

# CHAPTER 8: REPORTS

A variety of test reports are available and are listed in this section. Interested readers are also directed to the TEA publication *Interpreting Assessment Reports*, which is available from NCS Pearson by calling 1-800-252-9186.

## DESCRIPTION OF SCORES

For a detailed discussion on how the following scores are derived, see Chapter 10, Scaling.

### RAW SCORE

The raw score is the number of items answered correctly on a subject-area test. By itself the raw score has limited utility; it can be interpreted only in reference to the total number of items on a subject-area test, and raw scores should not be compared across tests or administrations. The raw score is provided for all English and Spanish-version TAAS tests, end-of-course tests, RPTE, and SDAA.

### TAAS AND END-OF-COURSE SCALE SCORE

The scale score is a statistic that provides a comparison of scores with the minimum expectations/passing standard and allows for comparison across years within a subject and grade. The scale score ranges from approximately 400 to 2400, with a minimum expectations/passing score of 1500. The score of 1500 does not represent the same amount of achievement at each grade or subject tested, although it does account for differences in the difficulty of the test form used for each administration. Thus, the scale score can be used to determine whether a student has met minimum expectations/passed, but it cannot be used to examine student progress across grades. The TAAS and end-of-course scale score is provided for TAAS writing, science, social studies, and Spanish-version tests and for all end-of-course tests.

### TEXAS LEARNING INDEX

The Texas Learning Index (TLI) is a statistic that allows for comparison both across years and across grades within a subject area for TAAS reading and mathematics tests at Grades 3–8 and exit level. The TLI ranges from 0 to the maximum score possible on a subject area test and is preceded by a digit representing the grade level (for example, 3-65 for Grade 3, X-83 for exit level). The minimum expectations score of 70 represents the same amount of achievement at each grade tested and at each administration. Thus, the TLI score can be used to assess learning progress within a subject-area across grades. For example, if a student scored a TLI of 3-65 at Grade 3 in reading, the student did not meet minimum expectations. If the same student achieved a TLI of 4-72 at Grade 4 in reading, the student showed more than one year's typical learning progress for one year's instruction and also met minimum expectations. The TLI is not currently used for reporting results of the end-of-course tests, the TAAS writing, science, or social studies tests, or the Spanish-version TAAS tests.

In the box on the next page are three explanatory examples of the TLI.

EXAMPLES:

**Student A**      Grade 3 TLI = 3-34 (i.e., Grade 3 score of 34)

Grade 4 TLI = 4-41 (i.e., Grade 4 score of 41)

In the example, Student A's score was below the performance necessary to be in line with passing the exit level test at both Grades 3 and 4, since the TLI is below 70 at both grades. However, the student made more than typical progress between Grade 3 and Grade 4, with typical progress being a TLI difference of zero between grades. Schools, teachers, and students can see that this student is making progress but that much work is still needed.

**Student B**      Grade 5 TLI = 5-80 (i.e., Grade 5 score of 80)

Grade 6 TLI = 6-80 (i.e., Grade 6 score of 80)

Student B surpassed the standard of 70 needed to be in line for success on the exit level examination and demonstrated one year's typical learning progress (that is, a TLI difference of zero).

**Student C**      Grade 7 TLI = 7-60 (i.e., Grade 7 score of 60)

Grade 8 TLI = 8-70 (i.e., Grade 8 score of 70)

Student C has shown more improvement than is usual during one year, with a TLI gain of 10 points and is now more likely to pass the exit level examination. However, a TLI of 70 at Grade 8 is no guarantee that the student will pass the exit level test. Only if current learning progress continues can the student be expected to pass the exit level test. In other words, if Student C continues to achieve at the same rate while studying new content, he or she is likely to receive a similar TLI in this subject area on future TAAS administrations.

## RPTE SCALE SCORE

The RPTE scale score is a statistic that can be used for evaluating a student's annual growth and pinpointing how high or low a student performs within an RPTE proficiency level. This score accounts for differences in the difficulty of the test forms used for each administration. See Chapter 4 for more information about RPTE.

## SDAA SCALE SCORE (MATHEMATICS AND READING TESTS ONLY)

SDAA scale scores provide a numeric value that can be used to evaluate a student's annual growth and to pinpoint how high or low the student performs within an achievement level. Scale scores for mathematics must not be compared with scale scores for reading. Knowing how well a student performed within an achievement level may be helpful when establishing the student's performance expectations for future assessments.

The SDAA scale score is a "growth," or vertical scale, score, meaning the SDAA tests are linked across instructional grade levels to create a single underlying scale. With a true vertical scale, there is a one-to-one correspondence between the scale score and estimated student proficiency; that is, two students with the same vertical scale score are estimated to be of the same proficiency on the underlying construct even if one took the third-grade test and the other took the fourth-grade test.

