



*Technical*  
**DIGEST**

**FOR THE ACADEMIC YEAR 2014–2015**

A Collaborative Effort of  
the Texas Education Agency  
and Pearson





# Table of Contents

List of Tables.....	ix
List of Figures .....	xi
List of Appendices.....	xii
About the Technical Digest .....	xiii
<b>Chapter 1 Historical Overview of Assessment in Texas .....</b>	<b>1</b>
Timeline .....	1
Assessment Provisions in State Law.....	11
Curriculum Guidelines for Assessment .....	13
TEKS Revisions .....	13
English Language Proficiency Standards .....	14
<b>Chapter 2 Building a High-Quality Assessment System .....</b>	<b>15</b>
Test Development Activities .....	15
Groups Involved.....	17
Student Assessment Division .....	17
Pearson.....	17
ETS .....	17
Tri-Lin.....	17
Lone Star Assessment and Publishing, L.L.C. ....	17
Texas Educators .....	18
Item Development and Review .....	18
Item Guidelines .....	18
Item Writers.....	19
Training .....	19
Contractor Review .....	19
TEA Review.....	19
Item-Review Committee .....	20
Pilot Testing .....	21
Field Testing and Data Review .....	21
Field-Test Procedures .....	21
Data-Review Procedures.....	22
Item Bank.....	23
Test Construction .....	23
Security.....	24
The Test Security Supplement and Administration Manuals .....	25
Online Training .....	25
14-Point Test Security Plan .....	25
Security Violations .....	25
Incident Tracking .....	26
Light Marks Analysis.....	26
Statistical Analyses.....	27
Quality-Control Procedures .....	28
Data and Report Processing.....	28
Technical Processing .....	29
Performance Assessments .....	30
Scoring Staff.....	31
Distributed Scoring .....	32
The ePEN System.....	32
Reader Training Process.....	33



Scoring Process .....	34
Score Reliability and Validity Information .....	36
Appeals .....	37
<b>Chapter 3 Standard Technical Processes .....</b>	<b>39</b>
Overview .....	39
Performance Standards .....	40
Item Analyses .....	41
Scaling .....	41
Equating .....	42
Reliability .....	43
Validity .....	43
Measures of Student Progress .....	44
Sampling .....	44
Technical Details and Procedures .....	45
Performance Standards .....	45
Item Analyses .....	49
Scaling .....	51
Equating .....	56
Reliability .....	62
Validity .....	67
Measures of Student Progress .....	70
Sampling .....	73
<b>Chapter 4 State of Texas Assessments of Academic Readiness (STAAR).....</b>	<b>77</b>
Overview .....	77
STAAR .....	79
STAAR Spanish .....	79
STAAR L .....	79
STAAR A .....	80
Participation Requirements .....	80
Testing Requirements for Graduation .....	82
Test Development .....	82
Item Development Approach for STAAR Spanish .....	84
Spanish–English STAAR Alignment .....	84
Training .....	85
District and Campus Coordinator Manual and Test Administrator Manuals .....	85
Test Administrations .....	86
The Online Test Delivery System .....	88
Make-up Testing .....	89
Out-of-District Testing .....	89
Out-of-School Testing .....	89
Educational Materials Required for Testing .....	90
Testing Accommodations .....	91
Accommodations for Students with Disabilities .....	91
Students with Visual Impairments .....	92
Dyslexia Accommodations for Reading Assessment .....	92
Oral/Signed Administration .....	93
STAAR A Embedded Accommodations and Accessibility Features .....	94
Linguistic Accommodations .....	95
Student Success Initiative .....	97
Scores and Reports .....	98



Description of Scores.....	98
Report Formats.....	99
Use of Test Results.....	100
Parent Brochures.....	100
Released Tests.....	101
Item Analysis Reports.....	101
Performance Standards.....	102
Performance Levels and Policy Definitions.....	102
Standard-Setting Process for STAAR.....	103
Standard-Setting Committees.....	106
Phase-in of Performance Standards.....	107
Outcome of Standard Setting.....	108
Review of Performance Standards.....	109
Scaling.....	109
Reporting Scales.....	109
Cumulative Score for Graduation.....	112
Equating.....	112
Overview.....	112
Pre-Equating.....	113
Post-Equating.....	113
Field-Test Equating.....	114
Comparability Analyses.....	114
Reliability.....	115
Internal Consistency.....	115
Classical Standard Error of Measurement (SEM).....	116
Conditional Standard Error of Measurement (CSEM).....	116
Classification Accuracy.....	116
Validity.....	116
Evidence Based on Test Content.....	117
Evidence Based on Response Processes.....	118
Evidence Based on Internal Structure.....	122
Evidence Based on Relationships to Other Variables.....	122
Evidence Based on the Consequences of Testing.....	123
Intended Interpretations and Uses of STAAR Test Scores.....	123
Measures of Student Progress.....	124
2013-2014 Progress Measure Updates.....	125
2014-2015 Progress Measure Updates.....	127
Progress Classifications.....	127
Classification Exceptions.....	129
Results.....	129
STAAR On-Track Measure.....	129
English Language Learner Progress Measure.....	130
Sampling.....	133
Test Results.....	133
<b>Chapter 5 STAAR Alternate 2.....</b>	<b>135</b>
Overview.....	135



