What Do the Numbers Mean?

by Dr. Malcolm Cummings

GENERAL

The report is divided into three general parts: upper left (percentile ranks, stanines, and grade equivalents), upper right (percentile bands), and bottom (containing either "Content Clusters" or a Narrative description of your child's scores. These sections present much of the same types of information, but they do so in different formats and with differing degrees of precision.

UPPER LEFT

Number of Items: The number of questions on a particular test or sub-test of the Stanford Achievement Test.

Raw Score: The number of correct answers on a particular test or sub-test; not statistically meaningful.

Scaled Score: A statistical conversion of the raw score; not meaningful for parents.

Natl PR-S: National percentile rank and stanine. Percentile ranks represent a nationwide grouping of students into ranks from one (the lowest) to 99 (the highest), the 50th percentile being average. Stanines represent a nationwide grouping into nine groups from one (the lowest) to nine (the highest), 4th through 6th being average.

AACS PR-S: Compares the student's scores to results of students attending other member schools of the American Association of Christian Schools rather than to nationwide scores (including public, Christian, and secular private schools).

Grade Equiv: Grade Equivalent. This score is often misunderstood and misused, since some people assume it means the student is working on a particular grade level. In reality, it means that the average student on the indicated grade level would have made the score your child made on that particular sub-test. As an example, a fifth grader might score 9.6 (ninth grade, sixth month) on a math sub-test. This does not mean he could profitably skip four grades and resume his math studies in ninth grade math. It does mean that the average ninth grade student would have made the same grade your child did on that part of the fifth grade achievement test. Therefore, it is never recommended that a student be moved up a grade or more based on achievement test scores. PHS means "post high school" or beyond the range of the test.

AAC Range: If the student has taken the Otis-Lennon School Ability Test (see an explanation of this test on the next page) along with the Stanford Achievement Test this column will be filled in. AAC means Ability-Achievement Comparison. If "Middle" is
written in, this means that the student's ability (capacity for learning) and achievement (what has been learned) are about the same in the sub-test indicated. In other words, the student is working up to his or her level of ability. If "High" is written in, this means that, in the sub-test indicated, the student's achievement is actually above what would be expected. If "Low" is written in, this means that, in the sub-test indicated, the student's achievement is not as high as may be expected.

Along with the Stanford Achievement Test, some schools administer the Otis-Lennon School Ability Test at some or all grade levels. The Otis-Lennon School Ability Test (OLSAT) is a general academic ability indicator which is not content-specific. The score projects how well the child is able to learn (or his/her capability). The Stanford Achievement Test indicates what he or she has learned. In addition to percentile and stanine scores on the OLSAT, the student also receives an SAI score. This stand for School Ability Index and is similar to what used to be called an IQ score. The average SAI (School Ability Index) is 100.

**UPPER RIGHT**

National percentile bands represent a range of achievement your child demonstrated, whereas a percentile rank represents a specific point on the scale. The bands project that on a re-test of the same material, your child's score would most likely fall within the range of scores included in the band.

**BOTTOM HALF: There are two possible formats of the bottom half of the page, depending on which choice the school has made:**

1. **Narrative:** This is a narrative description of the numerical information.
2. **Content Clusters**
   - **RS (Raw Score):** The number of correct answers on a particular test or sub-test.
   - **NP (Number Possible):** The total number of questions on a particular test or sub-test.
   - **NA (Number Answered):** The number of questions answered by the student on a particular test or sub-test.
   - **Checkmarks:** A check is placed in one of three columns labeled "below average", "average", or "above average". This section is most helpful in pinpointing how well the student has done in specific parts of a sub-test (thus enabling teachers and parents to determine if there are remedial topics which need to be addressed).

**EXPLANATORY NOTE:** It is not uncommon for Christian school students to score high on READING sub-tests and low on ENVIROMENT sub-tests in the early grades (grades 1 through 3). Please do not be alarmed if this is true of your child, since it is normal when teachers in Christian schools strongly emphasize reading skills rather than social sciences at this level. Nearly all Christian school students are on or above grade level in social sciences by the 4th grade and move upward in percentile and grade equivalent scores in
social science test as they advance in grades. Also, they are much farther ahead of public school students in reading and math skills. The goal often stated by the U.S. President and legislators that "students should be able to read by the third grade" has little meaning in Christian schools where most students are reading by the end of K-5 and literally all students of average intelligence are reading by the end of first grade.

A NOTE OF SPECIAL EMPHASIS: Please keep in mind that achievement and school ability test are only one measure of a student's academic progress. Class grades, general alertness and response, and personal observation by parents and teachers are also valid indicators of learning ability and academic achievement. Parents should not be overly alarmed if a child does not score as high as may be expected on achievement and ability tests. Some students simply do not test well (they tend to "freeze up" on tests). Others seem to test beyond their capability. These students might be called "over achievers". Please keep standardized test scores in their proper perspective. They do give an indication of how well a child is doing, but they are not the final and only measurement of academic ability and/or achievement.

(Acknowledgement is given to Northside Christian School in Charleston, SC, for the basis of some sections of this letter).