Multi-Tiered Systems of Support (MTSS) + PVAAS:

PVAAS and Your Work in Tier 2 & 3 Supports

PVAAS is a powerful data analysis tool. The highly reliable data in PVAAS reports—in combination with other data sources—can inform and support decision making for your LEA/school's MTSS program. This document describes which PVAAS reports can be especially useful in the **planning** and **evaluation** of Tier 2 and Tier 3 supports.

Tier 1: Planning and Evaluation	Effectiveness of System	Value-Added, Growth of Student Groups, and Diagnostic Reports
Tiers 2 & 3: Student-Level Planning	Identification of students in need of Tier 2 and 3 support in your MTSS framework	Student Report Projection Summary Report
Tiers 2 & 3: Program Evaluation	Effectiveness of Tier 2 and 3 supports	Diagnostic Report

See our companion guide for MTSS Tier 1/Core programming.

Background: MTSS Tier 2 & 3 Supports

The goal in an MTSS framework is to have a robust Tier 1 system for all students. We also know, however, that not all students respond the same way to the Tier 1/Core instruction, even with high-quality Tier 1 and differentiated supports in the classroom. Some students will need "more than the Core", through supports provided at Tiers 2 and 3:

"Tier 2 (also referred to as secondary intervention) offers supplemental intervention using a standard validated approach or program to students in a small-group setting; it is provided in addition to and aligned with Core instruction."

"**Tier 3** (also referred to as tertiary or intensive, individualized intervention) is intensive intervention that is individualized based on data; it is provided with more frequency and in smaller group settings than the Tier 2 intervention."

Source: Iris Center (iris.peabody.vanderbuilt.edu)

PVAAS + Tier 2 & 3 Supports

PVAAS provides reports that inform both planning and evaluation. Planning involves the identification of students in need of Tier 2 or 3 supports, and evaluation involves determining the effectiveness of your Tier 2 and 3 services. The four key questions below are the overarching questions that can be addressed through the use of specific PVAAS reports:

- 1. What percentage of our students have low likelihoods of reaching proficiency or higher if they continue on the same path? Planning
- 2. Who are the students in need of Tier 2 supports? Planning
- 3. Who are the students in need of Tier 3 supports? Planning
- 4. How effective are our MTSS services in Tiers 2 and 3? Program Evaluation

It is important to remember that PVAAS reporting is one source of information that is helpful in answering these questions. Other data sources include, but are not limited to: the history of a student's previous intervention services; local benchmark, summative, and diagnostic data; grades; and teacher recommendations.

Tiers 2 & 3: Planning

	1. What percentage of our students have low likelihoods of reaching proficiency or higher if they continue on the same path?	
Planning: Identification of students in need of Tiers 2 & 3	2. Who are the students in need of Tier 2 supports?	
	3. Who are the students in need of Tier 3 supports?	

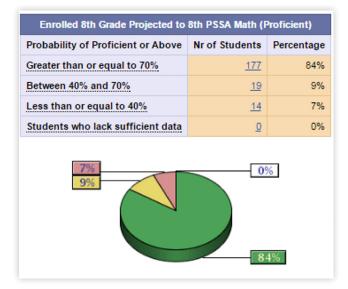
Question #1: What percentage of our students have low likelihoods of reaching proficiency or higher if they continue on the same path?

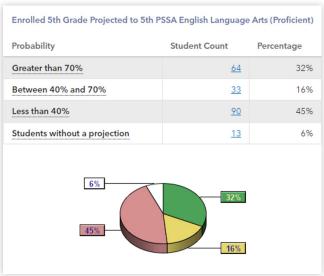
This question can be informed through the PVAAS Projection Summary Report!

The **Projection Summary Report** allows the educator to see the likelihoods of students reaching proficiency or above on an upcoming and/or future state assessment. This report groups students into three groups: greater than 70% likely to reach proficiency or above, between 40% and 70% likely, or less than 40% likely.

