



# Guide to Interpreting Principal Growth Scores for Grades 4–8

## The Role of Growth Scores in Annual Performance Reviews

New York State teachers of English language arts (ELA) and mathematics in grades 4–8 including teachers of grade 8 students who take the Algebra I Regents examination, and their principals will receive growth data based on State tests. These growth data are for continuous improvement purposes only and describe how much students are growing academically in ELA and mathematics (as measured by the New York State tests) compared to similar students statewide.

## Why Growth?

All students enter their teachers' classrooms at differing levels of academic proficiency or achievement. One way to measure proficiency is student performance on standardized assessments. By measuring the amount of



## How Does New York State Measure Student Growth?

The simplest way to measure growth would be to subtract a student's test score in a prior year from their test score in the current year (e.g., test score in spring minus test score in spring). However, New York State's tests are not designed to allow for this kind of calculation because the test scores are not comparable across grade levels. Nor would this approach account for a student's starting point and other background characteristics. Instead, New York State's approach is to compare the current year scores of similar students—that is, of students who had the same prior test histories—in order to measure growth while accounting for students' starting levels of achievement.

This method, illustrated in Figure 1, shows Student A (highlighted in yellow) with an ELA score of 440 in the previous year. Compared to other students who also had scores of 440 in the previous year, Student A's ELA test score in current year was in the middle range when compared to those same students. We can describe Student A's growth relative to students with similar test histories as a "student growth percentile" or SGP. In this example, because Student A's SGP is 56 (Student A scored 10th out of 18 similar students; 10 divided by 18 equals 56% or an SGP of 56), it means that this student achieved an ELA test score as high or better than 56 percent of other students with similar test histories. SGPs range from 1–99 and always tell you where a student stands in a distribution of similar students (specifically, what share of students he or she performed the same as or better than). New York State's growth model calculates SGPs separately by subject and grade.

— FIGURE 1. MEASURING STUDENT GROWTH COMPARED TO SIMILAR STUDENTS





## What Assessments Are Used to Determine Grades 4–8 ELA and Math Growth Scores?

Students must have an immediate prior year score in the same subject in order to receive an SGP. If available, students may also have up to three additional prior achievement scores, or pretests included as predictors in the model.

— TABLE 1. ASSESSMENTS AVAILABLE FOR GROWTH SCORES

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## Information Available in District Files

Growth scores are made available to districts each fall. These files contain the following information:

- Number of Student Scores: The number of SGPs included in an MGP.
- Unadjusted MGP: The mean of the SGPs for students linked to a teacher, principal, or school based on prior achievement scores.

Districts are also provided with student roster files and MGPs disaggregated by subject. These files show which students were included in a principal's MGP along with information about each student. These rosters display information about students who were linked to principals but were not included in the calculation of the MGP for the principal. Students who do not meet the minimum enrollment requirements will have a detailed exclusion reason (this will be "NA" if the student was included).

For students who were included in the MGP for a principal (exclusion reason of "NA"), the following information will be provided:

- Year, which indicates the end of the school year to which the information applies
- District, school, and educator (teacher or principal) name and ID
- Student name and ID
- Assessment subject and grade ("Item Description")
- Current and prior year(s) State test score(s)
- SGP

## Questions for Consideration

The following are questions to consider as you review your State-provided growth score information:

- How much did my students grow, on average, compared to similar students? Is this higher, lower, or about what I would have expected? Why?
- Look for patterns of high or low achievement and growth. Are these patterns correlated with interventions and accommodations provided to students?
- How does this information about student growth align with information about my instructional practice received through observations or other measures? Why might this be?
- For MGPs attributed to principals in both ELA and mathematics: How do the MGPs in these subjects compare? Why might they be similar or different.

## Information or Additional Questions

If you have questions about your data or what the scores are used for, please contact your superintendent or district data personnel for assistance. If unable to obtain answers to questions, contact [accountinfo@nysed.gov](mailto:accountinfo@nysed.gov).