

Frequently Asked Questions Regarding the Development of the Standardized Test Matrices

1. How do the score bands across the top of each chart work?

Mean National Percentile Rank (NPR) for cohort of students assigned					
Mean NPR in PSAT Reading less than 64	Mean NPR in PSAT Reading 65-69	Mean NPR in PSAT Reading 70-74	Mean NPR in PSAT Reading 75-79	Mean NPR in PSAT Reading 80-84	Mean NPR in PSAT Reading 85-100

The AVERAGE National Percentile Rank (or FSA/EOC score as applicable) for the cohort of students taught by a particular teacher will be calculated. If a teacher has 20 students in a single class then the average PSAT for those 20 students will determine which column is used to assess student outcomes. If a teacher has three sections of 20 students then the average score for all 60 students will be calculated to determine which column is used to assess student performance.

2. How were the vertical student outcome boxes determined?

Students scoring 3 and above is greater than both the national and state averages by at least 10 percentage points
Students scoring 3 and above is equal to or greater than the national or state average (whichever is greater)
Students scoring 3 and above is greater than or equal to the national or state average (whichever is less)
Students scoring 3 and above is within 5 percentage points of the national or state average (whichever is less)
Students scoring 3 and above is within 10 percentage points of the national or state average (whichever is less)
Students scoring 3 and above is within 20 percentage points of the national or state average (whichever is less)
Students scoring 3 and above is within 30 percentage points of the national or state average (whichever is less)
Students scoring 3 and above is more than 30 percentage points below the national or state average (whichever is less)
Students scoring 3 and above is more than 40 percentage points below the national or state average (whichever is less)

Test results from advanced placement, EOC, and science tests from 2014-2015 and 2015-2016 were plugged into the matrices and the outcomes were review by the EPIC committee. Adjustments to both the column ranges and the row criteria were changed until the outcomes made sense. Teaching a more struggling cohort of students not make it impossible for a teacher to be considered highly effective while teaching an advanced group should suggest that student performance is likely to be high. Efforts were made to find thresholds that were reasonable while also creating fair targets for what is considered effective results, and what would be considered highly effective results taking into account the group of students being taught.

3. How is the matrix applied to a teacher that only teaches one or two AP classes?

A given teacher's TOTAL student performance score might well be made up of pieces of evaluation from different areas. For example, a high school teacher that has two sections of English 2, two sections of English 3, and one section of AP Language.

Course	Student Perf. Meas.	Rating	Score
2 x English 2 (40%)	VAM	Effective	2
2 x English 3 (40%)	STAR Reading	Effective	2
1 x AP Language (20%)	AP Matrix	Highly Effective	3
$(0.4 \times 2) + (0.4 \times 2) + ((0.2 \times 3) = .80 + .80 + .60 = \text{Total Student Performance}$			2.2

4. What if a student in the cohort does not have a prior year score or PSAT score?

Only the scores of students that have a prior year score that is factored into the average will have their test results included in the analysis. This is similar to VAM in that only students with a prior year score receive a VAM score. The EPIC committee will evaluate the impact of this going forward.

5. What happens to students that transfer in or out of a class?

To be consistent with other measures, only students that are present in the same course, with the same teacher, in both survey 2 (October) and survey 3 (February) AND have a test outcome will be analyzed (with the exception of semester length AP courses). This makes the ROSTER VERIFICATION PROCESS critical as this is the process that determines the matched roster of students and teachers against which prior year lists and test outcome lists will be compared.

5. The AP Matrices all appear to be pretty much the same while the End-of-Course matrices are each a little different. Why?

The AP matrices benchmark student outcomes against State or National averages. Since each course has a different benchmark the matrices appear to “self-adjust” for the difficulty of the content. Courses with traditionally higher pass rates require higher pass rates and more difficult courses require lower for rating student performance. While the end-of-course assessments are similar, thought also went into minimizing the percentage of level 1 students as well as increasing the number of proficient (level 4) students. Allowances were made based on state and district percentages – but because each EOC has very different outcomes it was easier to make each matrix different. The EPIC committee will take advisement and review this going forward.

6. Why doesn't Algebra 1 EOC have a matrix?

Grade 8 Algebra and Grade 9 Algebra teachers receive a VAM score that looks only at the grade 8 students and grade 9 students in their classes. State law requires the use of the Grade 9 VAM score and the Grade 8 score is a more robust measurement of Grade 8 students than the matrix that was used (and the teacher outcomes were virtually identical in the two models).

7. Why do some AP courses look at Math and Reading PSAT?

While AP Calculus and AP Statistics *clearly* should take Mathematics background into account, AP Chemistry, Physics, Environmental Science, and Macroeconomics require not only college level reading ability, but advanced mastery of mathematics. These courses will look at both predictors and the one that results in the higher teacher rating will be used until a determination is made about which score is the better predictor of student outcomes. The EPIC committee will review this data annually.

8. AP Art, Music, and Foreign Language don't necessarily tie into PSAT Reading or Math. Why are they in a Matrix?

When these courses were analyzed they almost universally fell in the first two columns of the matrix. Since the first two columns do not provide a tremendous difference in differentiation this data will be monitored to see if there is a better way to address these classes. OFTEN there are not enough students in the classes to count (at least 10 students must be in the class for a matrix to be applied to that portion of the teacher's assignment). Essentially these classes are evenly compared to the state and national averages with an allowance to be as much as 20 percentage points below the lesser to still be considered effective work.

MORE FAQs REGARDING THIS TOPIC WILL BE ADDED AS NEEDED BY THE EPIC COMMITTEE.