California Department of Education
Assessment and Accountability Division

Standards-based Tests in Spanish
Technical Report
Spring 2010 Administration

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Educational Testing Service

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Table of Contents

Acronyms and Initialisms Used in the *STS Technical Report* viii

Chapter 1: Introduction 1
Background 1
Test Purpose 1
Test Content 2
Intended Population 2
Intended Use and Purpose of Test Scores 2
Testing Window 3
Significant Developments in 2010 3
New Cut Scores and Score Scales 3
Cluster Scores Reported 4
Number of Test Items 4
Changes to the STAR Contract as Required by Legislated Budget Expenditure Activities 4
Limitations of the Assessment 5
Score Interpretation 5
Out-of-Level Testing 5
Score Comparison 5
Groups and Organizations Involved with the STAR Program 6
State Board of Education 6
California Department of Education 6
Contractors 6
Overview of the Technical Report 7
Reference 8
Chapter 2: An Overview of STS Processes 9
Item Development 9
Item Formats 9
Item Development Specifications 9
Item Banking 9
Item Refresh Rate 10
Test Assembly 10
Test Length 10
Test Blueprint 10
Content Rules and Item Selection 10
Psychometric Criteria 10
Test Administration 11
Test Security and Confidentiality 11
Procedures to Maintain Standardization 11
Test Variations, Accommodations, and Modifications 12
Accommodation Summaries 13
Scores 13
Aggregation Procedures 13
Individual Scores 13
Group Scores 14
Equating 14
Calibration 14
Scaling 14
Scoring Table Production 15
Equating Samples 17
Equating the Braille Versions of the STS Tests 17
References 18
Appendix 2.A—STS Item and Estimated Time Chart 19
Appendix 2.B—Reporting Clusters 20
Reading/Language Arts 20
Mathematics 22
Appendix 2.C—2010 Test Variations, Accommodations, and Modifications 24
Appendix 2.D—Accommodation Summary Tables 26
Chapter 3: Item Development 101
Rules for Item Development 101
Item Development Specifications 101
Expected Item Ratio 102

Selection of Item Writers **103**
Criteria for Selecting Item Writers 103
Item Review Process **104**
Contractor Review 104
Content Expert Reviews 105
Statewide Pupil Assessment Review Panel 108
Field Testing **108**
Stand-alone Field Testing 108
Embedded Field-test Items 109
CDE Data Review **110**
Item Banking **110**
References **111**
Chapter 4: Test Assembly **112**
Test Length **112**
Rules for Item Selection **112**
Test Blueprint 112
Content Rules and Item Selection 112
Psychometric Criteria 113
Projected Psychometric Properties of the Assembled Tests 114
Rules for Item Sequence and Layout **115**
Reference **116**
Appendix 4.A—Technical Characteristics **117**
Appendix 4.B—Cluster Targets **122**
Chapter 5: Test Administration **140**
Test Security and Confidentiality **140**
ETS's Office of Testing Integrity 140
Test Development 140
Item and Data Review 140
Item Banking 141
Transfer of Forms and Items to the CDE 141
Security of Electronic Files Using a Firewall 141
Printing and Publishing 142
Test Administration 142
Test Delivery 142
Processing and Scoring 143
Data Management 143
Transfer of Scores via Secure Data Exchange 144
Statistical Analysis 144
Reporting and Posting Results 144
Student Confidentiality 144
Student Test Results 144
Procedures to Maintain Standardization **145**
Test Administrators 145
Directions for Administration 146
District and Test Site Coordinator Manual 146
STAR Management System Manuals 146
Test Booklets 147
Accommodations for Students with Disabilities **147**
Identification 147
Scoring 148
Demographic Data Corrections **148**
Testing Irregularities **148**
Test Administration Incidents **148**
References **149**
Chapter 6: Performance Standards **150**
Background **150**
Standard Setting Procedure **150**
Development of Competencies Lists 151
Standard Setting Methodology **151**
Results **152**
References **154**
Chapter 7: Scoring and Reporting **155**
Procedures for Maintaining and Retrieving Individual Scores **155**

Scoring and Reporting Specifications 155
Scanning and Scoring 155
Types of Scores and Subscores 156
Raw Score 156
Subscore 156
Scale Score 156
Performance Levels 156
Percent Correct Score 156
Score Verification Procedures 157
Scoring Key Verification Process 157
Score Verification Process 157
Overview of Score Aggregation Procedures 158
Individual Scores 158
Reports to Be Produced and Scores for Each Report 163
Types of Score Reports 163
Score Report Contents 163
Score Report Applications 164
Criteria for Interpreting Test Scores 164
Criteria for Interpreting Score Reports 165
References 166
Appendix 7.A—Score Distributions 167
Appendix 7.B—Demographic Summaries 171
Appendix 7.C—Types of Score Reports 212
Chapter 8: Analyses 215
Samples Used for the Analyses 215
Classical Item Analyses 216
Multiple-choice Items 216
Reliability Analyses 217
Intercorrelations, Reliabilities, and SEMs for Reporting Clusters 219
Subgroup Reliabilities and SEMs 219
Conditional Standard Errors of Measurement 219
Decision Classification Analyses 220
Validity Evidence 221
Purpose of the STS 222
The Constructs to Be Measured 222
Intended Test Population(s) 223
Validity Evidence Collected 224
Evidence Based on Response Processes 228
Evidence Based on Internal Structure 228
Evidence Based on Consequences of Testing 230
IRT Analyses 230
IRT Model-Data Fit Analyses 230
Model-fit Assessment Results 232
Evaluation of Scaling 233
Summaries of Scaled IRT b-values 233
Post-equating Results 234
Differential Item Functioning Analyses 234
References 236
Appendix 8.A—Classical Analyses 238
Appendix 8.B—Reliability Analyses 244
Appendix 8.C—Validity Analyses 271
Appendix 8.D—IRT Analyses 287
Scaling and Post-Equating Results 295
Appendix 8.E—DIF Analyses 301
Chapter 9: Quality Control Procedures 307
Quality Control of Item Development 307
Item Specifications 307
Item Writers 307
Internal Contractor Reviews 307
Assessment Review Panel Review 308
Statewide Pupil Assessment Review Panel Review 308
Data Review of Field-tested Items 308
Quality Control of the Item Bank 309

Quality Control of Test Form Development **309**
Quality Control of Test Materials **310**
Collecting Test Materials 310
Processing Test Materials 310
Quality Control of Scanning **310**
Post-scanning Edits 311
Quality Control of Image Editing **311**
Quality Control of Answer Document Processing and Scoring **312**
Accountability of Answer Documents 312
Processing of Answer Documents 312
Scoring and Reporting Specifications 312
Storing Answer Documents 312
Quality Control of Psychometric Processes **313**
Score Key Verification Procedures 313
Quality Control of Item Analyses, DIF, and the Equating Process 313
Score Verification Process 314
Offloads to Test Development 315
Quality Control of Reporting **315**
Excluding Student Scores from Summary Reports 315
Chapter 10: Historical Comparisons **317**
Base Year Comparisons **317**
Examinee Performance **317**
Test Characteristics **317**
Appendix 10.A—Historical Comparisons Tables **319**
Appendix 10.B—Historical Comparisons Tables **321**

Tables

Table 2.1 Scale Score Ranges for Performance Levels 16
Table 2.D.1 Accommodation Summary for RLA, Grades Two and Three 26
Table 2.D.2 Accommodation Summary for RLA, Grades Four and Five 33
Table 2.D.3 Accommodation Summary for RLA, Grades Six and Seven 40
Table 2.D.4 Accommodation Summary for RLA, Grades Eight and Nine 47
Table 2.D.5 Accommodation Summary for RLA, Grades Ten and Eleven 54
Table 2.D.6 Accommodation Summary for Mathematics, Grades Two and Three 61
Table 2.D.7 Accommodation Summary for Mathematics, Grades Four and Five 69
Table 2.D.8 Accommodation Summary for Mathematics, Grades Six and Seven 77
Table 2.D.9 Accommodation Summary for Algebra I 85
Table 2.D.10 Accommodation Summary for Geometry 93
Table 3.1 Field-test Percentages for the STS 103
Table 3.2 STS ARP Member Qualifications, by Content Area and Total 106
Table 3.3 Summary of Items and Forms Presented in the 2010 STS 109
Table 4.1 Target Statistical Specifications for the STS 114
Table 4.A.1 Summary of 2010 STS Projected Technical Characteristics 117
Table 4.A.2 Summary of 2010 STS Projected Statistical Attributes 117
Table 7.1 Mean and Standard Deviation of Raw and Scale Scores for the STS, Overall Population 159
Table 7.2 Mean and Standard Deviation of Raw and Scale Scores for the STS, Target Population 159
Table 7.3 Mean and Standard Deviation of Raw and Scale Scores for the STS, Optional Population 160
Table 7.4 Percentage of Examinees in Each Performance Level 161
Table 7.5 Subgroup Definitions 162
Table 7.6 Types of STS Reports 163
Table 7.A.1 Distribution of STS Scale Scores for RLA, Grades Two through Seven (Overall Population) 167
Table 7.A.2 Distribution of STS Scale Scores for RLA, Grades Two through Seven (Target Population) 167
Table 7.A.3 Distribution of STS Scale Scores for Mathematics, Grades Two through Seven (Overall Population) 168
Table 7.A.4 Distribution of STS Scale Scores for Mathematics, Grades Two through Seven (Target Population) 168
Table 7.A.5 Distribution of STS Raw Scores for RLA, Grades Eight through Eleven (Overall Population) 169
Table 7.A.6 Distribution of STS Raw Scores for RLA, Grades Eight through Eleven (Target Population) 169
Table 7.A.7 Distribution of STS Raw Scores for Algebra I and Geometry (Overall Population) 169
Table 7.A.8 Distribution of STS Raw Scores for Algebra I and Geometry (Target Population) 170
Table 7.A.9 Distribution of STS Raw Scores for a Grade-Specific Overall Population 170
Table 7.A.10 Distribution of STS Raw Scores for a Grade-Specific Target Population 170
Table 7.B.1 Demographic Summary for RLA, Grade Two (Overall Population) 171
Table 7.B.2 Demographic Summary for RLA, Grade Two (Target Population) 173
Table 7.B.3 Demographic Summary for RLA, Grade Three (Overall Population) 174
Table 7.B.4 Demographic Summary for RLA, Grade Three (Target Population) 175

Table 7.B.5 Demographic Summary for RLA, Grade Four (Overall Population) ... 176
Table 7.B.6 Demographic Summary for RLA, Grade Four (Target Population) ... 177
Table 7.B.7 Demographic Summary for RLA, Grade Five (Overall Population) ... 178
Table 7.B.8 Demographic Summary for RLA, Grade Five (Target Population) ... 179
Table 7.B.9 Demographic Summary for RLA, Grade Six (Overall Population) ... 180
Table 7.B.10 Demographic Summary for RLA, Grade Six (Target Population) ... 181
Table 7.B.11 Demographic Summary for RLA, Grade Seven (Overall Population) ... 182
Table 7.B.12 Demographic Summary for RLA, Grade Seven (Target Population) ... 183
Table 7.B.13 Demographic Summary for RLA, Grade Eight (Overall Population) ... 184
Table 7.B.14 Demographic Summary for RLA, Grade Eight (Target Population) ... 185
Table 7.B.15 Demographic Summary for RLA, Grade Nine (Overall Population) ... 186
Table 7.B.16 Demographic Summary for RLA, Grade Nine (Target Population) ... 187
Table 7.B.17 Demographic Summary for RLA, Grade Ten (Overall Population) ... 188
Table 7.B.18 Demographic Summary for RLA, Grade Ten (Target Population) ... 189
Table 7.B.19 Demographic Summary for RLA, Grade Eleven (Overall Population) ... 190
Table 7.B.20 Demographic Summary for RLA, Grade Eleven (Target Population) ... 191
Table 7.B.21 Demographic Summary for Mathematics, Grade Two (Overall Population) ... 192
Table 7.B.22 Demographic Summary for Mathematics, Grade Two (Target Population) ... 193
Table 7.B.23 Demographic Summary for Mathematics, Grade Three (Overall Population) ... 194
Table 7.B.24 Demographic Summary for Mathematics, Grade Three (Target Population) ... 195
Table 7.B.25 Demographic Summary for Mathematics, Grade Four (Overall Population) ... 196
Table 7.B.26 Demographic Summary for Mathematics, Grade Four (Target Population) ... 197
Table 7.B.27 Demographic Summary for Mathematics, Grade Five (Overall Population) ... 198
Table 7.B.28 Demographic Summary for Mathematics, Grade Five (Target Population) ... 199
Table 7.B.29 Demographic Summary for Mathematics, Grade Six (Overall Population) ... 200
Table 7.B.30 Demographic Summary for Mathematics, Grade Six (Target Population) ... 201
Table 7.B.31 Demographic Summary for Mathematics, Grade Seven (Overall Population) ... 202
Table 7.B.32 Demographic Summary for Mathematics, Grade Seven (Target Population) ... 203
Table 7.B.33 Demographic Summary for Algebra I (Overall Population) ... 204
Table 7.B.34 Demographic Summary for Algebra I (Target Population) ... 206
Table 7.B.35 Demographic Summary for Geometry (Overall Population) ... 208
Table 7.B.36 Demographic Summary for Geometry (Target Population) ... 210
Table 7.C.1 Score Reports Reflecting STS Results ... 212
Table 8.1 Mean and Median Proportion Correct and Point-Biserial Correlation ... 217
Table 8.2 Reliabilities and SEMs for the STS ... 218
Table 8.3 Scale Score CSEM at Performance Level Cut Points ... 220
Table 8.4 Correlations between STS for RLA Tests and CST for ELA Tests ... 226
Table 8.5 Correlations between STS for Mathematics Tests and CST for Mathematics Tests ... 226
Table 8.6 STS Content Area Intercorrelations ... 227
Table 8.7 Evaluation of Common Items between New and Reference Test Forms ... 233
Table 8.A.1 Item-by-item *p*-value and Point-Biserial for RLA ... 238
Table 8.A.2 Item-by-item *p*-value and Point-Biserial for Mathematics ... 240
Table 8.A.3 Item-by-item *p*-value and Point-Biserial for Grade-specific Mathematics ... 242
Table 8.B.1 Subscore Reliabilities and Intercorrelations for RLA ... 244
Table 8.B.2 Subscore Reliabilities and Intercorrelations for Mathematics ... 246
Table 8.B.3 STS Reliabilities and SEMs by Gender ... 248
Table 8.B.4 Reliabilities and SEMs for the STS by Economic Status ... 248
Table 8.B.5 Reliabilities and SEMs for the STS by Special Services ... 249
Table 8.B.6 Reliabilities and SEMs for the STS by Attendance in U.S. Schools ... 249
Table 8.B.7 STS Reliabilities and SEMs by English Learner Program Participation ... 250
Table 8.B.8 Subscore Reliabilities and SEM for RLA by Gender/Economic Status ... 251
Table 8.B.9 Subscore Reliabilities and SEM for Mathematics by Gender/Economic Status ... 253
Table 8.B.10 Subscore Reliabilities and SEM for Grade-specific Tests by Gender/Economic Status ... 254
Table 8.B.11 Subscore Reliabilities and SEM for RLA by Special Services/Attendance in U.S. Schools ... 255
Table 8.B.12 Subscore Reliabilities and SEM for Mathematics by Special Services/Attendance in U.S. Schools ... 257
Table 8.B.13 Subscore Reliabilities and SEM for Grade Specific Tests by Special Services/Attendance in U.S. Schools ... 259
Table 8.B.14 Subscore Reliabilities and SEM for RLA by English Learner Program Participation ... 260
Table 8.B.15 Subscore Reliabilities and SEM for Mathematics by English Learner Program Participation ... 263
Table 8.B.16 Subscore Reliabilities and SEM for Grade Specific Tests by English Learner Program Participation ... 266
Table 8.B.17 Reliability of Classification for RLA, Grade Two ... 267
Table 8.B.18 Reliability of Classification for RLA, Grade Three ... 267
Table 8.B.19 Reliability of Classification for RLA, Grade Four ... 267
Table 8.B.20 Reliability of Classification for RLA, Grade Five ... 268
Table 8.B.21 Reliability of Classification for RLA, Grade Six ... 268

Table 8.B.22 Reliability of Classification for RLA, Grade Seven 268
Table 8.B.23 Reliability of Classification for Mathematics, Grade Two 269
Table 8.B.24 Reliability of Classification for Mathematics, Grade Three 269
Table 8.B.25 Reliability of Classification for Mathematics, Grade Four 269
Table 8.B.26 Reliability of Classification for Mathematics, Grade Five 270
Table 8.B.27 Reliability of Classification for Mathematics, Grade Six 270
Table 8.B.28 Reliability of Classification for Mathematics, Grade Seven 270
Table 8.C.1 STS Content Area Correlations (Female) 271
Table 8.C.2 STS Content Area Correlations (Male) 272
Table 8.C.3 STS Content Area Correlations (Not Economically Disadvantaged) 273
Table 8.C.4 STS Content Area Correlations (Economically Disadvantaged) 274
Table 8.C.5 STS Content Area Correlations (Economic Status unknown) 275
Table 8.C.6 STS Content Area Correlations (In U.S. Schools ≥ 12 Months) 276
Table 8.C.7 STS Content Area Correlations (In U.S. Schools < 12 Months) 277
Table 8.C.8 STS Content Area Correlations (EL in ELD) 278
Table 8.C.9 STS Content Area Correlations (EL in ELD and SDAIE) 279
Table 8.C.10 STS Content Area Correlations (EL in ELD and SDAIE with Primary Language Support) 280
Table 8.C.11 STS Content Area Correlations (EL in ELD and Academic Subjects through Primary Language) 281
Table 8.C.12 STS Content Area Correlations (Other EL Instructional Services) 282
Table 8.C.13 STS Content Area Correlations (None (EL only)) 283
Table 8.C.14 STS Content Area Correlations (Program Participation unknown) 284
Table 8.C.15 STS Content Area Correlations (No Special Education) 285
Table 8.C.16 STS Content Area Correlations (Special Education) 286
Table 8.D.1 IRT Model Data Fit Distribution for RLA 287
Table 8.D.2 IRT Model Data Fit Distribution for Mathematics 287
Table 8.D.3 IRT Model Data Fit Distribution for RLA (field-test items) 287
Table 8.D.4 IRT Model Data Fit Distribution for Mathematics (field-test items) 288
Table 8.D.5 IRT *b*-values for RLA, Grade Two 288
Table 8.D.6 IRT *b*-values for RLA, Grade Three 288
Table 8.D.7 IRT *b*-values for RLA, Grade Four 288
Table 8.D.8 IRT *b*-values for RLA, Grade Five 289
Table 8.D.9 IRT *b*-values for RLA, Grade Six 289
Table 8.D.10 IRT *b*-values for RLA, Grade Seven 289
Table 8.D.11 IRT *b*-values for RLA, Grade Eight 289
Table 8.D.12 IRT *b*-values for RLA, Grade Nine 290
Table 8.D.13 IRT *b*-values for RLA, Grade Ten 290
Table 8.D.14 IRT *b*-values for RLA, Grade Eleven 290
Table 8.D.15 IRT *b*-values for Mathematics, Grade Two 290
Table 8.D.16 IRT *b*-values for Mathematics, Grade Three 291
Table 8.D.17 IRT *b*-values for Mathematics, Grade Four 291
Table 8.D.18 IRT *b*-values for Mathematics, Grade Five 291
Table 8.D.19 IRT *b*-values for Mathematics, Grade Six 291
Table 8.D.20 IRT *b*-values for Mathematics, Grade Seven 292
Table 8.D.21 IRT *b*-values for Algebra I 292
Table 8.D.22 IRT *b*-values for Geometry 292
Table 8.D.23 Distribution of IRT Difficulty (*b*-values) for RLA by Grade 293
Table 8.D.24 Distribution of IRT *b*-values for Mathematics 293
Table 8.D.25 Distribution of IRT *b*-values for RLA (field-test items) 294
Table 8.D.26 Distribution of IRT *b*-values for Mathematics (field-test items) 294
Table 8.D.27 New Conversions for RLA, Grades Two and Three 295
Table 8.D.28 New Conversions for RLA, Grades Four and Five 296
Table 8.D.29 New Conversions for RLA, Grades Six and Seven 297
Table 8.D.30 New Conversions for Mathematics, Grades Two and Three 298
Table 8.D.31 New Conversions for Mathematics, Grades Four and Five 299
Table 8.D.32 New Conversions for Mathematics, Grades Six and Seven 300
Table 8.E.1 Operational Items Exhibiting Significant DIF 301
Table 8.E.2 Field-test Items Exhibiting Significant DIF 301
Table 8.E.3 DIF Classifications for RLA, Grades Two through Four (operational items) 301
Table 8.E.4 DIF Classifications for RLA, Grades Five through Seven (operational items) 301
Table 8.E.5 DIF Classifications for RLA, Grades Eight through Eleven (operational Items) 302
Table 8.E.6 DIF Classifications for Mathematics, Grades Two through Four (operational items) 303
Table 8.E.7 DIF Classifications for Mathematics, Grades Five through Seven (operational items) 303
Table 8.E.8 DIF Classifications for Algebra I and Geometry (operational items) 303
Table 8.E.9 DIF Classifications for RLA, Grades Two through Four (field-test items) 304
Table 8.E.10 DIF Classifications for RLA, Grades Five through Seven (field-test Items) 304

Table 8.E.11 DIF Classifications for RLA, Grades Eight through Eleven (field-test items) 305
Table 8.E.12 DIF Classifications for Mathematics, Grades Two through Four (field-test items) 305
Table 8.E.13 DIF Classifications for Mathematics, Grades Five through Seven (field-test items) 306
Table 8.E.14 DIF Classifications for Algebra I and Geometry (field-test items) 306
Table 10.A.1 Number of Examinees Tested, Scale Score Means and Standard Deviations of STS for Base Year (2009) and 2010 319
Table 10.A.2 Percentage of Proficient and Above and Percentage of Advanced for Base Year (2009) and 2010 319
Table 10.A.3 Observed Score Distributions of the STS for Base Year (2009) and 2010 for RLA 320
Table 10.A.4 Observed Score Distributions of the STS for Base Year (2009) and 2010 for Mathematics 320
Table 10.B.1 Average Proportion-Correct for Operational Test Items for Base Year (2009) and 2010 321
Table 10.B.2 Overall IRT *b*-values for Operational Test Items for Base Year (2009) and 2010 321
Table 10.B.3 Average Point-Biserial Correlation for Operational Test Items for Base Year (2009) and 2010 321
Table 10.B.4 Score Reliabilities (Cronbach's Alpha) and Standard Error of Measurement (SEM) for Base Year (2009) and 2010 321

Figures

Figure 3.1 The ETS Item Development Process for the STAR Program 101
Figure 4.A.1 Plots for Target Information Function and Projected Information for Total Test and Linking Set for RLA 118
Figure 4.A.2 Plots for Target Information Function and Projected Information for Total Test and Linking Set for Mathematics 120
Figure 4.B.1 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Two 122
Figure 4.B.2 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Three 123
Figure 4.B.3 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Four 124
Figure 4.B.4 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Five 125
Figure 4.B.5 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Six 126
Figure 4.B.6 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Seven 127
Figure 4.B.7 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Eight 128
Figure 4.B.8 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Nine 129
Figure 4.B.9 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Ten 130
Figure 4.B.10 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Eleven 131
Figure 4.B.11 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Two 132
Figure 4.B.12 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Three 133
Figure 4.B.13 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Four 134
Figure 4.B.14 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Five 135
Figure 4.B.15 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Six 136
Figure 4.B.16 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Seven 137
Figure 4.B.17 Plots of Target Information Functions and Projected Information for Clusters for Algebra I 138
Figure 4.B.18 Plots of Target Information Functions and Projected Information for Clusters for Geometry 139
Figure 6.1 Bookmark Standard Setting Process for the STS Tests 152
Figure 8.1 Decision Accuracy for Achieving a Performance Level 221
Figure 8.2 Decision Consistency for Achieving a Performance Level 221
Figure 8.3 Items from the 2005 CST for History–Social Science Grade Ten Field-test Calibration 231

Acronyms and Initialisms Used in the *STS Technical Report*

ADA	Americans with Disabilities Act	GENASYS	Generalized Analysis System
AERA	American Educational Research Association	ICC	item characteristic curve
APA	American Psychological Association	IEP	individualized education program
ARP	Assessment Review Panel	IRT	item response theory
API	Academic Performance Index	IT	Information Technology
ASL	American Sign Language	LEA	local education agency
AYP	adequate yearly progress	MH DIF	Mantel-Haenszel DIF
CAHSEE	California High School Exit Examination	MCE	Manually Coded English
CAPA	California Alternate Performance Assessment	NCME	National Council on Measurement in Education
CCR	California *Code of Regulations*	NPS	nonsecure, nonsectarian school
CDE	California Department of Education	NSLP	National School Lunch Program
CDS	county/district/school	OTI	Office of Testing Integrity
CI	confidence interval	*p*-value	item proportion correct
CMA	California Modified Assessment	PSAA	Public School Accountability Act
CSEMs	conditional standard errors of measurement	Pt-Bis	point-biserial correlations
CSTs	California Standards Tests	RACF	Random Access Control Facility
DIF	differential item functioning	RLA	reading/language arts
DFA	*Directions for Administration*	SBE	State Board of Education
DOK	depth of knowledge	SD	standard deviation
DPLT	designated primary language test	SDAIE	specially designed academic instruction in English
DQS	Data Quality Services	SEM	standard error of measurement
EL	English learner	SFTP	secure file transfer protocol
ELA	English–language arts	SGID	School and Grade Identification sheet
ELD	English language development	SKM	score key management
EM	expectation maximization	SPAR	Statewide Pupil Assessment Review
EOC	end of course	STAR	Standardized Testing and Reporting
ESEA	Elementary and Secondary Education Act	STAR TAC	STAR Technical Assistance Center
ETS	Educational Testing Service	STS	Standards-based Tests in Spanish
FIA	final item analyses	WRMSD	weighted root-mean-square differences

Chapter 1: Introduction

Background

In 1997 and 1998, the California State Board of Education (SBE) adopted rigorous content standards in four major content areas: English–language arts (ELA), mathematics, history–social science, and science. These standards are designed to provide state-level input into instruction curricula and serve as a foundation for the state's school accountability programs.

In order to measure and evaluate student achievement of the content standards, the state instituted the Standardized Testing and Reporting (STAR) Program. This program, administered annually, was authorized in 1997 by state law (Senate Bill 376).

During its 2010 administration, the STAR Program had four components:

- California Standards Tests (CSTs), produced for California public schools to assess the California content standards for ELA, mathematics, history–social science, and science in grades two through eleven
- California Modified Assessment (CMA), an assessment of students' achievement of California's content standards for ELA, mathematics, and science, developed for students with individualized education programs (IEPs) who meet the CMA eligibility criteria approved by the SBE[1]
- California Alternate Performance Assessment (CAPA), produced for students with an IEP and who have a significant cognitive disabilities and are not able to take the CSTs with accommodations and/or modifications or the CMA with accommodations
- Standards-based Tests in Spanish (STS), an assessment of students' achievement of California's content standards for Spanish-speaking English learners that is administered as the STAR Program's designated primary language test (DPLT)[2]

Test Purpose

The purpose of the STS program is to permit Spanish-speaking English learners (ELs) to demonstrate achievement of the California content standards in reading/language arts (RLA) and mathematics through a primary language test in Spanish. These content standards, approved by the SBE, describe what students should know and be able to do at each grade level. The STS test results are not part of the accountability system in California.

According to the California *Education Code (EC)* Section 60640 (http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=60001-61000&file=60640-60649) (outside source):

"60640. (f) (1) … pupils with limited English proficiency who are enrolled in any of grades 2 to 11, inclusive, may take a second achievement test in their primary language. Primary language tests administered pursuant to this subdivision and subdivision (g) shall be subject

[1] In 2010, the CMA was administered in ELA in grades three through nine, in grade-level mathematics in grades three through seven, in end-of-course (EOC) Algebra I in grades seven through eleven, and in science in grades five, eight, and ten.

[2] In 2010, the STS was administered in reading/language arts (RLA) in grades two through eleven, in grade-level mathematics in grades two through seven, and in EOC Algebra I in grades seven through eleven and EOC Geometry in grades eight through eleven.

to the requirements of subdivision (a) of Section 60641. These primary language tests shall produce individual pupil scores that are valid and reliable."

Test Content

STS tests are administered in two content areas: RLA and mathematics. The STS RLA tests are administered to students in grades two through eleven and the STS grade-level mathematics tests are administered to students in grades two through seven. In addition, the STS includes two EOC mathematics tests: Algebra I, which is administered to students in grades seven through eleven; and Geometry, which is administered to students in grades eight through eleven. The end-of-course STS tests are designed to address the content standards for courses available at the secondary school level. Students in grade seven who meet the criteria for taking the CST for Algebra I also take the STS for Algebra I instead of the grade-level test.

In 2010, the STS included the following content areas:

- Reading/language arts (grades two through eleven)
- Mathematics (grades two through seven)
- Algebra I (grades seven through eleven)
- Geometry (grades eight through eleven)

Intended Population

The STS are multiple-choice tests that are required for Spanish-speaking English learners in grades two through eleven. Students who take the STS are required to also take the CSTs and/or CMA appropriate to their grade level.

The STS tests are targeted toward Spanish-speaking English learners who have been in school in the United States for less than 12 months or who receive instruction in Spanish. However, all students who are English learners and whose primary language is Spanish are eligible to take the STS. The two distinct STS populations are the "target" and "nontarget/ optional" students. The target population consists of students receiving instruction in Spanish or students who have attended school in the United States for less than 12 months. These are cumulative, not consecutive, months. The optional population consists of students who receive instruction in English and who have attended school in the United States for 12 cumulative months or longer.

The number of examinees taking the grade level STS vary significantly across different grade levels, from approximately 1,000 in grade eleven (RLA) to 14,000 for grade two. Volumes for the EOC STS varied by content, ranging from 600 for Algebra I to 3,000 for Geometry. Over 80 percent of the total test-takers are from the target population.

Parents may submit a written request to have their child exempted from taking any or all parts of the tests within the STAR Program. Only students whose parents submit a written request may be exempted from taking the tests.

Intended Use and Purpose of Test Scores

The results for tests within the STAR Program are used for three primary purposes, described (excerpted from the California *EC* Section 60602 Web page at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=60001-61000&file=60600-60603) (outside source):

"60602. (a) (1) First and foremost, provide information on the academic status and progress of individual pupils to those pupils, their parents, and their teachers. This information should be designed to assist in the improvement of teaching and learning in California public classrooms. The Legislature recognizes that, in addition to statewide assessments that will occur as specified in this chapter, school districts will conduct additional ongoing pupil diagnostic assessment and provide information regarding pupil performance based on those assessments on a regular basis to parents or guardians and schools. The legislature further recognizes that local diagnostic assessment is a primary mechanism through which academic strengths and weaknesses are identified."

"60602. (a) (4) Provide information to pupils, parents or guardians, teachers, schools, and school districts on a timely basis so that the information can be used to further the development of the pupil and to improve the educational program."

"60602. (c) It is the intent of the Legislature that parents, classroom teachers, other educators, governing board members of school districts, and the public be involved, in an active and ongoing basis, in the design and implementation of the statewide pupil assessment program and the development of assessment instruments."

"60602. (d) It is the intent of the Legislature, insofar as is practically feasible and following the completion of annual testing, that the content, test structure, and test items in the assessments that are part of the Standardized Testing and Reporting Program become open and transparent to teachers, parents, and pupils, to assist all the stakeholders in working together to demonstrate improvement in pupil academic achievement. A planned change in annual test content, format, or design, should be made available to educators and the public well before the beginning of the school year in which the change will be implemented."

In addition, STAR Program assessments (except for the STS) are used to provide data for state and federal accountability purposes.

Testing Window

The STS is administered at different times, depending on the progression of the school year within each particular school district. Specifically, schools must administer the CSTs, the CMA, the CAPA, and the STS within a 21-day window which begins 10 days before and ends 10 days after the day on which 85 percent of the instructional year is completed. School districts may use all or any part of the 21 days for testing but are encouraged to schedule testing over no more than a 10- to 15-day period (California *Code of Regulations [CCR], Title 5,* Education, Division 1, Chapter 2, Subchapter 3.75, Article 2, § 855; in the California Department of Education (CDE) Web document at http://www.cde.ca.gov/ta/tg/sr/starregs0207cln.doc).

Significant Developments in 2010

New Cut Scores and Score Scales

In 2010, scale scores and performance levels were reported for the first time for the STS RLA and mathematics tests in grades five through seven. Before 2010, only percent correct scores were reported for these grades. Scale scores and performance levels will be reported for grades eight through eleven in 2012.

Cluster Scores Reported

In 2010, cluster scores were reported for the first time for the STS RLA tests for grades eight through eleven and mathematics EOC tests for Algebra I, and Geometry. Before 2010, only percent correct scores at the test level were reported.

Number of Test Items

In 2010, full-length operational test forms[3] were administered for the first time for the STS for RLA in grades eight through eleven and Algebra I in grades seven through eleven. Before 2010, a short form with 40 operational items was administered for these tests.

Changes to the STAR Contract as Required by Legislated Budget Expenditure Activities

In September 2009, the SBE and the CDE approved amendments to the contract in order to meet legislative budgetary requirements under the Assembly Bill 1 of the 2009–10 Fourth Extraordinary Session (ABX4 1) (Chapter 1, Statutes of 2009) and Bill 1 of the 2009–10 Third Extraordinary Session (SBX3 1) (Chapter 1, Statutes of 2009), Section (SEC) 12.42 to maximize contract savings during the California budget crisis. As part of the contract amendments, the following changes were made for the 2010 test administration that impacted the STS:

- **Reduction in the number of reviews by Assessment Review Panels (ARPs)—**As part of the contract amendment, formal ARP meetings for data reviews, differential item function (DIF) reviews, and forms reviews were eliminated. The ARP meetings for new item reviews continue to be held.
- **Elimination of updates and the distribution of the administration videos and DVDs—**The annual updates to the test administration and CAPA training videos were eliminated. The production and distribution of the DVDs containing these videos were also eliminated. The training videos produced for the 2009 administration were made available to district STAR coordinators and test administrators on the STAR Web site at http://www.startest.org. Documents listing test administration updates for the 2010 administration were also made available on that Web site. District STAR coordinators and test administrators had the option to view the videos directly from the Web site or download the videos to their local computers.
- **Reduction in the number of Pre-Test and Post-Test Training Workshops—**The overall number of Pre-Test Training Workshops was reduced from 11 workshops in 2009 to 3 workshops in 2010. One Pre-Test Workshop was held in Northern California (Sacramento County), another in Southern California (Ventura County), and a third was conducted via Webcast. The archive of the Webcast was made available for later viewing on the San Diego County Office of Education's Web site. The number of Post-Test Workshops was reduced from five in-person workshops to one Webcast. There appeared to be no significant negative impact from the reduction of the workshops on the test administration process.
- **Reduction in the weight of paper used to print test materials—**The weight of the paper used to print the nonscannable test booklets, manuals, and *Directions for Administration (DFAs)* were reduced to a lighter weight, which reduced paper and shipping costs. There appeared to be no impact to the test administration process.

[3] A full-length operational test form consists of 75 items for RLA in grades eight through eleven and 65 items for Algebra I.

- **Elimination of the security audits—**The activities to train auditors and conduct site visits before, during, and after testing to randomly selected school districts were eliminated. Reviews of testing irregularities were conducted by the CDE. ETS continued to conduct investigations of security breaches at the CDE's direction.
- **Elimination of the mark discrimination analysis—**The mark discrimination analysis was eliminated beginning with the 2009 administration.

Limitations of the Assessment

Score Interpretation

A school district may use STS results to help make decisions about student placement, promotion, retention, or other considerations related to student achievement. However, it is important to remember that a single test can provide only limited information. Other relevant information should be considered as well. It is advisable for parents to evaluate their child's strengths and weaknesses in the relevant topics by reviewing classroom work and progress reports in addition to the child's STS test results (CDE, 2009). It is also important to note that student scores in a content area contain measurement error and could vary if students were retested.

Out-of-Level Testing

Testing below a student's grade is not allowed for the STS or any test in the STAR Program; all students are required to take the test for the grade in which they are enrolled. Districts are advised to review all IEPs to ensure that any provision for testing below a student's grade level has been removed.

Score Comparison

When comparing results for the STS in grades two through seven, the user is limited to comparisons within the same subject and grade. For example, it is appropriate to compare scores obtained by students and/or schools on the 2010 grade three mathematics tests; it would not be appropriate to compare scores obtained on the grade three mathematics test with those obtained on the grade four mathematics test. The reviewer may compare results for the same content area and grade, within a school, between schools, or between a school and its district, its county, or the state within the same year, and if based on the same score scale, across years. Comparisons between scores obtained in different grades or content areas should be avoided.

In 2010, the results for the STS for RLA in grades eight through eleven and the mathematics EOC tests in Algebra I in grades seven through eleven and Geometry in grades eight through eleven are reported as the percent-correct scores, which are the number-correct scores divided by the total number of items on the test. When comparing percent-correct score results, the user is limited to comparisons within the same subject, grade and year.

Finally, it is inappropriate to conduct any type of score comparisons (including raw score, percent correct, scale score, or performance level comparisons) between CST and STS tests. Although the STS shares the same test blueprint with the CSTs, they follow an independent procedure for test development and establishment of performance levels; therefore, comparison between STS and CST results is discouraged.

Groups and Organizations Involved with the STAR Program

State Board of Education

The SBE is the state education agency that sets education policy for kindergarten through grade twelve in the areas of standards, instructional materials, assessment, and accountability. The SBE adopts textbooks for kindergarten through grade eight, adopts regulations to implement legislation, and has the authority to grant waivers of the *EC*.

The SBE is responsible for assuring the compliance with programs that meet the requirement of the federal Elementary and Secondary Education Act (ESEA) and the state's Public School Accountability Act (PSAA) and for reporting results in terms of the adequate yearly progress (AYP) and Academic Performance Index (API), which measure the academic performance and growth of schools on a variety of academic measures.

California Department of Education

The CDE oversees California's public school system, which is responsible for the education of more than 7,000,000 children and young adults in more than 9,000 schools. The CDE's mission is to provide leadership, assistance, oversight, and resources so that every child in California has access to a competent and effective educational system. As part of its mission to promote district and school accountability for improving student achievement as defined by the SBE, the CDE oversees the development and administration of the STAR Program.

Contractors

Educational Testing Service

The CDE and the SBE contracted with Educational Testing Service (ETS) to develop and administer the STAR Program. As the prime contractor, ETS has overall responsibility for working with the CDE to implement and maintain an effective assessment system and to coordinate the work of ETS and its subcontractor Pearson. Activities directly conducted by ETS include the following:

- Overall management of the program activities;
- Development of all test items;
- Construction and production of test booklets and related test materials;
- Support and training provided to counties, school districts, and independently testing charter schools;
- Implementation and maintenance of the STAR Management System for orders of materials and pre-identification services; and
- Completion of all psychometric activities.

Pearson

ETS also monitors and manages the work of Pearson, subcontractor to ETS for the STAR Program. Activities conducted by Pearson include the following:

- Production of all scannable test materials;
- Packaging, distribution, and collection of testing materials to school districts and independently testing charter schools;
- Scanning and scoring of all responses, including performance scoring of the writing responses; and
- Production of all score reports and data files of test results.

Overview of the Technical Report

This technical report addresses the characteristics of the STS administered in spring 2010. The technical report contains nine additional chapters as follows:

- Chapter 2 presents a conceptual overview of processes involved in a testing cycle for an STS test. This includes test construction, test administration, generation of test scores, and dissemination of score reports. Information about the distributions of scores aggregated by subgroups based on demographics and the use of special services is also included in this chapter. Also included are the references to various chapters that detail the processes briefly discussed in this chapter.
- Chapter 3 describes the procedures followed during the development of valid STS items; the chapter explains the process of field-testing new items and the review of items by contractors and content experts.
- Chapter 4 details the content and psychometric criteria applicable to the construction of STS tests for 2010.
- Chapter 5 presents the processes involved in the actual administration of the 2010 STS tests with an emphasis on efforts made to ensure standardization of the tests. It also includes a detailed section that describes the procedures that were followed by ETS to ensure test security.
- Chapter 6 describes the standard-setting process conducted for the STS for RLA and mathematics in grades two through seven.
- Chapter 7 details the types of scores and score reports that are produced at the end of each administration of the STS.
- Chapter 8 summarizes the results of the test and item-level analyses performed during the spring 2010 administration of the tests. These include the classical item analyses; the reliability analyses that include assessments of test reliability and the consistency and accuracy of the STS proficiency-level classifications, and the procedures designed to ensure the validity of STS score uses and interpretations. Also discussed in this chapter are the item response theory (IRT) and model-fit analyses, as well as documentation of the equating along with STS conversion tables. Finally, the chapter summarizes the results of analyses investigating the DIF for each STS.
- Chapter 9 highlights the importance of controlling and maintaining the quality of the STS.
- Chapter 10 presents historical comparisons of various item- and test-level results for the spring 2010 administration and for the 2009 base year for RLA and mathematics in grades two through four.

Each chapter contains summary tables in the body of the text. However, extended appendixes that give more detailed information are provided at the end of the relevant chapters.

Reference

California Department of Education. (2009). *Interpreting 2009 STAR program test results.* Sacramento, CA. http://www.cde.ca.gov/ta/tg/sr/documents/star09intrprslt.pdf.

Chapter 2: An Overview of STS Processes

This chapter provides an overview of the processes involved in a typical test development and administration cycle for an STS test; these processes are similar to those undertaken to develop the CSTs. Also described are the specifications maintained by ETS to carry out each of those processes. The chapter is organized to provide a brief description of each process followed by a summary of the associated specifications. More details about the specifications and the analyses associated with each process are described in other chapters that are referenced in the sections that follow.

Item Development

Item Formats

All tests of the STS contain four-option multiple-choice items.

Item Development Specifications

The STS items are developed to measure California content standards and designed to conform to principles of item writing defined by ETS (ETS, 2002). ETS maintains item development specifications for each STS and has developed an item utilization plan to guide the development of the items for each content area. Item writing emphasis is determined in consultation with the CDE.

The item specifications describe the characteristics of the items that should be written to measure each content standard. The item specifications help ensure that the items in the STS measure the content standards in the same way. To do this, the item specifications provide detailed information to item writers that are developing items for the STS.

The items selected for each STS undergo an extensive item review process that is designed to provide the best standards-based tests possible. Details about the item development specifications, the item review process, the item utilization plan, and the rules for arranging items on the forms are presented in Chapter 3, starting on page 101.

Item Banking

The newly developed items are placed in the item bank along with the corresponding information obtained at the review sessions. Items that are accepted by the content experts are updated to a “field-test ready” status; items that are rejected are updated to a “rejected before use” status. ETS then delivers the items to the CDE by means of a delivery of the California electronic item bank.

Items are field tested to obtain information about item performance and item statistics that can be used to assemble operational forms. ETS then prepares the items and the associated statistics for review by the content experts and various external review organizations such as the Assessment Review Panels (ARPs), which are described starting on page 105; and the Statewide Pupil Assessment Review (SPAR) panel, described starting on page 108. Subsequent updates to item content and statistics are based on operational use of the items. However, only the latest content of the item is retained in the bank at any time, along with the administration data from every administration that has included the item.

Further details on item banking are presented on page 110 in Chapter 3.

Item Refresh Rate

The item utilization plan assumes that each year, a certain percentage of items on an operational form are refreshed; these items remain in the item bank for future use. The refresh rate for each STS test is presented on page 103 in Chapter 3.

Test Assembly

Test Length

The number of items in each STS and the estimated time to complete a test is presented in Appendix 2.A on page 19. There are 71 items on the STS tests for RLA in grades two and three and 81 items in grades four through eleven. The STS grade-level and end-of-course mathematics tests consist of 71 items. The considerations in deciding upon the test length are described on page 112 in Chapter 4.

Test Blueprint

ETS selects all STS test items to conform to the SBE-approved California content standards and test blueprints. The test blueprints for the STS can be found on the CDE STAR STS Blueprints Web page at http://www.cde.ca.gov/ta/tg/sr/stsblueprints.asp.

Although the test blueprints call for the number of items at the individual standard level, scores for the STS items in grades two through eleven are grouped into subcontent areas, referred to as “reporting clusters.”

For each STS reporting cluster, the percentage of questions correctly answered is reported on a student’s score report. A description of the STS reporting clusters for grades two through eleven and the standards that comprise each cluster are provided in Appendix 2.B, which starts on page 20.

Content Rules and Item Selection

When developing a new test form for a given grade and content area, test developers follow a number of rules. First and foremost, they select items that meet the blueprint for that grade level and content area. Using an electronic item bank, assessment specialists begin by identifying a number of linking items. These are items that appeared in the previous year’s operational administration and they are used to equate the test forms administered each year. In 2010, linking items were used to equate grade-level STS tests in grades two through seven. (No equating process was implemented for the STS for RLA in grades eight through eleven or the EOC mathematics STS, which did not report scale scores in 2010.) After the linking items are approved, assessment specialists populate the rest of the test form.

Another consideration is the difficulty of each item. Test developers strive to ensure that there are some easy and some hard items and that there are a number of items in the middle range of difficulty. The detailed rules are presented in Chapter 4, which begins on page 112.

Psychometric Criteria

The staff also assesses the projected test characteristics during the preliminary review of the assembled forms. The test targets used for the 2010 test development and the projected characteristics of the assembled forms are presented on page 114 in Chapter 4.

The items in test forms are organized and sequenced differently according to the requirements of the content area. Further details on the arrangement of items during test assembly are also described on page 115 in Chapter 4.

Test Administration

It is of the utmost priority to ETS to administer the STS tests in an appropriate, consistent, confidential, and standardized manner.

Test Security and Confidentiality

All tests within the STAR Program are secure documents. For the STS administration, every person having access to test materials maintains the security and confidentiality of the tests. ETS's Code of Ethics requires that all test information, including tangible materials (such as test booklets, test questions, test results), confidential files, processes, and activities are kept secure. To ensure security for all the tests that ETS develops or handles, ETS maintains an Office of Testing Integrity (OTI). A detailed description of the OTI and its mission is presented in Chapter 5 on page 140.

In its pursuit of enforcing secure practices, ETS and the OTI strive to safeguard the various processes involved in a test development and administration cycle. Those processes are listed below. The practices related to each process are discussed in detail in Chapter 5, starting on page 140.

- Test development
- Item and data review
- Item banking
- Transfer of forms and items to the CDE
- Security of electronic files using a firewall
- Printing and publishing
- Test administration
- Test delivery
- Processing and scoring
- Data management
- Transfer of scores via secure data exchange
- Statistical analysis
- Reporting and posting results
- Student confidentiality
- Student test results

Procedures to Maintain Standardization

The STS processes are designed so that the tests are administered and scored in a standardized manner. ETS takes all necessary measures to ensure the standardization of the STS tests, as described in this section.

Test Administrators

The STS tests are administered in conjunction with the other tests that comprise the STAR Program. ETS employs personnel who facilitate various processes involved in the standardization of an administration cycle.

Staff at school districts who are central to the processes include district STAR coordinators, test examiners, proctors, and scribes. The responsibilities of each of the staff members are included in the *STAR District and Test Site Coordinator Manua*l (CDE, 2010); see page 146 in Chapter 5 for more information.

Test Directions

ETS maintains a series of instructions compiled in detailed manuals that are available to the test administrators. Such documents include, but are not limited to, the following:

***Directions for Administration* (*DFA*s)—**Manuals used by test examiners to administer the STS tests to students to be followed exactly so that all students have an equal opportunity to demonstrate their academic achievement (See page 146 for more information.)

***District and Test Site Coordinator Manual*—**Test administration procedures for district STAR coordinators and test site coordinators (See page 146 for more information.)

STAR Management System manuals—Instructions for the Web-based modules that allow district STAR coordinators to set up test administrations, order materials, and submit and correct student Pre-ID data; every module has its own user manual with detailed instructions on how to use the STAR Management System (See page 146 for more information.)

Test Variations, Accommodations, and Modifications

All public school students participate in the STAR Program, including students with disabilities and English learners. Most students with disabilities take the STS tests under standard conditions. However, some students with disabilities may need assistance when taking the STS tests. This assistance takes the form of test variations, accommodations, or modifications. All eligible students may have test variations, if these variations are regularly used in the classroom. They also must be allowed to use the accommodations and modifications that are specified in each student's IEP or Section 504 plan. These accommodations and/or modifications must match the one(s) used for classroom work throughout the year.

Accommodations change the way the test is given but do not change what is tested. Modifications fundamentally change what is being tested and may interfere with the construct being measured. The purpose of test variations, accommodations, and modifications is to enable the students to take the STS tests, not to give them an advantage over other students or to artificially inflate their scores. Scores for students tested with modifications are counted as far below basic on the STAR summary reports for STS tests that report performance levels, regardless of the scale scores obtained. Test variations, accommodations, and modifications for the statewide assessments, including the STAR Program, are defined as follows:

Category 1: Test Variations—Eligible students may have test variations if regularly used in the classroom. For example, students may take a test in a group smaller than the regular testing group or take the test individually. They also may use special lighting, adaptive furniture, or magnifying equipment.

Category 2: Accommodations—Eligible students are permitted to take the STS tests with accommodations if specified in their IEP or Section 504 plan for use on the STS tests or for use during classroom instruction and assessment. Examples of accommodations are large-print or braille versions of the STS tests or providing more than one day for a test designed for a single sitting.

Category 3: Modifications—Eligible students are permitted to take the STS tests with modifications if specified in the student's IEP or Section 504 plan for use on the STS tests or for use during classroom instruction and assessment. Examples of modifications

include reading the test aloud to a student taking the RLA test or the allowing the use of a calculator by a student to perform computations on the mathematics test.

Appendix 2.C on page 24 presents the 2010 Matrix of Test Variations, Accommodations, and Modifications for Administration of California Statewide Assessments. The matrix provides a complete list of the variations, accommodations, and modifications that were allowed for the STS in 2010.

Accommodation Summaries

The percentage of students using various testing accommodations during the 2010 administration of all 18 STS tests is presented in Appendix 2.D, which starts on page 26. The data are organized into five sections within each table. The first section presents the percentages of students using each accommodation in the total testing population. The results for target and non-target STS students are presented in the second section, and the results for students in special education and not in special education are presented in the third section. The fourth section presents the results for students in U.S. schools for less than 12 months and students in U.S. schools for 12 months or more. The final section presents the results for various categories based on English learner (EL) program participation. The information within each section is presented for the relevant grades.

Most accommodations are common across the STS tests, although additional accommodations are included for the STS mathematics tests and involved having test questions read aloud.

Scores

The STS total test raw scores equal the sum of examinees' scores on the multiple-choice test items.

For grade-level STS in grades two through seven, total raw scores are converted to three-digit scale scores using the equating process described starting on page 14. STS results are reported through the use of these scale scores; the scores range from 150 to 600 for each test. Also reported are performance levels obtained by categorizing the scale score into one of the following levels: far below basic, below basic, basic, proficient, or advanced. The state's target is for all students to score at the proficient or advanced level.

In addition to scale scores for the total content-area test, STS performance on various reporting clusters is also reported for grades two through seven on grade-level tests. The subscore or reporting cluster score is obtained by summing an examinee's scores on items in each reporting cluster. That information is reported in terms of a percent correct score.

Detailed descriptions of STS scores are described in Chapter 7, which starts on page 155.

Aggregation Procedures

In order to provide meaningful results to the stakeholders, STS scores for a given grade and content area are aggregated at the school, independently testing charter school, district, county, and state levels. The aggregated scores are generated for both individual scores and group scores. The following sections present the types of aggregation performed on individual and group STS scores.

Individual Scores

Table 7.1 through Table 7.3 starting on page 159 in Chapter 7 offer summary statistics for individual scores, describing overall student performance on each STS test for the total, target, and non-target STS student populations respectively. Included in the tables are the

means and standard deviations (SDs) of student scores expressed in terms of both raw scores and scale scores, and the raw score means and standard deviations expressed as percentages of the total raw score points in each test. Table 7.4 on page 161 presents the percentages of STS target students in each performance level.

Group Scores

Statistics summarizing STS student performance by content area and grade for selected groups of students are provided in Table 7.B.1 through Table 7.B.36 starting on page 171 in Appendix 7.B for overall and target STS students respectively. In these tables, students are grouped by demographic characteristics including gender, country of origin, economic status, length of enrollment in U.S. schools, EL program participation, and need for special education services. The tables show the numbers of students tested in each group, scale score means and standard deviations, and percent in a performance level for grades two through seven, raw score means and standard deviations for grades eight through eleven, as well as mean percent correct scores for each reporting cluster for each demographic group for grades two through eleven. Table 7.5 on page 162 provides definitions for the demographic groups included in the tables.

Equating

The STS tests in grades two through seven are equated to a reference form using a common-item nonequivalent groups design and methods based on item response theory (Hambleton & Swaminathan, 1985). The “base” or “reference” calibrations were established by calibrating samples of data from a specific administration. Doing so established a scale to which subsequent item calibrations could be linked. The 2010 STS items on the grade-level tests in grades two through seven were placed on the reference scale using a set of linking items selected from the 2009 forms and re-administered in 2010.

The procedure used for equating the grade-level STS tests in grades two through seven involves three steps: calibration, scaling, and scoring table production.

For the STS for RLA in grades eight through eleven and the EOC mathematics STS, no scale scores were reported in 2010 and no equating was conducted for these tests.

Calibration

To obtain item calibrations, a proprietary version of the PARSCALE program is used. The estimation process is constrained by setting a common discrimination value for all items equal to 1.0 / 1.7 (or 0.588) and by setting the lower asymptote for all multiple-choice items to zero. The resulting estimation is equivalent to the Rasch model for multiple-choice items. This approach is in keeping with the current CST equating and scaling procedures. For the purpose of equating, only the operational items are calibrated for each test.

The PARSCALE calibrations are run in two stages, following procedures used with other ETS testing programs. In the first stage, estimation imposes normal constraints on the updated prior ability distribution. The estimates resulting from this first stage are used as starting values for a second PARSCALE run, in which the subject prior distribution is updated after each expectation maximization (EM) cycle with no constraints. For both stages, the metric of the scale is controlled by the constant discrimination parameters.

Scaling

Calibrations of the 2010 items for grade-level tests in grades two through seven were linked to the previously obtained reference scale estimates using linking items and the Stocking and Lord (1983) procedure. In the case of the one-parameter model calibrations, this

procedure is equivalent to setting the mean of the new item parameter estimates for the linking set equal to the mean of the previously scaled estimates. The linking set is a collection of items in a current test form that also appeared in last year's form and was scaled at that time.

The linking process was carried out iteratively by inspecting differences between the transformed new and old (reference) estimates for the linking items and removing items for which the item difficulty estimates changed significantly. Items with large weighted root-mean-square differences (WRMSD) between item characteristic curves (ICCs) based on the old and new difficulty estimates were removed from the linking set. The differences were calculated using the following formula:

$$WRMSD = \sqrt{\sum_{j=1}^{n_g} w_j \left[P_n\left(\theta_j\right) - P_r\left(\theta_j\right) \right]^2} \tag{2.1}$$

where,

abilities are grouped into intervals of 0.005 ranging from -3.0 to 3.0,

n_g is the number of intervals/groups,

θ_j is the mean of the ability estimates that fall in interval j,

w_j is a weight equal to the proportion of estimated abilities from the transformed new form in interval j,

$P_n(\theta_j)$ is the probability of correct response for the transformed new form item at ability θ_j, and

$P_r(\theta_j)$ is the probability of correct response for the old (reference) form item at ability θ_j.

Based on established procedures, any linking items for which the WRMSD was greater than 0.125 were eliminated. This criterion has produced reasonable results over time in similar equating work done with other testing programs at ETS.

Scoring Table Production

Once the new item calibrations for each test are transformed to the base scale, IRT procedures are used to transform the new form number-correct scores to their corresponding ability (theta). The ability estimates can then be transformed to scale scores through linear transformation.

The procedure is based on the relationship between raw scores and ability (theta). For the STS test consisting entirely of *n* multiple-choice items, this is the well-known relationship defined in Lord (1980; equations 4–5):

$$\xi(\theta) = \sum_{i=1}^{n} P_i(\theta) \tag{2.2}$$

where,

$P_i(\theta)$ is the probability of a correct response to item *i* at ability θ, and

$\xi(\theta)$ is the corresponding true score.

For each integer score ξ_n on the new form, the procedure first solves for the corresponding ability estimate using equation (2.2). The ability estimates are then expressed in the reporting scale metric by applying linear transformation with the appropriate slope and intercept using the equation below:

$$ScaleScore = Intercept + Slope \times \hat{\theta} \tag{2.3}$$

The slope and intercept for each STS were developed from the base forms, which are the 2008 operational forms for grades two through four and the 2009 operational forms for grades five through seven grade-level tests, using the equations below:

$$\text{slope} = \frac{350 - 300}{\hat{\theta}_{proficient} - \hat{\theta}_{basic}} \tag{2.4}$$

$$\text{intercept} = 350 - \hat{\theta}_{proficient} \times \left(\frac{350 - 300}{\hat{\theta}_{proficient} - \hat{\theta}_{basic}} \right) \tag{2.5}$$

where,

$\hat{\theta}$ represents student ability

$\hat{\theta}_{pro}$ represents theta cut-score for proficient on the base scale

$\hat{\theta}_{bas}$ represents theta cut-score for basic on the base scale

Complete raw-to-scale score conversion tables for the grade-level 2010 STS tests in grades two through seven are presented in Table 8.D.27 through Table 8.D.32 in Appendix 8.D, starting on page 295. The raw scores and corresponding transformed scale scores are listed in those tables. For all of these STS tests, scale scores were adjusted at both ends of the scale so that the minimum reported scale score was 150 and the maximum reported scale score was 600. The scale score ranges defining the various performance levels are presented in Table 2.1, on the next page.

Table 2.1 Scale Score Ranges for Performance Levels

Content Area	STS*	Far Below Basic	Below Basic	Basic	Proficient	Advanced
Reading/ Language Arts	**2**	150 – 241	242 – 299	300 – 349	350 – 385	386 – 600
	3	150 – 250	251 – 299	300 – 349	350 – 392	393 – 600
	4	150 – 255	256 – 299	300 – 349	350 – 386	387 – 600
	5	150 – 270	271 – 299	300 – 349	350 – 400	401 – 600
	6	150 – 259	260 – 299	300 – 349	350 – 400	401 – 600
	7	150 – 255	256 – 299	300 – 349	350 – 398	399 – 600
Mathematics	**2**	150 – 216	217 – 299	300 – 349	350 – 416	417 – 600
	3	150 – 228	229 – 299	300 – 349	350 – 420	421 – 600
	4	150 – 242	243 – 299	300 – 349	350 – 419	420 – 600
	5	150 – 244	245 – 299	300 – 349	350 – 415	416 – 600
	6	150 – 250	251 – 299	300 – 349	350 – 402	403 – 600
	7	150 – 256	257 – 299	300 – 349	350 – 414	415 – 600

* Numbers indicate grade-level tests.

Equating Samples

All target STS students with valid results on the STS tests are included in the equating samples.

Equating the Braille Versions of the STS Tests

In 2010, all STS items could be translated into braille and therefore, no special braille form equating was needed.

References

California Department of Education. (2010). *2010 STAR district and test site coordinator manual*. Sacramento, CA. http://www.startest.org/pdfs/STAR.coord_man.2010.pdf.

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Hambleton, R. K. and Swaminathan, H. (1985). *Item response theory: principles and applications*. Boston, MA: Kluwer-Nijhoff.

Lord, F. M. (1980). *Applications of item response theory to practical testing problems.* New Jersey: Lawrence Erlbaum.

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Appendix 2.A—STS Item and Estimated Time Chart

Standards-based Tests in Spanish	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grade 9		Grade 10		Grade 11	
	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time	Total No. of Items	Time
Reading/Language Arts		**150**		**150**		**170**		**170**		**170**		**170**		**170**		**170**		**170**		**170**
Part 1	71	50	71	50	81	85	81	85	81	85	81	85	81	85	81	85	81	85	81	85
Part 2		50		50		85		85		85		85		85		85		85		85
Part 3–only grades 2 & 3		50		50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mathematics		**150**		**150**		**150**		**150**		**150**		**150**		**180**		**180**		**180**		**180**
Part 1	71	50	71	50	71	75	71	75	71	75	71[1]	75	71[2]	90	71[2]	90	71[2]	90	71[2]	90
Part 2		50		50		75		75		75		75		90		90		90		90
Part 3–only grades 2 & 3		50		50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1] Students in grade seven taking a mathematics STS will take either the STS for Mathematics (Grade 7) or the STS for Algebra I. Item numbers and times are for the STS for Mathematics (Grade 7). Follow the item and estimated time guidelines for the STS for Mathematics for grades eight through eleven to estimate test administration time for students in grade seven taking the STS for Algebra I.

[2] Eligible students in grades eight through eleven may take the STS for Algebra I or Geometry.

Appendix 2.B—Reporting Clusters

Reading/Language Arts

Reading/Language Arts Standards Test (Grade Two)	
Reading	
Word Analysis and Vocabulary Development	22 items
Reading Comprehension	15 items
Literary Response and Analysis	6 items
Writing	
Written Conventions	14 items
Writing Strategies	8 items
Reading/Language Arts Standards Test (Grade Three)	
Reading	
Word Analysis and Vocabulary Development	20 items
Reading Comprehension	15 items
Literary Response and Analysis	8 items
Writing	
Written Conventions	13 items
Writing Strategies	9 items
Reading/Language Arts Standards Test (Grade Four)	
Reading	
Word Analysis and Vocabulary Development	18 items
Reading Comprehension	15 items
Literary Response and Analysis	9 items
Writing	
Written Conventions	18 items
Writing Strategies	15 items
Reading/Language Arts Standards Test (Grade Five)	
Reading	
Word Analysis and Vocabulary Development	14 items
Reading Comprehension	16 items
Literary Response and Analysis	12 items
Writing	
Written Conventions	17 items
Writing Strategies	16 items
Reading/Language Arts Standards Test (Grade Six)	
Reading	
Word Analysis and Vocabulary Development	13 items
Reading Comprehension	17 items
Literary Response and Analysis	12 items
Writing	
Written Conventions	16 items
Writing Strategies	17 items

Reading/Language Arts Standards Test (Grade Seven)

Reading	
Word Analysis and Vocabulary Development	11 items
Reading Comprehension	18 items
Literary Response and Analysis	13 items
Writing	
Written Conventions	16 items
Writing Strategies	17 items

Reading/Language Arts Standards Test (Grade Eight)

Reading	
Word Analysis and Vocabulary Development	9 items
Reading Comprehension	18 items
Literary Response and Analysis	15 items
Writing	
Written Conventions	16 items
Writing Strategies	17 items

Reading/Language Arts Standards Test (Grade Nine)

Reading	
Word Analysis and Vocabulary Development	8 items
Reading Comprehension	18 items
Literary Response and Analysis	16 items
Writing	
Written Conventions	13 items
Writing Strategies	20 items

Reading/Language Arts Standards Test (Grade Ten)

Reading	
Word Analysis and Vocabulary Development	8 items
Reading Comprehension	18 items
Literary Response and Analysis	16 items
Writing	
Written Conventions	13 items
Writing Strategies	20 items

Reading/Language Arts Standards Test (Grade Eleven)

Reading	
Word Analysis and Vocabulary Development	8 items
Reading Comprehension	19 items
Literary Response and Analysis	17 items
Writing	
Written Conventions	9 items
Writing Strategies	22 items

Mathematics

Mathematics Standards Test (Grade Two)	
Number Sense	
Place value, addition, and subtraction	15 items
Multiplication, division, and fractions	23 items
Algebra and Functions	6 items
Measurement and Geometry	14 items
Statistics, Data Analysis, and Probability	7 items
Mathematics Standards Test (Grade Three)	
Number Sense	
Place value, fractions, and decimals	16 items
Addition, subtraction, multiplication, division	16 items
Algebra and Functions	12 items
Measurement and Geometry	16 items
Statistics, Data Analysis, and Probability	5 items
Mathematics Standards Test (Grade Four)	
Number Sense	
Decimals, fractions, and negative numbers	17 items
Operations and factoring	14 items
Algebra and Functions	18 items
Measurement and Geometry	12 items
Statistics, Data Analysis, and Probability	4 items
Mathematics Standards Test (Grade Five)	
Number Sense	
Estimation, percents, and factoring	12 items
Operations with fractions and decimals	17 items
Algebra and Functions	17 items
Measurement and Geometry	15 items
Statistics, Data Analysis, and Probability	4 items

Mathematics Standards Test (Grade Six)

Number Sense	
Ratios, proportions, percentages, and negative numbers	15 items
Operations with problem solving with fractions	10 items
Algebra and Functions	19 items
Measurement and Geometry	10 items
Statistics, Data Analysis, and Probability	11 items

Mathematics Standards Test (Grade Seven)

Number Sense	
Rational numbers	14 items
Exponents, powers, and roots	8 items
Algebra and Functions	
Quantitative relationships and evaluating expressions	10 items
Multistep problems, graphing, and functions	15 items
Measurement and Geometry	13 items
Statistics, Data Analysis, and Probability	5 items

Algebra I Standards Test

Number Properties, Operations, and Linear Equations	
Standards: 1.0–5.0, 24.1–24.3, and 25.1–25.3	17 items
Graphing and Systems of Linear Equations	
Standards: 6.0–9.0	14 items
Quadratics and Polynomials	
Standards: 10.0, 11.0, 14.0, and 19.0–23.0	21 items
Functions and Rational Expressions	
Standards: 12.0, 13.0, and 15.0–18.0	13 items

(Note: Standards 24.0–25.3 are embedded within the 65 items)

Geometry Standards Test

Logic and Geometric Proofs	
Standards: 1.0–7.0	23 items
Volume and Area Formulas	
Standards: 8.0–11.0	11 items
Angle Relationships, Constructions, and Lines	
Standards: 12.0–17.0	16 items
Trigonometry	
Standards: 18.0–22.0	15 items

Appendix 2.C—2010 Test Variations, Accommodations, and Modifications

(1): Test Variation, (2): Accommodation, (3): Modification	
Test administration directions that are simplified or clarified (does not apply to test questions)	ALL
Student marks in test booklet (other than responses) including highlighting	ALL For grades 2 and 3 marks must be removed to avoid scanning interference or transcribe.
Test students in a small group setting	ALL
Extra time on a test within a testing day	ALL
Test individual student separately, provided that a test examiner directly supervises the student	1
Visual magnifying equipment	1
Audio amplification equipment	1
Noise buffers (e.g., individual carrel or study enclosure)	1
Special lighting or acoustics; special or adaptive furniture	1
Colored overlay, mask, or other means to maintain visual attention	1
Manually Coded English (MCE) or American Sign Language (ASL) to present directions for administration (does not apply to test questions)	1
Student marks responses in test booklet and responses are transferred to a scorable answer document by an employee of the school, district, or nonpublic school	2
Responses dictated [orally, or in MCE or ASL] to a scribe for selected-response items (multiple-choice questions)	2
Assistive device that does not interfere with the independent work of the student on the multiple-choice responses	2
Braille transcriptions provided by the test contractor	2
Large-print versions Test items enlarged if font larger than required on large-print versions	2
Test over more than one day for a test or test part to be administered in a single sitting	2
Supervised breaks within a section of the test	2
Administration of the test at the most beneficial time of day to the student	2
Test administered at home or in hospital by a test examiner	2
Dictionary	3
Test questions read aloud to student	2 Math
	3 RLA
Calculator on the mathematics tests	3

(1): Test Variation, (2): Accommodation, (3): Modification	
Arithmetic table or formulas (not provided) on the mathematics tests	3
Math manipulatives on the mathematics tests	3
Assistive device that interferes with the independent work of the student on the multiple-choice responses	3
Unlisted Accommodation or Modification	Check with CDE prior to use

All = All students may be provided these test variations.

(1): Test Variation = Students may have these testing variations if regularly used in the classroom.

(2): Accommodation = Eligible students shall be permitted to take the examination/test with accommodations if specified in the eligible student's IEP or Section 504 plan for use on the examination, standardized testing, or for use during classroom instruction and assessment.

(3): Modification = For the STAR Program, eligible students shall be permitted to take the tests with modifications if specified in the eligible student's IEP or Section 504 plan.

Appendix 2.D—Accommodation Summary Tables

Note:

1. To improve clarity of tables presented in this section, the columns with total number of students using each service are labeled with the particular grade or test name for which the services were utilized. For example, the column with a heading of "Grade 2" in Table 2.D.1 presents the number of students using various special services on the STS for RLA at grade two. The column with the heading of "Pct. Of Total" in the same table represents the percentage of students using a service, out of the total number of test-takers.
2. The total number of test-takers is the total of students listed under "*Any* Accommodation or Modification" and those listed under "*No* Accommodation or Modification."
3. The sum of the numbers of students across subgroups may not match exactly to the total testing population. For example, the total number of students listed as "in Special Education" who used a certain accommodation and those listed as "Not in Special Education" may not equal the number of all test-takers using the same accommodation. This occurred due to the fact that only valid primary disability codes were chosen to identify those subgroups.

