

A Principal's Guide to Interpreting  
State-Provided Growth Scores  
for Grades 4–8 in 2016–17



## 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 progress, or "academic growth" a student makes during a given school year on these assessments, we can begin to understand the influence of that particular school year experience on student learning.<sup>2</sup> By measuring academic *growth* rather than *proficiency*, we can identify strengths and gaps in student progress and help teachers to better support students who have a wide range of academic needs.

Growth measures for principals in grades 4-8 provide information on the growth of students for which they are responsible compared to students with similar characteristics across the state. This information can inform principals' understanding of how, on average, these students grew compared to their peers.

## How Does New York State Measure Student Growth?

The simplest way to measure growth would be to subtract a student's score on a standardized assessment in one year from their score on the same assessment in the following year. This method, however, does not account for the fact that students' scores on standardized assessments are not directly comparable from year to year. For example, a student who scores 100 on a standardized assessment in one year and 105 in the following year may have made significant progress, but this method would not capture this progress because the scores are not directly comparable. Instead, growth is measured by comparing a student's score on a standardized assessment in one year to the score of a similar student in the following year. This method, known as value-added modeling (VAM), accounts for the fact that students' scores on standardized assessments are not directly comparable from year to year. VAM uses statistical models to estimate the growth of individual students by comparing their scores to the scores of similar students in the following year. This method is more accurate than the simple subtraction method because it accounts for the fact that students' scores on standardized assessments are not directly comparable from year to year.

### Factors Used to Define “Similar Students” in the Growth Model for 2016-17

For educator evaluation, we further refine the definition of *similar students* to include additional factors known to impact student performance in order to better isolate the impact of a student’s teacher on his or her performance. In the State growth model, the term “similar students” means not only students with the same academic history, but also students with the same English language learner (ELL), economic disadvantage, or disability statuses at both the student and classroom levels. **Table 1** displays specific factors for each of these categories. We account for whether a student is an ELL, for example; we also account for the percentage of ELL students in a student’s ELA or mathematics course. This type of factor is intended to address *peer effects*, acknowledging that it may be a different experience for a student to be in a class or course with many ELL students (and a different job for an educator with many ELL students) than it is to be in a course with fewer ELL students.

**Table 1. Factors Used to Define “Similar Students” in 2016-17\***

Categories	Factors
Academic History	<ul style="list-style-type: none"> <li>• Up to three years of student State exam scores, same subject</li> <li>• Prior-year test score, different subject</li> <li>• Retained in grade</li> <li>• Average prior achievement and range around average prior score in student’s course (same subject)</li> <li>• New to school in a non-articulation year (e.g., entered middle school as an eighth grader)</li> </ul>
English Language Learners	<ul style="list-style-type: none"> <li>• New York State English as a Second Language Achievement Test (NYSESLAT) scores</li> <li>• Percentage of ELLs in student’s course</li> <li>• ELL status (yes or no)</li> </ul>

Categories	Factors
Economic Disadvantage	<ul style="list-style-type: none"> <li>• Percentage of economically disadvantaged students in student’s course</li> <li>• Student economic disadvantage status (yes or no)</li> </ul>
Students with Disabilities	<ul style="list-style-type: none"> <li>• Student with disabilities spending less than 40 percent of time in general education setting</li> <li>• Percentage of students with disabilities in student’s course</li> <li>• Student with disabilities status (yes or no)</li> </ul>

\*In the future, additional characteristics may be added or other changes may be made to the growth model as approved by the Board of Regents.

### How Is Student Growth Used for 4-8 Principal Evaluation?

A school’s or principal’s State-provided growth rating (the HEDI rating) and growth score (0–20) are based on the “**mean growth percentile**” or **MGP**, the aggregate measure of student growth in the principal’s school. An MGP is calculated by finding the average of all the SGPs for students attributed to a school or principal, across grades and subjects.

**Table 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 first day of the State assessment administration) are not included in a school’s or principal’s MGP.<sup>5</sup> **Finally, an MGP is reported only if it is based on at**



A growth score of 0–

**Figure 4. Determining Growth Ratings for Schools and Principals With Grades 4-8 and 9-12 Growth Measures**

**Information Available in District e**



- **Upper Limit and**

### Questions for Consideration

Following are some questions to consider as you review your State-provided growth score information:

- How much growth is expected for each grade level? (e.g., 0.432 for grade 4, 0.457 for grade 5, 0.472 for grade 6, 0.487 for grade 7, and 0.502 for grade 8)