



Multi-Tiered Systems of Support (MTSS) + PVAAS: PVAAS and Your Work in Tier 1/Core Instruction

Did you know that PVAAS data play an important role in informing the effectiveness of an MTSS system? This resource describes key PVAAS growth and projection reports that are highly beneficial in planning and informing the effectiveness of MTSS Tier 1, or Core, programming. These key reports, along with other data sources, guide discussion to answer the question:

Is our Tier 1 (Core) instruction effective in meeting our students' needs?

It is important to recognize that multiple sources of data should be used to inform Tier 1 planning, programming, and evaluation. These sources not only include PVAAS growth and projection data, but also PSSA/Keystone achievement results, growth and achievement results of locally administered assessments, and other data sources such as attendance data, behavioral data, perceptual data, and more.

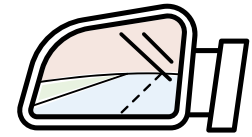
Rationale

Analyzing the effectiveness of Tier 1/Core programs is essential in building and sustaining a robust MTSS system over time. A healthy “Core” instructional program results in approximately 80% of students responding positively to the Core. It is important to analyze the health of Tier 1 on an annual basis to determine if the Core is working for the majority of students, which then allows for effective planning and programming for students in need of Tier 2 and 3 supports.

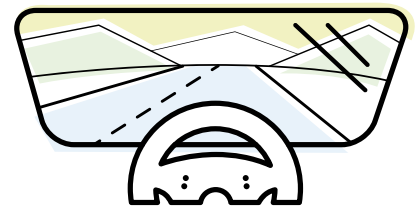
Using PVAAS growth and projection reports helps to inform the effectiveness of Tier 1/Core programming, setting the stage for digging deeper into the building blocks of an effective Tier 1 program: variables in curriculum, instruction, assessment, and organization.

Specifically, PVAAS growth and projection reports help to inform these 3 main questions:

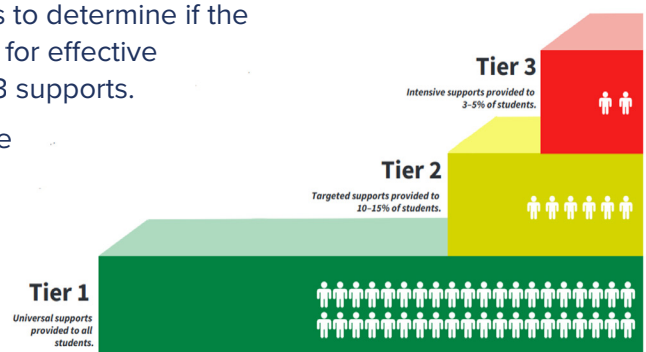
1. How effective is our system (Tier 1/Core) in supporting students' academic growth?
2. Is Tier 1/Core instruction meeting all students' needs? (student groups and varying achievement levels)
3. What does our probability (projection data) tell us about the effectiveness and needs for our Tier 1/Core program for students into the future?



Looking back
to determine program effectiveness and track student progress



Looking ahead
to plan for student needs and anticipate projected achievement

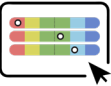

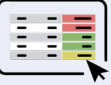







Tier 1 is defined as “high-quality core instruction provided in the general education classroom” (Iris Center MTSS/RTII Training Module).



The BIG Picture: PVAAS Key Reports for Tier 1

While there are many useful reports available through PVAAS, there are four PVAAS reports that are especially beneficial to Tier 1 – from planning, to determining the effectiveness, to answering the three key questions above. Those four reports are:

PVAAS Report	Question Answered	Type of Measure
 Value Added Report	<i>What is the pattern of growth for all students?</i>	 Growth
 Growth of Student Groups Report	<i>Is growth different for different student groups?</i>	 Growth
 Diagnostic Report	<i>Does growth differ for various types of learners?</i>	 Growth
 Projection Summary Report	<i>What percentage of our students are likely to achieve proficient or higher on a future state assessment AND what does that tell us about Tier 1?</i>	 Projection