## **APPROPRIATE SCORE USES**

Test results have several uses for individual students and for comparing the performance of groups.

### **INDIVIDUAL STUDENTS**

The TLI and scale score indicate whether a student has passed/met minimum expectations (achieving a TLI of 70 or above or a scale score of 1500 or above) and how far the student's achievement is above or below the passing standard. All students failing to meet minimum expectations on one or more TAAS tests must be offered accelerated instruction. In addition, students who fail one or more parts of TAAS are provided with TAAS study guides at no additional charge.

If the student has been administered the TAAS reading or mathematics tests for at least two years, the TLI scores can be used to gauge a student's relative achievement gains or losses over the years. In this way, students can see whether their performance is improving over time. (The TLI is not provided for Spanish-version TAAS tests.)

Test results can also be used to compare the performance of an individual student with the performance of a similar demographic or program group or to an entire campus or district. For example, the scores for a Hispanic student in a gifted and talented program could be compared with the average scores of Hispanic students, gifted and talented students, all the students on a campus, or any combination of these aggregations.

Other scores provide information about academic areas of relative strength or weakness. The objective mastery status can provide student information to help identify areas in which a student may be having difficulty, as indicated by this particular test. Once an area of possible weakness has been identified, supplementary data should be gathered to further define the student's instructional planning needs.

Finally, individual student test scores may also be used in conjunction with other performance indicators to assist in making placement decisions. However, all decisions regarding placement and educational planning for a student should incorporate as much test performance data as possible about the student.

### **GROUPS OF STUDENTS**

Test results can be used to evaluate the performance of a group over time. Average scale scores, TLIs, and the percent passing/meeting minimum expectations can be contrasted across administrations within the same grade and subject area to give insight into whether student performance is improving across years. For example, the average scale score for special education students taking the Grade 4 TAAS writing test can be compared for spring 2000, spring 2001, and spring 2002.

Test scores can also be used to compare the performance of different demographic or program groups to one another. All TAAS and end-of-course scores can be analyzed within the same subject and grade of any single administration to determine which demographic or program group had, for example, the highest average performance, the lowest percent passing/meeting minimum expectations, or the highest percent mastery of the "Word Meaning" objective.

Furthermore, TAAS scores such as the TLI and the percent meeting minimum expectations can be analyzed across grades for TAAS reading and mathematics. For example, the average TLI in reading at Grade 4 can be compared with the average TLIs in reading at Grades 5 and 6 from the same test administration. The percent of students meeting minimum expectations on TAAS reading or mathematics can also be compared

between Grades 3–8 and exit level. However, no comparisons of the TAAS writing test should be made between grades because the TAAS writing scores are not aligned across grades.

Since nine years of TLI scores in reading and mathematics are now available, groups that tested in the spring of 1994 can be compared with groups that tested in spring 1995, spring 1996, spring 1997, spring 1998, spring 1999, spring 2000, spring 2001, and spring 2002 in the same subject area. Tables depicting average statewide TLI gains/losses at adjacent grades, comparing the spring 2001 and spring 2002 TAAS administrations in reading and mathematics, can be found in Chapter 10. Comparisons over the nine-year period can be found in *Student Performance Results 2001–2002*.

Other scores can be used to help evaluate academic areas of relative strength or weakness. The objective mastery status can provide survey information to help identify areas where further diagnosis is warranted for a group of students.

Test results for groups of students may also be used when evaluating instruction or programs requiring average-score or year-to-year comparisons. Because the TAAS and end-of-course tests are designed to measure content areas within the required state curriculum, considering test results by subject area and by objective may be helpful when evaluating curriculum and instruction. Generalizations from test results may be made to the specific content domain represented by the objective or set of objectives being measured on the exam. However, because the tests are measuring a finite set of skills with a limited set of items, generalizations should be made only about student achievement as measured on a particular test. All instruction and program evaluations should include as much information as possible to provide a more complete picture of performance.

In addition, all test scores can be compared with regional and statewide performance within the same subject area and grade for any administration.

## RPTE SCORES

The RPTE assessments are not designed to measure mastery of content with a pass or fail score. This is one of the main differences between the RPTE and the TAAS reading assessments. Learning to read and fully understand academic content in a second language takes time. RPTE results provide a measure of progress, indicating annually where each LEP student is on a continuum of English language development designed for second-language learners. This continuum is divided into three proficiency levels: beginning, intermediate, and advanced. The progress of students along this continuum is the basis for the RPTE reporting system and the key to helping districts monitor whether their LEP students are making steady annual growth as they learn to read in English.

