



# Using PVAAS Custom Student Reports with Diagnostic and Benchmark Assessment Data for Improved Student Outcomes

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The purpose of this document is to illustrate how the PVAAS Custom Student Report can be used in conjunction with diagnostic and benchmark assessment data sources at the classroom level for enhancing student outcomes. Combining PVAAS projection data with other student-level assessment data guides the teacher in making decisions throughout the school year, monitoring students' levels of risk and their acquisition of specific skills as the year progresses.

## **Differentiating Instruction and Supports in the Classroom**

A key task of all teachers as they begin the school year is to understand the various risk levels of students, as well as their entering skill level, so they can best provide the instruction and supports needed by students – as a group and individually. Knowing students' proficiency risk levels and skill levels when they “walk in the door” AND as the year progresses can better prepare teachers in their planning and delivery of instruction. This continued practice throughout the school year is of great importance. The following steps illustrate a process that teachers can follow in doing this work.

### **Step 1: Analyze teacher diagnostic data in PVAAS**

Using PVAAS diagnostic reporting at the teacher level, identify patterns of growth with various types of students in the most recently completed school year, as well as in the prior school year. What type of growth did the lowest, middle, and highest achievers demonstrate? When analyzing two years of diagnostic data, is there a pattern of growth that emerges? Determine a student group of focus for the current school year. This student group may also be considered a target group for goal setting.

### **Step 2: Create a PVAAS Custom Student Report of current students**

In PVAAS, create a Custom Student Report to identify teachers' current students in the three achievement groups of low, middle, and high – as defined in the PVAAS teacher diagnostic report (from step 1). If a teacher is providing instruction to multiple sections or classes, consider

creating a PVAAS Custom Student Report for each of those sections or classes, which will allow the teacher to bring an identified focus to each class/period of students they teach.

### **Step 3: Administer a diagnostic or benchmark assessment to current students**

Using a diagnostic or benchmark assessment tool, determine the specific instructional needs of the current students in each of the achievement groups defined in previous steps.

### **Step 4: Provide differentiated and personalized instruction, as needed**

Based on assessment data results in step 3, provide differentiated and personalized instruction for appropriate skill development based on students' needs.

### **Step 5: Administer the diagnostic or benchmark assessment again to current students**

After re-administering the diagnostic or benchmark assessment, review the skill areas in which instruction was provided since the last administration of the assessment, and the skill areas where upcoming instruction will be provided.

### **Step 6: Analyze changes in performance**

Analyze your assessment data results to view changes in performance from the current administration to the previous administration(s). Is there an increase in skill acquisition for students? Are students making appropriate progress? If not, what skill areas need to be re-addressed, and how will instruction be adjusted?

### **Step 7: Determine additional instructional needs**

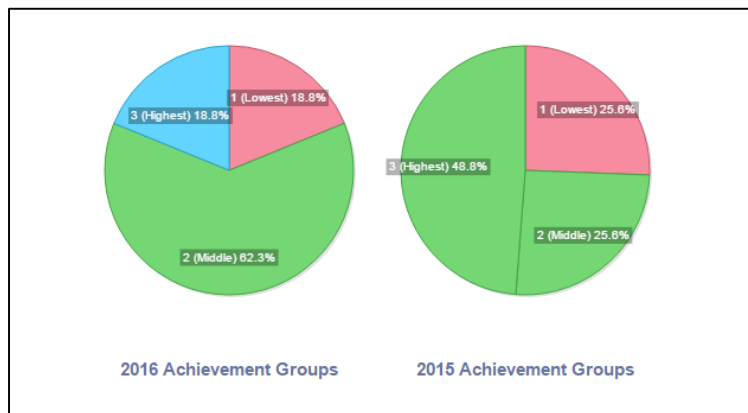
Analyze the assessment results to assess students' future skill needs. How are students performing in skill areas where upcoming instruction will be provided? What are students' specific instructional needs in those skill areas?

## An Example for Illustration Purposes

In the following example, Sarah is a 7<sup>th</sup> grade Math teacher in Golden Eagle Middle School. Sarah primarily teaches multiple sections of grade 7 Math each year.