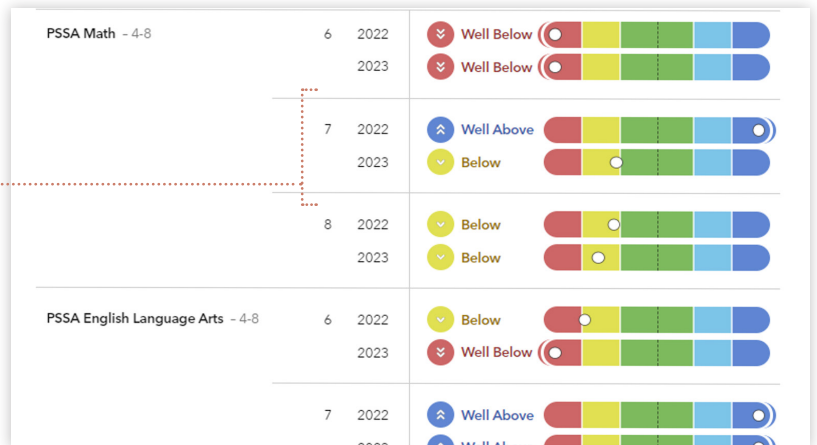
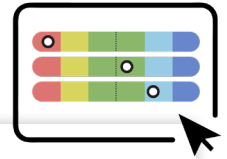
PVAAS Growth Reports

The **Value-Added Report** guides the educator to answer the first question:

How effective is our system (Tier 1/Core) in supporting students' academic growth?

In the example to the right, you can see patterns of the Tier 1 system **not working** in Math for Grades 6, 7, and 8, and ELA for Grade 6. However, you can see indicators of growth – i.e., the system **is working** for Grades 7 and 8 in ELA, and Grade 8 Science.

After looking at the previous-year data, one would also want to view value-added data in previous years. In this example to the right, a filter was applied to see a specific year **side-by-side with** the previous year.



Reminder: PVAAS Value-Added reporting can also create value-added growth reports on locally administered assessments including, but not limited to Acadience®, aimsWeb®, CDT, STAR, MAP®, and others.



The **Growth of Student Groups Report** answers the question:

Is the system (Tier 1/Core) working for different student groups?

After analyzing the Value-Added Report, the next step is to review the Growth of Student Groups Report, which allows you to see the growth (the value-added) to a variety of student groups, including but not limited to Asian, Black, Economically Disadvantaged, English Learner, Students with IEPs, Students with GIEPs, and more. Looking at the growth of student groups allows educators to see whether growth is occurring across a variety of students and compare that growth to the “all student” group.

Determining the health of your Tier 1/Core programming includes looking at not only the entire subject/grade, but also each student group within your system. In other words, *is what we’re doing working for ALL student groups?*

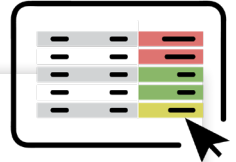
The example to the right shows that students with IEPs in Grade 7 ELA are “gaining”, students with IEPs are “maintaining” in Math Grade 8, and are “falling behind” in Math Grade 6 and 7 and ELA Grade 6.

For more information on the interpretation of the PVAAS Student Groups Report, refer to the PVAAS website.

Students with IEPs

▼ Collapse

Subject	Growth Measure	Standard Error	Growth Index	Growth Color Indicator
▼ Math				
▼ PSSA			-2.01	Well Below
6th Grade	-4.3	2.5	-1.72	Below
7th Grade	-2.8	1.4	-1.92	Below
8th Grade	0.3	1.7	0.18	Meets
▼ English Language Arts				
▼ PSSA			2.14	Well Above
6th Grade	-3.0	2.5	-1.21	Below
7th Grade	9.2	1.9	4.94	Well Above



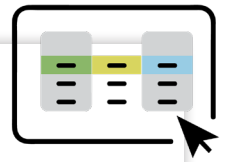
The **PVAAS Diagnostic Report** helps to uncover growth patterns by achievement groups, answering the questions:

Is the system working for:

- ***Students with a history of higher achievement?***
- ***Students with a history of average achievement?***
- ***Students with a history of lower achievement?***

In this example, you can see that students in the above average and well-above average quintiles are “maintaining” (green) while students in the 1st, 2nd, and 3rd quintiles are “gaining” (light blue).

The Diagnostic Report helps you to analyze your Tier 1/Core system by looking at how students at differing achievement levels are growing.





Achievement Data

In planning and analyzing the effectiveness of Tier 1, it is important to also analyze achievement. It is helpful to analyze not only the previous year’s achievement data through eMetric or your local student data system, but also to look at upcoming achievement data for future students. Pairing statewide achievement data with PVAAS projection data (Projection Summary Report) provides a fuller picture of achievement – past, current, and future.

