Rhode Island Student Growth FAQ

Revised December 2018

What is the Rhode Island Growth Model?

The Rhode Island Growth Model (RIGM) is a statistical model based on state assessment scores in English language arts and mathematics. The growth model provides an additional way of looking at student achievement, providing a measure of student growth between annual assessments. For 2017-18 RICAS reporting, the model uses students' prior PARCC scores and their 2018 RICAS scores in English language arts and mathematics.

Why is it useful?

The student growth percentile provides students, parents, teachers, districts, and the state additional data that contributes to a more descriptive picture of student achievement. In addition to students' proficiency levels, we can also see how much growth students are making relative to other students with similar test score histories.

The growth metric also enables districts and schools to identify promising or potentially struggling programs and practices. It can help answer questions such as:

- How much academic progress on state assessments did a student or a group of students make in a year?
- How does an individual student's growth compare to that of students with similar prior state test scores?
- In which schools or districts did students demonstrate better than (or less than) typical growth as compared to students in school or districts with similar overall achievement?

What are the benefits?

Students at the bottom of the proficiency scale have an equal chance to obtain a high SGP as students at the top of the scale. Because all students' scores are compared only to those of their academic peers, students at every level of proficiency can demonstrate an SGP between 1-99. This can encourage students, schools, and districts who demonstrate low proficiency but high growth. It can also discourage complacency among those with high proficiency but low growth.

Student growth can be calculated even when the assessment changes. For the 2018 assessment release, this is important because growth is calculated from PARCC to RICAS.

How is growth calculated?

Student state assessment scores are used to create individual student growth percentiles (SGPs), which are then aggregated to calculate mean (average) SGPs for districts and schools.

At a minimum, two consecutive data points are required to calculate growth for a student (for example, a student's test scores from grade 4 PARCC and grade 5 RICAS math tests). The model goes as far back as possible to calculate a cohort of academic peers for each student. Academic peers are all same-grade students statewide with a similar state test score history, regardless of student demographic data or program information (e.g., race/ethnicity, SES, IEP, ELL). Student demographic characteristics are not used to create a student cohort. The student's growth is compared to that of his or her academic peers and reported as a Student Growth Percentile ranging from 1-99, with an SGP of 1 indicating the lowest growth percentile and 99 representing the highest growth percentile.

In simple terms, SGPs describe the relative location of a student's current score compared to the current scores of students with similar score histories. The location in the reference group of academic peers is expressed as a percentile rank. For example, a student earning an SGP of 80 performed as well or better than 80 percent of her academic peers.

Which grades have reported growth scores? Which grades are used in growth score calculations?

Because the student growth percentile requires at least two consecutive years of state assessment data to measure growth across years, student growth scores can only be calculated and reported for grade 4 through 8 students for RICAS.

Can two students have the same SGP?

Yes, two students can have the same SGP. Even when students score at different places on the proficiency scale, similar SGPs can occur because they have different scores histories and are therefore included in two distinct comparison groups with different academic peers.

How is growth calculated for a group of students (such as a district, school, or grade)?

Growth is aggregated for any student group (district, school, grade, subgroup, etc.) by averaging the individual SGPs—adding all SGPs together and dividing by the total number of students to determine the average (or mean) SGP. In previous years, Rhode Island has presented growth as a median; however, this year we are presenting mean SGPs

What are the cuts for low, typical, and high growth?

These cuts are applicable to individual student SGPs as well as mean growth percentiles for groups such as schools and districts.

Low growth: 1-34 Typical growth: 35-69 High growth: 70-99

How do we compare student growth?

The mean growth percentile for a district or school can be used for comparison purposes. The data for comparisons are available using the Quick Reports file downloads on the public RI Assessment Data Portal or with the visualization tool on the RIDE Assessment Results page. See more information about accessing the growth resources below.

What should I consider when drawing conclusions from the growth results?

When interpreting RICAS results, keep in mind that only one year of student growth data is available with the results. Avoid making inferences about the long-term growth trends of a school or district.

What about high school growth?

For the 2017-18 reporting year, high school student growth is included in Rhode Island accountability for 10th grade PSAT test takers. This growth is calculated with the same model but using 2018 PSAT scores and prior year PARCC score(s) for each student. High school growth is not reported in the assessment system for 2017-18.

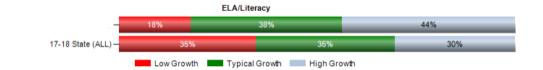
Beginning in 2018-19, high school student growth will be calculated using the same model but using current year SAT scores and prior year PSAT scores.

How do I access RICAS growth data?

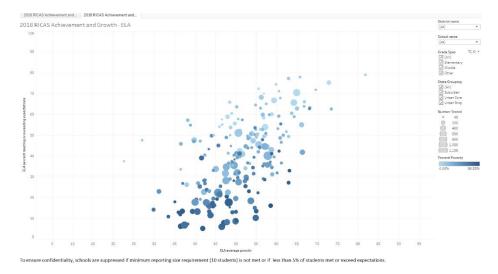
- (1) District, school, leaders, and teachers can access student growth percentiles on the RIDE confidential **Assessment Data Portal**, accessed through RIDEMap.
- **School & District Quick Reports** list the number and percentage of students with low, typical, and high growth and the average growth percentile for each subject.

	Participants	Low Growth		Typical Growth		High Growth		Average Growth
	Number	Number	Percent	Number	Percent	Number	Percent	Percentile
RICASGROWTH - ELA	55	10	18.18 %	21	38.18 %	24	43.64 %	60.58

• Interactive Reports display visualizations for low, typical, and high growth and enable drill-down to schools, subgroups, and student lists. Student lists include individual SGPs and low/medium/high growth designation for each student in ELA and math.



(2) An interactive visualization (bubble chart) comparing student proficiency and growth on a scatter plot is available at http://www.ride.ri.gov/Assessment-Results for both ELA and mathematics. The vertical axis represents the percentage of students meeting or exceeding expectations on the RICAS assessment. The horizontal axis represents the average growth. Each bubble represents a school. The visualization includes filters for school level and suburban, urban core, and urban ring groupings, and data markers (bubbles) display school size and percent poverty.



(3) Growth data is publicly available for state subgroup, district, and school level exports using the RICAS Quick Reports on the **public reporting site**: https://lms.backpack.education/public/ride. These exports display the percentage of students with low, typical, and high growth and the

- average growth percentile for each subject. In public reporting, data is suppressed when the minimum reporting requirements (at least 10 students) are not met.
- (4) Growth data is printed on hard copy RICAS **individual student reports** and labels shipped to schools in early December. An annotated ISR guide and a parent guide to growth percentiles are available at http://www.ride.ri.gov/Assessment-Results.

Your Child's	Overall Results	2018 Student Growth Percentiles						
English Language Arts Achievement Level	Mathematics Achievement Level	who had a similar score to your child on th						
Meeting Expectations	Partially Meeting Expectations	Lower Growth	Your Child	Higher Growth				
Meeting Expectations	rationy meeting expectations		──◎					
Score	Score		School					
517	499		•					
(Score range: 440-560)	(Score range: 440-560)		District					
Growth Percentile	Growth Percentile		45					
47	52	1 20	40 50 60	80 9				
Details on page 2	Details on page 3		50 State					