Table 2.D.1 Accommodation Summary for RLA, Grades Two and Three

Accommodation Summary for RLA, Grades Two and Three				
All Students Tested	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	2	0.01%	2	0.02%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.01%	3	0.03%
J: Tested over more than one day	12	0.09%	5	0.05%
K: Had supervised breaks	29	0.21%	26	0.28%
L: Administered at most beneficial time of day	9	0.06%	2	0.02%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	1	0.01%	0	0.00%
W: Used an unlisted modification	2	0.01%	1	0.01%
X: Used an unlisted accommodation	1	0.01%	2	0.02%
Y: Leave blank	0	0.00%	1	0.01%
Z: Examiner read test questions aloud	12	0.09%	6	0.06%
Accommodation or Modification is in Section 504 plan	1	0.01%	0	0.00%
Accommodation or Modification is in IEP	39	0.28%	32	0.34%
Any Accommodation or Modification	45	0.32%	34	0.36%
No Accommodation or Modification	13,992	99.68%	9,415	99.64%
Target Students Tested	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	2	0.02%	1	0.01%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.01%	2	0.02%
J: Tested over more than one day	9	0.08%	3	0.04%
K: Had supervised breaks	20	0.17%	24	0.28%

Accommodation Summary for RLA, Grades Two and Three				
L: Administered at most beneficial time of day	7	0.06%	2	0.02%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	2	0.02%	1	0.01%
X: Used an unlisted accommodation	1	0.01%	2	0.02%
Y: Leave blank	0	0.00%	1	0.01%
Z: Examiner read test questions aloud	10	0.09%	6	0.07%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	30	0.26%	29	0.34%
Any Accommodation or Modification	33	0.28%	31	0.37%
No Accommodation or Modification	11,571	99.72%	8,451	99.63%
Non-Target (Optional) Students Tested	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	1	0.10%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	1	0.10%
J: Tested over more than one day	3	0.12%	2	0.21%
K: Had supervised breaks	9	0.37%	2	0.21%
L: Administered at most beneficial time of day	2	0.08%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	1	0.04%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	2	0.08%	0	0.00%
Accommodation or Modification is in Section 504 plan	1	0.04%	0	0.00%
Accommodation or Modification is in IEP	9	0.37%	3	0.31%
Any Accommodation or Modification	12	0.49%	3	0.31%
No Accommodation or Modification	2,421	99.51%	964	99.69%
Students Not in Special Education	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.01%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	1	0.01%	3	0.03%
K: Had supervised breaks	5	0.04%	5	0.06%
L: Administered at most beneficial time of day	2	0.01%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%

Accommodation Summary for RLA, Grades Two and Three				
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	1	0.01%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.02%	1	0.01%
Accommodation or Modification is in Section 504 plan	1	0.01%	0	0.00%
Accommodation or Modification is in IEP	7	0.05%	5	0.06%
Any Accommodation or Modification	11	0.08%	5	0.06%
No Accommodation or Modification	13,434	99.92%	9,014	99.94%
Students in Special Education	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.17%	2	0.47%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.17%	3	0.70%
J: Tested over more than one day	11	1.86%	2	0.47%
K: Had supervised breaks	24	4.05%	21	4.90%
L: Administered at most beneficial time of day	7	1.18%	2	0.47%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	1	0.17%	0	0.00%
W: Used an unlisted modification	1	0.17%	1	0.23%
X: Used an unlisted accommodation	1	0.17%	2	0.47%
Y: Leave blank	0	0.00%	1	0.23%
Z: Examiner read test questions aloud	9	1.52%	5	1.17%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	32	5.41%	27	6.29%
Any Accommodation or Modification	34	5.74%	29	6.76%
No Accommodation or Modification	558	94.26%	400	93.24%
Students in U.S. Schools < 12 Months	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	2	0.15%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.07%	0	0.00%
J: Tested over more than one day	1	0.07%	0	0.00%
K: Had supervised breaks	2	0.15%	3	0.21%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%

Accommodation Summary for RLA, Grades Two and Three				
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	1	0.07%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	3	0.22%	2	0.14%
Any Accommodation or Modification	4	0.29%	3	0.21%
No Accommodation or Modification	1,367	99.71%	1,424	99.79%
Students in U.S. Schools ≥ 12 Months	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	2	0.02%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	3	0.04%
J: Tested over more than one day	11	0.09%	5	0.06%
K: Had supervised breaks	27	0.21%	23	0.29%
L: Administered at most beneficial time of day	9	0.07%	2	0.02%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	1	0.01%	0	0.00%
W: Used an unlisted modification	1	0.01%	1	0.01%
X: Used an unlisted accommodation	1	0.01%	2	0.02%
Y: Leave blank	0	0.00%	1	0.01%
Z: Examiner read test questions aloud	12	0.09%	6	0.07%
Accommodation or Modification is in Section 504 plan	1	0.01%	0	0.00%
Accommodation or Modification is in IEP	36	0.28%	30	0.37%
Any Accommodation or Modification	41	0.32%	31	0.39%
No Accommodation or Modification	12,625	99.68%	7,991	99.61%
EL Program: EL in ELD	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.26%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	4	1.03%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%

Accommodation Summary for RLA, Grades Two and Three				
W: Used an unlisted modification	1	0.26%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	4	1.03%	0	0.00%
Any Accommodation or Modification	5	1.28%	0	0.00%
No Accommodation or Modification	385	98.72%	127	100.00%
EL Program: EL in ELD and SDAIE	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	1	0.11%	0	0.00%
K: Had supervised breaks	1	0.11%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	1	0.11%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.11%	0	0.00%
Any Accommodation or Modification	2	0.22%	0	0.00%
No Accommodation or Modification	905	99.78%	755	100.00%
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.05%	1	0.11%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.05%	1	0.11%
J: Tested over more than one day	2	0.11%	2	0.22%
K: Had supervised breaks	4	0.21%	2	0.22%
L: Administered at most beneficial time of day	1	0.05%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%

Accommodation Summary for RLA, Grades Two and Three				
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	1	0.05%	0	0.00%
Accommodation or Modification is in IEP	5	0.26%	3	0.32%
Any Accommodation or Modification	6	0.32%	3	0.32%
No Accommodation or Modification	1,884	99.68%	922	99.68%
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	1	0.01%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	2	0.03%
J: Tested over more than one day	8	0.08%	3	0.04%
K: Had supervised breaks	19	0.18%	24	0.32%
L: Administered at most beneficial time of day	7	0.07%	2	0.03%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	1	0.01%	1	0.01%
X: Used an unlisted accommodation	1	0.01%	2	0.03%
Y: Leave blank	0	0.00%	1	0.01%
Z: Examiner read test questions aloud	10	0.10%	6	0.08%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	28	0.27%	29	0.39%
Any Accommodation or Modification	30	0.29%	31	0.42%
No Accommodation or Modification	10,490	99.71%	7,374	99.58%
EL Program: Other EL Instructional Services	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%

Accommodation Summary for RLA, Grades Two and Three				
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	79	100.00%	80	100.00%
EL Program: None (EL only)	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	84	100.00%	41	100.00%

Table 2.D.2 Accommodation Summary for RLA, Grades Four and Five

Accommodation Summary for RLA, Grades Four and Five				
All Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.04%	2	0.05%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	5	0.10%	9	0.24%
K: Had supervised breaks	20	0.39%	22	0.60%
L: Administered at most beneficial time of day	3	0.06%	2	0.05%
M: Administered at home or in a hospital	1	0.02%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.06%	1	0.03%
Z: Examiner read test questions aloud	4	0.08%	5	0.14%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	25	0.49%	23	0.63%
Any Accommodation or Modification	28	0.55%	24	0.65%
No Accommodation or Modification	5,073	99.45%	3,655	99.35%
Target Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.04%	2	0.07%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	3	0.07%	9	0.29%
K: Had supervised breaks	17	0.38%	21	0.68%
L: Administered at most beneficial time of day	3	0.07%	2	0.07%
M: Administered at home or in a hospital	1	0.02%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.07%	1	0.03%
Z: Examiner read test questions aloud	4	0.09%	5	0.16%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	21	0.47%	22	0.72%
Any Accommodation or Modification	24	0.54%	23	0.75%
No Accommodation or Modification	4,455	99.46%	3,047	99.25%

Accommodation Summary for RLA, Grades Four and Five				
Non-Target (Optional) Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	2	0.32%	0	0.00%
K: Had supervised breaks	3	0.48%	1	0.16%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	4	0.64%	1	0.16%
Any Accommodation or Modification	4	0.64%	1	0.16%
No Accommodation or Modification	618	99.36%	608	99.84%
Students Not in Special Education	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	4	0.08%	3	0.09%
K: Had supervised breaks	4	0.08%	3	0.09%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	1	0.02%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.06%	2	0.06%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	4	0.08%	3	0.09%
Any Accommodation or Modification	5	0.10%	3	0.09%
No Accommodation or Modification	4,834	99.90%	3,448	99.91%

Accommodation Summary for RLA, Grades Four and Five				
Students in Special Education	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.77%	2	0.88%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	1	0.38%	6	2.63%
K: Had supervised breaks	16	6.13%	19	8.33%
L: Administered at most beneficial time of day	3	1.15%	2	0.88%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	1.15%	1	0.44%
Z: Examiner read test questions aloud	1	0.38%	3	1.32%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	21	8.05%	20	8.77%
Any Accommodation or Modification	23	8.81%	21	9.21%
No Accommodation or Modification	238	91.19%	207	90.79%
Students in U.S. Schools < 12 Months	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	2	0.16%	6	0.52%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	1	0.08%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	0.16%	6	0.52%
Any Accommodation or Modification	3	0.24%	6	0.52%
No Accommodation or Modification	1,237	99.76%	1,148	99.48%

Accommodation Summary for RLA, Grades Four and Five				
Students in U.S. Schools ≥ 12 Months	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.05%	2	0.08%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	5	0.13%	9	0.36%
K: Had supervised breaks	18	0.47%	16	0.63%
L: Administered at most beneficial time of day	3	0.08%	2	0.08%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.08%	1	0.04%
Z: Examiner read test questions aloud	4	0.10%	5	0.20%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	23	0.60%	17	0.67%
Any Accommodation or Modification	25	0.65%	18	0.71%
No Accommodation or Modification	3,836	99.35%	2,507	99.29%
EL Program: EL in ELD	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	138	100.00%	119	100.00%

Accommodation Summary for RLA, Grades Four and Five				
EL Program: EL in ELD and SDAIE	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	1	0.15%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	1	0.14%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	1	0.15%
Any Accommodation or Modification	1	0.14%	1	0.15%
No Accommodation or Modification	691	99.86%	661	99.85%
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	2	0.33%	0	0.00%
K: Had supervised breaks	1	0.17%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	0.33%	0	0.00%
Any Accommodation or Modification	2	0.33%	0	0.00%
No Accommodation or Modification	603	99.67%	553	100.00%

Accommodation Summary for RLA, Grades Four and Five				
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.06%	2	0.10%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	3	0.09%	9	0.44%
K: Had supervised breaks	17	0.50%	21	1.02%
L: Administered at most beneficial time of day	3	0.09%	2	0.10%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.09%	1	0.05%
Z: Examiner read test questions aloud	4	0.12%	5	0.24%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	21	0.61%	22	1.07%
Any Accommodation or Modification	23	0.67%	23	1.12%
No Accommodation or Modification	3,407	99.33%	2,039	98.88%
EL Program: Other EL Instructional Services	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	2	1.20%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	1.20%	0	0.00%
Any Accommodation or Modification	2	1.20%	0	0.00%
No Accommodation or Modification	164	98.80%	217	100.00%

Accommodation Summary for RLA, Grades Four and Five				
EL Program: None (EL only)	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	19	100.00%	21	100.00%

Table 2.D.3 Accommodation Summary for RLA, Grades Six and Seven

Accommodation Summary for RLA, Grades Six and Seven				
All Students Tested	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	10	0.46%	5	0.27%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.09%	0	0.00%
Z: Examiner read test questions aloud	1	0.05%	1	0.05%
Accommodation or Modification is in Section 504 plan	1	0.05%	0	0.00%
Accommodation or Modification is in IEP	12	0.55%	6	0.32%
Any Accommodation or Modification	13	0.59%	6	0.32%
No Accommodation or Modification	2,174	99.41%	1,844	99.68%
Target Students Tested	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	10	0.51%	5	0.31%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.10%	0	0.00%
Z: Examiner read test questions aloud	1	0.05%	1	0.06%
Accommodation or Modification is in Section 504 plan	1	0.05%	0	0.00%
Accommodation or Modification is in IEP	12	0.61%	6	0.37%
Any Accommodation or Modification	13	0.66%	6	0.37%
No Accommodation or Modification	1,959	99.34%	1,598	99.63%

Accommodation Summary for RLA, Grades Six and Seven				
Non-Target (Optional) Students Tested	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	215	100.00%	246	100.00%
Students Not in Special Education	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.05%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	1	0.05%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	1	0.05%	0	0.00%
Accommodation or Modification is in IEP	1	0.05%	0	0.00%
Any Accommodation or Modification	2	0.10%	0	0.00%
No Accommodation or Modification	2,079	99.90%	1,807	100.00%

Accommodation Summary for RLA, Grades Six and Seven				
Students in Special Education	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	9	8.65%	5	11.63%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	1	0.96%	0	0.00%
Z: Examiner read test questions aloud	1	0.96%	1	2.33%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	11	10.58%	6	13.95%
Any Accommodation or Modification	11	10.58%	6	13.95%
No Accommodation or Modification	93	89.42%	37	86.05%
Students in U.S. Schools < 12 Months	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	7	0.69%	4	0.34%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.09%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	7	0.69%	5	0.43%
Any Accommodation or Modification	7	0.69%	5	0.43%
No Accommodation or Modification	1,001	99.31%	1,164	99.57%

Accommodation Summary for RLA, Grades Six and Seven				
Students in U.S. Schools ≥ 12 Months	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	3	0.25%	1	0.15%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.17%	0	0.00%
Z: Examiner read test questions aloud	1	0.08%	0	0.00%
Accommodation or Modification is in Section 504 plan	1	0.08%	0	0.00%
Accommodation or Modification is in IEP	5	0.42%	1	0.15%
Any Accommodation or Modification	6	0.51%	1	0.15%
No Accommodation or Modification	1,173	99.49%	680	99.85%
EL Program: EL in ELD	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.56%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	1	0.56%
Any Accommodation or Modification	0	0.00%	1	0.56%
No Accommodation or Modification	102	100.00%	176	99.44%

Accommodation Summary for RLA, Grades Six and Seven				
EL Program: EL in ELD and SDAIE	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	527	100.00%	513	100.00%
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	411	100.00%	417	100.00%

Accommodation Summary for RLA, Grades Six and Seven				
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	10	0.94%	5	0.85%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.19%	0	0.00%
Z: Examiner read test questions aloud	1	0.09%	0	0.00%
Accommodation or Modification is in Section 504 plan	1	0.09%	0	0.00%
Accommodation or Modification is in IEP	12	1.13%	5	0.85%
Any Accommodation or Modification	13	1.23%	5	0.85%
No Accommodation or Modification	1,046	98.77%	582	99.15%
EL Program: Other EL Instructional Services	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	38	100.00%	89	100.00%

Accommodation Summary for RLA, Grades Six and Seven				
EL Program: None (EL only)	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	16	100.00%	20	100.00%

Table 2.D.4 Accommodation Summary for RLA, Grades Eight and Nine

Accommodation Summary for RLA, Grades Eight and Nine				
All Students Tested	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	7	0.44%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	4	0.15%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	7	0.44%	0	0.00%
Any Accommodation or Modification	7	0.44%	4	0.15%
No Accommodation or Modification	1,599	99.56%	2,634	99.85%
Target Students Tested	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	6	0.42%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	4	0.17%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	6	0.42%	0	0.00%
Any Accommodation or Modification	6	0.42%	4	0.17%
No Accommodation or Modification	1,417	99.58%	2,397	99.83%

Accommodation Summary for RLA, Grades Eight and Nine				
Non-Target (Optional) Students Tested	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.55%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.55%	0	0.00%
Any Accommodation or Modification	1	0.55%	0	0.00%
No Accommodation or Modification	182	99.45%	237	100.00%
Students Not in Special Education	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.06%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	4	0.15%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.06%	0	0.00%
Any Accommodation or Modification	1	0.06%	4	0.15%
No Accommodation or Modification	1,572	99.94%	2,623	99.85%

Accommodation Summary for RLA, Grades Eight and Nine				
Students in Special Education	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	6	18.75%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	6	18.75%	0	0.00%
Any Accommodation or Modification	6	18.75%	0	0.00%
No Accommodation or Modification	26	81.25%	10	100.00%
Students in U.S. Schools < 12 Months	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	6	0.57%	0	0.00%
L: Most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	4	0.19%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	6	0.57%	0	0.00%
Any Accommodation or Modification	6	0.57%	4	0.19%
No Accommodation or Modification	1,054	99.43%	2,085	99.81%

Accommodation Summary for RLA, Grades Eight and Nine				
Students in U.S. Schools ≥ 12 Months	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.18%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.18%	0	0.00%
Any Accommodation or Modification	1	0.18%	0	0.00%
No Accommodation or Modification	545	99.82%	549	100.00%
EL Program: EL in ELD	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	152	100.00%	246	100.00%

Accommodation Summary for RLA, Grades Eight and Nine				
EL Program: EL in ELD and SDAIE	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	3	0.42%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	3	0.42%
No Accommodation or Modification	512	100.00%	714	99.58%
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.28%	0	0.00%
L: Most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	1	0.14%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.28%	0	0.00%
Any Accommodation or Modification	1	0.28%	1	0.14%
No Accommodation or Modification	357	99.72%	702	99.86%

Accommodation Summary for RLA, Grades Eight and Nine				
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	6	1.26%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	6	1.26%	0	0.00%
Any Accommodation or Modification	6	1.26%	0	0.00%
No Accommodation or Modification	470	98.74%	714	100.00%
EL Program: Other EL Instructional Services	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	53	100.00%	143	100.00%

Accommodation Summary for RLA, Grades Eight and Nine				
EL Program: None (EL only)	**Grade 8**	**Pct. of Total**	**Grade 9**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	19	100.00%	52	100.00%

Table 2.D.5 Accommodation Summary for RLA, Grades Ten and Eleven

Accommodation Summary for RLA, Grades Ten and Eleven				
All Students Tested	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.12%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	2	0.12%	0	0.00%
No Accommodation or Modification	1,644	99.88%	1,001	100.00%
Target Students Tested	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.14%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	2	0.14%	0	0.00%
No Accommodation or Modification	1,437	99.86%	862	100.00%

Accommodation Summary for RLA, Grades Ten and Eleven				
Non-Target (Optional) Students Tested	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	207	100.00%	139	100.00%
Students Not in Special Education	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.12%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	2	0.12%	0	0.00%
No Accommodation or Modification	1,637	99.88%	996	100.00%

Accommodation Summary for RLA, Grades Ten and Eleven				
Students in Special Education	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	7	100.00%	5	100.00%
Students in U.S. Schools < 12 Months	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.17%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	2	0.17%	0	0.00%
No Accommodation or Modification	1,202	99.83%	583	100.00%

Accommodation Summary for RLA, Grades Ten and Eleven				
Students in U.S. Schools ≥ 12 Months	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	442	100.00%	418	100.00%
EL Program: EL in ELD	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	194	100.00%	100	100.00%

Accommodation Summary for RLA, Grades Ten and Eleven				
EL Program: EL in ELD and SDAIE	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	2	0.42%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	2	0.42%	0	0.00%
No Accommodation or Modification	473	99.58%	271	100.00%
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	385	100.00%	191	100.00%

Accommodation Summary for RLA, Grades Ten and Eleven				
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	439	100.00%	350	100.00%
EL Program: Other EL Instructional Services	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	71	100.00%	37	100.00%

Accommodation Summary for RLA, Grades Ten and Eleven				
EL Program: None (EL only)	**Grade 10**	**Pct. of Total**	**Grade 11**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	26	100.00%	17	100.00%

Table 2.D.6 Accommodation Summary for Mathematics, Grades Two and Three

Accommodation Summary for Mathematics, Grades Two and Three				
All Students Tested	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.01%	2	0.02%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.01%	3	0.03%
J: Tested over more than one day	8	0.06%	3	0.03%
K: Had supervised breaks	16	0.11%	20	0.21%
L: Administered at most beneficial time of day	7	0.05%	2	0.02%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	1	0.01%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.01%	2	0.02%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	1	0.01%
X: Used an unlisted accommodation	1	0.01%	2	0.02%
Y: Leave blank	3	0.02%	1	0.01%
Z: Examiner read test questions aloud	16	0.11%	13	0.14%
Accommodation or Modification is in Section 504 plan	1	0.01%	1	0.01%
Accommodation or Modification is in IEP	30	0.21%	34	0.36%
Any Accommodation or Modification	33	0.24%	37	0.39%
No Accommodation or Modification	13,925	99.76%	9,338	99.61%
Target Students Tested	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.01%	1	0.01%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.01%	2	0.02%
J: Tested over more than one day	8	0.07%	3	0.04%
K: Had supervised breaks	15	0.13%	20	0.24%
L: Administered at most beneficial time of day	6	0.05%	2	0.02%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	1	0.01%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.01%	2	0.02%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	1	0.01%

Accommodation Summary for Mathematics, Grades Two and Three				
X: Used an unlisted accommodation	1	0.01%	2	0.02%
Y: Leave blank	3	0.03%	1	0.01%
Z: Examiner read test questions aloud	14	0.12%	11	0.13%
Accommodation or Modification is in Section 504 plan	1	0.01%	1	0.01%
Accommodation or Modification is in IEP	27	0.23%	31	0.37%
Any Accommodation or Modification	29	0.25%	34	0.40%
No Accommodation or Modification	11,516	99.75%	8,410	99.60%
Non-Target (Optional) Students Tested	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	1	0.11%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	1	0.11%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.04%	0	0.00%
L: Administered at most beneficial time of day	1	0.04%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	2	0.08%	2	0.21%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	3	0.12%	3	0.32%
Any Accommodation or Modification	4	0.17%	3	0.32%
No Accommodation or Modification	2,409	99.83%	928	99.68%
Students Not in Special Education	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	1	0.01%	1	0.01%
K: Had supervised breaks	1	0.01%	3	0.03%
L: Administered at most beneficial time of day	1	0.01%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	1	0.01%

Accommodation Summary for Mathematics, Grades Two and Three				
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	1	0.01%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.02%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	3	0.03%
Accommodation or Modification is in Section 504 plan	1	0.01%	1	0.01%
Accommodation or Modification is in IEP	4	0.03%	4	0.04%
Any Accommodation or Modification	5	0.04%	5	0.06%
No Accommodation or Modification	13,363	99.96%	8,945	99.94%
Students in Special Education	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.17%	2	0.47%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.17%	3	0.71%
J: Tested over more than one day	7	1.19%	2	0.47%
K: Had supervised breaks	15	2.54%	17	4.01%
L: Administered at most beneficial time of day	6	1.02%	2	0.47%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.17%	1	0.24%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	1	0.24%
X: Used an unlisted accommodation	1	0.17%	2	0.47%
Y: Leave blank	0	0.00%	1	0.24%
Z: Examiner read test questions aloud	16	2.71%	10	2.36%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	26	4.41%	30	7.08%
Any Accommodation or Modification	28	4.75%	32	7.55%
No Accommodation or Modification	562	95.25%	392	92.45%
Students in U.S. Schools < 12 Months	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.07%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.07%	0	0.00%
J: Tested over more than one day	1	0.07%	0	0.00%
K: Had supervised breaks	1	0.07%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Two and Three				
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.07%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	0.15%	1	0.07%
Any Accommodation or Modification	2	0.15%	1	0.07%
No Accommodation or Modification	1,366	99.85%	1,418	99.93%
Students in U.S. Schools ≥ 12 Months	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	2	0.03%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	3	0.04%
J: Tested over more than one day	7	0.06%	3	0.04%
K: Had supervised breaks	15	0.12%	20	0.25%
L: Administered at most beneficial time of day	7	0.06%	2	0.03%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	1	0.01%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.01%	2	0.03%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	1	0.01%
X: Used an unlisted accommodation	1	0.01%	2	0.03%
Y: Leave blank	3	0.02%	1	0.01%
Z: Examiner read test questions aloud	16	0.13%	12	0.15%
Accommodation or Modification is in Section 504 plan	1	0.01%	1	0.01%
Accommodation or Modification is in IEP	28	0.22%	33	0.41%
Any Accommodation or Modification	31	0.25%	36	0.45%
No Accommodation or Modification	12,559	99.75%	7,920	99.55%
EL Program: EL in ELD	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Two and Three				
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.26%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.26%	0	0.00%
Any Accommodation or Modification	1	0.26%	0	0.00%
No Accommodation or Modification	389	99.74%	126	100.00%
EL Program: EL in ELD and SDAIE	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	1	0.11%	0	0.00%
K: Had supervised breaks	1	0.11%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.13%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.11%	1	0.13%
Any Accommodation or Modification	1	0.11%	1	0.13%
No Accommodation or Modification	908	99.89%	751	99.87%

Accommodation Summary for Mathematics, Grades Two and Three				
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.05%	1	0.11%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.05%	1	0.11%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	1	0.05%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	2	0.11%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	3	0.16%	1	0.11%
Any Accommodation or Modification	4	0.21%	1	0.11%
No Accommodation or Modification	1,866	99.79%	884	99.89%
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	1	0.01%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	2	0.03%
J: Tested over more than one day	7	0.07%	3	0.04%
K: Had supervised breaks	14	0.13%	20	0.27%
L: Administered at most beneficial time of day	6	0.06%	2	0.03%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	1	0.01%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.01%	2	0.03%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	1	0.01%
X: Used an unlisted accommodation	1	0.01%	2	0.03%
Y: Leave blank	3	0.03%	1	0.01%
Z: Examiner read test questions aloud	14	0.13%	11	0.15%

Accommodation Summary for Mathematics, Grades Two and Three				
Accommodation or Modification is in Section 504 plan	1	0.01%	1	0.01%
Accommodation or Modification is in IEP	25	0.24%	31	0.42%
Any Accommodation or Modification	27	0.26%	34	0.46%
No Accommodation or Modification	10,436	99.74%	7,341	99.54%
EL Program: Other EL Instructional Services	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	78	100.00%	80	100.00%
EL Program: None (EL only)	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Two and Three				
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	82	100.00%	41	100.00%

Table 2.D.7 Accommodation Summary for Mathematics, Grades Four and Five

Accommodation Summary for Mathematics, Grades Four and Five				
All Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.04%	2	0.05%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	5	0.10%	3	0.08%
K: Had supervised breaks	20	0.40%	10	0.27%
L: Administered at most beneficial time of day	3	0.06%	4	0.11%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	4	0.11%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.02%	3	0.08%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.06%	3	0.08%
Z: Examiner read test questions aloud	4	0.08%	12	0.33%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	25	0.49%	21	0.58%
Any Accommodation or Modification	26	0.51%	24	0.66%
No Accommodation or Modification	5,034	99.49%	3,624	99.34%
Target Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.05%	2	0.07%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	3	0.07%	3	0.10%
K: Had supervised breaks	17	0.38%	9	0.29%
L: Administered at most beneficial time of day	3	0.07%	4	0.13%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	4	0.13%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.02%	3	0.10%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Four and Five				
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.07%	3	0.10%
Z: Examiner read test questions aloud	4	0.09%	12	0.39%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	21	0.47%	20	0.65%
Any Accommodation or Modification	22	0.50%	23	0.75%
No Accommodation or Modification	4,422	99.50%	3,039	99.25%
Non-Target (Optional) Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	2	0.32%	0	0.00%
K: Had supervised breaks	3	0.49%	1	0.17%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	4	0.65%	1	0.17%
Any Accommodation or Modification	4	0.65%	1	0.17%
No Accommodation or Modification	612	99.35%	585	99.83%
Students Not in Special Education	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	4	0.08%	1	0.03%
K: Had supervised breaks	5	0.10%	1	0.03%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Four and Five				
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.02%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	1	0.02%	2	0.06%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	5	0.10%	3	0.09%
Any Accommodation or Modification	5	0.10%	3	0.09%
No Accommodation or Modification	4,793	99.90%	3,418	99.91%
Students in Special Education	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.77%	2	0.88%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	1	0.38%	2	0.88%
K: Had supervised breaks	15	5.75%	9	3.96%
L: Administered at most beneficial time of day	3	1.15%	4	1.76%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	4	1.76%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	3	1.32%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	1.15%	3	1.32%
Z: Examiner read test questions aloud	3	1.15%	10	4.41%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	20	7.66%	18	7.93%
Any Accommodation or Modification	21	8.05%	21	9.25%
No Accommodation or Modification	240	91.95%	206	90.75%
Students in U.S. Schools < 12 Months	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	2	0.16%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Four and Five				
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	0.16%	0	0.00%
Any Accommodation or Modification	2	0.16%	0	0.00%
No Accommodation or Modification	1,232	99.84%	1,148	100.00%
Students in U.S. Schools ≥ 12 Months	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.05%	2	0.08%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	5	0.13%	3	0.12%
K: Had supervised breaks	18	0.47%	10	0.40%
L: Administered at most beneficial time of day	3	0.08%	4	0.16%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	4	0.16%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.03%	3	0.12%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.08%	3	0.12%
Z: Examiner read test questions aloud	4	0.10%	12	0.48%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	23	0.60%	21	0.84%
Any Accommodation or Modification	24	0.63%	24	0.96%
No Accommodation or Modification	3,802	99.37%	2,476	99.04%
EL Program: EL in ELD	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Four and Five				
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	138	100.00%	120	100.00%
EL Program: EL in ELD and SDAIE	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	1	0.15%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	1	0.15%
Any Accommodation or Modification	0	0.00%	1	0.15%
No Accommodation or Modification	688	100.00%	655	99.85%

Accommodation Summary for Mathematics, Grades Four and Five				
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	2	0.33%	0	0.00%
K: Had supervised breaks	1	0.17%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	0.33%	0	0.00%
Any Accommodation or Modification	2	0.33%	0	0.00%
No Accommodation or Modification	596	99.67%	531	100.00%
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.06%	2	0.10%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	3	0.09%	3	0.15%
K: Had supervised breaks	17	0.50%	9	0.44%
L: Administered at most beneficial time of day	3	0.09%	4	0.19%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	4	0.19%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	1	0.03%	3	0.15%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.09%	3	0.15%
Z: Examiner read test questions aloud	4	0.12%	12	0.58%

Accommodation Summary for Mathematics, Grades Four and Five				
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	21	0.62%	20	0.97%
Any Accommodation or Modification	22	0.65%	23	1.12%
No Accommodation or Modification	3,379	99.35%	2,037	98.88%
EL Program: Other EL Instructional Services	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	2	1.20%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	1.20%	0	0.00%
Any Accommodation or Modification	2	1.20%	0	0.00%
No Accommodation or Modification	164	98.80%	216	100.00%
EL Program: None (EL only)	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Four and Five				
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	19	100.00%	21	100.00%

Table 2.D.8 Accommodation Summary for Mathematics, Grades Six and Seven

Accommodation Summary for Mathematics, Grades Six and Seven				
All Students Tested	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	4	0.19%	2	0.11%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.14%	0	0.00%
Z: Examiner read test questions aloud	4	0.19%	1	0.06%
Accommodation or Modification is in Section 504 plan	1	0.05%	0	0.00%
Accommodation or Modification is in IEP	9	0.42%	3	0.17%
Any Accommodation or Modification	11	0.51%	3	0.17%
No Accommodation or Modification	2,146	99.49%	1,785	99.83%
Target Students Tested	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	4	0.20%	2	0.13%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Six and Seven				
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	3	0.15%	0	0.00%
Z: Examiner read test questions aloud	4	0.20%	1	0.06%
Accommodation or Modification is in Section 504 plan	1	0.05%	0	0.00%
Accommodation or Modification is in IEP	9	0.46%	3	0.19%
Any Accommodation or Modification	11	0.56%	3	0.19%
No Accommodation or Modification	1,947	99.44%	1,563	99.81%
Non-Target (Optional) Students Tested	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	199	100.00%	222	100.00%
Students Not in Special Education	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	1	0.05%	1	0.06%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Six and Seven				
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	1	0.05%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	1	0.05%	0	0.00%
Accommodation or Modification is in IEP	1	0.05%	1	0.06%
Any Accommodation or Modification	2	0.10%	1	0.06%
No Accommodation or Modification	2,054	99.90%	1,746	99.94%
Students in Special Education	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	3	3.03%	1	2.44%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	2	2.02%	0	0.00%
X: Used an unlisted accommodation	4	4.04%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	8	8.08%	1	2.44%
Accommodation or Modification is in Section 504 plan	9	9.09%	0	0.00%
Accommodation or Modification is in IEP	90	90.91%	2	4.88%
Any Accommodation or Modification	0	0.00%	2	4.88%
No Accommodation or Modification	0	0.00%	39	95.12%
Students in U.S. Schools < 12 Months	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Six and Seven				
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.09%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	999	100.00%	1	0.09%
Any Accommodation or Modification	0	0.00%	1	0.09%
No Accommodation or Modification	0	0.00%	1,134	99.91%
Students in U.S. Schools ≥ 12 Months	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	4	0.35%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	2	0.31%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	3	0.26%	0	0.00%
X: Used an unlisted accommodation	4	0.35%	0	0.00%
Y: Leave blank	1	0.09%	0	0.00%
Z: Examiner read test questions aloud	9	0.78%	0	0.00%
Accommodation or Modification is in Section 504 plan	11	0.95%	0	0.00%
Accommodation or Modification is in IEP	1,147	99.05%	2	0.31%
Any Accommodation or Modification	0	0.00%	2	0.31%
No Accommodation or Modification	0	0.00%	651	99.69%
EL Program: EL in ELD	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Six and Seven				
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.60%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	102	100.00%	1	0.60%
Any Accommodation or Modification	0	0.00%	1	0.60%
No Accommodation or Modification	0	0.00%	166	99.40%
EL Program: EL in ELD and SDAIE	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	508	100.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	0	0.00%	488	100.00%

Accommodation Summary for Mathematics, Grades Six and Seven				
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	410	100.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	0	0.00%	410	100.00%
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	4	0.38%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	2	0.34%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	3	0.29%	0	0.00%
X: Used an unlisted accommodation	4	0.38%	0	0.00%
Y: Leave blank	1	0.10%	0	0.00%
Z: Examiner read test questions aloud	9	0.86%	0	0.00%

Accommodation Summary for Mathematics, Grades Six and Seven				
Accommodation or Modification is in Section 504 plan	11	1.05%	0	0.00%
Accommodation or Modification is in IEP	1,038	98.95%	2	0.34%
Any Accommodation or Modification	0	0.00%	2	0.34%
No Accommodation or Modification	0	0.00%	580	99.66%
EL Program: Other EL Instructional Services	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	38	100.00%	0	0.00%
Any Accommodation or Modification	0	0.00%	0	0.00%
No Accommodation or Modification	0	0.00%	75	100.00%
EL Program: None (EL only)	**Grade 6**	**Pct. of Total**	**Grade 7**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used non-interfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	0	0.00%
J: Tested over more than one day	0	0.00%	0	0.00%
K: Had supervised breaks	0	0.00%	0	0.00%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%
M: Administered at home or in a hospital	0	0.00%	0	0.00%
N: Used a dictionary	0	0.00%	0	0.00%
O: Examiner presented with MCE or ASL	0	0.00%	0	0.00%
Q: Used a calculator	0	0.00%	0	0.00%
R: Used an arithmetic table	0	0.00%	0	0.00%
S: Used math manipulatives	0	0.00%	0	0.00%
V: Used interfering assistive device	0	0.00%	0	0.00%

Accommodation Summary for Mathematics, Grades Six and Seven				
W: Used an unlisted modification	0	0.00%	0	0.00%
X: Used an unlisted accommodation	0	0.00%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	16	100.00%	0	0.00%
Any Accommodation or Modification	16	100.00%	0	0.00%
No Accommodation or Modification	16	100.00%	19	100.00%

Table 2.D.9 Accommodation Summary for Algebra I

Accommodation Summary for Algebra I							
All Students Tested	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	1	0	0	0	1	0.03%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	3	2	0	5	0.15%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	1	0	0	0	1	0.03%
Any Accommodation or Modification	0	1	3	2	0	6	0.17%
No Accommodation or Modification	21	546	1,527	921	410	3,425	99.83%
Target Students Tested	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%

Accommodation Summary for Algebra I							
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	3	2	0	5	0.16%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	3	2	0	5	0.16%
No Accommodation or Modification	9	494	1,376	818	368	3,065	99.84%
Non-Target (Optional) Students Tested	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	1	0	0	0	1	0.28%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	1	0	0	0	1	0.28%
Any Accommodation or Modification	0	1	0	0	0	1	0.28%
No Accommodation or Modification	12	52	151	103	42	360	99.72%
Students Not in Special Education	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%

Accommodation Summary for Algebra I							
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	3	2	0	5	0.15%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	3	2	0	5	0.15%
No Accommodation or Modification	20	535	1,523	917	409	3,404	99.85%
Students in Special Education	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	1	0	0	0	1	4.76%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	1	0	0	0	1	4.76%
Any Accommodation or Modification	0	1	0	0	0	1	4.76%
No Accommodation or Modification	1	10	4	4	1	20	95.24%
Students in U.S. Schools < 12 Months	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%

Accommodation Summary for Algebra I							
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	3	2	0	5	0.20%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	3	2	0	5	0.20%
No Accommodation or Modification	9	351	1,181	691	263	2,495	99.80%
Students in U.S. Schools ≥ 12 Months	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	1	0	0	0	1	0.11%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	1	0	0	0	1	0.11%
Any Accommodation or Modification	0	1	0	0	0	1	0.11%
No Accommodation or Modification	12	195	346	230	147	930	99.89%
EL Program: EL in ELD	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%

Accommodation Summary for Algebra I							
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0	0.00%
No Accommodation or Modification	4	59	151	105	41	360	100.00%
EL Program: EL in ELD and SDAIE	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	2	2	0	4	0.43%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	2	2	0	4	0.43%
No Accommodation or Modification	1	187	374	254	110	926	99.57%

Accommodation Summary for Algebra I

EL Program: EL in ELD and SDAIE with Primary Language Support	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Total	Pct. of Total
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	1	0	0	0	1	0.11%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	1	0	0	1	0.11%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	1	0	0	0	1	0.11%
Any Accommodation or Modification	0	1	1	0	0	2	0.23%
No Accommodation or Modification	2	116	423	240	100	881	99.77%

EL Program: EL in ELD and Academic Subjects through Primary Language	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Total	Pct. of Total
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%

Accommodation Summary for Algebra I							
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0	0.00%
No Accommodation or Modification	2	163	436	245	127	973	100.00%
EL Program: Other EL Instructional Services	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0	0.00%
No Accommodation or Modification	11	5	79	41	12	148	100.00%
EL Program: None (EL only)	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0	0.00%

Accommodation Summary for Algebra I							
R: Used an arithmetic table	0	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0	0.00%
No Accommodation or Modification	1	7	19	5	5	37	100.00%

Table 2.D.10 Accommodation Summary for Geometry

Accommodation Summary for Geometry						
All Students Tested	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	119	253	232	604	100.00%
Target Students Tested	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%

Accommodation Summary for Geometry						
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	112	206	198	516	100.00%
Non-Target (Optional) Students Tested	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	7	47	34	88	100.00%
Students Not in Special Education	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%

Accommodation Summary for Geometry						
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	118	253	230	601	100.00%
Students in Special Education	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	1	0	2	3	100.00%
Students in U.S. Schools < 12 Months	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%

Accommodation Summary for Geometry						
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	81	125	95	301	100.00%
Students in U.S. Schools ≥ 12 Months	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	38	128	137	303	100.00%
EL Program: EL in ELD	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%

Accommodation Summary for Geometry						
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	15	25	19	59	100.00%
EL Program: EL in ELD and SDAIE	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	38	48	43	129	100.00%

Accommodation Summary for Geometry						
EL Program: EL in ELD and SDAIE with Primary Language Support	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	11	55	33	99	100.00%
EL Program: EL in ELD and Academic Subjects through Primary Language	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%

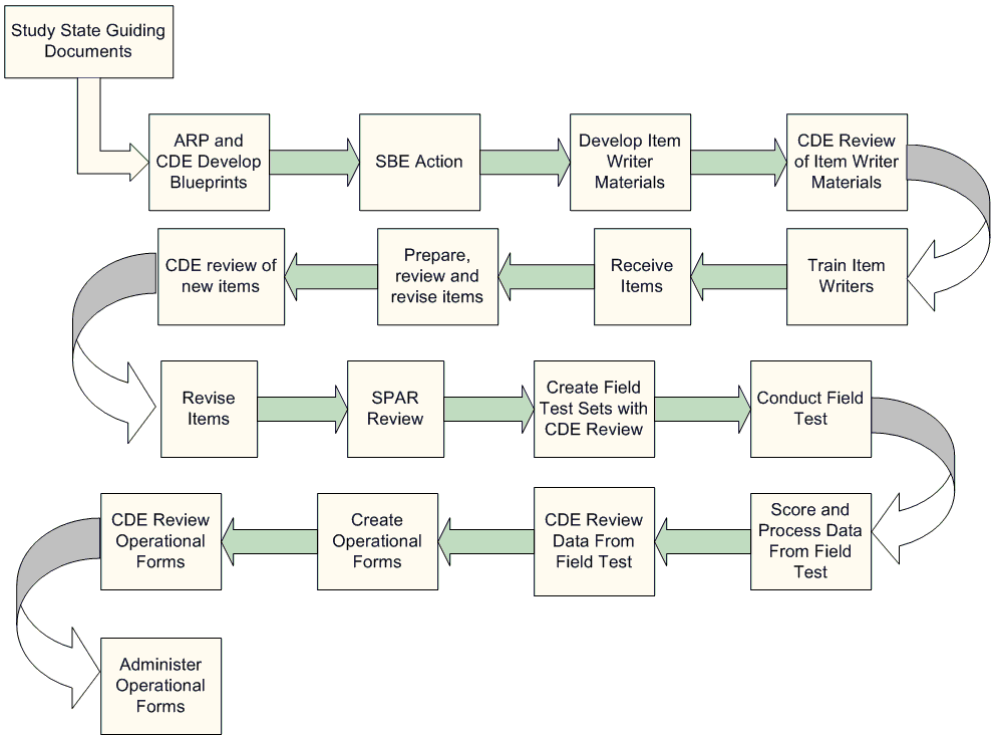
Accommodation Summary for Geometry						
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	37	112	125	274	100.00%
EL Program: Other EL Instructional Services	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	1	7	6	14	100.00%
EL Program: None (EL only)	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**	**Total**	**Pct. of Total**
B: Marked in test booklet	0	0	0	0	0	0.00%
C: Dictated responses to a scribe	0	0	0	0	0	0.00%
F: Used non-interfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%
H: Used large-print test	0	0	0	0	0	0.00%
J: Tested over more than one day	0	0	0	0	0	0.00%
K: Had supervised breaks	0	0	0	0	0	0.00%
L: Administered at most beneficial time of day	0	0	0	0	0	0.00%
M: Administered at home or in a hospital	0	0	0	0	0	0.00%
N: Used a dictionary	0	0	0	0	0	0.00%
O: Examiner presented with MCE or ASL	0	0	0	0	0	0.00%
Q: Used a calculator	0	0	0	0	0	0.00%

Accommodation Summary for Geometry						
R: Used an arithmetic table	0	0	0	0	0	0.00%
S: Used math manipulatives	0	0	0	0	0	0.00%
V: Used interfering assistive device	0	0	0	0	0	0.00%
W: Used an unlisted modification	0	0	0	0	0	0.00%
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	17	2	2	21	100.00%

Chapter 3: Item Development

The STS items are developed to measure California's content standards and designed to conform to principles of item writing defined by ETS (ETS, 2002). Each STS item goes through a comprehensive development cycle as is described in Figure 3.1, below.

Figure 3.1 The ETS Item Development Process for the STAR Program



Rules for Item Development

ETS maintains and updates item development specifications for each STS and has developed an item utilization plan to guide the development of the items for each content area. Item writing emphasis is determined in consultation with the CDE.

Item Development Specifications

The item specifications describe the characteristics of the items written to measure each content standard. The item specifications help ensure that the items in the STS measure the content standards. To achieve this, the item specifications provide detailed information to item writers that facilitates. The specifications include the following:

- A full statement of each academic content standard, as defined by the SBE (CDE, 2009)
- A description of each content strand
- The expected depth of knowledge (DOK) measured by items written for each standard (coded as 1, 2, or 3; items assigned a DOK of 1 are the least cognitively complex and items assigned a DOK of 3 are the most cognitively complex)
- The homogeneity of the construct measured by each standard
- A description of the kinds of item stems appropriate for multiple-choice items used to assess each standard
- A description of the kinds of distractors that are appropriate for multiple-choice items assessing each standard

- A description of appropriate data representations (such as charts, tables, graphs, or other illustrations) for mathematics items
- The content limits for the standard (such as one or two variables, maximum place values of numbers) for mathematics items
- A description of appropriate reading passages, if applicable, for RLA items
- A description of specific kinds of items to be avoided, if any (for example, items with any negative connotation in the stem, e.g. “Which of the following is NOT…”)

In addition, the RLA item specifications contain guidelines for passages used to assess reading comprehension and writing. These guidelines include the following:

- The acceptable ranges for passage length
- The expected distribution of passages by genre
- Guidelines for readability and cognitive load, using standards agreed to by the CDE and ETS
- Expected use of illustrations
- The target number of items that should follow each reading passage and each writing passage
- Writing passages for multiple-choice items to have a readability level appropriate to their respective grades
- A list of topics to be avoided

Expected Item Ratio

ETS has developed the item utilization plan to continue the development of STS items. The plan includes strategies for developing items that will permit coverage of all appropriate standards for all tests in each content area and at each grade level. ETS test development staff uses this plan to determine the number of items to develop for each content area.

The item utilization plan assumes that the percentage of new items required in an operational form each year matches the development rate listed for each test (shown in Table 3.1); these items remain in the item bank for future use. The plan also declares that an additional five percent of the operational items are likely to be unusable because of normal attrition and notes that there is a need to focus development on “critical” standards, which are standards that are difficult to measure well or for which there are few usable items.

For all content areas, it is assumed that at least 75 percent of all field-tested items are expected to have acceptable field-test statistics and become candidates for use in operational tests.

ETS has developed field-test percentages and item counts that are shown in Table 3.1. The percentages are based on the ratio of the number of items to be field-tested to the number of items in an operational test form.

Table 3.1 Field-test Percentages for the STS

Content Area	Grade or Course	Refresh Rate (Percent)	Percentage of Operational Form to Be Field Tested	Number of Items to Be Field Tested per Grade or Course
Reading/Language Arts	2	20%	96%	72
	3	20%	96%	72
	4	20%	72%	54
	5	15%	48%	36
	6	10%	32%	24
	7	10%	32%	24
	8	10%	32%	24
	9	15%	40%	30
	10	10%	32%	24
	11	5%	16%	12
Mathematics	2	20%	111%	72
	3	20%	111%	72
	4	20%	83%	54
	5	20%	55%	36
	6	10%	37%	24
	7	10%	37%	24
	Algebra I	15%	46%	30
	Geometry	5%	9%	6

The plan calls for larger numbers of items to be field tested at the lower grades than at the higher grades since lower grade levels require more items to be developed.

Selection of Item Writers

Criteria for Selecting Item Writers

The items for each STS test are written by individual item writers who have a thorough understanding of the California content standards. Applicants for item writing are screened by senior ETS content staff. Only those with strong content and teaching backgrounds are approved for inclusion in the training program for item writers. Because most of the participants are current or former California educators, they are particularly knowledgeable about the standards assessed in the STS. All item writers meet the following minimum qualifications:

- Possession of a Bachelor's degree in the relevant content area or in the field of education with special focus on a particular content of interest; an advanced degree in the relevant content area is desirable
- Previous experience in writing items for standards-based assessments, including knowledge of the many considerations that are important when developing items to match state-specific standards
- Previous experience in writing items in the content areas covered by STS grades and/or courses
- Familiarity, understanding, and support of the California content standards
- Current or previous teaching experience in California, when possible
- Bilingual and biliterate in Spanish and English

Item Review Process

The items selected for each STS undergo an extensive item review process that is designed to provide the best standards-based tests possible. This section summarizes the various reviews performed that ensure the quality of the STS items and test forms.

Contractor Review

Once the items have been written, ETS employs a series of internal reviews. The reviews establish the criteria used to judge the quality of the item content and are designed to ensure that each item is measuring what it is intended to measure. The internal reviews also examine the overall quality of the test items before they are prepared for presentation to the CDE and the Assessment Review Panels (ARPs). Because of the complexities involved in producing defensible items for high-stakes programs such as the STAR Program, it is essential that many experienced individuals review each item before it is brought to the CDE, the ARPs, and Statewide Pupil Assessment Review (SPAR) panels.

The ETS review process for the STS includes the following:

1. Internal content review
2. Internal editorial review
3. Internal sensitivity review

Throughout this multistep item review process, the lead content-area assessment specialists and development team members continually evaluate the adherence to the rules for item development.

1. Internal Content Review

Test items and materials undergo two reviews by the content-area assessment specialists. These assessment specialists make sure that the test items and related materials are in compliance with ETS's written guidelines for clarity, style, accuracy, and appropriateness for California students as well as in compliance with the approved item specifications. Assessment specialists review each item in terms of the following characteristics:

- Relevance of each item to the purpose of the test
- Match of each item to the item specifications, including depth of knowledge
- Match of each item to the principles of quality item writing
- Match of each item to the identified standard or standards
- Difficulty of the item
- Accuracy of the content of the item
- Readability of the item or passage
- Grade-level appropriateness of the item
- Appropriateness of any illustrations, graphs, or figures

Each item is classified with a code for the standard it is intended to measure. The assessment specialists also check all items against their classification codes, both to evaluate the correctness of the classification and to ensure that the task posed by the item is relevant to the outcome it is intended to measure. The reviewers may accept the item and classification as written, they may suggest revisions, or they may recommend that the item be discarded. These steps occur prior to the CDE's review.

2. Internal Editorial Review
After the content-area assessment specialists review each item, a group of specially trained editors review each item in preparation for review by the CDE and the ARPs. The editors check items for clarity, correctness of language, appropriateness of language for the grade level assessed, adherence to the style guidelines, and conformity with accepted item-writing practices.

3. Internal Sensitivity Review
ETS assessment specialists who are specially trained to identify and eliminate questions that contain content or wording that could be construed to be offensive to or biased against members of specific ethnic, racial, or gender groups, conduct the next level of review. These trained staff members review every item before for the CDE and ARP reviews.

The review process promotes a general awareness of and responsiveness to the following:

- Cultural diversity
- Diversity of background, cultural tradition, and viewpoints to be found in the test-taking populations
- Changing roles and attitudes toward various groups
- Role of language in setting and changing attitudes toward various groups
- Contributions of diverse groups (including ethnic and minority groups, individuals with disabilities, and women) to the history and culture of the United States and the achievements of individuals within these groups.
- Item accessibility for English-language learners

Content Expert Reviews

Assessment Review Panels
ETS is responsible for working with ARPs as items are developed for the STS. The ARPs are advisory panels to the CDE and ETS and provide guidance on areas related to item development for the STS. The ARPs are responsible for reviewing all newly developed items for alignment to the California content standards. The ARPs also review the items for accuracy of content, clarity of phrasing, and quality. ETS provides the ARPs with the opportunity to review the items with the applicable field-test statistics and to make recommendations for the use of items in subsequent test forms. In their examination of test items, the ARPs may raise concerns related to age/grade appropriateness and gender, racial, ethnic, and/or socioeconomic bias.

Composition of ARPs
The ARPs are comprised of current and former teachers, resource specialists, administrators, curricular experts, and other education professionals. Current school staff members must meet minimum qualifications to serve on the STS ARPs, including:

- Three or more years of general teaching experience in grades kindergarten through twelve and in the content areas (reading/language arts or mathematics);
- Bachelor’s or higher degree in a grade or content area related to reading/language arts or mathematics;
- Knowledge and experience with the California content standards in reading/language arts or mathematics; and
- Bilingual and biliterate in Spanish and English.

School administrators, district/county content/program specialists, or university educators serving on the STS ARPs must meet the following qualifications:

- Three or more years of experience as a school administrator, district/county content/ program specialist, or university instructor in a grade-specific area or area related to reading/language arts or mathematics;
- Bachelor's or higher degree in a grade-specific or subject area related to reading/ language arts or mathematics;
- Knowledge of and experience with the California content standards in reading/language arts or mathematics; and
- Bilingual and biliterate in Spanish and English.

Every effort is made to ensure that ARP committees include representation of gender and of the geographic regions and ethnic groups in California. Efforts are also made to ensure representation by members with experience working with the diverse student population that makes up STS-eligible test takers.

Current ARP members are recruited through an application process. Recommendations are solicited from school districts and county offices of education as well as from CDE and SBE staff. Applications are received and reviewed throughout the year. They are reviewed by the ETS assessment directors, who confirm that the applicant's qualifications meet the specified criteria. Applications that meet the criteria are forwarded to CDE and SBE staff for further review and agreement on ARP membership. Upon approval, the applicant is notified that he or she has been selected to serve on the ARP committee.

Table 3.2 shows the educational qualifications, present occupation, and credentials of the current STS ARP members.

Table 3.2 STS ARP Member Qualifications, by Content Area and Total

	RLA	Math	Total
Total	**20**	**12**	**32**
Occupation (Members may teach multiple levels)			
Teacher or Program Specialist, Elementary/Middle School	15	7	22
Teacher or Program Specialist, High School	2	1	3
Teacher or Program Specialist, K–12	3	1	4
University Personnel	3	0	3
Other District Personnel (e.g., Director of Special Services, etc.)	2	2	4
Highest Degree Earned			
Bachelor's Degree	8	7	15
Master's Degree	12	5	17
Doctorate	0	0	0
Teaching Experience			
Elementary Teaching (multiple subjects)	15	7	22
Secondary Teaching (single subject)	6	5	11
Special Education	0	0	0
Reading Specialist	0	0	0

	RLA	Math	Total
Bilingual Education (BCLAD)	9	4	13
Administrative	0	1	1
Other	1	0	1
None (teaching at university level)	0	0	0

ARP Meetings for Review of STS Items

ETS content-area assessment specialists facilitate the STS ARP meetings. Each meeting begins with a brief training session on how to review items. ETS provides this training, which consists of the following topics:

- Overview of the purpose and scope of the STS
- Overview of the STS's test design specifications and blueprints
- Analysis of the STS's item specifications
- Overview of criteria for evaluating multiple-choice test items
- Overview of universally accessible Spanish language used to develop multiple-choice test items
- Review and evaluation of items for bias and sensitivity issues

The criteria for evaluating multiple-choice items include the following:

- Overall technical quality
- Match to the California content standards
- Match to the construct being assessed by the standard
- Difficulty range
- Clarity
- Correctness of the answer
- Plausibility of the distracters
- Bias and sensitivity factors

Criteria also include more global factors, including—for RLA—the appropriateness, difficulty, and readability of reading passages. The ARPs also are trained on how to make recommendations for revising items. Guidelines for reviewing items are provided by ETS and approved by the CDE. The set of guidelines for reviewing items is summarized below.

Does the item:

- Have one and only one clearly correct answer?
- Measure the content standard?
- Match the test item specifications?
- Align with the construct being measured?
- Test worthwhile concepts or information?
- Reflect good and current teaching practices?
- Have a stem that gives the student a full sense of what the item is asking?
- Avoid unnecessary wordiness?
- Use response options that relate to the stem in the same way?

- Use response options that are plausible and have reasonable misconceptions and errors?
- Avoid having one response option that is markedly different from the others?
- Avoid clues to students, such as absolutes or words repeated in both the stem and options?
- Reflect content that is free of bias against any person or group?

Is the stimulus, if any, for the item:

- Required in order to answer the item?
- Likely to be interesting to students?
- Clearly and correctly labeled?
- Providing all the information needed to answer the item?

As the first step of the item review process, ARP members review a set of items independently and record their individual comments. The next step in the review process is for the group to discuss each item. The content-area assessment specialists facilitate the discussion and record all recommendations. Those recommendations are recorded in a master item review booklet. Item review binders and other item evaluation materials also identify potential bias and sensitivity factors the ARP will consider as a part of its item reviews.

Depending on CDE approval and the numbers of items still to be reviewed, some ARPs are further divided into smaller groups. These smaller groups are also facilitated by the content-area assessment specialists.

ETS staff maintains the minutes summarizing the review process and then forwards copies of the minutes to the CDE, emphasizing in particular the recommendations of the panel members.

Statewide Pupil Assessment Review Panel

The SPAR panel is responsible for reviewing and approving all achievement tests to be used statewide for the testing of students in California public schools, grades two through eleven. At the SPAR panel meetings, all new items are presented in binders for review. The SPAR panel representatives ensure that the test items conform to the requirements of *EC* Section 60602. If the SPAR panel rejects specific items, the items are marked for rejection in the item bank and excluded from use on field tests. For the SPAR panel meeting, the item development coordinator is available by telephone to respond to any questions during the course of the meeting.

Field Testing

The primary purposes of field testing are to gather information about item performance and to obtain statistics that can be used to assemble operational forms.

Stand-alone Field Testing

For RLA and mathematics in grades two through seven, for each new STS launched, a pool of items was initially constructed by administering the newly developed items in a stand-alone field test. In stand-alone field testing, examinees are recruited to take tests outside of the usual testing circumstances and the test results are typically not used for instructional or accountability purposes (Schmeiser & Welch, 2006). STS stand-alone field testing occurred in the fall before the test became operational in the following spring.

For STS RLA tests in grades eight and above and the EOC mathematics tests, no stand-alone field testing was conducted due to sample size concerns. Item statistics for these tests were obtained from operational administration and embedded field-testing.

Embedded Field-test Items

Although a stand-alone field test is useful for developing a new test because it can produce a large pool of quality items, embedded field testing is generally preferred because the items being field-tested are positioned throughout the operational test. Variables such as test-taker motivation and test security are the same in embedded field testing as they will be when the field-tested items are later administered operationally. Such field testing involves distributing the items being field-tested within an operational test form. Different forms contain the same operational items and different field-test items. The numbers of embedded field-test items for the STS are shown in Table 3.3.

Allocation of Students to Field-test Items

The operational test forms for a given STS are spiraled among students in the state so that a large representative sample of test takers responds to the field-test items embedded in these forms. The spiraling design ensures that a diverse sample of students take each field-test item. The students do not know which items are field-test items and which items are operational items; therefore, their motivation is not expected to vary over the two types of items (Patrick & Way, 2008).

Number of Forms and Sample Sizes

A set of six field-test items is administered on all STS forms. The sets of field-test items differ across forms and the number of forms varies across content area and grade level. Table 3.3 shows the number of forms administered for each STS in 2010 and the numbers of examinees included in samples used for the field test or “final” item analyses (FIA) of these forms. The field-test samples constitute the entire population tested.

Table 3.3 Summary of Items and Forms Presented in the 2010 STS

Content Area	STS*	Operational		Field Test		
		No. Items	No. Examinees	No. Forms	No. Items	No. Examinees FIA Sample
Reading/ Language Arts	**2**	65	11,518	12	6	760–1,151
	3	65	8,444	12	6	687–722
	4	75	4,459	9	6	373–587
	5	75	3,049	6	6	461–526
	6	75	1,962	4	6	459–478
	7	75	1,587	4	6	352–392
	8	75	1,416	4	6	312–347
	9	75	2,358	5	6	396–533
	10	75	1,401	4	6	331–350
	11	75	839	2	6	399–412
Mathematics	**2**	65	11,505	12	6	767–1,145
	3	65	8,382	12	6	684–720
	4	65	4,428	9	6	373–580
	5	65	3,043	6	6	460–527
	6	65	1,952	4	6	452–477
	7	65	1,549	4	6	342–385
	Algebra I	65	3,053	5	6	520–709
	Geometry	65	512	1	6	512

* Numbers indicate grade-level tests.

CDE Data Review

Once items have been field tested, ETS prepares the items and the associated statistics for review by the CDE. ETS provides items with their statistical data, along with annotated comment sheets, for the CDE to use in its review. ETS conducts an introductory training to highlight any new issues and serve as a statistical refresher. CDE consultants then make decisions about which items should be included in the item bank. ETS psychometric and content staff members are available to CDE consultants throughout this process.

Item Banking

Once the ARP new item review is complete, the items are placed in the item bank along with their corresponding review information. Items that are accepted by the ARP and CDE are updated to a “field-test ready” status; items that are rejected are updated to a “rejected before use” status. ETS then delivers the items to the CDE by means of a delivery of the STAR electronic item bank. Subsequent updates to items are based on field-test and operational use of the items. However, only the latest content of the item is in the bank at any given time, along with the administration data from every administration that has included the item.

After field-test or operational use, items that do not meet statistical specifications may be rejected; such items are updated with a status of “rejected for statistical reasons” and remain unavailable in the bank. These statistics are obtained by the research group at ETS, which carefully evaluates each item for its level of difficulty and discrimination as well as conformance to the IRT Rasch model. Researchers also determine if the item functions similarly for various subgroups of interest.

All unavailable items are marked with an availability indicator of “Unavailable,” a reason for rejection as described above, and cause alerts so they are not inadvertently included on subsequent test forms. Statuses and availability are updated programmatically as items are presented for review, accepted or rejected, placed on a form for field-testing, presented for statistical review, used operationally, and released. All rejection and release indications are monitored and controlled through ETS’s assessment development processes.

ETS currently provides and maintains the electronic item banks for several of the California assessments including the California High School Exit Examination (CAHSEE) and STAR (CSTs, CMA, CAPA, and STS). CAHSEE and STAR are currently consolidated in the California Item Banking system. ETS works with the CDE to obtain the data for assessments under contract with other vendors for inclusion into the item bank, using the tools previously developed. ETS provides the item banking application using the LAN architecture and the relational database management system, SQL 2000, already deployed. ETS provides updated versions of the item bank to the CDE on an ongoing basis, and works with the CDE to determine the optimum process if a change in databases is desired.

References

California Department of Education. (2009). *California content standards*. Sacramento, CA. http://www.cde.ca.gov/be/st/ss/.

Educational Testing Service. (2002). *ETS standards for quality and fairness*. Office of Testing Integrity, Princeton, NJ: Educational Testing Service.

Patrick, R., & Way, D. (March, 2008). *Field testing and equating designs for state educational assessments*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Schmeiser, C.B., & Welch, C.J. (2006). Test development. In R.L. Brennan (Ed.), *Educational measurement* (4th ed.). Westport, CT: American Council on Education and Praeger Publishers.

Chapter 4: Test Assembly

The STS tests are constructed to measure students' performance relative to California's content standards approved by the SBE. They are also constructed to meet professional standards for validity and reliability. For each STS, the content standards and psychometric attributes are used as the basis for assembling the test forms.

Test Length

The number of items in each STS blueprint was determined by considering the construct that the test is intended to measure and the level of psychometric quality desired. Test length is closely related to the complexity of content to be measured by each test; this content is defined by the California content standards for each grade level and content area. Also considered is the goal that the test be short enough that most of the students complete it in a reasonable amount of time.

The STS tests for RLA contain 71 items in grades two and three and 81 items in grades four through eleven. The STS grade-level and EOC mathematics tests contain 71 items. For more details on the distribution of items, see Appendix 2.A—STS Item and Time Chart on page 19.

Rules for Item Selection

Test Blueprint

ETS selects all STS test items to conform to the SBE-approved California content standards and test blueprints. The content blueprints for the STS can be found on the CDE STAR STS Blueprints Web page at http://www.cde.ca.gov/ta/tg/sr/stsblueprints.asp.

Although the test blueprints call for the number of items at the individual standard level, scores for the STS items are grouped into subcontent areas (reporting clusters). For each STS reporting cluster from grades two to seven, the percentage of questions correctly answered is reported on a student's score report. A description of the STS reporting clusters and the standards that compose each reporting cluster is provided in Appendix 2.B—Reporting Clusters, which starts on page 20.

Content Rules and Item Selection

When developing a new test form for a given grade and content area, test developers follow a number of rules. First and foremost, they select items that meet the blueprint for that grade level and content area. Using an electronic item bank, assessment specialists begin by identifying a number of linking items. These are items that appeared in the previous year's operational administration and are used to equate the test forms administered each year. Linking items are selected to proportionally represent the full blueprint. For example, if 25 percent of all of the items in a test are in the first reporting cluster, then 25 percent of the linking items should come from that cluster. The linking items are selected for their strong match to the content and are reviewed to ensure that they meet specific psychometric criteria.

After the linking items are approved, assessment specialists populate the rest of the test form. Their first consideration is the strength of the content and the match of each item to the standard. In selecting items, team members also try to ensure that they include a variety of formats and content and that at least some of the items include graphics for visual interest.

Another consideration is the difficulty of each item. Test developers strive to ensure that there are some easy and some hard items and that there are a number of items in the middle range of difficulty. If items do not meet all content and psychometric criteria, staff reviews the other available items to determine if there are other selections that could improve the match of the test to all of the requirements. If such a match is not attainable, the content team works in conjunction with psychometricians and the CDE to determine which combination of items will best serve the needs of the students taking the test.

These are rules that, in general, test developers follow to construct new forms for well-established tests. Slightly different test construction rules were followed for the STS tests for RLA in grades eight through eleven and the EOC mathematics tests because base year scales had not been established for these tests and therefore, sets of linking items were not needed.

Psychometric Criteria

For the STS, the test developers and psychometricians strive to accomplish three goals while developing a test:

1. The test must have desired precision of measurement at all ability levels.
2. The test score must be valid and reliable for the intended population and for the various subgroups of test-takers.
3. The test forms must be comparable across years of administration to ensure the generalizability of scores over time.

In order to achieve these goals, a set of rules is developed that outlines the desired psychometric properties of each STS. Such rules are referred to as statistical targets.

Three types of assembly targets are developed for each STS in grades two through seven: the total test target, the linking block target, and reporting cluster targets. Two types of assembly targets are developed for each STS for RLA in grades eight through eleven and the EOC mathematics tests: the total test target and (reporting) cluster targets. These targets are provided to test developers before a test construction cycle begins. The test developers and psychometricians work together to design the tests to meet these targets.

The total test target or primary statistical targets used for assembling the STS forms for the 2010 STAR administration were the test information function based on the item response theory (IRT) item parameters and an average point-biserial correlation. When using the IRT Rasch model, the target information function makes it possible to choose items to produce a test that has the desired precision of measurement at all ability levels. The target mean and standard deviation of item difficulty (*b*-values) consistent with the information curves were also provided to test development staff to help with the test construction process. The point-biserial correlation describes the relationship between student performance on a dichotomously scored item and student performance on the test as a whole. It is used as a measure of how well an item discriminates among test takers that differ in their ability and it is related to the overall reliability of the test.

The target *b*-value range approximates a minimum proportion-correct value (*p*-value) of 0.20 and a maximum *p*-value of 0.95 for each test. The minimum target value for an item point biserial was set at 0.14 for each test. This value approximates a biserial correlation of 0.20. These specifications were developed from the analyses of field-test items administered in the year 2006. The target values for the STS tests are presented in Table 4.1 on the next page.

The linking block target consisted of a proportionally adjusted (for numbers of items) total target. To aid comparisons, the information curves based on the linking blocks were proportionally adjusted to match the full test length and were presented with the information curves for the total test. The graphs in Figure 4.A.1 and Figure 4.A.2 starting on page 118 show, for each STS, the target test information function and the projected test information function for the total test and the linking set except for the STS tests in grades eight through eleven, where the projected test information for the linking set is not available. Target information functions are also used to evaluate the items selected to measure each subscore in the interest of maintaining some consistency in the accuracy of cluster scores across years. Because the clusters include fewer items than the total test, there is always more variability between the target and the constructed information curves for the clusters than there is for the total test.

Figure 4.B.1 through Figure 4.B.18 starting on page 122 present the target and projected information curves for the clusters in each STS.

Table 4.1 Target Statistical Specifications for the STS

Content Area	STS*	Target Mean b	Target SD b	Min *p*-value	Max *p*-value	Mean Point Biserial	Min Point Biserial
Reading/ Language Arts	**2**	–0.44	0.91	0.20	0.95	> 0.37	0.14
	3	–0.46	0.88	0.20	0.95	> 0.37	0.14
	4	–0.45	0.71	0.20	0.95	> 0.37	0.14
	5	–0.24	0.65	0.20	0.95	> 0.37	0.14
	6	–0.23	0.72	0.20	0.95	> 0.37	0.14
	7	–0.21	0.80	0.20	0.95	> 0.37	0.14
	8	–0.23	0.66	0.20	0.95	> 0.37	0.14
	9	–0.23	0.68	0.20	0.95	> 0.37	0.14
	10	–0.23	0.69	0.20	0.95	> 0.37	0.14
	11	–0.23	0.65	0.20	0.95	> 0.37	0.14
Mathematics	**2**	–0.75	0.94	0.20	0.95	0.39 – 0.45	0.14
	3	–0.58	0.88	0.20	0.95	0.39 – 0.45	0.14
	4	–0.49	0.65	0.20	0.95	0.39 – 0.45	0.14
	5	–0.23	0.65	0.20	0.95	0.39 – 0.45	0.14
	6	–0.25	0.65	0.20	0.95	0.39 – 0.45	0.14
	7	–0.24	0.65	0.20	0.95	0.39 – 0.45	0.14
	Algebra I	–0.22	0.65	0.20	0.95	0.31 – 0.35	0.14
	Geometry	–0.23	0.70	0.20	0.95	0.33 – 0.37	0.14

* Numbers indicate grade-level tests

Projected Psychometric Properties of the Assembled Tests

Prior to the 2010 administration, ETS psychometricians performed a preliminary review of the technical characteristics of the assembled tests. The expected or projected performance of examinees and the overall score reliability were estimated using the item-level statistics available in the California item bank for the selected items. The test reliability was based on Gulliksen's formula (Gulliksen, 1987) for estimating test reliability (r_{xx}) from item *p*-values and item point-biserial correlations:

$$r_{xx} = \left(\frac{K}{K-1}\right)\left(1 - \frac{\sum_{g=1}^{K} s_g^{\,2}}{\left(\sum_{g=1}^{K} r_{xg} s_g\right)^2}\right) \tag{4.1}$$

where,

K is the number of items in the test,

$s_g^{\,2}$ is the estimated item variances, i.e. $p_g(1-p_g)$, where p_g is the item *p*-value for item g,

r_{xg} is the item point-biserial correlation for item g, and

$r_{xg}s_g$ is the item reliability index.

In addition, estimated test raw score means were calculated by summing the item *p*-values and estimated test raw score standard deviations were calculated by summing the item reliability indices. Table 4.A.1 on page 117 presents these summary values by content area and grade.

It should be noted that the projected reliabilities given in Table 4.A.1 were based on item *p*-values and point-biserial correlations that, for some of the items, were based on external field-testing using samples from students that were not fully representative of the state. Chapter 8 presents item *p*-values, point-biserial correlations, and test reliability estimates based on the data from the 2010 STS administration.

Table 4.A.2 on page 117 shows the mean observed statistics of the items on each STS based on the item-level statistics available in the item bank for the most recent administration of those items. These values can be compared to the target values in Table 4.1.

The graphs in Figure 4.A.1 and Figure 4.A.2 starting on page 118 show, for each STS, the target test information function and the projected test information function for the total test and for the linking set as applicable (grades two through seven only). The information curves for the linking sets were adjusted so they could be directly compared to the information curves for the longer total tests. Figure 4.B.1 through Figure 4.B.18, which start on page 122, present the target and projected information curves for the clusters in each STS test.

Rules for Item Sequence and Layout

The items on test forms are organized and sequenced differently according to the requirements of the content area.

- RLA—Because the RLA test is primarily passage-dependent, items are sequenced with their associated reading passages. Passages are sequenced according to genre and interest level; test developers work to place high-interest pieces (typically narrative selections) near lower-interest pieces (typically functional or technical writing). Stand-alone items are placed throughout the form, where appropriate.
- Mathematics—The mathematics test forms are sequenced according to reporting cluster; that is, all items from a single reporting cluster are presented together and then all of the items from the next reporting cluster are presented.

Reference

Gulliksen, H. (1987). *Theory of mental tests*. Hillsdale, NJ: Erlbaum.

Appendix 4.A—Technical Characteristics

Table 4.A.1 Summary of 2010 STS Projected Technical Characteristics

Content Area	STS*	Number of Items	Mean Raw Score	Std. Dev. of Raw Scores	Reliability
Reading/ Language Arts	**2**	65	38.02	12.18	0.92
	3	65	36.19	12.14	0.91
	4	75	41.29	14.32	0.93
	5	75	34.83	12.45	0.90
	6	75	36.54	11.90	0.89
	7	75	39.88	12.13	0.90
	8	75	40.03	11.74	0.89
	9	75	40.76	11.25	0.88
	10	75	39.68	11.04	0.87
	11	75	37.82	10.71	0.86
Mathematics	**2**	65	42.14	11.58	0.91
	3	65	40.23	12.64	0.93
	4	65	38.80	12.53	0.92
	5	65	33.04	11.09	0.89
	6	65	31.89	11.76	0.91
	7	65	28.09	10.01	0.87
	Algebra I	65	23.61	7.01	0.72
	Geometry	65	26.05	8.66	0.83

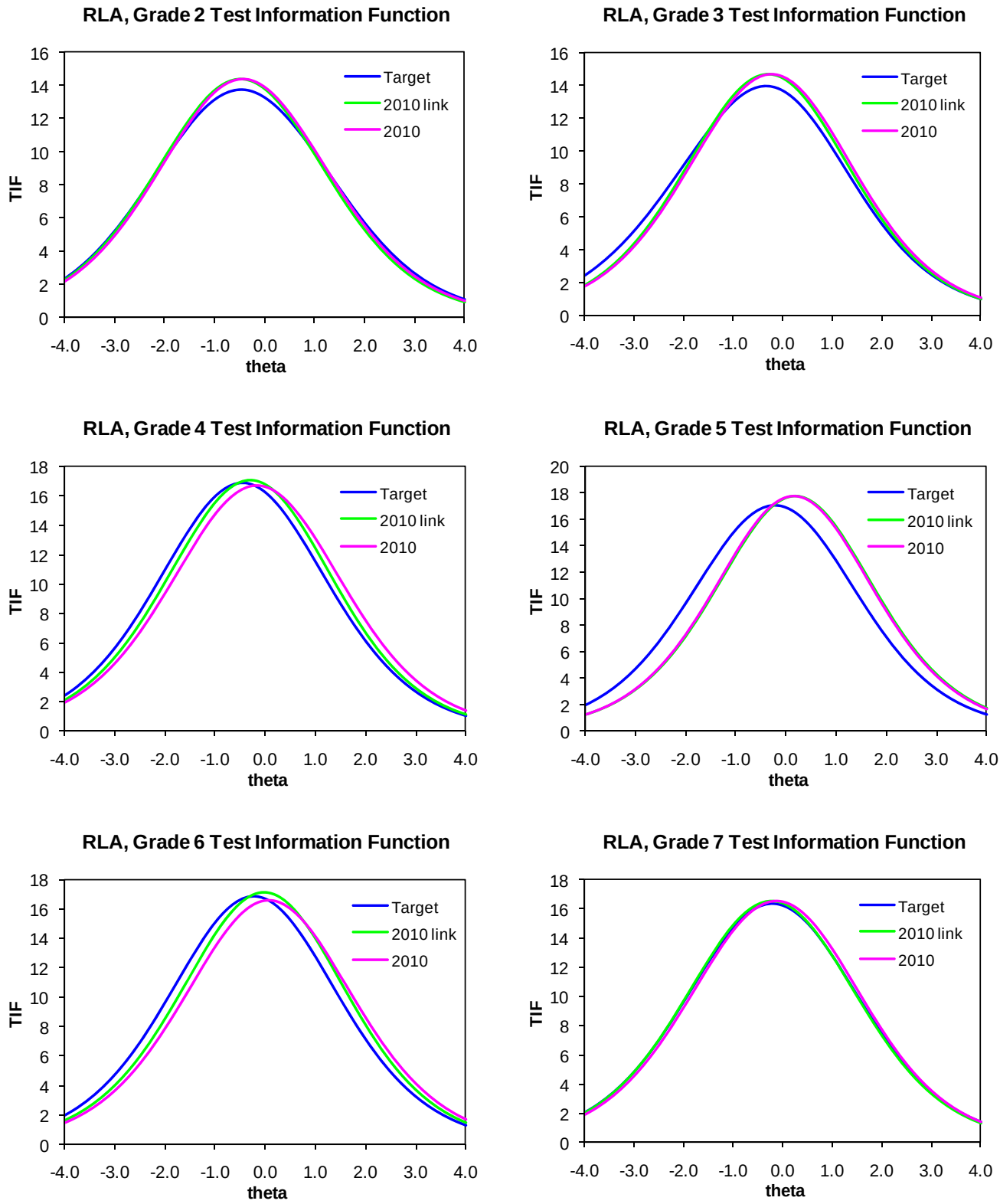
* Numbers indicate grade-level tests.

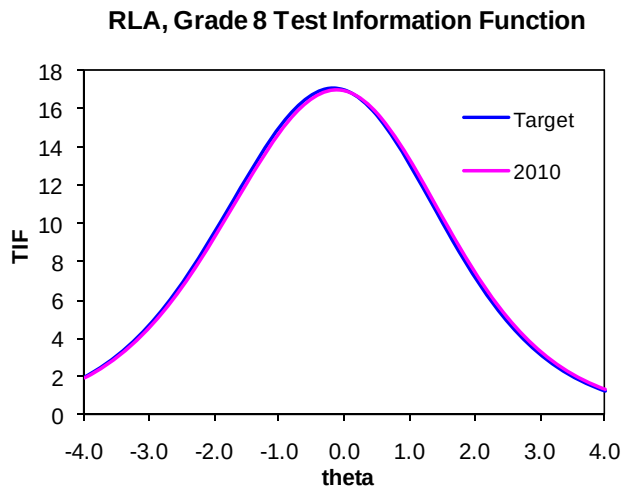
Table 4.A.2 Summary of 2010 STS Projected Statistical Attributes

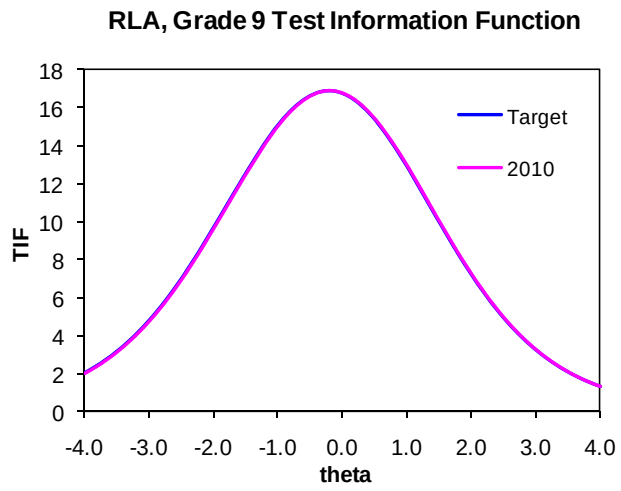
Content Area	STS*	Mean b	SD b	Mean *p*-value	Min *p*-value	Max *p*-value	Mean Point Biserial	Min Point Biserial
Reading/ Language Arts	**2**	–0.43	0.76	0.59	0.21	0.89	0.40	0.21
	3	–0.26	0.69	0.56	0.30	0.86	0.39	0.22
	4	–0.18	0.72	0.55	0.23	0.88	0.40	0.22
	5	0.15	0.48	0.46	0.26	0.71	0.34	0.11
	6	0.06	0.73	0.49	0.10	0.84	0.33	0.07
	7	–0.15	0.76	0.53	0.25	0.90	0.34	0.01
	8	–0.18	0.66	0.53	0.28	0.84	0.33	0.17
	9	–0.22	0.67	0.54	0.27	0.83	0.32	0.14
	10	–0.15	0.67	0.53	0.27	0.82	0.31	0.15
	11	–0.03	0.62	0.50	0.15	0.87	0.29	-0.09
Mathematics	**2**	–0.77	0.82	0.65	0.36	0.91	0.39	0.24
	3	–0.58	0.85	0.62	0.25	0.95	0.42	0.20
	4	–0.47	0.69	0.60	0.24	0.88	0.41	0.22
	5	–0.05	0.61	0.51	0.26	0.80	0.35	0.18
	6	0.04	0.73	0.49	0.08	0.83	0.37	-0.01
	7	0.29	0.63	0.43	0.17	0.82	0.32	0.15
	Algebra I	0.59	0.56	0.36	0.16	0.62	0.23	0.06
	Geometry	0.45	0.79	0.40	0.13	0.80	0.28	0.00

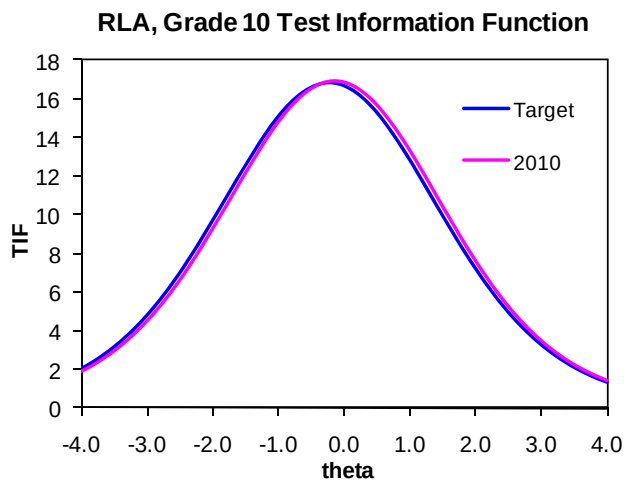
* Numbers indicate grade-level tests.

