaps. Finally, it is important to hold the learner accountable. For some learners, this may be simply following up with them at the next scheduled session or touching base via email. For other learners, it can be helpful for them to email an action plan after a meeting and regularly email at predetermined points.

A special case

The majority of learners will respond to this approach and with experience will begin to perform these steps without assistance. There is a special case though that bears mentioning as a coach will likely encounter this at some point during a coaching career. This is the learner who is unskilled and unaware of their lack of skills. These individuals often perceive that they are above average because they lack the necessary skills to identify their learning gaps even when comparing themselves to others.^{9,18} While many individuals exhibit some degree of illusory superiority and view themselves as above average compared to others for any given task, this is particularly problematic for those who are performing poorly. It is tempting to demonstrate to the student what poor performance looks like, thus assuming that the student will be able to improve. Unfortunately, students may not

have a deep enough understanding to be able to incorporate appropriate learning goals by watching others or their own performance. Instead, with these students, the primary focus should be on helping the student to improve, thus creating a more accurate self-assessment. This can be done by providing opportunity to practice skills while giving encouragement and reinforcement by supplying step by step coaching and frequent feedback.¹⁸ It may also be helpful to focus initially on the process instead of the outcome. For example, if a student is struggling with a procedural skill such as endotracheal intubation, a coach can first focus on the process of intubation instead of focusing exclusively on the outcome of successful intubation. By doing this, a coach will be able to reinforce actions that are performed well, correct actions that need modification, and build the learner's confidence by accomplishing discrete tasks.

The coach's role

The coach's role in the process of informed self-assessment and self-directed learning will evolve as the coaching relationship matures and the student becomes more adept with this process. Current work on effective feedback is focused on the "educational" relationship between feedback provider and learner. When the provider becomes a trusted source, the learner is more likely to incorporate feedback that is disconfirming with her own view of her performance.¹⁹ Thus, it is important to establish a relationship with the learner to gain trust. Initially, a coach may need to be directive and hold the learner's hand through the process. Ultimately, though, the learner will be able to perform this process independently of the coach. Regardless of the level of guidance the coach is providing, it is essential that he/she be mindful of the learner's underlying psychological needs if a learner is to achieve their full potential.

Specifically, self-determination theory suggests that an individual's natural motivation to learn is driven by fulfilling three innate psychological needs: a sense of relatedness, a sense of autonomy, and a sense of competence. The coach's job is to nurture the learner's motivation by helping to fulfill these motivational needs while providing high quality change-oriented feedback. Change-oriented feedback focuses on behaviors that need to be modified in order to eventually achieve the learner's goals.^{11,20}

To accomplish this, the feedback must be:

1. Empathic
2. Accompanied by choices of solutions to correct the problem
3. Based on clear and attainable objectives
4. Free from person-related statements
5. Paired with tips
6. Given in a considerate tone of voice.²⁰

In review

In revisiting the vignette, this student is unable to independently and accurately identify his weaknesses. Informed self-assessment is a framework for self-directed learning that teaches learners to elicit and incorporate various sources of feedback. This framework can be used by coaches and learners to more accurately approach assessment of performance.

For the learner who is performing poorly and is not aware of their poor performance, focus on helping them create a more accurate self-assessment. This can be done by providing ample opportunities for the learner to practice the skills in an environment where they will receive encouragement and feedback. Initially it can also be helpful to focus on the process and not the outcome.

Conclusion

The informed self-assessment framework can be utilized by coaches to help learners become self-directed learners. As learners progress through this process they will learn to perform this process independently. Coaches can facilitate this by walking them through the process and being mindful of self-determination theory. Through this process, coaches can help students along the journey to become Master Adaptive Learners.

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