

# How are Students Linked and Attributed to Teachers, Principals, and Schools in the State-Provided Growth Models?

Growth models measure the change in achievement on an assessment between two points in time for an individual student compared to similar students. Individual students who are linked to their teachers, principals, and schools and who meet enrollment duration requirements are attributed to their educators. The process for linking and attributing students differs for teachers, principals, and schools and between the grades 4-8 and 9-12 growth models.

New York State teachers of mathematics and English language arts (ELA) in grades 4–8 and principals receive State-provided growth scores based on 2018-19 State tests **for advisory purposes only** pursuant to Chapter 59 of the Laws of 2019, which amended the Student Performance Category requirements of Education Law §3012-d.

## Teachers

The Staff Student Course data (also known as the Teacher-Student Data Linkage or TSDL) are used to identify the student-teacher relationship for courses that end in a Grades 4-8 English Language Arts (ELA) or mathematics assessment or a math Regents.<sup>1</sup> Three data elements from the TSDL are used to determine whether students meet the attribution requirements to be included in their teachers' results and how students' results are included in their teachers' results:

1. **Course Duration** – Total number of instructional minutes for the course (i.e., the total planned class time)
2. **Enrollment Duration** – Total time a student is enrolled in the course
3. **Attendance Duration** – Total time a student attends the course

First, the course duration and enrollment duration are used to determine if students are enrolled in their courses for at least 60% of the course ( $\frac{\text{Enrollment Duration}}{\text{Course Duration}} \geq 0.6$ ). For students who meet the 60% enrollment threshold, their student growth percentiles (SGPs) are weighted for their teacher based on the student's attendance in the course ( $\text{weight} = \frac{\text{Enrollment Duration}}{\text{Course Duration}} \times \frac{\text{Attendance Duration}}{\text{Enrollment Duration}}$ ).

## Principals and Schools

Students are linked to their principals and schools based on the grade(s) for which the principal and school are responsible. Elementary and middle schools that serve any combination of grades 4-8 and their principals can be responsible for a single grade and still receive a State-provided growth score.

However, principals and schools with students in grades 9-12 must be responsible for all of grades 9 through 12 to receive State-provided growth results.

For a student to be attributed to a principal or school, the student must meet the continuous enrollment requirements: enrolled in the same school on Basic Education Data System (BEDS) day (i.e., the first Wednesday in October) and the first day of the State assessment administration appropriate for their grade (or age, if ungraded).

<sup>1</sup> The ESSA double-testing waiver allows students in Grades 7-8 to take math (not ELA) Regents exams instead of the grade-level state assessments for institutional accountability purposes. The state-provided growth model uses math Regents Staff Student Course records to identify teachers whose Grade 6-8 students may also take the grade-level state math assessment.

Table 1 provides a summary of the linkage and attribution requirements for teachers, principals, and schools in the State-provided growth models. The last two rows detail how students who meet the attribution requirements and who have a student growth percentile (SGP) score are included in their educator’s State-provided growth results, so long as their educator has at least 16 SGPs.<sup>2</sup>

**Table 1. Teacher, Principal, and School Linkage and Attribution Requirements**

	Grades 4-8 MGP			Grades 9-12 MGP and GRE	
	Teacher	Principal	School	Principal	School
Linked	Student is enrolled in a teacher’s course as identified by the TSDL	Principal is responsible for the same grade level as the assessment taken by a student		Principal is responsible for all of grades 9-12	School is responsible for all of grades 9-12
Attributed	Student enrolled for 60% or more of the course duration	Student enrolled in the school on BEDS day and the first day of the State assessment administration	Student enrolled in the school on BEDS day and the first day of the State assessment administration	Student enrolled in the school on BEDS day and the first day of the State assessment administration	Student enrolled in the school on BEDS day and the first day of the State assessment administration
Weight	$\frac{\text{Enrollment Duration}}{\text{Course Duration}} \times \frac{\text{Attendance Duration}}{\text{Enrollment Duration}}$	N/A	N/A	N/A	N/A
MGP <sup>1</sup>	$\frac{\sum \text{SGP} \times \text{weight}}{\sum \text{weight}}$	$\frac{\sum \text{SGP}}{n \text{ of students}}$	$\frac{\sum \text{SGP}}{n \text{ of students}}$	$\frac{\sum \text{SGP}}{n \text{ of students}}$	$\frac{\sum \text{SGP}}{n \text{ of students}}$

**Note:** Student SGPs will be included in their teacher, principal, or school’s results if the student has the necessary information to generate an SGP and the educator has at least 16 SGPs.

<sup>1</sup> The symbol “Σ” indicates the sum of the values.

Details on how the attribution and linkage are used in the computation of the State-provided growth model can be found in the technical report, available on the [NYSED growth measures toolkits page](#).



<sup>2</sup> Students can be attributed to an educator but not have an SGP.