

WHAT ARE NCEs?

NCEs are normalized standardized scores. NCEs have a mean of 50 and a standard deviation of 21.06. These values were selected because it produced an exact matches between NCEs of 1, 50, and 99 and percentiles of 1, 50, and 99.

One NCE, on average, equals one percentile, but in specific instances the equality almost never holds. The reason that this occurs is that NCEs are an equal-interval scale. This means that a gain five NCEs represents exactly the same amount of performance achievement at the extreme low end of the achievement distribution as it does for average achievers. This is not true of the percentile scale, they are big at the ends and small in the middle. Percentile ranked data are not normally distributed. Percentile ranks are ordinal (a number used to show the relative position of somebody or something in a sequence) and follow a rectangular (uniform) distribution, while NCEs are the same size of the scale from one end of the scale to the other. Because NCEs, unlike percentiles, are an even interval scale, they can legitimately be aggregated and averaged.

An NCE of 50 is at grade level. Regardless of the time of year at which testing is done and grade level tested, a properly derived NCE score of 50 will always be the national average for that grade level and month.

A zero NCE gain does not mean that the student or group of students learned nothing between pre-test and post-test. It just means that there was minimal gains.

All NCEs greater than 0 are good. In general, the larger the NCE gain, the more effective the child did on the test.

ADVANTAGES OF NORMAL CURVE EQUIVALENT SCORES

- They allow you to compare the performance of students who take different levels or forms of the same test.
- They allow you to draw comparisons across subject matter for the same student.
- They can be used to compute meaningful summary statistics.
- They can be used to evaluate gains over time
- They can be used to combine data from different tests

