RENAISSANCE LEARNING

Student Growth Percentile (SGP) FAQ

What is a Student Growth Percentile (SGP)?

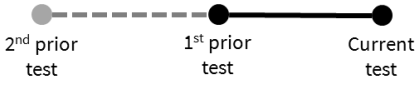
A Student Growth Percentile, or SGP, compares a student's growth to that of his or her academic peers nationwide. *Academic peers are students in the same grade with similar achievement history on STAR assessments.* SGP is reported on a 1–99 scale, with lower numbers indicating lower relative growth and higher numbers indicating higher relative growth. For example, if a student has an SGP of 90, it means the student has shown more growth than 90 percent of academic peers.

How are SGPs determined?

SGPs are based upon the best available information using a statistical model of growth and achievement. The way the model prioritizes data points is designed to make the best use of data across time. SGP uses test scores from at least two SGP windows, and a third SGP window when available.

SGP uses test scores from at least two SGP windows, and a third SGP window when available. It will use a current test and up to two priors.

- **Current test**
  - The most recent test within the last 18 months is considered the current test.
- **Prior tests**
  - A prior test(s) is from the SGP window(s) before the SGP window the current test falls within.
  - When two priors are available, the first prior is used to determine growth and the second prior is used to more accurately locate the student's starting point for the first prior. When working with priors, data from the previous school year may be included.



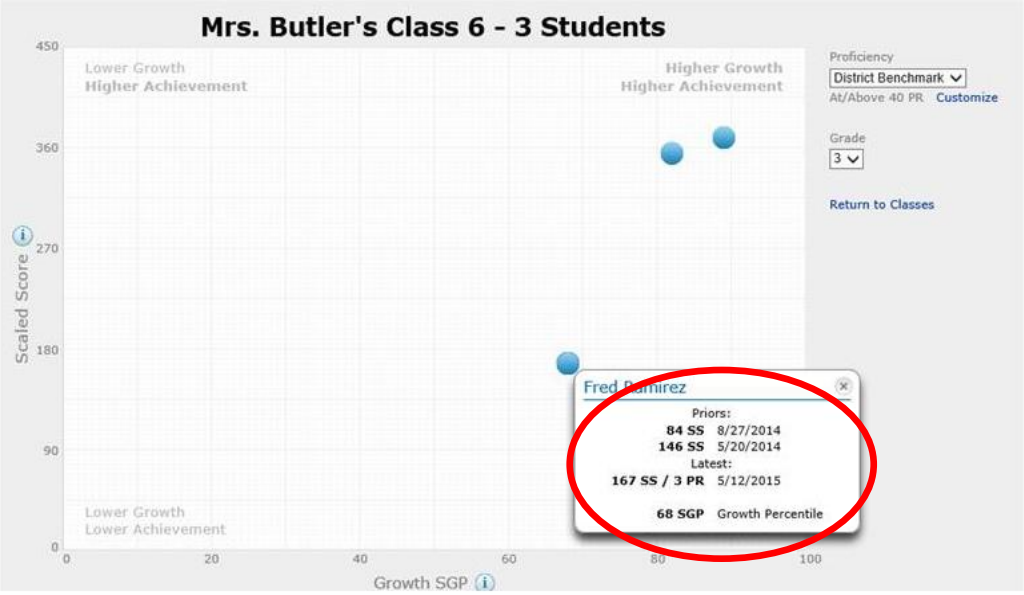
  - When there is more than one test taken in the **prior** SGP window, the following tests are used:
    - Fall- first test taken
    - Winter- test closest to January 15
    - Spring- last test taken
- **SGP windows:**
  - Fall: August 1–November 30
  - Winter: December 1–March 31
  - Spring: April 1–July 31

I tested a student in the fall, winter, and spring. Why is a previous year's test score used to determine the SGP?

Extensive research has shown that the most accurate depiction of growth within an academic year actually takes into account a student's prior spring test score when available. Now, SGP can provide that; data from the previous spring (when available) more accurately locates the student's starting point for the fall, and results in a more accurate measurement of that student's growth between the fall and spring.

