PVAAS Key Communication Messages

Introductory Concepts

- There is a key difference between achievement and growth.
- Achievement (PSSA & Keystones) and growth (PVAAS) must be used together to obtain a complete picture of student learning.
- Achievement is highly correlated with student demographic variables such as socioeconomic status.
- There is typically little to no relationship between growth and student demographic factors.
- PVAAS captures even subtle changes in performance for both high and low achieving students; this allows schools to respond faster to students’ needs in relation to the progress they are making.
- The PVAAS Average Growth Index (AGI) is an appropriate value to consider when comparing the growth of schools/districts/LEAs. However, achievement should be used in combination with growth data.
- Low achieving schools can meet, exceed, or fall short of the standard for PA Academic Growth, which is to at least maintain achievement from one grade/subject/course to the next.
- High achieving schools can also meet, exceed, or fall short of the standard for PA Academic Growth which is to at least maintain achievement from one grade/subject/course to the next.

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>The final result of an academic experience</td>
<td>Is the concept underlying value-added analysis and reporting</td>
</tr>
<tr>
<td>Highly correlated with demographic factors, such as socioeconomic status</td>
<td>Typically little to no correlation with demographic factors</td>
</tr>
<tr>
<td>Affected by factors outside the school</td>
<td>Typically dependent upon what happens as a result of schooling</td>
</tr>
<tr>
<td>Measures students’ performance at a single point in time</td>
<td>Measures students’ progress across time and years</td>
</tr>
<tr>
<td>Compares student performance to a standard</td>
<td>Compares student performance to his/her own prior performance</td>
</tr>
<tr>
<td>Critical to students’ post-secondary opportunities</td>
<td>Critical to ensuring students’ future academic success</td>
</tr>
</tbody>
</table>

There is a key difference between ‘achievement’ and ‘growth.’ Achievement data provides insights to whether or not students have reached proficiency of the Pennsylvania academic standards. PVAAS, however, offers insights about whether or not students as a group maintained their achievement from one grade/subject/course to the next.

Achievement is about location, growth is direction. We may know where we are with students at given point in time (achievement results), but do we know what direction we are headed in with them in terms of academic performance (growth)? If students do not at least meet the standard for PA Academic Growth, achievement results may be impacted.

Achievement results (PSSA & Keystones) and growth results (PVAAS) must be used together to obtain a complete picture of student learning. PVAAS is another tool that provides a more complete picture of student learning.
With achievement results schools do not always know if they have really made growth with different groups of students. Achievement results often compare two different groups of students. Sometimes students may not grow enough to make significant changes in their achievement results - such as going from non-proficient to proficient. However, they may have made growth. To view the achievement and growth results of Pennsylvania’s public districts/schools, go to: http://paschoolperformance.org/

**PVAAS lets districts/LEAs see if they are growing groups of students at ALL performance levels, both low achieving and high achieving students.** Growth results (PVAAS) let us see even very subtle changes that have occurred with student academic performance. Low performing students may not have yet reached proficiency, but the school may have been highly effective in making growth with those students; PVAAS will let the schools see those results. High performing students may still be at or above proficiency, but if they are not meeting the standard for PA Academic Growth their achievement levels may slip over time. PVAAS is a more sensitive indicator than we would see with achievement results, so schools can respond more quickly.

PVAAS allows schools to compare the academic growth of their students with similar schools across Pennsylvania. You can do this by clicking on “Visit Public Site” on the PVAAS website, https://pvaas.sas.com. Then, click on the “School Search” link under the Reports tab.

- It is **not** appropriate to compare the “Growth Measure” values from the District and School Value Added Reports as they do not take into account the different standard errors of each district and school.
- The color-coding of all of the Growth Measures does in fact take into account the various standard errors.
- The appropriate measure to compare the growth of districts and schools is through the District/School Search feature which provides the “Average Growth Index” (AGI) for each district and school.
  - The Average Growth Index is a value based on the average growth across grade levels and its relationship to the standard error so that comparison among districts and schools is meaningful.
  - If the standard error is not accounted for, users might get a skewed picture of the relative effectiveness of different districts and schools.
  - In general if the Average Growth Index is positive (greater than 0), this indicates that, on average, students in the district or school met or exceed the standard for PA Academic Growth (indicating achievement was maintained or increased as the group of students moved from one grade/subject/course to the next). A large, positive Average Growth Index provides more evidence that the group of students exceeded the standard for PA Academic Growth or increased their achievement.
  - If the Average Growth Index is negative (less than 0), this indicates that, on average, students in the district or school achieved did not meet the standard for PA Academic Growth indicating achievement was not maintained as the group of students moved from one grade/subject/course to the next). A large, negative Average Growth Index provides more evidence that the group of students fell short of the standard for PA Academic Growth or decreased in their achievement.

Achievement is highly correlated with demographic variables, such as socioeconomic status. However, there is typically little to no relationship between growth and demographic variables, such as socioeconomic status.

- There are both high achieving AND low achieving schools in PA making high growth.
- There are both high achieving AND low achieving schools in PA making low growth.

Value-added can remove the effects of factors not under the control of the school (McCaffrey, Lockwood, Loretz & Hamilton, 2003; Ross, Wang, Sanders, Wright & Stringfield, 1999; Wright, Horn & Sanders, 1999).