



As part of the Annual Professional Performance Review (APPR) process pursuant to Education Law §3012-d, New York State teachers of mathematics and English language arts (ELA) in grades 4–8 and their principals and principals of buildings that include all of grades 9-12 will receive State-provided growth scores based on 2017-18 State tests for **advisory purposes only** pursuant to Section 30-3.17 of the Rules of the Board of Regents. These growth scores describe how much students are growing academically in mathematics and ELA (as measured by the New York State tests) compared to similar students statewide. Development of the growth measures for principals of grades 9-12 was informed by the growth model for principals of grades 4-8. Where possible, the New York State Education Department used the same definitions of similar students and the same rules about student attrition as those that were used for the grades 4-8 principal measures.¹

During the 2016-17 through 2018-19 school years, teachers and principals who receive a State-provided growth score (i.e., teachers of grades 4-8 ELA and/or math and principals of schools that include grades 4–8 or all of grades 9–12) will receive two sets of scores and ratings: original scores and ratings and transition scores and ratings. The State-provided growth score shall be excluded from the scores and ratings used to calculate the overall transition rating. Only the transition score and rating will be used for purposes of employment decisions, including tenure determinations, proceedings under Education Laws §§3020-a and 3020-b, teacher and principal improvement plans, and employment records. During the 2016-17 through 2018-19 school years, such principals' original overall rating will be used for advisory purposes only. State-provided growth scores are just **one** of the **multiple** measures that comprise the annual professional performance review. For APPRs completed pursuant to Education Law §3012-d, an educator's overall composite rating is determined using a matrix that combines a rating based on one or more measures of student growth as well as a rating based on principal school visits.



out in the 2014-15 school year. Students who dropped out prior to the 2013-14 school year were not counted.

Staff assignment data submitted by districts, Boards of Cooperative Educational Services (BOCES), and charter schools are used to link principals to specific grade levels within a school. In schools where two (or more) principals are assigned to different grade levels, those principals will have growth scores that include only the principals' grade levels of assignment. However, scores are produced only for schools that serve all of grades 9–12 and for principals of schools with all of grades 9–12.



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.³ By measuring academic *growth* in addition to *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.

The goal of growth measures for principals of grades 9–12 is to measure student growth toward graduation as well as college and career readiness using available Regents Exam data. To achieve this goal, two different growth measures are reported. These two measures are intended to acknowledge progress in passing Regents Exams required for graduation, as well as to account for high-level performance on Regents Exams and passing Regents Exams beyond the minimum of five exams required for students using the "traditional pathway." Using these two measures allows us to capture two different, but equally important, aspects of student progress toward graduation and college and career readiness. They also allow us to include most students in at least one measure used to compute a score for high school principals. Each measure is described in detail in the sections that follow.



One growth measure for grades 9-12 principals is based on Algebra 1 and ELA Regents Exams. The approach New York State uses compares the current-year Regents Exam scores of similar students—that is, of students who had the same prior test scores and other characteristics—in order to measure growth while accounting for students' starting levels of achievement.⁴ This method of measuring growth is illustrated in **Figure 1**, which is the same as that used for grades 4–8 teachers and principals. In Figure 1, Student A (red student) had an eighth grade ELA score of 340. Compared with other students (solid blue students) who also had a score of 340, Student A's 2018 ELA Regents Exam test score was somewhere in the middle. We can describe Student A's growth in relative terms as a "**student growth percentile**" or **SGP**. In this example, because Student A's SGP is 56 (Student A scored 5th out of 9 similar students, 5 divided by 9 equals 55.5% or an SGP of 56), it means that this student performed as well as or better than 56 percent of students (with the same starting point and characteristics) who took the ELA Regents exam. **SGPs range from 1–99** 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). In New York State's evaluation system, SGPs are calculated separately for the ELA and Algebra Regents Exams.

³ Education Law §3012-d(2)(c) defines "student growth" as: "the change in student achievement for an individual student between two or more points in time."

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1. Introduction







All statistical calculations contain some uncertainty. Although the reported MGP or GRE score is the best estimate for any school or principal, we also can quantify a range wherein we can expect that the true answer lies. The upper- and lower-limit MGP or GRE scores define a set of scores wherein an educator's true MGP or GRE score lies 95 percent of the time. Reporting upper- and lower-limit MGPs is similar to the way we are used to seeing results from other statistical calculations such as political polls reported, in which a candidate can be ahead in the polls by six points plus or minus three points. The width of the confidence range (that is, the distance between the upper and lower limits) is affected by such factors as the number of students included in generating the score, the spread of student scores, and characteristics of the tests students take.

We report the upper- and lower-limit MGPs because we want to be transparent about the data. We also use upper and lower limits to assign school and principal growth ratings in a way that fairly takes uncertainty in MGP and GRE measures into account.

