Frequently Asked Questions About CogAT

What type of test is the CogAT?
The Cognitive Abilities Test (CogAT) is a nationally standardized, norm-referenced test (NRT).

What does *CogAT* measure?
The CogAT measures reasoning and problem-solving skills in three different areas: verbal, quantitative, and nonverbal. Reasoning skills develop gradually throughout a person's lifetime and at different rates for different individuals. Reasoning abilities are good predictors of success in school and are important outcomes of good schooling. *CogAT* does not measure such factors as effort, attention, motivation, and work habits, which also contribute importantly to school achievement.

How do the three sections of the *CogAT* differ?
- The **Verbal Battery** measures flexibility, fluency, and adaptability in reasoning with verbal materials and in solving verbal problems. These reasoning abilities play an important role in reading comprehension, critical thinking, writing, and virtually all verbal learning tasks.
- The **Quantitative Battery** measures quantitative reasoning skills; flexibility and fluency in working with quantitative symbols and concepts; and the ability to organize, structure, and give meaning to an unordered set of numerals and mathematical symbols. These reasoning skills are significantly related to problem solving in mathematics and other disciplines.
- The **Nonverbal Battery** measures reasoning using geometric shapes and figures. To perform successfully, students must invent strategies for solving novel problems. They must be flexible in using these strategies and accurate in implementing them.

What type of results does the CogAT provide?
The CogAt provides raw scores, standard age and/or grade scores, Universal Scale Scores, percentile rank scores, stanine scores.

What does the Universal Scale Score (USS) mean?
The universal scale score (USS) is a number that describes a student's location on a continuous growth scale of cognitive development.

What is a stanine score?
The stanine score is a normalized standard score ranging from 1-9. Stanines are grouped as follows:

Stanine 9 Very High
Stanines 7–8 Above Average
Stanines 4–6 Average
Stanines 2–3 Below Average
Stanine 1 Very Low

What is the standard age score (SAS)?
The standard age score is a number that allows the teacher to compare the rate and level of a student's cognitive development with other students the same age. It has a mean of 100 and a standard deviation of 16. If a student has a SAS of 100, he/she is typical students for his/her age. On the other hand, if a student has a SAS of 125 that student has a higher and faster rate of learning than most students his/her age.

What is a national percentile rank (NPR) score?
A percentile rank indicates the percentage of students in the same age or grade group whose scores fall below the score obtained by a particular student. For example, if a fifth-grade student obtains a grade PR of 90 on the Quantitative

Battery, it means that 90 percent of the fifth-grade students in the sample received scores lower than the on e received by the student.

What is a CogAT profile?

A student's CogAT profile is based on the pattern of scores from the administration of the three tests that are part of the CogAT (verbal, quantitative, non-verbal). How can we know if the verbal score is significantly higher than the quantitative score? All test scores have some error of measurement, so the difference should be larger than the error in either score. These profiles consist of A, B, C, and E and are provided for each of the three CogAT tests.

"A" Profiles. In an **A** profile, the student's verbal, quantitative, and nonverbal scores are roughly at the s**A**me level. There is only one other piece of information provided by the test, and that is the overall height, or level, of the profile. This type of profile is what we would expect if reasoning ability were a single dimension. It is the pattern assumed whenever a student's ability is summarized in a single score. About one-third of students obtain this profile.

"B" Profiles. In a **B** profile, one of the three battery scores is a**B**ove or **B**elow the other two scores. The student shows a relative strength (when one score is above the other two) or a relative weakness (when one score is below the other two). For example, **B (V+)** means that the scores show a **B** profile with a strength in verbal reasoning; **B (N–)** means a relative weakness on the Nonverbal Battery. Overall, approximately 40 percent of students obtain a **B** profile. Thus, **B** profiles are more common than **A** profiles.

"C" Profiles. This profile is called **C** for **C**ontrast. The student shows a relative strength *and* a relative weakness. This pattern is much less common. About 14 percent of students have a **C** profile. A student who shows a relative strength on the Verbal Battery and a relative weakness on the Quantitative Battery would have a **C (V+ Q–)** profile. **"E" Profiles.** The **B** or **C** profile for some students is much more extreme than for others.

"E" **Profiles**. This profile is called the **E**xtreme profile. Students with an E profile generally have significant differences 24 or more points on the SAS scale between their scores on two of the three tests.

CogAT Score Discriptors

Stanine - The name stanine is simply a derivation of the term "standard-nine" scale. Stanines are normalized standard scores, ranging in value from 1-9, whose distribution has a mean of 5 and a standard deviation of 2. Stanines 2 through 8, are equal to a ◆ standard deviation unit in width, with the middle stanine of 5 defined as the range of scores ◆ of a standard deviation below to ◆ of a standard deviation above the mean. Stanines can, more easily, be thought of as coarse groupings of percentile ranks (see below), and like percentile ranks indicate the status or relative rank of a score within a particular group. Due to their coarseness, stanines are less precise indicators than percentile ranks, and at times may be misleading (e.g., similar PR's can be grouped into different stanines [e.g., PR=23 and PR=24] and dissimilar PR's can be grouped into the same stanine [e.g., PR=24 and PR=40]). However, some find that using stanines tends to minimize the apparent importance of minor score fluctuations, and are often helpful in the determination of areas of strength and weakness. See also: Standard Score, Status Scores, Percentile Rank, Arithmetic Mean, and Standard Deviation.

Approximate Percentile Rank Range	Stanine	Percent of Examinees	Descriptor
96-99	9	4%	high
89-95	8	7%	well above average
77-88	7	12%	above average
60-76	6	17%	somewhat above average
41-59	5	20%	about average
24-40	4	17%	somewhat below average
12-23	3	12%	below average
5-11	2	7%	well below average
1-4	1	4%	low

Universal Scale Score (USS) - The Universal Scale Score provides a continuous growth scale of cognitive development from kindergarten through grade 12 for the Cognitive Abilities Test (CogAT). The USS is the standard score that is used for entry to the age and grade norms tables to obtain such derived scores as the Standard Age Score (SAS) and the Grade Percentile Rank (GPR) for each battery and composite score. These scores can then be converted to other derived scores such as Age Percentile Rank (APR), Age Stanine (AS), and Grade Stanine(GS) by the use of another set of conversion tables. See also: Scale Score, Age-Based Norms, Grade-Based Norms, Derived Score, Standard Age Score, Percentile Rank, and Stanine.