Figure 4.A.1 Plots for Target Information Function and Projected Information for Total Test and Linking Set for RLA




RLA, Grade 8 Test Information Function
TIF
theta
Target
2010
0
2
4
6
8
10
12
14
16
18
-4.0
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0


RLA, Grade 9 Test Information Function
TIF
theta
Target
2010
0
2
4
6
8
10
12
14
16
18
-4.0
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0


RLA, Grade 10 Test Information Function
TIF
theta
Target
2010
0
2
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6
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10
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14
16
18
-4.0
-3.0
-2.0
-1.0
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1.0
2.0
3.0
4.0

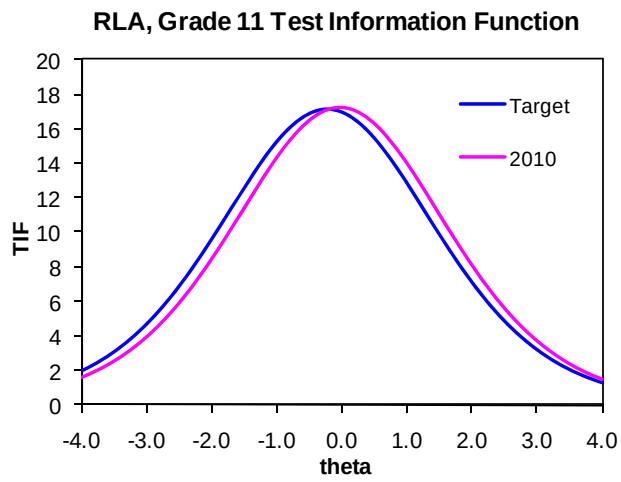
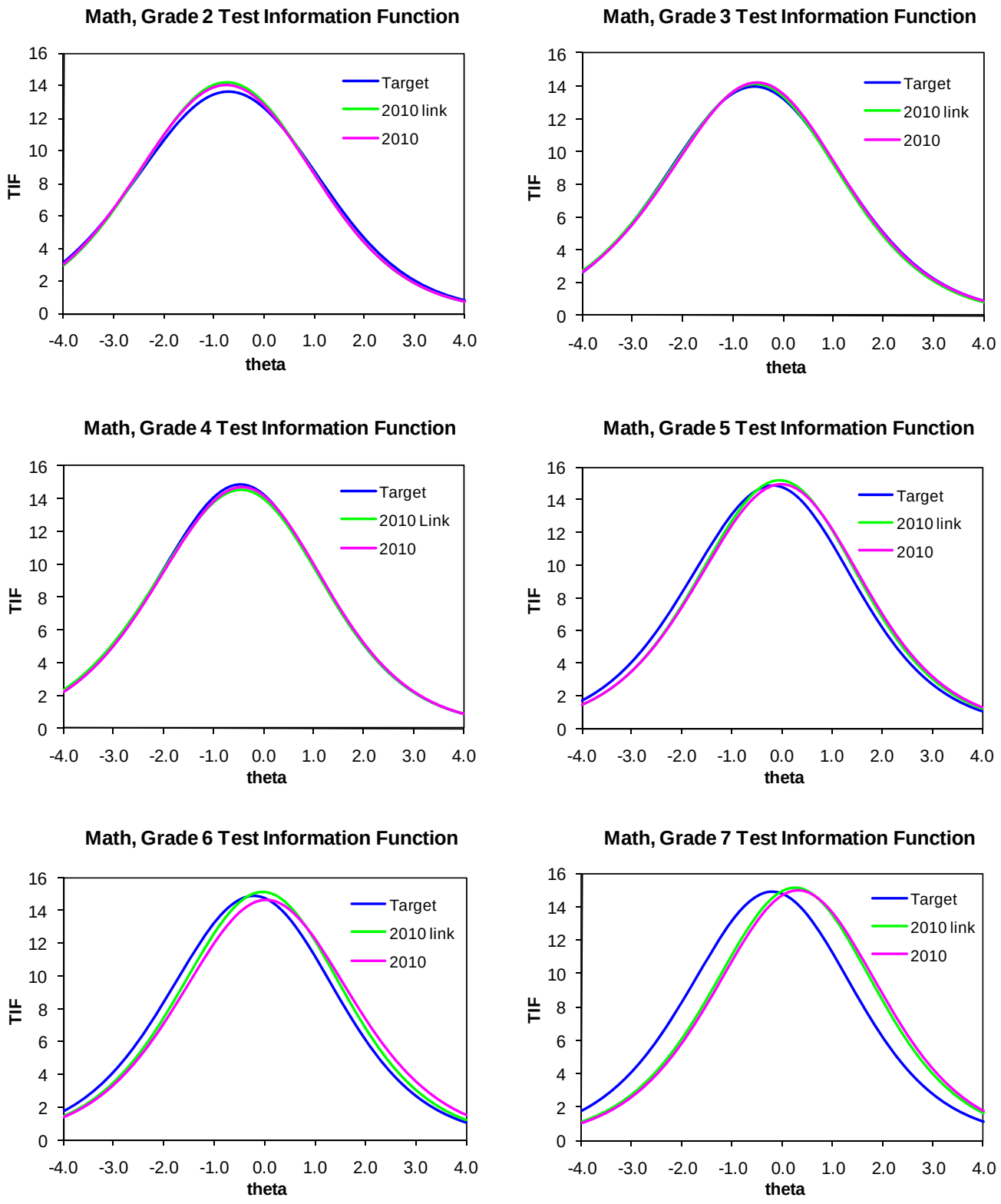
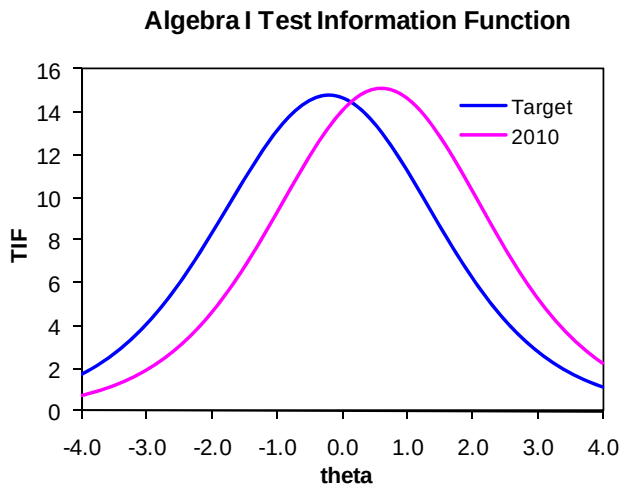
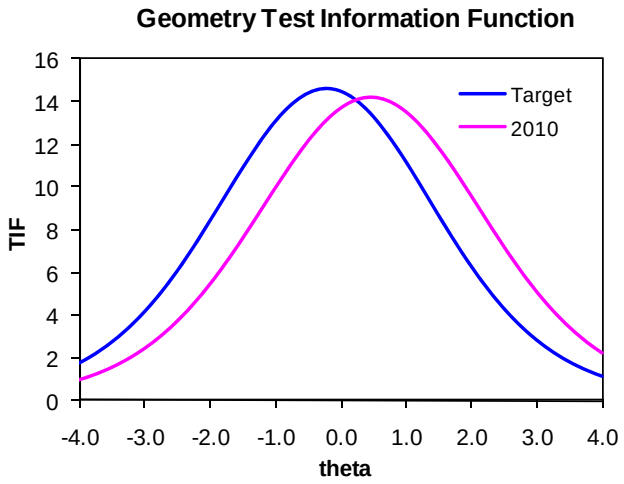

RLA, Grade 11 Test Information Function
TIF
theta
Target
2010
0
2
4
6
8
10
12
14
16
18
20
-4.0
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0

Figure 4.A.2 Plots for Target Information Function and Projected Information for Total Test and Linking Set for Mathematics

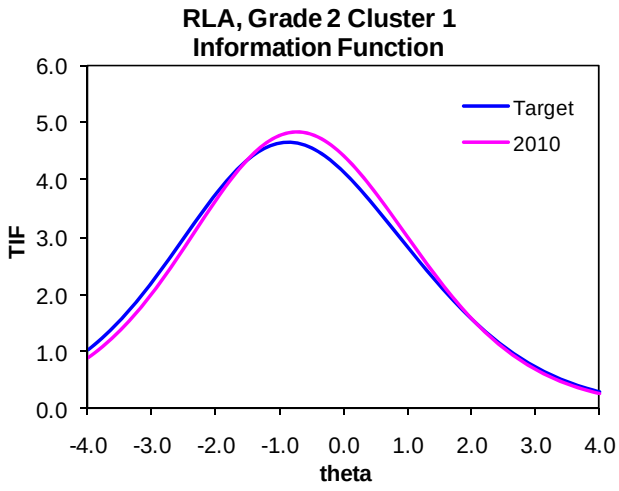


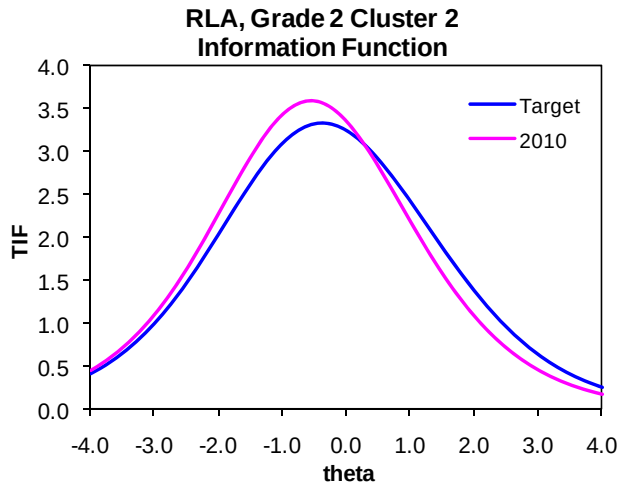

Algebra I Test Information Function
TIF
theta
Target
2010
16
14
12
10
8
6
4
2
0
-4.0
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0

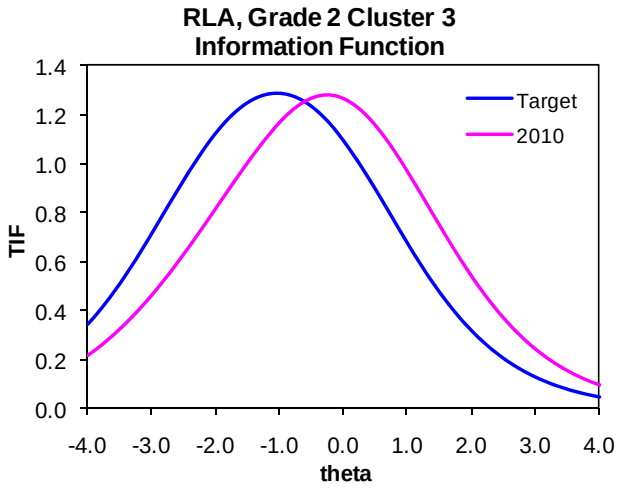

Geometry Test Information Function
TIF
theta
Target
2010
16
14
12
10
8
6
4
2
0
-4.0
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0

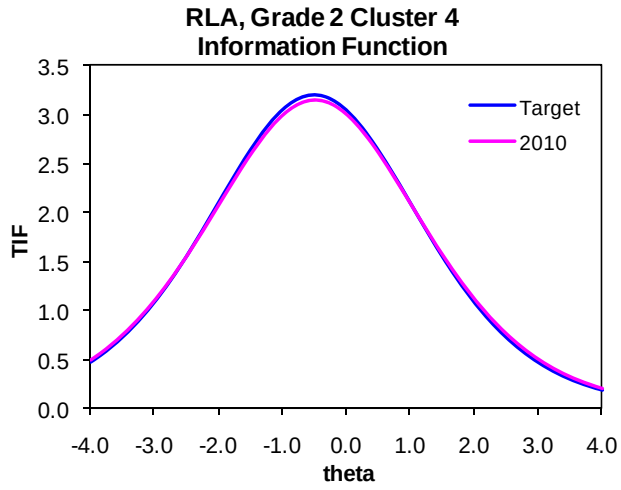
Appendix 4.B—Cluster Targets

Figure 4.B.1 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Two









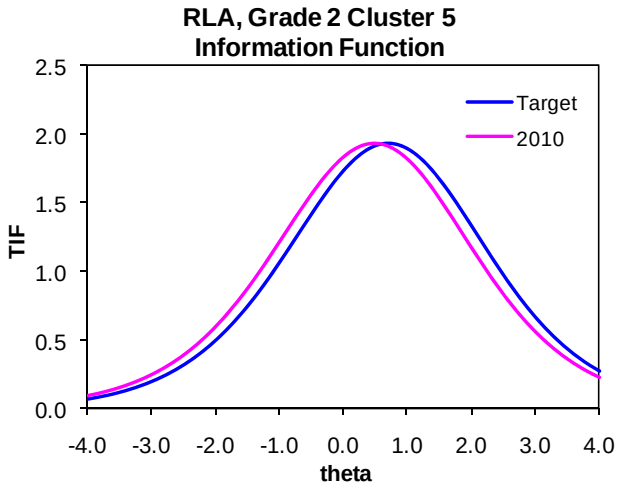
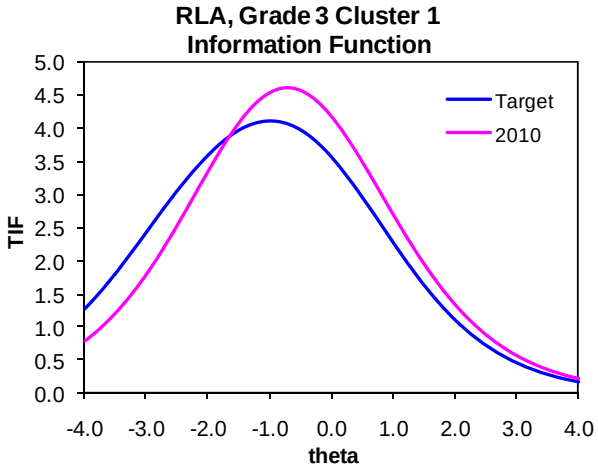
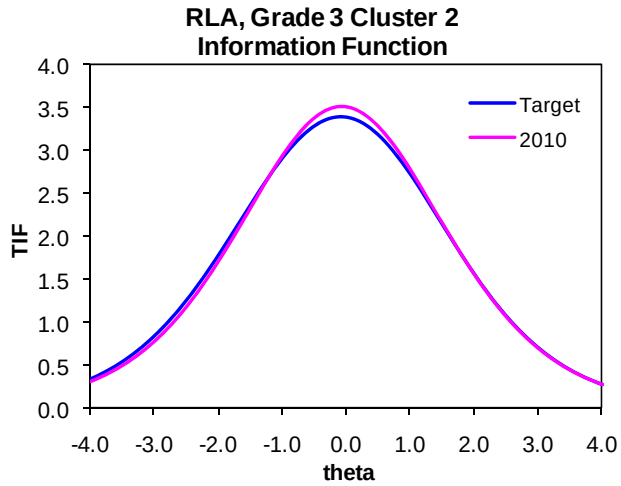
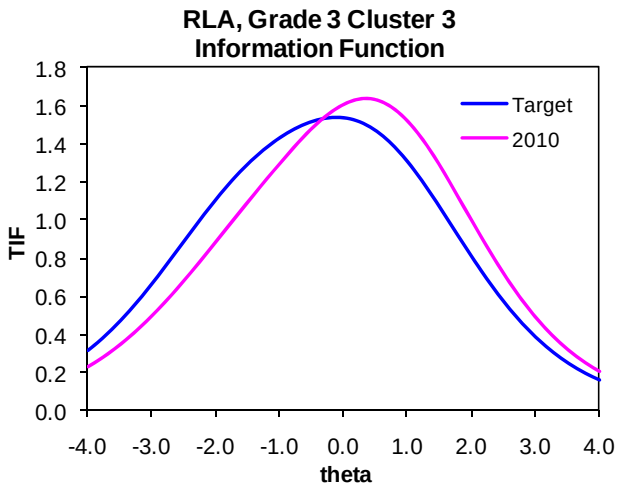
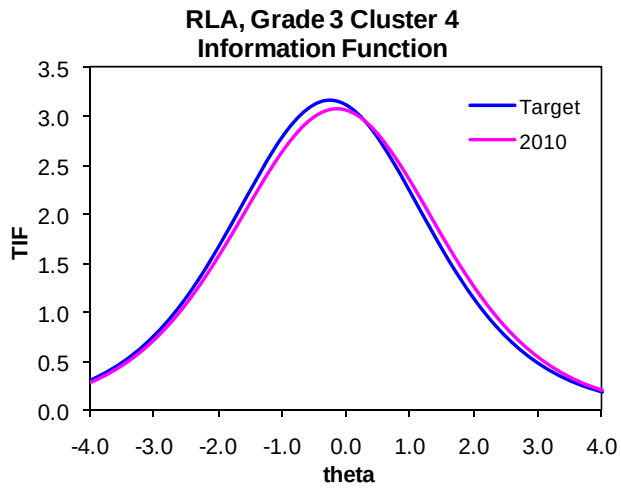


Figure 4.B.2 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Three









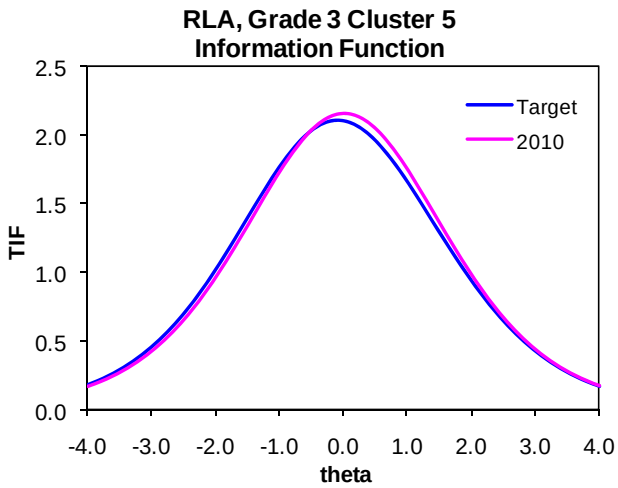


Figure 4.B.3 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Four

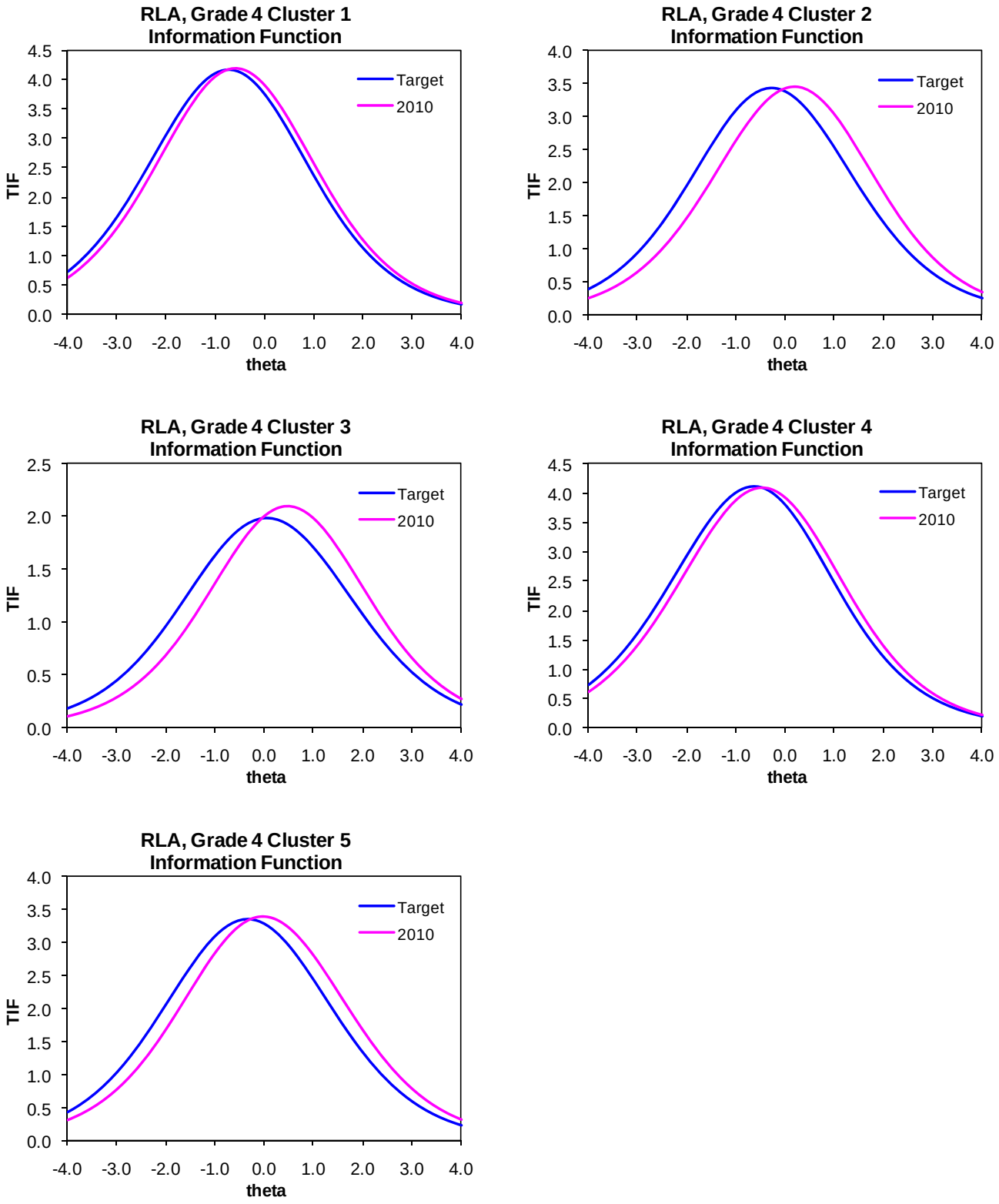


Figure 4.B.4 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Five

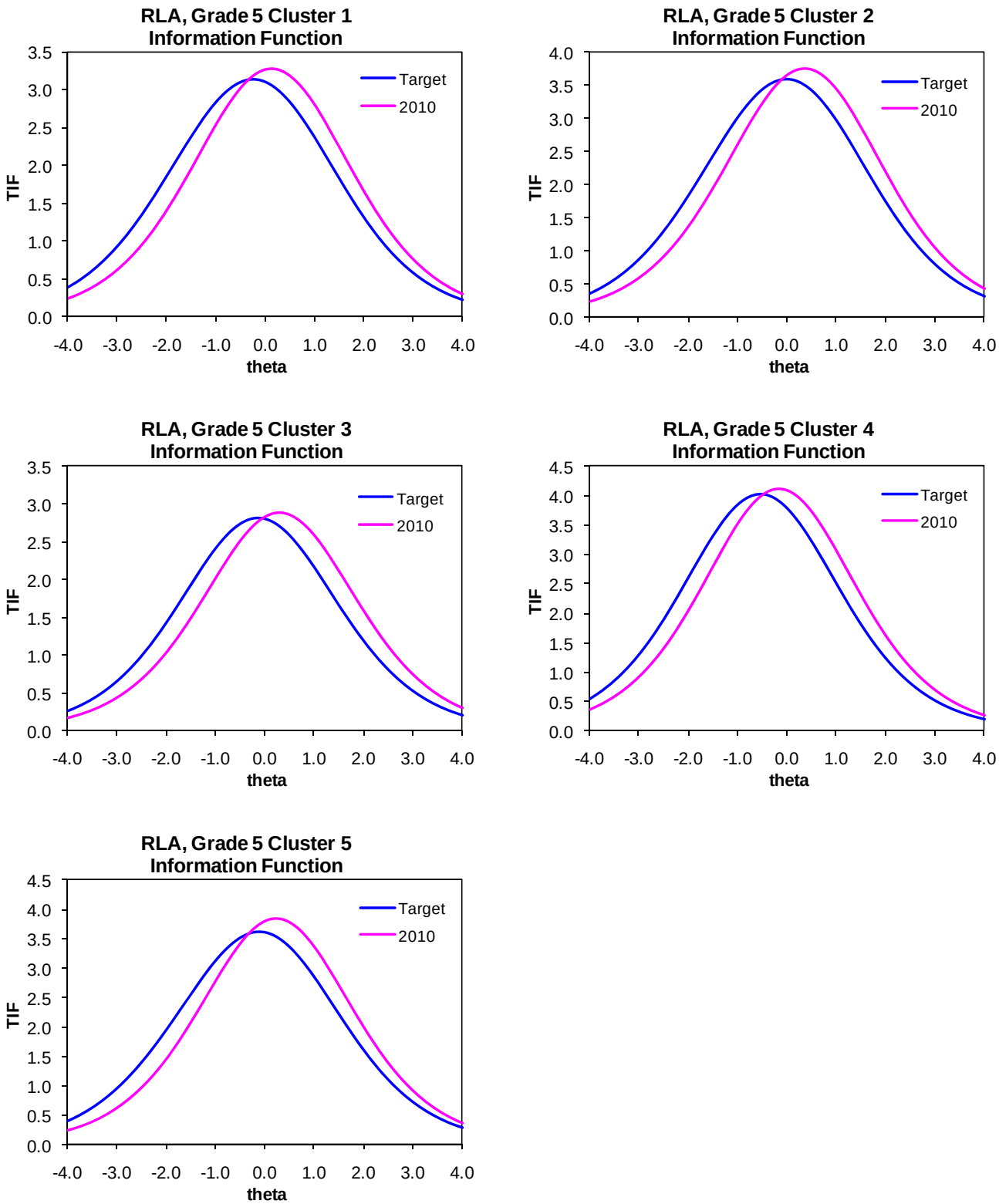


Figure 4.B.5 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Six

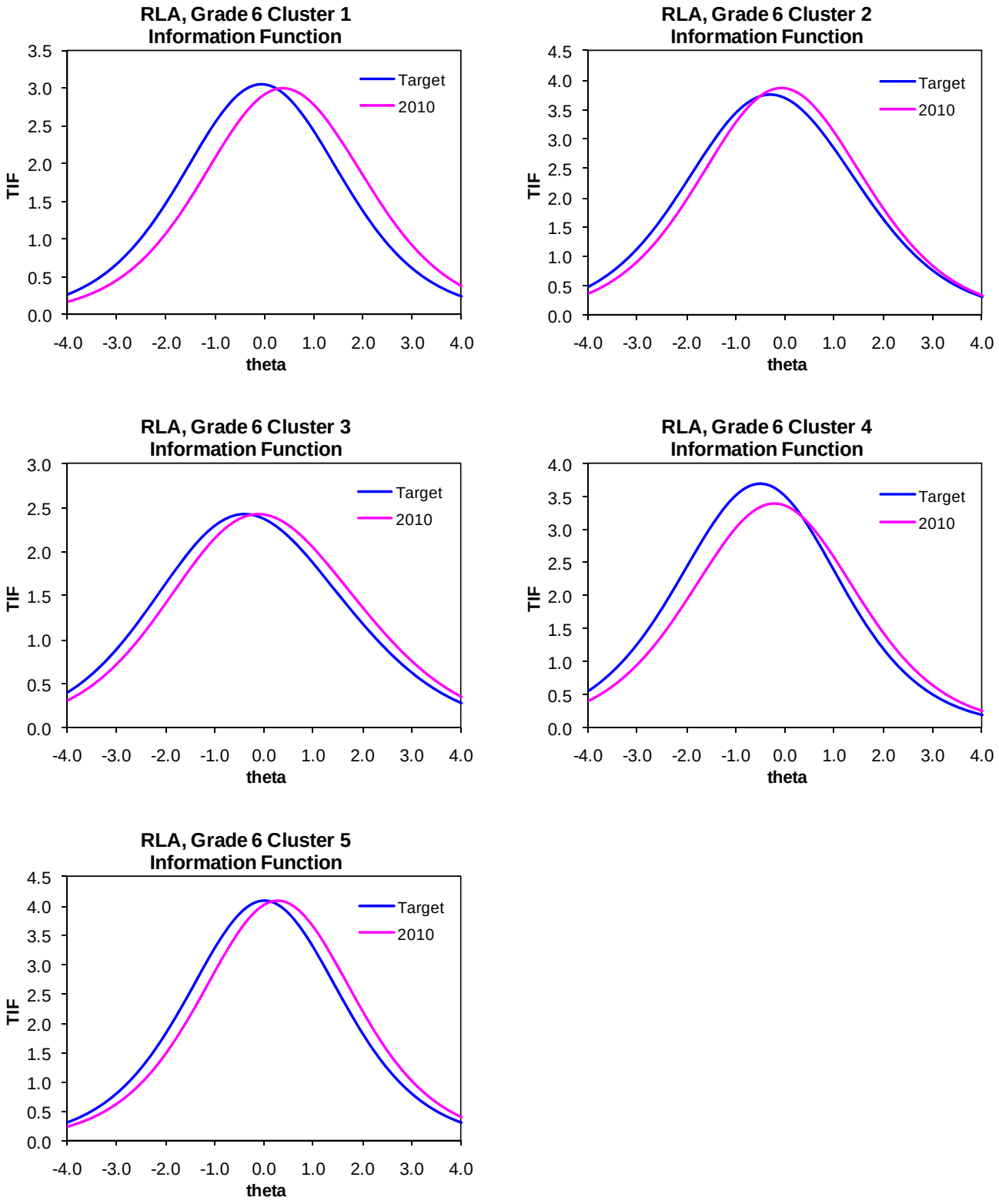


Figure 4.B.6 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Seven

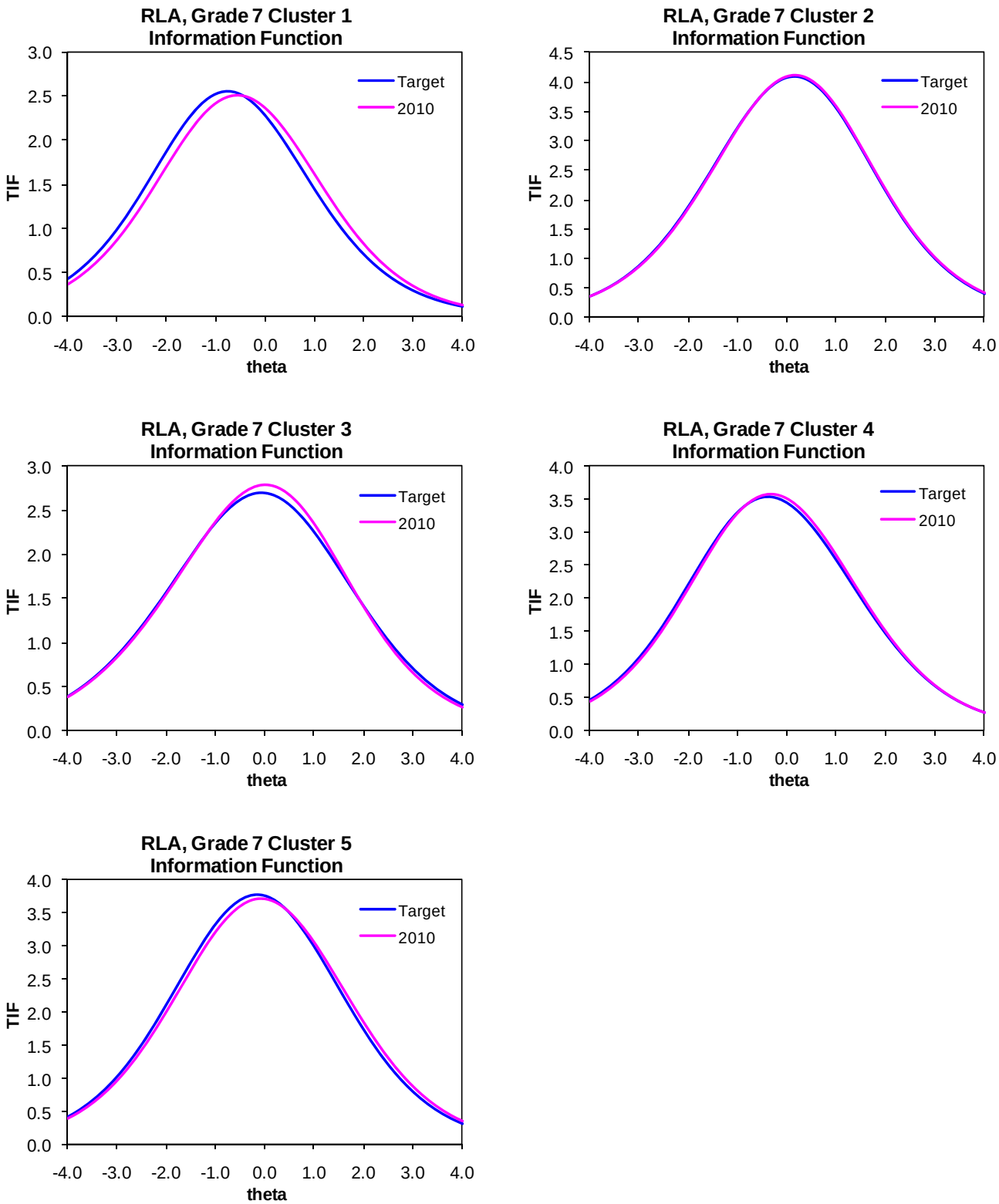


Figure 4.B.7 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Eight

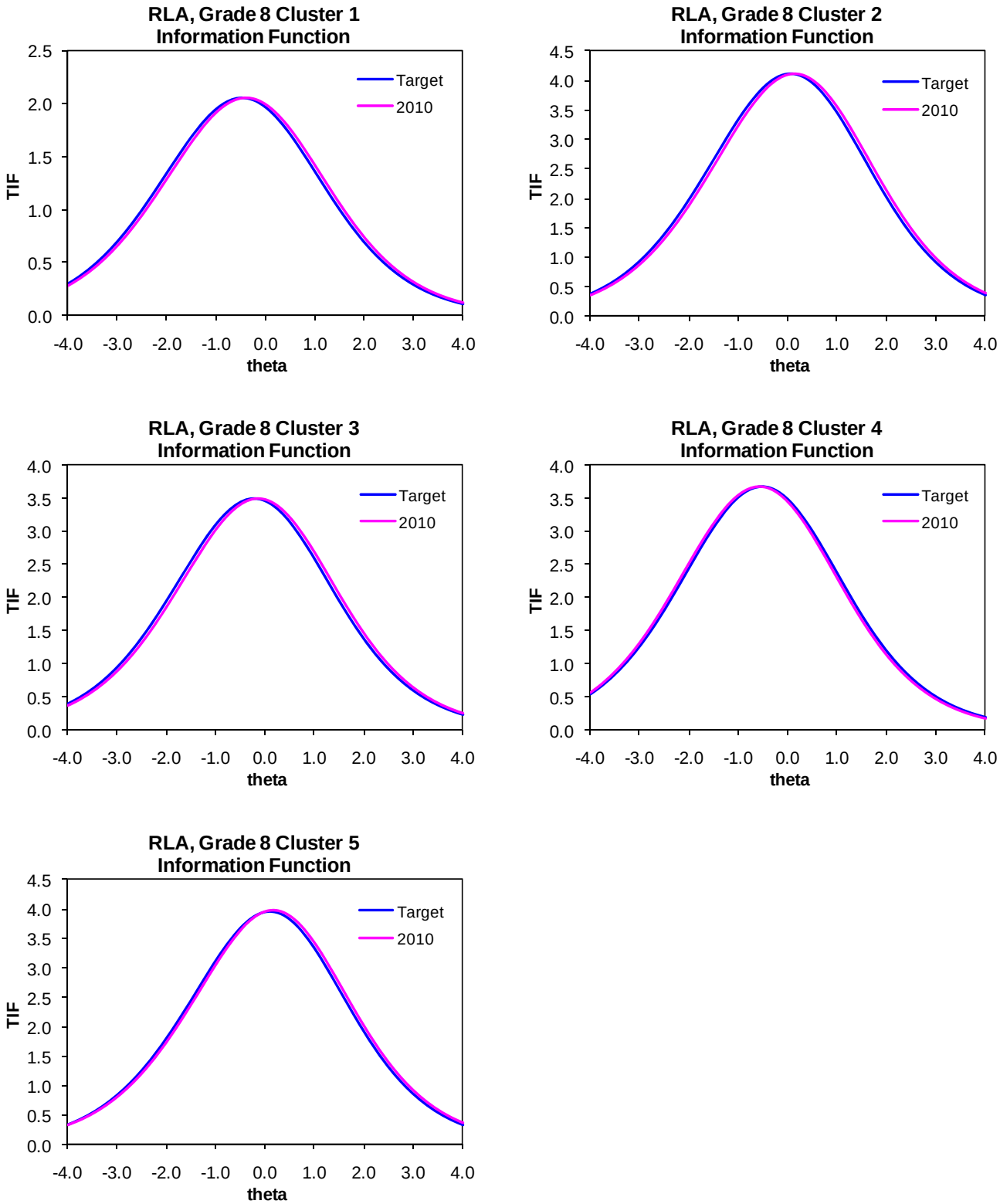


Figure 4.B.8 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Nine

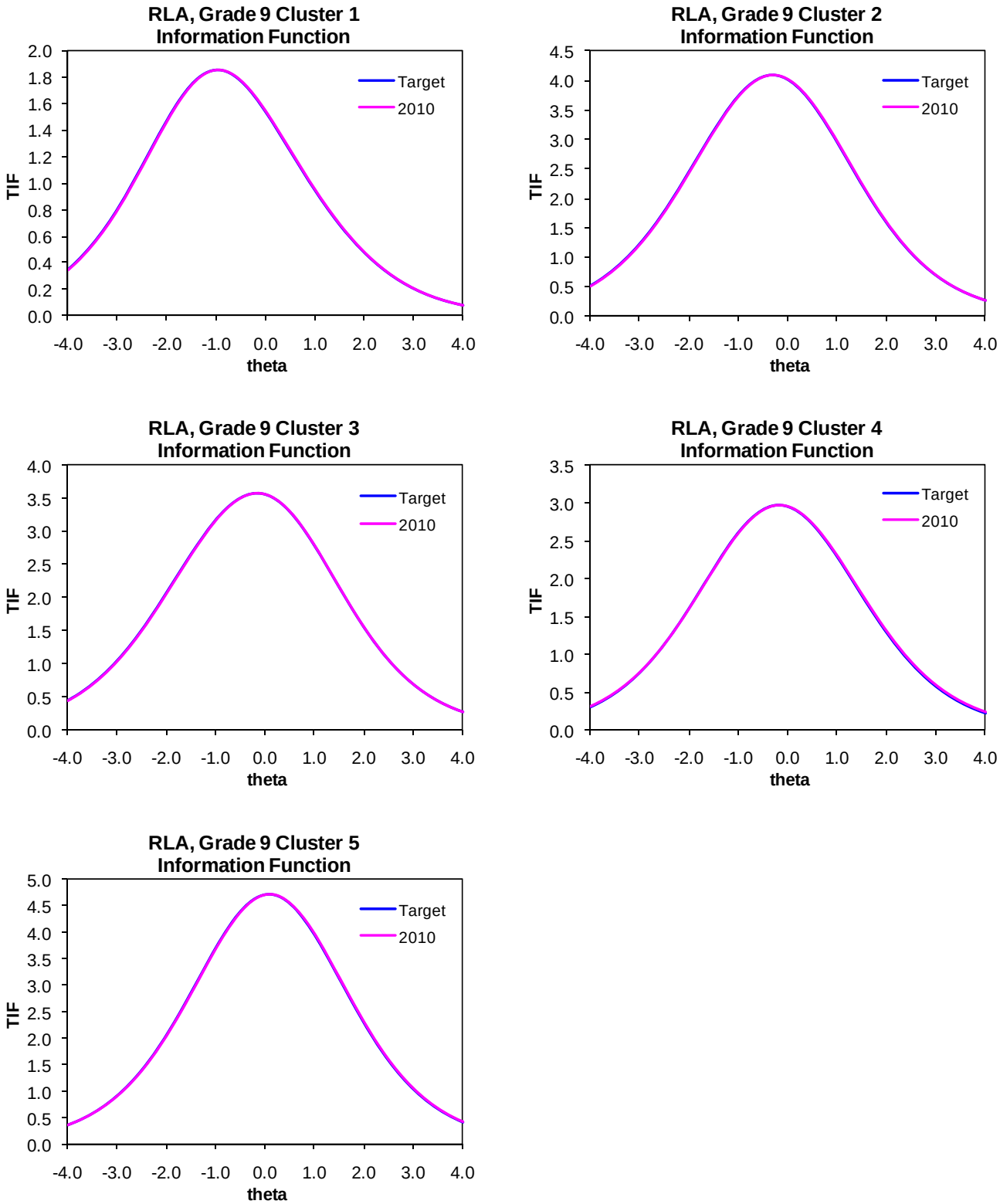


Figure 4.B.9 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Ten

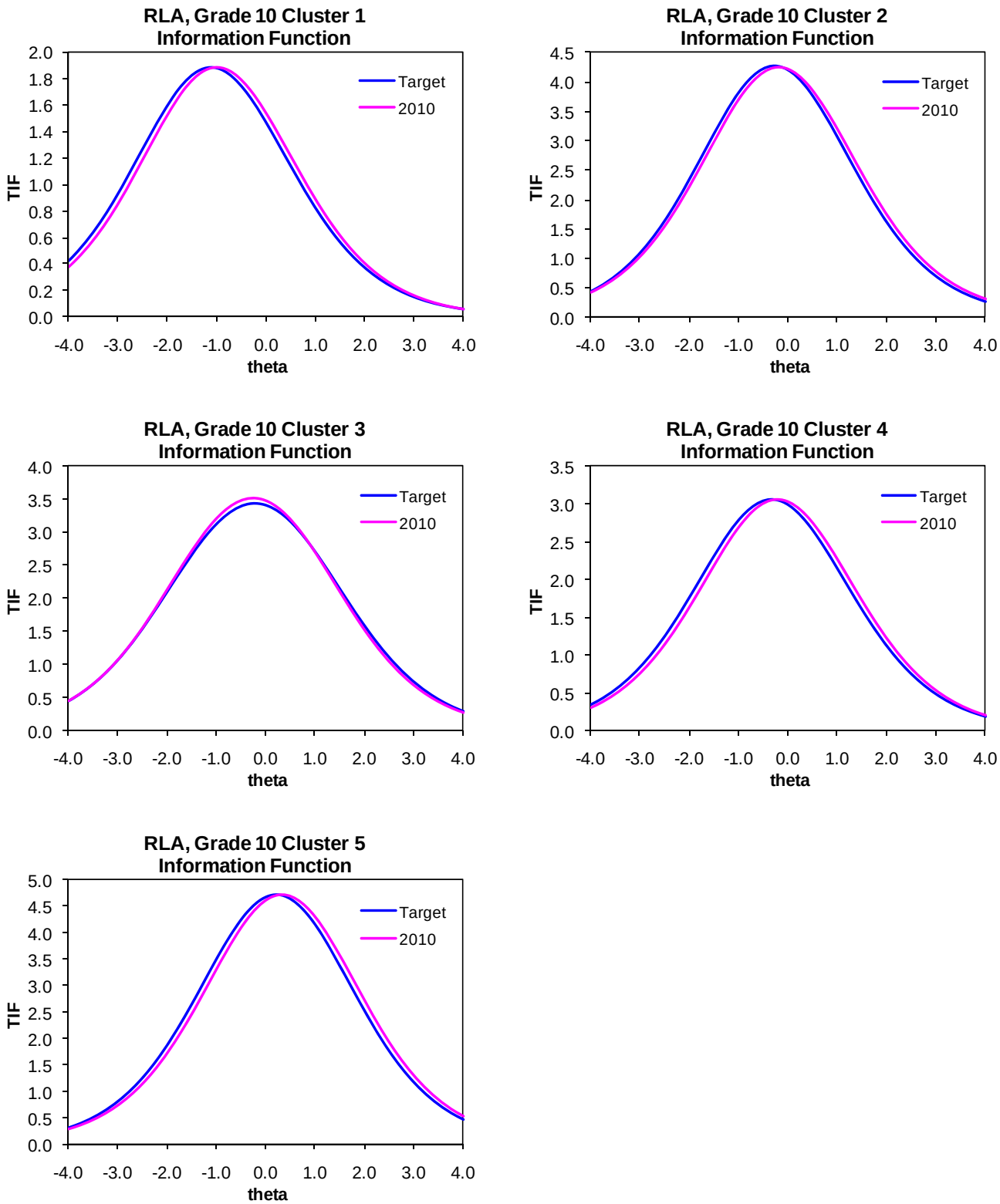


Figure 4.B.10 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Eleven

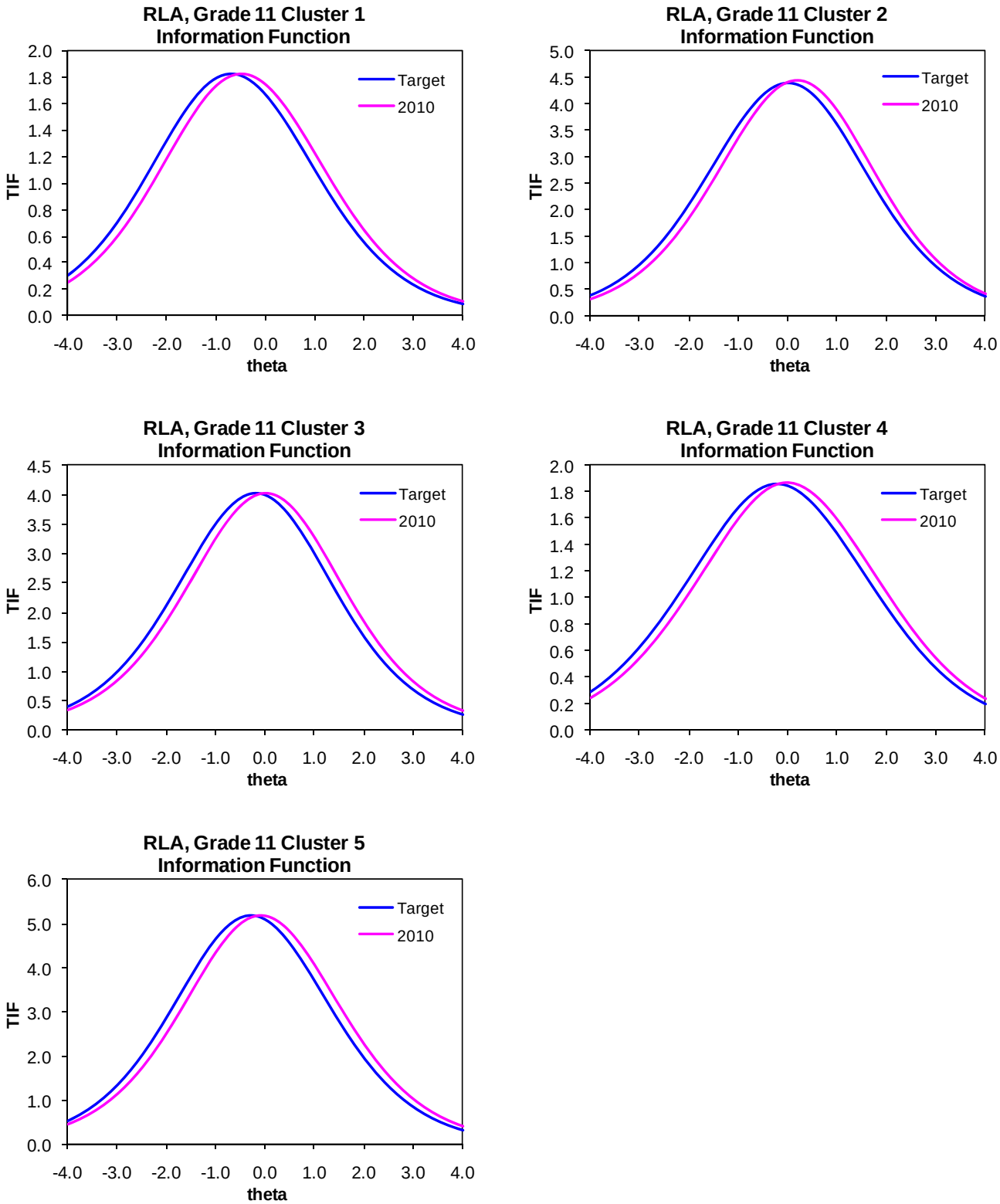


Figure 4.B.11 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Two

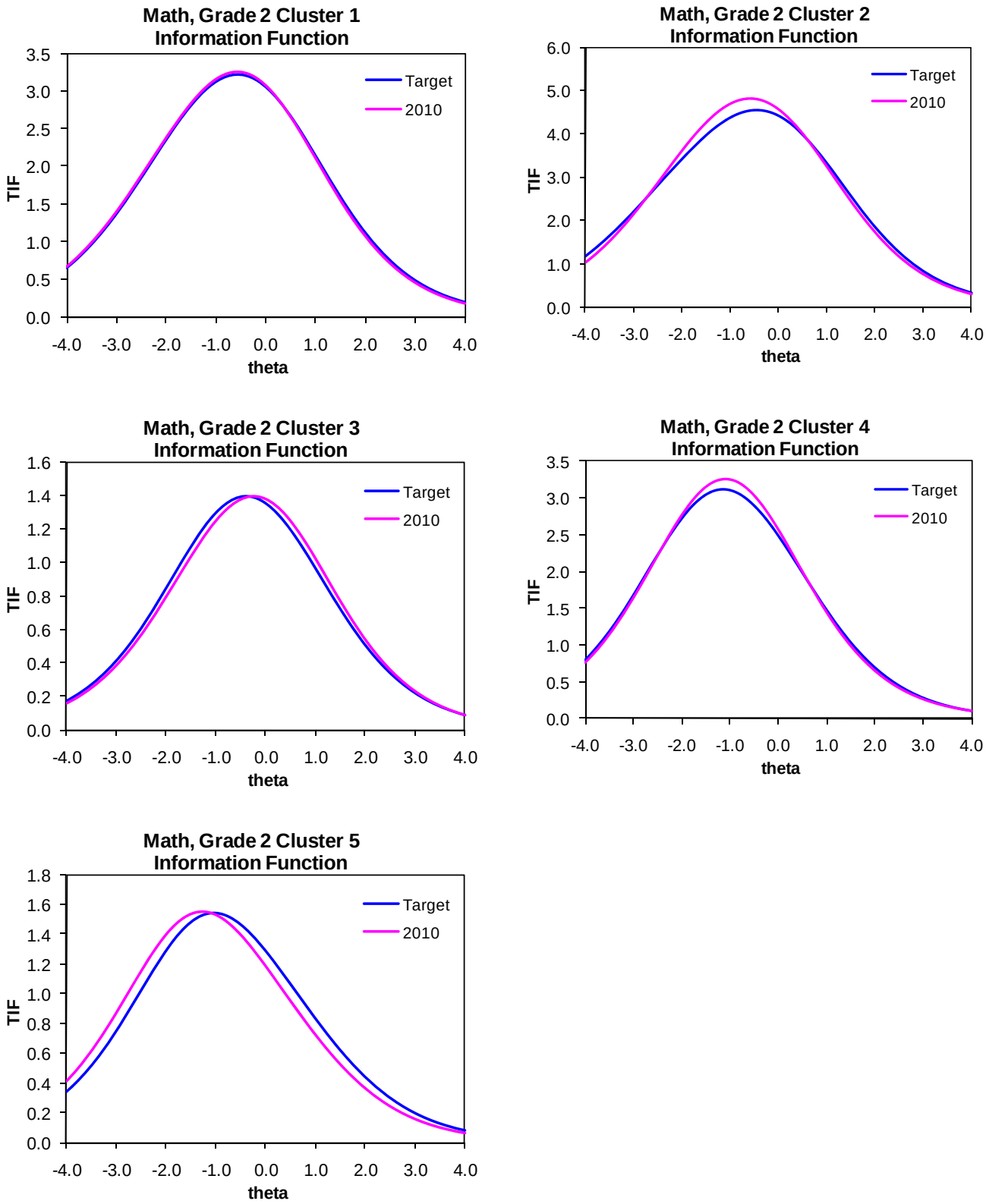


Figure 4.B.12 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Three

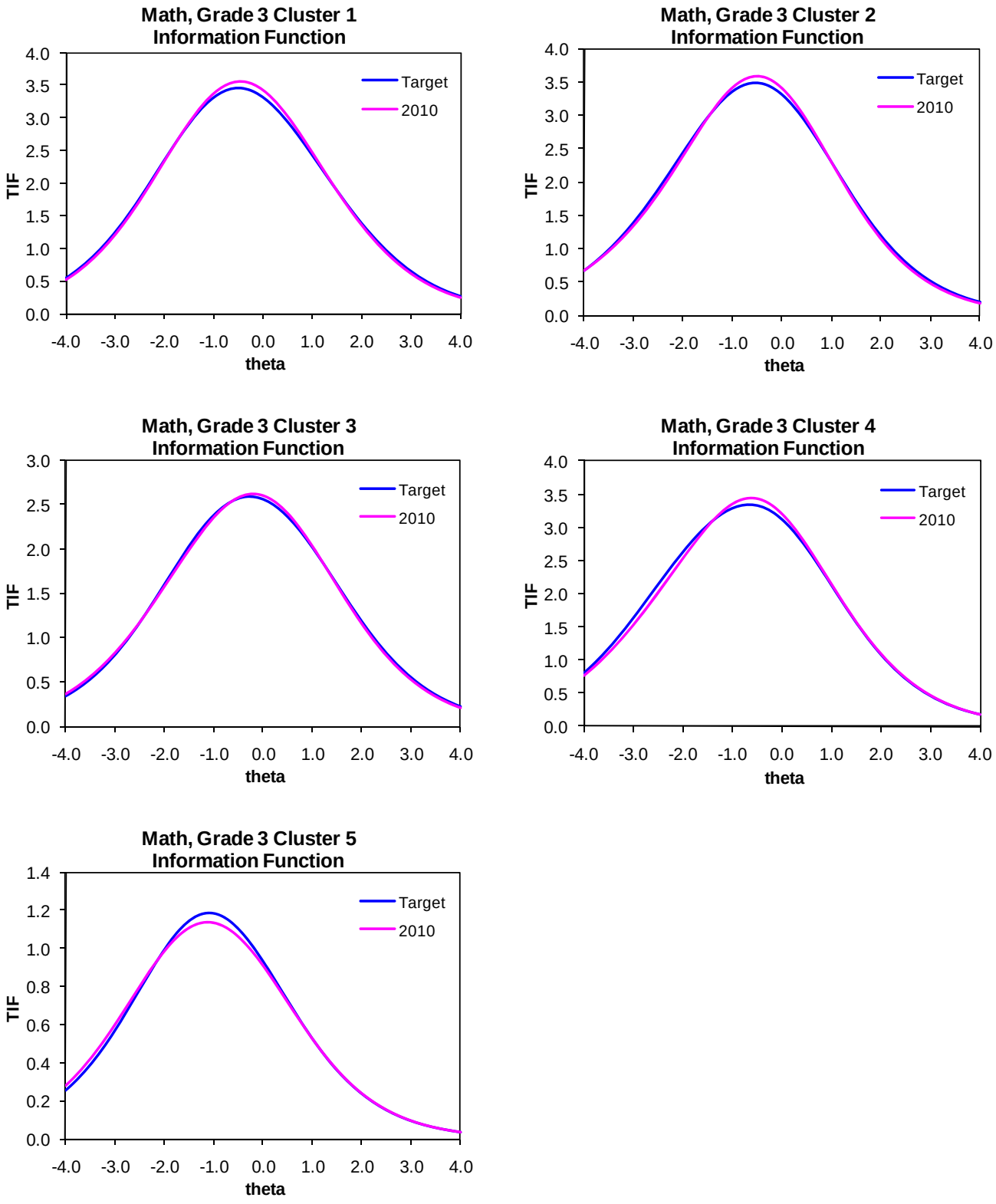


Figure 4.B.13 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Four

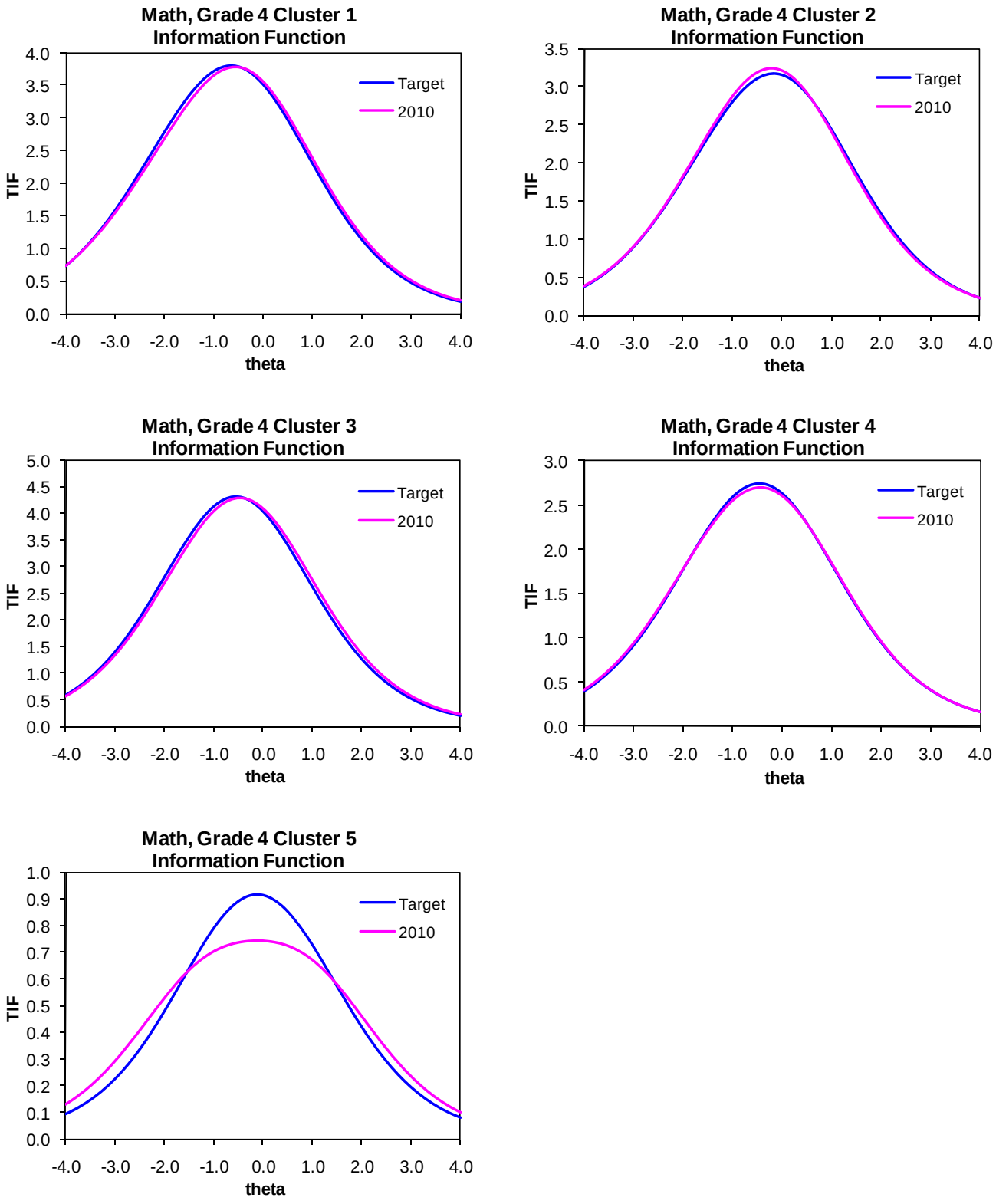


Figure 4.B.14 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Five

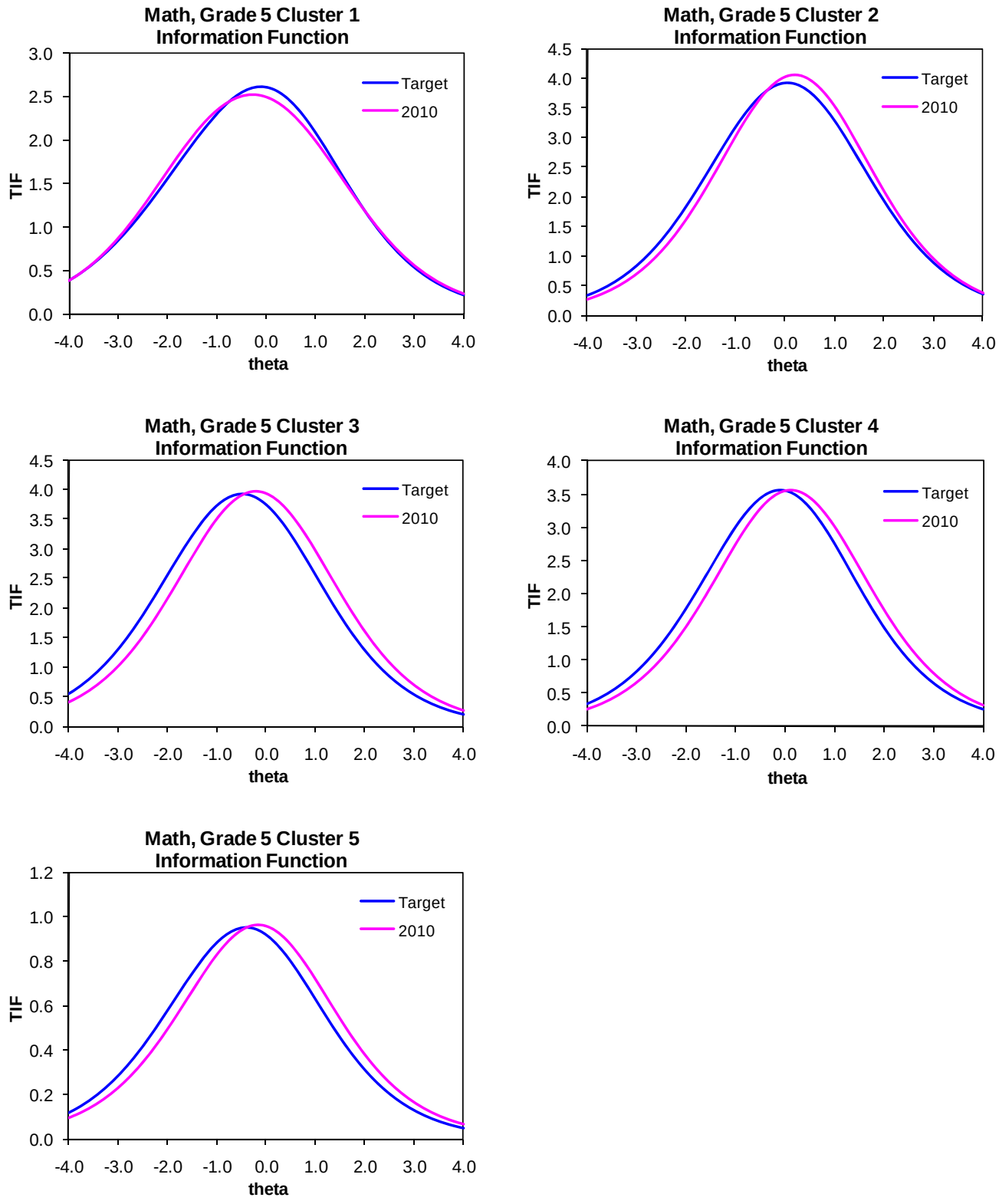


Figure 4.B.15 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Six

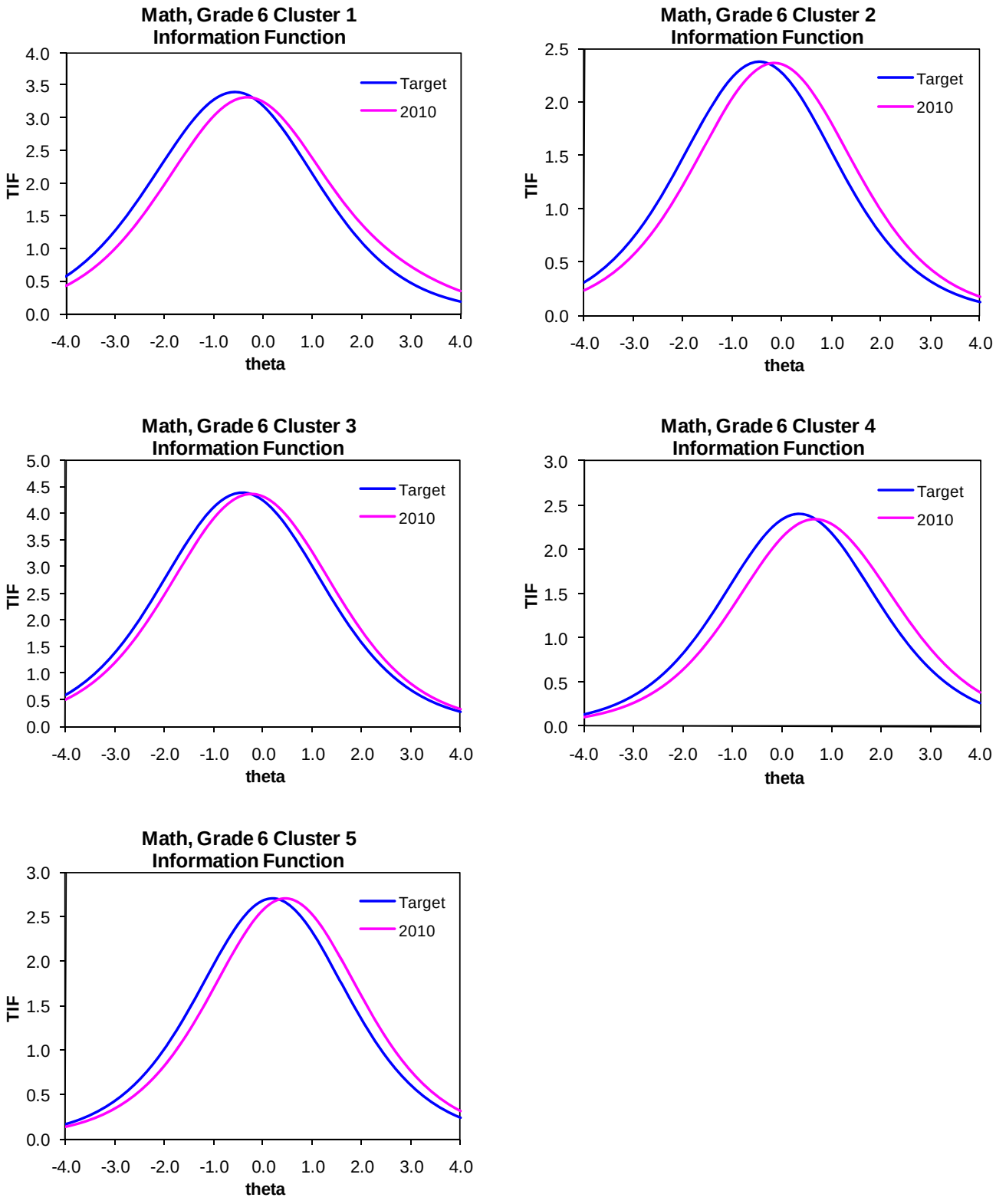


Figure 4.B.16 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Seven

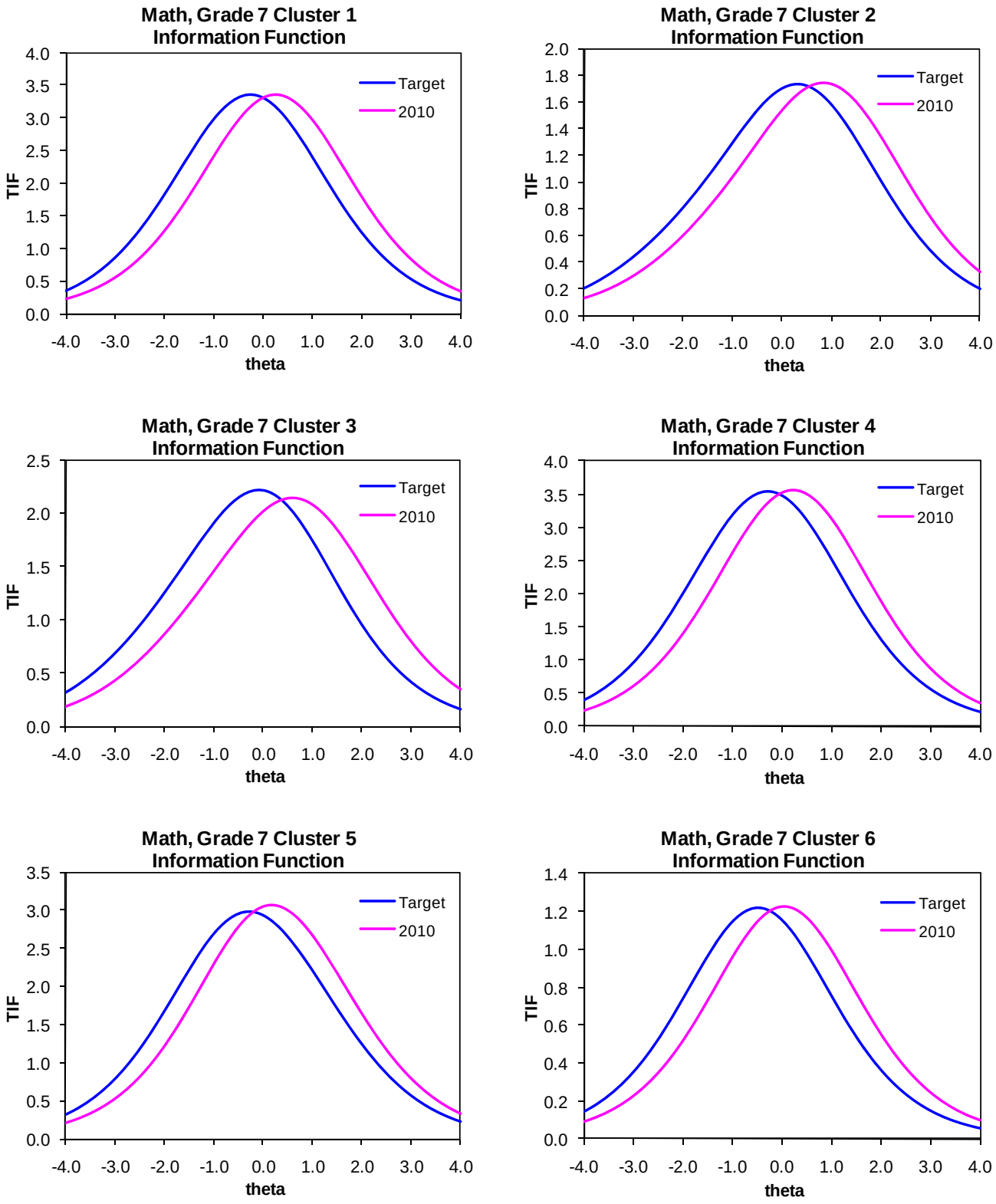


Figure 4.B.17 Plots of Target Information Functions and Projected Information for Clusters for Algebra I

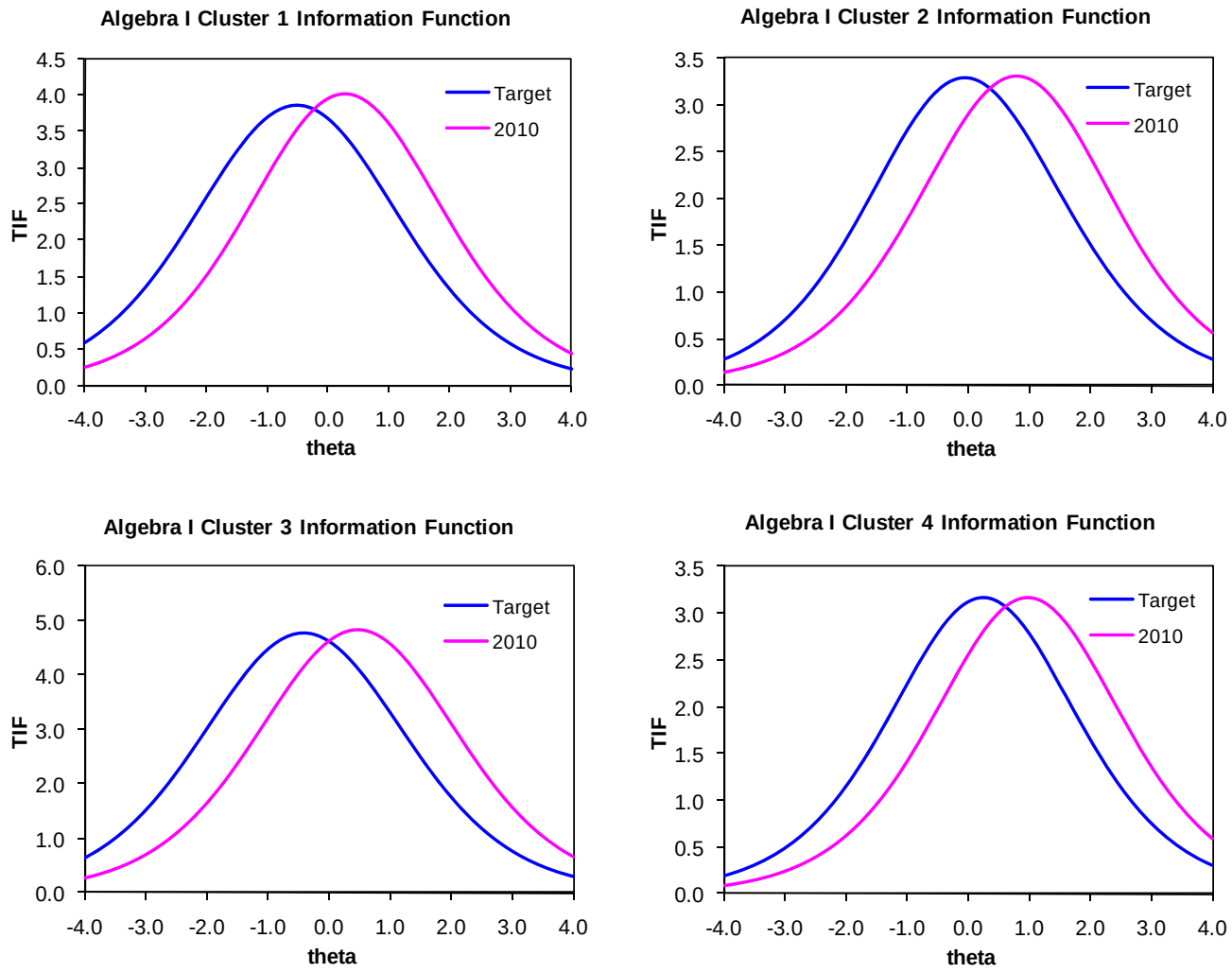
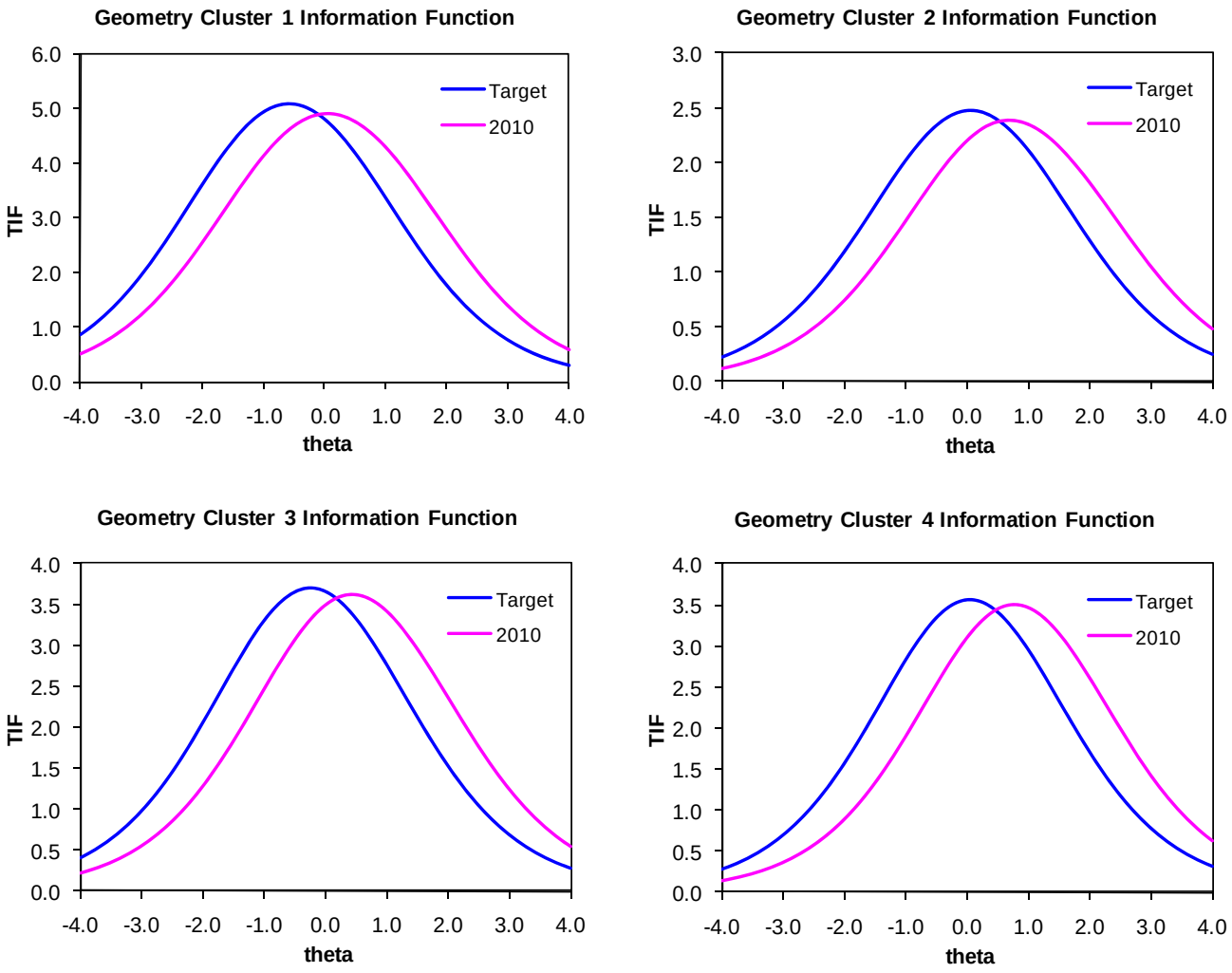


Figure 4.B.18 Plots of Target Information Functions and Projected Information for Clusters for Geometry



Chapter 5: Test Administration

Test Security and Confidentiality

All tests within the STAR Program are secure documents. For the STS administration, every person having access to testing materials maintains the security and confidentiality of the tests. ETS's Code of Ethics requires that all test information, including tangible materials (such as test booklets), confidential files, processes, and activities are kept secure. ETS has systems in place that maintain tight security for test questions and test results, as well as for student data. To ensure security for all the tests that ETS develops or handles, ETS maintains an Office of Testing Integrity (OTI), which is described in the next section.

ETS's Office of Testing Integrity

The OTI is a division of ETS that provides quality assurance services for all testing programs administered by ETS and resides in the ETS legal department. The Office of Professional Standards Compliance of ETS publishes and maintains *ETS Standards for Quality and Fairness,* which supports the OTI's goals and activities. The purposes of the *ETS Standards for Quality and Fairness* are to help ETS design, develop, and deliver technically sound, fair, and useful products and services, and to help the public and auditors evaluate those products and services.

The OTI's mission is to

- Minimize any testing security violations that can impact the fairness of testing
- Minimize and investigate any security breach
- Report on security activities

The OTI helps prevent misconduct on the part of test takers and administrators, detects potential misconduct through empirically established indicators, and resolves situations in a fair and balanced way that reflects the laws and professional standards governing the integrity of testing. In its pursuit of enforcing secure practices, ETS, through the OTI, strives to safeguard the various processes involved in a test development and administration cycle. These practices are discussed in detail in the next sections.

Test Development

During the test development process, ETS staff members consistently adhere to the following established security procedures:

- Only authorized individuals have access to test content at any step in the test development, item review, and data analysis processes.
- Test developers keep all hard-copy test content, computer disk copies, art, film, proofs, and plates in locked storage when not in use.
- ETS shreds working copies of secure content as soon as they are no longer needed in the test development process.
- Test developers take further security measures when testing materials are to be shared outside of ETS; this is achieved by using registered and/or secure mail, using express delivery methods, and actively tracking records of dispatch and receipt of the materials.

Item and Data Review

ETS enforces security measures at ARP meetings to protect the integrity of meeting materials using the following guidelines:

- Individuals who participate in the ARPs must sign a confidentiality agreement.
- Meeting materials are strictly managed before, during, and after the review meetings.
- Meeting participants are supervised at all times during the meetings.
- Use of electronic devices is prohibited in the meeting rooms.

Item Banking

Once the ARP review is complete, the items are placed in the item bank. ETS then delivers the items to the CDE through the California electronic item bank. Subsequent updates to content and statistics associated with items are based on data collected from field testing and the operational use of the items. The latest version of the item is retained in the bank along with the data from every administration that has included the item.

Security of the electronic item banking system is of critical importance. The measures that ETS takes for assuring the security of electronic files include the following:

- Electronic forms of test content, documentation, and item banks are backed up, and the backups are kept offsite.
- The offsite backup files are kept in secure storage with access limited to authorized personnel only.
- To prevent unauthorized electronic access to the item bank, state-of-the-art network security measures are used.

ETS routinely maintains many secure electronic systems for both internal and external access. The current electronic item banking application includes a login/password system to provide authorized access to the database or designated portions of the database. In addition, only users authorized to access the specific SQL database are able to use the electronic item banking system. Designated administrators at the CDE and at ETS authorize users to access these electronic systems.

Transfer of Forms and Items to the CDE

ETS shares a secure file transfer protocol (SFTP) site with the CDE. SFTP is a method for reliable and exclusive routing of files. Files reside on a password-protected server that only authorized users may access. On that site, ETS posts Microsoft Word and Excel, Adobe Acrobat PDF, or other document files for the CDE to review. ETS sends a notification e-mail to the CDE to announce that files are posted. Item data are always transmitted in an encrypted format to the SFTP site; test data are never sent via e-mail. The SFTP server is used as a conduit for the transfer of files; secure test data are not stored permanently on the shared SFTP server.

Security of Electronic Files Using a Firewall

A firewall is software that prevents unauthorized entry to files, e-mail, and other organization-specific programs. ETS data exchange and internal e-mail remain within the ETS firewall at all ETS locations, ranging from Princeton, New Jersey, to San Antonio, Texas, to Concord and Sacramento, California.

All electronic applications included in the STAR Management System (CDE, 2010a) remain protected by the ETS firewall software at all times. Due to the sensitive nature of the student information processed by the STAR Management System, the firewall plays a significant role in maintaining an assurance of confidentiality in the users of this information. (It should be noted that the STAR Management System neither stores nor processes tests or student test results.)

Printing and Publishing

After items and test forms are approved, the files are sent for printing on a CD using a secure courier system. According to the established procedures, the OTI pre-approves all printing vendors before they can work on secured confidential and proprietary testing materials. The printing vendor must submit a completed ETS Printing Plan and a Typesetting Facility Security Plan; both plans document security procedures, access to testing materials, a log of work in progress, personnel procedures, and access to the facilities by the employees and visitors. After reviewing the completed plans, representatives of the OTI visit the printing vendor to conduct an onsite inspection. The printing vendor ships printed test booklets to Pearson and other authorized locations. Pearson distributes the booklets to school districts in securely packaged boxes.

Test Administration

Pearson receives testing materials from printers, packages them, and sends them to school districts. After testing, the school districts return materials to Pearson for scoring. During these events, Pearson takes extraordinary measures to protect the testing materials. Pearson's customized Oracle business applications verify that inventory controls are in place from materials receipt to packaging. The reputable carriers used by Pearson provide a specialized handling and delivery service that maintains test security and meets the STAR program schedule. The carriers provide inside delivery directly to the district STAR coordinators or authorized recipients of the assessment materials.

Test Delivery

Test security requires accounting for all secure materials before, during, and after each test administration. The district STAR coordinators are, therefore, required to keep all testing materials in central locked storage except during actual test administration times. Test site coordinators are responsible for accounting for and returning all secure materials to the district STAR coordinator, who is responsible for returning them to the STAR Scoring and Processing Centers. The following measures are in place to ensure security of STAR testing materials:

- District STAR coordinators are required to sign and submit a "STAR Test (including field tests) Security Agreement for District and Test Site Coordinators" form to the STAR Technical Assistance Center before ETS can ship any testing materials to the district.
- Test site coordinators have to sign and submit a "STAR Test (including field tests) Security Agreement for District and Test Site Coordinators" form to the district STAR coordinator before any testing materials can be delivered to the school/test site.
- Anyone having access to the testing materials must sign and submit a "STAR Test (including field tests) Security Affidavit for Test Examiners, Proctors, Scribes, and Any Other Person Having Access to STAR Tests" form to the test site coordinator before receiving access to any testing materials.
- It is the responsibility of each person participating in the STAR Program to report immediately any violation or suspected violation of test security or confidentiality. The test site coordinator is responsible for immediately reporting any security violation to the district STAR coordinator. The district STAR coordinator must contact the CDE immediately; the coordinator will be asked to follow up with a written explanation of the violation or suspected violation.