RPTE test results include two major kinds of scores: a proficiency rating and a scale score. These scores are used to indicate the current reading levels of students as well as their annual growth. The proficiency ratings indicate whether a student demonstrates a beginning, intermediate, or advanced level of proficiency on the test. Students who achieve a rating of advanced are not required to take the RPTE in subsequent years. They have demonstrated the highest level of reading proficiency measured on this assessment instrument. The RPTE scale score provides a numeric value that can be used to evaluate annual growth and pinpoint how high or low a student performs within a proficiency level. To assist schools in examining a student's annual growth, two years of proficiency ratings and scale scores are included in the test results of students who participated in two consecutive administrations.

## SDAA RESULTS

SDAA is designed to measure the academic progress of students who receive special education services for whom TAAS is inappropriate. It provides information about students' performance in the TEKS curriculum

and on the effectiveness of instructional programs. There is not a predetermined passing standard for SDAA and results cannot be used to compare one student with another. This is one of the main differences between the SDAA and the TAAS assessments. Although ARD committees may use testing information in conjunction with other information to make decisions regarding a student's dismissal from special education services, SDAA results should not be used in isolation.

The first year a student takes SDAA in reading and/or mathematics is called a baseline year. The baseline test provides data about a student's academic performance in order to set expectations for growth in the future. Baseline results provide a starting point from which growth is measured. This growth is measured over two consecutive administrations of SDAA.

The SDAA writing test is administered only to qualified special education students enrolled in Grades 4 and 8. Therefore, results cannot provide a yearly measure of growth. Instead, SDAA writing test results can assist ARD committees in evaluating student performance and developing IEP goals and objectives for future writing instruction. Beginning in the 2002–2003 academic year, SDAA writing tests will be administered in Grades 4 and 7.

## **CAUTIONS FOR SCORE USE**

### SCALE RANGES AND MAXIMUM SCORES

A TLI of 70, which is the passing standard for all English TAAS reading and mathematics tests, represents the same level of achievement across all grades. However, the maximum and minimum scores on the TLI may be different for each grade and subject, depending on the overall difficulty of the items on the test. For example, if a test contains items that are more difficult, a student may demonstrate a higher level of achievement by answering more of the items correctly. Likewise, minimum and maximum scale scores may fluctuate as a function of test difficulty.

### USING SCORES AT THE EXTREME ENDS OF THE DISTRIBUTION

On the TAAS, end-of-course, and RPTE examinations, as with any test, student scores at the minimum or maximum ends of the score range must be viewed cautiously. For instance, if the maximum TLI for a subject is 7-94 and a student achieves this score, it cannot be determined whether the student's true achievement is a TLI of 7-94 or whether the student would have achieved a higher TLI if that score were possible. In other words, there is no way to know whether, if the test had had 10 more items on it, the student would have answered those items correctly and achieved a higher TLI. Because the minimum and maximum scores may not be the same between administrations, caution should be taken when comparing students who score at the extreme ends of the distribution.

Analysis of scores of students at the extreme ends of the distribution should also be undertaken cautiously because of a testing phenomenon known as regression toward the mean. Students who scored high on the test may achieve a lower score the next time they test because of regression toward the mean. This regression effect is related to the standard error of measurement and is observable in all testing programs. For example, if a student who scored 38 out of 40 on a test were to take the same test again, there would be 38 opportunities for him or her to incorrectly answer an item he or she answered correctly the first time, while there would be only two opportunities to correctly answer items that were missed the first time. If an item is answered differently, it is more likely to decrease the student's score than to increase it. The converse of this is also true for students with very low scores; the next time they test, they are more likely to achieve a higher score, and this higher score may be a result of regression toward the mean rather than an actual gain in achievement. It is more difficult for students with very high or very low scores to maintain their score than it is for students in the middle of the distribution.

## INTERPRETING TLI SCORES

In addition to the cautions listed above, specific issues regarding the interpretation of TLI scores should be kept in mind.

The TLI is not a percent of items correct. It is a standard score. Its primary functions are to describe how far above or below the passing standard the student is and to indicate whether the student is making learning progress over time.

It is also important to note that this learning progress, as measured by the TLI, is a reference only to achievement—not to an amount of time. For instance, a TLI gain of 6 points between Grades 3 and 4 does not indicate that the student has learned an additional 6 months worth of material. Similarly, a TLI loss of 10 points does not mean a student is one year behind. The units of the TLI scale describe only student achievement and are not designed to reference an amount of time.

Although the TLI ranges are approximately 0 to 100, another misinterpretation would be to add value labels to ranges of TLI scores (for example, 90 and above as a grade of A, 80 to 89 a B, 70 to 79 a C, and so on). This is not a valid interpretation of the TLI and overlooks the skills, items, and content that students must learn in order to score in those TLI ranges.

