



Test Scores

A visual representation of the different types of data that academic tests (assessments) produce.









Let's start with *scale score*. This is sort-of like measuring height.



But no two scale scores measure the same way. Even for two versions of the same test, given at different grade levels, the scale scores won't line up. Through a complex process to link scores across different grades some tests do the work to produce a *vertical scale*. That's useful, but how do you set the City Year growth goal?



If we can measure height the same way across grades, then a vertical scale can be used to measure growth.



The vertical scale can be compared to a criterionreferenced cut score, but this is complex - especially to set a goal for a student who is behind. Since all these are compared to a norm group, they can be compared from one year to the next. So we could set one growth goal for all students, such as growth at or above normal growth.



These norm-referenced scores measure a student at a point in time, compared to the norm group. For NCE, if the score stays the same then the student had normal growth. (PR and GE can be compared but can't tell you how much growth)



But, all this is in comparison to the *national norm group*, and our focus list students are often well outside the norm.



There is a growth model that does not compare against the national norm.



SGP compares against students with a similar score history instead; a custom comparison group. A pediatric growth chart can help explain.

Here is a 12 year old at the 50th percentile for height.

A student growth percentile starts with only the other 12 year olds who had the same prior height as she did for one or more prior years. Then, the amount she grows over the year is compared to that group.

> comparing to a large group of students (the norm.) Now, how might we measure the *change* year to year?





A student's scale score can be plotted from one year to the next. The 4th grade scores of students with the same 3rd grade score can differ.

Calculating the percentage based on the students with similar 3rd grade scores (and not all students) is Student Growth Percentile.







Other notes about SGP

- SGP does not tell you how much a student grew. It tells you how much a student grew compared to similar students. (Same grade, similar scores from last year, and similar starting scores.)
- A student with an SGP of 30 scored higher than 30 percent of students with similar score histories.
- This data is more valuable for decisions if you look at data for a larger group of students
 - For any single student there is measurement error in any one score, so it is best to look at multiple sources of data
 - When looking at larger groups of students, such as how many focus list students were above a certain level, this can more safely be used for decisions

