

Measuring Student Growth for Institutional Accountability in New York

PREPARED FOR THE NEW YORK STATE EDUCATION DEPARTMENT BY EDUCATION ANALYTICS, INC. LAST UPDATED: NOVEMBER 2023

Introduction

Student growth is calculated for institutions (e.g., public schools and districts) using student test scores and is based on changes in student performance on the State's grades 3–8 assessments in English Language Arts (ELA) and mathematics from between one and three prior years and the current year (see **Table 1** for an example of the prior year included in each model). The growth model (computed using regression) compares each student's academic growth to the growth of students with similar prior test histories in the State.

		Current Year Assessment				
		Grade 4	Grade 5	Grade 6	Grade 7	Grade 8/ Algebra I
Prior Year Assessments, Same Subject¹	Grade 3	REQUIRED				
	Grade 4		REQUIRED			
	Grade 5			REQUIRED		
	Grade 6				REQUIRED	
	Grade 7					REQUIRED

TABLE 1. EXAMPLE OF STUDENTS WHO COUNT IN AN INSTITUTION'S SUBGROUP GROWTH INDEX

¹Due to cancelation of the 2019–20 grades 3–8 ELA and math assessments and the particularly low participation in the 2020–21 assessments, test scores prior to the 2021–22 school year shall not be used to generate student growth scores. The 2022–23 growth results will include only one prior year assessment and the 2023–24 growth results will include up to two prior year assessments.



- 1. A **Student Growth Percentile (SGP)** is calculated for all public-school students in the state in grades 4 through 8 with a current and prior year test score in the same subject. SGPs measure a student's improvement, or growth, relative to other students, considering the students' prior academic histories. The SGP indicates whether a student grew more than or less than students in the State with similar prior test histories. For example, a student who receives an SGP of 70 in that year scored as high or higher than 70% of students in the state with similar prior test histories.
- 2. Second, the SGPs are attributed to an institution, and all SGPs attributed to that institution are averaged together to create a **Mean Growth Percentile (MGP)** for that institution. MGPs measure an institution's average growth based on the mean of the SGPs. For example, an institution that receives an MGP of 70 in that year had students that, on average, scored as high or higher than 70% of students in the State with similar prior test histories on the ELA and math assessments.

Why Use Growth for Institutional Accountability?

New York State's accountability system was implemented to meet the requirements of New York's Every Student Succeeds Act (ESSA). Using State assessments to measure each student's growth during a given school year can help illuminate the influence that a year of schooling has on student learning. By measuring academic growth, in addition to proficiency, we can identify strengths and gaps in student readiness and progress that helps teachers to better support students who have a wide range of academic needs.

Institutional Accountability for the 2022–23 and 2023–24 School Years

To further increase the stability and reliability of this measure, beginning with the 2017–18 school year results, New York State, in accordance with its approved Every Student Succeeds Act (ESSA) Plan, uses a three-year average MGP (or Growth index) using both ELA and mathematics SGPs for each accountability subgroup in the institution. In response to the impacts of the COVID-19 pandemic on the New York State testing system, the USDE approved amendments to the New York State ESSA Plan. As part of these amendments, NYSED generated one-year average Growth Indices based upon the 2022–23 school year results. These Growth Indices will not be used to make accountability determinations and are provided for informational purposes. Growth results are available in the Student Information Repository System (SIRS) 112 Verification Report.

Which Students are Attributed to the Institution's Growth Index?

Students must be continuously enrolled in a school (i.e., they are enrolled on BEDS Day in the fall and assessment day in the spring) in order for their SGPs to be included in their institution's Growth Index. For the 2022–23 institutional accountability calculation, district-verified rosters were available to attribute SGPs to institutions.

How are School and District Growth Indices and Levels Calculated?

Once the roster of continuously enrolled students is identified, a Growth Index (i.e., Mean Growth Percentile or "MGP") is created for each subgroup for which the count of SGPs is greater than or equal to 30 during the prior year of growth. The Growth Indices are then used to assign one of four levels based on the cut points described in **Table 2**.



- TABLE 2. GROWTH INDEX TO GROWTH LEVEL

Growth Index	Growth Level		
45 OR LESS	1		
45.1 TO 50	2		
50.1 TO 54	3		
GREATER THAN 54	4		

What Happens After Growth Scores are Calculated?

In September 2023, the United States Department of Education approved two-year amendments to the New York State consolidated state plan under ESSA. As part of these amendments, New York State will provide one-year Growth Indices for each accountability subgroup based upon 2022–23 school year results for informational purposes. Additional information about these designations and the methodology used to designate institutions and districts in 2022–23 can be found on the <u>NYSED Office of Accountability website</u>.