



**Cedar Rapids
Community School District**

Excellence for All

CogAT Parent Presentation

Spring 2016

Agenda

- Introductions
- Information Sharing
- Time for Questions

Why did my child take the Cognitive Abilities Test?

- Achievement vs. ability
- Assessments of achievement attempt to measure what has been learned
- Assessments of ability attempt to measure potential for learning
- ITBS composite 90% +
- Compare with achievement

What does the Cognitive Abilities Test measure?

- “All abilities are developed through experience. *CogAT* measures students’ abilities to reason with words, quantitative concepts, and spatial (nonverbal) pictures. These abilities are developed through experiences in school and outside of school.” Dr. David Lohman
- Purpose: To assess students’ abilities in reasoning and problem solving using verbal, quantitative, and nonverbal (spatial) symbols
- Non-Verbal is not spatial but rather a measure of creativity and flexibility in thinking skills using visual models
- Composite – not an average of percentiles but an average of Universal Scale Scores
- Not a measure of innate intelligence – cognitive abilities are fluid and are developed over time

What does CogAT measure?

- CogAT measures learned 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.
- CogAT* does not measure such factors as effort, attention, motivation, and work habits, which contribute to school achievement as well.

How do the three batteries of CogAT differ?

- The **Verbal Battery** measures a child's ability to remember and transform sequences of English words, to understand them, and to make inferences and judgments about them.
- The **Quantitative Battery** tests the child's understanding of basic quantitative concepts and relationships that are essential for learning mathematics. Tasks measure both the understanding of relational concepts and the student's ability to discover relationships and to figure out a rule or principle that explains them.
- The **Nonverbal Battery** measures reasoning using pictures and geometric shapes. This reduces the impact of language on the student's score. The Nonverbal Battery also appraises the student's ability to use her/his cognitive resources in new situations.

Sample Verbal Battery Questions

Intermediate Level

Directions: Find the word that makes the best sense in the sentence and mark the correct answer on your answer document.

Sentence Completion

On the way home from school, Lashanda jumped in the many _____ that the rain had left.

J rivers **K** puddles **L** flowers **M** holes **N** lakes

Sample Non-Verbal Battery Questions

Intermediate Level

Directions: The first figure is changed into the second figure. The third figure is changed in the same way to make one of the answer choices. Choose the answer choice that goes with the third figure.

Figure Analogies

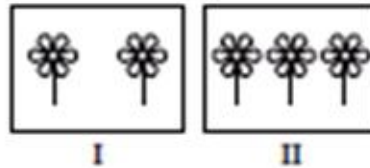


Sample Quantitative Battery Questions

Intermediate Level

Directions: Figure out the value of I and II. Then decide if I is greater than II, less than II, or equal to II.

Quantitative Relations



- A I has more flowers than II.
- B I has fewer flowers than II.
- C I has the same number of flowers as II.

How is the test administered?

- Group administered rather than individual
- Three test sessions of three subtests for each battery
- Approximately 45-60 minutes per session

What test level did my child take?

- One grade level higher than their grade
- Testing bright children with a more difficult level of the test allows them to show what they *can* do (without a ceiling)
- Overlapping items between levels: 80% same
- Data is reported as compared to other children taking the test in that grade or at that age – not to older children or higher grade
- CogAt is normed on a heterogeneous population

What do the results tell me?

- Look at the level and pattern of scores for each individual
- Note each individual's strongest area of cognitive development
- Identify uneven patterns of cognitive abilities. A difference of 2 or more in stanines represents significant differences in scores. (A difference of 24 points or more in SAS)
- Dominant symbol system

Glossary of Scoring Terms

- **Standard Age Score (SAS)** is a normalized standard score, with a mean (average) of 100. Standard Age Scores of 89-111 are all within the average range.
 - A student with a SAS of 100 on the Verbal Battery has the rate and level of development of verbal reasoning skills that are typical for his age group.
 - A student with a SAS of 125 on the Verbal Battery has a faster rate and higher level of development of verbal reasoning skills than the typical student in his age group
- **Percentile Rank** indicates the percentage of students in the same age or group whose scores fall below the score obtained by a particular student
- **Stanine** is a normalized standard score scale consisting of nine broad levels (1-9). Stanines are broad groupings of percentile ranks.