Processing and Scoring

An environment that promotes the security of the test prompts, student responses, data, and employees throughout a project is of utmost concern to Pearson. Pearson requires the following standard safeguards for security at their sites:

- There is controlled access to the facility.
- No testing materials may leave the facility during the project without the permission of a person or persons designated by the CDE.
- All scoring personnel must sign a nondisclosure and confidentiality form in which they agree not to use or divulge any information concerning tests, scoring guides, or individual student responses.
- All staff must wear Pearson identification badges at all times in Pearson facilities.

No recording or photographic equipment is allowed in the scoring area without the consent of the CDE.

The completed and scored answer documents are stored in secure warehouses. After they are stored, they will not be handled again unless questions arise about a student's score. For example, a school district or a parent may request that a student's test responses be rescored. In such a case, the answer document is removed from storage, copied, and sent securely to the ETS facility in Sacramento, California, for hand scoring, after which the copy is destroyed. School and district personnel are not allowed to look at a completed answer document unless required for transcription, or to investigate irregular cases.

All answer documents, test booklets, and other secure testing materials are destroyed after October 31 each year.

Data Management

Pearson provides overall security for assessment materials through its limited-access facilities and through its secure data processing capabilities. Pearson enforces stringent procedures to prevent unauthorized attempts to access their facilities. Entrances are monitored by security personnel and a computerized badge-reading system is utilized. Upon entering the facilities, all Pearson employees are required to display identification badges that must be worn at all times while in the facility. Visitors must sign in and out. While they are at the facility, they are assigned a visitor badge and escorted by Pearson personnel. Access to the Data Center is further controlled by the computerized badge-reading system that allows entrance only to those employees who possess the proper authorization.

Data, electronic files, test files, programs (source and object), and all associated tables and parameters are maintained in secure network libraries for all systems developed and maintained in a client-server environment. Only authorized software development employees are given access as needed for development, testing, and implementation, in a strictly controlled Configuration Management environment.

For mainframe processes, Pearson utilizes Random Access Control Facility (RACF) to limit and control access to all data files (test and production), source code, object code, databases, and tables. RACF controls who is authorized to alter, update, or even read the files. All attempts to access files on the mainframe by unauthorized users are logged and monitored. In addition, Pearson uses ChangeMan, a mainframe configuration management tool, to control versions of the software and data files. ChangeMan provides another level of security, combined with RACF, to place the correct tested version of code into production. Unapproved changes are not implemented without prior review and approval.

Transfer of Scores via Secure Data Exchange

After scoring is completed, Pearson sends scored data files to ETS and follows secure data exchange procedures. ETS and Pearson have implemented procedures and systems to provide efficient coordination of secure data exchange. This includes the established SFTP site that is used for secure data transfers between ETS and Pearson. These well-established procedures provide timely, efficient, and secure transfer of data. Access to the STAR data files is limited to appropriate personnel with direct project responsibilities.

Statistical Analysis

The Information Technology (IT) area at ETS retrieves the Pearson data files from the SFTP site and loads them into a database. The Data Quality Services (DQS) area at ETS extracts the data from the database and performs quality control procedures before passing files to the ETS Statistical Analysis group. The Statistical Analysis group then keeps the files on secure servers and adheres to the ETS Code of Ethics to prevent any unauthorized access.

Reporting and Posting Results

After statistical analysis has been completed on student data, the files flow in three different directions. Paper reports, some with individual student results and others with summary results, are produced. Encrypted files of summary results are also sent to the CDE by means of SFTP. Any summary results that have fewer than eleven students are not reported. The item-level statistics based on the results are also entered into the item bank.

Student Confidentiality

To meet ESEA and state requirements, school districts must collect demographic data about students. This includes information about students' ethnicity, parent education, disabilities, whether the student qualifies for the National School Lunch Program (NSLP), and so forth (CDE, 2010b). ETS takes precautions to prevent any of this information from becoming public or being used for anything other than testing purposes. These procedures are applied to all documents where this demographic information may appear, including in Pre-ID files and reports.

Student Test Results

ETS also has security measures for files and reports that show students' scores and performance levels. ETS is committed to safeguarding the information in its possession from unauthorized access, disclosure, modification, or destruction. ETS has strict information security policies in order to protect the confidentiality of ETS and client data. ETS staff access to production databases is limited to personnel with a business need to access the data. User IDs for production systems must be person-specific or for systems use only.

ETS has implemented network controls for routers, gateways, switches, firewalls, network tier management, and network connectivity. Routers, gateways, and switches represent points of access between networks. However, these do not contain mass storage or represent points of vulnerability, particularly to unauthorized access or denial of service. Routers, switches, firewalls, and gateways may possess little in the way of logical access.

ETS has many facilities and procedures that protect computer files. Facilities, policies, software, and procedures such as firewalls, intrusion detection, and virus control are in place to provide for physical security, data security, and disaster recovery. Comprehensive disaster recovery facilities are available and tested regularly at the SunGard installation in Philadelphia, Pennsylvania. ETS routinely sends backup data cartridges and files for critical software, applications, and documentation to a secure offsite storage facility for safekeeping.

Access to the ETS Computer Processing Center is controlled by employee and visitor identification badges. The Center is secured by doors that can only be unlocked by the badges of personnel who have functional responsibilities within its secure perimeter. Authorized personnel accompany visitors to the Data Center at all times. Extensive smoke detection and alarm systems, as well as a pre-action fire-control system, are installed in the Center.

ETS protects individual student's results on both electronic files and paper reports during the following events:

- Scoring
- Transfer of scores by means of secure data exchange
- Reporting
- Analysis and reporting of erasure marks
- Posting of aggregate data
- Storage

In addition to protecting the confidentiality of testing materials, ETS's Code of Ethics further prohibits ETS employees from financial misuse, conflicts of interest, and unauthorized appropriation of ETS's property and resources. Specific rules are also given to ETS employees and their immediate families who may take a test developed by ETS, such as a STAR examination. The ETS Office of Testing Integrity verifies that these standards are followed throughout ETS. It does this, in part, by conducting periodic onsite security audits of departments, with followup reports containing recommendations for improvement.

Procedures to Maintain Standardization

The STS processes are designed so that the tests are administered and scored in a standardized manner. ETS takes all necessary measures to ensure the standardization of STS tests, as described in this section.

Test Administrators

The STS tests are administered in conjunction with the other tests that comprise the STAR Program. In that respect, ETS employs personnel who facilitate various processes involved in the standardization of an administration cycle.

The responsibilities for district and test site staff members are included in the *STAR District and Test Site Coordinator Manua*l (CDE, 2010c). This manual is described in the next section.

The staff members centrally involved in the test administration are as follows:

District STAR Coordinator

Each local education agency[1] (LEA) designates a district STAR coordinator who is responsible for ensuring the proper and consistent administration of the STAR tests. They are also responsible for securing testing materials upon receipt, distributing testing materials to schools, tracking the materials, training and answering questions from district staff and test site coordinators, reporting any testing irregularities or security breaches to the CDE,

[1] Local education agencies include public school districts, statewide benefit charter schools, state board-authorized charter schools, county of education programs, and charter schools testing independently from their home district.

receiving scorable and nonscorable materials from schools after an administration, and returning the materials to the STAR contractor for processing.

Test Examiner
STS tests are administered by test examiners who may be assisted by test proctors and scribes. A test examiner is an employee of a school district or an employee of a nonpublic, nonsectarian school (NPS) who has been trained to administer the tests and has signed a STAR Test Security Affidavit, and is bilingual in English and Spanish. Test examiners must follow the directions in the *California Standards-based Tests in Spanish Directions for Administration* (*DFA*) (CDE, 2010d) exactly.

Test Proctor
A test proctor is an employee of the school district or a person, assigned by an NPS to implement the IEP of a student, who has received training designed to prepare him or her to assist the test examiner in the administration of tests within the STAR Program (*5 CCR* Section 850 [r]). Test proctors must sign STAR Test Security Affidavits (*5 CCR* Section 859 [c]).

Scribe
A scribe is an employee of the school district or a person, assigned by an NPS to implement the IEP of a student, who is required to transcribe a student's responses to the format required by the test. A student's parent or guardian is not eligible to serve as a scribe (*5 CCR* Section 850 [m]). Scribes must sign STAR Test Security Affidavits (*5 CCR* Section 859 [c]).

Directions for Administration

STS *DFA*s are manuals used by test examiners to administer the STS to students (CDE, 2010d). They must follow all directions and guidelines and read, word-for-word, the instructions to students in "SAY" boxes to ensure test standardization. The *DFA* for the grade two STS also includes test questions that the examiner reads aloud to students.

District and Test Site Coordinator Manual

Test administration procedures are to be followed exactly so that all students have an equal opportunity to demonstrate their academic achievement. The *STAR District and Test Site Coordinator Manual* contributes to this goal by providing information about the responsibilities of district and test site coordinators, as well as those of the other staff involved in the administration cycle (CDE, 2010c). However, the manual is not intended as a substitute for the *CCR*, *Title 5,* Education (*5 CCR*) or to detail all of the coordinator's responsibilities.

STAR Management System Manuals

The STAR Management System is a series of secure, Web-based modules that allow district STAR coordinators to set up test administrations, order materials, and submit and correct student Pre-ID data. Every module has its own user manual with detailed instructions on how to use the STAR Management System. The modules of the STAR Management System are as follows:

- **Test Administration Setup—**This module allows school districts to determine and calculate dates for scheduling test administrations for school districts, to verify contact information for those school districts, and to update the school district's shipping information. (CDE, 2010e)

- **Order Management—**This module allows school districts to enter quantities of testing materials for schools. Its manual includes guidelines for determining which materials to order. (CDE, 2010f)
- **Pre-ID—**This module allows school districts to enter or upload student information including demographics and to identify the test(s) the student will take. This information is printed on student test booklets or answer documents or on labels that can be affixed to test booklets or answer documents. Its manual includes the CDE's Pre-ID layout. (CDE, 2010b)
- **Extended Data Corrections—**This module allows school districts to correct the data that were submitted during Pre-ID up to seven days prior to the end of the school district's selected testing window. (CDE, 2010g)

Test Booklets

For each grade-level and end-of-course test, multiple versions of test booklets are administered. The versions differ only in terms of the field-test items they contain. In grades three through eleven, these versions are spiraled, or packaged, consecutively and are distributed at the student level—that is, each classroom or group of test takers receives at least one of each version of the test. The grade two CST versions are not spiraled. Versions are assigned by school since questions are read aloud to the students.

The test booklets, along with answer documents and other supporting materials, are packaged by school or group, depending on how the district STAR coordinator ordered the materials. All materials are sent to the district STAR coordinator for proper distribution within the LEA. Special formats of test booklets are also available for test takers who require accommodations to participate in testing. These special formats include large-print testing materials, and braille testing materials.

Accommodations for Students with Disabilities

All students participate in the STAR Program, including students with disabilities and English learners. ETS policy states that reasonable testing accommodations be provided to candidates with documented disabilities that are identified in the Americans with Disabilities Act (ADA). The ADA mandates that test accommodations be individualized, meaning that no single type of test accommodation may be adequate or appropriate for all individuals with any given type of disability. ADA authorizes that test takers with disabilities may be tested under standard conditions if ETS determines that only minor adjustments to the testing environment are required (e.g., wheelchair access, large-print test book, a sign language interpreter for spoken directions).

Identification

Most students with disabilities take the STS under standard conditions. However, some students with disabilities may need assistance when taking the STS; the assistance takes the form of test variations, accommodations, or modifications (see Appendix 2.C in Chapter 2 for details). During the test, these students may use the special services specified in their IEP or Section 504 plan. If students use accommodations or modifications for the STS, test examiners are responsible for marking the accommodation or modification used on the students' test booklets or answer documents.

Scoring

The purpose of test accommodations and modifications is to enable students to take the STS, not to give them an advantage over other students or to artificially inflate their scores. Scores for students tested with modifications are counted as far below basic for aggregate reporting.

Demographic Data Corrections

After reviewing student data, some school districts may discover demographic data that are incorrect. The Demographics Data Corrections module of the STAR Management System gives school districts the means to correct these data within a specified availability window. Data related to the STS tests are not correctable; for example, districts cannot rescore uncoded or miscoded STS end-of-course mathematics tests (CDE, 2010h).

Testing Irregularities

Testing irregularities are circumstances that may compromise the reliability and validity of test results.

The district STAR coordinator is responsible for immediately notifying the CDE of any irregularities that occur before, during, or after testing. The test examiner is responsible for immediately notifying the district STAR coordinator of any security breaches or testing irregularities that occur in the administration of the test. Once the district STAR coordinator and the CDE have determined that an irregularity has occurred, the CDE instructs the district STAR coordinator on how and when to identify the irregularity on the student test booklet or answer document. The information and procedures to assist in identifying irregularities and notifying the CDE are provided in the *STAR District and Test Site Coordinator Manual* (CDE, 2010c).

Test Administration Incidents

A test administration incident is any event that occurs before, during, or after test administrations that does not conform to the instructions stated in the *DFA*s and the *STAR District and Test Site Coordinator Manual* (CDE, 2010c). These events include test administration errors, disruptions, and student cheating. Test administration incidents generally do not affect test results. These administration incidents are not reported to the CDE or the STAR Program testing contractor. The STAR test site coordinator should immediately notify the district STAR coordinator of any test administration incidents that occur. It is recommended by the CDE that districts and schools maintain records of these incidents.

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Chapter 6: Performance Standards

Background

The STS tests for RLA and mathematics for grades two through four became part of the STAR Program in 2006. For each test, the performance standards were developed in February 2009 and adopted by the SBE for the 2009 administration of those tests.

In spring 2008, the STS tests for RLA and mathematics were introduced in grades five through seven. The performance standards for those tests were developed in October 2009 and adopted by the SBE for the 2010 administration.

The STS for RLA in grades eight through eleven and EOC mathematics were introduced in 2009. Performance standards will be established for these tests in 2011 and will be reported starting with the 2012 operational administration.

The performance standards for the STS were defined by the SBE as far below basic, below basic, basic, proficient, and advanced. The state target is to have all students achieve the proficient and advanced levels by 2014. Schools and districts are expected to provide additional assistance to students scoring at and below the basic level.

ETS employs carefully designed standard-setting procedures to facilitate the development of performance standards for each STS. These processes are described in the following sections.

Standard Setting Procedure

The process of standard setting is designed to identify a “cut score” or minimum test score that is required to qualify a student for each performance level. The process generally requires a panel of subject-matter experts and others with relevant perspectives (for example, teachers or school administrators) be assembled. The panelists for the STS standard settings were selected based on the following characteristics:

- Familiarity with the subject matter assessed
- Familiarity with students in the respective grade levels
- Experience with English learners
- Familiarity with the California content standards
- An understanding of the STS
- An appreciation of the consequences of setting these cut scores

All panelists are bilingual and biliterate in Spanish and English and were recruited from diverse geographic regions and from different gender and major racial/ethnic subgroups to be representative of the educators of the state’s STS-eligible students (ETS, 2009, 2010).

For each test, three cut scores were developed in order to differentiate four of the five performance levels: below basic, basic, proficient, and advanced. Far below basic was defined as chance-level performance. The standard setting processes employed required panelists to follow the steps listed below:

1. Prior to attending the workshop, all panelists received a pre-workshop assignment. The task was to review, on their own, the content standards upon which the test items are based and take notes on their own expectations in the content area. This allowed

the panelists to understand how their perceptions may relate to the complexity of the content standards.

2. At the start of the workshop, panelists received training, which included the purpose of standard setting and their role in the work; the meaning of a "cut score" and "impact data"; and specific training and practice in the Bookmark method. Impact data include the percentage of examinees assessed in a previous administration of the test that would fall into each level, given the panelists' judgments of cut scores.
3. Panelists next became familiar with the difficulty level of the items by taking the actual test and then assessing and discussing the demands of the test items.
4. Panelists reviewed the draft list of competencies as a group, noting the increasing demands of each subsequent level. In this step, they began to visualize the knowledge and skills of students in each performance level.
5. Panelists identify characteristics of a "borderline" test-taker or "target student." This student is defined as one who possesses just enough knowledge of the content to move over the border separating a performance level from the performance level below it.
6. After training in the method was complete and confirmed through an evaluation questionnaire, panelists made individual judgments. Working in small groups, they discussed feedback related to other panelists' judgments and feedback based on student performance data (impact data). Panelists revised their judgments during the process if they wished.
7. The final recommended cut scores were based on the median of panelists' judgments[1] at the end of three rounds. For the STS, the cut scores recommended by the panelists and the recommendation of the State Superintendent of Public Instruction are presented for public comment at regional public hearings. Comments and recommendations are then presented to the SBE for adoption.

Development of Competencies Lists

Prior to the STS standard-setting workshop, ETS facilitated a meeting in which a subset of the standard-setting panelists were assembled to develop a list of competencies based on the California content standards and California policy level descriptors. For each content area, one panel of educators was assembled for each grade to identify and discuss the competencies required of students in the STS for each performance level (below basic, basic, proficient, and advanced). The lists were used to facilitate the discussion and construction of the target student definitions during the standard-setting workshop.

Standard Setting Methodology

Bookmark Method

The Bookmark method for setting passing scores was introduced in 1999 and has been used widely across the United States (Lewis, et al., 1999; Mitzel, et al. 2001). In California, the Bookmark method has been used in standard settings for most of the STAR tests.

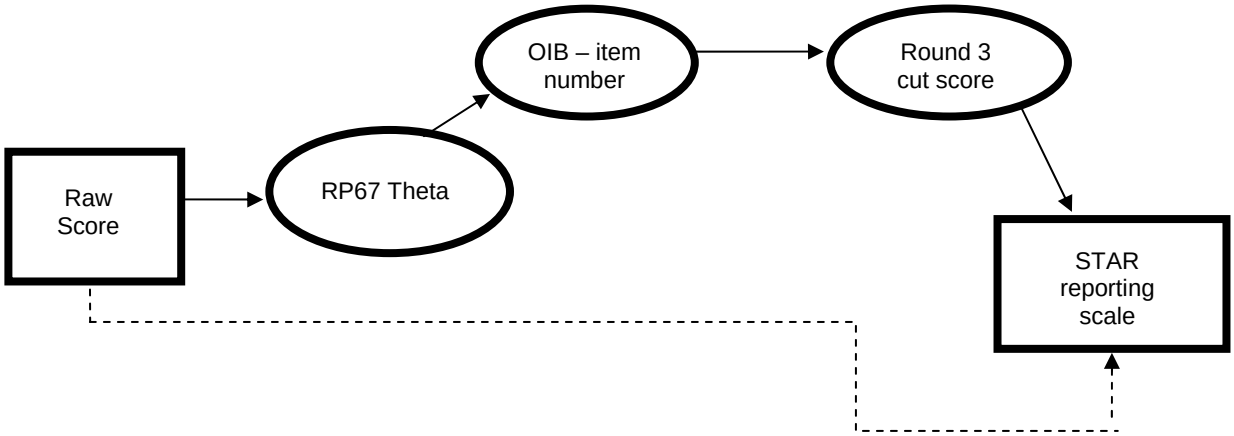
[1] In the bookmark method, the panel recommendation is calculated by taking the median of the small group (table) medians.

This method requires panelists to work through a test booklet in which the items have been re-ordered from easiest to hardest based on student performance data.[2] Panelists are asked to place a bookmark in the ordered item booklet (OIB) to demarcate each performance level. The bookmarks are placed with the assumption that the borderline students will perform successfully at a given performance level with a probability of at least 0.67. Conversely, these students are expected to perform successfully on the items after the bookmark with a probability of less than 0.67 (Huynh, 1998).

In this method, the panelists' cut score recommendations are presented in the metric of the OIB and are derived by obtaining the median of the corresponding bookmarks placed for each performance level across panelists.

Each item location corresponds to a value of theta, based on a response probability of 0.67, which maps back to a raw score on the test form. Figure 6.1 below may best illustrate the relationship among the various metrics used when the Bookmark method is applied. The solid lines represent steps in the standard-setting process described above; the dotted line represents the scaling described in the next section.

Figure 6.1 Bookmark Standard Setting Process for the STS Tests



Results

The cut scores obtained as a result of the standard-setting process are on the number-correct or raw score scale; the scores are then translated to a score scale that ranges between 150 and 600. The cut score for the basic performance level is 300 for every grade and content area; this means that a student must earn a score of 300 or higher to achieve a basic classification. The cut score for the proficient performance level is 350 for every grade and content area; this means that a student must earn a score of 350 or higher to achieve a proficient classification.

The cut scores for the other performance levels are derived using procedures based on IRT and usually vary by grade and content area. The raw cut scores for a given test are mapped

[2] An "item map" accompanies the ordered item booklet. The "map" includes information on the content measured by each question, information about each question's difficulty, the correct answer for each question, and where each question was located in the test booklet before the questions were reordered by difficulty.

to IRT *thetas* ($\hat{\theta}_S$) using the test characteristic function[3] and then transformed to the scale score metric using the following equation:

$$Scale\ Cut\ Score = (350 - \theta_{proficient} \times \left(\frac{350 - 300}{\theta_{proficient} - \theta_{basic}} \right)) + \left(\frac{350 - 300}{\theta_{proficient} - \theta_{basic}} \right) \times \hat{\theta} \quad (6.1)$$

where

$\theta_{proficient}$ represents the theta corresponding to the cut-score for proficient, and

θ_{basic} represents the theta corresponding to the cut-score for basic.

The scale score ranges for each performance level for grades two through seven are presented in Table 2.1 on page 16. The cut score for each performance level is the lower bound of each scale score range. The scale score ranges do not change from year to year. Once established, they remain unchanged from administration to administration until such time that new performance levels are adopted.

Table 7.4 on page 161 presents the percentages of examinees meeting each performance level in 2010.

[3] An IRT test characteristic curve is the sum of item characteristic curves (ICC), where an ICC represents the probability of correctly responding to an item conditioned on examinee ability.

References

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Chapter 7: Scoring and Reporting

ETS conforms to high standards of quality and fairness (ETS, 2002) when scoring tests and reporting scores. Such standards dictate that ETS provides accurate and understandable assessment results to the intended recipients. It is also ETS's mission to provide appropriate guidelines for score interpretation and cautions about the limitations in the meaning and use of the test scores. Finally, attempts are made to ensure sufficient data are collected for the major subgroups of students. Such data help ETS to conduct analyses needed to ensure that the assessments are equitable for various groups of test takers.

Procedures for Maintaining and Retrieving Individual Scores

Items for all STS tests are multiple choice. Students are presented with a question and asked to select the correct answer from among four possible choices. In grades two and three, students mark their answer choices in the test booklet. In the other grades, students mark their answer choices on an answer document. All questions are machine scored.

In order to score and report STS results, ETS follows an established set of written procedures. These specifications are presented in the next sections.

Scoring and Reporting Specifications

ETS develops standardized scoring procedures and specifications so that test materials are processed and scored accurately. These documents include the following:

- General Reporting Specifications—Provides the calculation rules for the information presented on STAR summary reports and defines the appropriate codes to use when a student does not take or complete a test or when a score will not be reported
- Score Key and Score Conversion—Defines file formats and information that is provided for scoring and the process of converting raw scores to scale scores or percent correct scores
- Form Planner Specifications—Describes, in detail, the contents of files that contain keys required for scoring
- Aggregation Rules—Describes how and when a school's results are aggregated at the school, district, county, and state levels
- "What If" List—Provides a variety of anomalous scenarios that may occur when test materials are returned by school districts to Pearson and defines the action(s) to be taken in response
- Edit Specifications—Describes edits, defaults, and solutions to errors encountered while data are being captured as answer documents are processed
- Reporting Cluster Names and Item Numbers—Identifies the reporting clusters for each test and the number of items in each cluster

The scoring specifications are reviewed and revised by the CDE, ETS, and Pearson each year. After a version that all parties agree to is finalized, the CDE issues a formal approval of the scoring and reporting specifications.

Scanning and Scoring

Answer documents are scanned and scored by Pearson in accordance with the scoring specifications that have been approved by the CDE. Answer documents are designed to produce a single complete record for each student. This record includes demographic data

and scanned responses for each student; once computed, the scored responses and the total test scores for a student are also merged into the same record. All scores must comply with the ETS scoring specifications. Pearson has quality control checks in place to ensure the quality and accuracy of scanning, and the transfer of scores into the database of student records.

Each school district must return scorable and nonscorable materials within five working days after the last day for each test administration period.

Types of Scores and Subscores

Raw Score

For all of the tests, the total raw score equals the sum of examinees' scores on the multiple-choice test items.

Subscore

The items of each CST are aggregated into groups of reporting clusters. A subscore is a measure of an examinee's performance on the items in each reporting cluster. These results are reported as the percent of items answered correctly. A description of the STS reporting clusters is provided in Appendix 2.B on page 20.

Scale Score

Raw scores obtained on each grade-level STS in grades two through seven are transformed to three-digit scale scores using the equating process described in Chapter 2 on page 14. Scale scores for each of these tests range from 150 to 600. The scale scores of examinees that have been tested in different years at a given grade level and content area can be compared. However, the raw scores of these examinees cannot be meaningfully compared, because these scores are affected by the relative difficulty of the test taken as well as the ability of the examinee.

Performance Levels

For grade-level STS tests in grades two through seven, the performance of each student is categorized into one of the following performance levels:

- far below basic
- below basic
- basic
- proficient
- advanced

For all STS tests that report performance levels—where scale scores are also reported—the cut score for the basic performance level is 300; this means that a student must earn a score of 300 or higher to achieve a basic classification. The cut score for the proficient performance level is 350 for every grade level and content area; this means that a student must earn a score of 350 or higher to achieve a proficient classification. The cut scores for the other performance levels usually vary by grade level and content area.

Percent Correct Score

The percent correct score is the percent of items on an examinee's test that were answered correctly. Percent correct scores are reported for the STS for RLA in grades eight through eleven and the EOC STS for Algebra I in grades seven through eleven and Geometry in grades eight through eleven.

Score Verification Procedures

ETS and Pearson take various necessary measures to ascertain that the scoring keys are applied to the student responses as expected and the student scores are computed accurately.

Scoring Key Verification Process

Scoring keys, provided in the form planners, are produced by ETS and verified thoroughly by performing multiple quality control checks. The form planners contain the information about an assembled test form including scoring keys, test name, administration year, subscore identification, and the standards and statistics associated with each item. The quality control checks that are performed before keys are finalized are listed below:

- The form planners are checked for accuracy against the Form Planner Specification document and the Score Key and Score Conversion document before the keys are loaded into the score key management system (SKM) at ETS.
- The printed lists of the scoring keys are checked again once the keys have been loaded into the SKM system.
- The sequence of linking items[1] in the form planners are matched with their sequence in the actual test booklets.
- The demarcations of various sections in the actual test book are checked against the list of demarcations provided by ETS test development staff.
- Scoring is verified internally at Pearson. ETS independently generates scores and verifies Pearson's scoring of the data by comparing the two results. Any discrepancies are then resolved.
- The entire scoring system is tested using a test deck that includes typical and extremely atypical response vectors.
- Classical item analyses are run on an early sample of data to provide an additional check of the keys. Although rare, if an item is found to be problematic, a followup process is carried out for it to be excluded from further analyses.

Score Verification Process

For the STS in 2010, two kinds of scoring tables are produced: raw-to-scale score conversion tables for the grade-level STS in grades two through seven and raw-to-percent-correct score conversion tables for the STS for RLA in grades eight through eleven and the EOC mathematics STS. Starting in 2012, raw-to-scale score conversion tables will be produced for all STS tests. Such tables map the current year's raw score to an appropriate scale score to adjust for item difficulty of one test form to another. Pearson utilizes these tables to generate scale scores or percent correct scores for each student: The raw-to-scale scoring tables are used to assign scale scores for the grade-level content-area tests taken by students in grades two through seven; the raw-to-percent-correct scoring tables are used to compute percent-correct scores for the STS for RLA taken by students in grades eight through eleven, and the EOC mathematics STS taken by students in grades seven through eleven.

[1] Linking items are used to link the scores on current year's test form to scores obtained on the previous years' test forms to adjust for the difficulty level of the forms across years. This is accomplished during the equating process, as discussed in Chapter 2.

ETS verifies Pearson's scale scores/percent-correct scores by adhering to procedures such as the following:

- Independently generating the scale scores for students in a small number of school districts and comparing these scores with those generated by Pearson. The selection of school districts is based on the availability of data for all schools included in those districts, known as "complete districts." (Similar procedures are employed to verify the percent correct scores for the STS for RLA in grades eight through eleven and the EOC mathematics STS.)
- Reviewing longitudinal data for reasonableness using over 90 percent of the entire testing population; the results are used to look at the trends for the state as well as few large districts.

The results of the longitudinal analyses are provided to the CDE and jointly discussed. Any anomalies in the results are investigated further and jointly discussed with the CDE. Resolution occurs after explanations that satisfy both the CDE and ETS are obtained.

Overview of Score Aggregation Procedures

In order to provide meaningful results to the stakeholders, STS scores for a given grade level and content area are aggregated at the school, independently testing charter school, district, county, and state levels. The aggregated scores are generated both for individual scores as well as group scores. The next section presents the types of aggregation performed on STS scores.

Individual Scores

The tables in this section provide state-level summary statistics describing student performance on each STS. Students taking a grade-level STS for RLA and mathematics in grades two through seven receive scale scores and are classified in terms of their performance levels. For students who took the STS for RLA in grades eight through eleven as well as the EOC mathematics STS, percent-correct scores are reported.

Score Distributions and Summary Statistics

Summary statistics are presented in Table 7.1 that describe the performance of students in the overall population on each STS. Analogous results are given in Table 7.2 and Table 7.3 for students in the target population and the optional population[2], respectively. Included in the tables are the number of items in each test, the number of examinees taking each test, the means and standard deviations of student raw scores, and the means and standard deviations of scale scores for tests for which scale scores were reported. The last two columns in the tables list the raw score means and standard deviations as percentages of the total raw score points in each test.

The last two rows in the tables present information on the grade-specific end-of-course testing groups. The statistics for grade-specific end-of-course testing groups are based on the population of test-takers in a particular grade for which the course is recommended. While end-of-course assessments address content standards for specific courses and are

[2] The target population consists of students receiving instruction in Spanish or students who have attended school in the United States for less than 12 months. These are cumulative, not consecutive, months. The optional population consists of students who receive instruction in English and who have attended school in the United States for 12 cumulative months or longer (see Chapter 1 for details).

presented to students at a variety of grade levels, it is the SBE's recommendation that students take Algebra I in grade eight and Geometry in grade nine.

Table 7.1 Mean and Standard Deviation of Raw and Scale Scores for the STS, Overall Population

				Scale Score		Raw Score		Raw Scr. Pct Poss Range	
Content Area	**STS***	**No. of Items**	**No. of Examinees**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**
Reading/ Language Arts	**2**	65	13,939	331	52	40.14	12.48	61.75	19.21
	3	65	9,400	333	52	38.55	12.19	59.31	18.76
	4	75	5,080	326	54	43.68	14.41	58.24	19.22
	5	75	3,657	316	55	36.22	12.95	48.29	17.27
	6	75	2,177	318	54	36.39	12.04	48.52	16.05
	7	75	1,823	321	52	39.49	12.61	52.66	16.81
	8	75	1,588	–	–	42.02	13.38	56.03	17.84
	9	75	2,587	–	–	40.54	13.03	54.05	17.37
	10	75	1,606	–	–	40.97	12.74	54.63	16.99
	11	75	976	–	–	38.98	12.07	51.97	16.10
Mathematics	**2**	65	13,909	365	74	44.48	11.70	68.43	18.00
	3	65	9,292	365	73	43.39	12.49	66.75	19.22
	4	65	5,042	363	74	41.80	12.75	64.31	19.62
	5	65	3,628	348	87	34.85	11.88	53.62	18.28
	6	65	2,151	332	76	32.48	11.69	49.96	17.99
	7	65	1,770	315	63	28.51	10.20	43.86	15.70
	Algebra I	65	3,411	–	–	24.64	9.04	37.91	13.91
	Geometry	65	599	–	–	26.09	9.04	40.13	13.90
Grade-Specific	**Algebra I – 8**	65	544	–	–	23.23	8.70	35.74	13.38
	Geometry – 9	65	118	–	–	22.37	7.58	34.42	11.66

* Numbers indicate grade-level tests.

Table 7.2 Mean and Standard Deviation of Raw and Scale Scores for the STS, Target Population

				Scale Score		Raw Score		Raw Scr. Pct Poss Range	
Content Area	**STS***	**No. of Items**	**No. of Examinees**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**
Reading/ Language Arts	**2**	65	11,518	331	52	40.27	12.51	61.96	19.24
	3	65	8,444	333	52	38.62	12.12	59.42	18.65
	4	75	4,459	326	54	43.86	14.45	58.48	19.26
	5	75	3,049	318	56	36.53	13.07	48.71	17.43
	6	75	1,962	318	54	36.34	12.00	48.45	16.00
	7	75	1,587	322	52	39.73	12.61	52.98	16.81
	8	75	1,416	–	–	42.71	13.20	56.95	17.59
	9	75	2,358	–	–	40.60	13.05	54.14	17.40
	10	75	1,401	–	–	41.61	12.51	55.47	16.68
	11	75	839	–	–	39.28	12.08	52.37	16.10
Mathematics	**2**	65	11,505	367	75	44.73	11.71	68.81	18.02
	3	65	8,382	366	73	43.47	12.47	66.87	19.18
	4	65	4,428	363	74	41.83	12.76	64.35	19.63
	5	65	3,043	349	88	34.95	12.05	53.77	18.54
	6	65	1,952	332	77	32.43	11.76	49.90	18.09
	7	65	1,549	316	63	28.65	10.26	44.07	15.79
	Algebra I	65	3,053	–	–	24.78	9.11	38.13	14.01
	Geometry	65	512	–	–	26.15	8.87	40.23	13.65

				Scale Score		Raw Score		Raw Scr. Pct Poss Range	
Content Area	**STS***	**No. of Items**	**No. of Examinees**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**
Grade-Specific	**Algebra I – 8**	65	491	–	–	23.26	8.78	35.78	13.50
	Geometry – 9	65	111	–	–	22.37	7.71	34.41	11.86

* Numbers indicate grade-level tests.

Table 7.3 Mean and Standard Deviation of Raw and Scale Scores for the STS, Optional Population

				Scale Score		Raw Score		Raw Scr. Pct Poss Range	
Content Area	**STS***	**No. of Items**	**No. of Examinees**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**
Reading/ Language Arts	**2**	65	2,421	328	51	39.48	12.35	60.74	19.00
	3	65	956	330	55	37.91	12.78	58.33	19.66
	4	75	621	321	53	42.38	14.12	56.50	18.82
	5	75	608	309	51	34.63	12.21	46.17	16.28
	6	75	215	320	56	36.87	12.36	49.15	16.48
	7	75	236	315	52	37.90	12.54	50.53	16.72
	8	75	172	–	–	36.30	13.57	48.40	18.10
	9	75	229	–	–	39.88	12.77	53.17	17.02
	10	75	205	–	–	36.65	13.50	48.87	18.00
	11	75	137	–	–	37.15	11.94	49.53	15.92
Mathematics	**2**	65	2,404	357	71	43.28	11.57	66.59	17.80
	3	65	910	361	73	42.68	12.68	65.66	19.51
	4	65	614	362	74	41.58	12.73	63.96	19.59
	5	65	585	344	78	34.34	10.93	52.83	16.82
	6	65	199	335	72	32.90	11.02	50.62	16.95
	7	65	221	309	60	27.52	9.77	42.35	15.03
	Algebra I	65	358	–	–	23.44	8.33	36.06	12.81
	Geometry	65	87	–	–	25.72	10.01	39.58	15.40
Grade-Specific	**Algebra I – 8**	65	53	–	–	22.98	7.98	35.36	12.28
	Geometry – 9	65	7	–	–	–	–	–	–

* Numbers indicate grade-level tests.

The percentages of students in each performance level are presented in Table 7.4; please note that performance levels were not available for the STS for RLA in grades eight through eleven or the EOC mathematics STS administered in grades seven through eleven for the spring 2010 operational administration. The last column in the table presents the percentages of examinees that were classified at the proficient level or higher.

The numbers in the summary tables may not match exactly the results reported on the CDE's Web site, as there may be slight differences in the samples used to compute the statistics. The P2 data file was used for the analyses in this chapter. This file contained data collected from all school districts but did not include corrections of demographic data through the Demographic Data Corrections process. In addition, students with invalid scores were excluded from the tables.

Table 7.4 Percentage of Examinees in Each Performance Level

Content Area	STS*	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Proficient/ Advanced
Reading/ Language Arts	**2**	3%	25%	35%	22%	14%	36%
	3	4%	24%	37%	23%	12%	35%
	4	11%	21%	33%	22%	14%	35%
	5	21%	19%	31%	20%	9%	29%
	6	15%	24%	33%	22%	7%	28%
	7	9%	29%	31%	23%	8%	31%
Mathematics	**2**	1%	19%	24%	32%	25%	56%
	3	1%	18%	26%	32%	23%	55%
	4	4%	18%	21%	35%	22%	57%
	5	10%	21%	24%	24%	22%	46%
	6	15%	23%	23%	21%	17%	38%
	7	16%	28%	29%	19%	8%	27%

* Numbers indicate grade-level tests.

Table 7.A.1 through Table 7.A.4 in Appendix 7.A, starting on page 167, show the distributions of scale scores for each STS test in grades two through seven for the overall and target population respectively. The results are reported in terms of 15 score intervals, each of which contains 30 scale score points. A frequency count of zero indicates that either there are no obtainable scale scores within that scale score range, or there were no students who obtained a scale score within the scale score range.

Table 7.A.5 through Table 7.A.8 show the distributions of raw scores for the STS tests for RLA in grades eight through eleven, Algebra I in grades seven through eleven, and Geometry in grades eight through eleven; scale scores were not reported for these tests in 2010. For each grade level and content area, the distributions are presented for all examinees and for the target population. Table 7.A.9 and Table 7.A.10 present similar information for grade-specific results of the Algebra I and Geometry EOC tests. The tables show the distribution of examinees within each 5-point raw score interval. The raw scores range from 0 to 75 for RLA in grades eight through eleven, resulting in 15 score intervals. For Algebra I and Geometry, raw scores range from 0 to 65, resulting in 13 score intervals.

Group Scores

Statistics summarizing student performance by content area and grade level for selected groups of students are provided in Table 7.B.1 through Table 7.B.36. The summary tables are provided for each STS based on all examinees and the target population respectively. In the tables, students are grouped by demographic characteristics including gender, country of origin, economic status, length of enrollment in U.S. schools, English learner (EL) program participation, and special education programs. Summary statistics are not presented for groups with fewer than 11 examinees. Percentages in these tables may not sum up to 100 due to rounding.

For the STS tests with established reporting scales and performance levels, the tables show the numbers of valid cases in each group as well as scale score means and standard deviations for each demographic group. For the STS for RLA in grades eight through eleven, Algebra I, and Geometry, means and standard deviations of raw scores instead of scale scores are provided. In addition, for all tests, mean percent correct scores within each reporting cluster are reported.

Table 7.5 provides definitions of the demographic groups included in the tables. Students' economic status was determined by considering the education level of their parents and whether or not they participated in the National School Lunch Program (NSLP). To protect privacy when the number of students in a subgroup is ten or fewer, the score distribution mean subscores are not reported and are presented as a hyphen.

Table 7.5 Subgroup Definitions

Subgroup	Definition
Gender	• Male • Female
Country of Origin	• Argentina • Bolivia • Brazil • Chile • Columbia • Costa Rica • Cuba • Ecuador • El Salvador • Guatemala • Mexico • Nicaragua • Panama • Paraguay • Peru • Puerto Rico • Spain • United States • Uruguay • Venezuela • Other
Economic Status	• Not economically disadvantaged • Economically disadvantaged
Enrollment in U.S. Schools	• Less than 12 months • 12 months or more
EL Program Participation	• English learner (EL) in English language development (ELD) • EL in ELD and specially designed academic instruction in English (SDAIE) • EL in ELD and SDAIE with primary language support • EL in ELD and academic subjects through primary language • Other EL services • None (EL only)
Special Services	• No special services • Special services

In addition to the subgroups presented in Table 7.5, the demographic tables also include grade-level data for the end-of-course tests in mathematics. The grades included for the end-of-course tests are as follows:

Grades	Test
7, 8, 9, 10, 11	Algebra I
8, 9, 10, 11	Geometry

Reports to Be Produced and Scores for Each Report

The tests that make up the STAR Program provide results or score summaries that are reported for different purposes. The four major purposes include:

1. Communicating with parents and guardians;
1. Informing decisions needed to support student achievement;
2. Evaluating school programs; and
3. Providing data for state and federal accountability programs for schools and districts.

A detailed description of the uses and applications of STAR reports is presented in the next section.

Types of Score Reports

There are three categories of STS reports. These categories and the specific reports in each category are given in Table 7.6, below.

Table 7.6 Types of STS Reports

1. Summary Reports	▪ STAR Student Master List Summary ▪ STAR Student Master List Summary, End-of-Course ▪ STAR Subgroup Summary
2. Individual Reports	▪ STAR Student Record Label ▪ STAR Student Master List ▪ STAR Student Report for the STS
3. Internet Reports	▪ STS Scores (state, county, district, school) ▪ STS Summary Scores (state, county, district, school)

These reports are sent to the independently testing charter schools, counties, or school districts; the school district forwards the appropriate reports to test sites or, in the case of the STAR Student Report, sends the reports to the child's parents or guardians and forwards a copy to the student's school or test site. Reports such as the STAR Student Report, Student Record Label, and Student Master List that include individual student results are not distributed beyond the student's school. Internet reports are described on the CDE Web site and are accessible to the public online at http://star.cde.ca.gov/.

Score Report Contents

The STAR Student Report provides scale scores, performance levels, and reporting cluster (subscore) results for each grade-level STS test taken by students in grades two through seven. Scale scores are reported on a scale ranging from 150 to 600. Results for these STS tests are also reported by performance levels, which are: far below basic, below basic, basic, proficient, and advanced.

In addition, percent correct scores are provided at the cluster level. Also given for each cluster is the average percent correct cluster score obtained by students who achieved the

lowest score that qualifies a student to be classified as proficient on the total test, as well as the average percent correct cluster score obtained by students who achieved the lowest score that qualifies a student to be classified as advanced on the total test. These two averages are given as a range of values in the report. The average percent correct was obtained empirically for the tests that have sample sizes of 25 or more examinees at both the minimum proficient and the minimum advanced score levels. In cases where the available sample sizes were less than 25, "data smoothing" was conducted before obtaining the averages. The results of these analyses allow for comparisons between an individual student's percent correct score to the average percent correct for the state, as a whole, and for the district where he or she attends school.

For students taking the STS for RLA in grades eight through eleven and the EOC mathematics STS, the STAR Student Report provides the overall percent correct score and the percent correct in each reporting cluster.

Reports for students with disabilities who use accommodations or modifications include a notation that indicates that the student used accommodations or was tested with modifications. Scores for students who use accommodations are reported in the same way as they are for non-accommodated tests. Modifications, however, change what is being tested and, therefore, change scores. If students use modifications, their scores are counted differently from non-modified test scores on summary reports. On the STAR summary reports, these students' STS scores are counted as far below basic for tests that report performance levels, regardless of the scale score obtained.

Further information about the STAR Student Report and the other reports is provided in Appendix 7.C on page 212.

Score Report Applications

STS results provide parents and guardians with information about their children's progress. The results are a tool for increasing communication and collaboration between parents or guardians and teachers. Along with report cards from teachers and information from school and classroom tests, the STAR Student Report can be used by parents and guardians to talk with teachers about ways to improve their children's achievement of the California content standards.

Schools may use the STS results to help make decisions about how to best support student achievement. STS results, however, should never be used as the only source of information to make important decisions about a child's education.

STS results help school districts and schools identify strengths and weaknesses in their instructional programs. Each year, school districts and school staffs examine STS results at each grade level and content area tested. Their findings are used to help determine:

- The extent to which students are learning the academic standards,
- Instructional areas that can be improved,
- Teaching strategies that can be developed to address needs of students, and
- Decisions about how to use funds to ensure that students achieve the standards.

Criteria for Interpreting Test Scores

A school district may use STS results to help make decisions about student placement, promotion, retention, or other considerations related to student achievement. However, it is important to remember that a single test can provide only limited information. Other relevant

information should be considered as well. It is advisable for parents to evaluate their child's strengths and weaknesses in the relevant topics by reviewing classroom work and progress reports in addition to the child's STS results (CDE, 2010a). It is also important to note that a student's score in a content area contains measurement error and could vary somewhat if the student was retested.

Criteria for Interpreting Score Reports

The information presented on various reports must be interpreted with caution when making performance comparisons. When comparing scale score and performance level results for the STS, the user is limited to comparisons within the same content area and grade level. This is because the score scales are different for each content area and grade level. The user may compare scale scores for the same content area and grade level, within a school, between schools, or between a school and its district, its county, or the state. The user can also make comparisons within the same grade level and content area across years. Comparing scores obtained in different grades or content areas should be avoided because the results are not on the same scale. Comparisons between raw scores or cluster scores should be limited to comparisons within not only content area and grade level but also test year. For more details on the criteria for interpreting information provided on the score reports, see the *2010 STAR Post-Test Guide* (CDE, 2010b).

References

California Department of Education. (2010a). *2010 STAR CST/CMA, CAPA, and STS printed reports*. Sacramento, CA. http://www.startest.org/pdfs/STAR.reports.2010.pdf.

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Educational Testing Service. (2002). *ETS standards for quality and fairness*. Office of Testing Integrity, Princeton, NJ: Educational Testing Service.

Appendix 7.A—Score Distributions

Table 7.A.1 Distribution of STS Scale Scores for RLA, Grades Two through Seven (Overall Population)

Scale Score	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
570 – 600	14	5	1	0	0	0
540 – 569	0	0	2	0	0	0
510 – 539	22	11	0	2	1	0
480 – 509	0	30	16	10	5	3
450 – 479	119	88	31	31	14	9
420 – 449	538	308	120	124	51	55
390 – 419	1,190	908	504	214	168	135
360 – 389	2,288	1,437	708	427	239	252
330 – 359	2,736	2,109	1,123	618	408	285
300 – 329	3,016	1,842	918	727	451	377
270 – 299	2,310	1,530	780	697	430	379
240 – 269	1,275	935	620	566	295	248
210 – 239	408	177	235	212	101	76
180 – 209	23	19	22	28	14	3
150 – 179	0	1	0	1	0	1

Table 7.A.2 Distribution of STS Scale Scores for RLA, Grades Two through Seven (Target Population)

Scale Score	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
570 – 600	13	4	0	0	0	0
540 – 569	0	0	2	0	0	0
510 – 539	21	9	0	2	1	0
480 – 509	0	26	15	10	4	3
450 – 479	99	80	28	27	11	8
420 – 449	453	281	111	116	50	49
390 – 419	1,006	817	452	186	148	122
360 – 389	1,910	1,278	634	359	207	224
330 – 359	2,276	1,926	977	511	369	251
300 – 329	2,464	1,666	807	602	412	327
270 – 299	1,870	1,367	669	583	388	327
240 – 269	1,062	823	546	460	271	208
210 – 239	325	153	200	169	88	66
180 – 209	19	14	18	23	13	1
150 – 179	0	0	0	1	0	1

Table 7.A.3 Distribution of STS Scale Scores for Mathematics, Grades Two through Seven (Overall Population)

Scale Score	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
570 – 600	202	148	11	55	18	2
540 – 569	0	0	24	57	11	5
510 – 539	208	128	64	86	17	6
480 – 509	596	385	173	74	36	5
450 – 479	727	444	396	216	62	43
420 – 449	1,146	1,057	437	201	110	46
390 – 419	2,014	1,058	746	394	206	107
360 – 389	2,060	1,454	771	380	250	182
330 – 359	2,307	1,356	706	479	298	214
300 – 329	1,914	1,519	590	579	324	367
270 – 299	1,610	950	586	414	334	357
240 – 269	795	669	333	342	279	262
210 – 239	261	114	172	240	151	151
180 – 209	59	10	31	89	43	22
150 – 179	10	0	2	22	12	1

Table 7.A.4 Distribution of STS Scale Scores for Mathematics, Grades Two through Seven (Target Population)

Scale Score	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
570 – 600	177	136	8	49	16	2
540 – 569	0	0	21	54	11	4
510 – 539	184	111	52	75	14	6
480 – 509	518	356	161	62	36	5
450 – 479	631	398	346	190	56	38
420 – 449	967	955	383	171	100	41
390 – 419	1,693	970	664	327	189	98
360 – 389	1,684	1,313	673	311	218	154
330 – 359	1,874	1,217	613	395	271	192
300 – 329	1,552	1,374	520	474	291	325
270 – 299	1,329	852	518	338	304	311
240 – 269	637	588	289	289	253	224
210 – 239	205	104	150	210	143	128
180 – 209	45	8	28	81	39	20
150 – 179	9	0	2	17	11	1

Table 7.A.5 Distribution of STS Raw Scores for RLA, Grades Eight through Eleven (Overall Population)

Raw Score	Grade 8	Grade 9	Grade 10	Grade 11
71 – 75	2	0	0	0
66 – 70	40	30	17	0
61 – 65	108	139	76	25
56 – 60	143	203	131	59
51 – 55	170	287	198	111
46 – 50	198	329	233	115
41 – 45	197	328	204	162
36 – 40	198	313	177	121
31 – 35	176	297	180	117
26 – 30	151	248	158	104
21 – 25	119	257	132	103
16 – 20	64	126	87	46
11 – 15	18	29	11	12
06 – 10	3	1	2	0
00 – 05	1	0	0	1

Table 7.A.6 Distribution of STS Raw Scores for RLA, Grades Eight through Eleven (Target Population)

Raw Score	Grade 8	Grade 9	Grade 10	Grade 11
71 – 75	2	0	0	0
66 – 70	36	27	15	0
61 – 65	102	130	69	20
56 – 60	132	187	122	56
51 – 55	157	259	173	98
46 – 50	189	297	217	102
41 – 45	182	304	184	144
36 – 40	177	288	155	99
31 – 35	147	269	156	98
26 – 30	130	224	135	85
21 – 25	95	226	99	84
16 – 20	49	118	66	41
11 – 15	15	28	9	12
06 – 10	2	1	1	0
00 – 05	1	0	0	0

Table 7.A.7 Distribution of STS Raw Scores for Algebra I and Geometry (Overall Population)

Raw Score	Algebra I	Geometry
61 – 65	3	1
56 – 60	17	3
51 – 55	15	6
46 – 50	67	16
41 – 45	114	22
36 – 40	221	36
31 – 35	343	78
26 – 30	524	106
21 – 25	822	156
16 – 20	838	129
11 – 15	414	41
06 – 10	32	5
00 – 05	1	0

Table 7.A.8 Distribution of STS Raw Scores for Algebra I and Geometry (Target Population)

Raw Score	Algebra I	Geometry
61 – 65	3	0
56 – 60	15	3
51 – 55	15	4
46 – 50	62	12
41 – 45	107	21
36 – 40	204	33
31 – 35	310	67
26 – 30	475	90
21 – 25	731	137
16 – 20	729	111
11 – 15	374	30
06 – 10	28	4
00 – 05	0	0

Table 7.A.9 Distribution of STS Raw Scores for a Grade-Specific Overall Population

Raw Score	Algebra I – Grade 8	Geometry – Grade 9
61 – 65	2	0
56 – 60	2	0
51 – 55	2	0
46 – 50	10	0
41 – 45	12	5
36 – 40	23	3
31 – 35	38	10
26 – 30	75	10
21 – 25	136	42
16 – 20	160	30
11 – 15	81	14
06 – 10	3	4
00 – 05	0	0

Table 7.A.10 Distribution of STS Raw Scores for a Grade-Specific Target Population

Raw Score	Algebra I – Grade 8	Geometry – Grade 9
61 – 65	2	0
56 – 60	2	0
51 – 55	2	0
46 – 50	9	0
41 – 45	11	5
36 – 40	21	3
31 – 35	35	9
26 – 30	67	9
21 – 25	122	39
16 – 20	143	29
11 – 15	74	13
06 – 10	3	4
00 – 05	0	0

Appendix 7.B—Demographic Summaries

Table 7.B.1 Demographic Summary for RLA, Grade Two (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All population valid scores	13,939	331	52	3%	26%	36%	22%	14%	69%	60%	58%	63%	44%
Male	6,889	323	51	4%	30%	36%	19%	11%	67%	57%	55%	61%	41%
Female	7,036	338	52	2%	22%	35%	25%	16%	72%	64%	61%	66%	47%
Gender unknown	14	316	53	7%	29%	29%	29%	7%	64%	50%	58%	59%	42%
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	324	56	0%	45%	18%	27%	9%	64%	58%	53%	61%	47%
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	9	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	136	309	56	10%	35%	32%	14%	8%	59%	55%	50%	52%	38%
Guatemala	111	313	50	8%	32%	33%	18%	8%	63%	55%	51%	57%	38%
Mexico	2,032	325	54	5%	30%	34%	20%	12%	66%	60%	56%	60%	42%
Nicaragua	8	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	16	336	51	0%	25%	31%	38%	6%	74%	66%	68%	58%	41%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	8,494	333	52	3%	24%	36%	23%	15%	70%	61%	59%	64%	45%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	354	329	50	3%	25%	36%	21%	14%	68%	61%	58%	63%	44%
Country unknown	2,752	330	50	2%	27%	36%	23%	12%	69%	59%	58%	64%	44%
Not economically disadvantaged	971	337	53	3%	22%	33%	26%	17%	71%	63%	61%	66%	47%
Economically disadvantaged	12,636	330	52	3%	26%	36%	22%	13%	69%	60%	58%	63%	44%
Economic status unknown	332	328	53	5%	25%	36%	22%	12%	68%	60%	56%	62%	44%
In U.S. schools < 12 months	1,339	297	49	10%	46%	28%	11%	4%	55%	50%	46%	48%	34%
In U.S. schools ≥ 12 months	12,600	334	51	2%	24%	36%	23%	15%	71%	61%	59%	65%	45%
EL in ELD	388	323	53	5%	30%	30%	23%	12%	66%	60%	56%	59%	40%
EL in ELD and SDAIE	893	311	56	9%	39%	27%	16%	9%	60%	53%	51%	54%	39%
EL in ELD and SDAIE with primary language support	1,874	316	50	5%	34%	35%	17%	8%	64%	55%	53%	57%	40%
EL in ELD and academic subjects through primary language	10,462	336	51	2%	23%	37%	24%	15%	71%	62%	60%	66%	46%
Other EL instructional services	76	314	53	12%	28%	33%	18%	9%	62%	54%	53%	58%	39%
None (EL only)	83	317	52	1%	45%	33%	8%	13%	63%	58%	45%	57%	41%
Program participation unknown	163	316	54	7%	34%	35%	15%	9%	63%	55%	51%	57%	39%

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
No special education	13,369	332	52	3%	25%	36%	23%	14%	70%	61%	59%	64%	45%
Special education	570	293	45	11%	49%	29%	8%	4%	54%	45%	44%	48%	33%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.2 Demographic Summary for RLA, Grade Two (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target population valid scores	11,518	331	52	3%	25%	35%	22%	14%	69%	61%	58%	64%	44%
Male	5,686	323	51	4%	30%	36%	19%	11%	67%	57%	55%	61%	42%
Female	5,824	339	52	2%	21%	35%	25%	17%	72%	64%	61%	66%	47%
Gender unknown	8	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	324	56	0%	45%	18%	27%	9%	64%	58%	53%	61%	47%
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	9	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	127	308	57	10%	35%	32%	14%	8%	58%	55%	50%	52%	38%
Guatemala	102	313	50	8%	33%	32%	19%	8%	62%	54%	52%	56%	38%
Mexico	1,632	323	54	5%	31%	34%	19%	12%	65%	59%	55%	59%	41%
Nicaragua	8	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	16	336	51	0%	25%	31%	38%	6%	74%	66%	68%	58%	41%
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	7,636	334	52	3%	24%	36%	23%	15%	70%	61%	59%	65%	45%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	338	329	50	3%	25%	36%	20%	15%	68%	61%	58%	63%	44%
Country unknown	1,624	333	51	2%	25%	36%	25%	13%	70%	61%	59%	66%	45%
Not economically disadvantaged	778	337	54	3%	21%	34%	24%	17%	71%	63%	61%	66%	47%
Economically disadvantaged	10,483	331	52	3%	26%	36%	22%	14%	69%	60%	58%	63%	44%
Economic status unknown	257	330	53	4%	25%	35%	23%	12%	68%	61%	57%	62%	45%
In U.S. schools < 12 months	1,339	297	49	10%	46%	28%	11%	4%	55%	50%	46%	48%	34%
In U.S. schools ≥ 12 months	10,179	336	51	2%	23%	36%	24%	15%	71%	62%	60%	66%	46%
EL in ELD	103	285	44	14%	57%	17%	11%	2%	50%	45%	43%	43%	27%
EL in ELD and SDAIE	488	289	47	13%	50%	26%	8%	3%	52%	46%	44%	44%	32%
EL in ELD and SDAIE with primary language support	400	284	42	14%	54%	24%	8%	1%	49%	44%	41%	42%	30%
EL in ELD and academic subjects through primary language	10,462	336	51	2%	23%	37%	24%	15%	71%	62%	60%	66%	46%
Other EL instructional services	13	297	47	8%	54%	23%	15%	0%	54%	51%	46%	49%	32%
None (EL only)	20	309	48	0%	50%	40%	0%	10%	61%	63%	41%	43%	38%
Program participation unknown	32	307	51	0%	56%	25%	16%	3%	58%	52%	47%	52%	41%
No special education	11,050	333	52	3%	24%	36%	23%	14%	70%	61%	59%	64%	45%
Special education	468	295	45	10%	49%	29%	9%	4%	55%	46%	45%	49%	34%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.3 Demographic Summary for RLA, Grade Three (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All population valid scores	9,400	333	52	4%	24%	36%	24%	12%	67%	55%	49%	60%	56%
Male	4,671	326	52	5%	28%	36%	22%	10%	65%	53%	47%	58%	53%
Female	4,718	339	52	3%	21%	36%	25%	14%	69%	58%	51%	63%	58%
Gender unknown	11	310	53	27%	9%	45%	9%	9%	62%	48%	43%	48%	45%
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	335	44	0%	18%	45%	27%	9%	70%	55%	64%	54%	58%
Costa Rica	6	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	152	321	57	9%	32%	30%	18%	12%	63%	52%	50%	51%	49%
Guatemala	111	319	46	5%	29%	45%	15%	6%	64%	50%	49%	54%	46%
Mexico	1,573	327	51	4%	28%	37%	21%	10%	67%	54%	48%	56%	52%
Nicaragua	13	334	41	0%	15%	54%	23%	8%	74%	62%	59%	49%	45%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	13	341	60	8%	23%	15%	38%	15%	67%	54%	52%	64%	70%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	5,663	334	53	4%	24%	36%	24%	13%	68%	56%	49%	61%	56%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	311	327	48	3%	27%	39%	22%	9%	65%	55%	49%	58%	53%
Country unknown	1,522	335	51	4%	22%	37%	25%	12%	67%	56%	49%	63%	59%
Not economically disadvantaged	618	338	54	5%	20%	35%	26%	14%	68%	57%	53%	62%	59%
Economically disadvantaged	8,584	332	52	4%	24%	36%	23%	12%	67%	55%	49%	60%	56%
Economic status unknown	198	330	49	3%	29%	36%	22%	10%	68%	55%	48%	60%	52%
In U.S. schools < 12 months	1,415	315	52	8%	34%	34%	17%	7%	62%	49%	46%	51%	48%
In U.S. schools ≥ 12 months	7,985	336	52	3%	23%	37%	25%	13%	68%	57%	50%	62%	57%
EL in ELD	125	312	49	9%	36%	31%	18%	6%	62%	47%	46%	49%	47%
EL in ELD and SDAIE	747	317	54	7%	35%	32%	17%	8%	61%	50%	47%	53%	48%
EL in ELD and SDAIE with primary language support	913	319	53	8%	32%	33%	20%	9%	62%	51%	47%	53%	51%
EL in ELD and academic subjects through primary language	7,378	336	51	3%	22%	37%	25%	13%	69%	57%	50%	62%	57%
Other EL instructional services	80	321	60	11%	31%	28%	19%	11%	62%	48%	47%	56%	52%
None (EL only)	41	327	52	5%	27%	39%	20%	10%	68%	55%	45%	55%	53%
Program participation unknown	116	318	54	9%	32%	30%	21%	9%	62%	52%	45%	55%	49%
No special education	8,978	334	52	4%	23%	37%	24%	12%	68%	56%	49%	61%	56%
Special education	421	295	46	14%	45%	27%	10%	4%	51%	42%	41%	45%	41%
Special education unknown	1	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.4 Demographic Summary for RLA, Grade Three (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target population valid scores	8,444	333	52	4%	24%	37%	23%	12%	67%	56%	49%	60%	56%
Male	4,184	327	52	5%	27%	36%	22%	10%	65%	53%	47%	58%	53%
Female	4,257	339	52	3%	21%	37%	25%	14%	70%	58%	51%	63%	58%
Gender unknown	3	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	6	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	139	321	58	9%	33%	27%	19%	12%	63%	52%	50%	51%	48%
Guatemala	100	318	46	5%	29%	45%	14%	7%	64%	50%	49%	54%	46%
Mexico	1,463	327	51	4%	27%	37%	22%	10%	67%	54%	48%	56%	53%
Nicaragua	13	334	41	0%	15%	54%	23%	8%	74%	62%	59%	49%	45%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	13	341	60	8%	23%	15%	38%	15%	67%	54%	52%	64%	70%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	5,190	335	53	4%	23%	36%	24%	13%	68%	56%	49%	62%	56%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	305	328	49	3%	28%	39%	22%	9%	65%	55%	49%	58%	53%
Country unknown	1,182	336	50	3%	21%	38%	26%	12%	68%	56%	48%	63%	59%
Not economically disadvantaged	532	340	54	4%	19%	36%	26%	15%	69%	58%	53%	62%	60%
Economically disadvantaged	7,769	332	52	4%	24%	37%	23%	12%	67%	55%	49%	60%	56%
Economic status unknown	143	332	50	3%	29%	36%	22%	10%	68%	56%	48%	60%	52%
In U.S. schools < 12 months	1,415	315	52	8%	34%	34%	17%	7%	62%	49%	46%	51%	48%
In U.S. schools ≥ 12 months	7,029	336	52	3%	22%	37%	25%	13%	69%	57%	50%	62%	57%
EL in ELD	100	311	48	8%	37%	33%	17%	5%	62%	47%	46%	48%	46%
EL in ELD and SDAIE	504	308	50	9%	40%	31%	13%	6%	59%	48%	45%	48%	44%
EL in ELD and SDAIE with primary language support	399	304	49	12%	37%	33%	13%	5%	57%	46%	44%	46%	46%
EL in ELD and academic subjects through primary language	7,378	336	51	3%	22%	37%	25%	13%	69%	57%	50%	62%	57%
Other EL instructional services	14	312	51	7%	43%	21%	21%	7%	67%	46%	51%	42%	40%
None (EL only)	22	317	62	9%	36%	27%	9%	18%	63%	51%	46%	48%	46%
Program participation unknown	27	318	47	4%	33%	37%	19%	7%	62%	52%	44%	55%	49%
No special education	8,071	335	52	4%	23%	37%	24%	12%	68%	56%	49%	61%	56%
Special education	372	296	46	13%	46%	28%	10%	4%	52%	43%	42%	45%	41%
Special education unknown	1	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.5 Demographic Summary for RLA, Grade Four (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All population valid scores	5,080	326	54	11%	22%	33%	21%	13%	65%	50%	50%	66%	54%
Male	2,521	315	54	15%	25%	33%	17%	10%	62%	47%	46%	62%	50%
Female	2,554	336	53	7%	18%	33%	25%	17%	68%	54%	54%	70%	57%
Gender unknown	5	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	15	370	64	0%	13%	40%	13%	33%	81%	63%	61%	76%	69%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	130	327	52	11%	21%	32%	24%	12%	66%	54%	52%	64%	53%
Guatemala	68	320	59	18%	24%	31%	13%	15%	61%	51%	52%	61%	52%
Mexico	1,338	326	55	11%	22%	32%	22%	13%	65%	51%	52%	65%	53%
Nicaragua	10	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	22	353	49	0%	9%	45%	23%	23%	77%	58%	61%	77%	60%
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	2,478	327	54	10%	21%	33%	22%	14%	66%	51%	50%	67%	54%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	178	320	56	15%	22%	33%	18%	13%	62%	48%	47%	65%	53%
Country unknown	820	321	54	12%	23%	34%	20%	11%	64%	49%	47%	65%	52%
Not economically disadvantaged	409	330	60	13%	20%	27%	23%	17%	65%	53%	52%	66%	55%
Economically disadvantaged	4,589	325	54	11%	22%	33%	21%	13%	65%	50%	50%	66%	53%
Economic status unknown	82	321	59	13%	20%	39%	13%	15%	62%	49%	50%	64%	53%
In U.S. schools < 12 months	1,231	322	55	13%	22%	34%	20%	11%	63%	50%	50%	63%	52%
In U.S. schools ≥ 12 months	3,849	327	54	10%	22%	33%	22%	14%	66%	51%	50%	67%	54%
EL in ELD	138	316	47	9%	22%	43%	20%	6%	62%	49%	47%	63%	49%
EL in ELD and SDAIE	686	322	58	14%	24%	30%	20%	13%	63%	50%	49%	63%	52%
EL in ELD and SDAIE with primary language support	603	316	53	14%	24%	36%	18%	9%	62%	48%	48%	62%	50%
EL in ELD and academic subjects through primary language	3,418	329	54	10%	21%	32%	22%	15%	66%	51%	51%	67%	55%
Other EL instructional services	166	325	49	10%	20%	37%	23%	11%	68%	49%	48%	66%	54%
None (EL only)	19	345	52	5%	11%	37%	32%	16%	70%	58%	53%	76%	60%
Program participation unknown	50	307	60	26%	20%	28%	22%	4%	58%	44%	48%	58%	47%
No special education	4,820	328	54	10%	21%	33%	22%	14%	66%	51%	51%	67%	54%
Special education	259	281	45	34%	33%	25%	6%	2%	47%	35%	36%	47%	40%
Special education unknown	1	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.6 Demographic Summary for RLA, Grade Four (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target population valid scores	4,459	326	54	11%	21%	33%	22%	14%	65%	51%	50%	66%	54%
Male	2,225	316	54	15%	24%	33%	18%	10%	62%	47%	46%	62%	50%
Female	2,232	337	53	6%	18%	33%	26%	17%	69%	54%	55%	70%	58%
Gender unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	13	375	65	0%	8%	46%	8%	38%	81%	64%	64%	78%	71%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	118	327	52	11%	19%	34%	24%	12%	66%	55%	52%	64%	53%
Guatemala	60	319	59	20%	23%	27%	15%	15%	60%	51%	51%	60%	52%
Mexico	1,203	326	55	11%	21%	32%	22%	14%	65%	51%	53%	65%	53%
Nicaragua	7	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	21	354	51	0%	10%	43%	24%	24%	78%	58%	61%	76%	60%
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	2,159	327	54	10%	21%	33%	22%	14%	66%	51%	50%	67%	54%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	156	321	55	15%	19%	36%	19%	12%	62%	48%	48%	65%	53%
Country unknown	701	322	53	12%	23%	34%	21%	11%	64%	49%	47%	66%	52%
Not economically disadvantaged	337	332	61	13%	19%	26%	25%	18%	66%	53%	53%	67%	56%
Economically disadvantaged	4,048	326	54	11%	21%	33%	21%	13%	65%	50%	50%	66%	54%
Economic status unknown	74	321	61	15%	20%	35%	14%	16%	62%	48%	49%	64%	52%
In U.S. schools < 12 months	1,231	322	55	13%	22%	34%	20%	11%	63%	50%	50%	63%	52%
In U.S. schools ≥ 12 months	3,228	328	54	10%	21%	32%	22%	15%	66%	51%	50%	67%	54%
EL in ELD	121	318	48	9%	22%	42%	20%	7%	63%	50%	47%	63%	50%
EL in ELD and SDAIE	503	322	58	13%	24%	31%	20%	12%	63%	50%	50%	63%	53%
EL in ELD and SDAIE with primary language support	367	313	53	16%	23%	34%	19%	8%	60%	47%	49%	60%	49%
EL in ELD and academic subjects through primary language	3,418	329	54	10%	21%	32%	22%	15%	66%	51%	51%	67%	55%
Other EL instructional services	13	307	59	23%	8%	31%	31%	8%	56%	47%	49%	56%	50%
None (EL only)	14	339	58	7%	14%	36%	29%	14%	66%	57%	54%	72%	57%
Program participation unknown	23	334	61	17%	9%	30%	35%	9%	69%	52%	61%	66%	55%
No special education	4,247	329	54	10%	21%	33%	22%	14%	66%	51%	51%	67%	54%
Special education	212	282	44	32%	34%	26%	6%	2%	47%	35%	36%	48%	40%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.7 Demographic Summary for RLA, Grade Five (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All population valid scores	3,657	316	55	22%	19%	31%	20%	8%	47%	44%	44%	56%	48%
Male	1,895	306	54	29%	21%	29%	16%	5%	45%	41%	40%	52%	45%
Female	1,760	327	55	15%	17%	33%	25%	10%	50%	47%	48%	61%	52%
Gender unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	383	69	0%	0%	27%	45%	27%	66%	57%	70%	70%	73%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	120	311	57	28%	14%	34%	13%	10%	47%	42%	43%	53%	48%
Guatemala	73	307	49	32%	15%	34%	18%	1%	46%	42%	43%	50%	46%
Mexico	1,202	322	58	19%	18%	31%	21%	11%	50%	46%	47%	56%	51%
Nicaragua	14	314	60	36%	0%	36%	14%	14%	48%	44%	43%	54%	47%
Panama	3	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	335	45	8%	0%	50%	42%	0%	60%	43%	52%	65%	54%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	1,664	313	54	24%	19%	31%	20%	6%	45%	43%	42%	56%	47%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	153	303	51	29%	23%	27%	16%	5%	43%	40%	39%	53%	45%
Country unknown	384	316	51	19%	23%	30%	22%	6%	47%	44%	43%	57%	48%
Not economically disadvantaged	362	331	61	17%	16%	28%	25%	14%	53%	49%	49%	60%	51%
Economically disadvantaged	3,250	315	55	23%	19%	31%	20%	7%	47%	43%	43%	56%	48%
Economic status unknown	45	318	42	11%	16%	53%	16%	4%	47%	43%	47%	59%	49%
In U.S. schools < 12 months	1,142	318	58	23%	17%	31%	19%	10%	50%	44%	46%	54%	50%
In U.S. schools ≥ 12 months	2,515	315	54	22%	20%	31%	21%	7%	46%	44%	43%	57%	48%
EL in ELD	118	316	56	22%	23%	29%	14%	12%	49%	44%	45%	54%	49%
EL in ELD and SDAIE	656	319	60	22%	18%	29%	20%	10%	49%	44%	46%	55%	49%
EL in ELD and SDAIE with primary language support	549	315	55	24%	15%	32%	22%	7%	48%	44%	45%	54%	49%
EL in ELD and academic subjects through primary language	2,053	317	54	21%	20%	31%	21%	7%	47%	45%	43%	58%	49%
Other EL instructional services	217	300	46	29%	21%	35%	12%	4%	42%	39%	38%	52%	44%
None (EL only)	21	318	68	24%	14%	29%	14%	19%	48%	44%	48%	55%	49%
Program participation unknown	43	310	51	28%	12%	40%	14%	7%	47%	43%	43%	52%	46%
No special education	3,434	319	55	20%	18%	32%	21%	8%	48%	45%	45%	57%	49%
Special education	223	275	38	48%	29%	17%	6%	0%	34%	32%	30%	43%	35%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.8 Demographic Summary for RLA, Grade Five (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target population valid scores	3,049	318	56	21%	19%	31%	20%	9%	48%	44%	44%	57%	49%
Male	1,585	307	54	28%	21%	29%	16%	6%	45%	42%	40%	52%	45%
Female	1,462	329	56	15%	17%	33%	25%	11%	50%	47%	48%	61%	53%
Gender unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	383	69	0%	0%	27%	45%	27%	66%	57%	70%	70%	73%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	111	312	58	29%	14%	33%	14%	11%	47%	42%	43%	52%	49%
Guatemala	62	306	49	31%	16%	35%	16%	2%	47%	42%	42%	49%	46%
Mexico	1,025	323	58	18%	18%	31%	21%	12%	51%	46%	47%	56%	51%
Nicaragua	12	325	58	25%	0%	42%	17%	17%	51%	47%	47%	56%	53%
Panama	3	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	1,360	316	55	22%	19%	30%	21%	7%	46%	44%	43%	58%	48%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	129	303	52	29%	23%	26%	16%	5%	44%	39%	39%	53%	45%
Country unknown	305	312	49	21%	24%	31%	18%	5%	46%	43%	42%	56%	47%
Not economically disadvantaged	308	332	62	16%	16%	29%	25%	15%	54%	49%	50%	60%	52%
Economically disadvantaged	2,706	316	55	22%	19%	30%	20%	8%	47%	44%	44%	56%	48%
Economic status unknown	35	316	39	9%	17%	63%	6%	6%	44%	43%	46%	58%	49%
In U.S. schools < 12 months	1,142	318	58	23%	17%	31%	19%	10%	50%	44%	46%	54%	50%
In U.S. schools ≥ 12 months	1,907	317	54	21%	21%	30%	21%	8%	47%	45%	43%	58%	48%
EL in ELD	99	317	57	22%	23%	28%	13%	13%	50%	44%	46%	54%	49%
EL in ELD and SDAIE	488	322	62	21%	17%	30%	19%	12%	51%	45%	48%	55%	50%
EL in ELD and SDAIE with primary language support	368	313	55	27%	15%	32%	18%	7%	48%	43%	44%	52%	49%
EL in ELD and academic subjects through primary language	2,053	317	54	21%	20%	31%	21%	7%	47%	45%	43%	58%	49%
Other EL instructional services	14	336	52	14%	0%	43%	29%	14%	54%	51%	58%	56%	56%
None (EL only)	16	319	73	25%	13%	31%	6%	25%	48%	45%	51%	54%	48%
Program participation unknown	11	304	54	18%	27%	36%	9%	9%	45%	37%	42%	51%	46%
No special education	2,869	320	56	20%	19%	31%	21%	9%	49%	45%	45%	57%	50%
Special education	180	278	40	45%	28%	19%	7%	0%	35%	33%	31%	44%	36%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.9 Demographic Summary for RLA, Grade Six (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All population valid scores	2,177	318	54	15%	24%	32%	22%	7%	42%	51%	50%	56%	43%
Male	1,104	309	53	19%	27%	30%	18%	5%	41%	48%	47%	52%	41%
Female	1,072	328	53	10%	21%	35%	27%	8%	44%	53%	53%	60%	46%
Gender unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	0	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	133	303	50	20%	29%	31%	15%	5%	37%	47%	48%	48%	39%
Guatemala	72	305	51	19%	26%	38%	11%	6%	38%	47%	47%	50%	39%
Mexico	897	325	55	12%	23%	32%	24%	9%	45%	53%	52%	57%	44%
Nicaragua	10	–	–	–	–	–	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	7	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–	–	–	–	–	–	–
Spain	3	–	–	–	–	–	–	–	–	–	–	–	–
United States	821	316	53	16%	23%	32%	24%	5%	41%	50%	49%	57%	43%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	57	305	56	16%	39%	25%	16%	5%	43%	49%	49%	44%	38%
Country unknown	156	310	47	16%	28%	35%	19%	3%	38%	48%	46%	55%	41%
Not economically disadvantaged	229	335	60	10%	19%	32%	25%	14%	49%	55%	55%	60%	47%
Economically disadvantaged	1,902	316	53	15%	25%	33%	22%	6%	41%	50%	49%	55%	43%
Economic status unknown	46	330	58	9%	26%	24%	30%	11%	45%	56%	51%	63%	43%
In U.S. schools < 12 months	1,005	322	56	14%	23%	32%	22%	9%	44%	52%	52%	55%	44%
In U.S. schools ≥ 12 months	1,172	316	52	15%	25%	32%	23%	5%	41%	50%	49%	56%	43%
EL in ELD	102	322	56	11%	27%	28%	27%	6%	44%	52%	52%	58%	41%
EL in ELD and SDAIE	525	326	58	13%	21%	31%	25%	10%	45%	54%	53%	57%	45%
EL in ELD and SDAIE with primary language support	410	315	52	16%	25%	34%	20%	6%	43%	49%	50%	53%	42%
EL in ELD and academic subjects through primary language	1,052	315	51	15%	25%	33%	21%	5%	41%	49%	48%	56%	42%
Other EL instructional services	38	346	63	13%	8%	21%	45%	13%	48%	58%	57%	68%	51%
None (EL only)	16	312	61	6%	44%	31%	6%	13%	46%	52%	49%	46%	36%
Program participation unknown	34	319	55	15%	21%	35%	21%	9%	40%	56%	50%	53%	44%
No special education	2,073	321	53	13%	23%	33%	23%	7%	43%	52%	51%	57%	44%
Special education	102	269	40	44%	35%	18%	2%	1%	27%	37%	37%	36%	31%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.10 Demographic Summary for RLA, Grade Six (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target population valid scores	1,962	318	54	15%	24%	33%	22%	7%	42%	51%	50%	56%	43%
Male	1,005	309	53	20%	27%	31%	18%	5%	41%	48%	47%	52%	41%
Female	956	328	53	10%	21%	35%	26%	8%	44%	54%	53%	60%	46%
Gender unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	8	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	0	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	129	303	49	19%	29%	32%	14%	5%	37%	47%	48%	48%	39%
Guatemala	68	305	51	19%	28%	35%	12%	6%	39%	47%	47%	51%	39%
Mexico	815	325	55	12%	22%	34%	23%	9%	45%	53%	52%	57%	44%
Nicaragua	10	–	–	–	–	–	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	5	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	720	316	53	17%	23%	32%	23%	5%	41%	50%	49%	56%	43%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	52	306	57	17%	37%	25%	15%	6%	43%	50%	50%	44%	38%
Country unknown	142	309	47	16%	28%	35%	18%	2%	37%	48%	46%	55%	42%
Not economically disadvantaged	212	335	59	9%	18%	33%	24%	15%	50%	55%	55%	60%	47%
Economically disadvantaged	1,717	316	53	15%	25%	33%	21%	6%	41%	50%	49%	55%	43%
Economic status unknown	33	324	56	9%	33%	24%	21%	12%	44%	54%	47%	62%	41%
In U.S. schools < 12 months	1,005	322	56	14%	23%	32%	22%	9%	44%	52%	52%	55%	44%
In U.S. schools ≥ 12 months	957	315	51	16%	25%	34%	21%	4%	41%	49%	48%	56%	42%
EL in ELD	80	323	57	10%	29%	28%	28%	6%	45%	53%	51%	57%	43%
EL in ELD and SDAIE	445	328	57	12%	20%	32%	24%	11%	46%	55%	53%	57%	46%
EL in ELD and SDAIE with primary language support	346	314	53	17%	23%	34%	19%	6%	43%	49%	50%	52%	42%
EL in ELD and academic subjects through primary language	1,052	315	51	15%	25%	33%	21%	5%	41%	49%	48%	56%	42%
Other EL instructional services	5	–	–	–	–	–	–	–	–	–	–	–	–
None (EL only)	11	316	70	9%	45%	27%	0%	18%	49%	49%	52%	47%	40%
Program participation unknown	23	311	56	17%	26%	35%	13%	9%	36%	53%	49%	50%	42%
No special education	1,868	321	53	13%	23%	34%	23%	7%	43%	51%	51%	56%	44%
Special education	92	271	39	43%	36%	17%	2%	1%	27%	37%	38%	37%	32%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.11 Demographic Summary for RLA, Grade Seven (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All population valid scores	1,823	321	52	9%	30%	31%	22%	8%	61%	48%	52%	55%	51%
Male	937	311	51	13%	36%	30%	17%	5%	58%	45%	49%	50%	47%
Female	880	333	51	5%	24%	33%	28%	10%	64%	50%	56%	60%	55%
Gender unknown	6	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	8	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	126	314	45	9%	33%	37%	20%	2%	60%	45%	49%	52%	48%
Guatemala	52	310	60	15%	37%	25%	19%	4%	54%	45%	46%	53%	46%
Mexico	959	324	54	9%	29%	30%	22%	9%	62%	49%	53%	55%	51%
Nicaragua	12	326	47	0%	33%	25%	33%	8%	66%	49%	49%	58%	53%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	332	52	0%	33%	33%	25%	8%	67%	50%	53%	61%	53%
Puerto Rico	1	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	466	319	50	10%	29%	33%	22%	6%	59%	46%	52%	56%	51%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	53	301	43	11%	38%	40%	8%	4%	53%	41%	44%	51%	45%
Country unknown	121	325	47	6%	27%	33%	30%	4%	61%	48%	55%	57%	52%
Not economically disadvantaged	243	332	56	6%	30%	27%	24%	13%	65%	49%	56%	59%	54%
Economically disadvantaged	1,541	319	52	10%	30%	32%	22%	7%	60%	47%	52%	54%	50%
Economic status unknown	39	328	39	5%	18%	54%	15%	8%	62%	51%	51%	60%	53%
In U.S. schools < 12 months	1,159	325	53	9%	27%	30%	25%	9%	63%	49%	54%	56%	52%
In U.S. schools ≥ 12 months	664	314	49	9%	34%	33%	17%	6%	57%	45%	50%	54%	49%
EL in ELD	176	326	52	9%	26%	30%	29%	7%	62%	48%	54%	57%	54%
EL in ELD and SDAIE	502	324	56	10%	28%	29%	24%	10%	62%	48%	53%	55%	52%
EL in ELD and SDAIE with primary language support	412	323	50	9%	28%	33%	24%	6%	63%	49%	53%	55%	51%
EL in ELD and academic subjects through primary language	580	317	49	8%	33%	35%	18%	6%	57%	46%	51%	55%	49%
Other EL instructional services	88	316	55	13%	32%	30%	19%	7%	59%	46%	49%	53%	51%
None (EL only)	18	304	57	22%	39%	17%	11%	11%	56%	42%	48%	48%	43%
Program participation unknown	47	330	62	6%	32%	21%	28%	13%	66%	52%	55%	56%	52%
No special education	1,782	322	52	9%	29%	32%	23%	8%	61%	48%	53%	55%	51%
Special education	41	289	40	17%	51%	24%	5%	2%	45%	39%	42%	47%	39%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.12 Demographic Summary for RLA, Grade Seven (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target population valid scores	1,587	322	52	9%	29%	31%	23%	8%	61%	48%	53%	55%	51%
Male	828	312	51	13%	34%	30%	18%	6%	58%	45%	50%	51%	47%
Female	756	333	51	5%	23%	33%	28%	10%	64%	51%	56%	60%	55%
Gender unknown	3	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	7	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	112	314	46	10%	32%	35%	21%	2%	61%	45%	50%	53%	48%
Guatemala	48	311	62	15%	38%	23%	21%	4%	53%	46%	46%	54%	46%
Mexico	835	325	54	9%	29%	29%	24%	10%	63%	49%	54%	55%	52%
Nicaragua	11	328	48	0%	27%	27%	36%	9%	67%	51%	50%	58%	53%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	9	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	1	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	409	319	50	10%	29%	34%	22%	6%	59%	46%	52%	55%	51%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	47	302	45	13%	38%	36%	9%	4%	53%	41%	43%	51%	45%
Country unknown	96	325	47	7%	23%	39%	26%	5%	61%	48%	54%	58%	52%
Not economically disadvantaged	223	332	56	6%	30%	27%	25%	12%	65%	49%	56%	60%	54%
Economically disadvantaged	1,344	320	51	10%	29%	32%	23%	7%	60%	48%	52%	54%	51%
Economic status unknown	20	330	43	5%	15%	50%	20%	10%	63%	51%	54%	59%	55%
In U.S. schools < 12 months	1,159	325	53	9%	27%	30%	25%	9%	63%	49%	54%	56%	52%
In U.S. schools ≥ 12 months	428	314	48	9%	34%	34%	17%	6%	56%	45%	50%	54%	49%
EL in ELD	147	325	52	10%	22%	31%	29%	7%	63%	48%	54%	56%	53%
EL in ELD and SDAIE	439	326	56	10%	27%	28%	25%	10%	63%	48%	54%	56%	53%
EL in ELD and SDAIE with primary language support	356	325	50	9%	28%	32%	25%	7%	64%	49%	53%	55%	52%
EL in ELD and academic subjects through primary language	580	317	49	8%	33%	35%	18%	6%	57%	46%	51%	55%	49%
Other EL instructional services	29	311	60	24%	21%	34%	17%	3%	60%	46%	49%	51%	46%
None (EL only)	14	313	58	14%	43%	14%	14%	14%	58%	45%	53%	50%	47%
Program participation unknown	22	343	63	0%	41%	9%	32%	18%	69%	57%	60%	58%	55%
No special education	1,550	323	52	9%	28%	32%	23%	8%	62%	48%	53%	55%	51%
Special education	37	285	37	19%	51%	24%	5%	0%	44%	38%	40%	47%	37%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.13 Demographic Summary for RLA, Grade Eight (Overall Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All Population valid scores	1,588	42	13	61%	51%	59%	62%	50%
Male	836	40	14	59%	49%	57%	58%	47%
Female	749	44	13	63%	54%	63%	67%	53%
Gender unknown	3	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–
Colombia	10	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–
Ecuador	7	–	–	–	–	–	–	–
El Salvador	112	41	13	60%	49%	58%	60%	48%
Guatemala	48	39	13	59%	47%	52%	59%	47%
Mexico	862	43	14	61%	52%	61%	63%	51%
Nicaragua	6	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	14	49	10	75%	59%	70%	71%	54%
Puerto Rico	3	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–
United States	367	40	13	58%	49%	57%	60%	47%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–
Other	43	42	14	64%	53%	56%	63%	47%
Country unknown	104	42	12	62%	49%	60%	63%	51%
Not economically disadvantaged	235	44	14	66%	55%	63%	63%	52%
Economically disadvantaged	1,311	42	13	60%	51%	59%	62%	49%
Economic status unknown	42	42	12	60%	50%	60%	65%	49%
In U.S. schools < 12 months	1,053	44	14	64%	54%	62%	64%	51%
In U.S. schools ≥ 12 months	535	39	12	55%	46%	55%	59%	47%
EL in ELD	152	44	14	63%	54%	63%	66%	50%
EL in ELD and SDAIE	501	43	14	62%	53%	61%	62%	51%
EL in ELD and SDAIE with primary language support	356	42	14	62%	51%	58%	62%	49%
EL in ELD and academic subjects through primary language	476	41	12	59%	49%	58%	62%	49%
Other EL instructional services	51	37	14	54%	46%	49%	58%	45%
None (EL only)	16	45	16	63%	55%	60%	64%	57%
Program participation unknown	36	45	11	61%	56%	64%	65%	54%
No special education	1,557	42	13	61%	52%	60%	63%	50%
Special education	30	32	7	45%	36%	47%	49%	41%
Special education unknown	1	–	–	–	–	–	–	–

