Student Growth Percentile

Student growth percentile (SGP) is a measure that describes how much a student has improved, or grown, academically from fall to spring as compared to his or her academic test peers. An academic test peer is a student who has the same or similar scaled score on a norm-referenced assessment. An SGP provides an increased level of individualization and accuracy in measuring student growth.

SGP is reported on a 1-99 scale, with lower numbers indicating low growth and higher numbers indicating high growth. For example, if a student has an SGP of 80, it indicates that the student has shown more growth than 80 percent of academic test peers. While knowing a student’s level of achievement expresses whether the student is performing below, above or on grade level, a growth measure such as SGP indicates what kind of progress the student is making.

Every student, regardless of their grade or initial achievement level, has the opportunity to receive any SGP between 1 and 99. A student may be performing at a low level, yet experiencing a high rate of growth. Conversely, a high-performing student could demonstrate limited to no growth.

The SGP methodology provides a platform whereby a school can easily monitor growth for all students, regardless of their college-readiness status, and examine the effect of instructional interventions to ensure the school is fostering academic excellence for all students.

A SGP does the following:

1. Describes a student’s growth compared to other students with similar prior test scores (academic test peers).
2. Enables a comparison of students at different academic levels (high, moderate, low and very low).
3. Demonstrates a student’s academic growth, even if that student is not yet meeting the college-readiness targets.
4. Assists in answering the question, “How is our school fostering academic excellence?”
   - with students of similar academic ability
   - in differentiating learning for all students
   - in meeting the needs of those students who are significantly below grade level

Median Growth Percentile

Median growth percentile (MGP) summarizes student growth rates by school or grade level. The median is calculated by taking the individual SGP for all students (grades three through eight) in a school, ordering them from lowest to highest, and identifying the middle score. The MGP indicates how well a typical student in a school is growing in comparison to other students nationwide that have similar norm-referenced test scores.

The data displays for MGP are a bell curve and line charts (displayed and described on the upcoming pages). The same color legend and percentile cut points are used for both the bell curve and line charts. These percentile cut points pertain to the likelihood that students will meet the college-readiness targets if growth rates are maintained for three years. The percentile cut points were established based upon analysis of test results from CMU-authorized charter public schools over time.

For example, if students in a school are performing below college-readiness benchmarks on average and the school has a MGP of 55, a typical student in that school has a moderate (50-64) likelihood that he/she will meet the college-readiness targets if the growth rate is consistently maintained for three years. However, if a school has a MGP of 40, a typical student in that school has a very low (1-44) likelihood that he/she will meet the college-readiness targets if the growth rate consistently remains in that range for three years.

Color Legend of Percentile Cut Scores

<table>
<thead>
<tr>
<th>Color</th>
<th>Percentile Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Blue</td>
<td>Exceeds / High</td>
</tr>
<tr>
<td>Green</td>
<td>Meets / Moderate</td>
</tr>
<tr>
<td>Yellow</td>
<td>Approaching / Low</td>
</tr>
<tr>
<td>Red</td>
<td>Does Not Meet / Very Low</td>
</tr>
</tbody>
</table>
Understanding the Bell Curve

The bell curve chart, as a display of student growth, identifies the reading and math MGP for all students in grades three through eight. The bell curve chart (shown below with descriptors) uses a color legend of percentile cut points divided into four categories (exceeds, meets, approaching and does not meet). The percentile cut points were established to assist in displaying the likelihood that a student will meet college-readiness targets if the median growth percentile is consistently maintained for over three years.

**COLOR LEGEND OF PERCENTILE CUT POINTS**

The color-coded percentile cut points are related to the likelihood that a student will meet college-readiness targets if the median growth percentile is consistently maintained over three years.
Understanding the Line Chart

The line chart, as a display of student growth, illustrates per grade level the fall and spring scaled scores and the median growth percentile. The line chart (shown below with descriptors) displays a line per school year and grade. The line color indicates the MGP percentile cut point being met and the end points represent the fall and spring scaled scores. The line chart, like the bell curve, displays the data using the four categories of percentile cut points (exceeds, meets, approaching and does not meet).

**SCALE SCORES**
Fall and spring scaled scores are represented by the ends of each line.
- ■ 2015-16
- ▲ 2014-15
- ● 2013-14

**MEDIAN GROWTH PERCENTILE**
The number in the middle of each donut chart indicates the median growth percentile for all students in the school in grades three through eight.

**PERCENT OF STUDENTS**
The percent of students in each of the four percentile cut-point categories.
- Exceeds / High 65-99
- Meets / Moderate 50-64
- Approaching / Low 45-49
- Does Not Meet / Very Low 1-44

**COLOR LEGEND OF PERCENTILE CUT POINTS**
The color of the line connecting the fall and spring scaled scores indicates the median growth percentile for the identified grade and school year.