How do I know which test scores were used to determine the SGP?

To check which tests were used to determine a student's SGP, refer to the Growth Proficiency Chart.



On which STAR reports does SGP appear?

SGPs are reported on the Growth Report and the Growth Proficiency Chart. Please note: The dates listed on the growth report may not be the dates used to determine the SGP. Tests used to determine a student's SGP can be located on the Growth Proficiency Chart. SGP can also be found on the Reading, Math, and STAR District Dashboards.

Which STAR Assessments provide SGPs?

SGPs can be calculated for the Enterprise and non-Enterprise versions of STAR Reading, STAR Math, and STAR Early Literacy Enterprise. SGPs cannot be calculated at this time for STAR Reading Spanish, STAR Math Enterprise Geometry and Algebra tests, and Grade K in STAR Reading.

We recommend using the Enterprise test for testing students. If data for two tests of the same version are not available, the software will calculate an SGP using an Enterprise and non-Enterprise test. However, the non-Enterprise test will be flagged on reports. Exercise caution when interpreting the growth data.

Why do I see an SGP in the fall?

The greatest benefit of the new SGP model is that teachers will start the school year with an SGP for their students (as long as data exists from the previous year). This allows teachers to start the year off understanding their students' growth history, which can provide insight and assist with instructional decisions right away.

How do I obtain an SGP for students who begin the school year taking STAR Early Literacy assessments and transition to STAR Reading during the same school year?

Tests must be taken within the same STAR assessment (e.g., STAR Reading, STAR Math, STAR Early Literacy) in order to obtain an SGP. If a student has transitioned to STAR Reading, consider administering STAR Early Literacy as well, to obtain an SGP.

What is the difference between Percentile Rank (PR) and SGP?

Percentile Rank and Student Growth Percentile are very different metrics. Percentile Rank is an achievement score that describes a single point in time. Student Growth Percentile is a growth measure that describes student growth between points in time. Both measures are norm-referenced, but they have different norming groups. The norming group for Percentile Rank is all students in a particular grade level. The norming group for Student Growth Percentile is each student's own "academic peer" group.

Percentile Rank	Student Growth Percentile
Based on a scale of 1-99	Based on a scale of 1-99
Performance Score	Growth score
Percentile Rank reported after one test	At least two tests are needed to report Student Growth Percentile
Describes a student's performance (achievement) at a single point in time	Measures a student's growth
Norm referenced – compares students in the same grade	Norm referenced – compares students in the same grade with similar achievement history
Scaled Score is compared to a national norm group of grade-level peers	Scaled Scores are compared a national norm group of grade-level academic peers

What does it mean when a student has a high PR and a low SGP?

This is a critical question that gets at the heart of why it's important to look at both achievement (percentile rank/scaled score) and growth (SGP). Achievement data, like percentile rank and/or scale score tell us the level at which students are performing. However, this is only half the story. The other half of the story is how these students perform in relation to their peers. We examine this question using comparative growth data like Student Growth Percentile. As an example, a student who starts and ends the year at the 50th percentile rank and only has an SGP of 30 is not growing as much as his academic peers. This is an important dimension.

Is SGP "fair" to high achieving students?

Yes. High achieving students are compared against a national sample of other high achieving students with similar achievement history. Every student, regardless of their grade or initial achievement level, has a chance to receive any SGP between 1 and 99. So, it is possible for a student who is scoring well above average at the beginning of the year to have an SGP that is relatively low. Take, for example, a student with a consistently high STAR Percentile Rank (e.g. 95 PR) who is showing a low SGP (e.g. 19 SGP). It may seem odd that such a high performing student would receive a relatively low growth score, but this simply indicates that 81 percent of this student's academic peers experienced more growth.

Can SGP be used with English Learners or students receiving Special Education services?