Table 7.B.14 Demographic Summary for RLA, Grade Eight (Target Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target Population valid scores	1,416	43	13	62%	52%	60%	63%	50%
Male	737	41	14	60%	50%	58%	59%	47%
Female	679	45	12	64%	54%	63%	68%	53%
Gender unknown	0	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–
Colombia	10	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–
Ecuador	6	–	–	–	–	–	–	–
El Salvador	103	41	13	62%	50%	58%	60%	49%
Guatemala	42	38	13	57%	46%	50%	58%	46%
Mexico	762	44	13	63%	53%	62%	64%	51%
Nicaragua	5	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	12	47	9	72%	57%	68%	69%	51%
Puerto Rico	3	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–
United States	323	41	13	59%	50%	58%	62%	48%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–
Other	40	43	14	66%	55%	57%	65%	49%
Country unknown	98	43	12	62%	50%	60%	63%	52%
Not economically disadvantaged	225	45	14	66%	56%	63%	64%	52%
Economically disadvantaged	1,167	42	13	61%	51%	60%	63%	50%
Economic status unknown	24	42	12	61%	49%	63%	66%	46%
In U.S. schools < 12 months	1,053	44	14	64%	54%	62%	64%	51%
In U.S. schools ≥ 12 months	363	40	12	57%	47%	57%	61%	48%
EL in ELD	124	45	14	66%	57%	65%	68%	51%
EL in ELD and SDAIE	447	43	14	63%	53%	62%	63%	51%
EL in ELD and SDAIE with primary language support	310	43	13	64%	53%	59%	65%	50%
EL in ELD and academic subjects through primary language	476	41	12	59%	49%	58%	62%	49%
Other EL instructional services	23	42	16	57%	56%	57%	61%	51%
None (EL only)	13	48	15	68%	57%	66%	69%	62%
Program participation unknown	23	45	11	63%	54%	63%	66%	54%
No special education	1,390	43	13	62%	52%	61%	64%	51%
Special education	25	34	7	46%	38%	49%	50%	43%
Special education unknown	1	–	–	–	–	–	–	–

Table 7.B.15 Demographic Summary for RLA, Grade Nine (Overall Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All Population valid scores	2,587	41	13	69%	56%	54%	54%	46%
Male	1,475	38	13	67%	54%	51%	51%	43%
Female	1,101	43	13	72%	59%	58%	58%	51%
Gender unknown	11	32	12	61%	48%	42%	38%	35%
Argentina	3	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–
Colombia	8	–	–	–	–	–	–	–
Costa Rica	4	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–
El Salvador	357	39	12	70%	53%	54%	49%	45%
Guatemala	269	36	13	63%	49%	50%	48%	41%
Mexico	1,209	41	13	70%	57%	55%	55%	47%
Nicaragua	17	39	14	68%	56%	46%	54%	46%
Panama	1	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	20	50	12	84%	67%	70%	67%	58%
Puerto Rico	3	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–
United States	413	42	13	70%	58%	55%	56%	48%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–
Other	100	39	12	68%	54%	54%	52%	41%
Country unknown	169	39	13	65%	55%	52%	52%	45%
Not economically disadvantaged	428	42	13	71%	58%	56%	54%	48%
Economically disadvantaged	2,076	40	13	69%	55%	54%	53%	46%
Economic status unknown	83	42	13	73%	58%	56%	57%	47%
In U.S. schools < 12 months	2,059	41	13	70%	56%	55%	54%	47%
In U.S. schools ≥ 12 months	528	39	13	65%	54%	53%	53%	45%
EL in ELD	244	41	12	70%	56%	54%	54%	46%
EL in ELD and SDAIE	707	40	13	68%	55%	53%	53%	46%
EL in ELD and SDAIE with primary language support	695	41	13	71%	57%	55%	54%	48%
EL in ELD and academic subjects through primary language	695	40	13	68%	55%	54%	53%	45%
Other EL instructional services	135	41	14	69%	58%	55%	53%	47%
None (EL only)	49	43	12	75%	60%	57%	58%	50%
Program participation unknown	62	40	13	70%	56%	52%	53%	47%
No special education	2,576	41	13	69%	56%	54%	54%	46%
Special education	10	–	–	–	–	–	–	–
Special education unknown	1	–	–	–	–	–	–	–

Table 7.B.16 Demographic Summary for RLA, Grade Nine (Target Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target Population valid scores	2,358	41	13	70%	56%	54%	54%	46%
Male	1,355	39	13	68%	53%	52%	51%	43%
Female	996	43	13	72%	59%	58%	58%	51%
Gender unknown	7	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–
Colombia	7	–	–	–	–	–	–	–
Costa Rica	4	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–
El Salvador	342	39	12	70%	53%	54%	49%	45%
Guatemala	256	36	13	63%	49%	50%	48%	41%
Mexico	1,086	42	13	71%	58%	55%	55%	48%
Nicaragua	17	39	14	68%	56%	46%	54%	46%
Panama	1	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	20	50	12	84%	67%	70%	67%	58%
Puerto Rico	3	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–
United States	385	42	13	71%	58%	55%	57%	48%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–
Other	91	39	13	69%	54%	54%	52%	42%
Country unknown	130	39	13	65%	55%	52%	53%	46%
Not economically disadvantaged	406	42	13	71%	58%	56%	54%	48%
Economically disadvantaged	1,895	40	13	69%	55%	54%	53%	46%
Economic status unknown	57	42	14	74%	58%	58%	56%	47%
In U.S. schools < 12 months	2,059	41	13	70%	56%	55%	54%	47%
In U.S. schools ≥ 12 months	299	39	13	64%	53%	52%	53%	45%
EL in ELD	202	40	12	70%	55%	54%	54%	45%
EL in ELD and SDAIE	626	40	13	69%	55%	54%	53%	46%
EL in ELD and SDAIE with primary language support	631	42	13	71%	57%	56%	55%	48%
EL in ELD and academic subjects through primary language	695	40	13	68%	55%	54%	53%	45%
Other EL instructional services	126	41	14	69%	58%	55%	53%	47%
None (EL only)	47	44	12	76%	60%	57%	58%	51%
Program participation unknown	31	41	14	75%	59%	55%	52%	45%
No special education	2,348	41	13	70%	56%	54%	54%	46%
Special education	9	–	–	–	–	–	–	–
Special education unknown	1	–	–	–	–	–	–	–

Table 7.B.17 Demographic Summary for RLA, Grade Ten (Overall Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All Population valid scores	1,606	41	13	74%	56%	57%	56%	43%
Male	898	39	13	71%	54%	54%	51%	41%
Female	702	44	12	78%	60%	59%	61%	46%
Gender unknown	6	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–
Colombia	10	–	–	–	–	–	–	–
Costa Rica	4	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–
El Salvador	123	38	12	69%	53%	55%	47%	38%
Guatemala	65	35	11	69%	48%	49%	47%	36%
Mexico	894	42	13	75%	58%	57%	57%	44%
Nicaragua	6	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	12	49	9	89%	70%	68%	66%	49%
Puerto Rico	1	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–
United States	361	41	13	73%	55%	56%	57%	43%
Uruguay	1	–	–	–	–	–	–	–
Venezuela	3	–	–	–	–	–	–	–
Other	33	38	9	69%	53%	57%	48%	37%
Country unknown	83	40	13	72%	56%	56%	53%	43%
Not economically disadvantaged	304	43	13	78%	60%	59%	59%	46%
Economically disadvantaged	1,240	40	13	73%	56%	56%	55%	42%
Economic status unknown	62	40	13	71%	54%	57%	52%	43%
In U.S. schools < 12 months	1,178	42	12	76%	58%	58%	58%	45%
In U.S. schools ≥ 12 months	428	37	13	67%	51%	53%	50%	39%
EL in ELD	193	42	13	77%	58%	56%	57%	45%
EL in ELD and SDAIE	470	42	12	76%	58%	57%	56%	43%
EL in ELD and SDAIE with primary language support	385	41	12	73%	56%	57%	55%	43%
EL in ELD and academic subjects through primary language	412	40	13	71%	56%	56%	54%	43%
Other EL instructional services	68	42	13	77%	55%	59%	58%	44%
None (EL only)	25	40	12	72%	56%	55%	55%	40%
Program participation unknown	53	38	13	66%	52%	54%	55%	40%
No special education	1,599	41	13	74%	57%	57%	56%	43%
Special education	7	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

Table 7.B.18 Demographic Summary for RLA, Grade Ten (Target Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target Population valid scores	1,401	42	13	75%	57%	57%	57%	44%
Male	791	39	12	72%	55%	55%	52%	41%
Female	607	45	12	79%	61%	60%	63%	47%
Gender unknown	3	–	–	–	–	–	–	–
Argentina	0	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–
Colombia	10	–	–	–	–	–	–	–
Costa Rica	4	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–
El Salvador	109	38	12	70%	53%	56%	48%	38%
Guatemala	55	37	11	72%	51%	51%	50%	38%
Mexico	777	42	13	76%	59%	58%	57%	45%
Nicaragua	4	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	11	49	9	89%	69%	68%	68%	50%
Puerto Rico	1	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–
United States	334	41	12	74%	56%	56%	58%	44%
Uruguay	1	–	–	–	–	–	–	–
Venezuela	3	–	–	–	–	–	–	–
Other	29	38	9	69%	53%	57%	50%	38%
Country unknown	56	41	13	73%	56%	58%	54%	44%
Not economically disadvantaged	278	44	13	79%	61%	59%	60%	47%
Economically disadvantaged	1,087	41	12	74%	57%	57%	56%	43%
Economic status unknown	36	43	12	76%	58%	62%	54%	46%
In U.S. schools < 12 months	1,178	42	12	76%	58%	58%	58%	45%
In U.S. schools ≥ 12 months	223	38	13	68%	52%	54%	50%	40%
EL in ELD	164	43	12	79%	61%	57%	59%	46%
EL in ELD and SDAIE	413	42	12	77%	58%	57%	57%	44%
EL in ELD and SDAIE with primary language support	302	42	12	75%	58%	58%	57%	44%
EL in ELD and academic subjects through primary language	412	40	13	71%	56%	56%	54%	43%
Other EL instructional services	61	42	13	77%	55%	59%	58%	44%
None (EL only)	22	39	11	69%	55%	53%	54%	39%
Program participation unknown	27	41	12	74%	55%	59%	58%	42%
No special education	1,396	42	12	75%	57%	57%	57%	44%
Special education	5	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

Table 7.B.19 Demographic Summary for RLA, Grade Eleven (Overall Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
All Population valid scores	976	39	12	61%	48%	52%	51%	53%
Male	503	37	12	59%	46%	49%	48%	50%
Female	469	41	12	63%	49%	56%	54%	55%
Gender unknown	4	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–
Colombia	4	–	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–
Ecuador	7	–	–	–	–	–	–	–
El Salvador	54	34	11	57%	41%	50%	41%	44%
Guatemala	28	32	9	48%	44%	43%	42%	41%
Mexico	522	39	12	60%	48%	52%	50%	52%
Nicaragua	5	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–
Puerto Rico	3	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–
United States	272	41	12	63%	48%	54%	54%	57%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–
Other	11	35	13	57%	43%	43%	49%	47%
Country unknown	48	38	13	59%	49%	48%	49%	51%
Not economically disadvantaged	186	41	12	64%	50%	55%	51%	57%
Economically disadvantaged	769	38	12	60%	47%	52%	50%	52%
Economic status unknown	21	38	13	61%	47%	45%	51%	54%
In U.S. schools < 12 months	576	41	12	64%	50%	54%	52%	55%
In U.S. schools ≥ 12 months	400	36	12	57%	44%	49%	48%	49%
EL in ELD	100	40	12	64%	49%	55%	49%	55%
EL in ELD and SDAIE	269	41	12	64%	49%	54%	54%	56%
EL in ELD and SDAIE with primary language support	190	39	11	61%	49%	51%	50%	52%
EL in ELD and academic subjects through primary language	331	37	12	57%	45%	49%	49%	50%
Other EL instructional services	35	45	13	68%	52%	63%	58%	64%
None (EL only)	16	35	13	59%	46%	48%	46%	41%
Program participation unknown	35	37	10	59%	45%	50%	50%	47%
No special education	971	39	12	61%	48%	52%	51%	53%
Special education	5	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

Table 7.B.20 Demographic Summary for RLA, Grade Eleven (Target Population)

				Mean Percent Correct in Content Area				
	Number Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Word Analysis and Vocabulary Development	Reading Comprehension	Literary Response and Analysis	Written Conventions	Writing Strategies
Target Population valid scores	839	39	12	61%	48%	53%	51%	53%
Male	434	37	12	59%	46%	49%	48%	51%
Female	402	41	12	63%	50%	56%	54%	56%
Gender unknown	3	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–
Colombia	4	–	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–
Ecuador	6	–	–	–	–	–	–	–
El Salvador	49	34	10	56%	40%	51%	41%	45%
Guatemala	26	33	9	49%	45%	44%	44%	42%
Mexico	440	39	12	61%	49%	53%	50%	53%
Nicaragua	4	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–
Puerto Rico	3	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–
United States	247	40	12	62%	48%	53%	54%	57%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–
Other	10	–	–	–	–	–	–	–
Country unknown	29	36	14	55%	46%	45%	47%	48%
Not economically disadvantaged	165	41	12	64%	51%	55%	52%	57%
Economically disadvantaged	662	39	12	60%	47%	52%	51%	52%
Economic status unknown	12	42	14	70%	51%	52%	54%	60%
In U.S. schools < 12 months	576	41	12	64%	50%	54%	52%	55%
In U.S. schools ≥ 12 months	263	36	12	56%	44%	48%	48%	49%
EL in ELD	78	41	12	67%	50%	57%	49%	56%
EL in ELD and SDAIE	232	41	12	64%	50%	55%	54%	57%
EL in ELD and SDAIE with primary language support	154	39	11	62%	49%	52%	51%	53%
EL in ELD and academic subjects through primary language	331	37	12	57%	45%	49%	49%	50%
Other EL instructional services	24	43	13	64%	51%	60%	55%	60%
None (EL only)	11	39	13	66%	51%	55%	54%	46%
Program participation unknown	9	–	–	–	–	–	–	–
No special education	834	39	12	61%	48%	53%	51%	53%
Special education	5	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

Table 7.B.21 Demographic Summary for Mathematics, Grade Two (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Place Value, Addition, and Subtraction	Multiplication, Division, and Fractions	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
All population valid scores	13,909	365	74	1%	19%	25%	32%	24%	66%	67%	61%	73%	76%
Male	6,877	364	75	1%	20%	24%	31%	24%	66%	66%	63%	73%	76%
Female	7,017	366	73	1%	18%	26%	33%	23%	67%	67%	59%	72%	77%
Gender unknown	15	348	46	0%	20%	27%	53%	0%	63%	65%	50%	74%	73%
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	371	100	0%	18%	27%	36%	18%	69%	69%	58%	71%	68%
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	9	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	136	343	77	1%	29%	29%	25%	16%	58%	61%	57%	66%	69%
Guatemala	112	350	71	1%	26%	25%	29%	19%	60%	64%	58%	71%	72%
Mexico	2,043	354	76	2%	25%	25%	29%	20%	63%	64%	58%	70%	72%
Nicaragua	8	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	16	368	79	0%	19%	31%	13%	38%	68%	66%	70%	71%	77%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	8,500	370	74	1%	17%	24%	33%	26%	68%	68%	63%	74%	78%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	352	360	76	1%	20%	26%	31%	22%	65%	66%	60%	69%	77%
Country unknown	2,706	359	69	1%	19%	27%	33%	20%	65%	65%	59%	72%	77%
Not economically disadvantaged	975	374	75	1%	17%	20%	35%	28%	69%	69%	64%	74%	77%
Economically disadvantaged	12,600	364	74	1%	19%	25%	32%	23%	66%	66%	61%	72%	76%
Economic status unknown	334	366	73	1%	17%	26%	33%	23%	65%	67%	62%	74%	78%
In U.S. schools < 12 months	1,358	324	70	3%	39%	25%	22%	11%	54%	56%	51%	64%	62%
In U.S. schools ≥ 12 months	12,551	369	73	1%	17%	25%	33%	25%	68%	68%	62%	74%	78%
EL in ELD	389	345	77	3%	26%	29%	27%	16%	62%	60%	56%	69%	70%
EL in ELD and SDAIE	904	335	72	2%	34%	25%	25%	14%	57%	59%	55%	67%	66%
EL in ELD and SDAIE with primary language support	1,861	346	70	1%	25%	27%	30%	16%	61%	63%	56%	69%	72%
EL in ELD and academic subjects through primary language	10,432	372	74	0%	16%	24%	33%	26%	69%	68%	63%	74%	78%
Other EL instructional services	78	344	70	1%	24%	31%	27%	17%	61%	61%	57%	70%	67%
None (EL only)	82	344	69	0%	27%	32%	29%	12%	63%	61%	55%	66%	71%
Program participation unknown	163	352	80	2%	25%	25%	29%	18%	60%	63%	55%	72%	73%
No special education	13,327	367	74	1%	18%	25%	32%	24%	67%	67%	61%	73%	77%
Special education	582	318	70	4%	42%	25%	20%	10%	53%	53%	52%	61%	64%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.22 Demographic Summary for Mathematics, Grade Two (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Place Value, Addition, and Subtraction	Multiplication, Division, and Fractions	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
Target population valid scores	11,505	367	75	1%	19%	24%	32%	25%	67%	67%	62%	73%	77%
Male	5,682	365	76	1%	20%	24%	31%	25%	66%	66%	63%	73%	76%
Female	5,815	368	74	1%	17%	25%	33%	24%	68%	68%	60%	73%	77%
Gender unknown	8	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	371	100	0%	18%	27%	36%	18%	69%	69%	58%	71%	68%
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	9	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	127	342	78	1%	29%	31%	24%	16%	58%	61%	57%	65%	69%
Guatemala	103	348	71	1%	27%	25%	27%	19%	59%	63%	58%	71%	71%
Mexico	1,644	354	78	1%	26%	24%	28%	21%	63%	64%	58%	70%	71%
Nicaragua	8	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	16	368	79	0%	19%	31%	13%	38%	68%	66%	70%	71%	77%
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	7,640	371	74	0%	17%	24%	33%	26%	68%	68%	63%	74%	78%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	336	359	76	1%	21%	26%	31%	21%	65%	66%	59%	68%	77%
Country unknown	1,596	364	70	1%	17%	26%	34%	22%	67%	66%	60%	73%	77%
Not economically disadvantaged	782	375	77	1%	17%	19%	34%	29%	70%	69%	65%	74%	77%
Economically disadvantaged	10,464	366	75	1%	19%	25%	32%	24%	67%	67%	61%	73%	76%
Economic status unknown	259	367	74	2%	17%	25%	32%	24%	65%	68%	63%	74%	79%
In U.S. schools < 12 months	1,358	324	70	3%	39%	25%	22%	11%	54%	56%	51%	64%	62%
In U.S. schools ≥ 12 months	10,147	372	74	0%	16%	24%	33%	26%	69%	69%	63%	74%	79%
EL in ELD	105	311	66	5%	40%	32%	16%	7%	50%	53%	49%	61%	55%
EL in ELD and SDAIE	500	318	69	3%	44%	24%	20%	10%	52%	55%	51%	63%	59%
EL in ELD and SDAIE with primary language support	403	309	60	3%	46%	26%	19%	5%	49%	53%	47%	60%	58%
EL in ELD and academic subjects through primary language	10,432	372	74	0%	16%	24%	33%	26%	69%	68%	63%	74%	78%
Other EL instructional services	15	307	55	0%	53%	20%	20%	7%	49%	55%	46%	60%	50%
None (EL only)	19	325	60	0%	42%	16%	42%	0%	58%	57%	46%	65%	66%
Program participation unknown	31	328	79	3%	48%	19%	10%	19%	51%	55%	57%	69%	61%
No special education	11,027	369	74	1%	18%	24%	32%	25%	67%	68%	62%	73%	77%
Special education	478	322	70	3%	42%	24%	20%	11%	54%	54%	52%	62%	65%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.23 Demographic Summary for Mathematics, Grade Three (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Place Value, Fractions, and Decimals	Addition, Subtraction, Multiplication, Division	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
All population valid scores	9,292	365	73	1%	18%	26%	32%	23%	66%	67%	62%	68%	78%
Male	4,615	368	75	1%	19%	25%	30%	26%	67%	67%	63%	68%	78%
Female	4,666	363	70	0%	18%	28%	33%	21%	65%	67%	61%	67%	79%
Gender unknown	11	353	84	0%	27%	18%	36%	18%	60%	66%	61%	65%	58%
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	352	57	0%	0%	73%	18%	9%	57%	67%	61%	67%	71%
Costa Rica	6	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	152	330	72	1%	39%	24%	22%	14%	54%	58%	52%	58%	61%
Guatemala	109	346	69	2%	26%	28%	29%	15%	60%	62%	58%	63%	73%
Mexico	1,560	353	71	1%	23%	28%	29%	18%	61%	65%	59%	64%	72%
Nicaragua	13	358	76	0%	31%	15%	23%	31%	57%	68%	69%	64%	69%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	13	370	81	0%	23%	15%	23%	38%	67%	69%	64%	65%	80%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	5,648	370	73	0%	17%	25%	33%	25%	67%	68%	63%	69%	80%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	306	355	72	1%	21%	29%	31%	18%	62%	63%	59%	66%	78%
Country unknown	1,449	369	71	0%	16%	26%	34%	24%	67%	68%	62%	69%	81%
Not economically disadvantaged	613	368	74	0%	17%	28%	28%	27%	65%	69%	63%	67%	79%
Economically disadvantaged	8,481	365	73	1%	18%	26%	32%	23%	66%	67%	62%	68%	78%
Economic status unknown	198	359	73	2%	21%	24%	32%	22%	64%	66%	60%	65%	77%
In U.S. schools < 12 months	1,406	335	68	2%	32%	30%	23%	13%	56%	60%	54%	60%	65%
In U.S. schools ≥ 12 months	7,886	371	72	0%	16%	26%	33%	25%	68%	68%	63%	69%	80%
EL in ELD	122	327	65	2%	37%	28%	20%	13%	53%	59%	53%	57%	62%
EL in ELD and SDAIE	745	341	72	2%	30%	27%	25%	16%	57%	62%	55%	61%	69%
EL in ELD and SDAIE with primary language support	866	345	71	1%	27%	29%	26%	16%	59%	62%	56%	62%	69%
EL in ELD and academic subjects through primary language	7,325	371	72	0%	15%	26%	34%	25%	68%	68%	63%	69%	81%
Other EL instructional services	78	348	75	1%	29%	26%	22%	22%	63%	62%	55%	61%	75%
None (EL only)	41	356	75	2%	17%	39%	17%	24%	62%	64%	59%	67%	74%
Program participation unknown	115	350	74	0%	27%	30%	23%	20%	59%	62%	59%	64%	75%
No special education	8,873	367	72	0%	17%	26%	32%	24%	66%	68%	62%	68%	79%
Special education	418	321	69	3%	43%	24%	20%	10%	52%	52%	49%	56%	66%
Special education unknown	1	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.24 Demographic Summary for Mathematics, Grade Three (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Place Value, Fractions, and Decimals	Addition, Subtraction, Multiplication, Division	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
Target population valid scores	8,382	366	73	1%	18%	26%	32%	23%	66%	67%	62%	68%	78%
Male	4,150	368	75	1%	19%	24%	30%	26%	67%	67%	63%	68%	78%
Female	4,229	363	70	0%	17%	28%	34%	21%	65%	67%	61%	68%	79%
Gender unknown	3	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	6	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	139	328	72	1%	40%	24%	22%	13%	54%	58%	51%	58%	61%
Guatemala	98	347	70	2%	26%	28%	30%	15%	61%	62%	58%	62%	73%
Mexico	1,454	352	71	1%	22%	29%	30%	18%	61%	65%	59%	64%	72%
Nicaragua	13	358	76	0%	31%	15%	23%	31%	57%	68%	69%	64%	69%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	13	370	81	0%	23%	15%	23%	38%	67%	69%	64%	65%	80%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	5,172	370	73	0%	16%	26%	33%	25%	68%	68%	63%	69%	80%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	300	355	72	1%	21%	29%	31%	18%	62%	63%	59%	66%	78%
Country unknown	1,154	372	71	0%	15%	25%	35%	25%	68%	68%	63%	70%	81%
Not economically disadvantaged	529	370	76	0%	17%	27%	28%	28%	66%	70%	64%	67%	78%
Economically disadvantaged	7,710	366	73	1%	18%	26%	32%	23%	66%	67%	62%	68%	78%
Economic status unknown	143	358	71	1%	20%	24%	35%	20%	65%	67%	60%	63%	77%
In U.S. schools < 12 months	1,406	335	68	2%	32%	30%	23%	13%	56%	60%	54%	60%	65%
In U.S. schools ≥ 12 months	6,976	372	72	0%	15%	25%	34%	25%	68%	69%	63%	69%	81%
EL in ELD	98	327	66	2%	38%	27%	20%	13%	53%	58%	53%	56%	61%
EL in ELD and SDAIE	504	327	65	2%	35%	30%	22%	11%	53%	58%	52%	57%	64%
EL in ELD and SDAIE with primary language support	395	324	68	2%	38%	31%	18%	11%	52%	57%	51%	56%	58%
EL in ELD and academic subjects through primary language	7,325	371	72	0%	15%	26%	34%	25%	68%	68%	63%	69%	81%
Other EL instructional services	12	333	66	0%	42%	17%	33%	8%	56%	60%	52%	58%	68%
None (EL only)	22	346	84	5%	23%	41%	14%	18%	56%	62%	58%	62%	67%
Program participation unknown	26	352	69	0%	27%	27%	23%	23%	60%	66%	62%	63%	70%
No special education	8,011	368	72	0%	17%	26%	33%	24%	67%	68%	62%	68%	79%
Special education	370	322	69	2%	42%	24%	21%	10%	52%	53%	49%	57%	66%
Special education unknown	1	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.25 Demographic Summary for Mathematics, Grade Four (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Decimals, Fractions, and Negative Numbers	Operations and Factoring	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
All population valid scores	5,042	363	74	4%	18%	21%	35%	22%	67%	61%	67%	63%	55%
Male	2,506	360	76	5%	20%	20%	32%	22%	67%	60%	66%	62%	53%
Female	2,531	366	71	3%	16%	22%	37%	22%	67%	62%	69%	65%	57%
Gender unknown	5	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	15	377	63	0%	7%	27%	47%	20%	68%	70%	68%	69%	67%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	4	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	132	344	74	8%	23%	25%	29%	16%	62%	55%	60%	61%	51%
Guatemala	67	334	84	16%	19%	24%	24%	16%	58%	55%	56%	56%	46%
Mexico	1,335	353	74	4%	24%	22%	32%	18%	64%	59%	63%	60%	54%
Nicaragua	10	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	22	396	72	5%	0%	18%	41%	36%	74%	71%	79%	67%	65%
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	2,472	370	73	4%	15%	21%	36%	24%	69%	62%	70%	65%	56%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	178	342	72	7%	25%	19%	35%	14%	64%	52%	61%	58%	51%
Country unknown	791	368	69	2%	17%	21%	37%	23%	68%	62%	70%	64%	54%
Not economically disadvantaged	411	369	77	5%	16%	20%	36%	24%	68%	64%	69%	63%	55%
Economically disadvantaged	4,551	363	73	4%	18%	21%	35%	22%	67%	61%	67%	63%	55%
Economic status unknown	80	356	71	1%	24%	23%	36%	16%	65%	60%	65%	61%	56%
In U.S. schools < 12 months	1,229	340	71	7%	25%	24%	31%	13%	61%	56%	59%	57%	52%
In U.S. schools ≥ 12 months	3,813	370	73	3%	16%	20%	36%	25%	69%	62%	70%	65%	56%
EL in ELD	137	338	63	4%	26%	29%	28%	12%	60%	55%	58%	59%	51%
EL in ELD and SDAIE	686	345	74	7%	24%	23%	31%	15%	62%	57%	60%	58%	53%
EL in ELD and SDAIE with primary language support	596	343	73	7%	23%	24%	30%	15%	62%	57%	60%	57%	51%
EL in ELD and academic subjects through primary language	3,389	371	72	3%	16%	20%	37%	25%	69%	63%	70%	65%	56%
Other EL instructional services	166	374	75	4%	15%	18%	37%	26%	69%	63%	71%	67%	55%
None (EL only)	19	382	70	0%	11%	16%	42%	32%	70%	67%	75%	67%	64%
Program participation unknown	49	324	69	8%	37%	18%	27%	10%	58%	50%	52%	55%	46%
No special education	4,782	366	73	4%	17%	21%	36%	23%	68%	62%	68%	64%	55%
Special education	259	314	68	13%	38%	20%	21%	8%	54%	45%	52%	51%	45%
Special education unknown	1	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.26 Demographic Summary for Mathematics, Grade Four (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Decimals, Fractions, and Negative Numbers	Operations and Factoring	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
Target population valid scores	4,428	363	74	4%	18%	21%	35%	22%	67%	61%	67%	63%	55%
Male	2,213	360	76	5%	20%	20%	32%	22%	67%	60%	66%	62%	53%
Female	2,213	367	71	3%	16%	21%	37%	22%	67%	62%	69%	65%	57%
Gender unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	13	377	68	0%	8%	31%	38%	23%	67%	70%	66%	71%	69%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	4	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	120	345	74	8%	23%	24%	30%	16%	62%	55%	61%	62%	51%
Guatemala	60	327	79	17%	22%	27%	22%	13%	56%	53%	55%	54%	44%
Mexico	1,201	354	74	4%	24%	21%	32%	18%	64%	60%	63%	60%	54%
Nicaragua	7	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	21	397	73	5%	0%	19%	38%	38%	73%	72%	79%	67%	67%
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	2,153	370	73	4%	15%	21%	36%	25%	69%	62%	70%	65%	57%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	156	344	73	8%	24%	17%	36%	15%	64%	53%	62%	57%	51%
Country unknown	677	366	69	2%	18%	21%	37%	22%	68%	62%	69%	64%	54%
Not economically disadvantaged	339	368	76	4%	17%	20%	36%	23%	68%	63%	68%	63%	56%
Economically disadvantaged	4,016	363	73	4%	18%	21%	35%	22%	67%	61%	67%	63%	55%
Economic status unknown	73	356	71	1%	23%	25%	36%	15%	65%	60%	65%	59%	55%
In U.S. schools < 12 months	1,229	340	71	7%	25%	24%	31%	13%	61%	56%	59%	57%	52%
In U.S. schools ≥ 12 months	3,199	372	73	3%	16%	20%	36%	25%	69%	63%	70%	66%	56%
EL in ELD	120	339	64	4%	27%	28%	30%	12%	61%	56%	59%	60%	51%
EL in ELD and SDAIE	503	340	74	8%	26%	23%	30%	13%	60%	56%	59%	58%	52%
EL in ELD and SDAIE with primary language support	366	330	70	10%	27%	25%	27%	10%	58%	54%	55%	54%	49%
EL in ELD and academic subjects through primary language	3,389	371	72	3%	16%	20%	37%	25%	69%	63%	70%	65%	56%
Other EL instructional services	13	319	54	8%	23%	46%	23%	0%	56%	53%	47%	61%	44%
None (EL only)	14	378	79	0%	14%	21%	36%	29%	66%	66%	75%	63%	64%
Program participation unknown	23	344	72	0%	35%	17%	35%	13%	63%	58%	55%	63%	49%
No special education	4,216	366	73	4%	17%	21%	36%	23%	68%	62%	68%	64%	55%
Special education	212	315	68	12%	38%	21%	21%	8%	54%	46%	52%	51%	46%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.27 Demographic Summary for Mathematics, Grade Five (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Estimation, Percents, and Factoring	Operations with Fractions and Decimals	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
All population valid scores	3,628	348	87	10%	21%	24%	24%	21%	59%	48%	58%	50%	55%
Male	1,883	343	90	12%	23%	22%	22%	21%	59%	47%	55%	49%	53%
Female	1,742	354	83	7%	18%	26%	27%	21%	60%	50%	60%	51%	56%
Gender unknown	3	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	377	94	9%	18%	18%	18%	36%	58%	53%	63%	65%	57%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	121	314	85	21%	31%	20%	14%	14%	50%	43%	46%	44%	53%
Guatemala	70	319	74	19%	27%	23%	17%	14%	51%	45%	49%	45%	49%
Mexico	1,202	342	88	11%	22%	25%	22%	20%	57%	49%	55%	49%	54%
Nicaragua	14	321	78	7%	43%	21%	14%	14%	51%	43%	48%	50%	45%
Panama	3	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	399	106	0%	8%	33%	25%	33%	67%	61%	67%	58%	67%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	1,661	357	86	7%	18%	25%	26%	24%	62%	50%	61%	51%	55%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	153	322	83	16%	27%	24%	21%	12%	55%	41%	51%	47%	51%
Country unknown	361	352	84	7%	20%	22%	29%	21%	61%	48%	59%	52%	57%
Not economically disadvantaged	357	362	97	10%	20%	18%	26%	27%	61%	52%	59%	53%	56%
Economically disadvantaged	3,226	347	85	10%	21%	25%	24%	20%	59%	48%	57%	50%	55%
Economic status unknown	45	338	84	4%	33%	20%	27%	16%	53%	49%	56%	47%	57%
In U.S. schools < 12 months	1,136	326	84	17%	25%	24%	20%	15%	52%	47%	50%	47%	51%
In U.S. schools ≥ 12 months	2,492	358	86	7%	19%	25%	26%	24%	63%	49%	61%	52%	56%
EL in ELD	117	328	82	13%	29%	26%	17%	15%	54%	48%	50%	46%	52%
EL in ELD and SDAIE	652	332	85	14%	24%	24%	20%	18%	54%	48%	52%	47%	52%
EL in ELD and SDAIE with primary language support	527	335	86	14%	24%	24%	23%	16%	55%	48%	52%	48%	51%
EL in ELD and academic subjects through primary language	2,053	360	88	7%	18%	24%	26%	25%	63%	49%	61%	52%	57%
Other EL instructional services	214	331	69	7%	25%	34%	22%	12%	57%	45%	54%	44%	53%
None (EL only)	21	346	79	10%	19%	24%	38%	10%	56%	51%	59%	47%	55%
Program participation unknown	44	324	72	11%	25%	27%	27%	9%	51%	43%	53%	47%	58%
No special education	3,407	351	87	9%	20%	24%	25%	22%	60%	49%	58%	51%	56%
Special education	221	300	67	18%	37%	24%	14%	6%	51%	38%	45%	42%	42%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.28 Demographic Summary for Mathematics, Grade Five (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Estimation, Percents, and Factoring	Operations with Fractions and Decimals	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
Target population valid scores	3,043	349	88	10%	21%	24%	24%	22%	59%	49%	58%	50%	55%
Male	1,584	343	92	13%	22%	22%	22%	21%	58%	47%	55%	49%	54%
Female	1,456	356	84	7%	19%	26%	26%	23%	60%	50%	60%	52%	56%
Gender unknown	3	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	377	94	9%	18%	18%	18%	36%	58%	53%	63%	65%	57%
Costa Rica	2	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	112	312	84	22%	30%	19%	15%	13%	51%	43%	46%	43%	54%
Guatemala	59	315	76	22%	27%	20%	17%	14%	50%	45%	49%	44%	45%
Mexico	1,026	342	89	12%	22%	24%	22%	20%	57%	49%	55%	49%	54%
Nicaragua	12	324	84	8%	50%	8%	17%	17%	49%	44%	49%	53%	46%
Panama	3	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	1,357	361	88	8%	17%	24%	26%	26%	63%	50%	62%	52%	56%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	129	325	80	13%	29%	26%	22%	11%	55%	41%	51%	47%	54%
Country unknown	304	348	82	8%	21%	24%	27%	19%	60%	47%	57%	52%	56%
Not economically disadvantaged	303	362	98	10%	21%	16%	26%	27%	61%	52%	59%	53%	57%
Economically disadvantaged	2,705	348	87	10%	20%	24%	24%	21%	59%	48%	57%	50%	55%
Economic status unknown	35	330	71	3%	37%	26%	23%	11%	52%	46%	55%	45%	55%
In U.S. schools < 12 months	1,136	326	84	17%	25%	24%	20%	15%	52%	47%	50%	47%	51%
In U.S. schools ≥ 12 months	1,907	363	88	6%	18%	24%	26%	26%	64%	50%	62%	53%	57%
EL in ELD	98	330	86	13%	27%	28%	15%	17%	55%	48%	51%	46%	52%
EL in ELD and SDAIE	484	326	86	17%	26%	22%	18%	18%	52%	47%	50%	47%	51%
EL in ELD and SDAIE with primary language support	368	324	83	17%	25%	25%	21%	13%	52%	46%	49%	46%	51%
EL in ELD and academic subjects through primary language	2,053	360	88	7%	18%	24%	26%	25%	63%	49%	61%	52%	57%
Other EL instructional services	12	347	66	0%	33%	25%	25%	17%	52%	54%	55%	52%	60%
None (EL only)	16	342	88	13%	19%	25%	31%	13%	54%	52%	56%	45%	59%
Program participation unknown	12	306	58	17%	33%	33%	8%	8%	44%	38%	48%	45%	58%
No special education	2,865	352	89	10%	20%	24%	24%	23%	60%	49%	58%	51%	56%
Special education	178	303	68	16%	38%	24%	15%	7%	52%	38%	46%	42%	43%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.29 Demographic Summary for Mathematics, Grade Six (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Ratios, Proportions, Percentages, and Negative Numbers	Operations with Problem Solving with Fractions	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
All population valid scores	2,151	332	76	15%	23%	23%	22%	17%	56%	53%	55%	38%	40%
Male	1,098	328	78	16%	24%	23%	20%	17%	55%	53%	55%	38%	39%
Female	1,052	336	74	13%	23%	23%	23%	17%	57%	54%	56%	38%	42%
Gender unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	0	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	132	289	71	38%	25%	15%	17%	5%	45%	41%	43%	30%	33%
Guatemala	71	293	60	25%	42%	14%	11%	7%	47%	42%	46%	28%	32%
Mexico	892	336	81	14%	23%	24%	20%	19%	57%	53%	56%	38%	41%
Nicaragua	9	–	–	–	–	–	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	7	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–	–	–	–	–	–	–
Spain	3	–	–	–	–	–	–	–	–	–	–	–	–
United States	805	342	70	9%	22%	23%	26%	19%	58%	57%	58%	41%	41%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	56	292	78	41%	25%	16%	9%	9%	45%	42%	43%	33%	32%
Country unknown	156	326	64	13%	23%	31%	23%	10%	53%	51%	54%	39%	39%
Not economically disadvantaged	226	342	85	13%	26%	20%	19%	22%	57%	55%	57%	38%	44%
Economically disadvantaged	1,879	331	75	15%	23%	23%	22%	16%	56%	53%	55%	38%	40%
Economic status unknown	46	352	81	9%	15%	28%	30%	17%	60%	55%	64%	41%	44%
In U.S. schools < 12 months	997	321	79	21%	26%	22%	17%	15%	53%	49%	52%	35%	39%
In U.S. schools ≥ 12 months	1,154	342	72	9%	22%	24%	26%	19%	58%	57%	58%	41%	41%
EL in ELD	101	321	75	20%	25%	19%	24%	13%	53%	48%	54%	33%	40%
EL in ELD and SDAIE	508	328	82	17%	26%	22%	19%	17%	55%	50%	54%	36%	40%
EL in ELD and SDAIE with primary language support	409	314	75	23%	25%	23%	15%	13%	53%	49%	50%	34%	37%
EL in ELD and academic subjects through primary language	1,045	343	73	10%	21%	24%	25%	20%	58%	57%	58%	41%	41%
Other EL instructional services	38	356	66	5%	16%	18%	47%	13%	55%	62%	66%	42%	46%
None (EL only)	16	329	87	13%	38%	25%	13%	13%	53%	49%	51%	41%	43%
Program participation unknown	34	319	72	15%	29%	21%	24%	12%	54%	48%	51%	36%	38%
No special education	2,051	335	77	14%	23%	23%	22%	18%	57%	54%	56%	38%	41%
Special education	98	286	54	27%	40%	20%	10%	3%	43%	40%	42%	32%	32%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.30 Demographic Summary for Mathematics, Grade Six (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area				
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Ratios, Proportions, Percentages, and Negative Numbers	Operations with Problem Solving with Fractions	Algebra and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
Target population valid scores	1,952	332	77	15%	23%	23%	21%	17%	56%	53%	55%	38%	40%
Male	1,003	328	78	17%	24%	22%	20%	17%	55%	52%	54%	38%	39%
Female	948	336	75	13%	23%	24%	22%	18%	57%	54%	56%	39%	42%
Gender unknown	1	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	8	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	0	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	128	288	71	38%	26%	16%	16%	5%	45%	41%	43%	30%	33%
Guatemala	67	290	58	27%	42%	15%	10%	6%	46%	41%	45%	28%	32%
Mexico	812	336	81	15%	22%	24%	19%	19%	57%	53%	56%	38%	41%
Nicaragua	9	–	–	–	–	–	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	5	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	718	343	71	9%	22%	23%	26%	20%	59%	57%	58%	41%	42%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	51	292	80	41%	25%	16%	8%	10%	45%	42%	43%	32%	33%
Country unknown	142	326	64	13%	23%	31%	24%	10%	52%	51%	54%	40%	39%
Not economically disadvantaged	211	341	85	14%	25%	20%	19%	22%	57%	55%	57%	39%	44%
Economically disadvantaged	1,708	331	76	15%	23%	23%	21%	17%	56%	53%	55%	38%	40%
Economic status unknown	33	341	81	12%	15%	36%	21%	15%	56%	51%	61%	39%	44%
In U.S. schools < 12 months	997	321	79	21%	26%	22%	17%	15%	53%	49%	52%	35%	39%
In U.S. schools ≥ 12 months	955	344	72	9%	21%	25%	26%	20%	59%	57%	59%	41%	42%
EL in ELD	79	323	79	23%	22%	18%	24%	14%	54%	48%	54%	33%	42%
EL in ELD and SDAIE	443	328	82	17%	26%	23%	18%	16%	55%	50%	54%	36%	40%
EL in ELD and SDAIE with primary language support	346	310	75	25%	26%	23%	13%	13%	52%	47%	48%	33%	37%
EL in ELD and academic subjects through primary language	1,045	343	73	10%	21%	24%	25%	20%	58%	57%	58%	41%	41%
Other EL instructional services	5	–	–	–	–	–	–	–	–	–	–	–	–
None (EL only)	11	323	104	18%	45%	18%	0%	18%	50%	44%	47%	37%	48%
Program participation unknown	23	304	66	22%	35%	13%	22%	9%	47%	44%	48%	35%	37%
No special education	1,860	334	77	14%	23%	23%	22%	18%	57%	54%	56%	38%	41%
Special education	90	285	55	28%	39%	20%	10%	3%	43%	40%	41%	33%	32%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.31 Demographic Summary for Mathematics, Grade Seven (Overall Population)

				Percent in Performance Level					Mean Percent Correct in Content Area					
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Rational Numbers	Exponents, Powers, and Roots	Quant. Relationships and Evaluating Expressions	Multistep Problems, Graphing, and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
All Population valid scores	1,770	29	10	16%	29%	29%	19%	7%	45%	39%	40%	45%	46%	48%
Male	914	28	10	18%	29%	30%	15%	8%	45%	38%	39%	44%	45%	47%
Female	850	29	10	15%	28%	27%	23%	6%	45%	39%	42%	45%	47%	49%
Gender unknown	6	–	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	7	–	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	120	24	7	28%	37%	25%	9%	1%	38%	31%	36%	38%	38%	40%
Guatemala	51	25	9	27%	35%	24%	8%	6%	38%	37%	37%	38%	37%	42%
Mexico	935	29	10	17%	27%	28%	20%	7%	46%	39%	40%	45%	47%	49%
Nicaragua	12	23	7	25%	33%	42%	0%	0%	35%	30%	38%	34%	34%	47%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–	–
United States	453	29	10	13%	27%	32%	19%	9%	46%	40%	41%	46%	46%	49%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Other	51	26	8	16%	35%	39%	8%	2%	41%	34%	38%	40%	42%	42%
Country unknown	119	31	9	7%	29%	26%	33%	6%	48%	42%	44%	50%	48%	49%
Not economically disadvantaged	236	29	11	15%	25%	30%	19%	11%	46%	41%	39%	46%	48%	53%
Economically disadvantaged	1,496	28	10	16%	29%	28%	19%	7%	45%	38%	40%	44%	46%	47%
Economic status unknown	38	29	9	18%	18%	34%	24%	5%	49%	37%	44%	46%	43%	45%
In U.S. schools < 12 months	1,120	28	10	17%	28%	28%	19%	7%	44%	37%	39%	44%	47%	49%
In U.S. schools ≥ 12 months	650	29	10	14%	29%	29%	20%	8%	46%	41%	42%	46%	45%	45%
EL in ELD	166	29	10	18%	24%	30%	20%	8%	47%	37%	39%	44%	47%	53%
EL in ELD and SDAIE	479	28	10	18%	29%	27%	18%	7%	44%	36%	39%	44%	46%	49%
EL in ELD and SDAIE with primary language support	404	27	10	20%	28%	30%	16%	6%	43%	36%	39%	43%	45%	47%
EL in ELD and academic subjects through primary language	580	30	10	13%	28%	31%	21%	8%	46%	43%	43%	47%	46%	46%
Other EL instructional services	75	28	11	15%	37%	21%	17%	9%	47%	39%	39%	42%	45%	44%
None (EL only)	19	27	11	16%	42%	21%	11%	11%	46%	38%	35%	38%	46%	46%
Program participation unknown	47	30	10	11%	30%	21%	34%	4%	48%	42%	43%	47%	50%	50%
No special education	1,730	29	10	16%	28%	29%	19%	7%	45%	39%	40%	45%	46%	48%
Special education	40	26	10	25%	33%	28%	5%	10%	39%	38%	40%	42%	40%	37%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.32 Demographic Summary for Mathematics, Grade Seven (Target Population)

				Percent in Performance Level					Mean Percent Correct in Content Area					
	Number Tested	Mean Scale Score	Std. Dev. of Scale Scores	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Rational Numbers	Exponents, Powers, and Roots	Quant. Relationships and Evaluating Expressions	Multistep Problems, Graphing, and Functions	Measurement and Geometry	Statistics, Data Analysis, and Probability
Target Population valid scores	1,549	29	10	16%	28%	29%	19%	8%	45%	39%	40%	45%	46%	49%
Male	811	28	10	18%	28%	31%	15%	9%	45%	38%	39%	45%	46%	48%
Female	735	29	10	14%	29%	27%	23%	6%	45%	39%	42%	45%	47%	50%
Gender unknown	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	6	–	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	106	24	7	28%	37%	25%	9%	1%	38%	30%	36%	39%	37%	42%
Guatemala	47	25	10	30%	32%	23%	9%	6%	38%	38%	37%	38%	37%	43%
Mexico	814	29	10	16%	27%	28%	21%	8%	46%	39%	40%	45%	48%	49%
Nicaragua	11	23	7	27%	27%	45%	0%	0%	36%	31%	37%	35%	35%	47%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Peru	8	–	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–	–
United States	407	29	10	13%	27%	32%	19%	8%	46%	40%	41%	46%	47%	50%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Other	45	26	8	13%	33%	42%	9%	2%	42%	35%	39%	40%	44%	42%
Country unknown	93	31	10	6%	28%	26%	32%	8%	47%	43%	45%	51%	48%	51%
Not economically disadvantaged	216	30	11	15%	25%	30%	19%	11%	46%	41%	39%	46%	49%	54%
Economically disadvantaged	1,314	28	10	16%	29%	29%	19%	7%	45%	39%	41%	45%	46%	48%
Economic status unknown	19	28	10	26%	16%	32%	21%	5%	47%	32%	40%	45%	47%	47%
In U.S. schools < 12 months	1,120	28	10	17%	28%	28%	19%	7%	44%	37%	39%	44%	47%	49%
In U.S. schools ≥ 12 months	429	30	10	13%	27%	31%	21%	9%	47%	43%	43%	47%	45%	47%
EL in ELD	140	28	10	19%	24%	29%	21%	6%	47%	36%	38%	43%	47%	53%
EL in ELD and SDAIE	421	28	10	17%	29%	28%	18%	8%	45%	37%	39%	45%	47%	50%
EL in ELD and SDAIE with primary language support	347	27	10	20%	27%	30%	17%	6%	42%	36%	39%	43%	46%	49%
EL in ELD and academic subjects through primary language	580	30	10	13%	28%	31%	21%	8%	46%	43%	43%	47%	46%	46%
Other EL instructional services	26	27	12	23%	35%	15%	15%	12%	43%	37%	36%	41%	47%	45%
None (EL only)	13	30	12	8%	38%	23%	15%	15%	50%	42%	38%	43%	51%	57%
Program participation unknown	22	32	11	9%	36%	18%	27%	9%	50%	41%	44%	47%	54%	55%
No special education	1,512	29	10	16%	28%	29%	20%	8%	45%	39%	40%	45%	46%	49%
Special education	37	25	10	24%	35%	30%	3%	8%	39%	37%	38%	41%	39%	37%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 7.B.33 Demographic Summary for Algebra I (Overall Population)

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Number Properties, Operations, and Linear Equations	Graphing and Systems of Linear Equations	Quadratics and Polynomials	Functions and Rational Expressions
All Population valid scores	3,411	25	9	44%	34%	42%	28%
Grade 7	21	16	3	22%	29%	25%	21%
Grade 8	544	23	9	40%	33%	39%	27%
Grade 9	1,519	24	9	44%	34%	41%	28%
Grade 10	919	25	9	46%	33%	43%	29%
Grade 11	408	27	10	49%	36%	46%	31%
Male	1,899	24	9	44%	33%	40%	29%
Female	1,500	25	9	45%	34%	44%	28%
Gender unknown	12	22	6	41%	27%	40%	24%
Argentina	5	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–
Colombia	13	30	13	58%	33%	52%	38%
Costa Rica	7	–	–	–	–	–	–
Cuba	11	31	11	59%	39%	50%	36%
Ecuador	7	–	–	–	–	–	–
El Salvador	371	22	8	40%	30%	37%	27%
Guatemala	197	23	8	40%	34%	38%	27%
Mexico	1,737	25	9	45%	34%	43%	29%
Nicaragua	16	24	9	41%	30%	43%	30%
Panama	0	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–
Peru	38	32	11	62%	45%	51%	38%
Puerto Rico	9	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–
United States	694	25	9	44%	35%	43%	28%
Uruguay	0	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–
Other	82	23	6	41%	34%	38%	25%
Country unknown	213	24	8	43%	33%	41%	26%
Not economically disadvantaged	581	25	9	45%	33%	42%	29%
Economically disadvantaged	2,716	25	9	44%	34%	42%	28%
Economic status unknown	114	25	9	45%	33%	44%	29%
In U.S. schools < 12 months	2,486	25	9	45%	34%	42%	29%
In U.S. schools ≥ 12 months	925	24	8	43%	33%	41%	27%
EL in ELD	358	25	9	45%	33%	41%	28%
EL in ELD and SDAIE	923	25	10	44%	34%	41%	29%
EL in ELD and SDAIE with primary language support	881	25	9	43%	34%	42%	28%
EL in ELD and academic subjects through primary language	966	25	9	45%	34%	42%	28%
Other EL instructional services	147	25	8	47%	32%	43%	30%
None (EL only)	37	22	8	40%	30%	35%	27%
Program participation unknown	99	24	9	43%	33%	40%	28%

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Number Properties, Operations, and Linear Equations	Graphing and Systems of Linear Equations	Quadratics and Polynomials	Functions and Rational Expressions
No special education	3,389	25	9	44%	34%	42%	28%
Special education	21	20	5	33%	30%	31%	27%
Special education unknown	1	–	–	–	–	–	–

Table 7.B.34 Demographic Summary for Algebra I (Target Population)

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Number Properties, Operations, and Linear Equations	Graphing and Systems of Linear Equations	Quadratics and Polynomials	Functions and Rational Expressions
Target Population valid scores	3,053	25	9	45%	34%	42%	28%
Grade 7	9	–	–	–	–	–	–
Grade 8	491	23	9	40%	33%	39%	27%
Grade 9	1,370	24	9	44%	33%	41%	28%
Grade 10	816	25	9	46%	33%	43%	29%
Grade 11	367	27	10	49%	37%	47%	31%
Male	1,715	24	9	44%	33%	40%	29%
Female	1,331	25	9	45%	34%	44%	28%
Gender unknown	7	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–
Colombia	12	32	13	58%	35%	55%	40%
Costa Rica	7	–	–	–	–	–	–
Cuba	11	31	11	59%	39%	50%	36%
Ecuador	5	–	–	–	–	–	–
El Salvador	347	22	8	40%	30%	37%	27%
Guatemala	181	23	8	40%	34%	38%	27%
Mexico	1,532	25	10	46%	34%	43%	29%
Nicaragua	15	24	10	41%	30%	42%	32%
Panama	0	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–
Peru	35	32	11	61%	44%	51%	36%
Puerto Rico	9	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–
United States	636	25	9	45%	35%	43%	28%
Uruguay	0	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–
Other	79	23	6	41%	34%	38%	24%
Country unknown	170	23	8	43%	32%	40%	25%
Not economically disadvantaged	539	25	9	46%	33%	42%	29%
Economically disadvantaged	2,448	25	9	44%	34%	42%	28%
Economic status unknown	66	26	10	46%	35%	45%	28%
In U.S. schools < 12 months	2,486	25	9	45%	34%	42%	29%
In U.S. schools ≥ 12 months	567	25	8	45%	34%	42%	27%
EL in ELD	307	25	9	45%	33%	41%	29%
EL in ELD and SDAIE	832	25	10	44%	34%	42%	29%
EL in ELD and SDAIE with primary language support	741	25	9	44%	34%	42%	28%
EL in ELD and academic subjects through primary language	966	25	9	45%	34%	42%	28%
Other EL instructional services	119	26	8	49%	32%	45%	31%
None (EL only)	33	22	9	39%	31%	36%	27%
Program participation unknown	55	23	8	42%	31%	39%	25%

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Number Properties, Operations, and Linear Equations	Graphing and Systems of Linear Equations	Quadratics and Polynomials	Functions and Rational Expressions
No special education	3,036	25	9	45%	34%	42%	28%
Special education	16	21	5	35%	29%	34%	26%
Special education unknown	1	–	–	–	–	–	–

Table 7.B.35 Demographic Summary for Geometry (Overall Population)

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Logic and Geometric Proofs	Volume and Area Formulas	Angle Relationships, Constructions, and Lines	Trigonometry
All Population valid scores	599	26	9	48%	36%	38%	34%
Grade 8	0	–	–	–	–	–	–
Grade 9	118	22	8	39%	30%	33%	31%
Grade 10	252	27	9	49%	38%	39%	34%
Grade 11	229	27	9	50%	37%	40%	34%
Male	285	26	9	47%	35%	38%	33%
Female	310	27	9	49%	37%	38%	35%
Gender unknown	4	–	–	–	–	–	–
Argentina	0	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–
Colombia	2	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–
Cuba	1	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–
El Salvador	53	23	7	41%	33%	35%	29%
Guatemala	22	22	6	40%	33%	31%	28%
Mexico	294	27	9	49%	37%	38%	35%
Nicaragua	3	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–
Peru	4	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–
Spain	1	–	–	–	–	–	–
United States	164	28	9	52%	38%	41%	35%
Uruguay	1	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–
Other	26	17	4	29%	26%	28%	23%
Country unknown	25	26	9	47%	40%	39%	32%
Not economically disadvantaged	121	25	9	47%	34%	35%	35%
Economically disadvantaged	463	26	9	48%	37%	39%	33%
Economic status unknown	15	29	12	53%	39%	43%	36%
In U.S. schools < 12 months	297	26	9	47%	37%	37%	35%
In U.S. schools ≥ 12 months	302	26	9	48%	35%	39%	33%
EL in ELD	59	27	9	49%	37%	38%	34%
EL in ELD and SDAIE	125	26	10	45%	38%	38%	35%
EL in ELD and SDAIE with primary language support	99	25	9	46%	35%	36%	32%
EL in ELD and academic subjects through primary language	273	27	8	50%	35%	39%	33%
Other EL instructional services	14	35	11	63%	49%	47%	47%
None (EL only)	21	20	7	35%	32%	30%	26%
Program participation unknown	8	–	–	–	–	–	–

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Logic and Geometric Proofs	Volume and Area Formulas	Angle Relationships, Constructions, and Lines	Trigonometry
No special education	596	26	9	48%	36%	38%	34%
Special education	3	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–

Table 7.B.36 Demographic Summary for Geometry (Target Population)

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Logic and Geometric Proofs	Volume and Area Formulas	Angle Relationships, Constructions, and Lines	Trigonometry
Target Population valid scores	512	26	9	48%	36%	38%	34%
Grade 8	0	–	–	–	–	–	–
Grade 9	111	22	8	40%	30%	32%	32%
Grade 10	205	27	9	50%	38%	40%	35%
Grade 11	196	27	9	51%	37%	40%	33%
Male	242	26	9	47%	35%	38%	32%
Female	269	27	9	49%	37%	39%	35%
Gender unknown	1	–	–	–	–	–	–
Argentina	0	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–
Colombia	2	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–
Cuba	1	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–
El Salvador	48	23	7	41%	32%	35%	30%
Guatemala	21	22	6	41%	33%	32%	28%
Mexico	239	27	9	50%	37%	39%	36%
Nicaragua	2	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–
Peru	4	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–
Spain	1	–	–	–	–	–	–
United States	151	27	9	51%	37%	39%	34%
Uruguay	1	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–
Other	22	17	4	28%	25%	26%	24%
Country unknown	17	26	9	46%	39%	43%	31%
Not economically disadvantaged	113	25	9	47%	33%	35%	35%
Economically disadvantaged	391	26	9	48%	37%	39%	34%
Economic status unknown	8	–	–	–	–	–	–
In U.S. schools < 12 months	297	26	9	47%	37%	37%	35%
In U.S. schools ≥ 12 months	215	26	8	49%	34%	39%	33%
EL in ELD	52	26	9	48%	36%	38%	35%
EL in ELD and SDAIE	99	25	10	45%	37%	37%	34%
EL in ELD and SDAIE with primary language support	59	26	9	48%	38%	38%	35%
EL in ELD and academic subjects through primary language	273	27	8	50%	35%	39%	33%
Other EL instructional services	10	–	–	–	–	–	–
None (EL only)	17	19	7	33%	28%	28%	25%
Program participation unknown	2	–	–	–	–	–	–

				Mean Percent Correct in Content Area			
	No. Tested	Mean Number Correct Score	Std. Dev. of Number Correct Scores	Logic and Geometric Proofs	Volume and Area Formulas	Angle Relationships, Constructions, and Lines	Trigonometry
special education	509	26	9	48%	36%	38%	34%
Special education	3	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–

Appendix 7.C—Types of Score Reports

Table 7.C.1 Score Reports Reflecting STS Results

2010 STAR STS Printed Reports	
Description	**Distribution**
The STAR Student Report	
This report provides parents/guardians and teachers with the student's results, presented in tables and graphs. For grades two through seven, the report shows performance-level results for the grade-level RLA and mathematics tests taken. For grades eight through eleven RLA and EOC Algebra I and Geometry, the report shows percent correct for each content area and reporting cluster within the content area. For grades two through seven only (but not for Algebra I), data presented include the following for each content area: • Scale scores • Performance levels (advanced, proficient, basic, below basic, and far below basic) • Number and percent correct in each reporting cluster • Comparison of the student's scores on specific reporting clusters to the range of scores of students statewide who scored proficient on the total test For grades eight through eleven RLA and EOC Algebra I and Geometry, data presented include for each content area: • Mean percent correct • Number and mean percent correct in each reporting cluster	This report includes individual student results and is not distributed beyond parents/guardians and the student's school. Two copies of this report are provided for each student. One is for the student's current teacher, and one is to be distributed by the school district to parents/guardians.
Student Record Label	
These reports are printed on adhesive labels to be affixed to the student's permanent school records. Each student shall have an individual record of accomplishment that includes STAR testing results (see California EC Section 60607[a]). For grades two through seven only (but not for Algebra I), data presented include the following for each content area: • Scale score • Performance level (advanced, proficient, basic, below basic, and far below basic) For grades eight through eleven RLA and EOC Algebra I and Geometry, data presented include overall percent correct for each content area.	This report includes individual student results and is not distributed beyond the student's school.

2010 STAR STS Printed Reports	
Description	**Distribution**
Student Master List	
This report is an alphabetical roster that presents individual student results. The following data are summarized for the STS for grades two through seven (grade-level RLA and mathematics) for each content area tested: • Percent correct for each reporting cluster • Scale score and performance level For the STS for RLA in grades eight through eleven and EOC Algebra I and Geometry, the mean percent correct for each reporting cluster is presented for each content area tested.	This report provides administrators and teachers with all students' results within each grade or within each grade and year-round schedule at a school. Because this report includes individual student results, it is not distributed beyond the student's school.
Student Master List Summary	
This report summarizes student results at the school, district, county, and state levels for each grade. It does not include any individual student information. ***Note:*** Summaries for specific STS tests for mathematics across grades are provided in the Student Master List Summary—End-of-Course Report. The following data are summarized for each content area and grade level for all tests: • Number of students enrolled • Number and percent of students tested • Number and percent of valid scores • Number tested with scores • Mean percent correct The following data are also summarized for each content area tested in grades two through seven (grade-level RLA and mathematics): • Mean scale score • Scale score standard deviation • Number and percent of students scoring at each performance level For all STS tests, the number of items for each reporting cluster and the mean percent correct data are also included.	This report is a resource for evaluators, researchers, teachers, parents/guardians, community members, and administrators. One copy is packaged for the school, and one for the school district. This report is also produced for school districts, counties, and the state. ***Note:*** The data in this report may be shared with parents/guardians, community members, and the media only if the data are for 11 or more students.
Student Master List Summary—End-of-Course	
This report summarizes Student Master List information for end-of-course STS tests for Algebra I and Geometry across grades at the school, district, county, and state levels. It does not include any individual student information. The STS for Algebra I is given to students in grades seven through eleven; the STS for Geometry is given to students in grades eight through eleven. The following data are summarized for each of these	This report is a resource for evaluators, researchers, teachers, parents/guardians, community members, and administrators. One copy is packaged for the school, and one for the school district. This report is also produced for school districts, counties, and the state. **Note:** The data on this report may be shared with parents/guardians, community members, and the

2010 STAR STS Printed Reports	
Description	**Distribution**
tests: • Number of students enrolled • Number and percent of students tested • Number and percent of valid scores • Number tested with scores • Mean percent correct	media only if the data are for 11 or more students.
Subgroup Summary	
This set of reports disaggregates and reports results by the following subgroups: • All students • Disability status • Economic status • Gender • English proficiency • Primary ethnicity These reports contain no individual student-identifying information and are aggregated at the school, district, county, and state levels. For each subgroup within a report and for the total number of students, the following data are included: • Total number tested in the subgroup • Percent tested in the subgroup as a percent of all students tested • Number and percent of valid scores • Number tested who received scores The following data are also summarized for each subgroup within each content area tested in grades two through seven (grade-level RLA and mathematics): • Mean scale score • Scale score standard deviation • Number and percent of students scoring at each performance level For the STS for RLA in grades eight through eleven, Algebra I, and Geometry, the mean percent correct is also summarized for each subgroup within each STS.	This report is a resource for evaluators, researchers, teachers, parents/guardians, community members, and administrators. One copy is packaged for the school, and one for the school district. This report is also produced for school districts, counties, and the state. ***Note:*** The data on this report may be shared with parents/guardians, community members, and the media only if the data are for 11 or more students.

Chapter 8: Analyses

This chapter summarizes the item- and test-level statistics obtained for the STS tests administered during the spring of 2010.

The statistics presented in this chapter are divided into five sections in the following order:

1. Classical Item Analyses
2. Reliability Analyses
3. Analyses in Support of Validity Evidence
4. Item Response Theory (IRT) Analyses
5. Differential Item Functioning (DIF) Analyses

Each of those sets of analyses is presented in the body of the text and in the appendixes as listed below.

1. Appendix 8.A presents the classical item analyses including proportion-correct values (*p*-values) and point-biserial correlation (Pt-Bis) for each item in each operational test. In addition, the mean and median *p*-value and point-biserial correlations for the operational tests are presented in Table 8.1 on page 217.
2. Appendix 8.B presents results of the reliability analyses of total test scores and subscores for the target population as a whole and for selected subgroups within the target population. Also presented are results of the analyses of the accuracy and consistency of the performance classifications.
3. Appendix 8.C presents tables showing the correlation between scores obtained on the STS measure different content areas which are provided as an example of the evidence of validity of the interpretation and uses of STS scores. The results for the overall target population are presented in Table 8.6; the tables in Appendix 8.C summarize the results for various subgroups within the target population.
4. Appendix 8.D presents the results of IRT analyses including the distribution of items based on their fit to the Rasch model and the summary of Rasch item difficulty statistics (*b*-values) for the operational and field-test items. In addition, the appendix presents the scoring tables for STS in grades two through seven obtained as a result of the IRT equating process. Information related to the evaluation of linking items is presented in Table 8.7 on page 233; these linking items were used in the equating process discussed later in this chapter.
5. Appendix 8.E presents the results of the DIF analyses applied to all operational and field-test items for which sufficient student samples were available. In this appendix, items flagged for significant DIF are listed. Also given are the distributions of items across DIF categories.

Samples Used for the Analyses

STS analyses were conducted at different times after test administration and involved varying proportions of the full STS data. The majority of the analyses presented in this chapter, including the classical item-analyses presented in Appendix 8.A, the reliability statistics included in Appendix 8.B, the content area correlations presented in Appendix 8.C, the IRT results presented in Appendix 8.D, and the item-level DIF results presented in Appendix 8.E were calculated on the STS target population using P2 data file. This data file

contained all test results except for the corrected demographic information (CDE, 2010) which only affected a few examinees.

The raw-to-scale score conversion tables presented in Appendix 8.D were based on equating data available in early June 2010, which contained more than 30 percent of the test results for the target population.

Following the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999, Standard 6.4) the results of the classical item analyses and reliability analyses for the end-of-course (EOC) mathematics tests in Algebra I and Geometry are also presented for the grade-specific population in addition to the overall target population. While the EOC assessments address content standards for specific courses and are presented to students at a variety of grade levels, it is the SBE's recommendation that students take Algebra I in grade eight and Geometry in grade nine.[1] The item level DIF and IRT analyses for the two EOC mathematics tests include all students taking these tests. No grade-specific DIF or IRT analyses were conducted for these tests.

Classical Item Analyses

Multiple-choice Items

The classical item statistics that included overall and item-by-item proportion correct indices and the point-biserial correlation indices were computed for the operational items. The *p*-value of an item represents the proportion of examinees in the sample that answered an item correctly. The formula for *p*-value is:

$$P-value_i = \frac{N_{ic}}{N_i} \tag{8.1}$$

where,

N_{ic} is the number of examinees that answered item *i* correctly, and

N_i is the total number of examinees that were presented with item *i*.

The point-biserial correlation is a special case of the Pearson product-moment correlation used to measure the strength of the relationship between two variables, one dichotomously and one continuously measured—in this case, the item score (right/wrong) and the total test score. The formula for the Pearson product-moment correlation is:

$$R_{it} = \frac{Cov(i,t)}{\sigma_{xi}\sigma_t} \tag{8.2}$$

where,

Cov(i,t) is the covariance between item *i* and total score *t*

σ_{xi} is the standard deviation for item *i,* and

σ_t is the standard deviation for total score *t*

The classical statistics for the overall test are presented in Table 8.1. The item-by-item values for the indices are presented in Table 8.A.1 through Table 8.A.3, which start on page 238.

[1] The students in this population will be referred to as the "grade-specific" population.

Table 8.1 Mean and Median Proportion Correct and Point-Biserial Correlation

				Mean		Median	
Content Area	**STS***	**No. of Items**	**No. of Examinees**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**
Reading/ Language Arts	2	65	11,518	0.62	0.42	0.63	0.43
	3	65	8,444	0.59	0.40	0.59	0.41
	4	75	4,459	0.58	0.41	0.58	0.43
	5	75	3,049	0.49	0.36	0.49	0.37
	6	75	1,962	0.48	0.33	0.48	0.34
	7	75	1,587	0.53	0.35	0.52	0.38
	8	75	1,416	0.57	0.37	0.54	0.38
	9	75	2,358	0.54	0.37	0.52	0.37
	10	75	1,401	0.55	0.36	0.54	0.36
	11	75	839	0.52	0.34	0.52	0.37
Mathematics	2	65	11,505	0.69	0.41	0.70	0.42
	3	65	8,382	0.67	0.43	0.67	0.45
	4	65	4,428	0.64	0.43	0.66	0.45
	5	65	3,043	0.54	0.38	0.51	0.39
	6	65	1,952	0.50	0.38	0.48	0.39
	7	65	1,549	0.44	0.33	0.43	0.33
	Algebra I	65	3,053	0.38	0.30	0.36	0.30
	Geometry	65	512	0.40	0.29	0.39	0.33
Grade-Specific	Algebra I – 8	65	491	0.36	0.29	0.33	0.29
	Geometry – 9	65	111	0.34	0.25	0.33	0.26

* STS tests named by number only are grade-level tests.