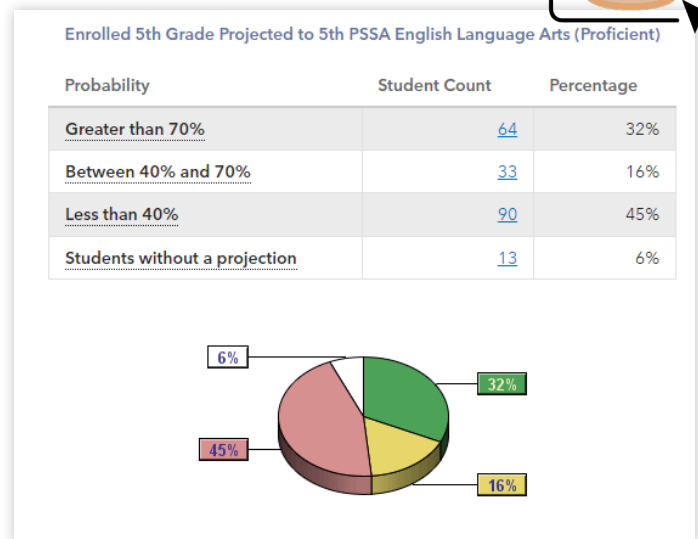
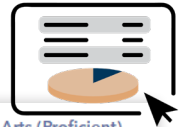
The **PVAAS Projection Summary Report** is beneficial to forecast the achievement probabilities of students in the upcoming year(s). Forecasting future probabilities of proficiency or higher tells a story relative to the health of Tier 1!

Ask: ***What percentage of your students are likely to be proficient or advanced on an upcoming assessment?*** For example:

- Are 80% of students projected to reach proficiency?
- Are 30% of students projected to reach proficiency?

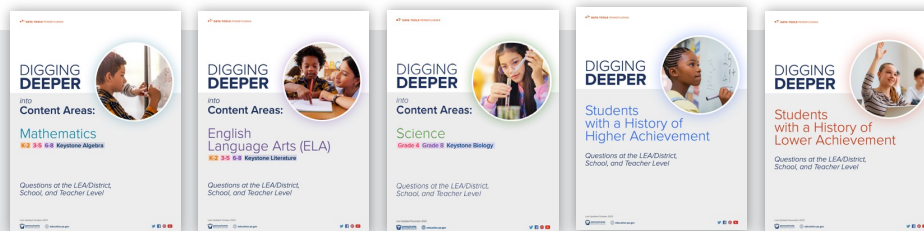
If there is a large percentage of students with a lower probability of proficiency, that is an indicator that Tier 1 needs to be strengthened!

The example at right illustrates that there are at least 61% of students who are not projected to be proficient or advanced on the upcoming PSSA, indicating a need for strengthening Tier 1. That means that there are approximately 123 students (61%) of students in need of some sort of intervention. In the words of Dr. Anita Archer, “You can’t intervene your way out of poor instruction.” In this scenario, the next step is to [dig deeper](#) for key variables in curriculum, instruction, assessment, and organization, which are potential root cause(s) for discussion and action planning.



“You can’t intervene your way out of poor instruction.”

DR. ANITA ARCHER



Explore the five Digging Deeper Guides for questions that can support your root cause analysis.

[Download the Digging Deeper Guides >](#)

<https://www.pa.gov/en/agencies/education/programs-and-services/instruction/elementary-and-secondary-education/assessment-and-accountability/pvaas/using-pvaas/digging-deeper-resources.html>

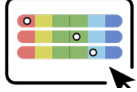

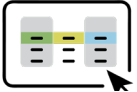


Summary


PVAAS reports—both looking back (growth) and looking forward (projections)—are of great benefit to the MTSS system, providing data that is useful in Tier 1/Core programming discussions.

PVAAS growth reports* guide the discussion to answer:

**and other data sources*

<i>What is the pattern of growth for all students?</i>	Value-Added Report	
<i>Is growth different for different student groups?</i>	Growth of Student Groups Report	
<i>Does growth differ for various types of learners?</i>	Diagnostic Report	

PVAAS projection reports can help answer:

<i>What percentage of your students is likely to reach proficient or above and what does this tell you about MTSS Tier 1 planning?</i>	PVAAS Projection Summary Report	
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With data about students’ growth, and past and projected students’ achievement, an LEA/school is able to annually engage in evaluating the health of their Tier 1/Core system across grades and subjects.

Visit [the PDE PVAAS Website](#) for additional resources on this topic.