FOR TEACHERS

Guide to Interpreting Student Growth Data Aggregated by Teachers

PREPARED FOR THE NEW YORK STATE EDUCATION DEPARTMENT BY EDUCATION ANALYTICS, INC.
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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. The growth data are provided for continuous improvement purposes and describe how much students are growing academically in ELA and mathematics (as measured by the New York State tests) compared to students with similar test histories.

Why Growth?

All students enter their teachers' classrooms at differing levels of academic pro ciency or achievement. One way to measure pro ciency is student performance on standardized assessments. By measuring the amount of progress, or "academic growth" a student makes during a given school year on these assessments, we can begin to understand the in uence of that particular school year experience on student learning. By measuring academic growth in addition to pro ciency, we can identify strengths and gaps in student progress and help teachers to better support students who have a wide range of academic needs.

Where and when will data be available?

Accountability growth data are generated for public schools, districts, and charter schools and are made available via the SIRS 112 Report. Teacher growth data are made available for download each fall on the secure Information and Reporting Services Portal.

Where can I get more information?

Additional information is available on the nysed.gov School and District Accountability Resources and Data page.

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 from the prior 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 the 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 (speci cally, 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

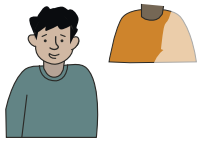
		Current Year Assessment				
		Grade 4	Grade 5	Grade 6	Grade 7	Grade 8/ Algebra I
Prior Years Assessment, Same Subject	Grade 3	REQUIRED	USE IF AVAILABLE	USE IF AVAILABLE		
	Grade 4		REQUIRED	USE IF AVAILABLE	USE IF AVAILABLE	
	Grade 5			REQUIRED	USE IF AVAILABLE	USE IF AVAILABLE
	Grade 6				REQUIRED	USE IF AVAILABLE
	Grade 7					REQUIRED

How is Student Growth Attributed to Teachers?

Student's growth results linked to each teacher are based on their “mean growth percentile” or MGP, the measure of their students’ growth. An MGP is calculated by nding the average of all the SGPs for students attributed to a teacher, across grades and subjects.

Figure 2 illustrates how an MGP is calculated for a school or principal by averaging SGPs of students. Students who do not meet the continuous enrollment requirement (i.e., those who were not enrolled on BEDS Day and on the last day of the State assessment administration) are not included in the MGP for a teacher. [1] Finally, an MGP is reported only if it is based on at least 16 SGPs.

FIGURE 2. EXAMPLE OF STUDENTS WHO COUNT IN THE MGP FOR A TEACHER: SAMPLE DATA



Information Available in District Files

- Number of Student Scores:
- MGP:

Questions for Consideration

For MGPs attributed to teachers in both ELA and mathematics:

Information or Additional Questions

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