Student Growth Percentiles 101
Using Relative Ranks in Student Test Scores to Help Measure Teaching Effectiveness

One way to assess a teacher’s effectiveness is to compare his or her students’ improvement with the improvement of other students. How is this improvement calculated and compared? In cases where standardized tests are administered annually to all students, student growth percentiles, or SGPs, provide a simple way of making this comparison because they show how each student’s test-score growth ranks among academically similar students.

SGPs show how a student’s achievement at the end of the year compares with that of other students who started the year at the same level.

For example, if Adele scored 263 on last year’s test, her score at the end of this year would be compared with the scores of all the other students who scored 263 last year. Adele’s SGP would be her percentile rank (from 1 to 99) within this group of similar peers. If Adele’s SGP is 50, it means that her growth in test scores is right in the middle: Half of the similar students who scored 263 last year scored higher than she did this year, and half of them scored lower.

A teacher’s score is the middle SGP for his or her students.

The middle SGP score provides a simple indicator of how well the typical student in a class performed relative to similar students. This score is called the median growth percentile (MGP), and it is useful because, unlike a simple average, it doesn’t change much if one or two students do unusually well or unusually poorly relative to their peers.

The MGP does not account for variations among students or classes, nor does it indicate what caused improvement.

Unlike some other methods of estimating teacher effectiveness, such as value-added modeling, MGP calculations do not try to adjust for differences in student characteristics. And neither SGPs nor value-added modeling indicates what might have caused improvements, nor do they reveal whether other students would make similar improvements if taught by that teacher.

SGPs are easier to understand than many other complex statistical models.

Although the calculations behind them are sophisticated, SGPs present information about growth in percentile terms that are familiar to most teachers and parents. They provide a clear indicator of progress for each student.