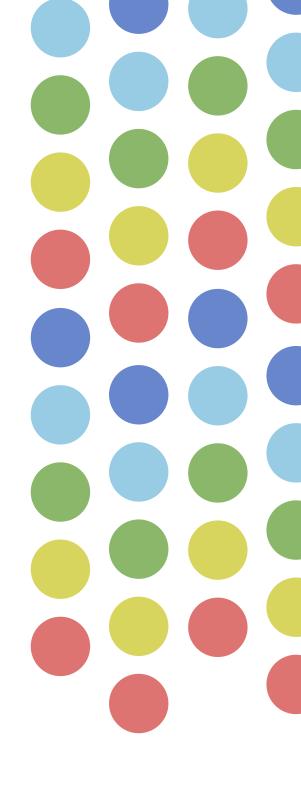


# PVAAS Statewide Scatterplots: **SY2017–18**

PSSA Mathematics PSSA English Language Arts PSSA Science Keystone Algebra I Keystone Literature Keystone Biology

Last Updated October 2018.





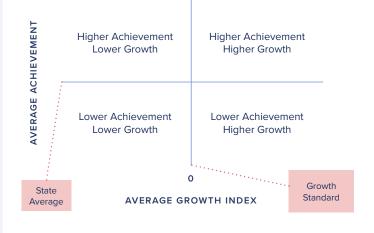
#### INTRODUCTION to SY2017-18

The PVAAS scatterplots visually display **the relationship between growth and achievement data** from the statewide distribution of results for SY2017–18.

#### **Entering Achievement or Vertical Axis:**

- In the PSSA subject areas of English Language Arts and Math, the achievement level is represented in Normal Curve Equivalents (NCE units), where an NCE of 50 equals the state average.
- In the PSSA subject area of Science and the Keystone content areas of Algebra I, Literature, and Biology, the achievement level is represented in scale score points.
- In the PSSA subject areas of English Language Arts, Math, and Science, the **Average Growth Index** represents the growth in that grade level and subject area in SY17–18.
- In the **three Keystone content areas**, the Average Growth Index represents the growth of the students in SY17–18.

## Scatterplot Quadrants and Their Meaning



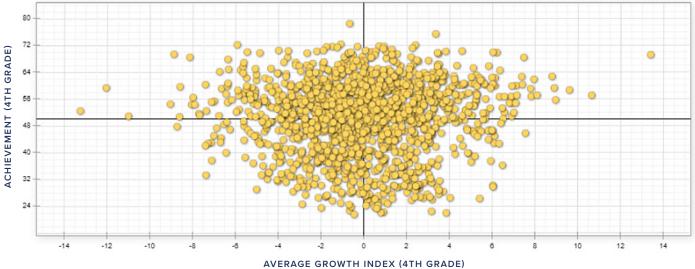
#### **Additional information:**

- Average Growth Index A measure of student progress across the tested grade levels in a school. This index is a value based on the average growth across grade levels and its relationship to the standard error so that comparison among schools is meaningful. It indicates the growth the students have made over time.
- The Average Growth Index is similar to the Consumer Price Index, a common scale used to provide comparisons. If the standard error is not accounted for, users might get a skewed picture of the relative effectiveness of different schools.
- Average Growth Index (AGI):
  - o If the AGI is **equal to or near zero**, this means the students met the growth standard.
  - o If the AGI is **greater than zero**, this means the students exceeded the growth standard. The greater the AGI, the more evidence we have that the group of students exceeded the growth standard.
  - o If the AGI is **less than zero**, this means the students did not meet the growth standard. The further the AGI is below zero, the more evidence we have that the group of students did not meet the growth standard.
- Each dot in the scatterplot represents a school.



