



Technical **DIGEST**

FOR THE ACADEMIC YEAR 2012–2013

A Collaborative Effort of
the Texas Education Agency
and Pearson



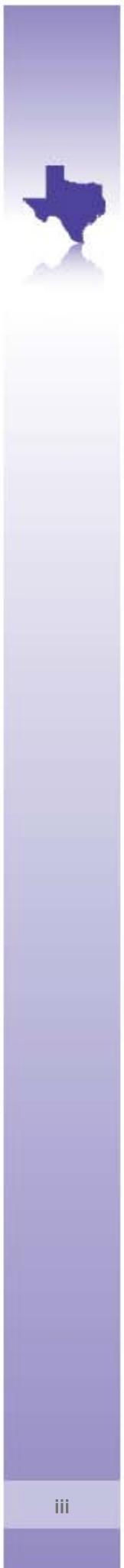
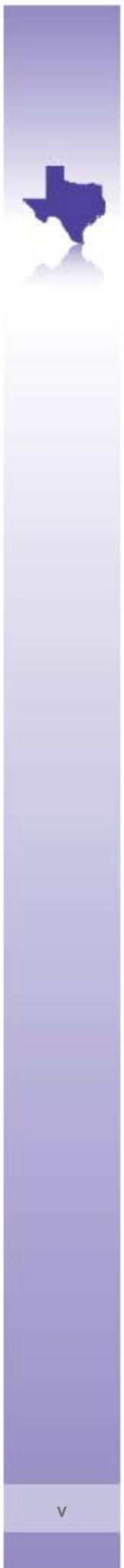


Table of Contents

List of Tables.....	xi
List of Figures	xiv
List of Appendices.....	xv
About the Technical Digest	xvi
Chapter 1 Historical Overview of Assessment in Texas	1
Timeline	1
Assessment Provisions in State Law and Administrative Rules.....	8
Texas Education Code	8
Texas Administrative Code	10
Curriculum Guidelines for Assessment	12
TEKS Revisions	13
English Language Proficiency Standards	13
Chapter 2 Building a High-Quality Assessment System	15
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	22
Field-Test Procedures	22
Data-Review Procedures.....	22
Item Bank	23
Test Construction	23
Security.....	24
Test Security Supplement.....	24
14-Point Test Security Plan	25
Manuals and Test Security	25
Incident Tracking	25
Online Training	26
Security Violations.....	26
Light Marks Analysis.....	26

Quality-Control Procedures	27
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
Chapter 3 Standard Technical Processes	39
Overview.....	39
Performance Standards Overview	40
Item Analyses Overview	41
Scaling Overview.....	41
Equating Overview	42
Reliability Overview	43
Validity Overview.....	43
Measures of Student Progress Overview.....	44
Sampling Overview.....	44
Technical Details and Procedures.....	45
Performance Standards.....	45
Item Analyses.....	49
Scaling	51
Equating	56
Reliability	63
Validity.....	67
Measures of Student Progress	71
Sampling	73
Chapter 4 State of Texas Assessments of Academic Readiness (STAAR).....	77
Overview.....	77
STAAR	79
STAAR Spanish	79
STAAR L	80
Participation Requirements	80
Testing Requirements for Graduation	81
Test Development.....	82
Item Development Approach for STAAR Spanish.....	84
Spanish–English STAAR Alignment	84
Training.....	85
District and Campus Coordinator Manual	85
Test Administrations.....	86
Make-up Testing.....	89
Out-of-District Testing.....	89
Educational Materials Required for Testing	89



Testing Accommodations	90
Accommodations for Students with Disabilities	91
Dyslexia Accommodations for Reading Assessment	92
Students with Visual Impairments	92
Linguistic Accommodations	93
Oral Administration	95
Student Success Initiative	96
Scores and Reports	97
Description of Scores	97
Report Formats	98
Use of Test Results	98
Parent Brochures	99
Released Tests	99
Item Analysis Reports.....	100
Performance Standards	100
Performance Levels and Policy Definitions.....	101
Standard-Setting Process for STAAR	101
Standard-Setting Committees.....	104
Phase-in of Performance Standards	105
Outcome of Standard Setting	106
Review of Performance Standards	107
Scaling.....	107
Reporting Scales	108
Cumulative Score for Graduation.....	112
Equating.....	113
Overview	113
Pre-Equating	113
Post-Equating.....	114
Field-Test Equating	114
Comparability Analyses	115
Reliability	116
Internal Consistency	116
Classical Standard Error of Measurement (SEM)	117
Conditional Standard Error of Measurement (CSEM)	117
Classification Accuracy.....	117
Validity	117
Evidence Based on Test Content	118
Evidence Based on Response Processes	119
Evidence Based on Internal Structure	123
Evidence Based on Relationships to Other Variables	123
Evidence Based on the Consequences of Testing.....	124
Intended Interpretations and Uses of STAAR Test Scores	124
Measures of Student Progress	125
Progress Classifications	126
Classification Exceptions	127
Results	128