Abilities	National Age Scores		National Age Percentile Ranks				
	Stanine	Percentile Rank	Low 1	25	50	75	High 99
Verbal	9	99					4
Quantitative	7	77					
Nonverbal	8	93					
COMPOSITE	9	97					

Ability Profile 8E (V+): The number in the profile is the age stanine for the middle score on the three batteries. The score on the Verbal Battery is significantly higher than the scores on the Quantitative and Nonverbal Batteries. For more information, visit www.cogat.com.

Abilities	Raw Scores			Grade Scores	
	Number of Items	Number Att.	Number Correct	National Stanine	National Percentile Rank
Verbal	65	65	64	9	99
Quantitative	60	52	46	6	68
Nonverbal	65	65	58	8	89
COMPOSITE				8	95

Scores for

was given the Cognitive Abilities Test in March 2009. At the time of testing, she was in third grade at in Cedar Rapids Schools.

Different students bring different patterns and levels of abilities to learning tasks. She was given the Cognitive Abilities Test to help find out about her reasoning abilities. was tested in all three areas: verbal, quantitative, and nonverbal abilities.

national percentile rank of 99 on verbal reasoning ability means that, compared with other students her age nationally, scored higher than 99 percent. national percentile rank is 77 in quantitative ability and 93 in nonverbal ability.

composite score is derived from results from the three batteries. composite national percentile rank of 97 is a general statement of her reasoning ability.