Participation Requirements ..... 136

Testing Requirements for Graduation ..... 137

Test Development..... 137

    Assessment Content ..... 137

    STAAR Alternate Redesign..... 138

    Assessment Item Criteria..... 138

    Review of Items ..... 139

Training..... 140

Test Administrations..... 140

    Administration Procedures..... 141

Testing Accommodations ..... 142

Student Success Initiative ..... 143

Scores and Reports ..... 144

    Scoring STAAR Alternate 2 Assessments ..... 144

    Description of Scores ..... 144

    Report Formats ..... 145

    Use of Test Results ..... 145

Parent Brochure..... 145

Performance Standards ..... 146

    Performance Levels and Policy Definitions..... 146

    Standard-Setting Process for STAAR Alternate 2..... 147

    Standard-Setting Committees..... 149

    Outcome of Standard Setting ..... 149

Scaling ..... 150

    Reporting Scales..... 150

Equating..... 152

    Overview..... 152

    Base Test Review..... 152

    Live Calibrations..... 153

    Field-Test Equating..... 153

Reliability ..... 153

    Internal Consistency..... 154

    Classical Standard Error of Measurement..... 154

    Conditional Standard Error of Measurement..... 155

    Classification Accuracy..... 155

Validity ..... 155

    Evidence Based on Test Content ..... 155

    Evidence Based on Response Processes ..... 156

    Evidence Based on Internal Structure ..... 156

    Evidence Based on Relationships to Other Variables ..... 157

    Evidence Based on Consequences of Testing..... 158

Measures of Student Progress..... 158

Sampling..... 158

Test Results..... 159

**Chapter 6 Texas English Language Proficiency Assessment System (TELPAS)**  
 ..... 161



Overview.....	161
Participation Requirements.....	162
Committee Decisions.....	162
Newly Enrolled ELLs—Holistically Rated Domains.....	162
Test Development.....	163
TELPAS Reading Assessments for Grades 2–12.....	163
TELPAS Holistically Rated Assessments.....	163
Training.....	164
Test Administrations.....	165
Scores and Reports.....	166
Language Domain Scores.....	169
TELPAS Comprehension and Composite Scores.....	169
Report Formats.....	171
Use of Test Results.....	171
Parent Brochures.....	171
Audits.....	172
Performance Standards.....	172
Scaling.....	173
Reporting Scales.....	174
Equating.....	175
Pre-Equating.....	175
Post-Equating.....	175
Field-Test Equating.....	175
Reliability.....	176
Internal Consistency.....	176
Classical Standard Error of Measurement (SEM).....	176
Conditional Standard Error of Measurement (CSEM).....	176
Classification Accuracy.....	177
Interrater Reliability.....	177
Validity.....	177
Evidence Based on Test Content.....	177
Evidence Based on Response Processes.....	180
Evidence Based on Internal Structure.....	181
Evidence Based on Relationships to Other Variables.....	182
Evidence Based on Consequences of Testing.....	186
Sampling.....	186
Test Results.....	186
<b>Chapter 7 Texas Assessment of Knowledge and Skills (TAKS).....</b>	<b>189</b>
Overview.....	189
TAKS.....	190
Testing Requirements for Graduation.....	190
Test Development.....	191
Item Development.....	191
Training.....	191
2015 Directions for District Coordinators, Campus Coordinators, and Test Administrators.....	191



Test Administrations.....	192
Overview .....	192
Online Testing .....	192
The Online Test Delivery System .....	192
Make-up Testing.....	193
Educational Materials Required for Testing .....	193
Testing Accommodations.....	194
Accommodations for Students with Disabilities .....	194
Accommodations Resources .....	195
Scores and Reports .....	195
Description of Scores .....	195
Report Formats .....	196
Use of Test Results .....	196
Parent Brochures .....	196
Performance Standards .....	197
Performance Level Descriptors .....	197
Standard Setting for TAKS .....	197
Scaling.....	198
Reporting Scales .....	198
Equating.....	199
Pre-Equating .....	199
Post-Equating.....	199
Field-Test Equating .....	199
Comparability Analyses .....	199
Reliability .....	200
Validity .....	200
Measures of Student Progress.....	201
Sampling.....	201
Test Results.....	201
<b>Chapter 8 Resources .....</b>	<b>203</b>
<b>Bibliography.....</b>	<b>205</b>





