

An Innovative Method of Assessing the AAMC Competencies in the Multiple Mini Interview

Melanie K. Prusakowski, MD[☆]

Background

- In 2023, the Association of American Medical Colleges (AAMC) updated the professional competencies intended to evaluate applicants' readiness for medical school¹
- Some competencies lend themselves to assessment through the American Medical College Application System (AMCAS) application while others require an accurate means of evaluation
- The Multiple Mini Interview (MMI) is a technique to supplement holistic evaluation of non-cognitive competencies²

Methods

- Using timely topics and issues, authors created MMI scenarios that each assess two separate AAMC professional competencies. Scenarios were vetted by Admissions personnel and the chief diversity officer for situational or scoring biases
- Authors also created a method of individual scoring rubrics including anchors and flexibility to include novel answers to minimize assessor variability and ensure accurate evaluation so that multiple interviews can be held concurrently in a MMI interviewing process
- Rubrics are used concomitantly with an interviewer's overall assessment of readiness for success in medical school, and some competencies can be assessed in more than one scenario
- Authors used ten separate scenarios to comprehensively evaluate thirteen of the seventeen non-cognitive professional traits that are more difficult to assess through the AMCAS primary and secondary applications alone

Example MMI Scenario and Evaluation Rubric

STEM: You are doing well in an upper-level science course. You usually attend lectures in person because it provides the opportunity to ask questions of the professors who are the experts in their fields. One professor is less capable of presenting the material in a manner with which you connect, so you stopped going after the third lecture. Students who attend the lectures describe them as "a waste of time." At the end of the semester you are asked to fill out an anonymous evaluation of the professor. What feedback, if any, would you give?

Unacceptable 1-2	Poor 3-4	Good 5-6	Very Good 7-8	Exceptional 9-10
Interpersonal Skills: Demonstrates an awareness of how social and behavioral cues affect people's interactions and behaviors; adjusts appropriately in response to cues, recognizes and manages one's emotions and how emotions impact others or a situation				
<ul style="list-style-type: none"> • Blames professor solely for the disengagement • Provides hurtful, disparaging feedback without constructive lessons • Suggests professor should be terminated based on the experience of three lessons and hearsay of other students 	<ul style="list-style-type: none"> • Provides negative but not mean-spirited feedback that is not constructive • Is ambivalent about possible effects on professor's tenure or promotion 	<ul style="list-style-type: none"> • Decides not to fill out survey because does not have a sense of responsibility to greater good/school/classmates and justifies it on only 3 classes attended • Provides friendly but unhelpful feedback 	<ul style="list-style-type: none"> • Provides primarily constructive feedback but suggests either that the inability to engage is solely due to the professor's lack of ability or also disparages the professor based on their limited experience in class 	<ul style="list-style-type: none"> • Provides balanced feedback making it clear it is based on only 3 lectures; suggests what would have allowed for more engagement • Recognizes that professor's inability to resonate with applicant does not necessarily mean the professor is inept
Commitment to Learning and Growth: Practices continuous personal and professional growth for improvement; reflects on successes, challenges and mistakes; pursues opportunities to improve knowledge; asks for and incorporates feedback				
<ul style="list-style-type: none"> • Failed to recognize the learner's role in actively engaging to enhance learning • Is disparaging toward poor educators 	<ul style="list-style-type: none"> • Feels the onus for education lies with the professor, but in a situation where the professor is inept, will look for readily-available resources to supplement learning 	<ul style="list-style-type: none"> • Understands that studying is a large part of adult learning, but expects the resources to be preselected and vetted 	<ul style="list-style-type: none"> • Addresses both the benefits of passive learning from experts in a field and the need for active engagement • Expects to be supplied with opportunities to be engaged 	<ul style="list-style-type: none"> • Recognizes active engagement is required for successful adult learning • Seeks out opportunities to learn new information and strengthen skills • Acknowledges the balance between student and faculty responsibility

Next Steps

- Scenario and rubric scores from matriculating students can be compared to formative evaluations of entrustable professional activities performed at the end of year one or at graduation
- This will inform which competencies are most important for accurate and holistic assessment by Admissions

AAMC Competencies for Entering Medical Students

Professional	Science	Thinking and Reasoning
Commitment to Learning and Growth Cultural Awareness Cultural Humility Empathy and Compassion Ethical Responsibility to Self and Others Interpersonal Skills Oral Communication Reliability and Dependability Resilience and Adaptability Service Orientation Teamwork and Collaboration	Human Behavior Living Systems	Critical Thinking Quantitative Reasoning Scientific Inquiry Written Communication

Discussion & Limitations

- The MMI includes multiple evaluators and has been shown to reduce bias in admissions evaluations^{2,3}
- It is a resource-intensive method requiring more interviewers and appropriate training for accuracy
- Authors anticipate assessment of the pre-medical school competencies in this way enhances our ability to provide an accurate and holistic evaluation of medical school applicants including the AAMC professional competencies for entering medical students

References

1. The Premed Competencies for Entering Medical Students. Association of American Medical Colleges, 2023. <https://students-residents.aamc.org/real-stories-demonstrating-premed-competencies/premed-competencies-entering-medical-students>. Accessed January 2024.
 2. Lin, John C., et al. "Best practices for interviewing applicants for medical school admissions: a systematic review." *Perspectives on Medical Education* 11.5 (2022): 239-246.
 3. Bergelson, Ilana, Chad Tracy, and Elizabeth Takacs. "Best practices for reducing bias in the interview process." *Current urology reports* 23.11 (2022): 319-325.
- ☆ Virginia Tech Carilion School of Medicine, Department of Admissions
 ☆ Departments of Emergency Medicine and Pediatrics