



Using the Projected Percentile versus the Projection Probability for Student-Level Decision-Making

Both pieces of data, the PVAAS projected percentile and the PVAAS probability of reaching specific performance levels, are valuable pieces of information for educators to consider when making decisions about individual students.

When and how might you use the PVAAS Projection Probability?

The percentages displayed on the PVAAS Student Projection Report indicate the probabilities that the student will reach an indicated benchmark or milestone on a future assessment. This would be the probability to the Basic (or higher), Proficient (or higher), or Advanced level on the next state assessment; the probability of reaching a 3 or higher, a 4 or higher, or a 5 on a future AP exam; or the probability of reaching or exceeding the indicated college benchmark on a future PSAT, SAT, or ACT assessment.

It is strongly recommended that discussions be held around these projection probabilities when considering individual student needs. The questions raised are, *“Are you as an educator satisfied with the probability that this student may reach or exceed the indicated benchmark on a future assessment? When combined with other data on the student, does it confirm your knowledge of the student’s performance risk on a future assessment?”*

- If yes, then discuss what needs to be done to allow this student to continue on this academic path.
- If no, then discuss what needs to be done to change this student’s academic path.

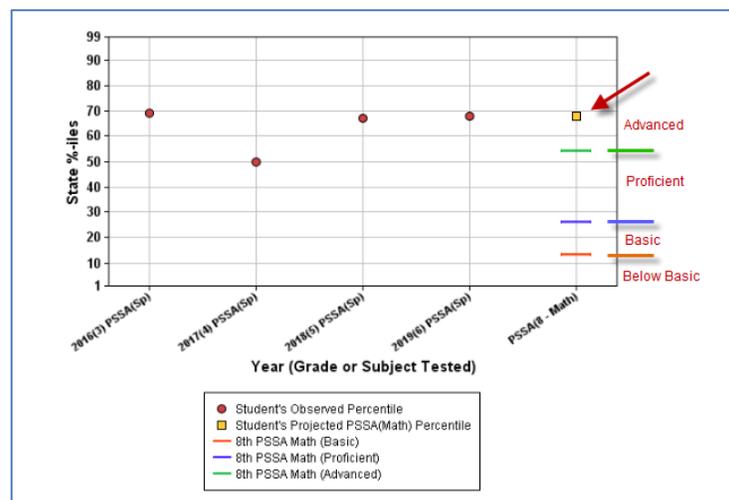
Work to get at the root cause. Are there other diagnostic and/or formative assessment data available to assist in identifying the specific areas of support or enrichment that are needed? Are different instructional strategies needed? Is the student already receiving some type of intervention or enrichment?

In situations where you are considering this information as part of course placement decisions, it is suggested that the projection probability be considered as one of the criteria for that decision. Although both the PVAAS projected percentile and the PVAAS projection probability are reliable and robust measures of students’ possible future performance, the projected state percentile does contain error – just like any single test measure when considering student performance. The projection probability, however, takes into account the associated error around the projected percentile.

When and how might you use the PVAAS Projected Percentile?

So, when might you consider using the PVAAS projected percentile? When using projections to Pennsylvania's state assessments, educators may want to use this projected percentile along with a Performance Diagnostic or Quintile Diagnostic Report to better analyze the general needs of students like this given the past influence of this school on academic growth for students at similar achievement levels.

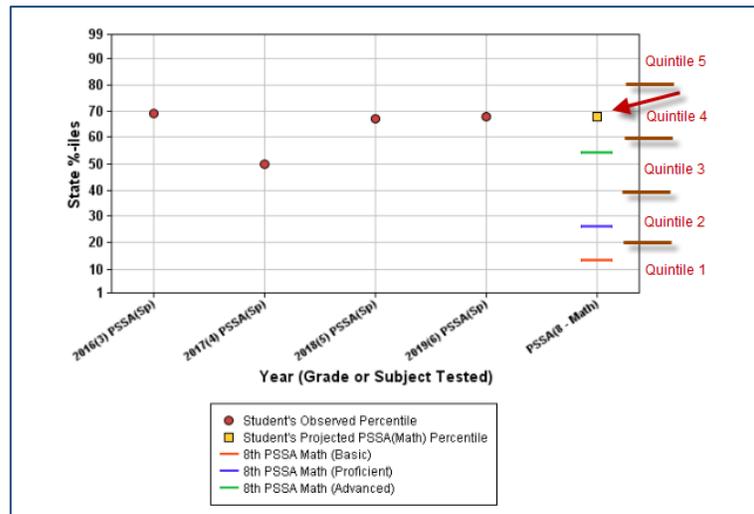
Let's consider a few examples. In our first example, let's look at a current 8th grade student who has the indicated 8th grade Math projection. As you can see from the PVAAS Student Projectoin report below, this student is projected to be in the Advanced range on the 8th grade PSSA Math assessment. But we need to ask ourselves, how has the school performed in supporting academic growth for students predicted to be Advanced in 8th grade Math?



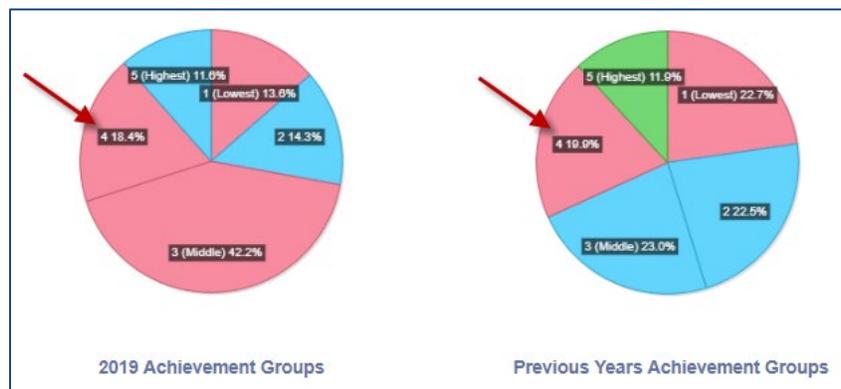
We can look at the most recent PVAAS Performance Diagnostic Report (shown below) to gain insight into the answer to that question. From this report, we see how well the school has done with supporting academic growth for all students in 8th grade Math. In this case, our current 8th grade student is projected to be Advanced and is attending a school where there is a history of supporting students with a similar achievement level (those projected to be Advanced) in exceeding the growth standard (i.e., gaining ground). This might lead to further questions about how we can continue to provide support for students with similar achievement levels in order to help them maintain their trajectory for success.



In our next example, let's consider the same 8th grade student but take a closer look at the percentile at which the student is projected to score. While this student is in fact projected to be Advanced on the 8th grade Math assessment, we can see that this student is not, however, projected to be in the highest quintile of the state. Rather, this student is projected to perform in the fourth quintile of the state. Again, we would ask, how has the school performed in supporting academic growth for students in the fourth quintile in 8th grade Math?



We can look at the most recent PVAAS Quintile Diagnostic report (shown below) to gain further insight. From this report, we see what the school has done with supporting academic growth for all students in 8th grade Math. In this case, our current 8th grade student is projected to be in the fourth quintile in the state and is attending a school where there is a history of students in the fourth quintile not meeting the growth standard (i.e., falling behind).



This might lead to further questions about the likelihood of this student actually performing as projected, given that students with similar achievement levels have not made adequate growth, in the past. Is this student likely to maintain their trajectory of performing in the fourth quintile? What changes can be made to curriculum, instructional strategies, and assessment practices to support students like this in maintaining their trajectory for success rather than falling behind?