

PVAAS

Pennsylvania Value-Added Assessment System

Fact Sheet

April 2004

What is Pennsylvania Value-Added Assessment System (PVAAS)?

Pennsylvania Value-Added Assessment System (PVAAS) is a statistical analysis of achievement data that reveals academic **growth over time** for students and groups of students, such as those in a grade level or in a school.

PVAAS is a tool that gives feedback to school leaders and teachers on student progress. It allows districts to follow student achievement over time and provides schools with a longitudinal view of student performance. PVAAS provides valuable information for teams of teachers to inform instructional decisions.

PVAAS is not an additional student test, but a useful tool to help districts make data-driven decisions. With the PVAAS analysis, districts will be able to *see, report* and *act* upon growth data – they will ‘see’ whether their students are in fact making progress; they will be able to ‘report’ on the gains made and they will be able to ‘act’ on what the PVAAS analysis reveals to make relevant instructional decisions for all groups of students.

How does PVAAS Work?

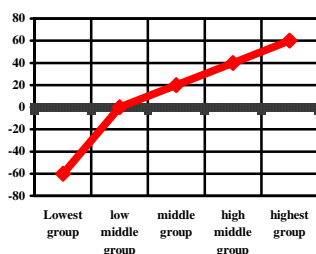
PVAAS reports are the result of analyses of different tests/variables to produce a precise and reliable estimate of student progress and effectiveness of instruction over time. Up to five years of students’ available achievement data is used in this process to estimate performance. For example, when both Reading and Mathematics achievement data are available, future Mathematics performance will be estimated from past performance in both Reading and Mathematics. Value added information for groups of students provide an indication of the effectiveness of schools and school districts, rather than inferring a school’s effectiveness by examining static school performance.

What are the Benefits of PVAAS?

- PVAAS methodology follows the progress of individual students over time. Each student is compared to his/her own past performance. By using individual student longitudinal data, each student serves as his or her own ‘control,’ thereby eliminating the confounding impact of demographic variables, such as economic status or racial/ethnic group. PVAAS provides a unique gauge to measure how much students have grown each year.
- PVAAS empowers all school districts with the benefits of rigorous statistical analyses that produce the results in an easily understood format. Reporting is at the fingertips of users, available in a secure-access web delivery. PVAAS gives the option for looking at growth and growth patterns, rather than static performance of groups of students. The PVAAS methodology can analyze data obtained from various assessment tools. Consequently, results from both the PSSA and other standardized assessments can be analyzed with the PVAAS model.
- Unlike typical achievement reports, which may reveal below average performance, PVAAS reports growth over time, thereby allowing these districts to see where growth is occurring even though overall achievement rates may be below benchmark performance.

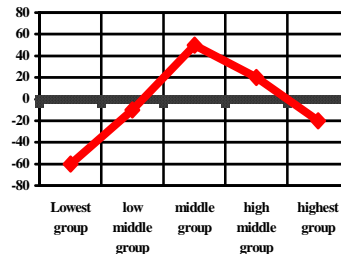
What Might PVAAS Look Like?

PVAAS provides an analysis of “patterns of growth.” Some typical growth patterns appear below.



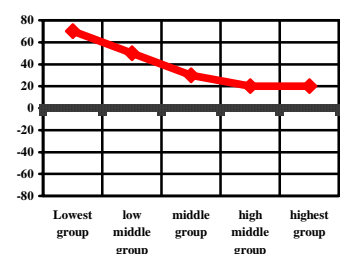
The Reverse Shed Pattern

This pattern reveals more than a year’s growth for high performing students, while the low achieving group has not maintained a year’s growth.



The Tent Pattern

This pattern shows more than a year’s growth for average students, while both high and low performing groups are not maintaining a year’s growth. Low performing students are falling further behind.



The Optimal Pattern

This is the optimal pattern with all students making positive gains. Low achieving students are making the most gains. Over time this pattern has the potential to close the achievement gap.

How Districts can prepare for participation in PVAAS?

Depending on their available historical data, school districts are at varying levels of preparedness for participation in PVAAS. Districts should begin to examine their current testing and data management practices to ensure their readiness for participation in the PVAAS process. Specifically, districts should:

- Collect previous achievement data for students in grades 3-8 in an electronic format. Publishers can recover past test scores in electronic file format, such as ASCII or EXCEL. (Districts already receive PSSA data in electronic format. Be sure to locate previous PSSA Data Diskettes from 1999/00, 2000/01, 2001/02, and 2002/03.)
- Assign unique student identification (ID) numbers to all students. Since PVAAS looks at growth over time, student records over time must be linked or matched electronically. Using unique student IDs results in a more accurate match of student records, rather than only using name and birth date.
- Code these student IDs on all assessment materials. In this way, the student ID will be included in the electronic data file. Demographic information is also required in an electronic format with each student record assigned to the same unique student identification number.

How is Pennsylvania implementing VAAS?

In SY2002-03, the Pennsylvania Department of Education (PDE) piloted PVAAS in 32 districts for grades 3-8. In the Spring of 2002, invitations to participate in the pilot were sent to districts whose state profiles indicated use of a standardized assessment in grades 3-8, in the areas of reading and mathematics, over three years. The PDE plans to continue to support the first set of pilot Phase I districts, as well as add on approximately 30 more volunteer districts in SY2003-04. A detailed plan for implementation across Pennsylvania is listed in the next section of this document.

In September 2002, the State Board of Education approved the recommendation to use PVAAS along with Pennsylvania's assessment plan under No Child Left Behind. The PDE will continue to support the original pilot Phase I districts as the phase-in process for all districts is implemented.

School District Participation:

SY 02-03: Phase I: Initial Pilot: 32 School Districts

SY 03-04: Phase II: 62 total districts to participate as follows:

- 32 Initial Pilot Phase I Districts School Districts continue participation
- 30 Additional (Phase II) School Districts begin participation (voluntary)

SY 04-05: Phase III: 122 total districts to participate as follows:

- 32 Initial Pilot Phase I School Districts continue participation
- 30 (Phase II) School Districts continue participation
- 60 additional (Phase III) School Districts participate (voluntary)

SY 05-06: Phase IV: Full Implementation 501 School Districts participate

What Training and Support will be available?

Implementing PVAAS will require a comprehensive support structure and professional development opportunities. A core team with expertise in PVAAS will continue to provide support to the initial pilot districts, as well as to the new districts that come on board this year. During the 2004-05 school year, additional support and resources will be provided to Intermediate Unit Teams to build capacity and support all districts during 2005-06 full implementation and beyond.

More information on PVAAS will be on the PDE Website (www.pde.state.pa.us) in the near future. In the meantime, if you have any questions please contact one of the following:

School Districts:

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