### Step 1: Analyze teacher diagnostic data in PVAAS

When released, Sarah views her teacher-specific reporting in PVAAS. Specifically, she wants to look in detail at the growth students are making in her 7<sup>th</sup> grade Math courses. From the most recent reporting, Sarah sees that her students in 2016 had varied growth across achievement levels. Over half of her students (62%) were middle, or average, achievers and maintained their overall achievement. However, students with higher achievement (19%) gained ground while students with lower achievement (19%) fell behind.



Comparing this with what occurred in the prior school year, Sarah sees that the lowest achieving students in her classroom consistently fall behind. This is definitely an area that concerns Sarah, and she considers different instructional, assessment, and organizational strategies she could use to meet the needs of these students in a better way.

Sarah also sees that her highest achieving students gained ground this year rather than maintaining their achievement in the prior year. This is certainly an area of success and one in which Sarah wants to reflect and think about the instructional, assessment, and organizational practices which may be leading to this outcome; she wants to replicate those practices with similar students in future years. What Sarah also notices is that her middle, or average, achieving students consistently maintained their achievement across years. This is also an area that Sarah wants to reflect upon, so she can make decisions regarding what she can do differently this year with those types of students in order to increase student growth further. (See the Digging Deeper Guides for questions to ask that help in determining the root cause – the “why” – in order to plan for improvement and enhancements for the current students this year. The Digging Deeper Guides are available on the PDE PVAAS website using this [link](#).)

Given what Sarah sees in her PVAAS teacher diagnostic data, she identifies the low achievement group as a particular area of focus during the coming school year – an area which could possibly be reflected as a targeted priority for the year.

## Step 2: Create a PVAAS Custom Student Report of current students

One piece of data that Sarah has available for her incoming 7<sup>th</sup> grade students is their PVAAS student projections. In August, the new PVAAS reporting is typically not yet available, but Sarah is able to use the current projection data from when the students were in 6<sup>th</sup> grade – to project to their 7<sup>th</sup> grade year. This information helps Sarah in knowing which students are in her focus area that she identified in step 1 (low achievement group). Below is a sample of the PVAAS Custom Student Report Sarah created for one section of her grade 7 Math students; she does this for each section she teaches.

Custom Student Report: Students I Teach This Year						
#	Student	PVAAS#	District	Tested School	Probability	Projected State Percentile
1.	DEHL, ARTHUR	95833384	Big City School District	Alpaca Elementary School	0.1	2
2.	GOFF, JAMESON	306778466	Big City School District	Alpaca Elementary School	0.8	7
3.	WICE, ASHLEY	171608634	Big City School District	Alpaca Elementary School	0.8	8
4.	BRADFORD, GRETCHEN	347927418	Big City School District	Alpaca Elementary School	9.1	18
5.	MARTIN, TRISTAN	844854244	Big City School District	Alpaca Elementary School	13.1	21
6.	BOWERS, COLIN	262893889	Big City School District	Alpaca Elementary School	14.9	22
7.	GARRIN, ALICIA	474269310	Big City School District	Alpaca Elementary School	57.7	63
8.	KPOR, MUHAMMAD	587268915	Big City School District	Alpaca Elementary School	58.9	64
9.	BOUSE, BAILEY	521448338	Big City School District	Alpaca Elementary School	65.2	68
10.	CHEEMA, ABERRA	763753651	Big City School District	Alpaca Elementary School	76.7	83
11.	MONTGOMERY, CINDY	477198487	Big City School District	Alpaca Elementary School	85.5	88
12.	SCHULTZ, DAKOTA	035509766	Big City School District	Alpaca Elementary School	86.2	91
13.	KRAMER, DEVLIN	168362937	Big City School District	Alpaca Elementary School	90.2	93
14.	SRINIVASAN, KARTHIK	683738428	Big City School District	Alpaca Elementary School	91.8	95
15.	SEV, SARAJU	543234528	Big City School District	Alpaca Elementary School	92.7	97
16.	DICKSON, MIRIAM	087648630	Big City School District	Alpaca Elementary School	97.5	99
17.	STEVENSON, WOLFGANG	461248122	Big City School District	Alpaca Elementary School	97.3	99
18.	HILL, IAN	611323113	Big City School District	Alpaca Elementary School	98.4	99
19.	BLACKWELL, HAROLD	616515591	Big City School District	Alpaca Elementary School	98.9	99
20.	ARNOLD, GILBERT	273751642	Big City School District	Alpaca Elementary School	99.9	99
21.	OGLE, ADELINE	255178249	Big City School District	Alpaca Elementary School	99.9	99
22.	WALLER, KHALID	557738224	Big City School District	Alpaca Elementary School	99.9	99
23.	SHARIF, HARSH	168657751	Big City School District	Alpaca Elementary School	99.9	99
24.	FISCHER, ZACHARIAN	364641321	Big City School District	Alpaca Elementary School	99.9	99

