

HIGH ACHIEVEMENT (PSSA) & HIGH GROWTH (PVAAS) – CAN IT BE DONE?

PSSA as a Basis for PVAAS Growth Measures

- PSSA is designed to provide stretch to discriminate between PROFICIENT and NON-PROFICIENT...and also to meaningfully discriminate between the academic performance levels of Below Basic, Basic, Proficient, and Advanced.
- There is NO pre-determined upper ceiling on ANY PSSA assessment.
- PSSA meets the three requirements to be used in value-added, or growth, analyses.
 - They demonstrate sufficient stretch to show growth of both low- and high-achieving students.
 - They are reliable and valid.
 - They are aligned to state curriculum standards.
- How many students score at the top end of the PSSA annually?
 - < 0.02% score at the highest point of the Advanced range
 - Only 0.003% score at the highest point of the Advanced range in math two years in a row
 - Only 0.0005% score at the highest point of the Advanced range in reading/ELA two years in a row
- How many students score at the top end of the Keystone annually?
 - < 0.002% score at the highest point of the Advanced range in Algebra I
 - < 0.002% score at the highest point of the Advanced range in Biology
 - < 0.002% score at the highest point of the Advanced range in Literature

Defining High Achievement & Growth

- What does it mean to be high achieving? How is your district/school defining high achievement?
 - Having students reach proficiency?
 - Having students score at an Advanced level on a state assessment?
 - Having students with a PVAAS probability of 70% or higher of reaching Advanced on the next state assessment?
- What does it mean to make growth in PVAAS?
 - Meeting the standard for academic growth (green) does NOT mean increasing achievement levels. It is about maintaining achievement levels.
 - PVAAS is NOT measuring progress by increases in entire PSSA performance levels. PVAAS is a more sensitive measure of progress.
 - The ranges of performance on the PSSA for Proficient and Advanced are quite broad. Students can lose ground within a performance level without dropping to a lower performance level. PVAAS helps you detect that change!

***Regardless of the entering achievement level of a group of students,
students should NOT lose ground academically.***

A reasonable goal would be to AT LEAST MAINTAIN the achievement level of the group.

ALL groups of students, even high-achieving groups of students, CAN make progress!



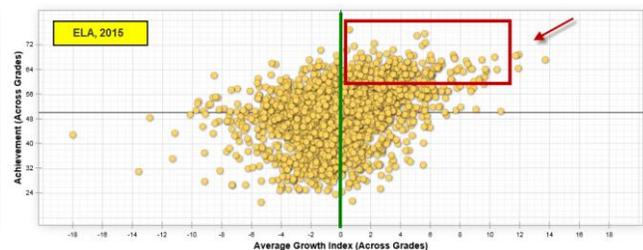
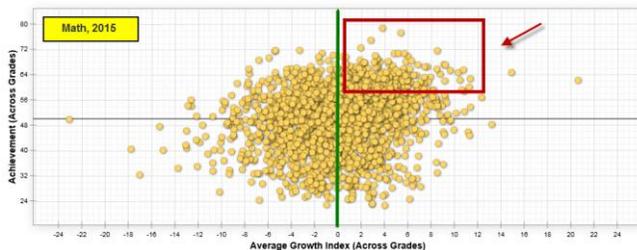
Statewide Evidence of High Achieving Groups of Students Making High Growth

*There are high achieving groups of student across Pennsylvania making high growth!
PVAAS provides a means to view this evidence!*



PVAAS Scatterplots

- In the scatterplots below, each dot represents a real PA school which has been placed on the graph based upon the average entering achievement and the PVAAS Growth Index.
- The horizontal green line represents that the group of students has met the standard for PA Academic Growth, or made one year's worth of academic growth.
 - A Growth Index significantly above zero (to the right of the zero/green line) indicates progress greater than the standard for PA Academic Growth.
 - A Growth Index significantly below zero (to the left of the zero/green line) indicates that the group of students did not meet the standard for PA Academic Growth.



