

# What's Working?

Evaluating & Assessing Your Programs with PVAAS

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Pennsylvania
Department of Education







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# What's Working?

This resource will focus on PVAAS data sources available to schools and LEAs/ districts to evaluate educational programs. We will examine these data sources through two main lenses:



# **Big Picture Lens**

- ✓ Comparing your LEA to similar LEAs in the state
- ✓ Viewing data at the district and/or school level
- ✓ Viewing data by grade, subject, year and/or across years

#### Featuring PVAAS Reports:





**Scatterplots** 

School Search



## **Custom Lens**

- ✓ Customize your view for detail on programs, services, and interventions.
- ✓ Assess for desired impact on student growth and achievement.
- ✓ Assist with decisions to continue, modify, or discontinue specific programming.

#### Featuring PVAAS Reports:





Student Reports Diagnostic Reports

# *Getting Ready for a* **Program Evaluation**

#### **Purpose and Considerations**

Program evaluation answers questions about a program's effectiveness. Evaluation data can be used to improve program services. However, data points alone may not indicate causality, so evaluations also include digging deeper to determine what aspects of what we're doing could be changed to improve student outcomes.

#### Questions to Ask about your Current System:

- What data do you consider or use to determine whether a selected program, service delivery model, or intervention is working and yielding the intended results?
- · How do you measure growth towards intended outcomes?
- How do you know if students of varying achievement levels are "gaining" or benefiting from the services provided to them?

#### **Evaluation Steps:**

- 1. Determine what programs and services you would like to evaluate for effectiveness.
- 2. Collect data:
  - Key PVAAS reports
  - Other relevant data (achievement/student learning, demographic, perceptual, process)
- 3. Use data to take action!
  - Communicate to stakeholders about program effectiveness.
  - Determine which students will likely benefit most from specific programs/services.
  - Plan for the continuation, adjustment, or termination of specific programs/services.

#### PVAAS and Program Evaluation Examples:

- What is the growth of students in our Title 1 program?
- What is the growth of students who are enrolled in our afterschool ELA program?
- What is the growth of students in Grade 8 Math who were enrolled in Algebra I in grade 8? What about for those who were enrolled in a Grade 8 Math course?
- What is the growth of students who were enrolled in a double period of ELA in grade 6?

# **Evaluating Your Programs**

#### **Big Picture Lens: Scatterplots**

Using **PVAAS Scatterplots**, you'll be able to pull comparative data for evaluation.

For example, consider scatterplots as a data point for evaluating Title 1 programming & reporting.

- How are schools like yours doing in achievement and growth?
- View by grade and subject.
- The default view will show achievement (y-axis) and growth (x-axis) with each school identified with a yellow dot.



PVAAS Scatterplots Annual depictions of high achievement and growth across Pennsylvania

Remember, this will not tell you what aspect of your programming is yielding different results. You will need to further investigate with other data. But with this big-picture view, you can view your system's achievement and growth as compared to others in the state. Likewise, you could use the scatterplots to look at the big picture of your special education program impact, comparing to other LEAs.

#### Statewide or Regional View with PVAAS Scatterplot





### **Big Picture Lens: PVAAS School Search**

#### Viewing PVAAS Growth Data

A different way to view comparison data across the state is to conduct a school search. You can find your school in the school search. That will serve as the "reference school." You can restrict the search to schools/LEAs similar to your school/LEA:

- Search within your district, IU, county or state.
- · Click on a demographic to see your reference data.
- Move reference data up and/or down to capture schools with similar demographics.



Is the program you'd like to evaluate specific to a population? Filter by Demographics for Similar Schools:

- Federal Programs & Title 1
- Special Education
- English Learners & Title 3



#### **Big Picture Lens Data: Deeper Analysis**

These are some potential example questions you might ask yourself to further refine your thinking, giving context to the data collected with a big-picture lens:

- · How does our LEA/district compare to other LEAs/districts in Pennsylvania? In our county and/or IU region?
- Where might there be opportunities for partnership, professional learning, or growth?
- Are we showing trends different than the state?
- What curriculum, instruction, and assessment practices may account for any differences?





