



Students at Different Achievement Levels:

Using PVAAS Projection Data to Meet Their Needs

Several data points are provided in the PVAAS student-level view – including those that “look forward” to a student’s future academic performance. This data can assist educators in planning students’ future academic programs based on their needs.

In particular, questions often arise about the use of the **projected state percentile versus the projection probability**. Both pieces of data—the PVAAS projected percentile *and* the PVAAS projection probability of reaching specific benchmarks—are valuable for educators to consider when making decisions about individual students. Although both are 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, considers the associated error around the projected percentile.

Below are considerations for how to best use projection data for student-level decision making.

When and how might you use the PVAAS Projection Probability?

The **projection probabilities** (percentages) displayed on the PVAAS Student Report indicate the likelihood that the student will reach an indicated benchmark or milestone on a future assessment. This would be the probability of:

- **On the next state assessment**, reaching Basic (or higher), Proficient (or higher), or the Advanced level;
- **On a future AP exam**, reaching a 3 or higher, a 4 or higher, or a 5;
- **On a future PSAT, SAT, or ACT assessment**, reaching or exceeding the indicated college benchmark; or
- **On a future ACCESS for ELLs assessment**, reaching or exceeding the indicated benchmark.

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.

● projection probability

an indicator of the **likelihood of the student reaching a specific benchmark or higher**, such as reaching Proficient or Advanced, on a future assessment. *In other words, how likely is the student to reach a specific benchmark or higher on a future assessment?*

● projected percentile

an indicator of **where the student is likely to perform in the statewide distribution of achievement scores in the future**. *In other words, where is the student likely to perform compared to other students taking that assessment statewide in the future?*



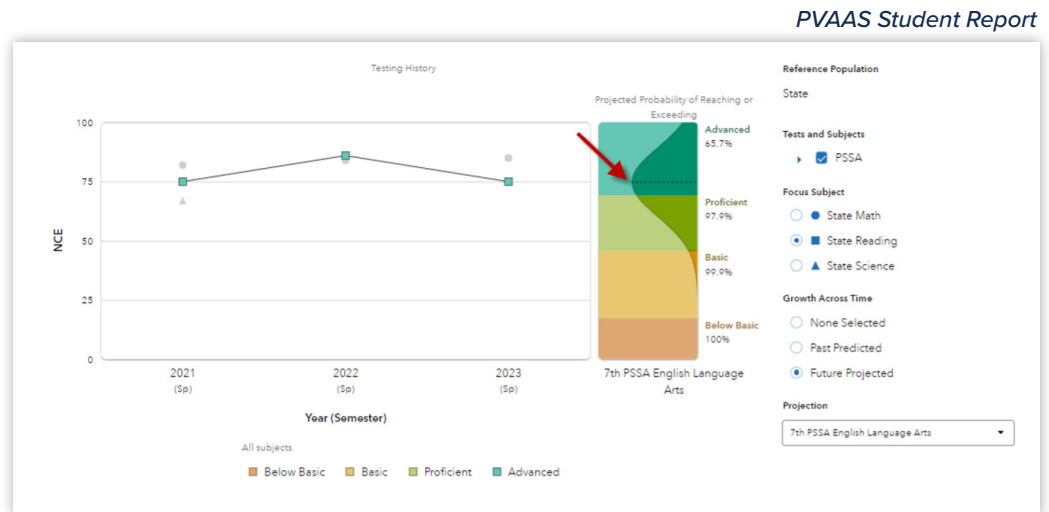
Work to get at the root cause! Are there other diagnostic and/or formative assessment data available to assist in identifying the specific areas of support or enrichment needed? Are different instructional strategies needed? Is the student already receiving some type of intervention or enrichment?

When making 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, considers the associated error around the projected percentile.

When and how might you use the PVAAS Projection with other PVAAS data?

When using projections to Pennsylvania's state assessments, educators may want to use the Student Projection along with a Diagnostic Report to better analyze the general needs of similar students, given the past influence of the school on the academic growth of students at similar achievement levels.

Let's consider two examples:

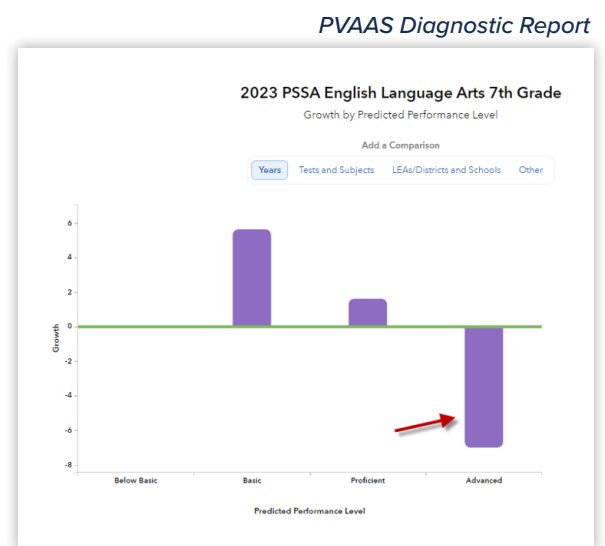


EXAMPLE 1: Let's look at a current 7th grade student. As you can see from the **PVAAS Student Report** shown above, this student is projected to be in the Advanced range on the grade 7 PSSA ELA assessment.

But we need to ask ourselves, *how has the school supported the academic growth for students predicted to be Advanced in grade 7 ELA in the past?*

We can look at the most recent **PVAAS Diagnostic Report** (at right) to gain insight. From this report, we see how well the school has supported academic growth for students in grade 7 ELA for students predicted to be Advanced.

