

# Explaining Student Growth Scores to Teachers and Principals 2018-19 Frequently Asked Questions

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## Teachers

### Growth Score Calculations

#### 1. How are student growth scores calculated for students in grades 4-8?

For each student in grades 4-8, a “student growth percentile” (SGP) is calculated based on his or her ELA and math State assessment results in the current year compared to similar students. 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 and the degree to which a student’s classmates are members of these groups.

SGPs range from 1 to 99, and they 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). SGPs are calculated separately by subject and grade.<sup>2</sup> An SGP score of 44 for a grade 4 ELA student, for example, would mean that the student scored as high or better than 44 percent of similar students on the grade 4 ELA assessment that year.

For educator evaluation, a teacher’s “mean growth percentile” (MGP) is then calculated, which is an aggregate measure of the growth of his or her students. A teacher’s MGP for each grade or subject is calculated using the SGP of each student on the teacher’s roster meeting the



Table 1. Sample Calculation of a Teacher's MGP Based on Weighted SGPs

Student	SGP	Enrollment	Include Student in MGP	Attendance	Enrollment x Attendance
Student A	45	80%	Yes	90%	0.72
Student B	40	100%	Yes	95%	0.95
Student C	70	50%	No	80%	NA
Student D	60	100%	Yes	90%	0.90
Student E	40	100%	Yes	75%	0.75

Note: This example includes fewer than 16 SGPs. MGPs are reported only when at least 16 SGPs are linked to a teacher.

To measure teacher performance, we find the MGP for his or her students, which is the weighted average of the SGPs that take into account the enrollment duration and attendance for each student. In the case described in Table 1, the steps to calculate a teacher's MGP would be:

- x **Step 1:** Multiply each student's SGP by their "Enrollment x Attendance" value; add all results together.  
 Table 1 example  $(45 \times 0.72) + (40 \times .95) + (60 \times .90) + (40 \times .75) = 154.4$
- x **Step 2:** Sum "Enrollment Duration x Attendance" results across all students.  
 Table 1 example  $0.72 + 0.95 + 0.90 + 0.75 = 3.32$
- x **Step 3:** Divide Step 1 result by Step 2.  
 Table 1 example  $154.4 / 3.32 = 46.5$

The teacher described in Table 1 has an MGP of **46.5**, meaning that, on average, students linked to this teacher performed as well as or better than about 47 percent of similar students.

For more information about how student growth scores are calculated in grades 4-8 please see the [Teacher's Guide to Interpreting State-Provided Growth Scores for Grades 4-8](#).

**2. How does student enrollment affect my growth score? What happens when a student isn't enrolled in a course for a certain duration?**

A teacher's State-provided growth score is based on his or her mean growth percentile (MGP), which is calculated by finding the weighted average of all student growth percentiles (SGPs) in each of a teacher's courses based on a State test in grades 4-8 ELA and mathematics. Each student's SGP is weighted in the teacher's MGP based on the amount of time that the student was enrolled and attended the course, based on the teacher-student data linkage (TSDL) data provided to NYSED by school districts, BOCES, and charter schools, where applicable. Districts, BOCES, and charter schools are required to certify the accuracy of the TSDL data submitted to NYSED to meet the annual data submission deadline, and §30-3.3 of the Rules of the Board of Regents requires teachers to be part of this data verification process.





HEDI scores of 0-20 are assigned to each educator based on his/her MGP within a particular HEDI rating category.

See the [2018-19 Classification Rules for Growth Ratings and Scores – Teachers](#) for more information.

**5. How/where can I get statewide statistics for my grade? I am especially interested in knowing the percentage of teachers in my grade, statewide, who got a 1, 2, 3, etc. on NYSED's 20-point scale.**

Education Law §3012-c(10), as applied to APPRs conducted pursuant to Education Law §3012-d, Education Law §3012-d(15) and §30-3.15 of the Rules of the Board of Regents, prohibits the Department and school districts/BOCES from releasing to the public APPR data, or any data that are used as a component of APPRs that includes personally identifying information for any teachers or principals. However, the percentage of educators statewide and by district and school







## Principals

### Specific Scores

#### 1. Why did one of my grade 4-8 teachers not receive a State-provided growth score?

There are a number of reasons why a teacher may not receive a State-provided growth score. The text below lists several of these reasons. You can use the "Teacher-Student 4-8" file, which was provided on the NYSED Information and Reporting Services Portal (IRSP), to understand the reasons a teacher who was included in your TSDL submission did not receive a State-provided growth score. In that file, you will see the list of students who were attributed to each teacher for use in the teacher's HEDI ratings/scores. You will also see a "reason for exclusion" if the student did not meet the requirements to be included in the teacher's HEDI rating/score determination. (This will be filled in as "NA" if the student was included.) A student may be excluded from a teacher's growth score for three reasons: 1) the student did not meet the minimum enrollment duration requirement (more below); 2) the student does not have a valid current year test score; or 3) the student does not have a valid prior year test score.

Reasons a grade 4-8 teacher may not have received a growth score:

- Growth scores are only provided for those teachers with students in grades 4-8 ELA and math. Teachers must have the minimum number of attributed student scores (16) to receive a growth score.
- Teachers that do not have any attributed students will not be included in the HEDI results file. These teachers will be included in the student file if they have at least one student linked to them.
- Students must meet the minimum enrollment duration required to be attributed to a teacher (60% of the course).

For example, a teacher had 17 student records linked to her. Two students left the class after being enrolled for only 40% of the class duration. The teacher did not meet the minimum number of student records (16) necessary to receive a growth score because two students did not meet the minimum enrollment duration (60% of the course).<sup>4</sup>

NYSED uses data for students, assessment scores, and enrollment and attendance duration submitted by districts and BOCES as of the deadlines set by NYSED for each data submission.

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<sup>4</sup> Note: If the teacher in question teaches both math and ELA for the 15 students who still meet the enrollment requirement, the teacher will not receive a subject-specific MGP for math or ELA. However, because each student has an SGP for both subjects, the teacher would have 30 total SGPs linked to her. This would result in the teacher receiving an overall MGP, despite not receiving subject-specific MGPs.



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The Department plans to explore the possibility of expanding the model to incorporate measures of student performance in advanced coursework aligned with college-readiness standards in order to recognize efforts to encourage student participation and success in college preparation courses.

While the Department cannot yet say with certainty that any exploration will lead to the eventual adoption of an expanded growth model for grades 9-12, plans are in place to begin beta modeling s

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