Additional Information.....	129
On Track Measure.....	130
Sampling.....	130
Sampling Process	130
Test Results.....	132
Chapter 5 STAAR Modified.....	135
Overview.....	135
Participation Requirements	137
Testing Requirements for Graduation	138
Test Development.....	138
Training.....	139
District and Campus Coordinator Manual	139
Test Administrations.....	139
Educational Materials Required for Testing	141
Testing Accommodations	141
Accommodations for Students with Disabilities.....	142
Dyslexia Accommodations.....	142
Oral Administration.....	142
Students with Visual Impairments.....	143
Linguistic Accommodations	143
Student Success Initiative	144
Scores and Reports	144
Description of Scores	144
Report Formats	145
Use of Test Results	146
Parent Brochures	146
Performance Standards	147
Performance Levels and Policy Definitions.....	147
Standard-Setting Process for STAAR Modified.....	148
Standard-Setting Committees.....	151
Phase-in of Performance Standards.....	151
Outcome of Standard Setting	152
Review of Performance Standards	153
Scaling.....	153
Reporting Scales	153
Equating.....	155
Pre-Equating	155
Field-Test Equating	155
Reliability	156
Internal Consistency	156
Classical Standard Error of Measurement (SEM)	156
Conditional Standard Error of Measurement (CSEM)	157
Classification Accuracy.....	157
Validity	157
Evidence Based on Test Content	157
Evidence Based on Response Processes	158



Evidence Based on Internal Structure	160
Evidence Based on Relationships to Other Variables	160
Evidence Based on Consequences of Testing.....	161
Measures of Student Progress.....	162
Sampling.....	163
Test Results.....	163
Chapter 6 STAAR Alternate.....	165
Overview.....	165
Participation Requirements	166
Testing Requirements for Graduation	167
Test Development.....	168
Assessment Content	168
Complexity Levels	168
Assessment Task Criteria.....	169
Review of Assessment Tasks.....	170
Training.....	170
Test Administrations.....	172
Administration Procedures.....	173
Testing Accommodations.....	174
Student Success Initiative	174
Scores and Reports	175
Scoring STAAR Alternate Assessments	175
Description of Scores	176
Report Formats	177
Use of Test Results	177
Parent Brochure.....	177
Audits.....	178
Performance Standards	178
Performance Levels and Policy Definitions.....	178
Standard-Setting Process for STAAR Alternate.....	179
Standard-Setting Committees.....	181
Implementation of Performance Standards.....	181
Outcome of Standard Setting	182
Review of Performance Standards	182
Scaling.....	183
Equating.....	183
Reliability	183
Validity	187
Evidence Based on Test Content	187
Evidence Based on Response Processes	188
Evidence Based on Internal Structure	189
Evidence Based on Relationships to Other Variables	189
Evidence Based on Consequences of Testing.....	191
Measures of Student Progress.....	191
Sampling.....	192
Test Results.....	192



Chapter 7 Texas English Language Proficiency Assessment System (TELPAS)	195
Overview.....	195
Participation Requirements	196
Committee Decisions.....	196
Newly Enrolled ELLs—Holistically Rated Domains.....	197
Test Development.....	197
TELPAS Reading Assessments for Grades 2–12.....	197
TELPAS Holistically Rated Assessments	197
Training.....	198
Test Administration	199
Scores and Reports	200
Language Domain Scores	203
TELPAS Comprehension and Composite Scores.....	204
Report Formats	205
Use of Test Results	206
Parent Brochures	206
Audits.....	207
Performance Standards	207
Scaling.....	208
Reporting Scales	209
Equating.....	210
Pre-Equating	210
Post-Equating.....	210
Field-Test Equating	210
Reliability	211
Internal Consistency.....	211
Classical Standard Error of Measurement (SEM)	211
Conditional Standard Error of Measurement (CSEM)	211
Classification Accuracy.....	212
Interrater Reliability.....	212
Validity	212
Evidence Based on Test Content	213
Evidence Based on Response Processes	215
Evidence Based on Internal Structure	216
Evidence Based on Relationships to Other Variables	217
Evidence Based on Consequences of Testing.....	221
Sampling.....	222
Test Results.....	222
Chapter 8 Texas Assessment of Knowledge and Skills (TAKS), TAKS (Accommodated), and TAKS–Modified (TAKS–M)	225
Overview.....	225
TAKS.....	226
TAKS (Accommodated).....	226
TAKS–Modified (TAKS–M)	227
Participation Requirements	227