In this case, our current 7th grade student is projected to be Advanced, but from the PVAAS Diagnostic report where this student is enrolled, we see that the school has a history of not meeting the growth standard with students predicted to be Advanced (i.e., students predicted to be Advanced are falling behind). Discussions may be beneficial regarding the curriculum, instruction, and assessment practices for students with histories of higher achievement. What can be changed in the larger system to better meet the needs of students predicted to be Advanced?



2023 PSSA English Language Arts 7th Grade

Predicted Performance Level

Growth	Below Basic	Basic	Proficient	Advanced
Average	--	5.64	1.62	-7.00
Standard Error	--	1.61	1.18	2.50
Student Count	1	96	186	62
Percentage of Students	0.3	27.8	53.9	18.0

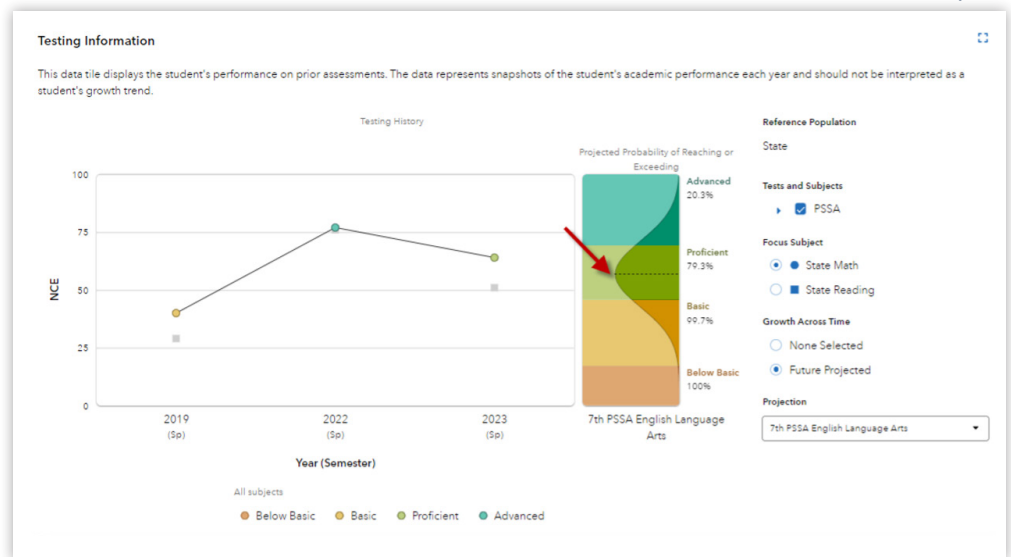
EXAMPLE 2: Let's consider another 7th grade student at the same school.

As you can see from the **PVAAS Student Report** at right, this student is projected to be in the Proficient range on the grade 7 PSSA ELA assessment.

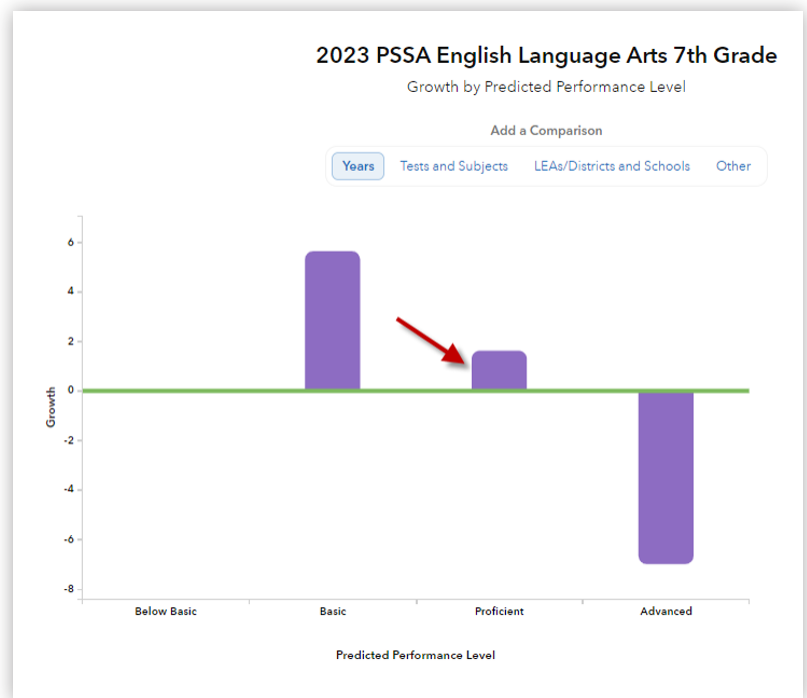
But we again need to ask ourselves, *how has the school performed in supporting the academic growth of students predicted to be Proficient in grade 7 ELA?*

Let's look at the most recent **PVAAS Diagnostic Report** 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 students predicted to be Proficient in grade 7 ELA.

This is good news for this student projected to be in the Proficient range; from the PVAAS Diagnostic report where this student is enrolled, we see that the school has a history of exceeding the growth standard with students predicted to be Proficient (i.e., students predicted to be Proficient are gaining). More discussion may be warranted to ensure instructional and assessment practices are in place to keep students on this trajectory.



PVAAS Diagnostic Report



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Standard Error	--	1.01	1.18	2.50
Student Count	1	96	186	62
Percentage of Students	0.3	27.8	53.9	18.0

For more information on this topic, explore these online resources:

Student Report e-Learning Module

<https://pvaas.sas.com/videos/PA/e-Learning/Student-Reports/index.html>

Student Report Desk Reference (PDF)

<https://pvaas.sas.com/support/PVAAS-SRRd-Desk-Reference.pdf>