EPA Thinking Course – Curriculum Proposal

Submitted by {fill in group or individuals}

**Summary of Main Points**

* Our current educational program does not have an educational policy that ensures that our students will graduate with the thirteen entrustable skills specified by the AAMC sponsored EPAs.
* Inclusion of a formalized training program in teaching the “thinking” that characterizes the EPAs would simultaneously:
  + improve the likelihood that students will be better prepared for learning basic clinical skills during the undergraduate curriculum and would be easier to document on attainment of entrustability,
  + maximize our students’ ability to compete for residencies using this experience in their application materials, and
  + maximize our appeal to future applicants who want evidence that we are doing that.
* Minimal curriculum time is required, all materials are freely accessible online, and no teacher training or additional preparation are needed.
* The EPA Thinking course could be listed in our accreditation database as an activity that develops self-directed learning skills aimed at life-long learning as expected by the LCME.
* Research that supports the concepts in the related Expert Skills Program would predict an improvement in academic performance in general.

**Problem statement**

The educational program for the School of Medicine is continually facing a future of increasing demands on student performance with decreasing teaching resources. This has forced policy development into a perpetual state of frustration as we try to adjust our curriculum to meet each new demand. Publication of the Core Entrustable Professional Activities for Entering Residency by the AAMC is the latest in new demands on our educational resources – curriculum time and design must be addressed, and qualified teachers need to be identified who can assess whether “entrustable” behavior has been demonstrated. This new demand is unexpected because it has been a given that qualification for conferring of the Doctor of Medicine degree assures that the graduates are prepared to be entrusted with basic clinical skills related to the basic ACGME Competencies. This assumption was incorrect.

The current reality is that a competitive application for residency will require assurance that the medical graduate can be entrusted to perform 13 types of activities which are related to the ACGME Competencies on day 1 of their residency. Medical schools that do not have a means for providing this assurance place their graduates at risk of matching poorly. On the other hand, medical schools that can provide strong evidence of this assurance are not only able to help their students compete for the residency they prefer, but they can advertise this in recruiting students to apply to their institution. This evidence can also be included in the LCME database addressing Standard 6.3 related to self-directed learning.

**Published background**

EPA Thinking is the type of analytical thinking that results from self-directed learning. Since the brain is designed to act on decisions, EPA Thinking will always precede entrustable behavior. Students who are aware of this type of thinking, and who acquire skill in using it, are more likely to demonstrate it more clearly during their clinical training. Metacognition is the study of how thinking and learning occur and it is tied to self-directed learning by research in the fields of psychology, human performance, sleep research, and brain function (Dweck, 2005; Ericsson, 2003). The need to introduce metacognition into all educational programs was prominently cited by a committee report from the National Research Council (Branson, 2000) as one of their three key findings (The remaining two key findings relate to assessing a student’s initial conceptual preparation and to emphasizing the organization of knowledge for effective retrieval.). Research in intelligence and human performance shows that students who understand their own learning perform better because they learn better. The use of metacognition as an educational standard shifts the emphasis in learning from simple remembering to analytical thinking. This shift in emphasis results in self-directed learners who have the characteristics of entrustable thinking.

**Proposal statement**

We propose that metacognition based self-directed learning be encouraged through implementation of the EPA Thinking Course including concepts from the Expert Skills Program that is offered through the current SuccessTypes in Medical Education website (<https://www.ttuhsc.edu/medicine/medical-education/success-types/>). The necessary background and materials for this course are located at this website which is available with free access.

The *EPA Thinking* Course is designed to place early emphasis in the curriculum on the type of thinking that underlies the fundamental clinical professional behaviors known as the Core Entrustable Professional Activities for Entering Residency (EPAs). Small groups meet in monthly sessions beginning in the first month of medical school to discuss the answers to questions provided in modules corresponding to each EPA. An additional module is included for the second session to review the essential concepts in metacognition that underpin entrustable behavior.

This course takes advantage of the Expert Skills Program to teach students how to acquire EPA thinking. The overarching goals are:

1. To teach the difference between the thinking that leads to either entrustable behavior or pre-entrustable behavior.
2. To learn and apply principles of metacognition necessary to build the learning skills that underlie the EPAs.

This course is an innovation in clinical teaching by introducing the necessary skills in cognitive function ahead of the procedural skills learned in the clinic. The discussion in a flipped classroom helps students to identify and strengthen the thinking skills that underlie entrustable clinical behavior. This is expected to meet long range goals of teaching self-directed, self-regulated learning.

Additional details and description are found at the SuccessTypes website.