

In Brief

This part of the guide offers suggestions on communicating *CogAT* test results to students and their families. The following topics are covered:

- “Preparing to Report Test Results to Others”
 - Before You Begin – recommended steps to take before communicating test results
 - General Reporting Strategies
 - Common Test Score Misconceptions
- “Discussing Test Results with Students”
- “Discussing Test Results with Parents”

Preparing to Report Test Results to Others

Before You Begin

To help ensure that you are working with the best information possible, take the following steps before you plan your reporting strategies:

- Verify the accuracy and completeness of the scores shown on the reports. (See “Establish the Integrity of Your Score Information” on page 4.)
- Study the reports, the scores, and this guide to learn what is being reported.
- Determine how to communicate test results in the context of the purpose for testing and the individual student.

General Reporting Strategies

Most schools and school systems establish policies for reporting test scores to students and their families. Adapt suggestions offered in this part of the guide to conform to such policies.

The best way to report test scores to students and parents is individually in a face-to-face conference. An individual conference provides an opportunity to clarify the purpose for the test and what the scores mean for that student.

The following guidelines can help make communications about test results more effective:

- **Use simple, everyday language.** Do not assume that parents and primary caregivers are familiar with the specialized terms used in educational testing.
- **Use visual displays to describe performance.** Bar graphs like those provided in the *Individual Profile Narrative* report are helpful tools for presenting numerical information.

- **Engage in a dialogue.** Encourage students and parents to ask questions about the tests, the scores, and any other concerns they have regarding the test results.
- **Anticipate and address common misunderstandings about test results.** Prepare by reviewing “Common Test Score Misconceptions” below to understand common misconceptions about *CogAT* results. Correct any misunderstandings that you anticipate or hear during discussions with students and their families.

If your school does not have the resources to hold individual conferences, use the student’s *Individual Profile Narrative* report to communicate test results. Offer to answer questions about the report and arrange a conference with parents who request one.

Common Test Score Misconceptions

Misconceptions about test scores can lead to misunderstandings about student abilities and, in turn, to misguided subsequent actions. Your own understanding of these misconceptions will help you to effectively communicate test results to others and to recognize and correct misunderstandings during those discussions.

Following are some **common fallacies** about test scores **and explanations** to correct each misconception:

- **Percentile rank (PR) means the same thing as percent correct.** People who equate percentile ranks with percent-correct scores may interpret a PR of 60 or below as a failing score. Explain that the concepts of passing and failing do not apply to standardized tests of general cognitive skills and that a PR of 60 means the student scored higher than 60 percent of students in a particular reference group (either nationally for age and grade norms or within the school/district for local norms).
- **The test scores are precise and absolutely accurate.** Test scores are always estimates rather than exact measures. It is important to think of them as representing a range of ability rather than as a specific, unchanging point on a score scale. The confidence bands on the graph of each student’s scores can be helpful in explaining this concept, especially if the student’s responses were inconsistent.
- **The norm group consists of students in a particular classroom or school.** Norm groups should always be identified when reporting standardized test scores. For *CogAT*, norms are based on a nationally representative group of students. For age norms, the norm group is made up of students in the nationally representative group who were the same age as the student taking the test. For grade norms, the norm group consists of students in the nationally representative group who were in the same grade as the student taking the test.

If your *CogAT* reports also show scores based on local norms, understand their purpose and why those scores may differ significantly from scores based on national norms. For more information, see “Local Norms” on page 110.

- **General cognitive ability is the only factor that is important in school achievement.** General cognitive ability affects how rapidly students learn, the conditions under which they learn most effectively, and how much they learn. Differences in levels of cognitive abilities do explain a significant amount of the

variation in achievement among students. However, many other factors matter as well: support at home, quality of instruction, motivation, out-of-school activities, and so on.