To determine the growth rating for a school or principal of grades 9–12, we first find a growth rating and score for each of the two types of metrics: The combined MGP measure and the GRE measure. **Figure 4** shows the rules used to determine these growth ratings. A growth score of 0–20 points is then assigned within each rating category (HEDI) using the scoring bands prescribed in Subpart 30-3 and the Rules of the Board of Regents (i.e., the regulations that govern evaluations pursuant to Education Law §3012-d). Higher MGPs and GRE scores receive more points.



Then we average the growth scores together, weighting them by the number of students included in each measure. **Figure 5** provides an example. The resulting score determines the State-provided growth subcomponent HEDI rating and growth score for a school or principal of grades 9–12.

5. State-provided Growth Subcomponent Rating & Growth Score for 4-8 & 9-12

Sample School	Growth Rating	Growth Score	Number of 9-12 Students or Student Scores in Measure	Percentage of 9-12 Students (Measure Weight)	Score X Measure Weight	Weighted Score (Rounded)
Comparative Growth in Regents Exams Passed	Effective	17	1,635	83%	17 x 0.83	14.1
MGP	Developing	13	335	17%	13 x 0.17	2.2
9-12 Growth Subcomponent Rating/Growth Score	Effective		1,970	100%		16

Multiply growth score (e.g., 17) by measure weight (e.g., 0.83) to get weighted score (e.g., 14.1)

Use the final growth subcomponent score (in this case, 16) to find the final growth subcomponent rating (in this case, Effective).

Sum the weighted scores for the Comparative Growth Measure (in this case, 14.1) and MGP measure (in this case, 2.2) to get the overall subcomponent score (in this case, 16).



Sample School	Growth Rating	Growth Score	Number of Students or Student Scores in Measure	Percentage of Students (Measure Weight)	Score X Measure Weight	Weighted Score (Rounded)
4-8 Growth Subcomponent Rating/Growth Score	Effective	16	435	18%	16 x 0.18	2.9
9-12 Growth Subcomponent Rating/Growth Score	Effective	15	1,970	82%	15 x 0.82	12.3
Overall Growth Subcomponent Rating/Growth Score (4-8 & 9-12)	Effective		2,405	100%		15

Use the final growth subcomponent score (in this case, 15) to find the final growth subcomponent rating (in this case, Effective).

Sum the weighted scores for 4-8 (in this case, 2.9) and 9-12 (in this case, 12.3) to get the overall growth subcomponent score (in this case, 15).

State-provided growth scores are made available to districts by September each school year or as soon as practicable thereafter. Results are provided in separate files for principals and schools. These files contain the following information:

- **Number of Student Scores (for MGP measure) or Student (for GRE measure):** These numbers refer to the SGPs included in an MGP or to the number of students included in the GRE measure.
- **Unadjusted Measure:** This measure is based on student growth and accounts for prior achievement scores only, without taking into consideration ELL, student with disabilities, or economically disadvantaged student characteristics.
- **Adjusted Measure:** This measure is based on student growth and is adjusted for academic history as well as ELL, student with disabilities, and economically disadvantaged characteristics at the student and school levels.
- **Upper Limit and Lower Limit:** Highest and lowest possible measure score for a 95-percent confidence range.
- **Growth Rating:**
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an educator's growth score (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")
- Student background characteristics:
 - Disability: Students identified as having disabilities, based on district, BOCES, or charter school-provided information
 - ELL: Students who have been identified as English language learners in accordance with Part 154 of the Commissioner's Regulations, based on district, BOCES, or charter school- provided information⁸
 - Economic disadvantage: Students whose families participate in economic assistance programs such as free or reduced-priced lunch programs, Social Security Insurance, food stamps, foster care, refugee assistance, earned income tax credit, the Home Energy Assistance Program, Safety Net Assistance, the Bureau of Indian Affairs, or Temporary Assistance for Needy Families, based on district, BOCES, or charter school-provided information
- 2018 State test score and prior year(s) State test score(s)
- SGP (unadjusted and adjusted)
- Cohort (years since entering ninth grade) (GRE only): Students who entered ninth grade one, two, three, four, or five or more years ago



The following questions are intended to help principals evaluate growth scores, interpret scores relative to aggregate data provided, and to provide a framework in which to consider scores in light of institutional practices at each school.

- How much did my students grow, on average, compared to similar students? Is this higher, lower, or about what I would have expected? Why?
- How do my scores compare with the district and State?
- How does this information about student growth align with information about my leadership practice received through observations or other measures? Why might this be?
- How does my MGP in Algebra compare with ELA (if applicable)? Why might they be similar or different?



If you have questions about your data, what the scores are used for, or why you received the score that you did, please contact your superintendent or district data personnel for assistance. If unable to obtain answers to questions, contact educatoreval@nysed.gov.



If any discrepancies exist between the language in these materials and the Statute, Regulations, or APPR Guidance, the Statute, Regulations, or APPR Guidance prevail.

⁸ See [Part 154 of the Commissioner's Regulations](#).

