Understanding Tests Scores

A parent of a child with disabilities is often asked to review test scores to make educational decisions about their child throughout their special education process. However, as a parent you may feel like the numbers and scores are very intimidating because you don’t understand them or know what they mean. This tipsheet was created to help you make sense of all the testing vocabulary. Once you learn the vocabulary of testing it will help you to be an informed participant using test scores to participate in your child’s IEP process.

Test Score Terms

**Bell Curve:** The bell curve is a graph that shows the percentage of children who score low to high on a tests. When all scores are plotted on a graph, it forms a bell shape. Most scores fall close to the middle with few scores falling outside the average high or low.

![Bell Curve Diagram]

**Standard Deviation:** The bell curve is measured in units called standard deviations. A standard deviation is how spread out the numbers or values are in a set of data. It tells how far a student’s standard score is from the average or mean. The closer the standard score is to the average, the smaller the standard deviation.

**Mean:** The mean is in the middle of the bell curve or at the 50th percentile. Most tests have a mean of 100, while subtests usually have a mean of 10.

Types of Scores

**Raw Scores:** Raw scores are scores that describe the number of correct answers on a test or the number of tasks performed correctly. For example, if a student answered 50 out of 100 questions correctly, they would receive a raw score of 50. Raw scores are converted into standard scores, percentile ranks, and grade-equivalent scores for reporting.
**Standard Score:** Standard scores are raw scores that have been converted to have a mean and a standard deviation. This is done so that the scores can be compared at different grades or age groups by converting the scores to the same numerical scale. These scores reflect a student’s rank compared to others. They indicate how far above or below the mean or average the individual scores fall. For example, if the test’s mean is 100 and the standard deviation is 15, a score of 115 places the score one standard deviation above the mean.

**Scaled Score:** Psychoeducational tests are typically made of several mini-tests, or subtests, which assess specific skill areas. Scaled scores are used to report subtests scores. Scaled scores are standard scores that have a mean of 10 and a standard deviation of 3.

**Percentiles:** Percentiles are probably the most commonly used test score in education. A percentile is a score that indicates the rank of the student compared to others the same age or grade. For example, a percentile score of 75 indicates that 75% of the students who took the same standardized test received the same score or lower.

**T-scores:** T-scores are a type of standardized score, where 50 is the mean with a standard deviation of 10. A high T-score can indicate something good or bad depending on what it is measuring. For instance, a high score on aggressiveness is bad, where a high T-score on social skills would be good.

**Stanines:** Stanines are another type of standardized score. Stanines have a mean or average of 5 with a standard deviation of 2 and have a scale from 1 to a 9.

**Composite, Cluster, and Index Scores:** Most psychological and educational tests are comprised of many subtests. Two or more subtests scores are often combined to report in an area of knowledge. Most composite, cluster, and index scores have a mean of 100 and a standard deviation of 15. Always beware that these scores may mask an area of weakness for your child because the scores will average from multiple scores. For example a child may score very high on a reading comprehension but score very low on decoding. Averaged together, the composite score would report an average score and mask the area of weakness in decoding.

**Grade Equivalent Score:** Grade equivalent scores demonstrate that the student has attained a score as an average student of that same grade level. For example, a student that receives a score of 3.2 tells us that the student performed as well as a student in the 2nd month of their 3rd grade year. On most tests a month equals one-tenth of the school year.

**Age Equivalent Score:** An age equivalent score compares a student’s performance to a chronological age. Age equivalent scores are reported in years and months. For example a student who receives a 10:3 tells us that the student is performing at the level of 10 years and 3 months.

**Descriptive Classification or Category:** Describes a student’s performance compared with same-age peers (Below Average, Average, Above Average, etc.).
Types of Tests

**Standardized Tests**: Standardized tests are tests that are administered in a consistent or standard manner with the same questions, administration, and scoring procedures for all test takers.

**Criterion-Referenced Tests**: Criterion-referenced tests are tests given to measure knowledge or skills. Educators used criterion-referenced tests to measure the mastery of skills. For example, a classroom spelling or math test are examples of criterion-referenced tests. The scores are based on percentages. A student who gets 8 out of 10 answers correct will receive an 80%.

**Norm Referenced Tests**: Norm-referenced tests compare an individual child’s performance to that of their classmates or some other larger group. This type of test will tell you how your child compares to similar children on a given set of skills or knowledge. It will not tell what your child does or does not know. Scores on norm-referenced tests indicate the student’s ranking relative to that group.

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