EPA Thinking - Module 7
Mentor supplement with examples and prompts

Mentor Briefing: It will be important to inform the students of the points below before you proceed with the module exercise so they will understand that the process they will follow gets more natural.

- Students should keep in mind that they are evaluating thinking needed to learn clinical procedures. These procedures will require decisions.
- Decisions can be pre-entrustable or entrustable. They cannot be memorized effectively nor are they acquired by experience alone.
- The flipped classroom causes attention to be focused on comparing current decisions in studying vs. future decisions in the clinic.
- Awareness of the EPAs and their understanding of how to acquire entrustability can be powerful in selling themselves to residency programs. Make them repeat this back and try to give their own explanation. Tell them not to worry, but just to focus on their own way of thinking.

You, the mentor, will be aided by several enhancements:

1. This supplement is composed of the materials that the students have with the enhancements added to provide an all-in-one document.
2. [brackets] are used to provide notes or suggestions.
3. Highlighting is used for faster reference on the page.
4. The sample responses in the section following the discussion questions are excerpted from the reading materials to help you prompt the students as needed.
5. Additional background material is also included in the sample responses.

EPA 7 Flipped Classroom Exercise

EPA 7: Form clinical questions and retrieve evidence to advance patient care.

AAMC description of activity: The goal is to be able to *identify key clinical questions* in caring for patients, identify information resources, and *retrieve information and evidence*. Skill in *critiquing the quality of the evidence* and assessing applicability to their patients. A required skill set is the *foundational knowledge* an individual has and the *self-awareness to identify gaps and fill them*.

Discussion Questions:

1. First student: Identify a behavior from the pre-entrustable description for this EPA in the AAMC Faculty and Learners' Guide.
    a. Next student: What type of thinking is associated, novice/robotic or integrated/anticipatory? [novice]
    - What is novice thinking? [direct recall; absence of awareness of significance]

- What is the corresponding study behavior, i.e. how do robotic thinkers study? [emphasis on recognition of facts; absence of personal organization of facts]

   b. Next student: Where do you think the information for this EPA is addressed in the preclinical curriculum? (starter example: What anatomy content is needed for this EPA?) [anatomy provides insight into function and relationships; physiology and biochemistry provide insight into normal communication between tissues, etc.]

2. Next student: Identify another behavior from the pre-entrustable description.
   a. Next student: What type of thinking is associated, novice/robotic or integrated/anticipatory?
   b. Next student: Where is this type of thinking addressed in the preclinical curriculum?
3. Continue this analysis until there is general agreement that at least three examples have been identified. [Note: Inclusion of at least three assures an appreciation of the variety of behaviors observed.]
4. Next student: Identify a behavior from the entrustable vignette.
   a. Next student: What type of thinking is associated, novice/robotic or integrated/anticipatory? [integrated/anticipatory]
   b. Next student: Where is this type of thinking addressed in the preclinical curriculum? Also, in your own study skills? [As above, but disciplines are related to each other by the student, e.g. heart anatomy is reviewed during cardiovascular physiology.]
5. Continue this questioning until there is general agreement that all have been identified.
6. Next student: Show how ESPeak Mapping helps to develop the skills needed for this EPA. (Example: could you organize this topic in a concept map?)
7. Next student: How does deliberate practice apply to this skill development [self-reflection is encouraged along with review of deficiencies]?
8. Next student: How does Jungian type apply to this EPA?
   a. Limit discussion to intuitive and sensing preferences. How does each preference prefer to think? [Sensing types: linear, memorization, recognition-based. Intuitive types: big picture, relationships, comparison-based.]
   b. Discussion should involve reflection on what preference requires most effort and is least trusted. [Sensing types tend to focus on… ; intuitive types tend to focus on…]
9. Pursue additional interests of the group or needs for clarification as they arise.

Sample excerpts from description and vignettes

Pre-entrustable sample responses:

1. relies more on linear thinking than does a more advanced learner;
2. less aware of her own knowledge limitations;
3. may in general jump to conclusions or generalizations without fully understanding the complexity of the situation;
4. may have an underdeveloped mental model of the problem even after multiple iterations of the problem-solving cycle;
5. needs improvement in the ability to both retrieve and assess relevant evidence;

Entrustable sample responses:

1. able to assess the applicability and generalizability of the information;
2. takes steps to address those gaps in personal knowledge;
3. routinely identifies situations in patient care in which additional information is needed based on assessment of her own knowledge gaps and patient needs;
4. formulates focused, pertinent clinical questions based on clinical scenarios;
5. discerning relevant factors, identifying the unknowns, and developing knowledge for generating a solution via just-in-time learning;