

# Going Deeper with PVAAS

## Student Projections and Diagnostic Reports:

# Individual Student Academic Scheduling Decisions

PVAAS individual student level projection data, paired with the relevant PVAAS Diagnostic Report, provides valuable insight into a student's future course placement needs. Using these two reports at the right moment in planning an individual student's schedule can be beneficial in making strong decisions that support their needs.

- *PVAAS projections, even for 3 years into the future, are **more reliable at projecting future performance than the most recent state assessment score.***

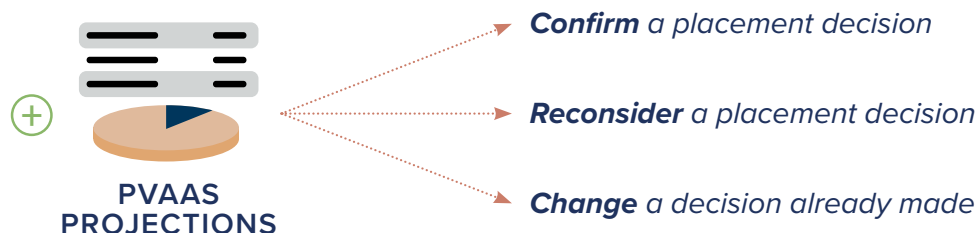
### Projected State Percentile versus the Projection Probability

In using student projection data, questions often arise about the use of the projected state percentile versus the projection probability. Although both are robust measures of students' possible future performance, the projected state percentile does contain error – just like any single measure when considering student performance. The projection probability, however, considers the associated error around the projected percentile. Therefore, the example in this resource uses the individual student's projection probability.

## Using the PVAAS Projection Probability for Individual Student Scheduling/ Course Placement

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 reaching Basic (or higher), Proficient (or higher), or the 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.

This information is highly reliable and therefore quite valuable as part of course placement decisions. Added to other local data, including but not limited to the student's grades, teacher recommendations, benchmark and diagnostic data, family and student preferences, and state assessment data, etc., **a student's PVAAS projection is an additional piece of data that can confirm, rethink, or possibly change a course placement.**





## Systems Thinking and Using PVAAS Projections

When using a student’s individual projection for schedule planning purposes, consider the system into which students are being placed. The context to which the student projection applies does matter! Take a look at this example.

### How would you respond to this question?

There are two systems into which a student may be placed. One setting/system is showing (PVAAS) **red growth**, and the other setting/system is showing (PVAAS) **dark blue growth**. In which system is the student most likely to experience higher levels of success - the “red” setting or the “blue” setting?



The answer, of course, is the “blue” setting! If a student is placed in a setting that has historically yielded strong growth (blues), that student is more likely to reach or exceed his projected probability!

## Pairing Student Projection Data with Growth (Diagnostic) Data

Knowing the effectiveness of the system into which the student is being placed can be quite informative, providing insight into the student’s course placement scheduling needs, **especially when a student’s projection probability is in a borderline range!**

To do this, the educator uses two PVAAS reports:

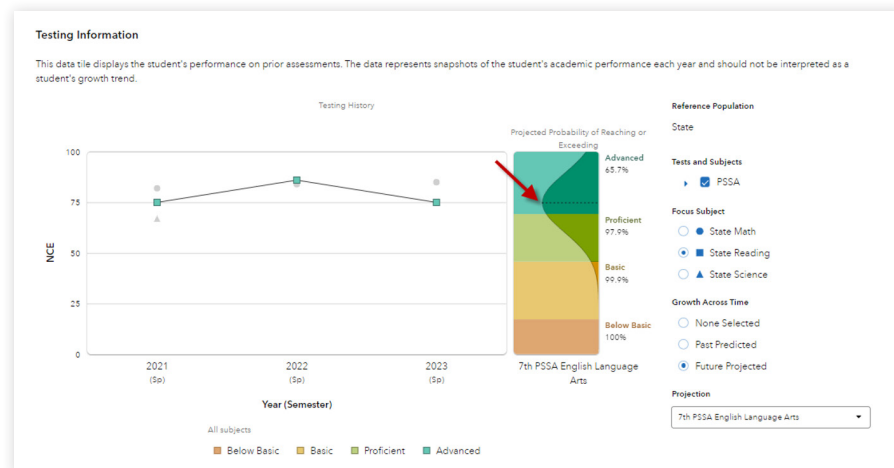
1. Student Report (individual student’s projection probability)
2. Diagnostic Report (for grade/subject being investigated)

### Consider this example:

Zane is currently in February of his 6th grade year. His schedule is being developed for his upcoming 7th grade placement. His PVAAS Student Report shows a 65.7% likelihood of scoring in the advanced range on his ELA 7th grade PSSA, placing him at the low end of the Advanced range, as shown below in his Student Report