**PVAAS School Search** An analysis of your school alongside similar schools and LEAs

#### **Custom Lens: PVAAS Diagnostic Reporting**

The **PVAAS Diagnostic** report has filters you can use to go deeper for program evaluation purposes. The filters allow you to select specific populations of students:

- · Students in a specific intervention program
- Students by grade or course (Math 8 course vs. 8th grade Algebra)
- Students in course sequences (Algebra IA, IB, IC)
- Students receiving pull-out or push-in supports

The PVAAS Diagnostic report provides data:

- Using a test you select
- Starting with a default grouping option with students grouped into statewide achievement quintiles
- Starting with a default measurement option showing growth

This report is an evaluation through your **Custom lens**. In contrast to a Big Picture lens, it can help you evaluate the impact of programming relative to your own student population.

#### PVAAS Diagnostic Report Data Table

Depending on their familiarity with PVAAS reports, different teams may favor the view of the data table for the diagnostic. This is available on the same screen, just under the bar chart view of the diagnostic data. This provides a reminder of the growth colors for the diagnostic. When you see blue growth, this indicates that students "gained." When you see green growth, the students "maintained" or met the growth standard. Yellow means that the group of students "slipped or fell behind."

On the PVAAS Diagnostic Report Data Table below, the students are grouped by statewide achievement groups and for each group of students, the data indicates the growth of each of the five groups. This sample table shows all 7th grade, divided into five state achievement groups. If you want to look at specific groups of students within 7th grade Math to help you evaluate your specific programs, you can change the default view of the data.

2022 PSSA Math 7th Grade									
Growth	State Achievement Group								
	1 Lowest	2 Low-Mid	3 Middle	4 Mid-High	5 Highest				
Average	4.16								
Standard Error	0.86	0.92	0.86	0.98	1.05				
Student Count	472	229	150	111	119				
Percentage of Students	43.7	21.2	13.9	10.3	11.0				





Moderate evidence that the group exceeded the growth standard.
 Evidence that the group met the growth standard.
 Moderate evidence that the group did not meet the growth standard.
 Not enough students to generate a

growth measure.

To close achievement gaps, aim for blue growth. Remember the catchy phrase: *Ones and twos must be blue!* 



#### PVAAS Diagnostic Reporting: Change Grouping Options

Using the student grouping options x-axis drop-down menu, you can select from any number of student groupings. You can choose any of the student demographic fields submitted in PIMS. For example if you would like to find some data points to evaluate the Title 1 services that your school/district is offering, you can change the student grouping option to do a side-by-side investigation.

Once you select a student group, your Diagnostic report will re-sort the data into two columns— students who "yes" have that demographic flag and students who "no" do not. In the sample data set, the students reported as Title 1 are listed in the "yes" column. As a group of learners receiving Title I services, the growth is yellow, or they are "slipping or falling behind." The students who are not receiving Title 1 services are collected in the "no" column. As a group of learners with no Title 1 flag, the growth color is green, or "maintaining their position." You can see that the students receiving Title I services have a different growth pattern than the students who are not receiving Title I services. In this sample data set the next steps may be to look at other data and investigate your programming to determine opportunities for improvement.



by student group by selecting pre-populated demographic fields from the **Student Grouping Options** list.

#### PVAAS Diagnostic Report: You Define the Group

If students in the program you are investigating do not necessarily have a demographic in common, you can reveal data based on students who receive the same common program, services or intervention. The PVAAS Diagnostic report allows the user to define a group of students. It can be used to generate a Diagnostic report for students who have had a similar educational opportunity such as participating in an intervention or receiving some type of enrichment support. To yield a customized PVAAS Diagnostic report:

- A user defines a specific group of students (likely students with a similar educational opportunity or experience)
- Needs a minimum of 5 students in a group to show a growth color
- For Math or ELA students must have a score in the subject for the two most recent years
- For Science or Keystones students must have a predicted score



head to the bottom of the filter panel on the left-hand side. You can select students by name using the **"limit by selected students"** option.