- **CogAT standard age scores (SAS) are IQ scores.** *CogAT* is not an IQ test. Intelligence tests differ from *CogAT* in two critical ways: 1) intelligence tests sample a broad range of abilities in addition to the reasoning abilities that *CogAT* measures and 2) intelligence tests are normed on the entire population whereas *CogAT* is normed on that subset of students who attend school and can take a group-administered test. Because of the potential confusion with IQ tests, score reports shared with parents should give national (and perhaps local) percentile ranks—not standard age scores.
- **CogAT scores should remain the same as the student matures.** *CogAT* does not measure fixed abilities. On average, the year-to-year stability of scores is quite good, although even highly correlated scores have room for individual variability. Composite standard age scores (SAS) for most students change less than 5 points from one year to the next. For 10 percent of the students, however, their standard age scores will change more than 10 points. Young students and those with extreme scores are more likely to have score changes than are high school students or those with an SAS near 100.
- **CogAT measures—or ought to measure—the innate potential or capacity of the student.** Explain that all abilities are developed, and give an analogy to physical skills to explain how this is so. The knowledge and skills that students learn in school and that are assessed by achievement tests are like students' acquired skills in playing various sports. The general reasoning abilities measured by *CogAT* are like general physical fitness. General fitness is important for success in a wide variety of sports. Using *CogAT* to predict achievement test scores is like predicting how well individuals can probably play a range of different sports given their level of physical fitness. But physical fitness is also, in part, an outcome of participation in physically demanding exercise. Similarly, the verbal, quantitative, and nonverbal reasoning abilities measured by *CogAT* are developed through participation in challenging learning activities.
- **Standardized tests are biased against minorities.** Explain that every item has been screened for potential bias by the test author and publisher and by a diverse panel of minority educators. Items are tried out on thousands of students nationwide and subjected to extensive statistical analyses for bias. All items selected for the test have been reviewed for bias and content sensitivity toward gender.

Most questions about bias on a test such as *CogAT* stem from the assumption that a good test measures abilities independent of culture, motivation, and experience. In another analogy to physical skills, this is like asking for a measure of physical fitness that is not influenced by the physical activities in which a person has participated. Although tests vary in the extent to which they are rooted in culture and experience, all tests measure developed abilities. *CogAT* measures those reasoning abilities that are required by and developed through formal schooling.

Explain that the Verbal Battery at Levels 5/6–8 measures the ability to reason with verbal concepts expressed in pictures and, on one subtest, in English or Spanish. As explained in the *CogAT Research and Development Guide*, scores for ELL students on

the Alternate Verbal Battery are actually higher than their scores on the Nonverbal Battery.

At Levels 9 and higher, only English is used on the Verbal tests. Students who have only limited experience with the language as it is used in schools are not likely to do as well on the Verbal subtests as they might do on tests administered in another language or dialect. The Nonverbal and Quantitative batteries are particularly helpful in estimating the reasoning abilities of these students. At all levels, ELL students actually perform as well or better on the *CogAT* Quantitative Battery as on the *CogAT* Nonverbal Battery.

Discussing Test Results with Students

Adapt your strategy and message to the developmental level of the student. Consider the suggestions summarized below.

Student Grade Level	Considerations	Discussion Strategy
Kindergarten, Grades 1 and 2	<ul style="list-style-type: none"> Students may not recall taking the test. It is unlikely that students in these grades will understand the meaning of the test scores. 	No formal discussion about test results
Grades 3–5	Students are capable of understanding scores in a very general way.	<ul style="list-style-type: none"> Emphasize verbal rather than numerical descriptions of their performance. Identify particular strengths.
Grades 6–12	<ul style="list-style-type: none"> Students are capable of understanding and are interested in test results. Students may be making educational choices regarding elective courses and post-secondary school goals. 	<ul style="list-style-type: none"> Present results in numerical and descriptive form. If reporting achievement test results along with <i>CogAT</i> results, use the same types of age and grade scores during the discussion, if possible. If percentiles or stanines were reported for the achievement test, use these score types when discussing <i>CogAT</i> results.