Reliability Analyses

Reliability focuses on the extent to which differences in test scores reflect true differences in the knowledge, ability, or skill being tested, rather than fluctuations due to chance or random factors. The variance in the distributions of test scores—essentially, the differences among individuals—is partly due to real differences in the knowledge, skill, or ability being tested (true-score variance) and partly due to random unsystematic errors in the measurement process (error variance).

The number used to describe reliability is an estimate of the proportion of the total variance that is true-score variance. Several different ways of estimating this proportion exist. The estimates of reliability reported here are internal-consistency measures, which are derived from analysis of the consistency of the performance of individuals on items within a test (internal-consistency reliability). Therefore, they apply only to the test form being analyzed. They do not take into account form-to-form variation due to equating limitations or lack of parallelism, nor are they responsive to day-to-day variation due, for example, to students' state of health or testing environment.

Reliability coefficients may range from 0 to 1. The higher the reliability coefficient for a set of scores, the more likely individuals would be to obtain very similar scores if they were retested. The formula for the internal consistency reliability measured by Cronbach's Alpha (Cronbach, 1951) is shown in equation (8.3):

$$\alpha = \frac{n}{n-1}\left[1 - \frac{\sum_{i=1}^{n}\sigma_i^2}{\sigma_t^2}\right] \tag{8.3}$$

where,

n is the number of items,

σ_i^2 is the variance of scores on item *i*, and

σ_t^2 is the variance of the total score (either the total raw score or scale score).

The standard error of measurement (SEM) provides a measure of score instability. The SEM was computed as shown in equation (8.4):

$$\sigma_e = \sigma_t \sqrt{1-\alpha} \tag{8.4}$$

where,

α is the reliability estimated from equation (8.3), and

σ_t is the standard deviation of the total raw scores.

The SEM is particularly useful in determining the confidence interval (CI) that captures an examinee's true score. Assuming that measurement error is normally distributed, it can be said that upon infinite replications of the testing occasion, approximately 95 percent of the CIs of $\pm$1.96 SEM around the observed score would contain an examinee's true score (Crocker & Algina, 1986). For example, if an examinee's observed score on a given test equals 15 points, and the SEM equals 1.92, one can be 95 percent confident that the examinee's true score lies between 11 and 19 points (15 $\pm$ 3.76 rounded to the nearest integer).

Table 8.2 gives the reliability for each of the operational STS tests, along with the number of items and examinees upon which those analyses were performed.

Table 8.2 Reliabilities and SEMs for the STS

					Scale Score			Raw Score		
Content Area	**STS***	**Test Length**	**No. Examinees**	**Reliab.**	**Mean**	**SD**	**SEM**	**Mean**	**SD**	**SEM**
Reading/ Language Arts	2	65	11,518	0.93	331	52	14.28	40.27	12.51	3.42
	3	65	8,444	0.92	333	52	15.15	38.62	12.12	3.52
	4	75	4,459	0.93	326	54	14.22	43.86	14.45	3.77
	5	75	3,049	0.91	318	56	16.92	36.53	13.07	3.96
	6	75	1,962	0.89	318	54	17.69	36.34	12.00	3.95
	7	75	1,587	0.90	322	52	16.09	39.73	12.61	3.89
	8**	75	1,416	0.92	–	–	–	42.71	13.20	3.84
	9**	75	2,358	0.91	–	–	–	40.60	13.05	3.85
	10**	75	1,401	0.91	–	–	–	41.61	12.51	3.85
	11**	75	839	0.89	–	–	–	39.28	12.08	3.94
Mathematics	2	65	11,505	0.92	367	75	20.94	44.73	11.71	3.28
	3	65	8,382	0.93	366	73	19.19	43.47	12.47	3.29
	4	65	4,428	0.93	363	74	19.53	41.83	12.76	3.38
	5	65	3,043	0.91	349	88	26.55	34.95	12.05	3.62
	6	65	1,952	0.91	332	77	23.54	32.43	11.76	3.61
	7	65	1,549	0.87	316	63	22.68	28.65	10.26	3.69
	Algebra I**	65	3,053	0.84	–	–	–	24.78	9.11	3.63
	Geometry**	65	512	0.83	–	–	–	26.15	8.87	3.62
Grade-Specific	Algebra I – 8**	65	491	0.83	–	–	–	23.26	8.78	3.62
	Geometry – 9**	65	111	0.78	–	–	–	22.37	7.71	3.62

* STS tests named by number only are grade-level tests.

****** Scale scores were not available for RLA (grades eight through eleven), Algebra I, and Geometry for the spring 2010 administration.

Intercorrelations, Reliabilities, and SEMs for Reporting Clusters

For each STS test, number-correct scores are computed for four to six reporting clusters.[2] Intercorrelations and reliability estimates for the reporting clusters are presented in Table 8.B.1 and Table 8.B.2 for the 18 STS tests. Results are also reported for grade-specific samples of the mathematics tests of Algebra I and Geometry. Consistent with results from previous years, the reliabilities across reporting clusters varied significantly according to the number of items in each cluster.

Subgroup Reliabilities and SEMs

The reliabilities of the 18 operational STS tests and the two grade-specific EOC mathematics STS were examined for various subgroups of the examinee population. The subgroups included in these analyses were defined by examinees' gender, economic status, provision of special services, length of attendance in U.S. schools, and EL program participation.

Reliabilities and SEMs information for the reporting clusters is also reported for the subgroups. Table 8.B.9 through Table 8.B.10 present the cluster-level reliabilities for the subgroups based on gender and economic status. The next set of tables, Table 8.B.11 through Table 8.B.13 show the same analyses for the subgroups based on provision of special services and the length of attendance in U.S. schools. The last set of tables, Table 8.B.14 through Table 8.B.16, present the cluster-based reliabilities for the subgroups based on EL program participation.

Note that the reliabilities are reported only for samples that are comprised of 11 or more examinees. Also, in some cases, score reliabilities were not estimable and are presented in the tables as a hyphen.

Conditional Standard Errors of Measurement

As part of the IRT-based equating procedures, scale score conversion tables and conditional standard errors of measurement (CSEMs) are produced. CSEMs for STS scale scores are based on item response theory and are calculated by the IRTEQUATE module in a computer system called the Generalized Analysis System (GENASYS). The CSEM is estimated as a function of measured ability. It is typically smaller in scale-score units toward the center of the scale in the test metric where more items are located and larger at the extremes where there are fewer items. An examinee's CSEM under the IRT framework is equal to the inverse of the square root of the test information function:

$$\mathrm{CSEM}(\hat{\theta}) = \frac{1}{\sqrt{\mathrm{I}(\theta)}} a \tag{8.5}$$

where,

$\mathrm{I}(\theta)$ is the test information function at ability level θ.

The statistic is multiplied by a, where a is the original scaling factor needed to transform theta to the scale score metric. The value of a varies by grade and subject.

SEMs vary across the scale. When a test has cut scores, it is important to provide CSEMs at the cut scores.

[2] Statistics are presented for reporting clusters with fewer than ten items. However, cluster scores alone should not be used in making inferences about individual students.

Table 8.3 presents the scale score CSEMs at the lowest score required for a student to be classified in the below basic, basic, proficient, and advanced performance levels for each STS for which scale score are available.[3]

The CSEMs tended to be higher at the advanced cut points for all tests. The pattern of lower values of CSEMs at the basic and proficient levels are expected since (1) more items tend to be of middle difficulty; and (2) items at the extremes still provide information toward the middle of the scale. This results in more precise scores in the middle of the scale and less precise scores in the extremes of the scale.

Table 8.3 Scale Score CSEM at Performance Level Cut Points

Content Area	STS*	Below Basic		Basic		Proficient		Advanced	
		Min. SS	CSEM	Min. SS	CSEM	Min. SS	CSEM	Min. SS	CSEM
Reading/Language Arts	2	242	14	300	13	350	14	386	17
	3	251	15	300	14	350	15	393	17
	4	256	14	300	13	350	14	387	16
	5	271	17	300	16	350	16	401	18
	6	260	18	300	17	350	17	401	19
	7	256	16	300	15	350	16	399	18
Mathematics	2	217	19	300	17	350	18	417	23
	3	229	18	300	16	350	17	421	21
	4	243	19	300	17	350	18	420	22
	5	245	26	300	25	350	24	416	26
	6	251	24	300	22	350	22	403	23
	7	257	24	300	22	350	21	415	23

* STS tests named by number only are grade-level tests.

Decision Classification Analyses

The methodology used for estimating the reliability of classification decisions is described in Livingston and Lewis (1995) and is implemented using the ETS-proprietary computer program RELCLASS-COMP (Version 4.14).

Decision accuracy describes the extent to which examinees are classified in the same way as they would be on the basis of the average of all possible forms of a test. Decision accuracy answers the question: How does the actual classification of test takers, based on their single-form scores, agree with the classification that would be made on the basis of their true scores, if their true scores were somehow known? RELCLASS-COMP also estimates decision accuracy using an estimated multivariate distribution of reported classifications on the current form of the exam and the classifications based on an all-forms average (true score).

Decision consistency describes the extent to which examinees are classified in the same way as they would be on the basis of a single form of a test other than the one for which data are available. Decision consistency answers the question: What is the agreement between the classifications based on two non-overlapping, equally difficult forms of the test? RELCLASS-COMP also estimates decision consistency using an estimated multivariate distribution of reported classifications on the current form of the exam and classifications on a hypothetical alternate form using the reliability of the test and strong true score theory.

[3] Scale scores and CSEMs for scale scores are not provided for the STS for RLA in grades eight through eleven, Algebra I, and Geometry because scale scores were not available for these tests in the spring 2010 administration.

In each case, the proportion of classifications with exact agreement is the sum of the entries in the diagonal of the contingency table representing the multivariate distribution. Reliability of classification at a cut score is estimated by collapsing the multivariate distribution at the passing score boundary into an *n* by *n* table (where *n* is the number of performance levels) and summing the entries in the diagonal. Figure 8.1 and Figure 8.2 present the two scenarios graphically.

Figure 8.1 Decision Accuracy for Achieving a Performance Level

		Decision made on the form taken	
		Does not achieve a performance level	Achieves a performance level
True status on all-forms average	Does not achieve a performance level	Correct classification	Mis-classification
	Achieves a performance level	Mis-classification	Correct classification

Figure 8.2 Decision Consistency for Achieving a Performance Level

		Decision made on the alternate form taken	
		Does not achieve a performance level	Achieves a performance level
Decision made on the form taken	Does not achieve a performance level	Correct classification	Mis-classification
	Achieves a performance level	Mis-classification	Correct classification

The results of these analyses for the STS tests in grades two through seven are presented in Table 8.B.17 through Table 8.B.28 in Appendix 8.B.[4]

Each table includes the contingency tables for both accuracy and consistency of the various performance-level classifications. The proportion of students being accurately classified is determined by summing across the diagonals of the upper tables. The proportion of consistently classified students is determined by summing the diagonals of the lower tables.

The classifications are collapsed to below-proficient versus proficient and above, which are the critical categories for adequate yearly progress (AYP) calculations for other tests in the STAR Program, and are also presented in the tables.

Validity Evidence

Validity refers to the degree to which each interpretation or use of a test score is supported by evidence that is gathered (AERA, APA, & NCME, 1999; ETS, 2002). It is a central concern underlying the development, administration, and scoring of a test and the uses and interpretations of test scores.

Validation is the process of accumulating evidence to support each proposed score interpretation or use. It does not involve a single study or gathering one particular kind of

[4] Decision classification analyses are not provided for the STS tests for RLA (grades eight through eleven), Algebra I, and Geometry because scale scores were not available for these tests in the spring 2010 administration.

evidence. Validation involves multiple investigations and various kinds of evidence (AERA, APA, & NCME, 1999; Cronbach, 1971; ETS, 2002; Kane, 2006). The process begins with test design and continues through the entire assessment process including item development and field testing, analyses of item and test data, test scaling, scoring, and score reporting.

This section presents the evidence gathered to support the intended uses and interpretations of scores for the STS testing program. The description is organized in the manner prescribed by *The Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999). These standards require a clear definition of the purpose of the test, which includes a description of the qualities—called constructs—that are to be assessed by a test, the population to be assessed, as well as how the scores are to be interpreted and used.

In addition, the *Standards* identify five kinds of evidence that can provide support for score interpretations and uses, which are as follows:

1. Evidence based on test content;
2. Evidence based on relations to other variables;
3. Evidence based on response processes;
4. Evidence based on internal structure; and
5. Evidence based on the consequences of testing.

These kinds of evidence are also defined as important elements of validity information in documents developed by the U.S. Department of Education for the peer review of testing programs administered by states in response to the Elementary and Secondary Education Act (USDOE, 2001).

The next section defines the purpose of the STS tests, followed by a description and discussion of the kinds of validity evidence that has been gathered.

Purpose of the STS

As mentioned in Chapter 1, the purpose of the STS program is to permit students to demonstrate achievement of the California content standards in reading/language arts and mathematics through a primary language test in Spanish. The STS test results are not part of the federal and state accountability systems.

The Constructs to Be Measured

The 18 STS tests, given in Spanish, are designed to show how well students perform relative to the California content standards. These content standards were approved by the SBE; they describe what students should know and be able to do at each grade level.

Test blueprints and specifications written to define the procedures used to measure the content standards provide an operational definition of the construct to which each set of standards refers—that is, they define, for each content area to be assessed, the tasks to be presented, the administration instructions to be given, and the rules used to score examinee responses. They control as many aspects of the measurement procedure as possible so that the testing conditions will remain the same over test administrations (Cronbach, 1971; Cronbach, Gleser, Nanda, & Rajaratnam, 1972) to minimize construct irrelevant score variance (Messick, 1989). The content blueprints for the STS tests can be found on the CDE STAR STS Blueprints Web page at http://www.cde.ca.gov/ta/tg/sr/stsblueprints.asp. ETS

has developed all STS test items to conform to the SBE-approved content standards and test blueprints.

The Interpretations and Uses of The Scores Generated

Total scores expressed as scale scores and student performance levels are generated for STS tests in grades two through seven. For the STS for RLA in grades eight through eleven, Algebra I, and Geometry, students' total scores were expressed in the raw score metric and no performance levels were reported. On the basis of a student's total score, an inference is drawn about how much knowledge and skill in the content area the student has. The total score also is used to classify students in terms of their level of knowledge and skill in the content area. These levels are called performance levels and are as follows: advanced, proficient, basic, below basic, and far below basic.

Reporting cluster scores, also called subscores, are used to draw inferences about a student's achievement in each of several specific knowledge or skill areas covered by each test. Reporting cluster results compare an individual student's percent-correct score to the average percent correct for the state as a whole. The range of scores for students who scored proficient is also provided for each cluster using a percent-correct metric. The reference points for this range are: (1) the average-percent correct for students who received the lowest score qualifying for the proficient performance level; and (2) the average-percent correct for students who received the lowest score qualifying for the advanced performance level. A detailed description of the uses and applications of STS scores is presented in Chapter 7.

The tests that make up the STAR Program, along with other assessments, provide results or score summaries that are used for different purposes. The three major purposes are:

1. Communicating with parents and guardians;
2. Informing decisions needed to support student achievement; and
3. Evaluating school programs.

These are the only uses and interpretations of scores for which validity evidence has been gathered. If the user wishes to interpret or use the scores in other ways, the user is cautioned that the validity of doing so has not been established (AERA, APA, & NCME, 1999, Standard 1.3). The user is advised to gather evidence to support these additional interpretations or uses (AERA, APA, & NCME, 1999, Standard 1.4).

Intended Test Population(s)

The STS tests are targeted toward Spanish-speaking English learners who have been in school in the United States for less than 12 cumulative months or who receive instruction in Spanish. However, all students who are English learners and whose primary language is Spanish are eligible to take the STS. The two distinct STS populations are the "target" and "nontarget/optional" populations. The target population consists of students receiving instruction in Spanish or students who have attended school in the United States for less than 12 months. These are cumulative, not necessarily consecutive, months. The nontarget/optional population consists of students who receive instruction in English and who have attended school in the United States for 12 cumulative months or longer.

Students in grades two through eleven are tested in RLA and mathematics. Students in grade seven who meet the criteria for taking the CST or CMA for Algebra I take the STS for Algebra I instead of the grade-level test.

Validity Evidence Collected

Evidence Based on Content

According to *The Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999), analyses that demonstrate a strong relationship between the test content and the construct that the test was designed to measure can provide important evidence of validity. In current K–12 testing, the construct of interest usually is operationally defined by state content standards and the test blueprints that specify the content, format, and scoring of items that are admissible measures of the knowledge and skills described in the content standards. Evidence that the items meet these specifications and represent the domain of knowledge and skills referenced by the standards supports the inference that students' scores on these items can appropriately be regarded as measures of the intended construct.

As noted in the AERA, APA, and NCME *Test Standards* (1999), evidence based on test content may involve logical analyses of test content in which experts judge the adequacy with which the test content conforms to the test specifications and represents the intended domain of content. Such reviews can also be used to determine whether the test content contains material that is not relevant to the construct of interest. Analyses of test content may also involve the use of empirical evidence of item quality.

Also to be considered in evaluating test content are the procedures used for test administration and test scoring. As Kane (2006, p. 29) has noted, although evidence that appropriate administration and scoring procedures have been used does not provide compelling evidence to support a particular score interpretation or use, such evidence may prove useful in refuting rival explanations of test results. Evidence based on content includes the following:

Description of the state standards—As was noted in Chapter 1, the SBE adopted rigorous content standards in 1997 and 1998 in four major content areas: ELA, history–social science, mathematics, and science. These standards were designed to guide instruction and learning for all students in the state and to bring California students to world-class levels of achievement. The STS program was instituted to permit students to demonstrate achievement of the content standards in reading/language arts and mathematics using a Spanish-language test.

Specifications and blueprints—ETS maintains item development specifications for each STS. The item specifications describe the characteristics of the items that should be written to measure each content standard. A thorough description of the specifications can be found in Chapter 3. Once the items are developed and field-tested, ETS selects all STS test items to conform to the SBE-approved California content standards and test blueprints. Test blueprints for the STS were proposed by ETS and reviewed and approved by the Assessment Review Panels (ARPs), which are advisory panels to the CDE and ETS on areas related to item development for the STS. Test blueprints were also reviewed and approved by the CDE and presented to the SBE for adoption. There have been no recent changes in the blueprints for the STS tests. The test blueprints for the STS tests can be found on the CDE STAR STS Blueprints Web page at http://www.cde.ca.gov/ta/tg/sr/stsblueprints.asp.

Item development process—A detailed description of the content and psychometric criteria applicable to the construction of the 2010 STS is presented in Chapter 4, starting on page 113.

Item review process—Chapter 3 explains the extensive item review process applied to items written for use in the STS tests. In brief, items written for the STS tests undergo multiple review cycles and involve multiple groups of reviewers. One of the reviews is carried out by an external reviewer, that is, the ARPs. The ARPs are responsible for reviewing all newly developed items for alignment to the California content standards.

Form construction process—For each test, the content standards, blueprints, and test specifications are used as the basis for choosing items for the test. Additional targets for item difficulty and discrimination that are used for test construction were defined in light of what are desirable statistical characteristics. Guidelines for test construction were established with the goal of maintaining parallel forms to the greatest extent possible from year to year. Details can be found in Chapter 4, starting on page 114.

Additionally, an external review panel, the Statewide Pupil Assessment Review (SPAR), is responsible for reviewing and approving the achievement tests to be used statewide for the testing of students in California public schools, grades two through eleven. More information about the SPAR is given in Chapter 3, starting on page 108.

Evidence Based on Relations to Other Variables

Empirical results concerning the relationships between score on a test and measures of other variables external to the test can also provide evidence of validity when these relationships are found to be consistent with the definition of the construct that the test is intended to measure. As indicated in the *Test Standards* (AERA, APA, & NCME, 1999), the variables investigated can include other tests that measure the same construct and different constructs, criterion measures that score on the test are expected to predict, as well as demographic characteristics of examinees that are expected to be related and unrelated to test performance.

Differential Item Functioning Analyses

Analyses of DIF provides evidence of the degree to which a score interpretation or use is valid for individuals who differ in particular demographic characteristics. For the STS, DIF analyses were performed on all operational items and all field-test items where sufficient student samples were available.

The results of the DIF analyses are presented in Appendix 8.E. The vast majority of the items exhibited little or no significant DIF, suggesting that, in general, scores based on the STS items would have the same meaning for individuals who differed in their demographic characteristics.

Correlations Between Scores on the STS tests and Scores on the CSTs

Relationships between scores on measures intended to assess similar constructs provide evidence of convergent validity. For STS reading/language arts and mathematics, the evidence of convergent validity was obtained by examining the relationship between the STS tests and their CST counterparts. CSTs assess students in English–language arts, history–social science, mathematics, and science. All students who take the STS are also required to take the CSTs at their grade level; both tests measure the same California content standards.

The convergent validity evidence was collected using data from the 2010 administration of the CSTs and the STS. The examinees taking both tests were matched on the basis of a unique student Identifier except for a few cases that were matched on the basis of student name and a 14-digit school code. More than 90 percent of the STS examinees could be matched with their CST records; the matching rate was higher in the lower grades.

Correlations of scores on the STS tests with their CST counterparts were computed on the basis of both the overall STS population and the STS target population. A summary of the findings follows.

Table 8.4 presents correlations between scores on the 2010 STS tests for RLA and the scores on the CSTs for ELA. As expected, the student scores on the STS RLA tests correlated moderately with their CST ELA scores. While both tests measure the common construct of reading ability, the STS tests for RLA measure reading skills in Spanish while the CSTs for ELA measure reading skills in English.

In general, correlations between scores at the elementary grade levels were higher than those in the middle and higher grade levels, which is due, in part, to the varying levels of internal consistency for these tests. As depicted by the results in Table 8.2, the internal consistency of STS RLA tests was higher at the elementary grade levels.

Table 8.4 Correlations between STS for RLA Tests and CST for ELA Tests

	Overall STS Population			Target STS Population		
Grade	Total No. of Examinees	No. Matched	STS/CST	Total No. of Examinees	No. Matched	STS/CST
2	13,939	13,773	0.75	11,518	11,381	0.75
3	9,400	9,243	0.73	8,444	8,306	0.73
4	5,080	4,978	0.66	4,459	4,380	0.66
5	3,657	3,558	0.59	3,049	2,962	0.58
6	2,177	2,106	0.57	1,962	1,896	0.56
7	1,823	1,726	0.49	1,587	1,504	0.50
8	1,588	1,521	0.45	1,416	1,357	0.47
9	2,587	2,354	0.44	2,358	2,159	0.43
10	1,606	1,482	0.58	1,401	1,297	0.58
11	976	894	0.55	839	778	0.55

Table 8.5 presents correlations between scores on 2010 STS tests for mathematics and scores on the CSTs for mathematics. The results show that, as expected, student scores on the STS mathematics tests correlated highly with their CST mathematics scores because these tests assess similar skills. The scores correlated more highly at the lower grade levels than at the higher grade levels. Similar to RLA, the variation in the levels of internal consistency partly explains such differences in the degree of correlation. As shown in Table 8.2, the internal consistency of STS mathematics tests declined as grade level increased.

Table 8.5 Correlations between STS for Mathematics Tests and CST for Mathematics Tests

	Overall STS Population			Target STS Population		
STS*	No. of Examinees	No. of Examinees Matched	STS/CST	Total No. of Examinees	No. of Examinees Matched	STS/CST
2	13,909	13,752	0.84	11,505	11,371	0.84
3	9,292	9,149	0.87	8,382	8,255	0.87
4	5,042	4,954	0.88	4,428	4,355	0.88
5	3,628	3,543	0.87	3,043	2,968	0.87
6	2,151	2,085	0.81	1,952	1,891	0.81
7	1,770	1,684	0.78	1,549	1,474	0.79
Algebra I	3,411	2,863	0.75	3,053	2,576	0.75
Geometry	599	498	0.77	512	430	0.75

* STS tests named by number only are grade-level tests.

Intercorrelations Between Content Areas

To the degree that students' content area scores correlate as expected, evidence of the validity in regarding those scores as measures of the intended constructs is provided. Table 8.6 gives the correlations between scores on the STS content-area tests and the numbers of students on which these correlations were based. Sample sizes for individual tests are shown on the diagonals of the correlation matrices, and the numbers of students on which the correlations were based are shown on the lower off-diagonals. The correlations are provided in the upper off-diagonals.

Results in the table appear to be consistent with expectations. In general, students' RLA scores correlated moderately with their mathematics scores in grades two through seven and less well with their scores on the more narrowly focused EOC content of the Algebra I and Geometry tests.

Table 8.C.1 through Table 8.C.16 in Appendix 8.C provide the content area correlations by gender, economic status, length of attendance in U.S. schools, EL program participation, and special service utilization. Similar patterns of correlations between students' RLA and mathematics were found within the subgroups.

Note that the correlations are reported only for samples that are comprised of more than 10 examinees. Correlations between any two content areas where 10 or fewer examinees took the tests are expressed as hyphens. Correlations between content areas where no examinees took the two tests are expressed as "N/A."

Note: Due to limited column space, test names were not repeated on the column heading of each correlation matrix in Table 8.6 and Table 8.C.1 through Table 8.C.16. Instead, numerical headings, such as "1." or "2." were used (in the case of Grade 2 in Table 8.6, "1." referred to "1. Reading/Language Arts" and "2." referred to "2. Mathematics").

Table 8.6 STS Content Area Intercorrelations

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**11,518**	0.75	
	2. Mathematics	11,439	**11,505**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**8,444**	0.76	
	2. Mathematics	8,363	**8,382**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**4,459**	0.73	
	2. Mathematics	4,418	**4,428**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**3,049**	0.66	
	2. Mathematics	3,035	**3,043**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**1,962**	0.67	
	2. Mathematics	1,943	**1,952**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**1,587**	0.65	N/A
	2. Mathematics	1,542	**1,549**	N/A
	3. Algebra I	9	N/A	**9**

Grade	STS	1.	2.	
8	**1. Reading/Language Arts**	**1,416**	0.46	
	2. Algebra I	489	**491**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**2,358**	0.55	0.47
	2. Algebra I	1,340	**1,370**	N/A
	3. Geometry	108	N/A	**111**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**1,401**	0.52	0.55
	2. Algebra I	789	**816**	N/A
	3. Geometry	200	N/A	**205**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**839**	0.59	0.54
	2. Algebra I	362	**367**	N/A
	3. Geometry	182	N/A	**196**

Intercorrelations between the reporting clusters are presented in Table 8.B.1 and Table 8.B.2 for the 18 STS tests and the two grade-specific EOC mathematics tests of Algebra I and Geometry. In general, moderate correlations between cluster scores should be expected since, by design, the clusters measure various aspects of the same construct. The findings given in Table 8.6 show that, in general, the intercorrelations ranged between 0.46 and 0.76. As also would be expected, the intercorrelations were higher among clusters that assessed more similar skills than they were among clusters that assessed somewhat dissimilar skills. For example, in mathematics, the clusters related to number sense correlated more highly with each other than they did with the cluster assessing statistics, data analysis, and probability.

Evidence Based on Response Processes

As noted in the AERA, APA, and NCME *Standards* (1999), additional support for a particular score interpretation or use can be provided by theoretical and empirical evidence indicating that examinees are using the intended response processes when responding to the items in a test. This evidence may be gathered from interacting with examinees in order to understand what processes underlie their item responses.

Evidence Based on Internal Structure

As suggested by the *Standards,* evidence of validity can also be obtained from studies of the properties of the item scores and the relationship between these scores and scores on components of the test. To the extent that the score properties and relationships found are consistent with the definition of the construct measured by test, support is gained for interpreting these scores as measures of the construct.

For the STS, it is assumed that a single construct underlies the total scores obtained on each test. Evidence to support this assumption can be gathered from the results of item analyses, evaluations of internal consistency, and studies of model-data fit, dimensionality, and reliability.

With respect to the subscores that are reported, these scores are intended to reflect examinees' knowledge and/or skill in an area that is part of the construct underlying the total test. Analyses of the intercorrelations among the subscores themselves and between the subscores and total test score can be used for this purpose. Information about the internal consistency of the items on which each subscore is based is also useful to provide.

Classical Statistics

Point-biserial correlations calculated for the items in a test show the degree to which the items discriminate between students with low and high scores on a test. To the degree that the correlations are high, evidence that the items assess the same construct is provided. The mean point-biserials for the items in the STS tests are presented in Table 8.1. This index was greater than 0.40 for STS tests at grades two through four, and between 0.33 and 0.38 for all other tests. The exceptions were the EOC mathematics STS for Algebra I and Geometry, where the mean point-biserials were 0.30 and 0.29 respectively.

Also germane to the validity of a score interpretation are the ranges of item difficulty for the items on which a test score will be based. The finding that items have difficulties that span the range of examinee ability provides evidence that examinees at all levels of ability are adequately measured by the items. Information on average item *p*-values is given in Table 8.1; individual item *p*-values are presented in Table 8.A.1 through Table 8.A.3. The distributions of item *b*-values are given in Table 8.D.23 and Table 8.D.24.

The data indicate that all STS tests, with the exception of the EOC mathematics tests, had average *p*-values ranging from 0.44 to 0.69; out of those, 13 tests had average *p*-values ranging from 0.50 to 0.67. A broad range of item *p*-values for these tests indicates that item difficulty spanned the ability scale. The *p*-values for the EOC mathematics tests tend to be somewhat lower and somewhat less variable in terms of difficulty.

Reliability

Reliability is a prerequisite for validity. The finding of reliability in student scores supports the validity of the inference that the scores reflect a stable construct. This section will describe briefly findings concerning the total test level, as well as reliability results for the reporting clusters.

Overall reliability—The reliability analyses, on each of the 18 operational STS tests are presented in Table 8.2. The results indicate that the reliabilities for STS RLA tests at all grade levels and for mathematics tests in grades two through six were moderately high, ranging from 0.89 to 0.93. Reliability estimates for the mathematics tests given in grades seven or higher were lower—ranging from 0.83 to 0.87.

Subgroup reliabilities—The reliabilities of the 18 operational STS tests and the two grade-specific EOC mathematics tests were also examined for various subgroups of the examinee population that differed in their demographic characteristics. The characteristics considered were gender, ethnicity, economic status, provision of special services, length of attendance in U.S. schools, and EL program participation. The results of these analyses can be found in Table 8.B.3 though Table 8.B.7.

Reporting cluster reliabilities—For each STS, number-correct scores are computed for the reporting clusters. The reliabilities of these scores are presented in Table 8.B.1 and Table 8.B.2. The reliabilities of reporting clusters invariably are lower than those for the total tests since they are based on fewer items. Cluster scores based on more items have somewhat higher reliabilities than cluster scores based on fewer items.

Because the reliabilities of scores at the cluster level can be low, schools should supplement the cluster level score results with other information when interpreting the results.

Reliability of performance classifications—The methodology used for estimating the reliability of classification decisions is described in the section “Decision Classification

Analyses" on page 220. The results of these analyses are presented for the STS tests for which the performance levels were available. These results are presented in Table 8.B.17 through Table 8.B.28 in Appendix 8.B these tables start on page 267. When the classifications are collapsed to below-proficient versus proficient and above, which are the critical categories for AYP analyses for other testing programs in STAR, the proportion of students that were classified accurately was about 0.91 for all STS tests in grades two through seven. Similarly, the proportion of students that were classified consistently ranged from 0.88 to 0.90 for students classified into below-proficient versus proficient and advanced. These results represent high levels of decision accuracy and consistency.

Evidence Based on Consequences of Testing

As observed in the *Standards*, tests are usually administered "with the expectation that some benefit will be realized from the intended use of the scores" (AERA, APA, & NCME, 1999, p. 18). When this is the case, evidence that the expected benefits accrue will provide support for intended use of the scores. The CDE and ETS are in the process of determining what kinds of information can be gathered to assess the consequences of administration of the STS tests.

IRT Analyses

The STS tests for grades two through seven are equated to a reference form using a common-item nonequivalent groups design and methods based on IRT. The "base" or "reference" calibrations for the STS tests were established by calibrating samples of data from a specific administration. Doing so established a scale to which subsequent item calibrations could be linked. The 2010 items were placed on the reference scale through a set of linking items that appeared in the 2009 operational forms and were re-administered in 2010.

The procedures used for equating the grade-level STS tests for grades two through seven involve three steps: item calibration, item parameter scaling, and production of raw-score-to-scale-score conversions using the scaled item parameters. ETS uses GENASYS for the IRT item calibration and equating work. As part of this system, a proprietary version of the PARSCALE computer program (Muraki & Bock, 1995) is used and parameterized to result in one-parameter calibrations. Research at ETS has suggested that PARSCALE calibrations done in this manner produce results that are virtually identical to results based on WINSTEPS (Way, Kubiak, Henderson, & Julian, 2002).

For the STS for RLA tests in grades eight through eleven and the EOC mathematics tests for Algebra I and Geometry, no scale scores were reported and, therefore, no equating procedure was implemented in 2010. The only IRT analyses for these tests were item calibrations to obtain item difficulty estimates.

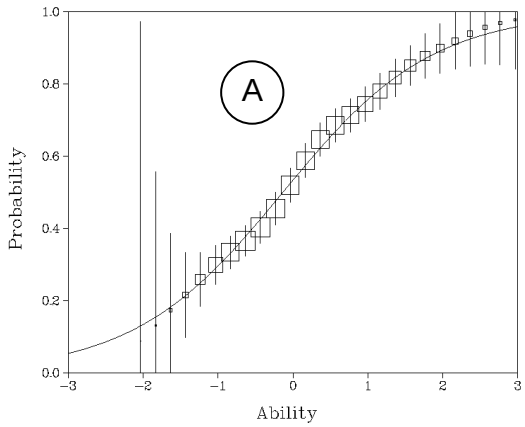
The details on the IRT calibration, scaling, and equating procedures are presented in Chapter 2 starting on page 14.

IRT Model-Data Fit Analyses

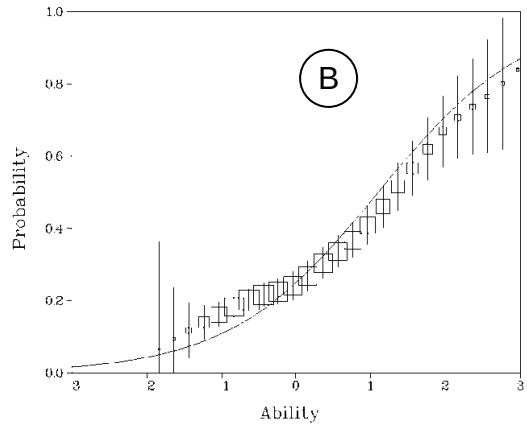
Because the Rasch model is used in equating the STS, an important part of IRT analyses is the assessment of model-data fit. ETS psychometricians classify operational and field-test items for the STS tests into discrete categories based on an evaluation of how well each item was fit by the Rasch model. The flagging procedure has categories of A, B, C, D, and F that are assigned based on an evaluation of graphical model-data fit information. Descriptors for each category are provided on the next page. As an illustration, the IRT item

characteristic curves and empirical data (item-ability regressions) for five CST items field-tested in 2005 are shown in Figure 8.3. These five items represent the various rating categories. The item number in the calibration and ETS identification number for each item ("accession number") are listed next to each item, the corresponding rating categories.

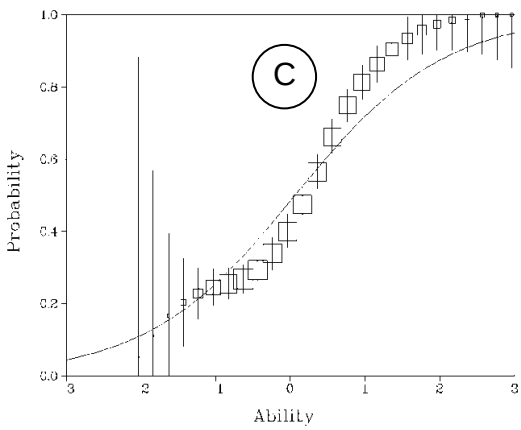
Figure 8.3 Items from the 2005 CST for History–Social Science Grade Ten Field-test Calibration



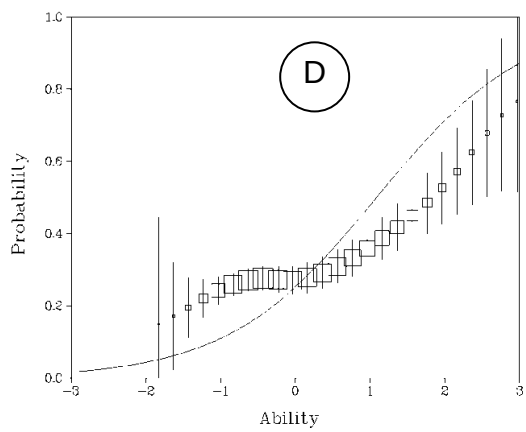
Version 30, Seq 29 (#236) CSV23487 4-Choice P+ = 0.563
a = 0.588 F, b = –0.135, c = 0.000 F, CHI = 5.41, N = 5,912



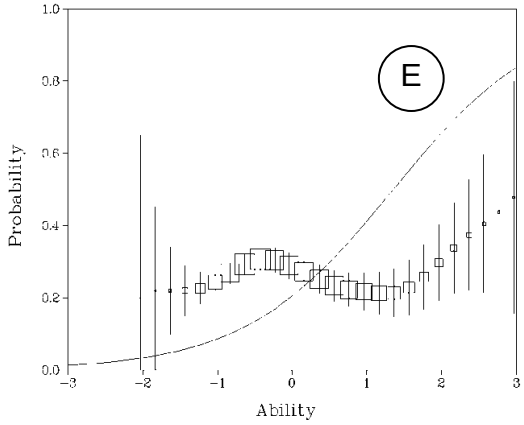
Version 1, Seq 28 (#61) CSV22589 4 Choice P+ = 0.307
a = 0.588 F, b = 1.104, c = 0.000 F, CHI = 66.70, N = 6,348



ersion 18, Seq 30 (#165) CSV20282 4-Choice P+ = 0.523
a = 0.588 F, b = 0.066, c = 0.000 F, CHI = 208.99, N = 6,183



Version 9, Seq 32 (#113) CSV20317 4-Choice P+ = 0.314
a = 0.588 F, b = 1.089, c = 0.000 F, CHI = 361.31, N = 6,047



Version 21, Seq 31 (#184) CSV20311 4-Choice P+ = 0.263
a = 0.588 F, b = 1.356, c = 0.000 F, CHI = 1027.57, N = 6,277

Flag A (Item 236, CSV23487)

- Good fit of theoretical curve to empirical data along the entire ability range, may have some small divergence at the extremes
- Small Chi-square value relative to the other items in the calibration with similar sample sizes

Flag B (Item 061, CSV22589)

- Theoretical curve within error range across most of ability range, may have some small divergence at the extremes
- Acceptable Chi-square value relative to the other items in the calibration with similar sample sizes

Flag C (Item 165, CSV20282)

- Theoretical curve within error range at some regions and slightly outside of error range at remaining regions of ability range
- Moderate Chi-square value relative to the other items in the calibration with similar sample sizes
- This category often applies to items that appear to be functioning well, but that are not well fit by the Rasch model

Flag D (Item 113, CSV20317)

- Theoretical curve outside of error range at some regions across ability range
- Large Chi-square value relative to the other items in the calibration with similar sample sizes

Flag F (Item 184, CSV20311)

- Theoretical curve outside of error range at most regions across ability range
- Probability of answering item correctly may be higher at lower ability than higher ability (U-shaped empirical curve)
- Very large Chi-square value relative to the other items with similar sample sizes and classical item statistics tend also to be very poor

In general, items with flagging categories of A, B, or C are all considered acceptable. Ratings of D are considered questionable, and the ratings of F indicate a poor model fit.

Model-fit Assessment Results

The model-fit assessment is performed twice in the administration cycle. The assessment is first performed before scoring tables are produced and released. The assessment is performed again as part of the final item analyses when much larger samples are available. The flags produced as a result of this assessment are placed in the item bank. The test developers are asked to avoid the items flagged as D if possible and to carefully review them if they must be used. Test developers are instructed to avoid using items rated F for operational test assembly without a review by a psychometrician and by CDE content specialists.

The distributions of the operational items across the IRT model data fit classifications are presented in Table 8.D.1 and Table 8.D.2 on page 287. The distributions for the field test items are presented in Table 8.D.3 and Table 8.D.4, which start on page 287.

Evaluation of Scaling

Calibrations of the 2010 forms were scaled to the previously obtained reference scale estimates in the item bank using the Stocking and Lord (1983) procedure for the grade-level STS tests in grades two through seven. Details on the scaling procedures are provided on page 14 in Chapter 2.

The linking process is carried out iteratively by inspecting differences between the transformed new and old (reference) estimates for the linking items and removing items for which the item difficulty estimates changed significantly. Items with large weighted root-mean-square differences (WRMSD) between item characteristic curves (ICCs) on the basis of the old and new difficulty estimates are removed from the linking set. Based on established procedures, any linking items for which the WRMSD is greater than 0.125 are eliminated. This criterion has produced reasonable results over time in similar equating work done for other testing programs at ETS.

Table 8.7 presents, for each grade-level STS in grades two through seven, the number of linking items between the 2010 (new) and the test form to which it was linked (2009); the numbers of items removed from the linking item sets; the correlation between the final set of new and reference difficulty estimates for the linking items; and the average WRMSD statistic across the final set of linking items.

Table 8.7 Evaluation of Common Items between New and Reference Test Forms

Content Area	STS*	No. of Linking Items	Linking Items Removed	Final Correlation	WRMSD**
Reading/Language Arts	2	52	0	0.99	0.02
	3	52	0	0.98	0.03
	4	60	0	0.99	0.02
	5	64	0	0.98	0.02
	6	65	0	0.99	0.02
	7	67	0	0.99	0.02
Mathematics	2	52	0	0.98	0.03
	3	52	0	1.00	0.02
	4	52	0	0.99	0.02
	5	56	0	0.99	0.02
	6	58	0	0.99	0.02
	7	60	0	0.98	0.02

* STS tests named by number only are grade-level tests.

** Average over retained items

Summaries of Scaled IRT b-values

Once the IRT *b*-values are placed on the item bank scale for STS tests for grades two through seven, analyses are performed to assess the overall test difficulty, the difficulty level of reporting clusters, and the distribution of items in a particular range of item difficulty. For the STS for RLA tests in grades eight through eleven and the EOC mathematics tests for Algebra I and Geometry, no scaling was undertaken, and the analyses were performed using *b*-values from IRT calibration.

Table 8.D.5 through Table 8.D.22 present descriptive statistics (mean, standard deviation, minimum, and maximum) for the scaled IRT *b*-values for each STS. The results for the overall test are presented separately for the operational items, the field test items, and for each reporting cluster (operational items).

Table 8.D.23 through Table 8.D.26 show the distributions of operational and field-test items across 16 intervals of *b*-values. The intervals range from “less than –3.5” to “greater than or equal to 3.5.”

Post-equating Results

As described on page 14 of Chapter 2, once the new item calibrations for each grade-level test in grades two through seven are transformed to the base scale, IRT true-score equating procedures are used to transform the new form number-correct scores to their corresponding ability estimates. These ability estimates can then be transformed to scale scores through linear transformation. The linear transformation parameters for the 2010 forms were developed based on standard setting using the 2008 operational forms for grades two through four and the 2009 operational forms for grades five through seven.

Complete raw-to-scale score conversion tables for the 2010 STS tests in grades two through seven are presented in Table 8.D.27 through Table 8.D.32 starting on page 295. The raw scores and corresponding transformed scale scores are listed on those tables. Scores were truncated at both ends of the scale so that the minimum reported scale score was 150 and the maximum reported scale score was 600. The scale scores defining the various performance level cut points are presented in Table 2.1, which is in Chapter 2 on page 16.

Differential Item Functioning Analyses

Analyses of DIF assess differences in the item performance of groups of students that differ in their demographic characteristics.

DIF analyses were performed on all operational items and all field-test items for which sufficient student samples were available. The sample size requirements for DIF analyses were 100 in the focal group and 400 in the combined focal and reference groups. These sample size requirements were based on standard operating procedures with respect to DIF analyses at ETS. The DIF analyses utilized the Mantel-Haenszel (MH) DIF statistic (Mantel & Haenszel, 1959; Holland & Thayer, 1985). This statistic is based on the estimate of constant odds ratio and is described as:

The α_{MH} is the constant odds ratio taken from Dorans and Holland (1993, equation 7) and computed as:

$$\alpha_{MH} = \frac{\left(\sum_m R_{rm} \frac{W_{fm}}{N_{tm}}\right)}{\left(\sum_m R_{fm} \frac{W_{rm}}{N_{tm}}\right)} \tag{8.6}$$

$$MH\ \ D\text{-}DIF\ = -2.35\ \ln[\,\alpha_{MH}\,] \tag{8.7}$$

where,

R = number right,

W = number wrong,

N = total:

fm = focal group at ability level m,

rm = reference group at ability level m, and

tm = total group at ability level m.

Items analyzed for DIF at ETS are classified into one of three categories: A, B, or C. Category A contains items with negligible DIF. Category B contains items with slight to moderate DIF. Category C contains items with moderate to large values of DIF. These categories have been used by ETS testing programs for more than 14 years. The definitions of the categories based on evaluations of the item-level MH D-DIF statistics is as follows:

DIF Category	Definition
A (negligible)	• Absolute value of MH D-DIF is not significantly different from zero, or is less than one. • Positive values are classified as “A+” and negative values as “A-.”
B (moderate)	• Absolute value of MH D-DIF is significantly different from zero but not from one, and is at least one; OR • Absolute value of MH D-DIF is significantly different from one, but is less than 1.5. • Positive values are classified as “B+” and negative values as “B-.”
C (large)	• Absolute value of MH D-DIF is significantly different from one, and is at least 1.5. • Positive values are classified as “C+” and negative values as “C-.”

The factors considered in the DIF analyses included gender and primary disability. The results of the DIF analyses are presented in Appendix 8.E.

Table 8.E.1 lists the operational items exhibiting significant DIF (C-DIF). Table 8.E.2 represents the analogous list for the field-test items. Test developers are instructed to avoid selecting field-test items flagged as having shown DIF that disadvantages a focal group (C-DIF) for future operational test forms unless their inclusion is deemed essential to meeting test-content specifications.

Table 8.E.3 through Table 8.E.8 show the distributions of operational items across the DIF category classifications for the STS tests. In these tables, classifications of B- or C- indicate DIF against a focal group; classifications of B+ and C+ indicate DIF in favor of a focal group. The last two columns of each table show the total number of items flagged for DIF in one or more comparisons. Table 8.E.9 through Table 8.E.14 provide the analogous results for the field-test items.

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Appendix 8.A—Classical Analyses

Table 8.A.1 Item-by-item *p*-value and Point-Biserial for RLA

Item-by-item *p*-value and Point-Biserial for RLA																				
STS	**2**		**3**		**4**		**5**		**6**		**7**		**8**		**9**		**10**		**11**	
Items	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**
1	0.57	0.39	0.39	0.17	0.44	0.43	0.60	0.40	0.69	0.35	0.87	0.19	0.51	0.34	0.31	0.24	0.67	0.29	0.44	0.33
2	0.75	0.48	0.78	0.29	0.54	0.44	0.53	0.37	0.68	0.30	0.59	0.27	0.47	0.40	0.39	0.19	0.80	0.31	0.69	0.43
3	0.35	0.25	0.71	0.39	0.66	0.44	0.44	0.26	0.68	0.32	0.71	0.43	0.76	0.40	0.69	0.24	0.40	0.17	0.65	0.36
4	0.83	0.45	0.34	0.27	0.59	0.38	0.35	0.20	0.47	0.37	0.70	0.29	0.49	0.28	0.36	0.27	0.50	0.34	0.53	0.09
5	0.72	0.45	0.65	0.48	0.43	0.33	0.73	0.36	0.46	0.35	0.51	0.30	0.79	0.44	0.42	0.31	0.76	0.33	0.43	0.27
6	0.70	0.31	0.59	0.41	0.83	0.37	0.54	0.46	0.38	0.35	0.57	0.37	0.77	0.19	0.29	0.40	0.58	0.37	0.52	0.12
7	0.60	0.33	0.83	0.39	0.56	0.37	0.69	0.48	0.38	0.19	0.71	0.40	0.59	0.47	0.82	0.36	0.61	0.41	0.43	0.18
8	0.83	0.43	0.87	0.43	0.71	0.32	0.53	0.46	0.13	0.20	0.33	0.36	0.71	0.39	0.72	0.40	0.42	0.23	0.65	0.34
9	0.82	0.52	0.70	0.49	0.71	0.41	0.65	0.45	0.61	0.35	0.76	0.43	0.48	0.31	0.57	0.28	0.41	0.37	0.35	0.26
10	0.63	0.44	0.54	0.36	0.68	0.47	0.53	0.38	0.64	0.41	0.75	0.45	0.45	0.21	0.42	0.16	0.72	0.37	0.71	0.44
11	0.63	0.43	0.69	0.39	0.70	0.43	0.46	0.30	0.62	0.39	0.44	0.39	0.70	0.36	0.81	0.47	0.68	0.49	0.60	0.42
12	0.63	0.40	0.53	0.34	0.64	0.35	0.48	0.36	0.57	0.46	0.45	0.32	0.69	0.28	0.75	0.46	0.49	0.33	0.77	0.16
13	0.65	0.44	0.82	0.35	0.56	0.49	0.60	0.43	0.69	0.34	0.66	0.40	0.58	0.25	0.80	0.53	0.54	0.28	0.65	0.36
14	0.64	0.54	0.54	0.44	0.42	0.38	0.38	0.31	0.35	0.10	0.36	0.43	0.83	0.47	0.47	0.31	0.81	0.42	0.53	0.14
15	0.67	0.51	0.32	0.20	0.32	0.24	0.49	0.35	0.26	0.13	0.60	0.31	0.47	0.28	0.47	0.31	0.71	0.32	0.33	0.27
16	0.60	0.49	0.60	0.43	0.60	0.45	0.44	0.43	0.47	0.31	0.48	0.48	0.78	0.55	0.39	0.23	0.47	0.22	0.38	0.21
17	0.27	0.14	0.55	0.32	0.74	0.48	0.25	0.23	0.47	0.31	0.53	0.29	0.42	0.42	0.80	0.42	0.79	0.48	0.79	0.45
18	0.66	0.40	0.52	0.29	0.81	0.49	0.57	0.44	0.82	0.44	0.76	0.38	0.54	0.34	0.71	0.45	0.31	0.37	0.38	0.39
19	0.78	0.39	0.78	0.39	0.52	0.42	0.38	0.20	0.67	0.44	0.46	0.39	0.56	0.45	0.68	0.39	0.40	0.21	0.59	0.34
20	0.64	0.42	0.68	0.46	0.62	0.41	0.47	0.48	0.50	0.41	0.41	0.15	0.71	0.57	0.69	0.56	0.75	0.47	0.57	0.38
21	0.58	0.32	0.59	0.49	0.49	0.36	0.55	0.55	0.33	0.22	0.41	0.26	0.90	0.39	0.57	0.35	0.65	0.41	0.54	0.34
22	0.68	0.48	0.74	0.50	0.54	0.48	0.42	0.44	0.65	0.43	0.73	0.53	0.43	0.44	0.81	0.49	0.57	0.41	0.41	0.38
23	0.62	0.42	0.83	0.38	0.50	0.33	0.42	0.31	0.56	0.42	0.51	0.42	0.76	0.49	0.43	0.28	0.33	0.26	0.40	0.31
24	0.38	0.33	0.75	0.42	0.45	0.35	0.31	0.32	0.42	0.33	0.29	0.29	0.62	0.46	0.78	0.50	0.69	0.44	0.51	0.18
25	0.81	0.40	0.48	0.33	0.47	0.38	0.41	0.38	0.56	0.34	0.54	0.38	0.48	0.35	0.58	0.44	0.71	0.54	0.42	0.24
26	0.86	0.40	0.61	0.43	0.56	0.38	0.43	0.48	0.34	0.19	0.29	0.21	0.39	0.38	0.52	0.48	0.63	0.44	0.47	0.46
27	0.65	0.41	0.55	0.35	0.55	0.44	0.40	0.37	0.53	0.30	0.33	0.14	0.67	0.35	0.58	0.43	0.87	0.41	0.37	0.29
28	0.62	0.46	0.55	0.41	0.74	0.51	0.54	0.46	0.55	0.39	0.54	0.29	0.61	0.51	0.52	0.34	0.85	0.40	0.49	0.18
29	0.64	0.45	0.43	0.41	0.65	0.54	0.39	0.36	0.34	0.20	0.30	0.21	0.65	0.39	0.40	0.34	0.41	0.23	0.60	0.43
30	0.61	0.47	0.47	0.47	0.53	0.34	0.36	0.25	0.49	0.31	0.60	0.49	0.50	0.40	0.69	0.47	0.34	0.30	0.29	0.17
31	0.87	0.47	0.69	0.43	0.66	0.45	0.24	0.14	0.22	0.08	0.39	0.39	0.58	0.33	0.44	0.33	0.53	0.27	0.34	0.21
32	0.81	0.49	0.34	0.23	0.58	0.32	0.32	0.20	0.31	0.24	0.46	0.31	0.29	0.24	0.60	0.45	0.67	0.36	0.33	0.18
33	0.82	0.49	0.33	0.24	0.58	0.41	0.36	0.18	0.48	0.33	0.58	0.49	0.36	0.32	0.45	0.37	0.54	0.33	0.59	0.43
34	0.56	0.46	0.33	0.27	0.32	0.29	0.38	0.38	0.52	0.46	0.39	0.26	0.37	0.31	0.69	0.45	0.54	0.39	0.43	0.40
35	0.33	0.25	0.57	0.41	0.41	0.27	0.54	0.46	0.42	0.24	0.38	0.33	0.53	0.42	0.50	0.40	0.59	0.33	0.50	0.13
36	0.51	0.42	0.69	0.49	0.45	0.47	0.39	0.36	0.43	0.34	0.43	0.34	0.44	0.44	0.63	0.39	0.64	0.51	0.71	0.46
37	0.66	0.46	0.68	0.47	0.34	0.27	0.38	0.31	0.45	0.23	0.67	0.49	0.48	0.43	0.58	0.53	0.60	0.44	0.51	0.39

Item-by-item *p*-value and Point-Biserial for RLA

STS	2		3		4		5		6		7		8		9		10		11	
Items	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**
38	0.79	0.49	0.36	0.40	0.58	0.28	0.52	0.45	0.24	0.16	0.48	0.24	0.38	0.24	0.46	0.29	0.41	0.40	0.37	0.26
39	0.60	0.47	0.50	0.41	0.84	0.46	0.50	0.34	0.23	0.17	0.47	0.35	0.50	0.39	0.68	0.44	0.79	0.48	0.73	0.31
40	0.52	0.46	0.69	0.50	0.88	0.44	0.82	0.37	0.39	0.27	0.46	0.37	0.79	0.44	0.38	0.35	0.77	0.54	0.65	0.46
41	0.58	0.42	0.85	0.40	0.74	0.50	0.73	0.28	0.43	0.38	0.45	0.29	0.56	0.27	0.39	0.23	0.36	0.33	0.75	0.54
42	0.54	0.44	0.56	0.41	0.53	0.40	0.74	0.45	0.33	0.19	0.60	0.43	0.73	0.38	0.46	0.36	0.67	0.42	0.64	0.30
43	0.82	0.39	0.75	0.46	0.67	0.43	0.64	0.41	0.69	0.53	0.73	0.35	0.45	0.29	0.34	0.15	0.56	0.29	0.64	0.36
44	0.75	0.38	0.57	0.38	0.73	0.42	0.54	0.37	0.64	0.38	0.75	0.38	0.58	0.43	0.47	0.32	0.59	0.45	0.86	0.47
45	0.45	0.36	0.50	0.42	0.76	0.44	0.55	0.33	0.53	0.41	0.52	0.40	0.52	0.27	0.34	0.24	0.50	0.34	0.45	0.40
46	0.33	0.29	0.60	0.39	0.50	0.31	0.71	0.47	0.45	0.32	0.52	0.38	0.44	0.26	0.50	0.28	0.54	0.45	0.61	0.48
47	0.63	0.54	0.63	0.35	0.71	0.55	0.47	0.30	0.49	0.39	0.52	0.41	0.55	0.37	0.40	0.37	0.66	0.44	0.53	0.35
48	0.53	0.46	0.59	0.51	0.62	0.46	0.51	0.24	0.42	0.26	0.68	0.38	0.84	0.43	0.62	0.49	0.40	0.32	0.51	0.40
49	0.62	0.43	0.57	0.31	0.50	0.38	0.57	0.31	0.36	0.23	0.25	0.06	0.39	0.28	0.76	0.44	0.48	0.31	0.66	0.47
50	0.33	0.20	0.61	0.44	0.62	0.43	0.53	0.37	0.82	0.44	0.46	0.33	0.52	0.33	0.59	0.39	0.37	0.19	0.58	0.44
51	0.42	0.29	0.58	0.47	0.60	0.37	0.46	0.29	0.47	0.33	0.67	0.45	0.51	0.31	0.66	0.34	0.52	0.29	0.59	0.35
52	0.69	0.42	0.58	0.43	0.57	0.47	0.54	0.37	0.36	0.37	0.77	0.47	0.82	0.40	0.49	0.30	0.40	0.28	0.41	0.20
53	0.55	0.46	0.66	0.49	0.71	0.53	0.36	0.25	0.57	0.42	0.65	0.32	0.54	0.31	0.69	0.35	0.54	0.40	0.51	0.40
54	0.41	0.27	0.72	0.46	0.28	0.20	0.54	0.31	0.50	0.34	0.62	0.47	0.37	0.38	0.34	0.31	0.33	0.25	0.42	0.37
55	0.52	0.43	0.66	0.43	0.52	0.45	0.63	0.42	0.61	0.49	0.35	0.33	0.56	0.48	0.60	0.31	0.47	0.33	0.59	0.45
56	0.75	0.55	0.76	0.53	0.72	0.53	0.50	0.29	0.47	0.35	0.70	0.41	0.78	0.45	0.46	0.44	0.39	0.37	0.48	0.40
57	0.41	0.37	0.57	0.32	0.78	0.50	0.47	0.32	0.56	0.32	0.63	0.51	0.75	0.41	0.64	0.47	0.54	0.43	0.21	0.29
58	0.90	0.36	0.53	0.42	0.52	0.42	0.55	0.44	0.51	0.38	0.65	0.46	0.66	0.39	0.51	0.37	0.75	0.36	0.64	0.46
59	0.38	0.45	0.50	0.37	0.34	0.30	0.40	0.37	0.33	0.09	0.72	0.45	0.61	0.52	0.65	0.38	0.66	0.41	0.45	0.41
60	0.62	0.49	0.45	0.33	0.82	0.52	0.39	0.29	0.48	0.36	0.41	0.34	0.68	0.43	0.24	0.26	0.21	0.19	0.67	0.39
61	0.62	0.45	0.51	0.45	0.47	0.45	0.46	0.27	0.45	0.34	0.49	0.49	0.64	0.46	0.47	0.48	0.33	0.24	0.61	0.45
62	0.70	0.47	0.56	0.51	0.72	0.55	0.65	0.43	0.51	0.49	0.43	0.25	0.44	0.35	0.49	0.33	0.34	0.20	0.54	0.46
63	0.65	0.52	0.72	0.53	0.53	0.42	0.55	0.27	0.31	0.15	0.49	0.42	0.61	0.39	0.23	0.12	0.85	0.39	0.36	0.29
64	0.60	0.52	0.59	0.36	0.55	0.48	0.60	0.51	0.37	0.32	0.66	0.41	0.49	0.34	0.77	0.42	0.71	0.47	0.41	0.22
65	0.58	0.39	0.41	0.30	0.65	0.49	0.50	0.36	0.37	0.27	0.64	0.49	0.54	0.35	0.72	0.51	0.59	0.26	0.69	0.51
66					0.46	0.22	0.49	0.40	0.40	0.31	0.75	0.34	0.71	0.43	0.64	0.39	0.27	0.23	0.71	0.52
67					0.69	0.51	0.41	0.51	0.62	0.46	0.59	0.48	0.57	0.35	0.45	0.40	0.58	0.42	0.51	0.41
68					0.71	0.47	0.36	0.18	0.52	0.44	0.35	0.27	0.35	0.38	0.36	0.19	0.61	0.49	0.51	0.37
69					0.37	0.30	0.50	0.37	0.56	0.46	0.31	0.10	0.46	0.39	0.62	0.45	0.36	0.31	0.52	0.42
70					0.34	0.31	0.30	0.33	0.66	0.44	0.38	0.28	0.42	0.32	0.63	0.50	0.60	0.39	0.39	0.12
71					0.61	0.45	0.49	0.43	0.46	0.37	0.46	0.39	0.52	0.37	0.31	0.36	0.49	0.35	0.66	0.49
72					0.71	0.53	0.41	0.38	0.54	0.48	0.53	0.45	0.40	0.30	0.69	0.51	0.51	0.29	0.26	0.10
73					0.40	0.21	0.48	0.40	0.65	0.48	0.59	0.40	0.40	0.28	0.46	0.42	0.31	0.34	0.58	0.40
74					0.66	0.45	0.32	0.32	0.55	0.47	0.31	0.17	0.50	0.38	0.32	0.29	0.62	0.39	0.57	0.42
75					0.59	0.43	0.44	0.34	0.36	0.23	0.23	0.00	0.79	0.44	0.44	0.39	0.53	0.38	0.12	–0.10

Table 8.A.2 Item-by-item *p*-value and Point-Biserial for Mathematics

Item-by-item *p*-value and Point-Biserial for Mathematics																
STS	**2**		**3**		**4**		**5**		**6**		**7**		**Algebra I**		**Geometry**	
Items	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**
1	0.69	0.47	0.75	0.41	0.67	0.45	0.41	0.36	0.46	0.46	0.42	0.24	0.26	0.26	0.60	0.20
2	0.82	0.41	0.58	0.48	0.70	0.33	0.61	0.15	0.78	0.38	0.64	0.33	0.43	0.50	0.38	0.27
3	0.52	0.51	0.70	0.46	0.79	0.48	0.82	0.43	0.65	0.39	0.51	0.26	0.20	0.32	0.58	0.38
4	0.91	0.29	0.75	0.31	0.70	0.36	0.49	0.24	0.61	0.29	0.39	0.41	0.36	0.16	0.59	0.36
5	0.87	0.40	0.83	0.49	0.47	0.39	0.54	0.42	0.58	0.39	0.25	0.27	0.50	0.30	0.45	0.16
6	0.74	0.48	0.67	0.57	0.70	0.52	0.31	0.33	0.56	0.49	0.51	0.41	0.33	0.26	0.57	0.35
7	0.88	0.27	0.74	0.53	0.58	0.55	0.66	0.40	0.56	0.46	0.35	0.21	0.65	0.46	0.23	0.20
8	0.79	0.34	0.69	0.57	0.68	0.42	0.47	0.39	0.50	0.38	0.20	0.24	0.47	0.36	0.27	0.33
9	0.74	0.49	0.41	0.55	0.75	0.49	0.58	0.44	0.43	0.34	0.49	0.26	0.57	0.14	0.67	0.42
10	0.65	0.48	0.44	0.52	0.66	0.44	0.41	0.50	0.73	0.35	0.49	0.31	0.48	0.29	0.63	0.37
11	0.91	0.38	0.74	0.46	0.62	0.41	0.41	0.52	0.67	0.29	0.47	0.42	0.39	0.21	0.77	0.42
12	0.70	0.44	0.58	0.52	0.88	0.34	0.65	0.44	0.49	0.41	0.51	0.35	0.51	0.46	0.36	0.41
13	0.55	0.46	0.44	0.49	0.57	0.51	0.60	0.51	0.55	0.39	0.80	0.37	0.42	0.42	0.59	0.39
14	0.47	0.48	0.66	0.48	0.69	0.49	0.46	0.41	0.56	0.45	0.37	0.31	0.40	0.40	0.71	0.41
15	0.64	0.47	0.76	0.49	0.53	0.35	0.35	0.45	0.56	0.49	0.37	0.27	0.61	0.46	0.35	0.40
16	0.72	0.40	0.63	0.42	0.89	0.38	0.41	0.39	0.83	0.41	0.37	0.40	0.35	0.32	0.38	0.36
17	0.53	0.47	0.62	0.45	0.68	0.46	0.79	0.22	0.44	0.43	0.35	0.22	0.63	0.40	0.64	0.43
18	0.75	0.25	0.70	0.45	0.43	0.27	0.79	0.40	0.51	0.45	0.50	0.28	0.29	0.23	0.24	0.20
19	0.58	0.47	0.60	0.53	0.47	0.26	0.39	0.36	0.63	0.42	0.32	0.29	0.23	0.31	0.41	0.35
20	0.54	0.37	0.65	0.44	0.44	0.32	0.62	0.52	0.53	0.26	0.43	0.39	0.37	0.29	0.48	0.41
21	0.59	0.44	0.68	0.45	0.65	0.42	0.44	0.29	0.61	0.44	0.34	0.42	0.32	0.29	0.28	0.24
22	0.78	0.43	0.85	0.40	0.70	0.47	0.79	0.42	0.48	0.43	0.31	0.37	0.30	0.18	0.23	0.08
23	0.56	0.36	0.61	0.53	0.56	0.28	0.42	0.35	0.08	0.04	0.45	0.24	0.41	0.29	0.63	0.18
24	0.77	0.48	0.64	0.51	0.89	0.41	0.59	0.44	0.56	0.44	0.34	0.17	0.31	0.25	0.15	0.29
25	0.79	0.40	0.61	0.41	0.65	0.46	0.40	0.37	0.34	0.44	0.48	0.39	0.29	0.30	0.45	0.34
26	0.62	0.40	0.63	0.44	0.82	0.37	0.46	0.36	0.53	0.27	0.56	0.49	0.21	0.19	0.29	0.29
27	0.74	0.43	0.86	0.45	0.54	0.45	0.39	0.25	0.46	0.25	0.41	0.33	0.61	0.36	0.40	0.33
28	0.55	0.50	0.96	0.27	0.51	0.42	0.52	0.45	0.46	0.31	0.46	0.42	0.41	0.34	0.61	0.42
29	0.48	0.50	0.32	0.41	0.63	0.51	0.63	0.42	0.41	0.45	0.36	0.16	0.19	0.29	0.43	0.27
30	0.60	0.39	0.81	0.44	0.55	0.43	0.59	0.50	0.62	0.51	0.40	0.47	0.42	0.17	0.40	0.26
31	0.62	0.43	0.73	0.37	0.51	0.46	0.78	0.43	0.70	0.50	0.47	0.45	0.35	0.22	0.43	0.46
32	0.59	0.56	0.65	0.38	0.74	0.51	0.72	0.53	0.46	0.54	0.38	0.24	0.58	0.46	0.21	0.08
33	0.67	0.42	0.54	0.33	0.53	0.37	0.47	0.19	0.42	0.31	0.64	0.47	0.56	0.44	0.44	0.32
34	0.45	0.39	0.53	0.49	0.71	0.58	0.49	0.45	0.79	0.44	0.47	0.36	0.55	0.35	0.12	0.09
35	0.37	0.36	0.59	0.44	0.61	0.53	0.45	0.33	0.42	0.43	0.33	0.17	0.42	0.36	0.54	0.31
36	0.83	0.41	0.54	0.56	0.66	0.62	0.56	0.35	0.58	0.40	0.39	0.18	0.27	0.29	0.52	0.36
37	0.54	0.49	0.76	0.51	0.78	0.55	0.75	0.52	0.34	0.32	0.43	0.37	0.70	0.23	0.29	0.19

Item-by-item *p*-value and Point-Biserial for Mathematics

STS	2		3		4		5		6		7		Algebra I		Geometry	
Items	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**
38	0.90	0.35	0.49	0.42	0.57	0.37	0.67	0.47	0.67	0.40	0.66	0.44	0.41	0.47	0.36	0.37
39	0.50	0.42	0.66	0.55	0.56	0.46	0.38	0.37	0.38	0.34	0.32	0.39	0.34	0.31	0.16	0.01
40	0.56	0.43	0.80	0.45	0.80	0.54	0.61	0.51	0.60	0.59	0.40	0.18	0.54	0.48	0.40	0.45
41	0.71	0.48	0.70	0.46	0.80	0.54	0.49	0.29	0.72	0.45	0.38	0.35	0.16	0.01	0.54	0.36
42	0.55	0.44	0.55	0.49	0.55	0.50	0.45	0.55	0.54	0.54	0.30	0.21	0.37	0.33	0.17	0.18
43	0.84	0.29	0.90	0.25	0.72	0.51	0.66	0.45	0.58	0.50	0.81	0.31	0.30	0.35	0.33	0.22
44	0.54	0.50	0.36	0.39	0.74	0.51	0.49	0.40	0.79	0.46	0.63	0.45	0.41	0.21	0.59	0.46
45	0.43	0.27	0.73	0.28	0.75	0.56	0.63	0.46	0.47	0.45	0.25	0.23	0.39	0.32	0.35	0.37
46	0.69	0.26	0.25	0.28	0.68	0.60	0.58	0.44	0.40	0.21	0.35	0.29	0.33	0.36	0.61	0.37
47	0.73	0.36	0.73	0.28	0.63	0.51	0.57	0.22	0.53	0.30	0.13	0.16	0.36	0.34	0.39	0.37
48	0.71	0.34	0.67	0.36	0.64	0.52	0.48	0.32	0.44	0.38	0.43	0.33	0.56	0.41	0.31	0.36
49	0.65	0.31	0.61	0.43	0.65	0.50	0.54	0.31	0.38	0.30	0.58	0.38	0.55	0.42	0.29	0.10
50	0.80	0.28	0.66	0.45	0.83	0.35	0.55	0.41	0.35	0.44	0.45	0.34	0.49	0.43	0.26	0.18
51	0.76	0.43	0.69	0.37	0.46	0.22	0.44	0.31	0.43	0.34	0.49	0.36	0.25	0.08	0.17	0.04
52	0.78	0.44	0.92	0.24	0.76	0.35	0.43	0.39	0.36	0.24	0.53	0.44	0.28	0.35	0.45	0.37
53	0.90	0.31	0.64	0.40	0.44	0.28	0.65	0.33	0.23	0.12	0.56	0.44	0.22	0.10	0.38	0.16
54	0.79	0.42	0.93	0.34	0.68	0.48	0.33	0.27	0.21	0.20	0.40	0.26	0.21	0.16	0.36	0.34
55	0.77	0.30	0.71	0.47	0.86	0.39	0.49	0.45	0.30	0.32	0.25	0.38	0.28	0.18	0.19	0.04
56	0.62	0.52	0.72	0.29	0.74	0.37	0.44	0.36	0.36	0.35	0.51	0.43	0.25	0.19	0.24	0.33
57	0.92	0.28	0.85	0.25	0.63	0.47	0.71	0.38	0.47	0.49	0.60	0.26	0.26	0.16	0.33	0.01
58	0.67	0.40	0.47	0.12	0.53	0.35	0.47	0.36	0.46	0.35	0.49	0.36	0.35	0.35	0.45	0.34
59	0.90	0.40	0.60	0.47	0.58	0.40	0.52	0.19	0.42	0.33	0.26	0.22	0.41	0.26	0.45	0.30
60	0.69	0.45	0.66	0.54	0.38	0.30	0.45	0.36	0.42	0.33	0.45	0.33	0.24	0.28	0.19	0.36
61	0.82	0.37	0.88	0.43	0.71	0.48	0.51	0.50	0.35	0.16	0.53	0.32	0.19	0.16	0.44	0.37
62	0.81	0.38	0.64	0.47	0.74	0.45	0.53	0.28	0.38	0.30	0.42	0.30	0.32	0.15	0.35	0.07
63	0.85	0.30	0.87	0.45	0.38	0.30	0.69	0.42	0.40	0.34	0.51	0.36	0.24	0.10	0.39	0.35
64	0.81	0.47	0.81	0.36	0.79	0.36	0.50	0.34	0.51	0.40	0.56	0.41	0.36	0.37	0.28	0.16
65	0.47	0.51	0.71	0.43	0.30	0.13	0.48	0.35	0.36	0.28	0.42	0.40	0.35	0.30	0.40	0.33

Table 8.A.3 Item-by-item *p*-value and Point-Biserial for Grade-specific Mathematics

Item-by-item *p*-value and Point-Biserial for Grade-Specific STS				
STS	**Algebra I (Grade 8)**		**Geometry (Grade 9)**	
Items	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**
1	0.22	0.10	0.54	0.28
2	0.36	0.53	0.38	0.16
3	0.18	0.26	0.41	0.38
4	0.32	0.15	0.46	0.42
5	0.44	0.23	0.32	0.09
6	0.31	0.23	0.43	0.28
7	0.59	0.44	0.19	0.17
8	0.46	0.32	0.27	0.30
9	0.55	0.12	0.60	0.33
10	0.49	0.27	0.50	0.49
11	0.36	0.23	0.62	0.47
12	0.45	0.42	0.32	0.43
13	0.36	0.32	0.44	0.40
14	0.36	0.34	0.56	0.42
15	0.54	0.43	0.27	0.10
16	0.30	0.28	0.27	0.21
17	0.56	0.41	0.54	0.42
18	0.26	0.24	0.23	0.04
19	0.24	0.33	0.33	0.42
20	0.37	0.31	0.37	0.41
21	0.33	0.27	0.23	0.07
22	0.29	0.25	0.20	0.04
23	0.41	0.29	0.60	0.09
24	0.30	0.25	0.14	0.26
25	0.29	0.29	0.32	0.29
26	0.19	0.16	0.32	0.28
27	0.57	0.33	0.33	0.18
28	0.38	0.29	0.47	0.40
29	0.22	0.28	0.38	0.22
30	0.43	0.20	0.35	0.16
31	0.37	0.22	0.33	0.45
32	0.47	0.44	0.19	-0.01
33	0.52	0.37	0.35	0.26
34	0.52	0.39	0.12	0.20
35	0.42	0.34	0.39	0.22
36	0.23	0.38	0.40	0.20
37	0.71	0.24	0.28	0.08
38	0.29	0.45	0.25	0.41
39	0.29	0.27	0.22	-0.06
40	0.49	0.45	0.30	0.31
41	0.18	0.01	0.46	0.34
42	0.37	0.30	0.14	0.14
43	0.32	0.32	0.36	0.22
44	0.40	0.20	0.51	0.46
45	0.37	0.30	0.33	0.22
46	0.32	0.30	0.52	0.49
47	0.33	0.30	0.35	0.17
48	0.54	0.41	0.22	0.28
49	0.48	0.39	0.23	-0.04
50	0.44	0.47	0.23	0.19
51	0.24	0.06	0.20	0.02
52	0.31	0.33	0.42	0.23
53	0.16	0.14	0.40	0.06
54	0.21	0.17	0.30	0.33
55	0.29	0.23	0.21	0.02

Item-by-item *p*-value and Point-Biserial for Grade-Specific STS				
STS	**Algebra I (Grade 8)**		**Geometry (Grade 9)**	
Items	***p*-value**	**Pt-Bis**	***p*-value**	**Pt-Bis**
56	0.26	0.22	0.21	0.29
57	0.26	0.28	0.30	0.07
58	0.36	0.38	0.46	0.42
59	0.33	0.23	0.41	0.26
60	0.27	0.33	0.17	0.42
61	0.18	0.18	0.42	0.44
62	0.30	0.18	0.33	-0.08
63	0.26	0.09	0.30	0.35
64	0.31	0.31	0.32	0.30
65	0.32	0.36	0.34	0.37

Appendix 8.B—Reliability Analyses

Table 8.B.1 Subscore Reliabilities and Intercorrelations for RLA

Subscore Area	No. of Items	Intercorrelation					Reliab.	SEM
Grade 2		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	22	1.00					0.82	1.88
2. Reading Comprehension	15	0.72	1.00				0.78	1.66
3. Literary Response and Analysis	6	0.60	0.62	1.00			0.49	1.05
4. Written Conventions	14	0.73	0.69	0.59	1.00		0.78	1.55
5. Writing Strategies	8	0.55	0.58	0.48	0.59	1.00	0.55	1.29
Grade 3		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	20	1.00					0.79	1.85
2. Reading Comprehension	15	0.71	1.00				0.70	1.74
3. Literary Response and Analysis	8	0.57	0.58	1.00			0.49	1.24
4. Written Conventions	13	0.69	0.65	0.53	1.00		0.73	1.59
5. Writing Strategies	9	0.66	0.64	0.52	0.67	1.00	0.65	1.34
Grade 4		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	18	1.00					0.80	1.79
2. Reading Comprehension	15	0.70	1.00				0.72	1.75
3. Literary Response and Analysis	9	0.60	0.63	1.00			0.60	1.37
4. Written Conventions	18	0.74	0.65	0.58	1.00		0.82	1.74
5. Writing Strategies	15	0.71	0.67	0.59	0.75	1.00	0.73	1.70
Grade 5		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	14	1.00					0.65	1.71
2. Reading Comprehension	16	0.66	1.00				0.68	1.82
3. Literary Response and Analysis	12	0.64	0.65	1.00			0.67	1.56
4. Written Conventions	17	0.63	0.58	0.58	1.00		0.72	1.85
5. Writing Strategies	16	0.62	0.63	0.62	0.65	1.00	0.68	1.84
Grade 6		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	13	1.00					0.57	1.65
2. Reading Comprehension	17	0.58	1.00				0.65	1.89
3. Literary Response and Analysis	12	0.51	0.55	1.00			0.56	1.53
4. Written Conventions	16	0.57	0.62	0.52	1.00		0.76	1.77
5. Writing Strategies	17	0.53	0.59	0.50	0.66	1.00	0.64	1.92
Grade 7		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	11	1.00					0.70	1.44
2. Reading Comprehension	18	0.65	1.00				0.66	1.95
3. Literary Response and Analysis	13	0.59	0.65	1.00			0.62	1.60
4. Written Conventions	16	0.64	0.58	0.56	1.00		0.72	1.76
5. Writing Strategies	17	0.61	0.61	0.59	0.67	1.00	0.69	1.85
Grade 8		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	9	1.00					0.62	1.28
2. Reading Comprehension	18	0.65	1.00				0.71	1.91
3. Literary Response and Analysis	15	0.65	0.66	1.00			0.73	1.68
4. Written Conventions	16	0.61	0.62	0.60	1.00		0.74	1.71
5. Writing Strategies	17	0.62	0.66	0.61	0.65	1.00	0.69	1.88
Grade 9		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	8	1.00					0.67	1.11
2. Reading Comprehension	18	0.69	1.00				0.75	1.87
3. Literary Response and Analysis	16	0.65	0.68	1.00			0.67	1.78
4. Written Conventions	13	0.58	0.60	0.52	1.00		0.66	1.60
5. Writing Strategies	20	0.60	0.64	0.59	0.66	1.00	0.74	2.02
Grade 10		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	8	1.00					0.66	1.05
2. Reading Comprehension	18	0.64	1.00				0.77	1.88
3. Literary Response and Analysis	16	0.56	0.66	1.00			0.61	1.77

Subscore Area	No. of Items	Intercorrelation					Reliab.	SEM
4. Written Conventions	13	0.56	0.62	0.54	1.00		0.70	1.61
5. Writing Strategies	20	0.56	0.63	0.57	0.66	1.00	0.66	2.06
Grade 11		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	8	1.00					0.62	1.21
2. Reading Comprehension	19	0.54	1.00				0.57	2.03
3. Literary Response and Analysis	17	0.62	0.59	1.00			0.66	1.89
4. Written Conventions	9	0.50	0.46	0.49	1.00		0.52	1.29
5. Writing Strategies	22	0.64	0.56	0.63	0.61	1.00	0.79	2.11

Table 8.B.2 Subscore Reliabilities and Intercorrelations for Mathematics

Subscore Area	No. of Items	Intercorrelation						Reliab.	SEM
Grade 2		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Place Value, Addition, and Subtraction	15	1.00					–	0.77	1.59
2. Number Sense: Multiplication, Division, and Fractions	23	0.75	1.00				–	0.82	1.95
3. Algebra and Functions	6	0.59	0.62	1.00			–	0.63	1.02
4. Measurement and Geometry	14	0.63	0.67	0.50	1.00		–	0.66	1.50
5. Statistics, Data Analysis, and Probability	7	0.63	0.63	0.48	0.59	1.00	–	0.61	0.96
Grade 3		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Place Value, Fractions, and Decimals	16	1.00					–	0.79	1.63
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.78	1.00				–	0.82	1.60
3. Algebra and Functions	12	0.72	0.73	1.00			–	0.75	1.43
4. Measurement and Geometry	16	0.68	0.64	0.62	1.00		–	0.69	1.65
5. Statistics, Data Analysis, and Probability	5	0.59	0.55	0.53	0.57	1.00	–	0.59	0.79
Grade 4		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	1.00					–	0.74	1.72
2. Number Sense: Operations, and Factoring	14	0.69	1.00				–	0.79	1.59
3. Algebra and Functions	18	0.71	0.74	1.00			–	0.87	1.67
4. Measurement and Geometry	12	0.58	0.58	0.64	1.00		–	0.68	1.46
5. Statistics, Data Analysis, and Probability	4	0.42	0.42	0.45	0.42	1.00	–	0.27	0.86
Grade 5		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Estimation, Percents, and Factoring	12	1.00					–	0.69	1.46
2. Number Sense: Operations with Fractions and Decimals	17	0.63	1.00				–	0.75	1.87
3. Algebra and Functions	17	0.66	0.67	1.00			–	0.79	1.79
4. Measurement and Geometry	15	0.58	0.62	0.62	1.00		–	0.67	1.79
5. Statistics, Data Analysis, and Probability	4	0.40	0.43	0.48	0.44	1.00	–	0.38	0.91
Grade 6		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Ratios, Proportions, Percentages, and Negative Numbers	15	1.00					–	0.75	1.66
2. Number Sense: Operations with Problem Solving with Fractions	10	0.61	1.00				–	0.66	1.41
3. Algebra and Functions	19	0.67	0.64	1.00			–	0.81	1.89
4. Measurement and Geometry	10	0.50	0.47	0.51	1.00		–	0.52	1.43
5. Statistics, Data Analysis, and Probability	11	0.51	0.47	0.55	0.48	1.00	–	0.62	1.51
Grade 7		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Rational Numbers	14	1.00						0.58	1.75
2. Number Sense: Exponent, Powers and Roots	8	0.50	1.00					0.54	1.20
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.42	0.43	1.00				0.40	1.39
4. Algebra and Functions: Multistep Problems, Graphing, and Functions	15	0.58	0.48	0.47	1.00			0.67	1.77
5. Measurement and Geometry	13	0.51	0.42	0.41	0.60	1.00		0.65	1.65
6. Statistics, Data Analysis, and Probability	5	0.39	0.33	0.30	0.46	0.48	1.00	0.49	1.02

Subscore Area	No. of Items	Intercorrelation						Reliab.	SEM
Algebra I		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Properties, Operations, and Linear Equations	17	1.00				–	–	0.68	1.87
2. Graphing and Systems of Linear Equations	14	0.46	1.00			–	–	0.53	1.66
3. Quadratics and Polynomials	21	0.63	0.47	1.00		–	–	0.72	2.06
4. Functions and Rational Expressions	13	0.41	0.31	0.43	1.00	–	–	0.37	1.57
Geometry		**1**	**2**	**3**	**4**	**5**	**6**		
1. Logic and Geometric Proofs	23	1.00				–	–	0.72	2.15
2. Volume and Area Formulas	11	0.45	1.00			–	–	0.52	1.45
3. Angle Relationships, Constructions, and Lines	16	0.55	0.48	1.00		–	–	0.59	1.79
4. Trigonometry	15	0.41	0.39	0.45	1.00	–	–	0.49	1.74
Algebra I – 8		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Properties, Operations, and Linear Equations	17	1.00				–	–	0.59	1.89
2. Graphing and Systems of Linear Equations	14	0.47	1.00			–	–	0.52	1.66
3. Quadratics and Polynomials	21	0.59	0.45	1.00		–	–	0.70	2.06
4. Functions and Rational Expressions	13	0.45	0.38	0.44	1.00	–	–	0.43	1.54
Geometry – 9		**1**	**2**	**3**	**4**	**5**	**6**		
1. Logic and Geometric Proofs	23	1.00				–	–	0.67	2.17
2. Volume and Area Formulas	11	0.28	1.00			–	–	0.52	1.42
3. Angle Relationships, Constructions, and Lines	16	0.43	0.31	1.00		–	–	0.44	1.79
4. Trigonometry	15	0.44	0.35	0.40	1.00	–	–	0.40	1.74

Table 8.B.3 STS Reliabilities and SEMs by Gender

		Male			Female		
Content Area	**STS***	**N**	**Reliab.**	**SEM**	**N**	**Reliab.**	**SEM**
Reading/ Language Arts	2	5,686	0.92	3.48	5,824	0.92	3.36
	3	4,184	0.91	3.56	4,257	0.91	3.48
	4	2,225	0.93	3.82	2,232	0.93	3.72
	5	1,585	0.90	3.98	1,462	0.91	3.93
	6	1,005	0.89	3.97	956	0.89	3.92
	7	828	0.90	3.93	756	0.90	3.84
	8	737	0.92	3.87	679	0.91	3.80
	9	1,355	0.91	3.88	996	0.92	3.78
	10	791	0.90	3.89	607	0.90	3.79
	11	434	0.89	3.96	402	0.89	3.90
Mathematics	2	5,682	0.92	3.28	5,815	0.92	3.27
	3	4,150	0.94	3.27	4,229	0.93	3.30
	4	2,213	0.93	3.40	2,213	0.92	3.37
	5	1,584	0.92	3.62	1,456	0.90	3.62
	6	1,003	0.91	3.60	948	0.90	3.60
	7	811	0.88	3.68	735	0.86	3.68
	Algebra I	1,715	0.84	3.64	1,331	0.84	3.62
	Geometry	242	0.84	3.62	269	0.83	3.63
Grade-Specific	Algebra I – 8	257	0.84	3.63	234	0.82	3.60
	Geometry – 9	54	0.77	3.62	57	0.79	3.63

* STS tests named by number only are grade-level tests.