The Projection Summary Report helps in various ways relative to MTSS:

- ✓ Informs the effectiveness of the Tier 1 system by indicating the percentage of students who are likely to score proficient or higher through Core instruction with Tier 1 supports as needed. In an effective MTSS system, we continually strive to improve the achievement and growth of students through the Tier 1/Core program.
- ✓ Identifies the percentage and number of students who are less than 70% likely to score proficient or higher on the next or future state assessment, providing the educator with a big-picture view of the needs for supplemental services through Tier 2 and 3 supports.





The example at left illustrates an effective Tier 1 system, with 80% of students on path to proficiency (16% of students may benefit from supplemental Tier 2 or Tier 3 supports). Clicking on the "19" and the "14" will show who the students are and their individual projection number. This information (along with other data) can inform how many students may be in need of Tiers 2 and 3!

Caution: it should not be assumed that the 40-70% range are students in need of Tier 2, and the 14 students with less than or egual to 40% are the Tier 3 students! Students in need of Tiers 2 and 3 require further data review and assessment to determine the appropriate level of Tier 2 or 3 intervention services.

This example shows a need for emphasis on Tier 1, with only 32% of students likely to score proficient or higher, and approximately 56% or more in need of additional supports through a multi-tiered system, including Tiers 1, 2, and 3. The challenge here is to focus on improving Tier 1 (the Core) while at the same time, determining which of the 56% of students will benefit from Tier 2 and 3 supplemental services. This school needs more success at the Core (Tier 1) in order to appropriately and effectively provide Tier 2 and 3 supports.

As we know, all students receive Tier 1 instruction and supports, and in this example, schools may vary in resources needed for Tier 2 and 3 supports — hence a focus on high-quality instruction at Tier 1.

The PVAAS Projection Summary Report in Planning Tier 2 and 3 Supports

Value	Interpretation	Recommendation
Greater than 70%	Student is likely to reach or exceed the indicated performance level/benchmark	Continue with student's current program, investigate what has worked – the student is on a path towards reaching or exceeding the indicated performance level/benchmark
40%-70%	Student may or may not reach or exceed the indicated performance level/benchmark	Investigate and implement adjustments to student's current program to increase the likelihood of reaching or exceeding the indicated performance level/benchmark
Less than 40%	Student is not likely to reach or exceed the indicated performance level/benchmark	Investigate and implement significant changes to student's current program to increase likelihood of reaching or exceeding the indicated performance level/benchmark.

Question #2: Who are the students in need of Tier 2 supports?

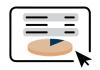
Question #3: Who are the students in need of Tier 3 supports?

Student Reporting Tiles

Individual students (with appropriate years of data) each have PVAAS reports where educators can see a student's projections to the next state assessment and/or future assessments. It is an interactive report that also allows the educator to see achievement history on state and local assessments, PVAAS projections, and other data. The PVAAS Student Report tells how this student is predicted to perform on upcoming assessments (PSSA, Keystone, AP, PSAT, SAT, ACT, ACCESS for ELLs, and others).

Student Projections

A projection is a reliable indicator of a student's likelihood of reaching or exceeding future performance levels or benchmarks. It is based on the student's past performance on assessments across subjects.



		Probability of Reaching or Exceeding the Indicated Performance Level or Benchmark			Below Basic	
Tests and Subjects	Grade	Below Basic	Basic	Proficient	Advanced	Basic
PSSA Math	7	100.0%	0.2%	0.1%	0.1%	 ✓ Proficient ✓ Advanced Tests and Subjects ✓ PSSA ✓ Keystone
PSSA Math	8	100.0%	6.7%	0.1%	0.1%	
PSSA English Language Arts	7	100.0%	74.3%	9.6%	0.2%	
PSSA English Language Arts	8	100.0%	54.4%	3.6%	0.1%	
PSSA Science	8	100.0%	47.2%	16.1%	0.9%	
Keystone Algebra I	N/A	100.0%	37.1%	0.2%	0.1%	
Keystone Biology	N/A	100.0%	32.4%	0 4.1%	0.1%	
Keystone Literature	N/A	100.0%	45.7%	D 5.8%	0.1%	

There are several ways to access individual Student Projection Reports:

- Projection Summary Report
- Custom Student Report
- Student Projection Report
- Exported file of PVAAS student projections

After generating the list of students with their individual projections, the educator now has a helicopter view of the names of students who are likely to need moderate to intensive support to achieve proficiency or higher on a future assessment. From the list, educators can then delve more deeply into specific students' data to determine the level of supports warranted for each student. This information can be found on the PVAAS student tile (achievement history, past and future projected performance, etc.) and in other local assessment data for each student who is being considered for Tier 2 or 3 support.

