## What is a Normal Curve Equivalent Score?

The Normal Curve Equivalent, or NCE, is a way of measuring where a student falls along the normal curve. The numbers on the NCE line run from 0 to 100 , similar to percentile ranks, which indicate an individual student's rank, or how many students out of a hundred had a lower score. NCE scores have a major advantage over percentile rank scores in that they can be averaged. That is an important characteristic when studying overall school performance, and in particular, in measuring school-wide gains and losses in student achievement.


In a normally distributed population, if all students were to make exactly one year of progress after one year of instruction, then their NCE scores would remain exactly the same and their NCE gain would be zero, even though their raw scores (i.e. the number of questions they answered correctly) increased. Some students will make more than a year's progress in that time and will have a net gain in the NCE score, which means that those students have learned more, or at least have made more progress in the areas tested, than the general population. Other students, while making progress in their skills, may progress more slowly than the general population and will show a net loss in their NCE ranks.

As with many other scales related to the normal curve, the average NCE, by definition, is 50 . If all students improve in their performance, the mean, or NCE 50, will represent a higher raw score. The standard deviation of NCE is set at 21.06. NCE were developed for program evaluation and are usually the choice for significance testing.