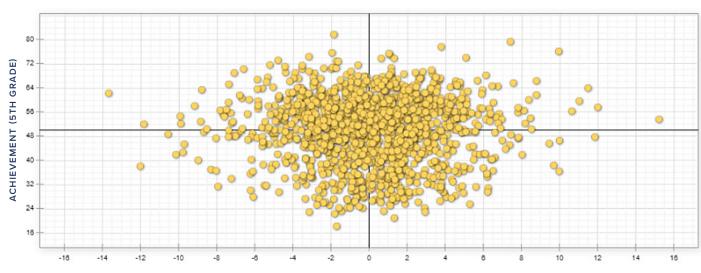
#### **Grade 4 Mathematics Statewide**

**School Scatterplot** 



#### AVERAGE GROWTH INDEX (4TH GRADE)

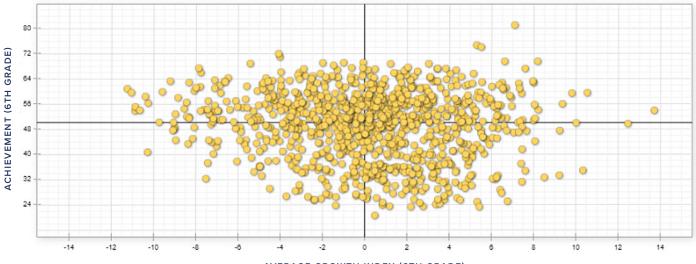
#### **Grade 5 Mathematics Statewide**





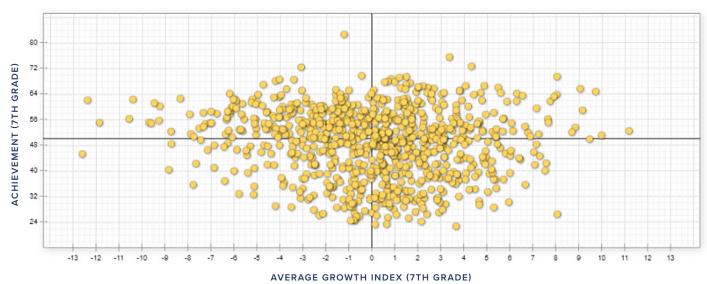
### **Grade 6 Mathematics Statewide**

**School Scatterplot** 



AVERAGE GROWTH INDEX (6TH GRADE)

### **Grade 7 Mathematics Statewide**



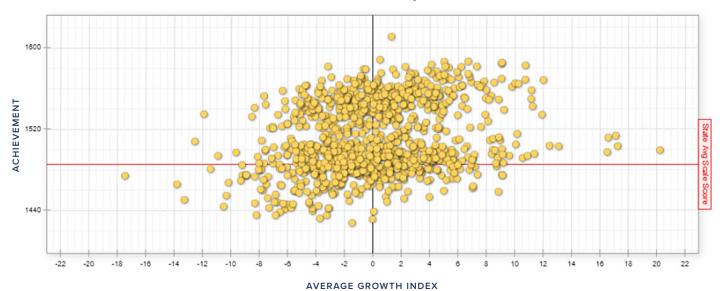


#### 0 80 ACHIEVEMENT (8TH GRADE) 72 0 64 0 58 48 0 ò 40 0 0 32 24 -20 -18 -16 -14 -12 -10 10 12 16 18 20 -8 -8 14 AVERAGE GROWTH INDEX (8TH GRADE)

## **Grade 8 Mathematics Statewide**

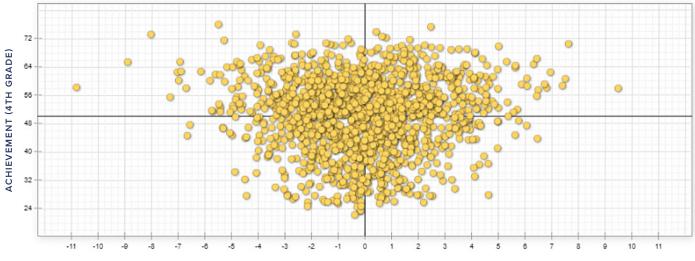


## Keystone Algebra I Statewide





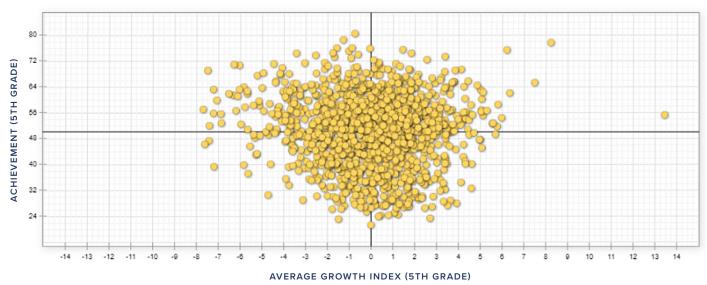
## Grade 4 English Language Arts Statewide



**School Scatterplot** 

AVERAGE GROWTH INDEX (4TH GRADE)

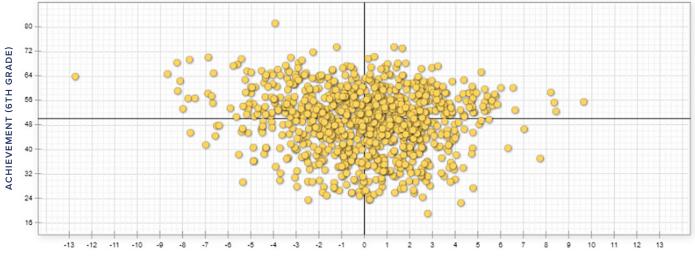
### Grade 5 English Language Arts Statewide