Table 8.B.4 Reliabilities and SEMs for the STS by Economic Status

		Not Disadvantaged			Disadvantaged		
Content Area	**STS***	**N**	**Reliab.**	**SEM**	**N**	**Reliab.**	**SEM**
Reading/ Language Arts	2	778	0.93	3.38	10,483	0.92	3.42
	3	532	0.92	3.48	7,769	0.92	3.52
	4	337	0.94	3.71	4,048	0.93	3.77
	5	308	0.92	3.91	2,706	0.91	3.96
	6	212	0.91	3.87	1,717	0.89	3.96
	7	223	0.92	3.81	1,344	0.90	3.90
	8	225	0.93	3.77	1,167	0.91	3.85
	9	406	0.91	3.82	1,895	0.91	3.85
	10	278	0.91	3.80	1,087	0.90	3.86
	11	165	0.89	3.93	662	0.89	3.94
Mathematics	2	782	0.93	3.20	10,464	0.92	3.28
	3	529	0.93	3.26	7,710	0.93	3.29
	4	339	0.93	3.35	4,016	0.93	3.39
	5	303	0.93	3.57	2,705	0.91	3.63
	6	211	0.92	3.56	1,708	0.90	3.61
	7	216	0.89	3.66	1,314	0.87	3.69
	Algebra I	539	0.83	3.64	2,448	0.84	3.63
	Geometry	113	0.85	3.60	391	0.83	3.63
Grade-Specific	Algebra I – 8	85	0.82	3.67	398	0.83	3.61
	Geometry – 9	38	0.78	3.58	71	0.78	3.65

* STS tests named by number only are grade-level tests.

Table 8.B.5 Reliabilities and SEMs for the STS by Special Services

		No Special Services			Special Services		
Content Area	**STS***	**N**	**Reliab.**	**SEM**	**N**	**Reliab.**	**SEM**
Reading/Language Arts	2	11,050	0.92	3.41	468	0.90	3.63
	3	8,071	0.91	3.51	372	0.90	3.67
	4	4,247	0.93	3.76	212	0.90	3.94
	5	2,869	0.91	3.96	180	0.82	3.96
	6	1,868	0.89	3.95	92	0.79	3.93
	7	1,550	0.90	3.88	37	0.81	4.01
	8	1,390	0.92	3.84	25	0.67	4.00
	9	2,348	0.91	3.84	9	–	–
	10	1,396	0.90	3.85	5	–	–
	11	834	0.89	3.94	5	–	–
Mathematics	2	11,027	0.92	3.27	478	0.92	3.50
	3	8,011	0.93	3.28	370	0.93	3.48
	4	4,216	0.93	3.37	212	0.92	3.61
	5	2,865	0.91	3.62	178	0.85	3.72
	6	1,860	0.91	3.60	90	0.82	3.66
	7	1,512	0.87	3.69	37	0.85	3.69
	Algebra I	3,036	0.84	3.63	16	0.53	3.58
	Geometry	509	0.83	3.62	3	–	–
Grade-Specific	Algebra I – 8	480	0.83	3.62	10	–	–
	Geometry – 9	110	0.78	3.62	1	–	–

* STS tests named by number only are grade-level tests.

Table 8.B.6 Reliabilities and SEMs for the STS by Attendance in U.S. Schools

		In U.S. Schools < 12 Months			In U.S. Schools ≥ 12 Months		
Content Area	**STS***	**N**	**Reliab.**	**SEM**	**N**	**Reliab.**	**SEM**
Reading/Language Arts	2	1,339	0.92	3.60	10,179	0.92	3.39
	3	1,415	0.92	3.59	7,029	0.91	3.50
	4	1,231	0.93	3.78	3,228	0.93	3.75
	5	1,142	0.92	3.94	1,907	0.90	3.95
	6	1,005	0.90	3.92	957	0.88	3.97
	7	1,159	0.91	3.86	428	0.89	3.95
	8	1,053	0.92	3.81	363	0.89	3.92
	9	2,059	0.91	3.84	299	0.92	3.89
	10	1,178	0.90	3.84	223	0.91	3.91
	11	576	0.89	3.92	263	0.90	3.96
Mathematics	2	1,358	0.92	3.51	10,147	0.92	3.24
	3	1,406	0.93	3.48	6,976	0.93	3.25
	4	1,229	0.93	3.51	3,199	0.93	3.33
	5	1,136	0.90	3.67	1,907	0.91	3.58
	6	997	0.91	3.60	955	0.89	3.59
	7	1,120	0.87	3.67	429	0.87	3.71
	Algebra I	2,486	0.85	3.63	567	0.81	3.64
	Geometry	297	0.85	3.61	215	0.81	3.64
Grade-Specific	Algebra I – 8	349	0.84	3.61	142	0.80	3.64
	Geometry – 9	80	0.72	3.59	31	0.77	3.66

* STS tests named by number only are grade-level tests.

Table 8.B.7 STS Reliabilities and SEMs by English Learner Program Participation

		EL in ELD			EL in ELD and SDAIE			EL in ELD and SDAIE with Prim. Lang. Support			EL in ELD and Acad. Subj. through Prim. Lang.			Other EL Instruct. Services			None (EL only)		
Content Area	**STS**	**N**	**Rel.**	**SEM**	**N**	**Rel.**	**SEM**	**N**	**Rel.**	**SEM**	**N**	**Rel.**	**SEM**	**N**	**Rel.**	**SEM**	**N**	**Rel.**	**SEM**
Reading/ Language Arts	2	103	0.91	3.62	488	0.91	3.62	400	0.89	3.64	10,462	0.92	3.39	13	0.92	3.61	20	0.90	3.57
	3	100	0.91	3.61	504	0.91	3.61	399	0.91	3.62	7,378	0.91	3.50	14	0.93	3.47	22	0.94	3.47
	4	121	0.92	3.82	503	0.94	3.76	367	0.93	3.83	3,418	0.93	3.75	13	0.94	3.88	14	0.93	3.69
	5	99	0.91	3.97	488	0.92	3.92	368	0.91	3.95	2,053	0.90	3.95	14	0.90	3.90	16	0.95	3.87
	6	80	0.90	3.89	445	0.90	3.90	346	0.89	3.94	1,052	0.88	3.97	5	–	–	11	0.92	3.95
	7	147	0.91	3.87	439	0.92	3.84	356	0.90	3.86	580	0.89	3.94	29	0.93	3.82	14	0.93	3.82
	8	124	0.93	3.75	447	0.92	3.82	310	0.92	3.81	476	0.90	3.90	23	0.94	3.80	13	0.94	3.71
	9	202	0.89	3.86	626	0.91	3.86	631	0.91	3.82	695	0.92	3.85	126	0.92	3.84	47	0.90	3.81
	10	164	0.90	3.81	413	0.90	3.83	302	0.90	3.85	412	0.91	3.87	61	0.91	3.83	22	0.87	3.95
	11	78	0.89	3.89	232	0.90	3.90	154	0.86	3.96	331	0.90	3.95	24	0.91	3.85	11	0.91	3.96
Mathematics	2	105	0.91	3.55	500	0.92	3.53	403	0.90	3.58	10,432	0.92	3.24	15	0.89	3.60	19	0.91	3.58
	3	98	0.93	3.50	504	0.92	3.52	395	0.92	3.52	7,325	0.93	3.25	12	0.93	3.50	22	0.94	3.44
	4	120	0.91	3.56	503	0.93	3.49	366	0.93	3.54	3,389	0.93	3.34	13	0.89	3.59	14	0.93	3.35
	5	98	0.91	3.65	484	0.91	3.67	368	0.90	3.68	2,053	0.91	3.59	12	0.85	3.77	16	0.90	3.69
	6	79	0.91	3.57	443	0.92	3.58	346	0.90	3.61	1,045	0.90	3.60	5	–	–	11	0.94	3.64
	7	140	0.87	3.67	421	0.88	3.66	347	0.87	3.67	580	0.86	3.71	26	0.91	3.56	13	0.91	3.62
	Algebra I	307	0.84	3.63	832	0.86	3.62	741	0.85	3.62	966	0.82	3.64	119	0.78	3.66	33	0.82	3.63
	Geometry	52	0.85	3.60	99	0.86	3.60	59	0.84	3.61	273	0.81	3.64	10	–	–	17	0.73	3.53
Grade-Specific	Algebra I – 8	48	0.91	3.55	170	0.81	3.61	95	0.78	3.62	162	0.82	3.62	3	–	–	6	–	–
	Geometry – 9	14	–	–	33	0.71	3.56	10	–	–	37	0.76	3.64	1	–	–	16	0.41	3.51

* STS tests named by number only are grade-level tests.

Table 8.B.8 Subscore Reliabilities and SEM for RLA by Gender/Economic Status

		Male		Female		Not Econ. Dis.		Econ. Dis.	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 2									
1. Word Analysis and Vocabulary Development	22	0.82	1.92	0.80	1.84	0.82	1.86	0.82	1.88
2. Reading Comprehension	15	0.77	1.70	0.79	1.63	0.80	1.63	0.78	1.67
3. Literary Response and Analysis	6	0.46	1.07	0.50	1.03	0.51	1.03	0.49	1.05
4. Written Conventions	14	0.77	1.58	0.78	1.52	0.80	1.51	0.78	1.56
5. Writing Strategies	8	0.54	1.28	0.55	1.30	0.58	1.28	0.55	1.29
Grade 3									
1. Word Analysis and Vocabulary Development	20	0.79	1.88	0.79	1.82	0.80	1.82	0.79	1.85
2. Reading Comprehension	15	0.68	1.76	0.70	1.72	0.70	1.73	0.70	1.74
3. Literary Response and Analysis	8	0.47	1.25	0.50	1.23	0.55	1.22	0.48	1.24
4. Written Conventions	13	0.74	1.59	0.72	1.58	0.75	1.56	0.73	1.59
5. Writing Strategies	9	0.65	1.34	0.63	1.33	0.67	1.30	0.64	1.34
Grade 4									
1. Word Analysis and Vocabulary Development	18	0.80	1.83	0.79	1.74	0.84	1.74	0.80	1.79
2. Reading Comprehension	15	0.72	1.75	0.72	1.74	0.75	1.73	0.72	1.75
3. Literary Response and Analysis	9	0.60	1.36	0.57	1.37	0.65	1.34	0.59	1.37
4. Written Conventions	18	0.81	1.79	0.80	1.68	0.83	1.72	0.81	1.74
5. Writing Strategies	15	0.73	1.71	0.71	1.69	0.75	1.67	0.73	1.70
Grade 5									
1. Word Analysis and Vocabulary Development	14	0.66	1.71	0.65	1.70	0.69	1.69	0.65	1.71
2. Reading Comprehension	16	0.65	1.83	0.69	1.81	0.73	1.79	0.67	1.82
3. Literary Response and Analysis	12	0.64	1.57	0.68	1.55	0.70	1.57	0.67	1.56
4. Written Conventions	17	0.71	1.88	0.71	1.82	0.75	1.82	0.72	1.86
5. Writing Strategies	16	0.65	1.85	0.69	1.83	0.74	1.81	0.67	1.84
Grade 6									
1. Word Analysis and Vocabulary Development	13	0.57	1.65	0.56	1.64	0.68	1.61	0.54	1.65
2. Reading Comprehension	17	0.65	1.89	0.63	1.89	0.65	1.87	0.64	1.89
3. Literary Response and Analysis	12	0.54	1.55	0.55	1.50	0.61	1.48	0.55	1.53
4. Written Conventions	16	0.75	1.79	0.76	1.74	0.77	1.73	0.76	1.77
5. Writing Strategies	17	0.63	1.91	0.64	1.92	0.69	1.89	0.63	1.92
Grade 7									
1. Word Analysis and Vocabulary Development	11	0.71	1.45	0.69	1.42	0.73	1.38	0.69	1.44
2. Reading Comprehension	18	0.67	1.95	0.62	1.96	0.72	1.93	0.64	1.96
3. Literary Response and Analysis	13	0.59	1.61	0.62	1.58	0.66	1.58	0.60	1.60
4. Written Conventions	16	0.71	1.79	0.70	1.72	0.73	1.73	0.72	1.77
5. Writing Strategies	17	0.67	1.87	0.68	1.82	0.71	1.82	0.68	1.85
Grade 8									
1. Word Analysis and Vocabulary Development	9	0.64	1.29	0.60	1.27	0.67	1.23	0.61	1.29
2. Reading Comprehension	18	0.73	1.91	0.68	1.90	0.75	1.88	0.70	1.91
3. Literary Response and Analysis	15	0.74	1.70	0.73	1.65	0.79	1.61	0.72	1.69
4. Written Conventions	16	0.75	1.75	0.72	1.67	0.74	1.71	0.75	1.72
5. Writing Strategies	17	0.69	1.88	0.69	1.88	0.73	1.86	0.69	1.88
Grade 9									
1. Word Analysis and Vocabulary Development	8	0.69	1.13	0.63	1.09	0.69	1.08	0.67	1.12
2. Reading Comprehension	18	0.75	1.88	0.75	1.85	0.74	1.88	0.76	1.87
3. Literary Response and Analysis	16	0.66	1.81	0.67	1.75	0.65	1.78	0.67	1.78
4. Written Conventions	13	0.64	1.62	0.68	1.56	0.68	1.57	0.66	1.60
5. Writing Strategies	20	0.71	2.04	0.76	2.01	0.76	2.01	0.73	2.03

		Male		Female		Not Econ. Dis.		Econ. Dis.	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 10									
1. Word Analysis and Vocabulary Development	8	0.68	1.10	0.61	1.00	0.65	1.00	0.66	1.07
2. Reading Comprehension	18	0.77	1.90	0.77	1.85	0.79	1.83	0.77	1.89
3. Literary Response and Analysis	16	0.61	1.78	0.59	1.75	0.60	1.75	0.61	1.77
4. Written Conventions	13	0.66	1.64	0.71	1.56	0.67	1.61	0.70	1.61
5. Writing Strategies	20	0.66	2.05	0.64	2.07	0.68	2.06	0.65	2.06
Grade 11									
1. Word Analysis and Vocabulary Development	8	0.63	1.23	0.61	1.18	0.61	1.21	0.63	1.21
2. Reading Comprehension	19	0.50	2.05	0.60	2.02	0.55	2.05	0.56	2.03
3. Literary Response and Analysis	17	0.66	1.91	0.64	1.87	0.63	1.89	0.66	1.89
4. Written Conventions	9	0.48	1.31	0.53	1.26	0.54	1.26	0.52	1.29
5. Writing Strategies	22	0.79	2.11	0.78	2.11	0.77	2.11	0.79	2.11

Table 8.B.9 Subscore Reliabilities and SEM for Mathematics by Gender/Economic Status

		Male		Female		Not Econ. Dis.		Econ. Dis.	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 2									
1. Number Sense: Place Value, Addition, and Subtraction	15	0.77	1.60	0.76	1.58	0.77	1.56	0.77	1.59
2. Number Sense: Multiplication, Division, and Fractions	23	0.83	1.96	0.82	1.94	0.84	1.90	0.82	1.96
3. Algebra and Functions	6	0.63	1.01	0.63	1.02	0.66	0.99	0.63	1.02
4. Measurement and Geometry	14	0.68	1.49	0.66	1.51	0.68	1.46	0.66	1.50
5. Statistics, Data Analysis and Probability	7	0.61	0.97	0.60	0.96	0.64	0.95	0.61	0.96
Grade 3									
1. Number Sense: Place Value, Fractions, and Decimals	16	0.80	1.61	0.78	1.64	0.81	1.62	0.79	1.63
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.83	1.59	0.81	1.60	0.83	1.56	0.82	1.60
3. Algebra and Functions	12	0.77	1.42	0.74	1.45	0.77	1.41	0.75	1.44
4. Measurement and Geometry	16	0.71	1.65	0.68	1.65	0.70	1.66	0.69	1.65
5. Statistics, Data Analysis and Probability	5	0.61	0.79	0.58	0.79	0.62	0.79	0.59	0.79
Grade 4									
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	0.77	1.70	0.72	1.73	0.77	1.69	0.74	1.72
2. Number Sense: Operations and Factoring	14	0.80	1.59	0.78	1.58	0.79	1.57	0.79	1.59
3. Algebra and Functions	18	0.88	1.68	0.86	1.66	0.88	1.65	0.87	1.67
4. Measurement and Geometry	12	0.69	1.47	0.67	1.45	0.69	1.46	0.68	1.46
5. Statistics, Data Analysis, and Probability	4	0.30	0.87	0.24	0.83	0.27	0.86	0.27	0.86
Grade 5									
1. Number Sense: Estimation, Percents, and Factoring	12	0.72	1.47	0.66	1.45	0.73	1.44	0.69	1.46
2. Number Sense: Operations with Fractions and Decimals	17	0.76	1.86	0.73	1.87	0.79	1.84	0.74	1.87
3. Algebra and Functions	17	0.80	1.81	0.78	1.78	0.82	1.76	0.79	1.80
4. Measurement and Geometry	15	0.69	1.78	0.63	1.80	0.71	1.77	0.66	1.79
5. Statistics, Data Analysis, and Probability	4	0.42	0.91	0.34	0.92	0.43	0.90	0.38	0.91
Grade 6									
1. Number Sense: Ratios, Proportions, Percentages and Negative Numbers	15	0.76	1.66	0.73	1.66	0.78	1.63	0.74	1.66
2. Number Sense: Operations with Problem Solving with Fractions	10	0.68	1.40	0.64	1.42	0.70	1.39	0.66	1.41
3. Algebra and Functions	19	0.81	1.89	0.80	1.88	0.84	1.84	0.80	1.90
4. Measurement and Geometry	10	0.55	1.43	0.49	1.43	0.60	1.41	0.51	1.44
5. Statistics, Data Analysis, and Probability	11	0.61	1.51	0.62	1.51	0.67	1.51	0.61	1.51
Grade 7									
1. Number Sense: Rational Numbers	14	0.61	1.74	0.55	1.75	0.64	1.73	0.57	1.75
2. Number Sense: Exponent, Powers and Roots	8	0.52	1.22	0.56	1.19	0.54	1.23	0.54	1.20
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.42	1.39	0.37	1.39	0.47	1.38	0.39	1.39
4. Algebra and Functions: Multistep Problems, Graphing and Functions	15	0.68	1.76	0.67	1.78	0.70	1.76	0.67	1.77

		Male		Female		Not Econ. Dis.		Econ. Dis.	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
5. Measurement and Geometry	13	0.66	1.65	0.63	1.64	0.69	1.61	0.64	1.65
6. Statistics, Data Analysis, and Probability	5	0.52	1.01	0.46	1.02	0.49	1.01	0.49	1.02
Algebra I									
1. Number Properties, Operations, and Linear Equations	17	0.69	1.87	0.66	1.87	0.69	1.87	0.68	1.87
2. Graphing and Systems of Linear Equations	14	0.54	1.66	0.52	1.66	0.50	1.66	0.54	1.66
3. Quadratics and Polynomials	21	0.71	2.05	0.72	2.06	0.69	2.07	0.72	2.05
4. Functions and Rational Expressions	13	0.36	1.59	0.39	1.56	0.36	1.59	0.37	1.57
Geometry									
1. Logic and Geometric Proofs	23	0.72	2.15	0.72	2.14	0.72	2.15	0.72	2.15
2. Volume and Area Formulas	11	0.51	1.45	0.54	1.45	0.51	1.45	0.53	1.45
3. Angle Relationships, Constructions, and Lines	16	0.63	1.77	0.54	1.81	0.54	1.78	0.60	1.79
4. Trigonometry	15	0.50	1.73	0.47	1.75	0.57	1.73	0.46	1.74

Table 8.B.10 Subscore Reliabilities and SEM for Grade-specific Tests by Gender/Economic Status

		Male		Female		Not Econ. Dis.		Econ. Dis.	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Algebra I – 8									
1. Number Properties, Operations, and Linear Equations	17	0.62	1.88	0.53	1.89	0.59	1.90	0.58	1.89
2. Graphing and Systems of Linear Equations	14	0.55	1.66	0.48	1.66	0.60	1.65	0.50	1.66
3. Quadratics and Polynomials	21	0.72	2.05	0.66	2.07	0.67	2.10	0.70	2.05
4. Functions and Rational Expressions	13	0.34	1.59	0.48	1.50	0.36	1.58	0.43	1.54
Geometry – 9									
1. Logic and Geometric Proofs	23	0.73	2.16	0.61	2.17	0.61	2.16	0.70	2.17
2. Volume and Area Formulas	11	0.49	1.39	0.52	1.46	0.47	1.38	0.51	1.45
3. Angle Relationships, Constructions, and Lines	16	0.49	1.78	0.40	1.80	0.37	1.77	0.47	1.79
4. Trigonometry	15	0.18	1.77	0.50	1.74	0.34	1.77	0.40	1.73

Table 8.B.11 Subscore Reliabilities and SEM for RLA by Special Services/Attendance in U.S. Schools

		No Spec. Serv.		Spec. Serv.		In U.S. Schools <12 Months		In U.S. Schools ≥ 12 Months	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 2									
1. Word Analysis and Vocabulary Development	22	0.81	1.87	0.79	2.09	0.82	2.05	0.80	1.85
2. Reading Comprehension	15	0.78	1.66	0.73	1.75	0.76	1.73	0.78	1.65
3. Literary Response and Analysis	6	0.49	1.04	0.34	1.12	0.46	1.11	0.47	1.04
4. Written Conventions	14	0.78	1.55	0.72	1.67	0.75	1.65	0.77	1.54
5. Writing Strategies	8	0.55	1.29	0.46	1.26	0.50	1.25	0.55	1.29
Grade 3									
1. Word Analysis and Vocabulary Development	20	0.79	1.84	0.78	2.01	0.81	1.91	0.79	1.84
2. Reading Comprehension	15	0.69	1.74	0.65	1.76	0.71	1.75	0.69	1.73
3. Literary Response and Analysis	8	0.49	1.23	0.31	1.29	0.50	1.23	0.49	1.24
4. Written Conventions	13	0.73	1.58	0.68	1.64	0.73	1.62	0.72	1.57
5. Writing Strategies	9	0.64	1.33	0.57	1.36	0.63	1.36	0.64	1.33
Grade 4									
1. Word Analysis and Vocabulary Development	18	0.79	1.78	0.76	1.93	0.79	1.80	0.80	1.77
2. Reading Comprehension	15	0.72	1.75	0.59	1.76	0.72	1.72	0.73	1.75
3. Literary Response and Analysis	9	0.59	1.37	0.45	1.37	0.57	1.38	0.61	1.36
4. Written Conventions	18	0.81	1.73	0.75	1.91	0.83	1.76	0.80	1.72
5. Writing Strategies	15	0.72	1.70	0.68	1.72	0.73	1.70	0.73	1.70
Grade 5									
1. Word Analysis and Vocabulary Development	14	0.66	1.70	0.38	1.72	0.69	1.69	0.63	1.71
2. Reading Comprehension	16	0.68	1.82	0.53	1.79	0.67	1.82	0.68	1.81
3. Literary Response and Analysis	12	0.67	1.56	0.40	1.54	0.70	1.55	0.66	1.56
4. Written Conventions	17	0.73	1.85	0.61	1.91	0.76	1.84	0.71	1.84
5. Writing Strategies	16	0.68	1.84	0.45	1.86	0.70	1.82	0.68	1.85
Grade 6									
1. Word Analysis and Vocabulary Development	13	0.56	1.65	0.17	1.57	0.63	1.63	0.48	1.66
2. Reading Comprehension	17	0.64	1.89	0.54	1.87	0.67	1.89	0.62	1.89
3. Literary Response and Analysis	12	0.55	1.52	0.53	1.57	0.56	1.49	0.56	1.55
4. Written Conventions	16	0.75	1.76	0.66	1.79	0.77	1.76	0.75	1.77
5. Writing Strategies	17	0.64	1.92	0.46	1.88	0.65	1.91	0.64	1.93
Grade 7									
1. Word Analysis and Vocabulary Development	11	0.70	1.43	0.29	1.59	0.71	1.41	0.64	1.50
2. Reading Comprehension	18	0.65	1.95	0.64	1.91	0.66	1.95	0.63	1.96
3. Literary Response and Analysis	13	0.62	1.60	0.35	1.64	0.63	1.58	0.58	1.62
4. Written Conventions	16	0.72	1.76	0.58	1.84	0.74	1.75	0.67	1.78
5. Writing Strategies	17	0.68	1.85	0.50	1.91	0.70	1.83	0.64	1.89
Grade 8									
1. Word Analysis and Vocabulary Development	9	0.62	1.28	0.51	1.35	0.64	1.26	0.54	1.34
2. Reading Comprehension	18	0.71	1.91	N/A	N/A	0.73	1.89	0.63	1.94
3. Literary Response and Analysis	15	0.74	1.68	N/A	N/A	0.75	1.66	0.68	1.72
4. Written Conventions	16	0.75	1.71	0.30	1.90	0.76	1.70	0.69	1.76
5. Writing Strategies	17	0.70	1.88	0.59	1.87	0.72	1.87	0.61	1.90
Grade 9									
1. Word Analysis and Vocabulary Development	8	0.67	1.11	N/A	N/A	0.67	1.11	0.67	1.17
2. Reading Comprehension	18	0.75	1.87	N/A	N/A	0.75	1.87	0.75	1.89
3. Literary Response and Analysis	16	0.67	1.78	N/A	N/A	0.67	1.78	0.66	1.82
4. Written Conventions	13	0.66	1.60	N/A	N/A	0.66	1.60	0.70	1.59

		No Spec. Serv.		Spec. Serv.		In U.S. Schools <12 Months		In U.S. Schools ≥ 12 Months	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
5. Writing Strategies	20	0.74	2.03	N/A	N/A	0.74	2.03	0.76	2.02
Grade 10									
1. Word Analysis and Vocabulary Development	8	0.66	1.06	N/A	N/A	0.64	1.04	0.71	1.14
2. Reading Comprehension	18	0.77	1.88	N/A	N/A	0.76	1.88	0.80	1.86
3. Literary Response and Analysis	16	0.61	1.77	N/A	N/A	0.60	1.76	0.65	1.80
4. Written Conventions	13	0.70	1.61	N/A	N/A	0.69	1.60	0.70	1.64
5. Writing Strategies	20	0.66	2.06	N/A	N/A	0.66	2.06	0.64	2.06
Grade 11									
1. Word Analysis and Vocabulary Development	8	0.62	1.21	N/A	N/A	0.63	1.19	0.59	1.25
2. Reading Comprehension	19	0.56	2.03	N/A	N/A	0.54	2.04	0.56	2.03
3. Literary Response and Analysis	17	0.66	1.89	N/A	N/A	0.64	1.88	0.67	1.91
4. Written Conventions	9	0.52	1.29	N/A	N/A	0.49	1.29	0.57	1.29
5. Writing Strategies	22	0.79	2.11	N/A	N/A	0.78	2.11	0.80	2.11

Table 8.B.12 Subscore Reliabilities and SEM for Mathematics by Special Services/Attendance in U.S. Schools

		No Spec. Serv.		Spec. Serv.		In U.S. Schools <12 Months		In U.S. Schools ≥12 Months	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 2									
1. Number Sense: Place Value, Addition, and Subtraction	15	0.77	1.58	0.76	1.69	0.75	1.70	0.76	1.57
2. Number Sense: Multiplication, Division, and Fractions	23	0.82	1.95	0.82	2.08	0.82	2.05	0.82	1.94
3. Algebra and Functions	6	0.63	1.01	0.53	1.07	0.56	1.07	0.63	1.01
4. Measurement and Geometry	14	0.66	1.50	0.70	1.61	0.69	1.63	0.65	1.48
5. Statistics, Data Analysis and Probability	7	0.60	0.96	0.60	1.09	0.63	1.09	0.57	0.94
Grade 3									
1. Number Sense: Place Value, Fractions, and Decimals	16	0.79	1.62	0.79	1.73	0.79	1.73	0.78	1.61
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.82	1.59	0.83	1.68	0.81	1.67	0.82	1.58
3. Algebra and Functions	12	0.75	1.43	0.76	1.48	0.71	1.51	0.76	1.42
4. Measurement and Geometry	16	0.69	1.64	0.70	1.75	0.67	1.74	0.68	1.63
5. Statistics, Data Analysis and Probability	5	0.59	0.78	0.58	0.91	0.60	0.92	0.56	0.76
Grade 4									
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	0.74	1.71	0.77	1.83	0.76	1.76	0.72	1.69
2. Number Sense: Operations and Factoring	14	0.79	1.58	0.74	1.66	0.77	1.63	0.79	1.56
3. Algebra and Functions	18	0.87	1.66	0.86	1.82	0.86	1.77	0.87	1.63
4. Measurement and Geometry	12	0.68	1.46	0.62	1.54	0.66	1.52	0.68	1.44
5. Statistics, Data Analysis, and Probability	4	0.28	0.85	0.07	0.93	0.32	0.85	0.25	0.86
Grade 5									
1. Number Sense: Estimation, Percents, and Factoring	12	0.70	1.46	0.58	1.53	0.70	1.49	0.66	1.44
2. Number Sense: Operations with Fractions and Decimals	17	0.75	1.87	0.64	1.86	0.74	1.87	0.75	1.86
3. Algebra and Functions	17	0.79	1.79	0.71	1.90	0.76	1.85	0.78	1.75
4. Measurement and Geometry	15	0.67	1.79	0.53	1.82	0.63	1.80	0.67	1.78
5. Statistics, Data Analysis, and Probability	4	0.39	0.91	0.18	0.95	0.35	0.93	0.40	0.90
Grade 6									
1. Number Sense: Ratios, Proportions, Percentages and Negative Numbers	15	0.75	1.65	0.62	1.75	0.76	1.66	0.72	1.65
2. Number Sense: Operations with Problem Solving with Fractions	10	0.66	1.41	0.56	1.44	0.66	1.41	0.65	1.41
3. Algebra and Functions	19	0.81	1.89	0.72	1.89	0.83	1.88	0.77	1.88
4. Measurement and Geometry	10	0.52	1.43	0.38	1.42	0.53	1.41	0.49	1.45
5. Statistics, Data Analysis, and Probability	11	0.62	1.51	0.22	1.53	0.63	1.50	0.59	1.52
Grade 7									
1. Number Sense: Rational Numbers	14	0.58	1.75	0.60	1.73	0.58	1.75	0.58	1.75
2. Number Sense: Exponent, Powers and Roots	8	0.54	1.21	0.42	1.19	0.54	1.20	0.52	1.22
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.40	1.39	0.46	1.39	0.42	1.38	0.33	1.42
4. Algebra and Functions: Multistep Problems, Graphing and Functions	15	0.68	1.77	0.68	1.77	0.68	1.76	0.66	1.79

		No Spec. Serv.		Spec. Serv.		In U.S. Schools <12 Months		In U.S. Schools ≥12 Months	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
5. Measurement and Geometry	13	0.65	1.64	0.49	1.69	0.65	1.64	0.63	1.65
6. Statistics, Data Analysis, and Probability	5	0.49	1.02	0.54	0.97	0.49	1.02	0.51	1.01
Algebra I									
1. Number Properties, Operations, and Linear Equations	17	0.68	1.87	0.40	1.84	0.68	1.87	0.66	1.88
2. Graphing and Systems of Linear Equations	14	0.53	1.66	N/A	N/A	0.54	1.66	0.50	1.67
3. Quadratics and Polynomials	21	0.72	2.06	0.26	2.03	0.73	2.05	0.67	2.07
4. Functions and Rational Expressions	13	0.37	1.57	N/A	N/A	0.38	1.58	0.30	1.55
Geometry									
1. Logic and Geometric Proofs	23	0.72	2.14	N/A	N/A	0.75	2.13	0.67	2.16
2. Volume and Area Formulas	11	0.53	1.45	N/A	N/A	0.51	1.46	0.54	1.44
3. Angle Relationships, Constructions, and Lines	16	0.59	1.79	N/A	N/A	0.61	1.76	0.55	1.82
4. Trigonometry	15	0.49	1.74	N/A	N/A	0.50	1.75	0.47	1.73

Table 8.B.13 Subscore Reliabilities and SEM for Grade Specific Tests by Special Services/Attendance in U.S. Schools

		No Spec. Serv.		Spec. Serv.		In U.S. Schools <12 Months		In U.S. Schools ≥12 Months	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Algebra I – 8									
1. Number Properties, Operations, and Linear Equations	17	0.59	1.89	N/A	N/A	0.59	1.89	0.56	1.89
2. Graphing and Systems of Linear Equations	14	0.52	1.66	N/A	N/A	0.50	1.66	0.56	1.66
3. Quadratics and Polynomials	21	0.70	2.06	N/A	N/A	0.71	2.05	0.66	2.07
4. Functions and Rational Expressions	13	0.42	1.55	N/A	N/A	0.44	1.54	0.35	1.56
Geometry – 9									
1. Logic and Geometric Proofs	23	0.68	2.17	N/A	N/A	0.61	2.14	0.51	2.19
2. Volume and Area Formulas	11	0.51	1.43	N/A	N/A	0.37	1.44	0.72	1.35
3. Angle Relationships, Constructions, and Lines	16	0.45	1.78	N/A	N/A	0.42	1.75	0.32	1.84
4. Trigonometry	15	0.38	1.75	N/A	N/A	0.28	1.74	0.46	1.77

Table 8.B.14 Subscore Reliabilities and SEM for RLA by English Learner Program Participation

Subscore Reliabilities and SEM for RLA by EL Program Participation													
		EL in ELD		EL in ELD and SDAIE		EL in ELD and SDAIE with Prim. Lang. Support		EL in ELD and Acad. Subj. through Prim. Lang.		Other EL Instruct. Services		None (EL only)	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 2													
1. Word Analysis and Vocabulary Development	22	0.80	2.10	0.80	2.09	0.79	2.09	0.80	1.86	0.80	2.04	0.73	2.06
2. Reading Comprehension	15	0.73	1.75	0.75	1.74	0.71	1.76	0.78	1.66	0.83	1.69	0.71	1.70
3. Literary Response and Analysis	6	0.40	1.13	0.48	1.10	0.31	1.14	0.47	1.04	N/A	N/A	0.28	1.11
4. Written Conventions	14	0.67	1.70	0.71	1.66	0.70	1.66	0.77	1.54	0.75	1.70	0.76	1.62
5. Writing Strategies	8	0.60	1.14	0.44	1.25	0.39	1.24	0.55	1.29	0.42	1.27	0.61	1.27
Grade 3													
1. Word Analysis and Vocabulary Development	20	0.82	1.91	0.80	1.95	0.81	1.95	0.79	1.83	0.78	1.86	0.79	1.87
2. Reading Comprehension	15	0.67	1.76	0.69	1.76	0.70	1.75	0.69	1.73	0.77	1.65	0.76	1.70
3. Literary Response and Analysis	8	0.43	1.25	0.55	1.22	0.44	1.25	0.49	1.24	0.70	1.15	0.70	1.19
4. Written Conventions	13	0.71	1.63	0.70	1.64	0.69	1.64	0.73	1.57	0.65	1.62	0.82	1.56
5. Writing Strategies	9	0.62	1.36	0.66	1.34	0.59	1.38	0.64	1.33	0.77	1.27	0.77	1.26
Grade 4													
1. Word Analysis and Vocabulary Development	18	0.75	1.81	0.80	1.79	0.78	1.83	0.80	1.77	0.73	1.97	0.79	1.77
2. Reading Comprehension	15	0.69	1.73	0.72	1.72	0.73	1.71	0.73	1.75	0.66	1.75	0.67	1.70
3. Literary Response and Analysis	9	0.37	1.41	0.61	1.36	0.55	1.38	0.60	1.36	0.68	1.38	0.58	1.36
4. Written Conventions	18	0.79	1.79	0.84	1.74	0.83	1.80	0.80	1.72	0.86	1.84	0.80	1.73
5. Writing Strategies	15	0.65	1.71	0.74	1.69	0.72	1.72	0.73	1.69	0.75	1.72	0.83	1.56
Grade 5													
1. Word Analysis and Vocabulary Development	14	0.73	1.68	0.71	1.69	0.67	1.69	0.63	1.71	0.35	1.75	0.89	1.47
2. Reading Comprehension	16	0.60	1.87	0.71	1.81	0.64	1.83	0.68	1.81	0.51	1.87	0.72	1.81
3. Literary Response and Analysis	12	0.74	1.51	0.72	1.54	0.65	1.56	0.66	1.56	0.75	1.49	0.83	1.51
4. Written Conventions	17	0.74	1.88	0.78	1.83	0.75	1.84	0.71	1.85	0.81	1.77	0.74	1.93
5. Writing Strategies	16	0.68	1.83	0.71	1.82	0.69	1.84	0.68	1.85	0.46	1.82	0.79	1.73

Subscore Reliabilities and SEM for RLA by EL Program Participation

		EL in ELD		EL in ELD and SDAIE		EL in ELD and SDAIE with Prim. Lang. Support		EL in ELD and Acad. Subj. through Prim. Lang.		Other EL Instruct. Services		None (EL only)	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 6													
1. Word Analysis and Vocabulary Development	13	0.64	1.62	0.65	1.62	0.61	1.64	0.48	1.66	N/A	N/A	N/A	N/A
2. Reading Comprehension	17	0.67	1.90	0.66	1.87	0.65	1.90	0.63	1.89	N/A	N/A	N/A	N/A
3. Literary Response and Analysis	12	0.67	1.45	0.56	1.48	0.54	1.49	0.55	1.55	N/A	N/A	N/A	N/A
4. Written Conventions	16	0.71	1.77	0.78	1.74	0.75	1.77	0.75	1.77	N/A	N/A	N/A	N/A
5. Writing Strategies	17	0.66	1.88	0.67	1.91	0.59	1.92	0.64	1.92	N/A	N/A	N/A	N/A
Grade 7													
1. Word Analysis and Vocabulary Development	11	0.73	1.40	0.73	1.41	0.71	1.40	0.64	1.49	0.76	1.41	0.76	1.42
2. Reading Comprehension	18	0.66	1.95	0.69	1.93	0.63	1.96	0.64	1.96	0.64	1.95	0.79	1.84
3. Literary Response and Analysis	13	0.63	1.61	0.68	1.57	0.59	1.58	0.58	1.61	0.64	1.61	0.26	1.69
4. Written Conventions	16	0.72	1.76	0.76	1.74	0.71	1.77	0.68	1.78	0.81	1.69	0.87	1.66
5. Writing Strategies	17	0.68	1.83	0.72	1.82	0.69	1.83	0.65	1.88	0.74	1.82	0.79	1.77
Grade 8													
1. Word Analysis and Vocabulary Development	9	0.66	1.24	0.63	1.26	0.63	1.26	0.58	1.32	0.76	1.24	0.40	1.36
2. Reading Comprehension	18	0.71	1.89	0.74	1.89	0.72	1.90	0.66	1.93	0.71	1.94	0.81	1.86
3. Literary Response and Analysis	15	0.77	1.62	0.75	1.66	0.74	1.68	0.69	1.71	0.80	1.66	0.79	1.61
4. Written Conventions	16	0.75	1.65	0.76	1.71	0.75	1.69	0.71	1.74	0.79	1.71	0.87	1.58
5. Writing Strategies	17	0.72	1.86	0.71	1.87	0.72	1.86	0.64	1.89	0.77	1.89	0.44	1.93
Grade 9													
1. Word Analysis and Vocabulary Development	8	0.63	1.13	0.68	1.13	0.66	1.09	0.66	1.13	0.73	1.09	0.72	1.00
2. Reading Comprehension	18	0.74	1.88	0.76	1.87	0.75	1.86	0.76	1.87	0.72	1.90	0.72	1.87
3. Literary Response and Analysis	16	0.57	1.82	0.67	1.79	0.68	1.77	0.68	1.78	0.66	1.79	0.73	1.74
4. Written Conventions	13	0.57	1.59	0.65	1.61	0.67	1.58	0.68	1.60	0.75	1.58	0.53	1.61
5. Writing Strategies	20	0.71	2.02	0.72	2.04	0.74	2.03	0.76	2.02	0.76	2.03	0.70	2.06
Grade 10													
1. Word Analysis and Vocabulary Development	8	0.64	0.98	0.60	1.06	0.67	1.04	0.71	1.09	0.69	1.00	0.28	1.16
2. Reading Comprehension	18	0.78	1.85	0.75	1.89	0.75	1.88	0.80	1.86	0.78	1.90	0.75	1.96
3. Literary Response and Analysis	16	0.64	1.74	0.60	1.76	0.61	1.77	0.63	1.79	0.60	1.79	0.45	1.81

Subscore Reliabilities and SEM for RLA by EL Program Participation													
		EL in ELD		EL in ELD and SDAIE		EL in ELD and SDAIE with Prim. Lang. Support		EL in ELD and Acad. Subj. through Prim. Lang.		Other EL Instruct. Services		None (EL only)	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
4. Written Conventions	13	0.66	1.62	0.69	1.61	0.66	1.61	0.74	1.60	0.71	1.60	0.47	1.72
5. Writing Strategies	20	0.61	2.08	0.69	2.04	0.59	2.07	0.68	2.07	0.71	2.03	0.59	2.05
Grade 11													
1. Word Analysis and Vocabulary Development	8	0.68	1.14	0.65	1.18	0.55	1.23	0.59	1.24	0.72	1.19	0.71	1.16
2. Reading Comprehension	19	0.56	2.03	0.59	2.03	0.45	2.04	0.58	2.03	0.40	2.06	0.36	2.13
3. Literary Response and Analysis	17	0.67	1.84	0.64	1.87	0.58	1.91	0.67	1.90	0.73	1.79	0.79	1.81
4. Written Conventions	9	0.40	1.30	0.50	1.29	0.53	1.26	0.54	1.29	0.42	1.29	0.67	1.22
5. Writing Strategies	22	0.77	2.13	0.79	2.09	0.73	2.14	0.80	2.11	0.82	2.05	0.85	2.09

Table 8.B.15 Subscore Reliabilities and SEM for Mathematics by English Learner Program Participation

Subscore Reliabilities and SEM for Mathematics by EL Program Participation													
		EL in ELD		EL in ELD and SDAIE		EL in ELD and SDAIE with Prim. Lang. Support		EL in ELD and Acad. Subj. through Prim. Lang.		Other EL Instruct. Services		None (EL only)	
Subscore Area	# of Items	Reliab.	SEM	Reliab.	SEM	Reliab.	SEM	Reliab.	SEM	Reliab.	SEM	Reliab.	SEM
Grade 2													
1. Number Sense: Place Value, Addition, and Subtraction	15	0.70	1.74	0.74	1.71	0.68	1.74	0.76	1.57	0.69	1.74	0.62	1.76
2. Number Sense: Multiplication, Division, and Fractions	23	0.80	2.06	0.82	2.07	0.78	2.08	0.82	1.94	0.79	2.06	0.86	2.08
3. Algebra and Functions	6	0.62	1.05	0.56	1.07	0.48	1.09	0.63	1.01	0.48	1.00	N/A	N/A
4. Measurement and Geometry	14	0.75	1.62	0.71	1.63	0.62	1.69	0.65	1.48	0.60	1.72	0.73	1.63
5. Statistics, Data Analysis and Probability	7	0.54	1.13	0.63	1.12	0.59	1.12	0.57	0.94	0.69	1.15	0.45	1.08
Grade 3													
1. Number Sense: Place Value, Fractions, and Decimals	16	0.78	1.76	0.78	1.75	0.78	1.75	0.78	1.61	0.77	1.78	0.84	1.69
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.82	1.67	0.81	1.69	0.82	1.69	0.82	1.58	0.88	1.55	0.79	1.69
3. Algebra and Functions	12	0.74	1.49	0.68	1.52	0.73	1.49	0.75	1.42	0.74	1.52	0.78	1.45
4. Measurement and Geometry	16	0.65	1.76	0.65	1.76	0.66	1.76	0.68	1.63	0.62	1.78	0.67	1.77
5. Statistics, Data Analysis and Probability	5	0.65	0.92	0.58	0.94	0.56	0.96	0.56	0.76	0.67	0.90	0.62	0.90
Grade 4													
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	0.73	1.76	0.76	1.76	0.76	1.78	0.72	1.70	0.69	1.79	0.80	1.69
2. Number Sense: Operations and Factoring	14	0.76	1.64	0.77	1.63	0.78	1.63	0.79	1.57	0.70	1.68	0.78	1.55
3. Algebra and Functions	18	0.84	1.82	0.87	1.76	0.85	1.81	0.87	1.63	0.73	1.91	0.81	1.67
4. Measurement and Geometry	12	0.64	1.52	0.65	1.52	0.69	1.52	0.67	1.44	0.50	1.57	0.67	1.50
5. Statistics, Data Analysis, and Probability	4	0.31	0.87	0.30	0.86	0.39	0.86	0.25	0.86	–	–	0.28	0.92

Subscore Reliabilities and SEM for Mathematics by EL Program Participation

		EL in ELD		EL in ELD and SDAIE		EL in ELD and SDAIE with Prim. Lang. Support		EL in ELD and Acad. Subj. through Prim. Lang.		Other EL Instruct. Services		None (EL only)	
Subscore Area	**# of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Grade 5													
1. Number Sense: Estimation, Percents, and Factoring	12	0.75	1.46	0.69	1.49	0.68	1.50	0.67	1.45	0.61	1.48	0.75	1.49
2. Number Sense: Operations with Fractions and Decimals	17	0.78	1.84	0.75	1.87	0.72	1.88	0.75	1.86	0.77	1.89	0.78	1.90
3. Algebra and Functions	17	0.78	1.82	0.76	1.86	0.75	1.86	0.79	1.76	0.80	1.78	0.82	1.77
4. Measurement and Geometry	15	0.59	1.81	0.67	1.79	0.60	1.80	0.67	1.78	0.43	1.93	0.73	1.79
5. Statistics, Data Analysis, and Probability	4	0.34	0.92	0.32	0.93	0.37	0.92	0.40	0.90	0.55	0.88	–	–
Grade 6													
1. Number Sense: Ratios, Proportions, Percentages and Negative Numbers	15	0.77	1.64	0.77	1.65	0.75	1.69	0.73	1.65	–	–	–	–
2. Number Sense: Operations with Problem Solving with Fractions	10	0.73	1.34	0.68	1.40	0.63	1.41	0.64	1.41	–	–	–	–
3. Algebra and Functions	19	0.85	1.85	0.83	1.88	0.82	1.90	0.78	1.88	–	–	–	–
4. Measurement and Geometry	10	0.49	1.40	0.55	1.40	0.44	1.41	0.51	1.45	–	–	–	–
5. Statistics, Data Analysis, and Probability	11	0.55	1.54	0.65	1.50	0.61	1.49	0.60	1.51	–	–	–	–
Grade 7													
1. Number Sense: Rational Numbers	14	0.64	1.75	0.58	1.76	0.55	1.74	0.58	1.75	0.69	1.68	0.58	1.76
2. Number Sense: Exponent, Powers and Roots	8	0.45	1.21	0.56	1.20	0.54	1.18	0.52	1.22	0.55	1.15	0.70	1.19
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.40	1.36	0.37	1.38	0.39	1.38	0.40	1.41	0.61	1.29	0.67	1.31
4. Algebra and Functions: Multistep Problems, Graphing and Functions	15	0.63	1.78	0.71	1.74	0.68	1.77	0.66	1.79	0.77	1.71	0.67	1.72
5. Measurement and Geometry	13	0.66	1.64	0.68	1.63	0.64	1.65	0.61	1.66	0.68	1.65	0.86	1.51
6. Statistics, Data Analysis, and Probability	5	0.44	1.03	0.48	1.02	0.52	1.00	0.50	1.01	0.58	0.98	0.38	1.02

Subscore Reliabilities and SEM for Mathematics by EL Program Participation

		EL in ELD		EL in ELD and SDAIE		EL in ELD and SDAIE with Prim. Lang. Support		EL in ELD and Acad. Subj. through Prim. Lang.		Other EL Instruct. Services		None (EL only)	
Subscore Area	**# of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Algebra I													
1. Number Properties, Operations, and Linear Equations	17	0.67	1.88	0.70	1.86	0.67	1.87	0.67	1.88	0.57	1.90	0.77	1.82
2. Graphing and Systems of Linear Equations	14	0.55	1.65	0.56	1.65	0.54	1.66	0.51	1.67	0.35	1.66	0.40	1.67
3. Quadratics and Polynomials	21	0.71	2.06	0.73	2.06	0.73	2.05	0.70	2.06	0.66	2.07	0.68	2.06
4. Functions and Rational Expressions	13	0.41	1.58	0.36	1.58	0.41	1.56	0.34	1.57	0.31	1.62	0.10	1.57
Geometry													
1. Logic and Geometric Proofs	23	0.77	2.08	0.76	2.12	0.73	2.17	0.66	2.16	–	–	0.64	2.13
2. Volume and Area Formulas	11	0.49	1.46	0.54	1.46	0.47	1.44	0.53	1.45	–	–	0.58	1.36
3. Angle Relationships, Constructions, and Lines	16	0.56	1.79	0.70	1.75	0.59	1.78	0.55	1.81	–	–	0.29	1.71
4. Trigonometry	15	0.59	1.74	0.42	1.76	0.49	1.75	0.47	1.74	–	–	0.32	1.72

Table 8.B.16 Subscore Reliabilities and SEM for Grade Specific Tests by English Learner Program Participation

Subscore Reliabilities and SEM for Grade Specific Tests by EL Program Participation													
		EL in ELD		EL in ELD and SDAIE		EL in ELD and SDAIE with Prim. Lang. Support		EL in ELD and Acad. Subj. through Prim. Lang.		Other EL Instruct. Services		None (EL only)	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Algebra I – 8													
1. Number Properties, Operations, and Linear Equations	17	0.73	1.86	0.55	1.90	0.49	1.90	0.59	1.87	–	–	–	–
2. Graphing and Systems of Linear Equations	14	0.75	1.62	0.42	1.66	0.28	1.69	0.58	1.66	–	–	–	–
3. Quadratics and Polynomials	21	0.79	2.02	0.71	2.05	0.65	2.05	0.66	2.07	–	–	–	–
4. Functions and Rational Expressions	13	0.64	1.52	0.33	1.54	0.37	1.55	0.43	1.55	–	–	–	–
Geometry – 9													
1. Logic and Geometric Proofs	23	0.07	2.14	0.54	2.11	–	–	0.56	2.15	–	–	0.46	2.13
2. Volume and Area Formulas	11	0.19	1.44	0.24	1.49	–	–	0.71	1.35	–	–	0.55	1.34
3. Angle Relationships, Constructions, and Lines	16	0.07	1.76	0.54	1.72	–	–	0.34	1.84	–	–	–	–
4. Trigonometry	15	–	–	0.40	1.71	–	–	0.40	1.77	–	–	0.27	1.70

Table 8.B.17 Reliability of Classification for RLA, Grade Two

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 16	0.02	0.01	0.00	0.00	0.00	0.03
	17 – 32	0.01	0.21	0.03	0.00	0.00	0.25
	33 – 46	0.00	0.03	0.29	0.04	0.00	0.35
	47 – 54	0.00	0.00	0.04	0.16	0.03	0.22
	55 – 65	0.00	0.00	0.00	0.03	0.11	0.14
	Estimated Proportion Correctly Classified: Total = 0.78, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 16	0.02	0.01	0.00	0.00	0.00	0.03
	17 – 32	0.02	0.19	0.05	0.00	0.00	0.25
	33 – 46	0.00	0.05	0.25	0.05	0.00	0.35
	47 – 54	0.00	0.00	0.05	0.13	0.04	0.22
	55 – 65	0.00	0.00	0.00	0.04	0.10	0.14
	Estimated Proportion Consistently Classified: Total = 0.70, Proficient & Above = 0.90						

Table 8.B.18 Reliability of Classification for RLA, Grade Three

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 17	0.02	0.02	0.00	0.00	0.00	0.04
	18 – 30	0.01	0.19	0.04	0.00	0.00	0.24
	31 – 44	0.00	0.03	0.30	0.04	0.00	0.37
	45 – 53	0.00	0.00	0.04	0.17	0.02	0.23
	54 – 65	0.00	0.00	0.00	0.03	0.09	0.12
	Estimated Proportion Correctly Classified: Total = 0.77, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 17	0.02	0.02	0.00	0.00	0.00	0.04
	18 – 30	0.02	0.17	0.05	0.00	0.00	0.24
	31 – 44	0.00	0.05	0.26	0.05	0.00	0.37
	45 – 53	0.00	0.00	0.05	0.14	0.04	0.23
	54 – 65	0.00	0.00	0.00	0.03	0.09	0.12
	Estimated Proportion Consistently Classified: Total = 0.68, Proficient & Above = 0.89						

Table 8.B.19 Reliability of Classification for RLA, Grade Four

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 23	0.08	0.03	0.00	0.00	0.00	0.11
	24 – 36	0.02	0.17	0.03	0.00	0.00	0.21
	37 – 51	0.00	0.03	0.26	0.04	0.00	0.33
	52 – 60	0.00	0.00	0.04	0.15	0.03	0.22
	61 – 75	0.00	0.00	0.00	0.03	0.11	0.14
	Estimated Proportion Correctly Classified: Total = 0.76, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 23	0.07	0.03	0.00	0.00	0.00	0.11
	24 – 36	0.03	0.14	0.04	0.00	0.00	0.21
	37 – 51	0.00	0.05	0.23	0.05	0.00	0.33
	52 – 60	0.00	0.00	0.05	0.12	0.04	0.22
	61 – 75	0.00	0.00	0.00	0.04	0.10	0.14
	Estimated Proportion Consistently Classified: Total = 0.66, Proficient & Above = 0.90						

Table 8.B.20 Reliability of Classification for RLA, Grade Five

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 24	0.17	0.05	0.00	0.00	0.00	0.21
	25 – 31	0.04	0.11	0.04	0.00	0.00	0.19
	32 – 44	0.00	0.04	0.23	0.03	0.00	0.31
	45 – 56	0.00	0.00	0.04	0.15	0.01	0.20
	57 – 75	0.00	0.00	0.00	0.02	0.06	0.09
	Estimated Proportion Correctly Classified: Total = 0.72, Proficient & Above = 0.93						
Decision Consistency Alternate Form	0 – 24	0.15	0.05	0.01	0.00	0.00	0.21
	25 – 31	0.05	0.08	0.05	0.00	0.00	0.19
	32 – 44	0.01	0.05	0.20	0.05	0.00	0.31
	45 – 56	0.00	0.00	0.05	0.13	0.03	0.20
	57 – 75	0.00	0.00	0.00	0.03	0.06	0.09
	Estimated Proportion Consistently Classified: Total = 0.62, Proficient & Above = 0.90						

Table 8.B.21 Reliability of Classification for RLA, Grade Six

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 22	0.09	0.05	0.00	0.00	0.00	0.15
	23 – 31	0.03	0.17	0.05	0.00	0.00	0.24
	32 – 43	0.00	0.05	0.25	0.04	0.00	0.33
	44 – 55	0.00	0.00	0.04	0.16	0.01	0.22
	56 – 75	0.00	0.00	0.00	0.02	0.04	0.07
	Estimated Proportion Correctly Classified: Total = 0.71, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 22	0.09	0.05	0.01	0.00	0.00	0.15
	23 – 31	0.05	0.13	0.06	0.00	0.00	0.24
	32 – 43	0.00	0.06	0.21	0.06	0.00	0.33
	44 – 55	0.00	0.00	0.05	0.14	0.02	0.22
	56 – 75	0.00	0.00	0.00	0.02	0.04	0.07
	Estimated Proportion Consistently Classified: Total = 0.61, Proficient & Above = 0.89						

Table 8.B.22 Reliability of Classification for RLA, Grade Seven

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 22	0.05	0.04	0.00	0.00	0.00	0.09
	23 – 34	0.02	0.22	0.05	0.00	0.00	0.29
	35 – 47	0.00	0.04	0.25	0.03	0.00	0.31
	48 – 58	0.00	0.00	0.05	0.16	0.02	0.23
	59 – 75	0.00	0.00	0.00	0.03	0.05	0.08
	Estimated Proportion Correctly Classified: Total = 0.73, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 22	0.05	0.04	0.00	0.00	0.00	0.09
	23 – 34	0.04	0.18	0.06	0.00	0.00	0.29
	35 – 47	0.00	0.06	0.21	0.05	0.00	0.31
	48 – 58	0.00	0.00	0.06	0.14	0.03	0.23
	59 – 75	0.00	0.00	0.00	0.03	0.05	0.08
	Estimated Proportion Consistently Classified: Total = 0.63, Proficient & Above = 0.89						

Table 8.B.23 Reliability of Classification for Mathematics, Grade Two

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 16	0.00	0.01	0.00	0.00	0.00	0.01
	17 – 33	0.00	0.15	0.03	0.00	0.00	0.19
	34 – 43	0.00	0.03	0.17	0.04	0.00	0.24
	44 – 54	0.00	0.00	0.04	0.25	0.03	0.32
	55 – 65	0.00	0.00	0.00	0.04	0.20	0.25
	Estimated Proportion Correctly Classified: Total = 0.78, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 16	0.00	0.00	0.00	0.00	0.00	0.01
	17 – 33	0.00	0.14	0.04	0.00	0.00	0.19
	34 – 43	0.00	0.04	0.14	0.06	0.00	0.24
	44 – 54	0.00	0.00	0.05	0.22	0.05	0.32
	55 – 65	0.00	0.00	0.00	0.05	0.20	0.25
	Estimated Proportion Consistently Classified: Total = 0.70, Proficient & Above = 0.89						

Table 8.B.24 Reliability of Classification for Mathematics, Grade Three

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 15	0.00	0.01	0.00	0.00	0.00	0.01
	16 – 30	0.00	0.15	0.03	0.00	0.00	0.18
	31 – 42	0.00	0.03	0.20	0.03	0.00	0.26
	43 – 54	0.00	0.00	0.04	0.25	0.03	0.32
	55 – 65	0.00	0.00	0.00	0.04	0.20	0.23
	Estimated Proportion Correctly Classified: Total = 0.80, Proficient & Above = 0.93						
Decision Consistency Alternate Form	0 – 15	0.00	0.00	0.00	0.00	0.00	0.01
	16 – 30	0.01	0.13	0.04	0.00	0.00	0.18
	31 – 42	0.00	0.04	0.17	0.05	0.00	0.26
	43 – 54	0.00	0.00	0.05	0.22	0.05	0.32
	55 – 65	0.00	0.00	0.00	0.04	0.19	0.23
	Estimated Proportion Consistently Classified: Total = 0.72, Proficient & Above = 0.90						

Table 8.B.25 Reliability of Classification for Mathematics, Grade Four

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 18	0.03	0.01	0.00	0.00	0.00	0.04
	19 – 30	0.01	0.13	0.04	0.01	0.00	0.18
	31 – 40	0.00	0.02	0.16	0.03	0.00	0.21
	41 – 53	0.00	0.00	0.04	0.29	0.02	0.35
	54 – 65	0.00	0.00	0.00	0.04	0.17	0.22
	Estimated Proportion Correctly Classified: Total = 0.78, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 18	0.03	0.01	0.00	0.00	0.00	0.04
	19 – 30	0.02	0.11	0.04	0.01	0.00	0.18
	31 – 40	0.00	0.03	0.13	0.05	0.00	0.21
	41 – 53	0.00	0.00	0.05	0.26	0.04	0.35
	54 – 65	0.00	0.00	0.00	0.05	0.17	0.22
	Estimated Proportion Consistently Classified: Total = 0.69, Proficient & Above = 0.89						

Table 8.B.26 Reliability of Classification for Mathematics, Grade Five

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 19	0.06	0.04	0.00	0.00	0.00	0.10
	20 – 27	0.02	0.14	0.04	0.00	0.00	0.21
	28 – 35	0.00	0.04	0.15	0.04	0.00	0.24
	36 – 45	0.00	0.00	0.04	0.17	0.02	0.24
	46 – 65	0.00	0.00	0.00	0.03	0.18	0.22
	Estimated Proportion Correctly Classified: Total = 0.70, Proficient & Above = 0.91						
Decision Consistency Alternate Form	0 – 19	0.05	0.04	0.00	0.00	0.00	0.10
	20 – 27	0.04	0.11	0.05	0.00	0.00	0.21
	28 – 35	0.01	0.06	0.12	0.06	0.00	0.24
	36 – 45	0.00	0.00	0.05	0.14	0.04	0.24
	46 – 65	0.00	0.00	0.00	0.04	0.18	0.22
	Estimated Proportion Consistently Classified: Total = 0.60, Proficient & Above = 0.88						

Table 8.B.27 Reliability of Classification for Mathematics, Grade Six

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 19	0.10	0.04	0.00	0.00	0.00	0.15
	20 – 27	0.03	0.16	0.04	0.00	0.00	0.23
	28 – 35	0.00	0.04	0.15	0.04	0.00	0.23
	36 – 44	0.00	0.00	0.04	0.14	0.02	0.21
	45 – 65	0.00	0.00	0.00	0.03	0.14	0.17
	Estimated Proportion Correctly Classified: Total = 0.70, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 19	0.09	0.05	0.00	0.00	0.00	0.15
	20 – 27	0.05	0.13	0.06	0.00	0.00	0.23
	28 – 35	0.00	0.06	0.12	0.05	0.00	0.23
	36 – 44	0.00	0.01	0.05	0.12	0.04	0.21
	45 – 65	0.00	0.00	0.00	0.03	0.14	0.17
	Estimated Proportion Consistently Classified: Total = 0.60, Proficient & Above = 0.89						

Table 8.B.28 Reliability of Classification for Mathematics, Grade Seven

	Placement Score	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Category Total
Decision Accuracy All-forms Average	0 – 18	0.09	0.07	0.00	0.00	0.00	0.16
	19 – 25	0.04	0.19	0.05	0.00	0.00	0.28
	26 – 34	0.00	0.06	0.19	0.03	0.00	0.29
	35 – 45	0.00	0.00	0.04	0.14	0.01	0.19
	46 – 65	0.00	0.00	0.00	0.02	0.06	0.08
	Estimated Proportion Correctly Classified: Total = 0.66, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0 – 18	0.08	0.07	0.01	0.00	0.00	0.16
	19 – 25	0.07	0.14	0.07	0.00	0.00	0.28
	26 – 34	0.01	0.07	0.16	0.05	0.00	0.29
	35 – 45	0.00	0.00	0.05	0.12	0.02	0.19
	46 – 65	0.00	0.00	0.00	0.02	0.05	0.08
	Estimated Proportion Consistently Classified: Total = 0.55, Proficient & Above = 0.89						

Appendix 8.C—Validity Analyses

Table 8.C.1 STS Content Area Correlations (Female)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**5,824**	0.74	
	2. Mathematics	5,789	**5,815**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**4,257**	0.77	
	2. Mathematics	4,220	**4,229**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**2,232**	0.73	
	2. Mathematics	2,209	**2,213**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**1,462**	0.66	
	2. Mathematics	1,456	**1,456**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**956**	0.70	
	2. Mathematics	945	**948**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**756**	0.66	–
	2. Mathematics	732	**735**	N/A
	3. Algebra I	4	N/A	**4**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**679**	0.46	
	2. Algebra I	234	**234**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**996**	0.54	0.47
	2. Algebra I	557	**574**	N/A
	3. Geometry	56	N/A	**57**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**607**	0.53	0.52
	2. Algebra I	340	**352**	N/A
	3. Geometry	102	N/A	**104**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**402**	0.57	0.50
	2. Algebra I	162	**167**	N/A
	3. Geometry	99	N/A	**108**

Table 8.C.2 STS Content Area Correlations (Male)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**5,686**	0.76	
	2. Mathematics	5,642	**5,682**	
Grade	STS	1.	2.	
3	1. Reading/Language Arts	**4,184**	0.77	
	2. Mathematics	4,140	**4,150**	
Grade	STS	1.	2.	
4	1. Reading/Language Arts	**2,225**	0.73	
	2. Mathematics	2,207	**2,213**	
Grade	STS	1.	2.	
5	1. Reading/Language Arts	**1,585**	0.66	
	2. Mathematics	1,577	**1,584**	
Grade	STS	1.	2.	
6	1. Reading/Language Arts	**1,005**	0.66	
	2. Mathematics	997	**1,003**	
Grade	STS	1.	2.	3.
7	1. Reading/Language Arts	**828**	0.66	–
	2. Mathematics	807	**811**	N/A
	3. Algebra I	5	N/A	**5**
Grade	STS	1.	2.	
8	1. Reading/Language Arts	**737**	0.46	
	2. Algebra I	255	**257**	
Grade	STS	1.	2.	3.
9	1. Reading/Language Arts	**1,355**	0.55	0.45
	2. Algebra I	779	**791**	N/A
	3. Geometry	52	N/A	**54**
Grade	STS	1.	2.	3.
10	1. Reading/Language Arts	**791**	0.52	0.56
	2. Algebra I	449	**464**	N/A
	3. Geometry	98	N/A	**101**
Grade	STS	1.	2.	3.
11	1. Reading/Language Arts	**434**	0.61	0.58
	2. Algebra I	198	**198**	N/A
	3. Geometry	82	N/A	**87**

Table 8.C.3 STS Content Area Correlations (Not Economically Disadvantaged)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**778**	0.77	
	2. Mathematics	772	**782**	
Grade	STS	1.	2.	
3	1. Reading/Language Arts	**532**	0.78	
	2. Mathematics	528	**529**	
Grade	STS	1.	2.	
4	1. Reading/Language Arts	**337**	0.76	
	2. Mathematics	337	**339**	
Grade	STS	1.	2.	
5	1. Reading/Language Arts	**308**	0.72	
	2. Mathematics	303	**303**	
Grade	STS	1.	2.	
6	1. Reading/Language Arts	**212**	0.71	
	2. Mathematics	209	**211**	
Grade	STS	1.	2.	3.
7	1. Reading/Language Arts	**223**	0.68	N/A
	2. Mathematics	216	**216**	N/A
	3. Algebra I	N/A	N/A	**0**
Grade	STS	1.	2.	
8	1. Reading/Language Arts	**225**	0.44	
	2. Algebra I	84	**85**	
Grade	STS	1.	2.	3.
9	1. Reading/Language Arts	**406**	0.55	0.42
	2. Algebra I	219	**222**	N/A
	3. Geometry	38	N/A	**38**
Grade	STS	1.	2.	3.
10	1. Reading/Language Arts	**278**	0.52	0.58
	2. Algebra I	154	**156**	N/A
	3. Geometry	42	N/A	**43**
Grade	STS	1.	2.	3.
11	1. Reading/Language Arts	**165**	0.58	0.61
	2. Algebra I	74	**76**	N/A
	3. Geometry	31	N/A	**32**

Table 8.C.4 STS Content Area Correlations (Economically Disadvantaged)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**10,483**	0.74	
	2. Mathematics	10,411	**10,464**	
Grade	STS	1.	2.	
3	1. Reading/Language Arts	**7,769**	0.76	
	2. Mathematics	7,692	**7,710**	
Grade	STS	1.	2.	
4	1. Reading/Language Arts	**4,048**	0.73	
	2. Mathematics	4,008	**4,016**	
Grade	STS	1.	2.	
5	1. Reading/Language Arts	**2,706**	0.65	
	2. Mathematics	2,697	**2,705**	
Grade	STS	1.	2.	
6	1. Reading/Language Arts	**1,717**	0.67	
	2. Mathematics	1,701	**1,708**	
Grade	STS	1.	2.	3.
7	1. Reading/Language Arts	**1,344**	0.65	–
	2. Mathematics	1,307	**1,314**	N/A
	3. Algebra I	9	N/A	**9**
Grade	STS	1.	2.	
8	1. Reading/Language Arts	**1167**	0.45	
	2. Algebra I	397	**398**	
Grade	STS	1.	2.	3.
9	1. Reading/Language Arts	**1,895**	0.55	0.49
	2. Algebra I	1,088	**1,115**	N/A
	3. Geometry	68	N/A	**71**
Grade	STS	1.	2.	3.
10	1. Reading/Language Arts	**1,087**	0.52	0.53
	2. Algebra I	612	**637**	N/A
	3. Geometry	156	N/A	**160**
Grade	STS	1.	2.	3.
11	1. Reading/Language Arts	**662**	0.59	0.52
	2. Algebra I	286	**289**	N/A
	3. Geometry	147	N/A	**160**

Table 8.C.5 STS Content Area Correlations (Economic Status unknown)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**257**	0.76	
	2. Mathematics	256	**259**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**143**	0.74	
	2. Mathematics	143	**143**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**74**	0.63	
	2. Mathematics	73	**73**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**35**	0.44	
	2. Mathematics	35	**35**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**33**	0.60	
	2. Mathematics	33	**33**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**20**	0.65	N/A
	2. Mathematics	19	**19**	N/A
	3. Algebra I	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**24**	–	
	2. Algebra I	8	**8**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**57**	0.62	–
	2. Algebra I	33	**33**	N/A
	3. Geometry	2	N/A	**2**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**36**	0.66	–
	2. Algebra I	23	**23**	N/A
	3. Geometry	2	N/A	**2**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**12**	–	–
	2. Algebra I	2	**2**	N/A
	3. Geometry	4	N/A	**4**

Table 8.C.6 STS Content Area Correlations (In U.S. Schools ≥ 12 Months)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**10,179**	0.73	
	2. Mathematics	10,108	**10,147**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**7,029**	0.75	
	2. Mathematics	6,961	**6,976**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**3,228**	0.73	
	2. Mathematics	3,192	**3,199**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**1,907**	0.66	
	2. Mathematics	1,902	**1,907**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**957**	0.63	
	2. Mathematics	949	**955**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**428**	0.60	N/A
	2. Mathematics	425	**429**	N/A
	3. Algebra I	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**363**	0.52	
	2. Algebra I	142	**142**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**299**	0.55	0.42
	2. Algebra I	183	**195**	N/A
	3. Geometry	30	N/A	**31**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**223**	0.43	0.35
	2. Algebra I	117	**126**	N/A
	3. Geometry	78	N/A	**81**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**263**	0.47	0.55
	2. Algebra I	101	**104**	N/A
	3. Geometry	91	N/A	**103**

Table 8.C.7 STS Content Area Correlations (In U.S. Schools < 12 Months)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**1,339**	0.72	
	2. Mathematics	1,331	**1,358**	
3	1. Reading/Language Arts	**1,415**	0.77	
	2. Mathematics	1,402	**1,406**	
4	1. Reading/Language Arts	**1,231**	0.73	
	2. Mathematics	1,226	**1,229**	
5	1. Reading/Language Arts	**1,142**	0.70	
	2. Mathematics	1,133	**1,136**	
6	1. Reading/Language Arts	**1,005**	0.75	
	2. Mathematics	994	**997**	
7	1. Reading/Language Arts	**1,159**	0.69	–
	2. Mathematics	1,117	**1,120**	N/A
	3. Algebra I	9	N/A	**9**
8	1. Reading/Language Arts	**1053**	0.47	
	2. Algebra I	347	**349**	
9	1. Reading/Language Arts	**2,059**	0.55	0.39
	2. Algebra I	1,157	**1,175**	N/A
	3. Geometry	78	N/A	**80**
10	1. Reading/Language Arts	**1,178**	0.54	0.63
	2. Algebra I	672	**690**	N/A
	3. Geometry	122	N/A	**124**
11	1. Reading/Language Arts	**576**	0.61	0.53
	2. Algebra I	261	**263**	N/A
	3. Geometry	91	N/A	**93**

