

Gifted & Talented (G&T) *Frequently Asked Questions – Scoring*

The New York City Department of Education (DOE) provides Gifted & Talented (G&T) programs for students who meet eligibility requirements, apply for admission, and receive a placement. Applicants' scores on the G&T assessments are considered among the eligibility requirements. Students who obtain an overall G&T score of 97 or above are eligible for placement in both citywide and district G&T programs. Students who obtain an overall G&T score of 90 or above are eligible for placement in G&T district programs but not citywide programs. Please refer to the [G&T program handbook](#) for the complete eligibility requirements and a list of G&T programs.

Score reports for students who participate in the January 2016 G&T assessment program will be sent to families in April 2016. This document answers frequently asked questions about the methods used to calculate students' G&T scores.

1. Which assessments are administered to determine students' G&T eligibility?

In January 2016, the DOE will use the Naglieri Nonverbal Ability Test (NNAT) and the verbal component of the Otis-Lennon School Ability Test (OLSAT). The NNAT measures students' abilities including reasoning and problem-solving skills using nonverbal test items while the verbal component of the OLSAT measures verbal reasoning and comprehension. More detailed information about the tests can be found in the [G&T program handbook](#).

2. How are the assessments scored?

A statistical process is used to create your child's overall G&T score to determine whether s/he is eligible to apply for district and citywide G&T programs. The scores are based on performance on both assessments, relative to the child's age at the time of the test. The NNAT and the OLSAT each count for 50% of the overall score.

After the testing period ends, all assessment materials are returned to the test vendor for scanning and scoring. The NYCDOE works extensively with the vendor and a third party auditor to ensure that additional procedural safeguards are implemented. These quality assurance checks ensure that scores are accurate prior to communicating scores to families.

3. How is the overall G&T score generated?

Your child's overall G&T score is derived from a statistical combination of your child's raw scores. The NNAT and the OLSAT are two different tests that are administered together. Raw scores, scale scores, normalized standard scores, and percentile ranks are computed separately for each test. In order to calculate an overall score, a common interval scale is needed to allow the individual test scores to be combined. Each percentile rank is changed to a quantity called a Normal Curve Equivalent (NCE). The two NCEs are on the same interval scale and are averaged. The test weights (50% NNAT and 50% OLSAT) are applied to the NCEs, not to the raw scores or the percentile ranks. The average of the NCEs is then converted back to a whole number between 1 and 99 to obtain the overall G&T score.

When you receive your child's score report, you can refer to the 2016 G&T Score Conversion Table (available when score reports are sent in April) to determine how your child's overall G&T score was calculated based on his/her individual percentile ranks. Note: the score conversion table is only intended for use with your child's January 2016 G&T test results.

4. How are my child's NNAT and OLSAT scores calculated?

Your child's NNAT and OLSAT raw scores are each converted into a scaled score. The scaled scores are then converted into normalized standard scores based on your child's age and the national norms for each assessment.

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Normalized standard scores are established for 3-month age band cohorts so children are scored among same-aged peers. The normalized standard scores are then converted into percentile ranks for each assessment.

5. What is a raw score?

Your child's raw scores show the number of items your child answered correctly on each assessment. There are 48 total test items on the NNAT and 30 total test items on the verbal component of the OLSAT. Each raw score is used to calculate, separately for each test, a scale score, a normalized standard score based on your child's age at the time of the test, and an age-based percentile rank.

6. What is a percentile rank?

A percentile rank is a whole number (no decimal points) between 1 and 99 that is used to show the relative standing of an individual student compared to his or her same-aged peers. For example, a percentile rank of 50 indicates that a student performed similarly or better than 50% of his or her same-aged peers who took the test according to a national sample. Percentile rank is not the same as percent correct, which is a conversion of the raw score into a percent. For example, a student who got 23 out of 30 questions right has a percent correct score of 77%, but may have different percentile rank.

You will see separate percentile ranks for the verbal component of the OLSAT and the NNAT. The percentile ranks refer to your child's relative performance on either the verbal or the nonverbal test only. Percentile ranks for each test are determined based on students' raw scores and how old they were at the time of testing.

7. What is a Normal Curve Equivalent (NCE)?

NCEs are a statistical way of standardizing scores from a test into a common interval scale. NCEs range from 1 to 99 (calculated to three decimal places). They have the property that percentile ranks of 1, 50, and 99 correspond to NCEs of 1.000, 50.000, and 99.000. Percentile ranks between these three values correspond to NCEs that are based on the relationship between percentile ranks and a normal (or Gaussian) distribution, which underlies the statistical theory of most norm-referenced test scores. Since the OLSAT and NNAT are two different standardized tests with different score scales, the conversion of the percentile ranks from each test to NCEs allows the two scores for each examinee to be averaged in the process of calculating a single overall G&T score for each examinee.

8. Could my child's overall G&T score be different than the average of his/her individual percentile ranks?

Yes. The Normal Curve Equivalent (NCE) that corresponds to your child's percentile rank on each test is used to calculate your child's overall G&T score. Due to the statistical properties of NCEs, this does not always equal the average of the two percentile ranks. For example, a student with a verbal percentile rank of 90 and a nonverbal percentile rank of 98 will not have an overall G&T score of 94 (the average of the two).

For additional support, please call the Service Center at 212-374-6646 or email ServiceCenter@schools.nyc.gov.