Praxis Mathematics (5165) Test Review

Virginia Tuesday, May 4, 2021

OVERVIEW

This meeting was conducted using Zoom. The participants and agenda followed are provided in ATTENDEES and AGENDA below. RESULTS provides the panelists' feedback—captured through online polls—about the test and a recommended passing score.

The results include:

- All five panelists agreed that the test is appropriate for licensure as a secondary mathematics teacher, with the sixth indicating that the test assesses content beyond (i.e., above) what would be expected.
- The panel's recommended passing score—the median of their individual recommendations—is 159 on the Praxis scale (39 out of 60 points on the form reviewed). Two panelists were "very comfortable" and threer "somewhat comfortable" with that recommendation.

	ATTENDEES	
 MALIK MCKINLEY (ETS) ERIC STEINHAUER (ETS) TITUS TEODORESCU (ETS) MAGGIE CLEMMONS (VA DOE) 	PANELISTS 1. BRENDON ALBON 2. TINA MAZZACANE 3. AMY SIEPKA	4. TONI SORRELL5. SUSAN STANBERY
A addition	AGENDA	Annual time

AGENDA	
Activity	Approx. time
Whole panel	
 Welcome and Introductions 	
 Overview of the test and its development 	30 mins
 Overview of standard setting process 	
Agreement to proceed.	
Breakout rooms	
Review of the test form (BREAK 5 mins)	1:50
Discussion: What is measured?	
Whole panel	
Discussion: What is measured?	20 mins
Poll: Test review feedback.	
Whole panel	
 Review of standard setting results 	
Poll: Passing score recommendation.	20 mins
 Review of panel recommendation 	

Poll: Feedback on panel recommendation.

RESULTS

- I. Following an overview of (i) the test's structure and content (ii) the test's development and (iii) the standard setting process, panelists responded to a poll indicating their agreement to proceed. All agreed to these two statements
 - (A) I understand that, by proceeding, I agree not to keep or disclose (1) secure test material provided and/or (2) any information provided specific to secure tests and/or (3) details of panel discussions of secure material, including panel recommendation.
 - (B) I understand that, by proceeding, I agree not to take this Praxis test any time within the next year.
- II. Following a review of the test form used in standard setting, panelists discussed among themselves what they saw being measured including (1) what content they expect to be particularly challenging for candidates and (2) what content is especially important for beginning practice. Then panelists provided feedback about the test, starting with two questions to evaluate the test:
 - (C) How important are the knowledge and skills being assessed for effective beginning practice as a secondary mathematics teacher?

0	Very important	3
0	Important	2
0	Moderately important	_
0	Of some importance	_
0	Of little importance	_
Total		5

(D) Based on the knowledge and skills being assessed, is the test appropriate for licensure as a secondary mathematics teacher?

0	Yes	5
0	No	_
Total		5

Provided with an optional open-ended question

(E) About the knowledge and skills being assessed: Please provide any further feedback about alignment to the knowledge and skills a secondary mathematics teacher needs?

Three panelists provided further feedback:

- Knowledge and skills are indicative of mathematics content an entry level teacher should have mastery of and experience with.
- Some questions were easy to answer by elimination and could be answered without a good grasp of the content. Increase misconceptions/pedagogy questions. Increase higher level stats and decrease basic probability questions and basic stats (i.e. median of a box plot).
- I think it's important that teachers think around the math, (ie planning and delivery) regardless of their degree. Knowing math is essential...being able to teach it is more essential.

III. The panel was provided an overview of the process and results of a multistate standard setting (MSSS) conducted for the test. (Note: In advance of the meeting, panelists received a technical report describing the MSSS process and results in detail.)

Results included:

- The recommended score value (RSV) from the study was 39 (out of 60 possible points) on the test form you reviewed
- The mean recommendation of 38.56 was rounded up to a whole number.
- The scale score associated with 39 raw points is 159.

Panelists were asked for their recommended passing score based on their review of the test, the panel's discussion of the test and the results of the MSSS. Choices presented were the MSSS RSV and raw scores ranging two conditional standard errors of measurement (CSEM) above and below the RSV:

(F) What passing score would you recommend [raw number correct

0	47	Scale 177 (+2.0 CSEM)	_
0	45		_
0	43	Scale 168 (+1.0 CSEM)	1
0	41		_
0	39	Scale 159 (Recommended Value from MSSS)	3
0	38		_
0	36	Scale 152 (-1.0 CSEM)	1
0	34		_
0	32	Scale 143 (-2.0 CSEM)	_
Tot	tal		5

Note: One panelist had to leave the meeting immediately after providing a judgment regarding the recommended study value.

The panel was shown these results for a brief discussion and then asked for feedback on the panel's recommended passing score, identified as the median of the panelists' recommendations:

The panel's recommended passing score is 39, equivalent to a scaled score of 159.

Panelists provided feedback about this recommended passing score in answers to two questions:

(G) Overall, how comfortable are you with the panel's recommended cut score?

0	Very Comfortable	2
0	Somewhat Comfortable	3
0	Somewhat Uncomfortable	_
0	Very Uncomfortable	_
Total		5

(H) Overall, the panel's recommended cut score is:

0	Too high	1
0	About Right	4
0	Too Low	_
То	tal	5

Provided with an optional open-ended question

(I) Please provide any further comments about your recommendation

Three panelists provided further feedback:

— Since Virginia was not involved in the standard setting process, it is difficult to ascertain the appropriate cut score without further review.

- I think the score is a little low but I also know that secondary math teachers are hard to come by, so overall, the cut score will allow just qualified teachers to get certified, who can grow as they gain experience in the profession.
- The time it takes to read and interpret the question is on average longer than expected. The questions that focus on mathematics pedagogy are important but challenging for pre-service teachers.