**School Scatterplot** 



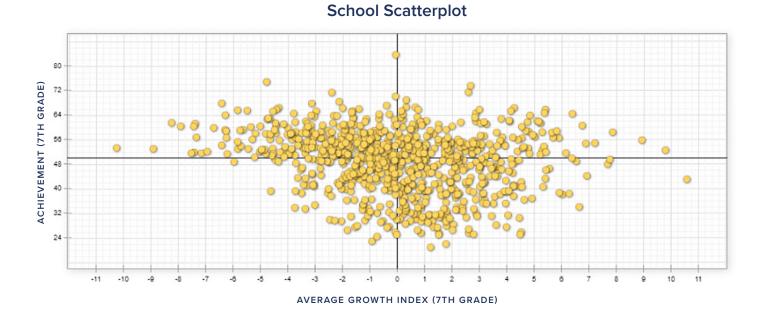
## Grade 6 English Language Arts Statewide



**School Scatterplot** 

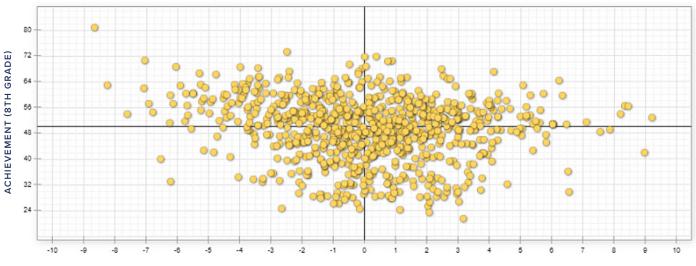
AVERAGE GROWTH INDEX (6TH GRADE)

### Grade 7 English Language Arts Statewide





## Grade 8 English Language Arts Statewide

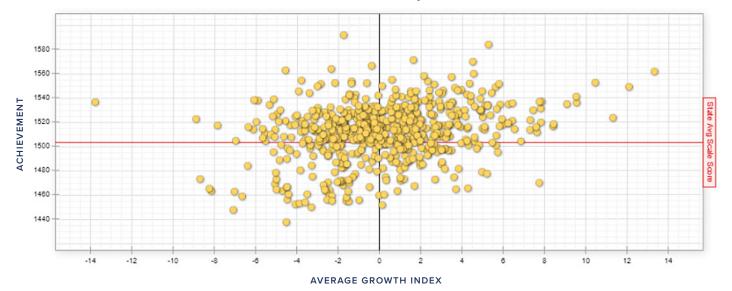


**School Scatterplot** 

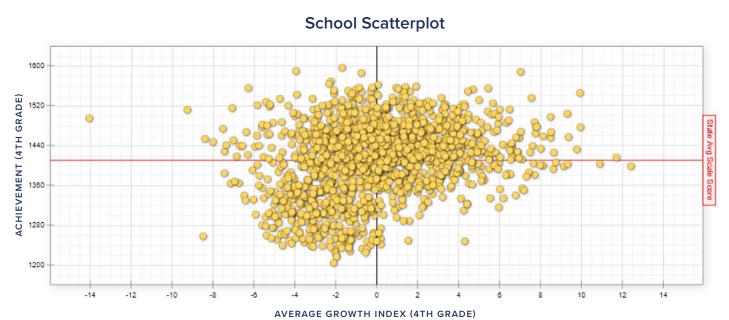
AVERAGE GROWTH INDEX (8TH GRADE)



## Keystone Literature Statewide

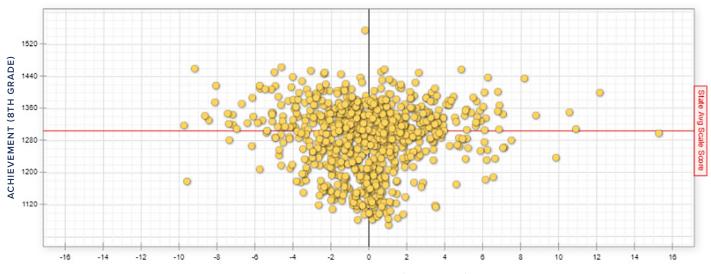






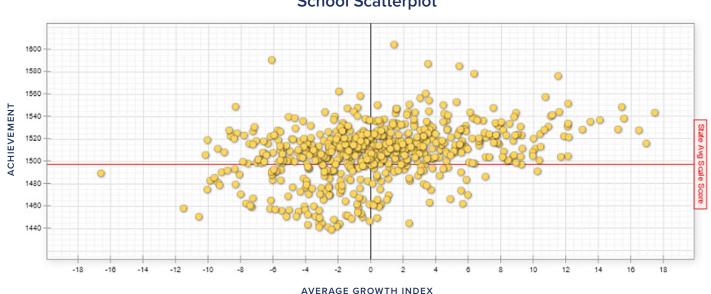
#### Grade 4 Science Statewide

### Grade 8 Science Statewide



**School Scatterplot** 





### **Keystone Biology Statewide**

**School Scatterplot** 

Visit <u>education.pa.gov/pvaas</u> for additional resources.