Tiers 2 & 3: Program Evaluation

Question #4: How effective are the support services provided through Tier 2 and 3 supports?

The PVAAS Diagnostic Report is interactive, and by using filters to customize the report, an educator can view crucial data on whether current programs are working for students receiving targeted supports. We want to ensure that students receiving intervention supports are benefiting from the services being provided! Put another way, we want to know if programs that have been provided to students receiving Tier 2 and 3 supports are working. If yes, we can choose to continue with those supports. If no, adjustments are warranted to ensure that all students are growing at an appropriate rate from their starting points!

From the PVAAS Diagnostic Report, an educator can customize the student group. For the purposes of MTSS Tiers 2 and 3, one might select all students who received Tier 2 or Tier 3 supports – or, one might even choose to select students who received a certain program (Wilson Language, for example). This can be easily done on the Diagnostic Report by using the "Selected Students" checkbox, and choosing the students receiving a particular intervention.

Once that group has been selected, the report can help to answer this specific question: "What is the growth of students in this customized group?" Using the report's interactive features, a student grouping option can be to see the growth of students who fall into the three different achievement groups—lower, middle, and higher achieving—relative to the amount of growth made for the whole group of students. Depending on the findings, adjustments to the intervention may be made for all students, or for some students, as the data conveys.

Average

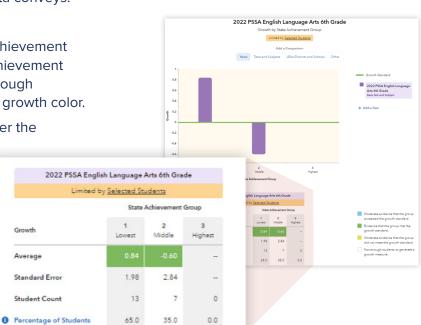
Standard Error

Student Count

In the example at right, the group with lower achievement "maintained" (green), the group with middle achievement also "maintained" (green), and there weren't enough students in the higher achievement group for a growth color.

This data tells us that we may need to reconsider the

program/services being provided to this targeted group of students. Green growth indicates that the achievement level is maintained, but students might not be experiencing "catch up" growth! "Catch up" growth is needed to raise achievement, and is particularly important for students falling into the lowest achievement quintiles.



Measurement Options (Y Axis)

Student Grouping Options (X Axis)

State Achievement Group

Five Groups

Graph Options

Bar Chart

Race

Sex

Other

Selected Students (O Selected)

Limit by

Three Groups

Growth

There are some deeper questions that educators may want to probe as they analyze and evaluate the effectiveness of their Tier 2 and Tier 3 support programs and services:

- Was the program appropriate for all students or just a certain group?
- 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?

For more on MTSS and designing effective Core and supplemental supports, explore these resources:

PaTTAN: Pennsylvania Training and Technical Assistance Network

https://www.pattan.net

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/usdigging-deeper-resources.html

Summary

PVAAS can and does inform Tiers 2 and 3, in addition to Tier 1 of course! In an effective MTSS system, the goal is to have an effective Tier 1 in the general education classroom that works for approximately 80% of the students, along with effective services for students receiving Tier 2 or 3 supports. Decisions in planning for Tier 2 and 3 supports are very important, and highly depend on Tier 1 data. It is important to identify how many students are not likely to be proficient or higher on a specified assessment, and also be able to use data effectively to determine who is best served with tiered supports at Tiers 2 and 3.

Within an MTSS framework, it is also highly important to engage in an evaluation of the effectiveness of Tiers 2 and 3. PVAAS can help with both planning and evaluation of your Tier 2 & 3 supports!

Visit the PDE PVAAS Website for additional resources on this topic.