TAKS-M.....	227
Testing Requirements for Graduation	228
Test Development.....	229
Item Development	229
Additional Considerations for TAKS-M.....	229
Training.....	230
2013 Directions for District Coordinators, Campus Coordinators, and Test Administrators.....	230
Test Administrations.....	230
Overview	230
Online Testing	231
The Online Test Delivery System	232
Make-up Testing.....	232
Educational Materials Required for Testing	233
Testing Accommodations	234
Accommodations for Students with Disabilities.....	234
Accommodations Manual	235
Scores and Reports	235
Description of Scores	235
Report Formats	236
Use of Test Results	237
Parent Brochures	237
Performance Standards	237
Performance Level Descriptors	237
Standard Setting for TAKS	238
Standard Setting for TAKS-M	239
Scaling.....	239
Reporting Scales	239
Equating.....	240
Pre-Equating	241
Post-Equating.....	241
Field-Test Equating	241
Comparability Analyses	241
Reliability	242
Internal Consistency	242
Classical Standard Error of Measurement	242
Conditional Standard Error of Measurement.....	243
Classification Accuracy.....	243
Validity	243
Evidence Based on Test Content	243
Evidence Based on Response Processes	244
Evidence Based on Internal Structure	248
Evidence Based on Relationships to Other Variables	248
Evidence Based on Consequences of Testing.....	249
Measures of Student Progress	250
Sampling.....	254

Test Results.....	254
Chapter 9 Resources	257
Bibliography	259





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. 2012–2013 STAAR Assessments
Table 4.2. STAAR Assessments Administered in 2012–2013
Table 4.3. Overview of the STAAR EOC Standard-Setting Process
Table 4.4. Overview of the STAAR 3–8 Standard-Setting Process
Table 4.5. STAAR 3–8 Performance Standards
Table 4.6. STAAR EOC Performance Standards
Table 4.7. Horizontal Scaling Constants for STAAR 3–8
Table 4.8. Horizontal Scaling Constants for STAAR EOC
Table 4.9. Vertical Scale Score Transformation and Scaling Constants for STAAR 3–8 Mathematics and Reading
Table 4.10. Summary of Reader Agreement (Reliability) for 2013 STAAR
Table 4.11. Summary of Validity Packet Results for 2013 STAAR
Table 4.12. STAAR Progress Measure Targets
Table 4.13. 2012–2013 Grades 3–8 Primary Administration Progress Measure Results
Table 4.14. 2012–2013 EOC Spring Administration Progress Measure Results
Table 4.15. Sampling Summary for Spring 2013 STAAR EOC Assessments
Table 4.16. STAAR Spring 2013 Pass Rates (at the Phase-in 1 Standard)
Table 5.1. 2012–2013 STAAR Modified Assessments
Table 5.2. STAAR Modified Assessments Administered in 2012–2013
Table 5.3. Overview of the STAAR Modified EOC Standard-Setting Process
Table 5.4. Overview of the STAAR Modified 3–8 Standard Setting Process
Table 5.5. STAAR Modified 3–8 Performance Standards
Table 5.6. STAAR Modified EOC Performance Standards
Table 5.7. Horizontal Scaling Constants for STAAR Modified 3–8
Table 5.8. Horizontal Scaling Constants for STAAR Modified EOC
Table 5.9. Summary of Reader Agreement (Reliability) for 2013 STAAR Modified
Table 5.10. Summary of Validity Packet Results for 2013 STAAR Modified
Table 5.11. STAAR Modified Spring 2013 Pass Rates (at the Phase-in 1 Standard)
Table 6.1. 2012–2013 STAAR Alternate Assessments
Table 6.2. Students Tested in 2012–2013 STAAR Alternate Assessments
Table 6.3. Scoring of the STAAR Alternate Primary Observation
Table 6.4. Overview of the STAAR Alternate Standard-Setting Process
Table 6.5. STAAR Alternate Performance Standards
Table 6.6. Correlations Between First and Second Ratings
Table 6.7. Guidelines for Weighted Kappa Agreement Coefficients
Table 6.8. Weighted Kappa Agreement Coefficients Between First and Second Ratings
Table 6.9. Percent Agreement Between First and Second Ratings