Finally, for a subject area the average TLI for a group is computed by summing each student's TLI and by dividing this sum by the number of students tested. Although a TLI of 70 is required to meet minimum expectations for each grade and each subject, an average TLI above 70 does not necessarily indicate that most students in the group passed the test. A majority of students could achieve a TLI just below 70, and a small number of students could achieve very high TLI scores, resulting in a low percent of students passing the test but an average TLI score well above 70. Only when the percent meeting minimum expectations is above 50% can one conclude that most students passed the test.

## USING OBJECTIVE-LEVEL INFORMATION

Objective-level information provided with the TAAS, end-of-course, RPTE, and SDAA exams can be useful as a preliminary survey to help identify skill areas in which further diagnosis is warranted. As with all tests given at a single point in time, the data gleaned from this snapshot should be used in conjunction with other evaluations of performance to provide an in-depth portrait of student achievement. Once an area of possible weakness has been identified, supplementary data should be gathered to further define students' instructional planning needs.

Furthermore, since the TAAS, end-of-course, and RPTE exams are equated only at the total subject-area test level, year-to-year comparisons of objective-level performance should be made cautiously. Every effort is made to approximate the overall difficulty of the objectives from year to year in the test construction process, but some fluctuations in the difficulty of the objectives do occur at every administration. Observing trends in objective-level performance over time, identifying patterns of performance in clusters of objectives testing similar skills, and comparing campus or district objective-level performance to that of the region or state are appropriate uses of group objective-level information.

## PROGRAM EVALUATION

Standardized tests are used for evaluation and accountability in Texas as well as in other states. Test scores can be used as a valuable tool for evaluating programs, but any achievement test can give only one part of the picture. The TAAS, end-of-course, RPTE, and SDAA exams are not all-encompassing assessments that can measure every factor that contributes to the success or failure of a program. Although more-accurate evaluation decisions can be made by considering all the data the tests provide, test results can be most helpful if considered as one component of an evaluation system.

# REPORTS

Two types of reports are provided for the various testing programs: standard and optional reports. Standard reports are provided automatically to districts. Optional reports, which present student performance data in somewhat different formats and, in some instances, greater detail, may be purchased for a nominal fee.

Reports that are titled “confidential” contain student-level results. All other reports present test results in an aggregate format.

## STANDARD REPORTS

Information contained in the standard reports is sufficient to satisfy mandatory reporting requirements. Districts received the following standard reports in the 2001–2002 school year:

- Confidential Student Report\*†
- Confidential Student Label\*† and Confidential Exit Level Cumulative Label
- Summary Report—Test Performance and Group Performance (campus and district)\*†
- Demographic Performance Summary (campus and district)†
- 2003 Early Indicator Summary Report
- Confidential Campus Roster—All Students\*†
- Preliminary Confidential Campus Roster—All Students (exit level only)
- Confidential List of Students’ Results
- Confidential List of Students Not Meeting Minimum Expectations/Passing
- Confidential “Do Not Score” Report
- Confidential Student Academic Recognition Roster
- TAAS Written Composition Analytic Information Summary Report
- English II End-of-Course Composition Analytic Information Summary Report
- Confidential List of Students Meeting Texas End-of-Course Testing Requirements for Graduation
- Item Analysis Summary Report (campus and district)\*
- RPTE Cohort Report\*

\* These reports are provided for RPTE.

† These reports are provided for SDAA.

## OPTIONAL REPORTS

The following optional reports were available in the 2001–2002 school year:

- Optional Confidential Campus Roster—Program and Demographic Groups
- Optional Confidential Campus Roster—Ordered by TLI
- Optional Confidential Report to Parents
- Optional District Summary of Performance Chart
- Optional Subject Area Performance Summary
- Optional Subject Area Performance Summary for LEP and Non-LEP Students
- Optional Confidential Student Item Analysis Report\*
- Optional Summary Report for LEP and Non-LEP Students
- Confidential Student Label (second copy)
- Confidential Student Report (extra copy)
- Optional Customized Group Report
- Electronic Individual Student Records (Confidential)—CD-ROM, data tape, or data diskette\*†
- Electronic Campus and District Summaries—CD-ROM

\* These reports are provided for RPTE.

† These reports are provided for SDAA.

## CUMULATIVE LISTS

In September 2001 NCS Pearson provided school districts with various TAAS Cumulative Student Summary Lists for exit level students. Each list contained the student's name, campus number, date of birth, PEIMS ID number, local student ID number (if provided by the district), testing dates, scores, and mastery status. NCS Pearson generated the following lists:

- An alphabetical list of students within each campus
- An alphabetical list of students within the district
- A list ordered by student PEIMS ID number within the district
- A list ordered by local student ID number within the district (or an additional alphabetical list if the district did not provide student ID numbers)