



Terms: Score Types

Scale Scores: A type of test score that converts a student's raw score (the actual number of questions answered correctly) into a score on a common scale for a particular state's test, in order to control for slight variations between different versions of the same test. Scale scores are helpful because each year most testing programs use a different version of their test, which may differ from a previous version in the number or difficulty of questions. Scale scores make it possible to compare performance on different versions of the same test from year to year. Scale scores are the best score to use when showing growth at the individual student level. Some assessments give you charts to show you what an average year growth looks like.

National Percentile Scores (NP): represents the percentage of students in the national norm group whose score was at or below a student's score. Example: A student whose NP is 70 performed better than 70% of those students who took the test when it was normed. NP scores range 1 to 99. NP scores are NOT percent correct scores. NP scores should not be added or subtracted because they are not an equal-interval scale score. Since the NP are on a bell curve and not an equal interval scale, you should not report an NP score to represent individual student growth. One advantage to using the NP is easier to explain and understand. **Percentile ranks are especially useful for profile analysis determining the areas of relative strength and weakness for an individual student, class or grade group.** If a student makes "normal" growth for his/her achievement level, percentile ranks will not change much from year to year. A student achieving at the 90th percentile will need to grow more than a student achieving at the 20th percentile level to remain at the 90th percentile the following year.

Normal Curve Equivalent (NCE): see attached handout for even more detail.

The Normal Curve Equivalent (NCE) is a score that is based on national percentiles (NP), but has an advantage over NP scores when comparing results for groups of students and when assessing changes in achievement over time. NCE scores based on national norming samples will always be set so that the mean is 50, no matter the grade level of the test. The average student in the United States will be a better reader in grade 5 than in grade 4, but this average student would have an NCE 50 in grade 4 and a 50 in grade 5. The NCE gain for this student is 0.

A student with a positive NCE gain score would have improved more than the average student; a student with a negative score would have learned less than the average student. Differences of fewer than 11 NCE units would not be considered educationally significant for an individual student. Unlike NP scores, you can average NCE scores for a group, like all students in your class. If you are teaching seventh grade mathematics, you could find the average NCE gain for your group of students by taking the difference of the average seventh grade math test scores minus the average sixth grade test scores. If the difference is zero or close to zero, the class has learned as much mathematics during seventh grade as the average seventh grader in the nation. **Differences of 7 or more NCE units represent educationally significant changes for a classroom of students.**

NCE scores are good for showing grade to grade level growth, school comparisons and growth across time.

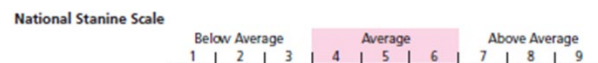


NP of the Mean NCE: This score allows comparison between groups. (Example: teacher can see his students' performance in relation to all schools in the system or nation. To break it down, this score is simply a statistically correct way of showing what the "average national percentile score is for a group" so that you can compare groups.

For example,

- 1) A principal may want to report how an average 4th grader is performing at their school. Rather than use NCE scores that may confuse a parent or someone that is not an educator, by averaging the NCE scores and associating the NP of that score, it would be correct to say, our average 4th grader at our elementary school is scoring at the 70th percentile in Reading.
- 2) Teacher may use this score to know how her class is ranked in comparison with other 4th graders locally or nationally.

National Stanines: The stanine (like the scale score and NCE score) has the advantage of being an equal-interval scale, meaning that it can be treated arithmetically to add, subtract or average group gains. The Stanines are single digit numbers are less likely to be confused with the percentage of items answered correctly. The Stanine is usually a simple, easily understood score that shows whether or not a student, class or school is performing below, average or above average with their representative peers.



RIT Score: Rasch Unit Scale. RIT scales are stable, equal interval scales that use individual item difficulty values to measure student achievement independent of grade levels (across grade levels). Useful for measuring growth.