- Table 6.10. Correlations Among STAAR Alternate Scoring Components
Table 6.11. Overall STAAR Alternate Correlation Between Subject Area Scores
Table 6.12. STAAR Alternate Spring 2013 Pass Rates (at the Recommended Standard)
Table 7.1. Grade Clusters for 2–12 Reading
Table 7.2. TELPAS Assessments Administered in 2012–2013
Table 7.3. Weights of the Language Domains in TELPAS Composite Ratings
Table 7.4. Approved Raw and Scale Score Cut Scores from 2008 TELPAS Reading Proficiency Level Setting (Online Versions)
Table 7.5. Vertical Scale Score Linking Constants for TELPAS Reading Tests
Table 7.6. Staged Linguistic Accommodation Test Design
Table 7.7. 2013 STAAR* Reading Performance by TELPAS Reading Proficiency Level for Students Who Participated in Both Assessments in STAAR Grades 3–8, English I Reading, or English II Reading
Table 7.8. 2013 STAAR* Writing Performance by TELPAS Writing Proficiency Rating for Students Who Participated in Both Assessments in STAAR Grade 4, Grade 7, English I Writing, or English II Writing
Table 7.9. 2013 TAKS* ELA Performance by TELPAS Reading Proficiency Rating for Students Who Participated in Both Assessments in Grade 11
Table 7.10. Percentage* of students in each of the TELPAS composite proficiency levels in 2013
Table 8.1. 2012–2013 TAKS and TAKS–M Assessments
Table 8.2. TAKS and TAKS–M Assessments Administered in 2012–2013
Table 8.3. 2012–2013 TAKS Online Test Administrations
Table 8.4. Horizontal Scaling Constants for TAKS
Table 8.5. Horizontal Scaling Constants for TAKS–M
Table 8.6. Summary of Scorer Agreement (Reliability) for 2013 TAKS
Table 8.7. Summary of Validity Results for 2013 TAKS
Table 8.8. Summary of Scorer Agreement (Reliability) for 2013 TAKS–M
Table 8.9. Summary of Validity Results for 2013 TAKS–M
Table 8.10. Overall TAKS–M Correlations Between Content Area Scores
Table 8.11. TAKS Classification Accuracy for the TPM from 2010 to 2013 (Single-year Model)
Table 8.12. TAKS Classification Accuracy for the TPM from 2010 to 2013 (Two-year model)
Table 8.13. TAKS Classification Accuracy for the TPM from 2011 to 2013 (Single-year model)
Table 8.14. TAKS Classification Accuracy for the TPM from 2011 to 2013 (Two-year model)
Table 8.15. TAKS Classification Accuracy for the TPM from 2012 to 2013 (Single-year Model)
Table 8.16. TAKS Classification Accuracy for the TPM from 2012 to 2013 (Two-year Model)
Table 8.17. TAKS–M Classification Accuracy for the TPM from 2012 to 2013 (Single-year model)
Table 8.18. TAKS Spring 2013 (Primary Administration) Pass Rates

Table 8.19. TAKS-M Spring 2013 Pass Rates

Table 9.1. 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. TAKS 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. ELL Participation in STAAR
- Figure 4.3. Accommodations for Students with Disabilities
- Figure 4.4. Allowable Linguistic Accommodations for ELLs Taking STAAR
- Figure 7.1. Sample Calculation of Composite Results



List of Appendices

Appendix A

Quality Control System (QCS)

Appendix B

STAAR Statistical Tables

Appendix C

STAAR Modified Statistical Tables

Appendix D

STAAR Alternate Statistical Tables

Appendix E

TELPAS Statistical Tables

Appendix F

TAKS Statistical Tables

Appendix G

TAKS–M 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.state.tx.us.

The *Technical Digest* for 2012–2013 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](#).