

EPA Thinking - Module 2

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 x Flipped Classroom Exercise

EPA 2: Prioritize a differential diagnosis following a clinical encounter

AAMC Description of Activity: The goal is to be able to integrate patient data to *formulate an assessment, developing a list of potential diagnoses* that can be *prioritized* and lead to *selection of a working diagnosis*.

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? [Students should **compare** sensing preference with intuitive preference. **Sensing emphasizes** robotic thinking, routine, equal application in all circumstances. **Intuitive emphasizes** integrative thinking, uniqueness of situation, each situation is new.]
 - b. Next student: Where do you think the information for this EPA is addressed in the preclinical curriculum? [Basic procedure is educated guessing based on basic science background. **Emphasize cause and effect.**]
6. 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 EPA addressed in the preclinical curriculum?
 7. Continue this analysis until there is general agreement that all have been identified. [Note: All examples do not have to be discovered at this time. Inclusion of at least three assures an appreciation of the variety of behaviors observed.]
 8. 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 EPA addressed in the preclinical curriculum? Also, in your own study skills? [How does anatomy, biochemistry, etc. provide background? **In what way?**]
 9. Continue this questioning until there is general agreement that all have been identified.
 10. Next student: Give an example of an application of ESPeak Mapping for developing the skills needed for this EPA. [**Cause and effect can be organized** into a map, e.g. result of hormone increase or decrease. This teaches that all EPAs are associated with application of basic science knowledge.]
 11. Next student: How does deliberate practice apply to this skill development [**self-reflection** is encouraged]? [Students can apply to themselves or to a hypothetical student who is either pre-EPA or EPA. This develops awareness that skills always require awareness or they deteriorate.]
 12. Next student: How does Jungian type apply to this EPA? [discussion should involve reflection on what preference requires most effort and least trusted vs. most trusted]
 - 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 robotic collection of data and avoid interpretation; **intuitive types** tend to focus on “interesting” data and can miss collection of routine data which could prove important as diagnosis is determined.]

13. Pursue additional interests of the group or needs for clarification as they arise. [The **degree of engagement increases** beginning with the second session and leads to increased initiation of discussion independent of the mentor. At this point, the mentor still needs to **guide the conversation** so that the conversation remains focused on the questions.]

Sample excerpts from description and vignettes

Pre-entrustable sample responses:

[For each example (remember that only three are needed) bring out how study should change to correct the thinking to entrustable.]

1. Approaches assessment of a patient problem largely from a **rigid template** based on associations made between symptoms or physical exam findings and diagnoses;
14. Limited ability to **filter, prioritize, and make connections** between information gathered from primary and secondary sources;
15. Limited ability to **identify and reflect on pertinent information** as it emerges in order to continuously update the differential diagnosis and avoid errors of clinical reasoning, such as premature closure;
16. May not be able to articulate a **cohesive management plan**;
17. **Missing confirmation** or disconfirmation of important diagnoses;
18. Plans may disregard **pre-test probability** or relevant system factors;
19. Little insight into his limitations and **may not be aware when his knowledge is insufficient** for the situation at hand;
20. May come to **premature closure**;
21. Not comfortable **acknowledging ambiguity** and may not ask other health care providers on the team;
22. May fail to document or may incompletely **document the reasoning** that led to the assessment and plan.

Entrustable sample responses:

1. Ability to **link current findings** to prior clinical encounters;
23. Gathers **pertinent information**;
24. Using all the available data to **propose a relevant set** of differential diagnoses;
25. Able to avoid most **errors of clinical reasoning**, such as premature closure;
26. Has an **understanding** of his knowledge, strengths, and weaknesses;
27. Comfortable with some **ambiguity**; feels comfortable seeking assistance.