Yes. The SGP norming sample included students categorized as English Learners and Special Education. However, much remains to be learned regarding how English Learners and Special Education students grow and whether it is reasonable to expect the same amount of growth as other students. Preliminary analyses with STAR data show that the median SGP for these groups tends to be slightly lower than the general population of students. To shed more light on this topic and better assist educators with goal setting, Renaissance Learning is collecting Special Education categorical data with the assistance of Dr. James Ysseldyke of the University of Minnesota. Future data collection efforts will focus on English Learners. If your district uses STAR and would like to contribute data to this research project, please contact research@renaissance.com to learn more.

What is typical growth?

Renaissance Learning does not provide benchmarks for typical growth. However, many states that have adopted SGP consider 35–65 SGP to be the benchmark for typical growth. For more information, we recommend that educators look to states that have adopted SGP to see how they are using this data. A helpful tool can be found through this link: Typical Growth Defined by States.

In the states that have adopted SGP, how will a student's SGP from the state test compare to their SGP from STAR?

The statistical model for Student Growth Percentile is the same across the 23 states who've adopted it—and now for STAR. However, a student's SGP on any assessment can be different than their SGP from STAR. Keep in mind that the tests are different, the amount of time between tests is different, and norming groups are different.

Having two tests report a slightly different SGP is a good thing. A similar growth measure from two separate sources is a great way to get multiple data points. If both tests show a student is growing, you can be reasonably sure the student is growing. If both tests show a student is not growing, you can be reasonably sure they are not growing. If one test shows a student is growing and the other shows they're not, then you are getting a clear signal you must dig deeper.

Why can't I get SGP based only on students in my state?

The Student Growth Percentile in STAR compares students to their academic peers nationwide. An SGP in STAR provides a unified, national way to compare student growth based on national data rather than state-level data.

How do I get an SGP for an earlier time in the year, or a previous school year?

STAR will always report a student's most current SGP using a test in the current SGP window and up to two prior tests from prior SGP windows. In order to capture SGP's from earlier times, save and/or print past reports.

Will I see an updated SGP immediately after testing?

Student data will populate overnight and reports will reflect an updated SGP the following day. Any feature in which SGP is a component (e.g., RTI Goal Setting, Dashboards, Growth Proficiency Chart, Growth Report) will be affected by this as well.

What is a median?

The median is one of three "measures of central tendency." The other two are the mean (the arithmetic average) and the mode (the most commonly occurring score in the data set). All three measures of central tendency provide insight into the data set; however the median may be the most helpful measure in working with SGP targets for your Student Learning Objective (SLO), Student Learning Target (SLT) or other measures of growth. This is helpful because the median is the exact the middle score in any data set that has been arranged in numerical order. When looking at SGP scores for your class, grade, or school, the median SGP is the middle score when all of the SGP scores in the data set are arranged from lowest to highest (or highest to lowest). Because the median is the exact middle of the data set, it means that 50 percent of students have a SGP score above the median and 50 percent of students have a SGP score below the median. Understanding the clarity and simplicity of the median can be helpful as you develop your SLO.

What does the dash mean on the Growth Report?

- A dash will appear on the Growth Report for students who have not taken a test in two consecutive SGP windows.
- STAR Reading and STAR Math are designed for students in grades 1-12; SGPs are not calculated for kindergarten students taking these tests, and a dash will appear. SGPs ***are*** reported for kindergarten students who take STAR Early Literacy tests.
- In order for a Spring test and following Fall test to be used for SGP, the student needs to have advanced one grade between those two tests. Students who have the same grade placement across these two windows will see a dash on the Growth Report, as SGP's comparison of academic peers is only looking at students who advance one grade between spring and fall.
- Student data will populate overnight and reports will reflect an updated SGP the following day. Therefore, when viewing the Growth Report on the date the assessment was given, a dash will appear if it is the student's first test in the second window.

For more information regarding Student Growth Percentile, access this document:

R54866 - STAR Student Growth Percentiles - Learn More

PO Box 8036 | Wisconsin Rapids, WI 54495-8036 | (800) 338-4204 | www.renaissance.com