## List of Tables

- Table 2.1. Item Review Guidelines
- Table 2.2. Comparison of Readiness and Supporting Standards
- Table 3.1. The Nine-Step STAAR Standard-Setting Process
- Table 3.2. Classification Accuracy for STAAR Level II
- Table 4.1. 2014–2015 STAAR Assessments
- Table 4.2. ELL Participation in STAAR
- Table 4.3. STAAR A Eligibility Requirements
- Table 4.4. STAAR Assessments Administered in 2014–2015
- Table 4.5. Features Available in STAAR A
- Table 4.6. Allowable Linguistic Accommodations for ELLs Taking STAAR
- Table 4.7. Overview of the STAAR EOC Standard-Setting Process
- Table 4.8. Overview of the STAAR 3–8 Standard-Setting Process
- Table 4.9. STAAR 3–8 Performance Standards Applied in 2014–2015
- Table 4.10. STAAR EOC Performance Standards Applied in 2014–2015
- Table 4.11. Horizontal Scaling Constants for STAAR 3–8
- Table 4.12. Horizontal Scaling Constants for STAAR EOC
- Table 4.13. Vertical Scale Score Transformation and Scaling Constants for STAAR 3–8 Reading
- Table 4.14. Summary of Reader Agreement (Reliability) for 2015 STAAR
- Table 4.15. Summary of Validity Packet Results for 2015 STAAR
- Table 4.16. 2015 STAAR Progress Measure Targets
- Table 4.17. ELL Progress Measure Plans
- Table 4.18. STAAR Spring 2015 Pass Rates (at the Level II Phase-in 1 Standard)
- Table 5.1. 2014–2015 STAAR Alternate 2 Assessments
- Table 5.2. Students Tested in 2014–2015 STAAR Alternate 2 Assessments
- Table 5.3. Overview of the STAAR Alternate 2 Standard-Setting Process
- Table 5.4. STAAR Alternate 2 Performance Standards
- Table 5.5. Horizontal Scaling Constants for STAAR Alternate 2
- Table 5.6. STAAR Alternate 2 Spring 2015 Pass Rates
- Table 6.1. Grade Clusters for 2–12 Reading
- Table 6.2. TELPAS Assessments Administered in 2014–2015
- Table 6.3. Weights of the Language Domains in TELPAS Composite Ratings
- Table 6.4. Approved Raw and Scale Score Cut Scores from 2013 TELPAS Reading Proficiency Level Standards Review
- Table 6.5. Vertical Scale Score Linking Constants for TELPAS Reading Tests
- Table 6.6. Staged Linguistic Accommodation Test Design
- Table 6.7. 2015 STAAR Grades 3–8 Reading\*, English I, and English II Performance by TELPAS Reading Proficiency Level for Students Who Participated in Both Assessments
- Table 6.8. 2015 STAAR Grades 4 and 7 Writing\*, English I, and English II Performance by TELPAS Writing Proficiency Rating for Students Who Participated in Both Assessments



- Table 6.9. Percentage\* of Students in Each of the TELPAS Composite Proficiency Levels in 2015
- Table 7.1. 2014–2015 TAKS Assessments
- Table 7.2. TAKS Assessments Administered in 2014-2015
- Table 7.3. 2014–2015 TAKS Online Test Administrations
- Table 7.4. Horizontal Scaling Constants for TAKS
- Table 8.1. Quick Reference to Online Resources



## List of Figures

- Figure 2.1. Test Development Process
- Figure 3.1. Relationship between Raw Scores and Scale Scores at the Performance Standards
- Figure 3.2. Critical Elements of the Evidence-Based Standard-Setting Approach
- Figure 3.3. Three Stages of the Equating Process
- Figure 3.4. TELPAS Common-Item Post-Equating Design
- Figure 3.5. STAAR Common-Item Post-Equating Design
- Figure 3.6. STAAR Incomplete Data Matrix for Common-Item Sets
- Figure 4.1. STAAR Development and Implementation Schedule
- Figure 4.2. Accommodations for Students with Disabilities
- Figure 5.1. STAAR Alternate 2 Allowable Accommodations
- Figure 6.1. Sample Calculation of Composite Results

## List of Appendices

### **Appendix A**

Quality Control System (QCS)

### **Appendix B**

STAAR Statistical Tables

### **Appendix C**

STAAR Alternate 2 Statistical Tables

### **Appendix D**

STAAR TELPAS Statistical Tables

## About the Technical Digest

The *Technical Digest* is designed to provide information to Texas testing coordinators, educators, researchers, and interested citizens about the development procedures and technical attributes of the state-mandated assessment program. This digest does not include all the information available about the assessment program in Texas.

Additional information is available on the [Texas Education Agency \(TEA\) Student Assessment Division website](#). For materials not found on the website or for questions concerning information in this digest, contact the TEA Student Assessment Division at 512-463-9536 or by email at [Student.Assessment@tea.texas.gov](mailto:Student.Assessment@tea.texas.gov).

The *Technical Digest* for 2014–2015 is designed primarily as a web-based document. The entire text of the *Technical Digest* along with the documents referenced and the technical reports in support of information in the *Technical Digest* are available on [TEA's Student Assessment Division website](#).