Sarah uses this report to sort students based on their projected percentile on the PSSA Grade 7 Math assessment. Then groups them into three achievement groups:

1. Lowest achievement group with projected state percentiles 1-33 (her focus group) – 6 students this year
2. Average achievement group with projected state percentiles 34-66 – 8 students this year
3. Highest achievement group with projected state percentiles 67-99 – 10 students this year.

This process allows her to get a better sense of the level of differentiation that may be needed as she begins the school year. Sarah also keeps these groups in mind to monitor their progress throughout the year on other benchmark and diagnostic assessments.

## Step 3: Administer a diagnostic or benchmark assessment to current students

After several initial weeks of instruction, Sarah administers an assessment to her students to get a baseline view of the skill levels of her students. Upon completion of the assessment, Sarah analyzes the results by the three achievement groups of students she identified in step 2. In particular, she looks closely at her students' skills in the categories of Numbers and Operations and Algebraic Concepts as these are the instructional areas she has defined for the upcoming weeks. Knowing students' skill areas individually, as well as by smaller focus group (defined in

step 2), helps Sarah in planning and delivering her instruction. Additionally, Sarah carefully considers the most effective instructional strategies needed for the content, plans for improvement and enhancements in her existing strategies, and creates a schedule to monitor students' progress frequently.

#### **Step 4: Provide differentiated and personalized instruction, as needed**

Using the information from the assessment in step 3, Sarah is able to plan both whole group and small group instruction that meets the skill areas of her students. Over the upcoming weeks, Sarah delivers this instruction and adjusts as needed based on formative assessments used on a daily and weekly basis.

#### **Step 5: Administer the diagnostic or benchmark assessment again to current students**

Several months into the school year, Sarah re-administers the assessment. Once again, after getting the reports, she analyzes the results by the three achievement groups of students she identified in step 2. Additionally, Sarah looks individually at each student.

#### **Step 6: Analyze changes in performance**

Sarah first uses the assessment results to monitor the progress being made by her students, especially those in the low achieving group that was identified in the beginning of the year using PVAAS projections as a focus area. In particular, Sarah looks at Numbers and Operations and Algebraic Concepts as that was the focus of her instruction since the last assessment. She can use this information as another piece of evidence in determining if the low achieving group of students are making the appropriate progress to accelerate their learning and increase their likelihood of reaching proficiency. (This is in addition to the progress monitoring Sarah planned for in step 3.) Remember, these were the types of students who were falling behind in prior years. Sarah chose this as a focus area for change this year and wants to closely monitor the progress of these students. Additionally, Sarah wants to ensure that her middle and high achieving students are making progress as well, so she views their results to ensure they are continuing to make the progress needed to keep them on a path to proficiency, or perhaps advanced levels of performance. For any students who are not making appropriate progress, Sarah adjusts her instructional strategies for those students, and again creates a schedule to further monitor students' progress frequently.

#### **Step 7: Determine additional instructional needs**

For each unit she is planning throughout the year, Sarah uses the most recent assessment results for the appropriate reporting category, and determines the small groups and skills needed in the upcoming weeks. For example, if the next unit focuses on Geometry, Sarah can make that selection to look only at the assessment results for that category. She does this for each individual student, as well as by the three achievement groups identified in step 2. Just as she did in step 3, Sarah carefully considers the most effective instructional strategies needed for

the content, plans for improvement and enhancements in her existing strategies, and creates a schedule to monitor students' progress.

**Note:** *While changes in diagnostic and benchmark assessment scores may not equate to growth as measured in PVAAS, measuring student progress in skill acquisition over the course of the year is one way to document increased understanding of standards. PVAAS growth data includes multiple years of data for groups of students and is not calculated for individual students. Within the process described in this document, change is measured only from one assessment administration to the next. Overall, using PVAAS to understand the trends in your teacher data can help you identify specific groups of students to track closely over the course of the year.*