At all levels, the primary purpose for reporting scores to students is to help them understand:

- their own patterns of achievement and general cognitive skills
- the extent to which they are using their cognitive resources

Foster understanding with a dialogue that allows students the opportunity to:

- ask questions
- explain the reasons for their test performance
- express concerns about their scores
- articulate and explore their learning styles, preferences, and interests

Discussing Test Results with Parents

The most effective way to discuss test results with parents or guardians is in a face-to-face conference. The primary goal is to help parents understand how their student learns so that they can work with the school to facilitate the student's development. If possible, provide parents with their own copy of the student's *Individual Profile Narrative* report.

If you are reporting on standardized achievement test results at the same time as *CogAT*, the following discussion points may be helpful:

- Explain that the two tests appraise different things. The achievement test appraises skills that are directly taught and practiced in school, whereas *CogAT* appraises general thinking skills that the student gradually develops from both in-school and out-of-school experiences.
- Explain that all test scores are **estimates**, not absolute measures, of a student's standing on skills such as verbal reasoning and mathematical computation. Scores on both types of tests change significantly over time.
- Use the same types of scores, if possible, to report results for both tests. Percentile ranks and stanines are easier to explain to parents than standard age scores, which may be confused with IQ scores.
- Discuss test scores and what they mean using verbal descriptions (such as very high, above average, or below average) more often than numerical values. Explain that all test scores contain a margin of error, so one should not attach too much significance to small differences in scores. Use stanines or percentile ranks, not standard age scores.
- Point out relationships between the two sets of scores. If results vary significantly (see "Part 5: Identifying Ability-Achievement Discrepancies," beginning on page 51), probe causes such as learning styles, motivation, and possibly language/educational background in an effort to partner with the parents on solutions for improvement. If both sets of results are relatively poor, focus on the tests with the highest scores and strategize how to build on relative strengths.

Parent-Teacher Discussion Topics

This section contains a list of topics to consider when discussing a student's *CogAT* test results with parents or a primary caregiver. Typically, it is best to begin by explaining what *CogAT* measures and why it was given. Use the *Individual Profile Narrative* report in discussing the first four items on this list. The remaining items are questions that parents commonly ask. Focus on topics relevant to the student and be prepared to answer questions that arise during your parent-teacher discussion.

- **What does *CogAT* assess?** *CogAT* measures general thinking and problem-solving skills and indicates how well the student uses these skills to solve verbal, quantitative, and nonverbal problems. The profile of these abilities helps teachers better understand how different students learn best. The skills measured by *CogAT* develop gradually throughout a person's lifetime, but individuals vary in the rates at which they develop the skills. Experiences both in and out of school influence their development.