## PVAAS Student Report (percent probability)

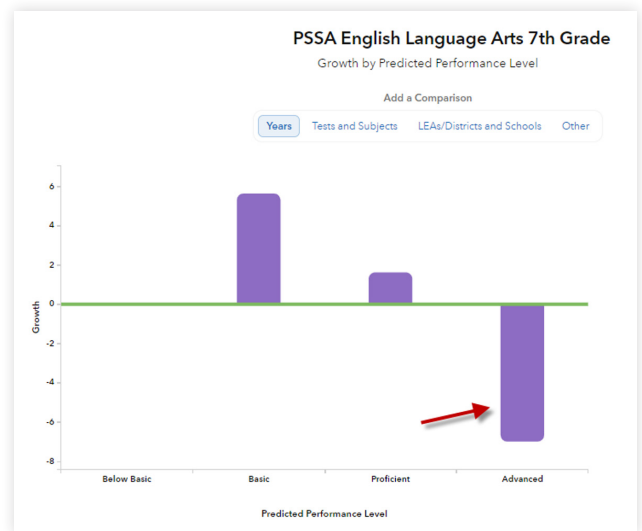


Given that Zane is at the cusp of Advanced (borderline) and the teacher is unsure as to course level recommendation, the next step is to go to the 7th grade ELA Diagnostic report to see the historical growth data on students in the Advanced range.



## Diagnostic Report, Gr. 7

PSSA English Language Arts 7th Grade				
Growth	Predicted Performance Level			
	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
<b>Percentage of Students</b>	0.3	27.8	53.9	18.0



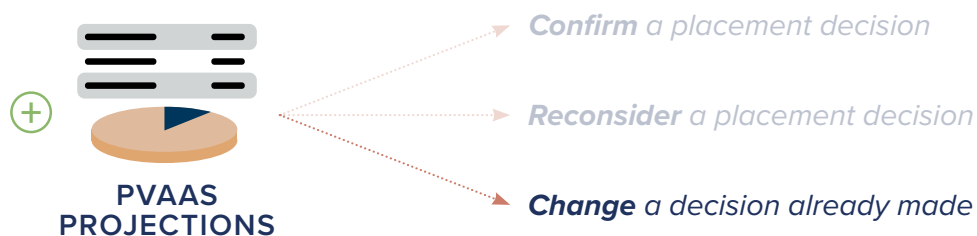
As shown in the Diagnostic Report, the students predicted to be in the Advanced range fell behind (yellow), i.e., did not meet or exceed the growth standard.

*So, what does that mean for Zane for 7th grade?*

*What other data do we have as we consider course placement for Zane?*

WHAT WE KNOW (Zane’s data story)	QUESTIONS
Zane’s projection probability places him at the very low end of Advanced for 7th grade ELA.	What ELA course would best meet Zane’s needs in grade 7? ELA 7 or Honors ELA 7?
Advanced students historically have not shown growth in 7th grade ELA.	Where is Zane most likely to be successful?
ADDITIONAL DATA:	
<ul style="list-style-type: none"> <li>Zane currently has a B average in 6th grade ELA at mid-term.</li> <li>Local assessment data (benchmark and diagnostic) shows Zane to be making adequate progress towards 6th grade standards</li> </ul>	

**Possible Decision:** Given that Zane’s probability is borderline at the Advanced (65.7% likelihood) level AND that Advanced level students have historically not met or exceeded the growth standard, along with further consultation with his 6th grade ELA teacher, his family and Zane himself, it is decided that Zane will be placed in ELA 7 (vs. Honors ELA 7).





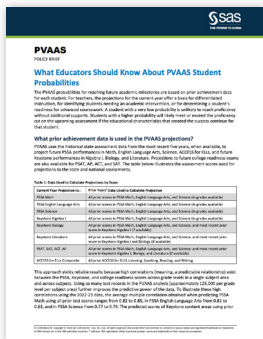
With that placement recommendation comes an understanding that Zane will benefit from differentiated instruction, rigor and enrichment in his 7th grade ELA class to promote his opportunity to “meet or beat” his 65.7% Advanced projection!

- **IMPORTANT:** The purpose of this example is not to provide the “right” answer to this situation, but to indicate how using PVAAS projection data PAIRED with diagnostic data can cause one to confirm, reconsider and/or change course placement decisions and offer further insight into a student’s needs.

In this example, the decision may have been to place Zane in the Honors ELA 7 course with an understanding that both Zane and possibly his teacher will need additional support to provide Zane with the best outcomes in ELA.

## What Else May Be Learned?

Discussions may be beneficial regarding the curriculum, instruction, and assessment practices for students with histories of higher achievement, regardless of course level placement (Honors ELA 7 or ELA 7). The question is: What can be changed in the larger system to better meet the needs of students predicted to be Advanced?



Learn more on this topic:

## [What Educators Should Know About PVAAS Student Probabilities \(PDF\) >](https://pvaas.sas.com/support/PVAAS-StudentProbabilities.pdf)

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Visit [education.pa.gov/pvaas](https://education.pa.gov/pvaas) for additional resources on this topic.