## Understanding CogAt Scores

Subtest/Score	What it Measures	Students with High Scores	Students with Low Scores
Verbal subtest	Verbal aptitude, word knowledge and concepts, facility with language, verbal reasoning, and analogies	Can usually be expected to do well in reading and language activities	May struggle with reading, writing, and other language-based activities. They may need supplemental instruction in vocabulary as well as in basic literacy skills.
Quantitative subtest	Mathematical reasoning and problem solving, numerical sequences and patterns, manipulation of mathematical concepts.	Usually do well with complex mathematical or numerical activities and concepts.	May need supplemental instruction in basic math skills to achieve success.
Nonverbal subtest	Reasoning and problem solving with patterns and relationships, pictorial analogies, and categories. Helpful for obtaining an accurate assessment of the cognitive abilities of a student who may have limited proficiency in English or who has had limited opportunities to acquire verbal or quantitative knowledge.	Can often be expected to do well with logic, models, creative thinking, constructions or building, technology, or other non-language based activities.	May just not have strengths in this area, OR may have had no previous exposure to pictorial problem solving and analogies, OR may be "out-thinking" themselves ("well, it could be this, but if you look at it that way, it could be this, or even this"), OR have vision issues, OR may just not understand the tasks.
Composite Score	A total or overall score. A composite score is neither the sum nor the average of the subtest scores, but is computed separately.	Often seem to be the traditional "gifted" students, with excellent skills in most areas. Students with high scores in one or two subtests may also be gifted, and may need differentiated instruction in their areas of strength.	May indicate that the student will need more structure, time, and practice for learning effectively.

**Percentile rank (PR):** A point (score) on a scale of 100 that indicates the percent of scores at or below that point. A student's score at the 84th percentile is regarded as equaling or surpassing that of 84 percent of the students in the group being tested. It does not mean that the student got 84 percent of the answers correct, but rather that the student performed better than 84 out of 100 students being tested.

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Percentile Rank	Description	
96-99	Very High	
89-95	Above Average	
77-88	Above Average	
60-76	Average	
40-59	Average	
23-39	Average	
11-22	Below Average	
4-10	Below Average	
1-3	Very Low	

### **Understanding CogAt Scores**

#### **Relative Strengths and Weaknesses**

Approximately half of the students who take CogAT show a relative strength or a relative weakness in one of the three test batteries. Ability profiles with a V+, Q+, or N+ indicate a relative strength on the Verbal, Quantitative, or Nonverbal Battery, respectively. Profiles that show a relative strength are more common for low scores than for high scores. Ability profiles with a V-, Q-, or N- indicate a relative weakness on the respective CogAT battery. When a student displays a significantly lower score on one of the three batteries, it typically indicates a preference for thinking in one cognitive domain (verbal, quantitative, or nonverbal) rather than another.

#### **Relative Strengths**



Indicators of a relative strength in verbal reasoning include the following:

- These students generally do best when they are encouraged to talk and write about what they are attempting to learn.
- These students often have remarkably good memories for arbitrary sequences of sounds, letters, words, and events.

Indicators of a **relative strength in quantitative reasoning** include the following:

- These students are capable of abstract thinking.
- Q+
- Students who display high levels of quantitative reasoning abilities typically excel in identifying patterns from their experiences and then reasoning by using their abstractions.
- They often learn computer skills more readily than their peers, especially skills such as procedures for using text editors and spreadsheets. They do not typically excel at computer programming unless their quantitative reasoning abilities are quite high.

Indicators of a relative strength in nonverbal reasoning include the following:

N+

- Students tend to prefer visual mental models when solving problems. They respond well to texts that contain difficult graphics and prefer maps to verbal directions.
- Learning is easiest for these students when they can readily connect each new concept or relationship with a mental or physical model (e.g., a schematic drawing) of the situation.

#### **Relative Weaknesses**

- V-
- Indicators of a relative weakness in verbal reasoning include the following:
  - Activities that are unnecessarily verbal thwart the students' performance even in areas in which they excel. Common sources of difficulty are directions that are overly long and tests that require the translation of verbal prompts or that require verbal responses.
  - Students with lower verbal scores often find themselves overwhelmed in the classroom, especially when following directions for the first time or when attempting to transfer their attention between different verbal activities.
- **Q** Indicators of **a relative weakness in quantitative reasoning** include the following:
  - Some students prefer more concrete modes of thinking and often disguise their failure to think abstractly when using verbal concepts.
  - For other students, the difficulty lies in the failure to develop an internal mental model that functions as a number line.
  - And for other students, the weakness represents nothing more than a lack of experience in thinking and talking about quantitative concepts.
- N- Indicators of a relative weakness in nonverbal reasoning include the following:
  - Either the student has difficulty reasoning with figural-spatial stimuli or
  - The student has difficulty solving unfamiliar problems.