- **Why was the test given?** Based on your school’s purpose for administering *CogAT*, indicate why the information from the test is important and how it will be used. Explain that the scores will be used to help the students learn more effectively. If there are additional reasons relevant to the student under discussion, state these as well.
- **What is the student’s relative standing on each battery and the composite?** Include descriptive information about where the student stands in her or his age and grade groups as well as whether the individual’s pattern of abilities is even or uneven. If uneven, identify the strengths and weaknesses in the profile. If the student’s relative standings in the age and grade groups differ, point out the differences. If they are significant, explain how the age of the student in relation to her or his grade peers influences the differences and what they mean. (For information on the effect of a student’s age on *CogAT* results, read about “Age Norms” and “Grade Norms” beginning on page 109.)
- **What is the purpose of the ability profile?** The ability profile assists teachers and counselors in locating specific instructional suggestions for helping the student learn based on the student’s *CogAT* scores. The ability profile summarizes information about the level and pattern in each student’s scores for the three batteries. As students change, so will their ability profiles.
- **What is the basis of comparison for these test scores?** In reporting relative standing, be sure to make clear that the student is being compared with a national representative sample of her or his age and grade peers. Sometimes parents think this comparison is based solely on the students who are in the same class. If local norms are also used, explain their use and significance. (See “Local Norms” on page 110.)
- **What is my child’s IQ?** Explain that the type of score known as an “IQ” is no longer used in large-scale assessments and that *CogAT* does not give IQ scores. Emphasize that *CogAT* measures developed reasoning abilities that grow with activities in and out of school that challenge students to reason about their experiences. If this explanation is not sufficient, explain that, unlike specialized IQ tests, *CogAT* is normed only on that portion of the population that attends school and can take a group-administered test.
- **Is my child gifted?** State that there are many types of giftedness and that scores on *CogAT* are related to one type, namely, academic giftedness. Explain that giftedness in any area depends on many factors and that all of these cannot be determined by a single test. Further, students who excel in the primary grades often do not achieve such high rankings compared with classmates as they mature. The “gifted” label implies a permanence that often misleads. If the school has a program for academically talented students, answer this question in terms of the eligibility criteria for that program. Encourage parents to focus on the development of their child’s interests and talents, not on whether the student is or is not gifted.
- **What do the *CogAT* scores indicate about the student’s ability to learn?** If the student has below-average or very low scores on *CogAT*, explain that all individuals can learn, but they do not all learn at the same rate or in the same way. Emphasize any strengths the student displays. Discuss what is being done in school to help this individual learn. If the student has average or higher scores on *CogAT* and is doing very

poorly in school, explore possible reasons for the discrepancy and discuss what can be done both by the school and by the parents to help the student.

- **How can CogAT scores predict achievement in school?** Explain that predicted achievement levels reflect how students in the national sample who obtained similar scores on CogAT performed in school. Use broad ranges, such as above average or average, to designate the level of achievement. Indicate that these expected levels of achievement should be viewed as only one guideline for setting expectations of the student's progress in school. If parents indicate concern about their child's predicted level of achievement, address these concerns and be certain that parents understand what predicted achievement means. It should not be viewed as a permanent consignment to a particular level of achievement. Point out that factors such as effort, attention, attitudes, work habits, and support at home also influence school achievement.
- **How does the student's classroom performance compare with that of the predicted score?** Indicate whether the student's achievement in class is the same as, higher than, or lower than predicted. Explain how well the student uses her or his cognitive resources as well as other resources to learn. If the student's achievement is higher than predicted, comment favorably on it. If the achievement is lower than predicted, explore with parents the possible reasons and the steps that could be taken to improve it.
- **Why are scores on CogAT and the achievement test different?** Sometimes this question indicates that the parent is placing undue emphasis on small, insignificant differences between scores. For example, if a student has a percentile rank of 85 on the Verbal Battery and a percentile rank of 80 on the Reading section of a standardized achievement test (e.g., the *Iowa Assessments*), the difference is insignificant. Remind parents that the two tests measure different things, so scores should not be expected to be identical. Point out that although the two scores are not identical, they are consistent because (in this example) both indicate that the student is above average. Note that very high (or low) scores on one test are unlikely to be as high (or low) on the other test.
- **How can teachers, counselors, and parents work together to help the student become a more effective learner?** Discuss ways that parents can capitalize on their child's strengths while supervising homework, helping their child practice skills, or providing enrichment experiences. Some parents can use the suggestions for adapting instruction that are provided online for each CogAT ability profile. If there are community or school resources that would benefit the student, discuss available resources with parents.
- **Why are these CogAT scores different from those the student received earlier?** Individuals who assume that CogAT scores should be constant also assume that the test measures innate rather than developed abilities. Large changes in scores are not uncommon between kindergarten or grade 1 and grade 3 or 4. This reflects, in part, differences in the abilities that are measured by the tests that can be administered at each age. Score changes also reflect errors of measurement inherent in all assessment instruments and differences in the opportunities students have had to develop their

reasoning abilities. Students who come from advantaged backgrounds often show less advantage as other students catch up. For all of these reasons, students who receive very high scores on the first test they take are most likely to receive somewhat lower scores on the second test.