## Examples:

# User-defined groups could include students instructed using:

- Specific reading programs (ex. Orton-Gillingham, Project Read, Wilson, Read 180, etc.)
- Technology-based programs (ex. Imagine Learning, Study Island, Carnegie Learning, Dreambox)

#### **Students Enrolled:**

- Simultaneously in a remediation/ intervention class while also enrolled in a Keystone course
- In a special education pull-out program
- In a push-in program
- In Grade 8 Math and Algebra
- In summer programming
- In after-school programming



## **Custom Lens: PVAAS Student Reporting**

You may be interested in looking at program impact at the student level. The **PVAAS Student Reporting** provides a student-by-student view of achievement over time.

& Reports					🖶 Prin
Students	1026680	) Student			
1926680, Student •	1920000	, student			
Enrolled in Amber Cove	What is the :	student's past and proj	ected performanc	e?	
Grade	This report displays t understand a student	re selected student's testing history, pri 's history and plan for future learning n	sjected performance on future a eeds.	assessments, and demographi	c information. This data can help teachers
Student Report 💋	Testing Inform	ation			0
Child Success Summary	This data tile disp	lays the student's performance on prior	assessments. The data represer	ents snapshots of the student's	academic performance each year and should
ests and Subjects	not be interpreted	I as a student's growth trend.			
liter subjects in all data tiles		74	ssting History		Reference Population
🕨 🗹 PSSA	100				State
PASA					Tests and Subjects
- Kanada					PSSA
Keystone	/5				
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PVAAS Student Reporting A student-by-student view of achievement over time

One comprehensive report that includes:

- ✓ Student Information
- ✓ Testing Information
- ✓ Student Projections
- ✓ Value-Added History

A key view for program impact at the student level is to look at a student's past predicted score as compared to actual performance:

#### Testing Information

This data tile displays the student's performance on prior assessments. The data represents snapshots of the student's academic performance each year and sh not be interpreted as a student's growth trend.



For each year, you can view a student's past predicted score as compared to the actual score, based on the student's available testing history in PA. Did the student perform above, below, or near the past predicted performance? Using this view, you can assess the impact of educational programs for individual students.

#### **Custom Lens Data: Deeper Analysis**

Details about the context can help refine your next actions. These are some potential example questions you might ask yourself to further refine your thinking, giving context to the data collected with a custom lens:

- Was the program appropriate for all students?
- Did all students receive the same amount of intervention time?
- Was the program implemented as intended?
- Were the same instructional strategies used with all students?
- Was the intervention provided on different days, or at different times of the day for different groups?
- Were the same materials and resources used with all students?

- 0.5 1 Lowest 2 Low-Mid 3 Middle 4 Mid-High 5 Higher State Achievement Grou 2023 PSSA Math 7th Grade ed by <u>Selected Students</u> Moderate evidence that the group exceeded the group met the growth standard.
   Moderate evidence that the group did not meet the growth standard.
   Not enough students to generate a combit measure. Growt Average 2.09 2.36 Standard Error 3.79 Student Cour 16 11 8 30.6 22.2 2.8 Percentage of Students 44.4 0.0
- Are specific programs working?
- How did a specific program benefit students across various achievement levels?
- Did certain groups of students benefit more than others?

For more on this topic, please explore these additional resources:

- PVAAS Login Page: https://pvaas.sas.com
- PVAAS Online Help: https://pvaas.sas.com/support/papublic/s/main/generalHelpOverview.html
- PVAAS e-Learning Modules: https://pvaas.sas.com/e/eLearn.html?&w4=79
- PVAAS Virtual Library: https://evaasresources.sas.com/pvaas/full-view.html





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