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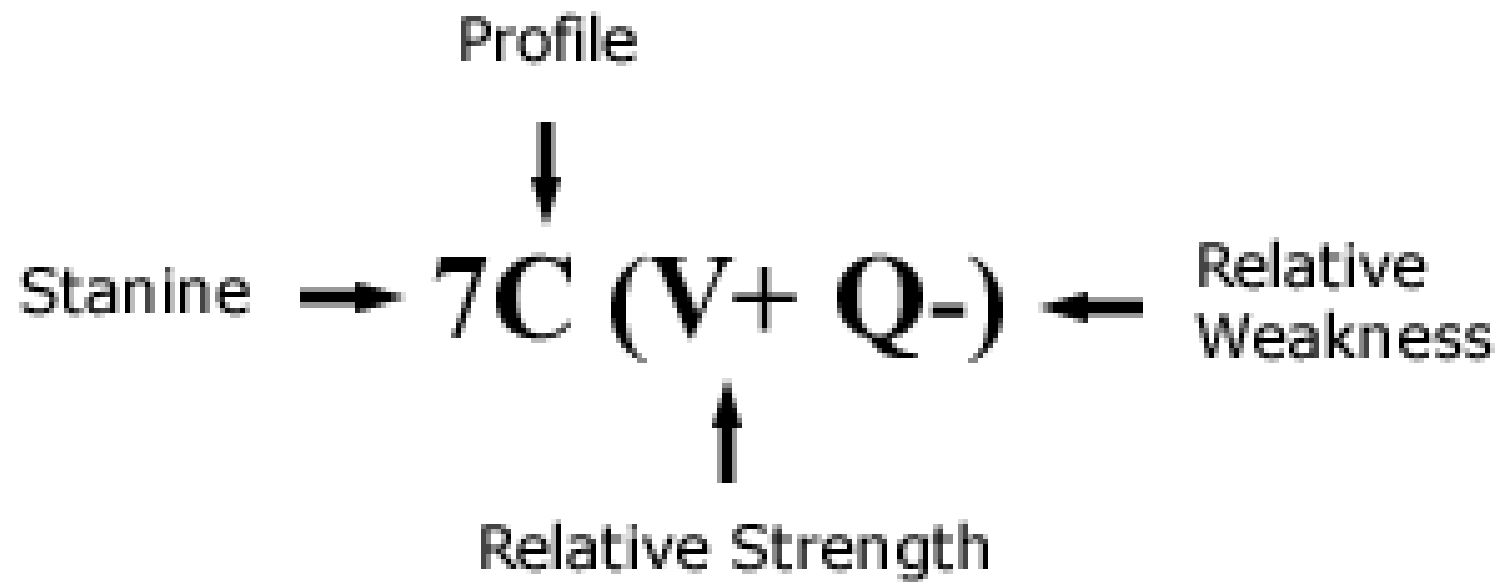
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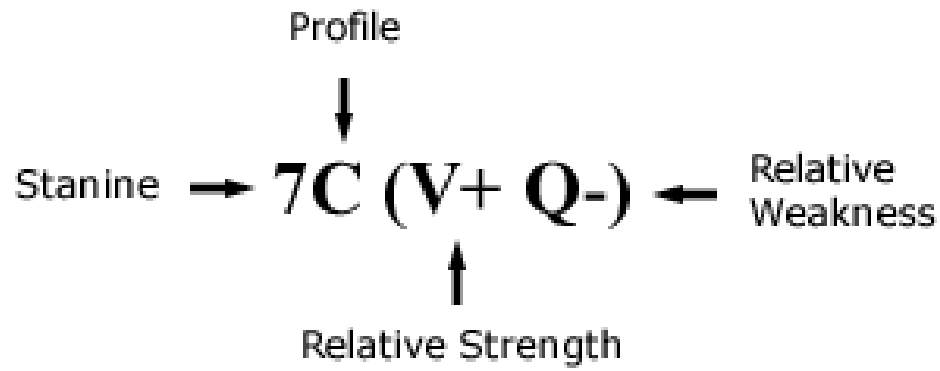
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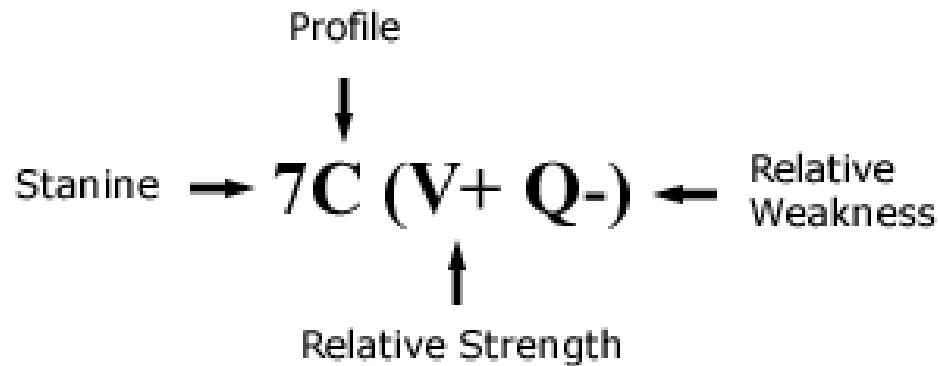
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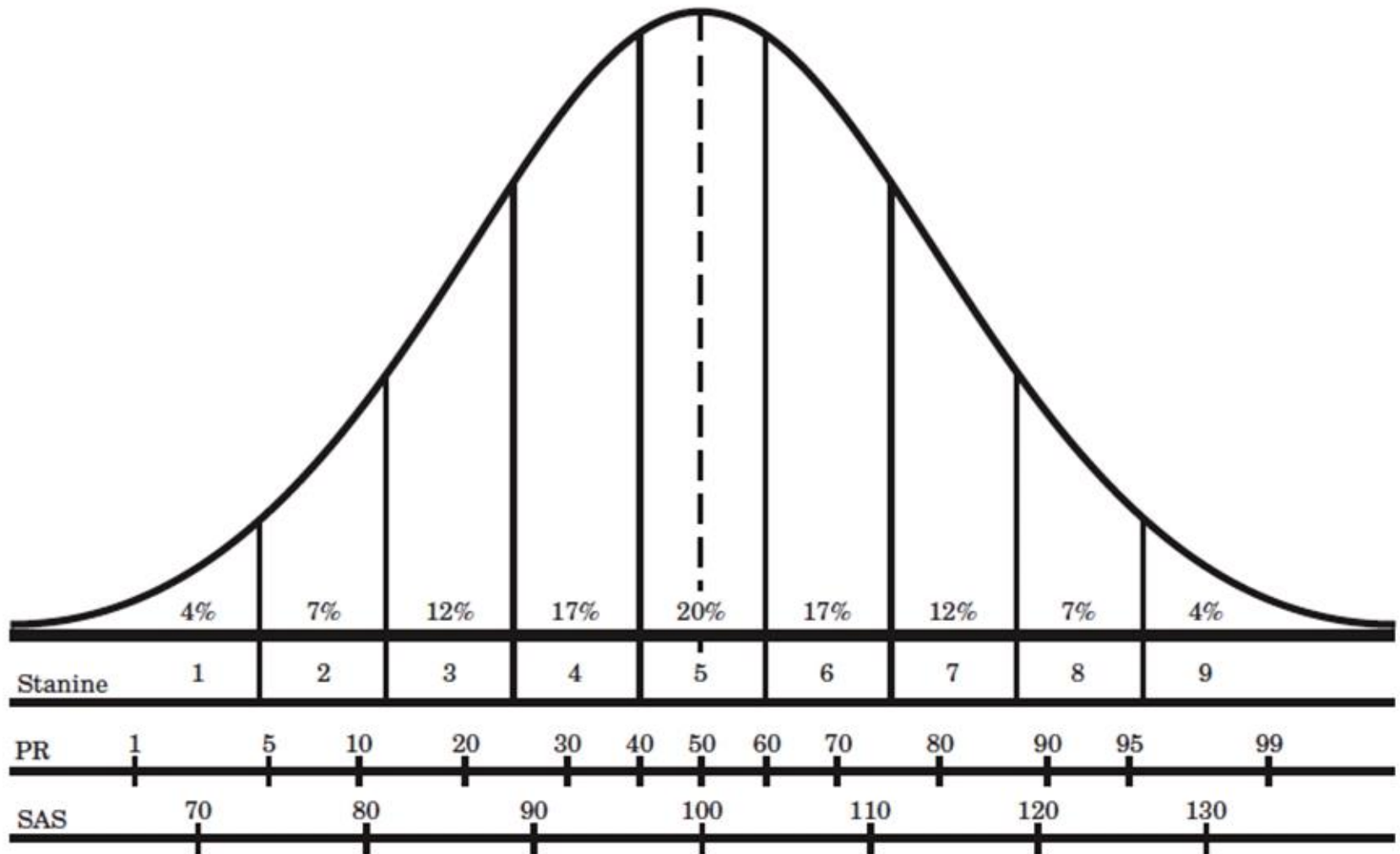


- Stanine –the middle age stanine the student obtained on the three batteries of *CogAT*
 - 6, 4, 5 = 5
 - 2, 7, 3 = 3



- Profile Letter – the general form of the score pattern
 - A All scores are roughly the same level
 - B One score is above or below the other two – a relative strength or relative weakness – one score differs by at least 10 points
 - C Two scores Contrast – a relative strength AND a relative weakness
 - E There are Extreme score differences – at least two scores differ by 24 or more points on the SAS scale
- The symbols in parentheses tell which scores are exceptional

Figure 1-1: Relationship of Stanines, Percentile Ranks, and Standard Age Scores



Interpreting Percentile Ranks and Standard Age Scores

	Standard Age Score	Percentile
Very High	128-150	96th-99th
Above Average	112-127	77th-95th
Average	89-111	24th-76th
Below Average	73-88	5th-23rd

Cognitive Abilities Test Websites

Cognitive Abilities Test - Home

<http://www.riverpub.com/products/cogAt/index.html>

Online Interpretation System

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



Thank You!

- **Thank you for taking the time to come to the meeting this evening!**
- **If we can help you with any questions please stay, otherwise please drive safely!**