

Basic Information About the *CogAT*

Test Purpose and Design

The *Cognitive Abilities Test (CogAT)* is a K-12 assessment designed to measure a student's learned **Verbal**, **Quantitative**, and **Nonverbal** (spatial) reasoning abilities, the three areas most linked to academic success in school. *CogAT* results are most helpful when adapting instruction to meet individual student needs. The results also provide a measure of cognitive ability not often represented in school grades or other achievement measures.

The *CogAT* is not an IQ test. While a strong correlation exists between innate ability and student performance on academic assessments, the abilities assessed by *CogAT* are developed through experience in and out of school.

The Mukilteo School District only gives the *CogAT* to students who are being considered for enrollment in elementary and middle school highly capable services. The test is given on a computer, and no reading is required by students in grades K-2 (directions are heard via headphones). The Quantitative and Nonverbal parts also do not require reading.

Understanding and Using the Results

The three parts of the *CogAT* assess different types of reasoning abilities (e.g., recalling information, making inferences, detecting relationships and patterns, analyzing and solving problems, categorizing concepts). Students may have strengths or weaknesses in each area.

- Students with **verbal** strengths have good memories for arbitrary sequences of sounds, letters, words, and events. They are often above average in spelling, in their knowledge of syntax and grammar, in their ability to learn other languages, and in their ability to remember dialogue, prose, and poetry.
- Students with **quantitative** strengths are capable of abstract thinking and excel in identifying patterns from their experiences and reasoning using their abstractions. They often learn computer skills easily, especially skills such as the procedures for using text editors and spreadsheets.
- **Nonverbal** scores are less influenced by a student's education than the verbal and quantitative measures. Students with nonverbal strengths tend to prefer visual mental models when solving problems. They respond well to texts that contain graphics and maps, and they learn best when they can connect new concepts or relationships with a mental or physical model. Students with strong nonverbal scores often excel in drawing, sculpting, and other visual and mechanical arts.

A copy of the student's *CogAT* report is placed in their school cumulative folder soon after testing occurs. The report includes several scores according to the student's age. Each part of the *CogAT* receives a separate score, and a composite score estimates the level of a student's overall reasoning skills.

The types of scores shown on the student report and an example of how the results appear on the report are shown below. Separate scores are given for each part of the assessment.

- A **standard age score (SAS)** is a normalized score with an average of 100 and a standard deviation of 16. Scores range from 50 to 160.
- A **stanine** score indicates one of nine broad score groupings using a normalized score scale. Stanines range from 1 (lowest) to 9 (highest) and have an average of 5. The stanine is used to describe a student's *CogAT* results in terms of their general ability levels, ranging from very high (9) and above average (7-8) to below average (2-3) and very low (1).
- The **age percentile rank (APR)** is a score from 1 to 99 that indicates the percentage of students in the same age group who obtained lower scores on a test. A score of 99 is the highest and 50 is the average.
- **Raw scores** indicate the number of items on the assessment, how many were attempted, and the number that were answered correctly.

Example of Report Results

Abilities	Age Scores			APR Graph				
	Standard Age Score	Age Stanine	Age Percentile Rank	1	25	50	75	99
Verbal	108	6	69					
Quantitative	109	6	71					
Nonverbal	103	5	57					
Composite (VQN)	107	6	67					

Abilities	Raw Scores			Grade Scores		Local Scores	
	Number of Items	Number Att.	Number Correct	Grade Stanine	Grade Percentile Rank		
Verbal	48	48	33	6	73		
Quantitative	44	43	24	6	74		
Nonverbal	44	44	28	5	57		
Composite (VQN)				6	68		

Each student report includes a short narrative description of the results and recommendations about how to address the student's unique needs. In addition, a student **ability profile** code is shown in the paragraph on the left side of the student report. The profile provides more depth about a student's abilities and is found on the *CogAT* website. To view the profile, use the website below and enter the **ability profile** code in the menu on the right side of the web page. The example below is for a student with a 4C (V+) (Q-) profile. More information about the *CogAT* can also be found using links on this website.

<http://www.riversidepublishing.com/products/group/cogat6/input.jsp>

EXAMPLE ABILITY PROFILE

Stanine: ▼

Profile: ▼

Relative Strength: ▼

Relative Weakness: ▼