PVAAS District & School Search

- The District and School Search features found in PVAAS allow viewers to find and view the achievement and progress of groups of students in public districts and schools across Pennsylvania. These search features enable you to search for districts and schools with many high-achieving students, within the same county, IU, or statewide.
- This feature will provide you with a list of schools in PA comprised of large percentages of students performing at an advanced level. As seen below, you will find that a number of these schools are also making high growth as evidenced by the dark blue Average Growth Index.

School	District	Tested Grades	Growth Measure	Std Err	Average Growth Index	% Prof	% Adv	% Total
Reference School and District					0.38	39.3	50.0	89.3
Matching Schools and Grades					0.56	29.8	69.7	99.5
					5.02	27.4	66.1	93.4
					2.23	26.3	64.6	90.9
					5.10	31.4	64.5	95.9
					5.67	32.3	59.4	91.7
					7.54	37.3	56.8	94.1
					3.50	35.3	55.6	90.9
					9.46	31.8	55.2	86.9
					6.11	37.1	54.4	91.5
					0.88	41.3	53.8	95.1
					7.63	38.8	53.4	92.3
					11.74	36.4	53.1	89.5
					13.72	41.3	52.5	93.9
					7.60	35.9	52.4	88.3
					1.45	37.1	50.9	88.0

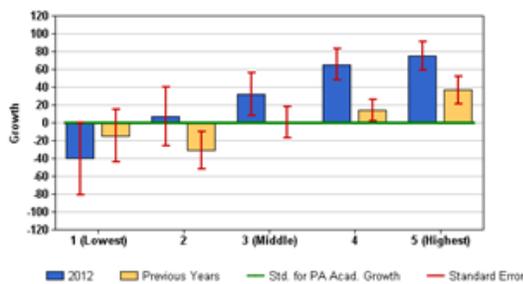
Using the Quintile Diagnostic Report to View Growth of High-Achieving Students

There are opportunities for growth in Pennsylvania's schools, even with groups of high-achieving students!

But first, how do your high-achieving students profile relative to other high-achieving students across PA?

- The Advanced performance level is a range of achievement in Pennsylvania, a classification of *Advanced* does not necessarily imply the highest levels of achievement.
- The PVAAS Quintile Diagnostic Report allows educators to view the progress of students who are at the highest level of achievement across the Commonwealth (top 20% of all students in that same subject and grade level).
- So, how many of your students perform in the top 20% (or, top quintile) of achievement in Pennsylvania? Are your students who are performing in the top quintile making a year's worth of academic growth or more? The PVAAS Quintile Diagnostic Report provides those answers!
- In the example below, this report allows educators in this high school to view the progress of their students who are in the top 20% of the state in terms of achievement.
 - While achievement (PSSA) data showed that 54% of the high school students performed at an Advanced level, the PVAAS Quintile Diagnostic Report shows that only 35% of this school's students are actually in the top 20% of the state in terms of achievement.
 - We can also see that these students in the top 20% of the state were also exceeding the standard for PA Academic Growth!

These students are not only high-achieving and performing in the top quintile in PA; they are also demonstrating high growth!



**High School
54% of Students
are Advanced**

**Only 35% are in
the Highest
Achievement
Quintile in PA**

		Predicted Achievement Quintile Group				
		1 (Lowest)	2	3 (Middle)	4	5 (Highest)
Reading	2012					
	Growth	-49.3	7.1	32.2	65.4	75.1
	Standard Error	40.6	33.0	23.9	17.6	15.8
	# of Students	22	28	46	61	86
Previous Years						
	Growth	-14.5	-31.0	0.7	14.1	36.8
	Standard Error	29.1	20.9	17.4	11.7	15.5
	# of Students	34	62	91	122	156
	% of Students	9.1	11.5	18.9	25.1	35.4
	% of Students	7.3	13.3	19.6	26.2	33.5