Table 8.C.8 STS Content Area Correlations (EL in ELD)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**103**	0.68	
	2. Mathematics	103	**105**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**100**	0.76	
	2. Mathematics	98	**98**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**121**	0.67	
	2. Mathematics	120	**120**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**99**	0.63	
	2. Mathematics	98	**98**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**80**	0.78	
	2. Mathematics	79	**79**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**147**	0.74	–
	2. Mathematics	139	**140**	N/A
	3. Algebra I	3	N/A	**3**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**124**	0.50	
	2. Algebra I	48	**48**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**202**	0.48	0.15
	2. Algebra I	122	**125**	N/A
	3. Geometry	13	N/A	**14**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**164**	0.52	0.47
	2. Algebra I	91	**93**	N/A
	3. Geometry	19	N/A	**20**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**78**	0.54	0.69
	2. Algebra I	38	**38**	N/A
	3. Geometry	18	N/A	**18**

Table 8.C.9 STS Content Area Correlations (EL in ELD and SDAIE)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**488**	0.71	
	2. Mathematics	487	**500**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**504**	0.76	
	2. Mathematics	501	**504**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**503**	0.72	
	2. Mathematics	501	**503**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**488**	0.73	
	2. Mathematics	483	**484**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**445**	0.79	
	2. Mathematics	441	**443**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**439**	0.70	–
	2. Mathematics	421	**421**	N/A
	3. Algebra I	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**447**	0.47	
	2. Algebra I	168	**170**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**626**	0.57	0.35
	2. Algebra I	327	**329**	N/A
	3. Geometry	32	N/A	**33**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**413**	0.54	0.75
	2. Algebra I	233	**234**	N/A
	3. Geometry	36	N/A	**36**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**232**	0.69	0.60
	2. Algebra I	98	**98**	N/A
	3. Geometry	30	N/A	**30**

Table 8.C.10 STS Content Area Correlations (EL in ELD and SDAIE with Primary Language Support)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**400**	0.65	
	2. Mathematics	397	**403**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**399**	0.76	
	2. Mathematics	394	**395**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**367**	0.73	
	2. Mathematics	366	**366**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**368**	0.69	
	2. Mathematics	367	**368**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**346**	0.72	
	2. Mathematics	345	**346**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**356**	0.63	–
	2. Mathematics	346	**347**	N/A
	3. Algebra I	2	N/A	**2**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**310**	0.46	
	2. Algebra I	95	**95**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**631**	0.56	–
	2. Algebra I	364	**371**	N/A
	3. Geometry	10	N/A	**10**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**302**	0.56	0.62
	2. Algebra I	186	**188**	N/A
	3. Geometry	31	N/A	**31**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**154**	0.55	0.57
	2. Algebra I	84	**85**	N/A
	3. Geometry	18	N/A	**18**

Table 8.C.11 STS Content Area Correlations (EL in ELD and Academic Subjects through Primary Language)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**10,462**	0.73	
	2. Mathematics	10,390	**10,432**	
3	1. Reading/Language Arts	**7,378**	0.75	
	2. Mathematics	7,310	**7,325**	
4	1. Reading/Language Arts	**3,418**	0.73	
	2. Mathematics	3,381	**3,389**	
5	1. Reading/Language Arts	**2,053**	0.66	
	2. Mathematics	2,048	**2,053**	
6	1. Reading/Language Arts	**1,052**	0.63	
	2. Mathematics	1,039	**1,045**	
7	1. Reading/Language Arts	**580**	0.61	–
	2. Mathematics	575	**580**	N/A
	3. Algebra I	2	N/A	**2**
8	1. Reading/Language Arts	**476**	0.49	
	2. Algebra I	162	**162**	
9	1. Reading/Language Arts	**695**	0.55	0.43
	2. Algebra I	415	**433**	N/A
	3. Geometry	36	N/A	**37**
10	1. Reading/Language Arts	**412**	0.50	0.44
	2. Algebra I	221	**243**	N/A
	3. Geometry	108	N/A	**112**
11	1. Reading/Language Arts	**331**	0.50	0.51
	2. Algebra I	122	**126**	N/A
	3. Geometry	110	N/A	**124**

Table 8.C.12 STS Content Area Correlations (Other EL Instructional Services)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**13**	0.59	
	2. Mathematics	13	**15**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**14**	0.84	
	2. Mathematics	12	**12**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**13**	0.79	
	2. Mathematics	13	**13**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**14**	0.58	
	2. Mathematics	12	**12**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**5**	–	
	2. Mathematics	5	**5**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**29**	0.76	N/A
	2. Mathematics	26	**26**	N/A
	3. Algebra I	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**23**	–	
	2. Algebra I	3	**3**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**126**	0.54	–
	2. Algebra I	70	**70**	N/A
	3. Geometry	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**61**	0.40	–
	2. Algebra I	34	**34**	N/A
	3. Geometry	6	N/A	**6**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**24**	0.58	–
	2. Algebra I	12	**12**	N/A
	3. Geometry	3	N/A	**3**

Table 8.C.13 STS Content Area Correlations (None (EL only))

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**20**	0.72	
	2. Mathematics	18	**19**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**22**	0.88	
	2. Mathematics	22	**22**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**14**	0.80	
	2. Mathematics	14	**14**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**16**	0.66	
	2. Mathematics	16	**16**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**11**	0.91	
	2. Mathematics	11	**11**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**14**	0.76	–
	2. Mathematics	13	**13**	N/A
	3. Algebra I	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**13**	–	
	2. Algebra I	6	**6**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**47**	0.28	0.20
	2. Algebra I	17	**17**	N/A
	3. Geometry	16	N/A	**16**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**22**	–	N/A
	2. Algebra I	5	**5**	N/A
	3. Geometry	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**11**	–	–
	2. Algebra I	4	**4**	N/A
	3. Geometry	1	N/A	**1**

Table 8.C.14 STS Content Area Correlations (Program Participation unknown)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**32**	0.65	
	2. Mathematics	31	**31**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**27**	0.78	
	2. Mathematics	26	**26**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**23**	0.70	
	2. Mathematics	23	**23**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**11**	0.88	
	2. Mathematics	11	**12**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**23**	0.46	
	2. Mathematics	23	**23**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**22**	0.81	N/A
	2. Mathematics	22	**22**	N/A
	3. Algebra I	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**23**	–	
	2. Algebra I	7	**7**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**31**	0.55	N/A
	2. Algebra I	25	**25**	N/A
	3. Geometry	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**27**	0.52	N/A
	2. Algebra I	19	**19**	N/A
	3. Geometry	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**9**	–	–
	2. Algebra I	4	**4**	N/A
	3. Geometry	2	N/A	**2**

Table 8.C.15 STS Content Area Correlations (No Special Education)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**11,050**	0.74	
	2. Mathematics	10,974	**11,027**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**8,071**	0.76	
	2. Mathematics	7,997	**8,011**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**4,247**	0.72	
	2. Mathematics	4,208	**4,216**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**2,869**	0.66	
	2. Mathematics	2,858	**2,865**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**1,868**	0.68	
	2. Mathematics	1,853	**1,860**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**1,550**	0.66	–
	2. Mathematics	1,507	**1,512**	N/A
	3. Algebra I	9	N/A	**9**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**1390**	0.45	
	2. Algebra I	478	**480**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**2,348**	0.55	0.46
	2. Algebra I	1,338	**1,367**	N/A
	3. Geometry	107	N/A	**110**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**1,396**	0.52	0.55
	2. Algebra I	787	**814**	N/A
	3. Geometry	200	N/A	**205**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**834**	0.59	0.54
	2. Algebra I	361	**366**	N/A
	3. Geometry	180	N/A	**194**

Table 8.C.16 STS Content Area Correlations (Special Education)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**468**	0.71	
	2. Mathematics	465	**478**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**372**	0.76	
	2. Mathematics	365	**370**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**212**	0.69	
	2. Mathematics	210	**212**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**180**	0.58	
	2. Mathematics	177	**178**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**92**	0.29	
	2. Mathematics	88	**90**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**37**	0.60	N/A
	2. Mathematics	35	**37**	N/A
	3. Algebra I	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**25**	–	
	2. Algebra I	10	**10**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**9**	–	–
	2. Algebra I	2	**3**	N/A
	3. Geometry	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**5**	–	N/A
	2. Algebra I	2	**2**	N/A
	3. Geometry	N/A	N/A	**0**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**5**	–	–
	2. Algebra I	1	**1**	N/A
	3. Geometry	2	N/A	**2**

Appendix 8.D—IRT Analyses

Table 8.D.1 IRT Model Data Fit Distribution for RLA

Op. Items	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grade 9		Grade 10		Grade 11	
Flag	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**
A	26	40	26	40	29	39	32	43	25	33	20	27	19	25	13	17	26	35	20	27
B	16	25	20	31	20	27	26	35	15	20	24	32	28	37	27	36	21	28	10	13
C	21	32	18	28	26	35	17	23	28	37	26	35	25	33	32	43	26	35	31	41
D	2	3	1	2	0	0	0	0	6	8	3	4	3	4	3	4	2	3	11	15
F	0	0	0	0	0	0	0	0	1	1	2	3	0	0	0	0	0	0	3	4
Total	65	100	65	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100

Table 8.D.2 IRT Model Data Fit Distribution for Mathematics

Op. Items	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Algebra I		Geometry	
Flag	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**
A	34	52	29	45	19	29	22	34	8	12	19	29	28	43	27	42
B	18	28	15	23	20	31	20	31	24	37	23	35	15	23	14	22
C	12	18	19	29	24	37	19	29	24	37	19	29	19	29	17	26
D	1	2	1	2	2	3	4	6	9	14	4	6	3	5	6	9
F	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	2
Total	65	100	65	100	65	100	65	100	65	100	65	100	65	100	65	100%

Table 8.D.3 IRT Model Data Fit Distribution for RLA (field-test items)

FT Items	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grade 9		Grade 10		Grade 11	
Flag	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**	**N**	**Pct.**
A	9	13	10	14	5	9	4	11	1	4	1	4	1	4	4	13	2	8	1	8
B	16	22	10	14	8	15	4	11	4	17	4	17	6	25	7	23	2	8	0	0
C	27	38	35	49	17	31	18	50	16	67	14	58	14	58	10	33	11	46	7	58
D	16	22	11	15	14	26	6	17	1	4	3	13	2	8	6	20	5	21	1	8
F	4	6	6	8	10	19	4	11	2	8	2	8	1	4	3	10	4	17	3	25
Total	72	100	72	100	54	100	36	100	24	100	24	100	24	100	30	100	24	100	12	100

Table 8.D.4 IRT Model Data Fit Distribution for Mathematics (field-test items)

FT Items	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Algebra I		Geometry	
Flag	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
A	28	39	23	32	5	9	0	0	2	8	0	0	13	43	0	0
B	19	26	7	10	4	7	5	14	1	4	4	17	4	13	0	0
C	13	18	22	31	26	48	19	53	15	63	12	50	7	23	3	50
D	9	13	15	21	15	28	9	25	2	8	3	13	4	13	3	50
F	3	4	5	7	4	7	3	8	4	17	5	21	2	7	0	0
Total	72	100	72	100	54	100	36	100	24	100	24	100	30	100	6	100

Table 8.D.5 IRT *b*-values for RLA, Grade Two

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	22	–0.87	0.82	–2.09	0.97
Reading Comprehension	15	–0.35	0.53	–1.42	1.08
Literary Response and Analysis	6	–0.27	1.08	–1.93	1.40
Written Conventions	14	–0.54	0.77	–2.43	1.06
Writing Strategies	8	0.48	0.45	–0.42	1.04
All operational items	65	–0.46	0.83	–2.43	1.40
Field-test items	72	0.03	0.86	–2.01	1.36

Table 8.D.6 IRT *b*-values for RLA, Grade Three

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	20	–0.74	0.70	–1.96	0.70
Reading Comprehension	15	–0.11	0.65	–1.58	1.09
Literary Response and Analysis	8	0.19	1.06	–1.63	1.04
Written Conventions	13	–0.34	0.38	–1.15	0.19
Writing Strategies	9	–0.11	0.48	–0.96	0.59
All operational items	65	–0.31	0.72	–1.96	1.09
Field-test items	72	0.31	0.95	–2.35	2.71

Table 8.D.7 IRT *b*-values for RLA, Grade Four

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	18	–0.58	0.56	–1.66	0.71
Reading Comprehension	15	0.18	0.55	–0.82	1.10
Literary Response and Analysis	9	0.19	0.48	–0.58	0.98
Written Conventions	18	–0.66	0.73	–2.06	0.42
Writing Strategies	15	0.02	0.78	–0.96	1.35
All operational items	75	–0.24	0.73	–2.06	1.35
Field-test items	54	0.59	0.65	–1.01	2.23

Table 8.D.8 IRT *b*-values for RLA, Grade Five

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	14	0.13	0.57	–1.09	0.99
Reading Comprehension	16	0.30	0.55	–0.86	1.32
Literary Response and Analysis	12	0.30	0.46	–0.42	1.26
Written Conventions	17	–0.29	0.57	–1.69	0.51
Writing Strategies	16	0.08	0.48	–1.13	0.90
All operational items	75	0.09	0.57	–1.69	1.32
Field-test items	36	0.58	0.62	–0.79	1.77

Table 8.D.9 IRT *b*-values for RLA, Grade Six

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	13	0.34	0.60	–0.57	1.30
Reading Comprehension	17	–0.05	0.64	–0.90	1.39
Literary Response and Analysis	12	–0.00	1.01	–1.69	2.11
Written Conventions	16	–0.29	0.59	–1.68	0.85
Writing Strategies	17	0.29	0.37	–0.34	0.78
All operational items	75	0.05	0.67	–1.69	2.11
Field-test items	24	0.48	0.58	–0.13	2.17

Table 8.D.10 IRT *b*-values for RLA, Grade Seven

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	11	–0.55	0.54	–1.31	0.40
Reading Comprehension	18	0.08	0.61	–1.25	0.93
Literary Response and Analysis	13	–0.18	0.91	–2.11	0.99
Written Conventions	16	–0.26	0.75	–1.39	1.26
Writing Strategies	17	–0.07	0.77	–1.26	1.36
All operational items	75	–0.16	0.74	–2.11	1.36
Field-test items	24	0.55	0.68	–0.98	2.28

Table 8.D.11 IRT *b*-values for RLA, Grade Eight

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	9	–0.61	0.86	–2.39	0.37
Reading Comprehension	18	–0.08	0.72	–1.74	1.07
Literary Response and Analysis	15	–0.49	0.69	–1.49	0.43
Written Conventions	16	–0.65	0.69	–1.86	0.30
Writing Strategies	17	0.00	0.62	–1.50	0.75
All operational items	75	–0.33	0.74	–2.39	1.07
Field-test items	24	0.19	0.58	–1.57	1.01

Table 8.D.12 IRT *b*-values for RLA, Grade Nine

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	8	–0.97	0.71	–1.56	0.68
Reading Comprehension	18	–0.29	0.72	–1.69	1.03
Literary Response and Analysis	16	–0.22	0.81	–1.65	0.95
Written Conventions	13	–0.15	0.78	–1.27	1.40
Writing Strategies	20	0.19	0.59	–0.89	1.34
All operational items	75	–0.19	0.77	–1.69	1.40
Field-test items	30	0.36	0.67	–1.04	1.78

Table 8.D.13 IRT *b*-values for RLA, Grade Ten

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	8	–1.31	0.73	–2.10	0.08
Reading Comprehension	18	–0.33	0.54	–1.07	0.85
Literary Response and Analysis	16	–0.36	0.89	–1.57	0.94
Written Conventions	13	–0.29	0.54	–1.24	0.92
Writing Strategies	20	0.33	0.58	–0.55	1.49
All operational items	75	–0.26	0.79	–2.10	1.49
Field-test items	24	0.42	0.91	–1.06	2.82

Table 8.D.14 IRT *b*-values for RLA, Grade Eleven

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Word Analysis and Vocabulary Development	8	–0.53	0.69	–1.48	0.68
Reading Comprehension	19	0.09	0.64	–1.32	1.01
Literary Response and Analysis	17	–0.11	0.60	–1.08	0.82
Written Conventions	9	–0.02	1.19	–2.00	2.16
Writing Strategies	22	–0.14	0.54	–0.97	1.45
All operational items	75	–0.10	0.70	–2.00	2.16
Field-test items	12	0.70	0.99	–1.31	2.61

Table 8.D.15 IRT *b*-values for Mathematics, Grade Two

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Place Value, Addition, and Subtraction	15	–0.66	0.83	–2.41	0.39
Multiplication, Division, and Fractions	23	–0.67	0.91	–2.46	0.98
Algebra and Functions	6	–0.34	0.78	–1.73	0.28
Measurement and Geometry	14	–1.00	0.79	–2.49	0.64
Statistics, Data Analysis, and Probability	7	–1.26	0.90	–2.35	0.44
All operational items	65	–0.77	0.86	–2.49	0.98
Field-test items	72	–0.72	1.16	–2.88	3.55

Table 8.D.16 IRT *b*-values for Mathematics, Grade Three

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Place Value, Fractions, and Decimals	16	–0.48	0.82	–1.76	1.38
Addition, Subtraction, Multiplication, Division	16	–0.60	0.93	–3.29	0.70
Algebra and Functions	12	–0.28	0.90	–2.19	1.11
Measurement and Geometry	16	–0.64	1.05	–2.60	1.80
Statistics, Data Analysis, and Probability	5	–1.26	0.72	–1.97	–0.33
All operational items	65	–0.57	0.92	–3.29	1.80
Field-test items	72	–0.13	1.44	–2.96	2.98

Table 8.D.17 IRT *b*-values for Mathematics, Grade Four

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Decimals, Fractions, and Negative Numbers	17	–0.63	0.86	–2.17	0.70
Operations and Factoring	14	–0.25	0.59	–1.50	0.50
Algebra and Functions	18	–0.59	0.49	–1.36	0.17
Measurement and Geometry	12	–0.41	0.89	–1.88	0.92
Statistics, Data Analysis, and Probability	4	0.03	1.33	–1.27	1.39
All operational items	65	–0.46	0.76	–2.17	1.39
Field-test items	54	0.60	1.04	–2.04	3.15

Table 8.D.18 IRT *b*-values for Mathematics, Grade Five

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Estimation, Percents, and Factoring	12	–0.36	0.92	–1.60	1.08
Operations with Fractions and Decimals	17	0.20	0.46	–0.60	0.84
Algebra and Functions	17	–0.24	0.57	–1.32	0.70
Measurement and Geometry	15	0.11	0.45	–0.91	0.99
Statistics, Data Analysis, and Probability	4	–0.12	0.47	–0.80	0.23
All operational items	65	–0.06	0.62	–1.60	1.08
Field-test items	36	0.52	0.85	–1.20	2.15

Table 8.D.19 IRT *b*-values for Mathematics, Grade Six

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Ratios, Proportions, Percentages, and Negative Numbers	15	–0.22	1.00	–1.74	2.83
Operations with Problem Solving with Fractions	10	–0.11	0.54	–1.10	0.79
Algebra and Functions	19	–0.23	0.68	–1.49	0.78
Measurement and Geometry	10	0.62	0.52	–0.12	1.55
Statistics, Data Analysis, and Probability	11	0.50	0.30	–0.02	1.02
All operational items	65	0.04	0.76	–1.74	2.83
Field-test items	24	0.58	0.67	–1.04	1.85

Table 8.D.20 IRT *b*-values for Mathematics, Grade Seven

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Rational Numbers	14	0.24	0.41	–0.61	0.84
Exponents, Powers, and Roots	8	0.54	0.91	–1.49	1.52
Quant. Relationships and Evaluating Expressions	10	0.48	1.01	–1.57	2.13
Multistep Problems, Graphing, and Functions	15	0.24	0.46	–0.61	0.93
Measurement and Geometry	13	0.19	0.51	–0.44	1.21
Statistics, Data Analysis, and Probability	5	0.07	0.28	–0.24	0.38
All operational items	65	0.29	0.62	–1.57	2.13
Field-test items	24	0.99	0.70	–0.56	2.51

Table 8.D.21 IRT *b*-values for Algebra I

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Number Porperties, Operations, and Linear Equations	17	0.22	0.59	–0.72	1.45
Graphing and Systems of Linear Equations	14	0.73	0.52	–0.51	1.50
Quadratics and Polynomials	21	0.34	0.65	–0.93	1.73
Functions and Rational Expressions	13	0.99	0.36	0.37	1.54
All operational items	65	0.52	0.62	–0.93	1.73
Field-test items	30	0.69	0.57	–0.77	1.69

Table 8.D.22 IRT *b*-values for Geometry

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Logic and Geometric Proofs	23	0.07	0.78	–1.30	1.30
Volume and Area Formulas	11	0.68	0.79	–0.52	2.10
Angle Relationships, Constructions, and Lines	16	0.54	0.69	–0.49	1.74
Trigonometry	15	0.74	0.53	0.18	1.68
All operational items	65	0.44	0.75	–1.30	2.10
Field-test items	6	0.20	0.47	–0.30	0.89

Table 8.D.23 Distribution of IRT Difficulty (*b*-values) for RLA by Grade

IRT *b*-value	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11
> 3.5	0	0	0	0	0	0	0	0	0	0
3.0 < 3.5	0	0	0	0	0	0	0	0	0	0
2.5 < 3.0	0	0	0	0	0	0	0	0	0	0
2.0 < 2.5	0	0	0	0	1	0	0	0	0	0
1.5 < 2.0	0	0	0	0	0	0	0	0	0	0
1.0 < 1.5	4	3	5	2	4	1	1	3	2	3
0.5 < 1.0	6	5	6	18	14	13	9	12	12	10
0.0 < 0.5	5	10	18	23	21	19	20	19	14	16
–0.5 < 0.0	21	22	17	21	17	17	20	12	20	25
–1.0 < –0.5	13	13	18	6	15	12	9	17	14	14
–1.5 < –1.0	5	6	6	3	0	11	11	6	7	5
–2.0 < –1.5	8	5	3	1	2	0	3	5	4	1
–2.5 < –2.0	2	0	1	0	0	1	1	0	1	0
–3.0 < –2.5	0	0	0	0	0	0	0	0	0	0
–3.5 < –3.0	0	0	0	0	0	0	0	0	0	0
< –3.5	1	1	1	1	1	1	1	1	1	1
Total	65	65	75	75	75	75	75	75	75	75

Table 8.D.24 Distribution of IRT *b*-values for Mathematics

IRT *b*-value	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Algebra I	Geometry
> 3.5	0	0	0	0	0	0	0	0
3.0 < 3.5	0	0	0	0	0	0	0	0
2.5 < 3.0	0	0	0	0	1	0	0	0
2.0 < 2.5	0	0	0	0	0	1	0	1
1.5 < 2.0	0	1	0	0	1	1	3	6
1.0 < 1.5	0	2	0	1	2	4	13	9
0.5 < 1.0	3	4	6	11	11	18	19	13
0.0 < 0.5	12	5	12	23	19	21	15	18
–0.5 < 0.0	11	21	15	13	18	13	9	10
–1.0 < –0.5	13	16	17	10	6	4	5	6
–1.5 < –1.0	12	5	9	5	5	1	0	1
–2.0 < –1.5	6	6	2	1	1	1	0	0
–2.5 < –2.0	7	2	3	0	0	0	0	0
–3.0 < –2.5	0	1	0	0	0	0	0	0
–3.5 < –3.0	0	1	0	0	0	0	0	0
< –3.5	1	1	1	1	1	1	1	1
Total	65	65	65	65	65	65	65	65

Table 8.D.25 Distribution of IRT *b*-values for RLA (field-test items)

IRT *b*-value	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11
≥ 3.5	0	0	0	0	0	0	0	0	0	0
3.0 – < 3.5	0	0	0	0	0	0	0	0	0	0
2.5 – < 3.0	0	1	0	0	0	0	0	0	1	0
2.0 – < 2.5	0	1	1	0	1	1	0	0	0	0
1.5 – < 2.0	0	6	3	1	0	0	0	2	0	0
1.0 – < 1.5	9	8	13	7	2	2	1	2	3	4
0.5 – < 1.0	16	18	11	13	6	10	7	10	8	3
0.0 – < 0.5	14	13	15	7	8	5	10	7	4	2
–0.5 – < 0.0	13	11	8	4	6	4	3	5	3	1
–1.0 – < –0.5	11	6	1	3	0	1	1	2	2	0
–1.5 – < –1.0	1	4	1	0	0	0	0	1	2	1
–2.0 – < –1.5	6	2	0	0	0	0	1	0	0	0
–2.5 – < –2.0	1	1	0	0	0	0	0	0	0	0
–3.0 – < –2.5	0	0	0	0	0	0	0	0	0	0
–3.5 – < –3.0	0	0	0	0	0	0	0	0	0	0
< –3.5	1	1	1	1	1	1	1	1	1	1
Total	72	72	54	36	24	24	24	30	24	12

Table 8.D.26 Distribution of IRT *b*-values for Mathematics (field-test items)

IRT *b*-value	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Algebra I	Geometry
> 3.5	1	0	0	0	0	0	0	0
3.0 – < 3.5	0	0	1	0	0	0	0	0
2.5 – < 3.0	0	2	0	0	0	1	0	0
2.0 – < 2.5	0	3	2	2	0	1	0	0
1.5 – < 2.0	3	1	7	3	1	2	1	0
1.0 – < 1.5	0	15	8	3	7	7	7	0
0.5 – < 1.0	5	5	16	10	4	8	9	1
0.0 – < 0.5	8	6	6	7	6	2	10	2
–0.5 – < 0.0	7	8	3	6	4	1	1	2
–1.0 – < –0.5	17	10	6	3	0	1	1	0
–1.5 – < –1.0	16	7	2	1	1	0	0	0
–2.0 – < –1.5	5	8	1	0	0	0	0	0
–2.5 – < –2.0	4	3	1	0	0	0	0	0
–3.0 – < –2.5	5	3	0	0	0	0	0	0
–3.5 – < –3.0	0	0	0	0	0	0	0	0
< –3.5	1	1	1	1	1	1	1	1
Total	72	72	54	36	24	24	30	6

Scaling and Post-Equating Results

Table 8.D.27 New Conversions for RLA, Grades Two and Three

Grade 2								Grade 3							
Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score
0	–	150.0000	150	**41**	0.1559	328.6078	329	**0**	–	150.0000	150	**41**	0.2855	337.5979	338
1	–4.9383	150.0000	150	**42**	0.2319	332.2446	332	**1**	–4.7202	150.0000	150	**42**	0.3593	341.4456	341
2	–4.2176	150.0000	150	**43**	0.3094	335.9475	336	**2**	–4.0024	150.0000	150	**43**	0.4344	345.3625	345
3	–3.7843	150.0000	150	**44**	0.3884	339.7261	340	**3**	–3.5718	150.0000	150	**44**	0.5111	349.3624	349
4	–3.4685	155.3237	155	**45**	0.4693	343.5948	344	**4**	–3.2589	152.7659	153	**45**	0.5895	353.4531	353
5	–3.2173	167.3377	167	**46**	0.5523	347.5620	348	**5**	–3.0103	165.7302	166	**46**	0.6700	357.6497	358
6	–3.0067	177.4061	177	**47**	0.6377	351.6437	352	**6**	–2.8023	176.5751	177	**47**	0.7528	361.9675	362
7	–2.8241	186.1341	186	**48**	0.7258	355.8561	356	**7**	–2.6223	185.9609	186	**48**	0.8383	366.4243	366
8	–2.6620	193.8833	194	**49**	0.8170	360.2186	360	**8**	–2.4628	194.2810	194	**49**	0.9268	371.0407	371
9	–2.5156	200.8869	201	**50**	0.9119	364.7535	365	**9**	–2.3188	201.7909	202	**50**	1.0188	375.8412	376
10	–2.3813	207.3050	207	**51**	1.0109	369.4880	369	**10**	–2.1869	208.6645	209	**51**	1.1150	380.8547	381
11	–2.2569	213.2517	213	**52**	1.1148	374.4544	374	**11**	–2.0650	215.0264	215	**52**	1.2159	386.1158	386
12	–2.1406	218.8116	219	**53**	1.2243	379.6920	380	**12**	–1.9510	220.9689	221	**53**	1.3224	391.6719	392
13	–2.0311	224.0494	224	**54**	1.3407	385.2555	385	**13**	–1.8438	226.5614	227	**54**	1.4356	397.5735	398
14	–1.9272	229.0149	229	**55**	1.4651	391.2045	391	**14**	–1.7422	231.8596	232	**55**	1.5567	403.8922	404
15	–1.8282	233.7487	234	**56**	1.5994	397.6253	398	**15**	–1.6454	236.9069	237	**56**	1.6877	410.7198	411
16	–1.7334	238.2833	238	**57**	1.7460	404.6318	405	**16**	–1.5527	241.7389	242	**57**	1.8307	418.1803	418
17	–1.6421	242.6457	243	**58**	1.9081	412.3827	412	**17**	–1.4636	246.3848	246	**58**	1.9892	426.4454	426
18	–1.5540	246.8583	247	**59**	2.0908	421.1169	421	**18**	–1.3776	250.8690	251	**59**	2.1682	435.7813	436
19	–1.4686	250.9403	251	**60**	2.3015	431.1898	431	**19**	–1.2944	255.2122	255	**60**	2.3751	446.5682	447
20	–1.3856	254.9081	255	**61**	2.5528	443.2084	443	**20**	–1.2134	259.4325	259	**61**	2.6225	459.4703	459
21	–1.3047	258.7767	259	**62**	2.8685	458.2984	458	**21**	–1.1346	263.5445	264	**62**	2.9342	475.7264	476
22	–1.2257	262.5566	263	**63**	3.3021	479.0299	479	**22**	–1.0575	267.5624	268	**63**	3.3634	498.1083	498
23	–1.1482	266.2605	266	**64**	4.0229	513.4944	513	**23**	–0.9821	271.4982	271	**64**	4.0799	535.4722	535
24	–1.0721	269.8982	270	**65**	–	600.0000	600	**24**	–0.9080	275.3622	275	**65**	–	600.0000	600
25	–0.9972	273.4787	273					**25**	–0.8350	279.1646	279				
26	–0.9234	277.0100	277					**26**	–0.7631	282.9139	283				
27	–0.8504	280.4999	280					**27**	–0.6921	286.6183	287				
28	–0.7781	283.9555	284					**28**	–0.6218	290.2855	290				
29	–0.7064	287.3843	287					**29**	–0.5520	293.9225	294				
30	–0.6351	290.7908	291					**30**	–0.4827	297.5364	298				
31	–0.5642	294.1825	294					**31**	–0.4138	301.1335	301				
32	–0.4934	297.5653	298					**32**	–0.3450	304.7204	305				
33	–0.4227	300.9452	301					**33**	–0.2763	308.3033	308				
34	–0.3520	304.3280	304					**34**	–0.2075	311.8885	312				
35	–0.2810	307.7196	308					**35**	–0.1386	315.4822	315				
36	–0.2098	311.1261	311					**36**	–0.0694	319.0908	319				
37	–0.1381	314.5536	315					**37**	0.0002	322.7209	323				
38	–0.0658	318.0086	318					**38**	0.0703	326.3792	326				
39	0.0071	321.4976	321					**39**	0.1412	330.0731	330				
40	0.0810	325.0283	325					**40**	0.2128	333.8099	334				

Table 8.D.28 New Conversions for RLA, Grades Four and Five

Grade 4								Grade 5							
Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score
0	–	150.0000	150	**41**	–0.0225	313.1937	313	**0**	–	150.0000	150	**41**	0.2923	334.4608	334
1	–4.8031	150.0000	150	**42**	0.0381	316.4518	316	**1**	–4.3903	150.0000	150	**42**	0.3501	338.3415	338
2	–4.0879	150.0000	150	**43**	0.0990	319.7280	320	**2**	–3.6769	150.0000	150	**43**	0.4083	342.2451	342
3	–3.6602	150.0000	150	**44**	0.1604	323.0279	323	**3**	–3.2510	150.0000	150	**44**	0.4669	346.1771	346
4	–3.3501	150.0000	150	**45**	0.2223	326.3563	326	**4**	–2.9429	150.0000	150	**45**	0.5259	350.1436	350
5	–3.1044	150.0000	150	**46**	0.2849	329.7185	330	**5**	–2.6993	150.0000	150	**46**	0.5856	354.1508	354
6	–2.8995	158.5513	159	**47**	0.3482	333.1196	333	**6**	–2.4964	150.0000	150	**47**	0.6460	358.2055	358
7	–2.7227	168.0572	168	**48**	0.4123	336.5655	337	**7**	–2.3218	158.9721	159	**48**	0.7072	362.3147	362
8	–2.5663	176.4607	176	**49**	0.4773	340.0622	340	**8**	–2.1676	169.3192	169	**49**	0.7694	366.4887	366
9	–2.4256	184.0238	184	**50**	0.5435	343.6194	344	**9**	–2.0292	178.6145	179	**50**	0.8326	370.7324	371
10	–2.2972	190.9264	191	**51**	0.6109	347.2406	347	**10**	–1.9030	187.0822	187	**51**	0.8970	375.0566	375
11	–2.1787	197.2966	197	**52**	0.6796	350.9356	351	**11**	–1.7868	194.8835	195	**52**	0.9628	379.4715	379
12	–2.0683	203.2291	203	**53**	0.7499	354.7136	355	**12**	–1.6788	202.1351	202	**53**	1.0301	383.9886	384
13	–1.9647	208.7967	209	**54**	0.8219	358.5849	359	**13**	–1.5776	208.9291	209	**54**	1.0991	388.6206	389
14	–1.8669	214.0543	214	**55**	0.8959	362.5612	363	**14**	–1.4822	215.3355	215	**55**	1.1700	393.3818	393
15	–1.7740	219.0477	219	**56**	0.9721	366.6557	367	**15**	–1.3917	221.4105	221	**56**	1.2431	398.2880	398
16	–1.6854	223.8130	224	**57**	1.0507	370.8836	371	**16**	–1.3054	227.1993	227	**57**	1.3187	403.3624	403
17	–1.6004	228.3801	228	**58**	1.1322	375.2628	375	**17**	–1.2229	232.7393	233	**58**	1.3970	408.6223	409
18	–1.5187	232.7737	233	**59**	1.2168	379.8130	380	**18**	–1.1436	238.0619	238	**59**	1.4786	414.0953	414
19	–1.4398	237.0148	237	**60**	1.3052	384.5625	385	**19**	–1.0672	243.1923	243	**60**	1.5637	419.8122	420
20	–1.3634	241.1211	241	**61**	1.3977	389.5372	390	**20**	–0.9933	248.1538	248	**61**	1.6531	425.8100	426
21	–1.2892	245.1081	245	**62**	1.4952	394.7743	395	**21**	–0.9216	252.9654	253	**62**	1.7473	432.1336	432
22	–1.2170	248.9896	249	**63**	1.5983	400.3186	400	**22**	–0.8519	257.6437	258	**63**	1.8471	438.8386	439
23	–1.1466	252.7760	253	**64**	1.7082	406.2260	406	**23**	–0.7840	262.2034	262	**64**	1.9537	445.9942	446
24	–1.0777	256.4789	256	**65**	1.8262	412.5682	413	**24**	–0.7177	266.6576	267	**65**	2.0684	453.6950	454
25	–1.0102	260.1072	260	**66**	1.9540	419.4389	419	**25**	–0.6527	271.0178	271	**66**	2.1929	462.0532	462
26	–0.9439	263.6692	264	**67**	2.0942	426.9722	427	**26**	–0.5890	275.2943	275	**67**	2.3297	471.2307	471
27	–0.8787	267.1729	267	**68**	2.2499	435.3397	435	**27**	–0.5264	279.4967	279	**68**	2.4819	481.4511	481
28	–0.8145	270.6240	271	**69**	2.4260	444.8062	445	**28**	–0.4648	283.6343	284	**69**	2.6545	493.0408	493
29	–0.7512	274.0297	274	**70**	2.6301	455.7772	456	**29**	–0.4040	287.7127	288	**70**	2.8550	506.5008	507
30	–0.6885	277.3957	277	**71**	2.8747	468.9251	469	**30**	–0.3440	291.7409	292	**71**	3.0964	522.7051	523
31	–0.6265	280.7275	281	**72**	3.1840	485.5513	486	**31**	–0.2847	295.7257	296	**72**	3.4020	543.2173	543
32	–0.5651	284.0302	284	**73**	3.6106	508.4834	508	**32**	–0.2259	299.6732	300	**73**	3.8247	571.5990	572
33	–0.5041	287.3086	287	**74**	4.3247	546.8681	547	**33**	–0.1675	303.5896	304	**74**	4.5353	600.0000	600
34	–0.4435	290.5674	291	**75**	–	600.0000	600	**34**	–0.1096	307.4807	307	**75**	–	600.0000	600
35	–0.3831	293.8111	294					**35**	–0.0519	311.3519	311				
36	–0.3230	297.0440	297					**36**	0.0055	315.2088	315				
37	–0.2630	300.2704	300					**37**	0.0629	319.0565	319				
38	–0.2030	303.4945	303					**38**	0.1201	322.9003	323				
39	–0.1430	306.7205	307					**39**	0.1774	326.7455	327				
40	–0.0828	309.9525	310					**40**	0.2348	330.5972	331				

Table 8.D.29 New Conversions for RLA, Grades Six and Seven

Grade 6								Grade 7							
Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score
0	–	150.0000	150	**41**	0.2537	337.3788	337	**0**	–	150.0000	150	**41**	0.0543	325.6032	326
1	–4.4544	150.0000	150	**42**	0.3126	341.5241	342	**1**	–4.7205	150.0000	150	**42**	0.1149	329.3791	329
2	–3.7414	150.0000	150	**43**	0.3720	345.6951	346	**2**	–4.0058	150.0000	150	**43**	0.1758	333.1768	333
3	–3.3157	150.0000	150	**44**	0.4317	349.8980	350	**3**	–3.5785	150.0000	150	**44**	0.2372	337.0018	337
4	–3.0077	150.0000	150	**45**	0.4921	354.1391	354	**4**	–3.2688	150.0000	150	**45**	0.2991	340.8596	341
5	–2.7642	150.0000	150	**46**	0.5530	358.4251	358	**5**	–3.0236	150.0000	150	**46**	0.3616	344.7561	345
6	–2.5613	150.0000	150	**47**	0.6147	362.7631	363	**6**	–2.8191	150.0000	150	**47**	0.4248	348.6974	349
7	–2.3864	151.7715	152	**48**	0.6773	367.1606	367	**7**	–2.6426	157.4861	157	**48**	0.4889	352.6901	353
8	–2.2320	162.6241	163	**49**	0.7409	371.6295	372	**8**	–2.4866	167.2093	167	**49**	0.5539	356.7437	357
9	–2.0933	172.3797	172	**50**	0.8055	376.1738	376	**9**	–2.3462	175.9602	176	**50**	0.6200	360.8631	361
10	–1.9668	181.2727	181	**51**	0.8714	380.8053	381	**10**	–2.2181	183.9465	184	**51**	0.6873	365.0580	365
11	–1.8502	189.4707	189	**52**	0.9387	385.5352	386	**11**	–2.0999	191.3169	191	**52**	0.7559	369.3382	369
12	–1.7417	197.0978	197	**53**	1.0075	390.3755	390	**12**	–1.9898	198.1812	198	**53**	0.8261	373.7143	374
13	–1.6400	204.2477	204	**54**	1.0781	395.3400	395	**13**	–1.8864	204.6236	205	**54**	0.8981	378.1981	378
14	–1.5440	210.9944	211	**55**	1.1507	400.4440	400	**14**	–1.7888	210.7082	211	**55**	0.9719	382.8034	383
15	–1.4530	217.3964	217	**56**	1.2255	405.7045	406	**15**	–1.6961	216.4876	216	**56**	1.0480	387.5453	388
16	–1.3661	223.5010	224	**57**	1.3029	411.1450	411	**16**	–1.6076	222.0039	222	**57**	1.1266	392.4417	392
17	–1.2830	229.3470	229	**58**	1.3832	416.7854	417	**17**	–1.5228	227.2913	227	**58**	1.2079	397.5124	398
18	–1.2030	234.9668	235	**59**	1.4666	422.6546	423	**18**	–1.4412	232.3786	232	**59**	1.2925	402.7845	403
19	–1.1259	240.3880	240	**60**	1.5538	428.7853	429	**19**	–1.3624	237.2901	237	**60**	1.3807	408.2835	408
20	–1.0513	245.6333	246	**61**	1.6453	435.2169	435	**20**	–1.2861	242.0462	242	**61**	1.4731	414.0449	414
21	–0.9789	250.7233	251	**62**	1.7418	441.9970	442	**21**	–1.2120	246.6655	247	**62**	1.5704	420.1106	420
22	–0.9085	255.6753	256	**63**	1.8440	449.1845	449	**22**	–1.1399	251.1615	251	**63**	1.6734	426.5324	427
23	–0.8398	260.5046	261	**64**	1.9531	456.8529	457	**23**	–1.0695	255.5494	256	**64**	1.7832	433.3752	433
24	–0.7726	265.2246	265	**65**	2.0704	465.1017	465	**24**	–1.0006	259.8408	260	**65**	1.9011	440.7220	441
25	–0.7069	269.8476	270	**66**	2.1977	474.0500	474	**25**	–0.9332	264.0462	264	**66**	2.0287	448.6812	449
26	–0.6424	274.3843	274	**67**	2.3373	483.8685	484	**26**	–0.8669	268.1753	268	**67**	2.1688	457.4120	457
27	–0.5789	278.8446	279	**68**	2.4927	494.7927	495	**27**	–0.8018	272.2366	272	**68**	2.3244	467.1087	467
28	–0.5164	283.2383	283	**69**	2.6687	507.1663	507	**28**	–0.7376	276.2387	276	**69**	2.5004	478.0803	478
29	–0.4548	287.5714	288	**70**	2.8728	521.5160	522	**29**	–0.6742	280.1873	280	**70**	2.7044	490.7963	491
30	–0.3939	291.8532	292	**71**	3.1181	538.7586	539	**30**	–0.6116	284.0904	284	**71**	2.9491	506.0511	506
31	–0.3336	296.0907	296	**72**	3.4279	560.5353	561	**31**	–0.5496	287.9539	288	**72**	3.2581	525.3164	525
32	–0.2739	300.2906	300	**73**	3.8552	590.5799	591	**32**	–0.4882	291.7839	292	**73**	3.6847	551.9045	552
33	–0.2146	304.4592	304	**74**	4.5708	600.0000	600	**33**	–0.4272	295.5858	296	**74**	4.3987	596.4186	596
34	–0.1556	308.6026	309	**75**	–	600.0000	600	**34**	–0.3666	299.3651	299	**75**	–	600.0000	600
35	–0.0970	312.7267	313					**35**	–0.3062	303.1267	303				
36	–0.0385	316.8383	317					**36**	–0.2461	306.8758	307				
37	0.0198	320.9396	321					**37**	–0.1861	310.6173	311				
38	0.0782	325.0392	325					**38**	–0.1261	314.3559	314				
39	0.1365	329.1423	329					**39**	–0.0661	318.0965	318				
40	0.1950	333.2534	333					**40**	–0.0060	321.8439	322				

Table 8.D.30 New Conversions for Mathematics, Grades Two and Three

Grade 2								Grade 3							
Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score
0	–	150.0000	150	**41**	–0.1343	335.4014	335	**0**	–	150.0000	150	**41**	0.0647	342.5484	343
1	–5.2951	150.0000	150	**42**	–0.0573	340.2959	340	**1**	–5.1743	150.0000	150	**42**	0.1414	347.0727	347
2	–4.5730	150.0000	150	**43**	0.0209	345.2726	345	**2**	–4.4401	150.0000	150	**43**	0.2196	351.6786	352
3	–4.1382	150.0000	150	**44**	0.1007	350.3448	350	**3**	–3.9949	150.0000	150	**44**	0.2993	356.3786	356
4	–3.8210	150.0000	150	**45**	0.1822	355.5267	356	**4**	–3.6686	150.0000	150	**45**	0.3809	361.1886	361
5	–3.5681	150.0000	150	**46**	0.2657	360.8344	361	**5**	–3.4079	150.0000	150	**46**	0.4646	366.1227	366
6	–3.3559	150.0000	150	**47**	0.3515	366.2887	366	**6**	–3.1888	150.7607	151	**47**	0.5507	371.1999	371
7	–3.1716	150.0000	150	**48**	0.4399	371.9088	372	**7**	–2.9986	161.9742	162	**48**	0.6396	376.4413	376
8	–3.0078	152.7044	153	**49**	0.5313	377.7208	378	**8**	–2.8295	171.9382	172	**49**	0.7318	381.8711	382
9	–2.8595	162.1332	162	**50**	0.6262	383.7544	384	**9**	–2.6767	180.9462	181	**50**	0.8276	387.5183	388
10	–2.7234	170.7839	171	**51**	0.7251	390.0453	390	**10**	–2.5367	189.1991	189	**51**	0.9276	393.4170	393
11	–2.5972	178.8097	179	**52**	0.8288	396.6365	397	**11**	–2.4071	196.8417	197	**52**	1.0327	399.6085	400
12	–2.4790	186.3226	186	**53**	0.9380	403.5813	404	**12**	–2.2860	203.9814	204	**53**	1.1435	406.1436	406
13	–2.3676	193.4078	193	**54**	1.0539	410.9462	411	**13**	–2.1720	210.7011	211	**54**	1.2613	413.0877	413
14	–2.2618	200.1322	200	**55**	1.1776	418.8161	419	**14**	–2.0640	217.0635	217	**55**	1.3874	420.5198	421
15	–2.1609	206.5492	207	**56**	1.3112	427.3090	427	**15**	–1.9613	223.1214	223	**56**	1.5236	428.5471	429
16	–2.0641	212.7011	213	**57**	1.4569	436.5695	437	**16**	–1.8630	228.9167	229	**57**	1.6723	437.3125	437
17	–1.9710	218.6243	219	**58**	1.6180	446.8125	447	**17**	–1.7685	234.4840	234	**58**	1.8369	447.0147	447
18	–1.8809	224.3484	224	**59**	1.7994	458.3471	458	**18**	–1.6774	239.8526	240	**59**	2.0223	457.9489	458
19	–1.7937	229.8985	230	**60**	2.0088	471.6596	472	**19**	–1.5893	245.0471	245	**60**	2.2363	470.5598	471
20	–1.7088	235.2964	235	**61**	2.2587	487.5488	488	**20**	–1.5038	250.0889	250	**61**	2.4914	485.5992	486
21	–1.6260	240.5608	241	**62**	2.5728	507.5239	508	**21**	–1.4205	254.9967	255	**62**	2.8114	504.4639	504
22	–1.5450	245.7082	246	**63**	3.0045	534.9713	535	**22**	–1.3393	259.7876	260	**63**	3.2500	530.3151	530
23	–1.4657	250.7531	251	**64**	3.7232	580.6646	581	**23**	–1.2598	264.4736	264	**64**	3.9766	573.1490	573
24	–1.3877	255.7092	256	**65**	–	600.0000	600	**24**	–1.1818	269.0697	269	**65**	–	600.0000	600
25	–1.3110	260.5868	261					**25**	–1.1052	273.5876	274				
26	–1.2353	265.3979	265					**26**	–1.0297	278.0378	278				
27	–1.1605	270.1522	270					**27**	–0.9552	282.4303	282				
28	–1.0865	274.8591	275					**28**	–0.8815	286.7745	287				
29	–1.0131	279.5275	280					**29**	–0.8084	291.0790	291				
30	–0.9402	284.1646	284					**30**	–0.7359	295.3523	295				
31	–0.8676	288.7795	289					**31**	–0.6638	299.6033	300				
32	–0.7952	293.3797	293					**32**	–0.5920	303.8374	304				
33	–0.7230	297.9732	298					**33**	–0.5203	308.0641	308				
34	–0.6507	302.5657	303					**34**	–0.4486	312.2909	312				
35	–0.5784	307.1668	307					**35**	–0.3768	316.5254	317				
36	–0.5058	311.7842	312					**36**	–0.3047	320.7754	321				
37	–0.4328	316.4256	316					**37**	–0.2322	325.0487	325				
38	–0.3593	321.0991	321					**38**	–0.1591	329.3538	329				
39	–0.2851	325.8134	326					**39**	–0.0854	333.6992	334				
40	–0.2102	330.5775	331					**40**	–0.0109	338.0934	338				

Table 8.D.31 New Conversions for Mathematics, Grades Four and Five

Grade 4								Grade 5							
Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score
0	–	150.0000	150	**41**	0.1441	349.9762	350	**0**	–	150.0000	150	**41**	0.5317	384.1018	384
1	–4.9069	150.0000	150	**42**	0.2190	354.9085	355	**1**	–4.4286	150.0000	150	**42**	0.6035	390.8593	391
2	–4.1871	150.0000	150	**43**	0.2953	359.9297	360	**2**	–3.7113	150.0000	150	**43**	0.6765	397.7412	398
3	–3.7547	150.0000	150	**44**	0.3731	365.0528	365	**3**	–3.2813	150.0000	150	**44**	0.7510	404.7600	405
4	–3.4401	150.0000	150	**45**	0.4527	370.2968	370	**4**	–2.9689	150.0000	150	**45**	0.8273	411.9398	412
5	–3.1898	150.0000	150	**46**	0.5343	375.6740	376	**5**	–2.7209	150.0000	150	**46**	0.9054	419.3048	419
6	–2.9804	150.0000	150	**47**	0.6183	381.2056	381	**6**	–2.5135	150.0000	150	**47**	0.9859	426.8826	427
7	–2.7989	156.1498	156	**48**	0.7050	386.9141	387	**7**	–2.3341	150.0000	150	**48**	1.0689	434.7051	435
8	–2.6380	166.7493	167	**49**	0.7948	392.8258	393	**8**	–2.1752	150.0000	150	**49**	1.1550	442.8091	443
9	–2.4926	176.3207	176	**50**	0.8881	398.9713	399	**9**	–2.0318	150.0000	150	**50**	1.2444	451.2364	451
10	–2.3596	185.0849	185	**51**	0.9855	405.3878	405	**10**	–1.9007	154.9718	155	**51**	1.3380	460.0484	460
11	–2.2364	193.1995	193	**52**	1.0877	412.1199	412	**11**	–1.7794	166.3965	166	**52**	1.4362	469.2991	469
12	–2.1212	200.7810	201	**53**	1.1956	419.2223	419	**12**	–1.6662	177.0595	177	**53**	1.5399	479.0706	479
13	–2.0129	207.9189	208	**54**	1.3101	426.7676	427	**13**	–1.5598	187.0886	187	**54**	1.6502	489.4615	489
14	–1.9102	214.6819	215	**55**	1.4327	434.8405	435	**14**	–1.4590	196.5827	197	**55**	1.7684	500.5981	501
15	–1.8123	221.1262	221	**56**	1.5651	443.5589	444	**15**	–1.3630	205.6204	206	**56**	1.8963	512.6455	513
16	–1.7186	227.2968	227	**57**	1.7097	453.0799	453	**16**	–1.2713	214.2658	214	**57**	2.0364	525.8342	526
17	–1.6285	233.2307	233	**58**	1.8697	463.6220	464	**17**	–1.1831	222.5724	223	**58**	2.1917	540.4713	540
18	–1.5415	238.9591	239	**59**	2.0503	475.5137	476	**18**	–1.0980	230.5821	231	**59**	2.3674	557.0188	557
19	–1.4573	244.5085	245	**60**	2.2588	489.2454	489	**19**	–1.0157	238.3344	238	**60**	2.5709	576.1880	576
20	–1.3754	249.9014	250	**61**	2.5079	505.6535	506	**20**	–0.9358	245.8607	246	**61**	2.8148	599.1619	599
21	–1.2956	255.1584	255	**62**	2.8213	526.2913	526	**21**	–0.8580	253.1887	253	**62**	3.1231	600.0000	600
22	–1.2176	260.2943	260	**63**	3.2525	554.6908	555	**22**	–0.7821	260.3429	260	**63**	3.5487	600.0000	600
23	–1.1412	265.3263	265	**64**	3.9710	600.0000	600	**23**	–0.7078	267.3447	267	**64**	4.2615	600.0000	600
24	–1.0662	270.2680	270	**65**	–	600.0000	600	**24**	–0.6348	274.2136	274	**65**	–	600.0000	600
25	–0.9923	275.1318	275					**25**	–0.5631	280.9681	281				
26	–0.9195	279.9280	280					**26**	–0.4925	287.6211	288				
27	–0.8475	284.6681	285					**27**	–0.4228	294.1897	294				
28	–0.7762	289.3615	289					**28**	–0.3538	300.6872	301				
29	–0.7055	294.0184	294					**29**	–0.2854	307.1264	307				
30	–0.6353	298.6447	299					**30**	–0.2176	313.5195	314				
31	–0.5653	303.2506	303					**31**	–0.1501	319.8783	320				
32	–0.4956	307.8442	308					**32**	–0.0828	326.2161	326				
33	–0.4259	312.4336	312					**33**	–0.0157	332.5386	333				
34	–0.3562	317.0265	317					**34**	0.0514	338.8610	339				
35	–0.2863	321.6311	322					**35**	0.1187	345.1972	345				
36	–0.2160	326.2553	326					**36**	0.1862	351.5542	352				
37	–0.1454	330.9075	331					**37**	0.2540	357.9451	358				
38	–0.0742	335.5963	336					**38**	0.3224	364.3822	364				
39	–0.0023	340.3307	340					**39**	0.3913	370.8782	371				
40	0.0704	345.1206	345					**40**	0.4611	377.4466	377				

Table 8.D.32 New Conversions for Mathematics, Grades Six and Seven

Grade 6								Grade 7							
Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score	Raw Scr.	Theta	Scale Score	Rprtd Score
0	–	150.0000	150	**41**	0.6327	379.8939	380	**0**	–	150.0000	150	**41**	0.8730	385.7776	386
1	–4.3769	150.0000	150	**42**	0.7065	385.9932	386	**1**	–4.0674	150.0000	150	**42**	0.9448	391.7349	392
2	–3.6579	150.0000	150	**43**	0.7816	392.2068	392	**2**	–3.3489	150.0000	150	**43**	1.0179	397.8044	398
3	–3.2264	150.0000	150	**44**	0.8584	398.5539	399	**3**	–2.9182	150.0000	150	**44**	1.0925	404.0034	404
4	–2.9126	150.0000	150	**45**	0.9370	405.0547	405	**4**	–2.6053	150.0000	150	**45**	1.1690	410.3508	410
5	–2.6631	150.0000	150	**46**	1.0178	411.7317	412	**5**	–2.3571	150.0000	150	**46**	1.2475	416.8679	417
6	–2.4544	150.0000	150	**47**	1.1010	418.6107	419	**6**	–2.1497	150.0000	150	**47**	1.3283	423.5824	424
7	–2.2738	150.0000	150	**48**	1.1870	425.7210	426	**7**	–1.9705	150.0000	150	**48**	1.4119	430.5194	431
8	–2.1136	152.8075	153	**49**	1.2762	433.0994	433	**8**	–1.8119	162.8505	163	**49**	1.4985	437.7134	438
9	–1.9691	164.7585	165	**50**	1.3692	440.7850	441	**9**	–1.6690	174.7139	175	**50**	1.5887	445.2037	445
10	–1.8368	175.6958	176	**51**	1.4664	448.8276	449	**10**	–1.5385	185.5522	186	**51**	1.6831	453.0372	453
11	–1.7145	185.8149	186	**52**	1.5687	457.2869	457	**11**	–1.4179	195.5659	196	**52**	1.7822	461.2708	461
12	–1.6002	195.2639	195	**53**	1.6770	466.2362	466	**12**	–1.3055	204.9028	205	**53**	1.8871	469.9745	470
13	–1.4927	204.1543	204	**54**	1.7922	475.7677	476	**13**	–1.1998	213.6759	214	**54**	1.9986	479.2356	479
14	–1.3908	212.5731	213	**55**	1.9160	485.9984	486	**14**	–1.0998	221.9739	222	**55**	2.1182	489.1656	489
15	–1.2939	220.5899	221	**56**	2.0500	497.0809	497	**15**	–1.0048	229.8659	230	**56**	2.2478	499.9222	500
16	–1.2011	228.2621	228	**57**	2.1970	509.2345	509	**16**	–0.9139	237.4102	237	**57**	2.3895	511.6916	512
17	–1.1120	235.6334	236	**58**	2.3603	522.7345	523	**17**	–0.8267	244.6539	245	**58**	2.5469	524.7572	525
18	–1.0259	242.7456	243	**59**	2.5450	538.0070	538	**18**	–0.7426	251.6365	252	**59**	2.7247	539.5245	540
19	–0.9427	249.6311	250	**60**	2.7589	555.6978	556	**19**	–0.6612	258.3914	258	**60**	2.9307	556.6285	557
20	–0.8618	256.3181	256	**61**	3.0153	576.8935	577	**20**	–0.5823	264.9474	265	**61**	3.1775	577.1163	577
21	–0.7830	262.8315	263	**62**	3.3381	600.0000	600	**21**	–0.5054	271.3295	271	**62**	3.4888	600.0000	600
22	–0.7061	269.1928	269	**63**	3.7812	600.0000	600	**22**	–0.4304	277.5594	278	**63**	3.9178	600.0000	600
23	–0.6308	275.4212	275	**64**	4.5157	600.0000	600	**23**	–0.3569	283.6579	284	**64**	4.6343	600.0000	600
24	–0.5568	281.5341	282	**65**	–	600.0000	600	**24**	–0.2849	289.6389	290	**65**	–	600.0000	600
25	–0.4841	287.5475	288					**25**	–0.2140	295.5208	296				
26	–0.4124	293.4742	293					**26**	–0.1442	301.3175	301				
27	–0.3416	299.3285	299					**27**	–0.0753	307.0422	307				
28	–0.2715	305.1227	305					**28**	–0.0071	312.7072	313				
29	–0.2021	310.8683	311					**29**	0.0606	318.3233	318				
30	–0.1330	316.5763	317					**30**	0.1278	323.9025	324				
31	–0.0643	322.2574	322					**31**	0.1947	329.4549	329				
32	0.0042	327.9220	328					**32**	0.2613	334.9909	335				
33	0.0726	333.5822	334					**33**	0.3279	340.5206	341				
34	0.1411	339.2424	339					**34**	0.3946	346.0539	346				
35	0.2098	344.9193	345					**35**	0.4614	351.6011	352				
36	0.2787	350.6206	351					**36**	0.5285	357.1724	357				
37	0.3481	356.3574	356					**37**	0.5960	362.7783	363				
38	0.4180	362.1410	362					**38**	0.6641	368.4299	368				
39	0.4887	367.9832	368					**39**	0.7328	374.1387	374				
40	0.5602	373.8964	374					**40**	0.8024	379.9169	380				

Appendix 8.E—DIF Analyses

Table 8.E.1 Operational Items Exhibiting Significant DIF

Content Area	Accession No.	Grade	Item Seq	MHD-DIF	Comparison	In Favor Of
Reading/Language-Arts	STR30626.OSA	11	68	–1.83	MALE/FEMALE	MALE
Mathematics	STM12864	5	11	–1.61	MALE/FEMALE	MALE
	STM11872	7	21	–2.02	MALE/FEMALE	MALE

Table 8.E.2 Field-test Items Exhibiting Significant DIF

Content Area	Accession No.	Grade	Item Seq	MHD-DIF	Comparison	In Favor Of
Reading/Language-Arts	STR20645.074	6	42	–2.18	MALE/FEMALE	MALE
	STR40162.OSA	9	71	–2.51	MALE/FEMALE	MALE
	STR30057.246	9	45	–2.05	MALE/FEMALE	MALE
Mathematics	STM14735	4	17	–2.83	MALE/FEMALE	MALE

Table 8.E.3 DIF Classifications for RLA, Grades Two through Four (operational items)

	Grade 2						Grade 3						Grade 4					
DIF	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	3
A-	33	51	33	51	30	46	32	49	29	45	32	49	31	41	35	47	35	47
A+	31	48	32	49	34	52	33	51	36	55	33	51	44	59	36	48	36	48
B+	1	2	0	0	1	2	0	0	0	0	0	0	0	0	2	3	2	3
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	65	100	65	100	65	100	65	100	65	100	65	100	75	100	75	100	75	100

Table 8.E.4 DIF Classifications for RLA, Grades Five through Seven (operational items)

	Grade 5						Grade 6						Grade 7					
DIF	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B-	1	1	4	5	5	7	0	0	0	0	0	0	3	4	0	0	3	4
A-	33	44	33	44	34	45	34	45	0	0	34	45	35	47	0	0	35	47
A+	41	55	38	51	36	48	41	55	0	0	41	55	35	47	0	0	35	47
B+	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	2	3
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	0	0	0	0	0	0	75	100	0	0	0	0	75	100	0	0
TOTAL	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100

Table 8.E.5 DIF Classifications for RLA, Grades Eight through Eleven (operational Items)

DIF category	Grade 8						Grade 9						Grade 10						Grade 11					
	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
B-	3	4	0	0	3	4	3	4	0	0	3	4	2	3	0	0	2	3	1	1	0	0	1	1
A-	33	44	0	0	33	44	32	43	0	0	32	43	37	49	0	0	37	49	32	43	0	0	32	43
A+	37	49	0	0	37	49	38	51	0	0	38	51	34	45	0	0	34	45	39	52	0	0	39	52
B+	2	3	0	0	2	3	2	3	0	0	2	3	2	3	0	0	2	3	2	3	0	0	2	3
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	75	100	0	0	0	0	75	100	0	0	0	0	75	100	0	0	0	0	75	100	0	0
TOTAL	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100	75	100

Table 8.E.6 DIF Classifications for Mathematics, Grades Two through Four (operational items)

	Grade 2						Grade 3						Grade 4					
DIF	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B-	0	0	0	0	0	0	3	5	0	0	3	5	2	3	2	3	4	6
A-	32	49	35	54	29	45	28	43	34	52	30	46	29	45	28	43	28	43
A+	33	51	30	46	36	55	34	52	31	48	32	49	32	49	35	54	31	48
B+	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	2	3
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	65	100	65	100	65	100	65	100	65	100	65	100	65	100	65	100	65	100

Table 8.E.7 DIF Classifications for Mathematics, Grades Five through Seven (operational items)

	Grade 5						Grade 6						Grade 7					
DIF	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	1	2	0	0	1	2	0	0	0	0	0	0	1	2	0	0	1	2
B-	0	0	3	5	3	5	1	2	0	0	1	2	2	3	0	0	2	3
A-	32	49	29	45	25	38	29	45	0	0	29	45	33	51	0	0	33	51
A+	31	48	32	49	34	52	34	52	0	0	34	52	26	40	0	0	26	40
B+	1	2	1	2	2	3	1	2	0	0	1	2	3	5	0	0	3	5
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	0	0	0	0	0	0	65	100	0	0	0	0	65	100	0	0
TOTAL	65	100	65	100	65	100	65	100	65	100	65	100	65	100	65	100	65	100

Table 8.E.8 DIF Classifications for Algebra I and Geometry (operational items)

	Algebra I						Geometry					
DIF	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0
B-	1	2	0	0	1	2	0	0	0	0	0	0
A-	32	49	0	0	32	49	36	55	0	0	36	55
A+	32	49	0	0	32	49	26	40	0	0	26	40
B+	0	0	0	0	0	0	3	5	0	0	3	5
C+	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	65	100	0	0	0	0	65	100	0	0
TOTAL	65	100	65	100	65	100	65	100	65	100	65	100

Table 8.E.9 DIF Classifications for RLA, Grades Two through Four (field-test items)

	Grade 2						Grade 3						Grade 4					
DIF	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B-	3	4	0	0	3	4	4	6	0	0	4	6	1	2	0	0	1	2
A-	31	43	0	0	31	43	28	39	0	0	28	39	19	35	0	0	19	35
A+	38	53	0	0	38	53	40	56	0	0	40	56	19	35	0	0	19	35
B+	0	0	0	0	0	0	0	0	0	0	0	0	3	6	0	0	3	6
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	72	100	0	0	0	0	72	100	0	0	12	22	54	100	12	22
TOTAL	72	100	72	100	72	100	72	100	72	100	72	100	54	100	54	100	54	100

Table 8.E.10 DIF Classifications for RLA, Grades Five through Seven (field-test Items)

	Grade 5						Grade 6						Grade 7					
DIF	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	1	4	0	0	1	4	0	0	0	0	0	0
B-	1	3	0	0	1	3	1	4	0	0	1	4	0	0	0	0	0	0
A-	13	36	0	0	13	36	8	33	0	0	8	33	0	0	0	0	0	0
A+	22	61	0	0	22	61	12	50	0	0	12	50	0	0	0	0	0	0
B+	0	0	0	0	0	0	2	8	0	0	2	8	0	0	0	0	0	0
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	36	100	0	0	0	0	24	100	0	0	24	100	24	100	24	100
TOTAL	36	100	36	100	36	100	24	100	24	100	24	100	24	100	24	100	24	100

Table 8.E.11 DIF Classifications for RLA, Grades Eight through Eleven (field-test items)

DIF category	Grade 8						Grade 9						Grade 10						Grade 11					
	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	2	7	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0
B-	0	0	0	0	0	0	2	7	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0
A-	0	0	0	0	0	0	9	30	0	0	9	30	0	0	0	0	0	0	4	33	0	0	4	33
A+	0	0	0	0	0	0	11	37	0	0	11	37	0	0	0	0	0	0	2	17	0	0	2	17
B+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	24	100	24	100	24	100	6	20	30	100	6	20	24	100	24	100	24	100	6	50	12	100	6	50
TOTAL	24	100	24	100	24	100	30	100	30	100	30	100	24	100	24	100	24	100	12	100	12	100	12	100

Table 8.E.12 DIF Classifications for Mathematics, Grades Two through Four (field-test items)

DIF category	Grade 2						Grade 3						Grade 4					
	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1	2
B-	4	6	0	0	4	6	8	11	0	0	8	11	2	4	0	0	2	4
A-	21	29	0	0	21	29	37	51	0	0	37	51	22	41	0	0	22	41
A+	39	54	0	0	39	54	26	36	0	0	26	36	16	30	0	0	16	30
B+	8	11	0	0	8	11	1	1	0	0	1	1	1	2	0	0	1	2
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	72	100	0	0	0	0	72	100	0	0	12	22	54	100	12	22
TOTAL	72	100	72	100	72	100	72	100	72	100	72	100	54	100	54	100	54	100

Table 8.E.13 DIF Classifications for Mathematics, Grades Five through Seven (field-test items)

	Grade 5						Grade 6						Grade 7					
	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
DIF category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B-	2	6	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0
A-	15	42	0	0	15	42	9	38	0	0	9	38	0	0	0	0	0	0
A+	19	53	0	0	19	53	14	58	0	0	14	58	0	0	0	0	0	0
B+	0	0	0	0	0	0	1	4	0	0	1	4	0	0	0	0	0	0
C+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	36	100	0	0	0	0	24	100	0	0	24	100	24	100	24	100
TOTAL	36	100	36	100	36	100	24	100	24	100	24	100	24	100	24	100	24	100

Table 8.E.14 DIF Classifications for Algebra I and Geometry (field-test items)

	Algebra I						Geometry					
	M-F		NonD-Dis		Total		M-F		NonD-Dis		Total	
DIF category	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
C-	0	0	0	0	0	0	0	0	0	0	0	0
B-	0	0	0	0	0	0	0	0	0	0	0	0
A-	17	57	0	0	17	57	0	0	0	0	0	0
A+	13	43	0	0	13	43	0	0	0	0	0	0
B+	0	0	0	0	0	0	0	0	0	0	0	0
C+	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	30	100	0	0	6	100	6	100	6	100
TOTAL	30	100	30	100	30	100	6	100	6	100	6	100

Chapter 9: Quality Control Procedures

ETS implements rigorous quality control procedures throughout the test development, administration, scoring, and reporting processes. As part of this effort, ETS maintains an Office of Testing Integrity (OTI) that resides in the ETS legal department. OTI provides quality assurance services for all testing programs administered by ETS. In addition, the Office of Professional Standards Compliance at ETS publishes and maintains the *ETS Standards for Quality and Fairness,* which supports the OTI's goals and activities. The purposes of the *ETS Standards for Quality and Fairness* are to help ETS design, develop, and deliver technically sound, fair, and useful products and services; and to help the public and auditors evaluate those products and services.

In addition, each department at ETS that is involved in the testing cycle designs and implements an independent set of procedures to ensure the quality of their products. In the next sections, these procedures are described.

Quality Control of Item Development

The item development process for the STS is described in detail in Chapter 3, starting on page 101. The next sections highlight elements of the process devoted specifically to quality control of item development.

Item Specifications

ETS maintains item development specifications for each STS test and has developed an item utilization plan to guide the development of the items for each content area. Item writing emphasis is determined in consultation with the CDE. Adherence to the specifications ensures the maintenance of quality and consistency of the item development process.

Item Writers

The items for each STS test are written by item writers that have a thorough understanding of the California content standards. The item writers are carefully screened and selected by senior ETS content staff and approved by the CDE. Only those with strong content and teaching backgrounds are invited to participate in an extensive training program for item writers.

Internal Contractor Reviews

Once items have been written, ETS assessment specialists make sure that each item goes through an intensive internal review process. Every step of this process is designed to produce items that exceed industry standards for quality. It includes three rounds of content reviews, two rounds of editorial reviews, an internal fairness review, and a high-level review and approval by a content area director. A carefully designed and monitored workflow and detailed checklists help to ensure that all items meet the specifications for the process.

Content Review

ETS assessment specialists make sure that the test items and related materials comply with ETS's written guidelines for clarity, style, accuracy, and appropriateness and with approved item specifications.

The artwork and graphics for the items are created during the internal content review period so assessment specialists can evaluate the correctness and appropriateness of the art early in the item development process. ETS selects visuals that are relevant to the item content

and that are easily understood so students do not struggle to determine the purpose or meaning of the questions.

Editorial Review

Another step in the ETS internal review process involves a team of specially trained editors who check questions for clarity, correctness of language, grade-level appropriateness of language, adherence to style guidelines, and conformity to acceptable item-writing practices. The editorial review also includes rounds of copyediting and proofreading. ETS takes pride in the typographical integrity of the items presented to our clients and strives for error-free items beginning with the initial rounds of review.

Fairness Review

One of the final steps in the ETS internal review process is to have all items and stimuli reviewed for fairness. Only ETS staff members who have participated in the ETS Fairness Training, a rigorous internal training course, conduct this bias and sensitivity review. These staff members have been trained to identify and eliminate test questions that contain content that could be construed as offensive to, or biased against, members of specific ethnic, racial, or gender groups.

Assessment Director Review

As a final quality control step, the content area's assessment director or another senior-level content reviewer will read each item before it is presented to the CDE.

Assessment Review Panel Review

The ARPs are panels that advise the CDE and ETS on areas related to item development for the STS tests. The ARPs are responsible for reviewing all newly developed items for alignment to the California content standards. The ARPs also review the items for accuracy of content, clarity of phrasing, and quality.

Statewide Pupil Assessment Review Panel Review

The SPAR panel is responsible for reviewing and approving a single achievement test to be used statewide for the testing of students in California public schools in grades two through eleven. The SPAR panel representatives ensure that the test items conform to the requirements of *EC* Section. The constructed-response writing tasks are also presented to the SPAR panel for review. If the SPAR panel rejects specific items and/or constructed-response writing tasks, the items and/or tasks are replaced with other items and/or tasks.

Data Review of Field-tested Items

ETS field tests newly developed items to obtain statistical information about item performance. This information is used to evaluate items that are candidates for use in operational test forms. The items and item statistics are examined carefully at data review meetings, which is where content experts discuss items that have poor statistics and do not meet the psychometric criteria for item quality. The CDE defines the criteria for acceptable or unacceptable item statistics. These criteria ensure that the item (1) has an appropriate level of difficulty for the target population; (2) discriminates well between examinees that differ in ability; and (3) conforms well to the statistical model underlying the measurement of the intended constructs. The results of analyses for differential item functioning (DIF) are used to make judgments about the appropriateness of items for various subgroups.

The panelists respond to questions such as:

- Are there any instructional issues that have negatively affected the performance of the item?
- Is there a content problem within the item?

The panelists make recommendations about whether to accept or reject each item for inclusion in the California item bank.

Quality Control of the Item Bank

After the data review meetings, items are placed in the item bank along with their statistics and reviewers' evaluations of their quality. ETS then delivers the items to the CDE through the California electronic item bank. The item bank database is maintained by a staff of application systems programmers, led by the Item Bank Manager, at ETS. All processes are logged; all change requests—including item bank updates for item availability status—are tracked; and all output and California item bank deliveries are quality-controlled for accuracy.

Quality of the item bank and secure transfer of the California item bank to the CDE is very important. The ETS internal item bank database resides on a server within the ETS firewall; access to the SQL Server database is strictly controlled by means of system administration. The electronic item banking application includes a login/password system to authorize access to the database or designated portions of the database. In addition, only users authorized to access the specific database are able to use the item bank. Users are authorized by a designated administrator at the CDE and at ETS.

ETS has extensive experience in accurate and secure data transfer of many types including CDs, secure remote hosting, secure Web access, and secure file transfer protocol (SFTP), which is the current method used to deliver the California electronic item bank to the CDE. In addition, all files posted on the SFTP site by the Item Bank staff are encrypted with a password.

The measures taken for ensuring the accuracy, confidentiality, and security of electronic files are as follows:

- Electronic forms of test content, documentation, and item banks are backed up electronically, with the backup media kept offsite, to prevent loss from system breakdown or a natural disaster.
- The offsite backup files are kept in secure storage, with access limited to authorized personnel only.
- Advanced network security measures are used to prevent unauthorized electronic access to the item bank.

Quality Control of Test Form Development

The ETS Assessment Development group is committed to providing the highest quality product to the students of California and has in place a number of quality control checks to ensure that outcome. During the item development process, there are multiple senior reviews of items and passages, including one by the Assessment Director. Test forms certification is a formal quality control process established as a final checkpoint prior to printing. In it, content, editorial, and senior development staff review test forms for accuracy and clueing issues.

ETS also includes quality checks throughout preparation of the form planners. A form planner specifications document is developed by the test development team lead with input from ETS's item bank and statistics groups; this form is then reviewed by all team members who build forms at a training specific to form planners. After trained content team members sign off on a form planner, a representative from the internal QC group reviews each file for accuracy against the specifications document. Assessment Directors review and sign off on form planners prior to processing.

As processes are refined and enhanced, ETS will implement further QC checks as appropriate.

Quality Control of Test Materials

Collecting Test Materials

Once the tests are administered, school districts return scorable and nonscorable materials within five working days after the last selected testing day of each test administration period. The freight return kits provided to the districts contain color-coded labels identifying scorable and nonscorable materials and labels with bar-coded information identifying the school and district. The school districts apply the appropriate labels and number the cartons prior to returning the materials to the processing center by means of their assigned carrier. The use of the color-coded labels streamlines the return process.

All scorable materials are delivered to the Pearson scanning and scoring facilities in Iowa City, Iowa. The nonscorable materials, including test booklets, are returned to the Security Processing Department in Pearson's Cedar Rapids, Iowa, facility. ETS and Pearson closely monitor the return of materials. The STAR Technical Assistance Center (TAC) at ETS monitors returns and notifies school districts that do not return their materials in a timely manner. STAR TAC contacts the district STAR coordinators and works with them to facilitate the return of the test materials.

Processing Test Materials

Upon receipt of the test materials, Pearson uses precise inventory and test processing systems, in addition to quality assurance procedures, to maintain an up-to-date accounting of all the testing materials within their facilities. The materials are removed carefully from the shipping cartons and examined for a number of conditions, including physical damage, shipping errors, and omissions. A visual inspection to compare the number of students recorded on the School and Grade Identification (SGID) sheets with the number of answer documents in the stack is also conducted.

Pearson's image scanning process captures security information electronically and compares scorable material quantities reported on the SGIDs to actual documents scanned. School districts are contacted by phone if there are any missing shipments or the quantity of materials returned appears to be less than expected.

Quality Control of Scanning

Before any STAR documents are scanned, Pearson conducts a complete check of the scanning system. ETS and Pearson create test decks for every test and form. Each test deck consists of approximately 25 answer documents marked to cover response ranges, demographic data, blanks, double marks, and other responses. Fictitious students are created to verify that each marking possibility is processed correctly by the scanning program. The output file generated as a result of this activity is thoroughly checked against each answer document after each stage to verify that the scanner is capturing marks

correctly. When the program output is confirmed to match the expected results, a scan program release form is signed and the scan program is placed in the production environment under configuration management.

The intensity levels of each scanner are constantly monitored for quality control purposes. Intensity diagnostics sheets are run before and during each batch to verify that the scanner is working properly. In the event that a scanner fails to properly pick up items on the diagnostic sheets, the scanner is recalibrated to work properly before being allowed to continue processing student documents.

Documents received in poor condition (torn, folded, or water-stained) that could not be fed through the high-speed scanners are either scanned using a flat-bed scanner or keyed into the system manually.

Post-scanning Edits

After scanning, there are three opportunities for demographic data to be edited:

- After scanning, by Pearson online editors
- After Pearson online editing, by district STAR coordinators (demographic edit)
- After paper reporting, by district STAR coordinators

Demographic edits completed by the Pearson editors and by the district STAR coordinator online are included in the data used for the paper reporting and for the technical reports.

Quality Control of Image Editing

Prior to submitting any STAR operational documents through the image editing process, Pearson creates a mock set of documents to test all of the errors listed in the edit specifications. The set of test documents is used to verify that each image of the document is saved so that an editor would be able to review the documents through an interactive interface. The edits are confirmed to show the appropriate error, the correct image to edit the item, and the appropriate problem and resolution text that instructs the editor on the actions that should be taken.

Once the set of mock test documents is created, the image edit system completes the following procedures:

1. Scan the set of test documents.
2. Verify that the images from the documents are saved correctly.
3. Verify that the appropriate problem and resolution text displays for each type of error.
4. Submit the post-edit program.
5. Make changes and resubmit the post-edit program if errors are identified that requires correction.
6. Print a listing of the post-edit file, the correction card file, and the original scan file.

Pearson checks the post file against expected results to ensure the appropriate corrections are made. The post file will have all keyed corrections and any defaults from the edit specifications.

Quality Control of Answer Document Processing and Scoring

Accountability of Answer Documents

In addition to the quality control checks carried out in scanning and image editing, the following manual quality checks are conducted to verify that the answer documents are correctly attributed to the students, schools, districts, and subgroups:

- Grade counts are compared to the District Master File Sheets.
- Document counts are compared to the School Master File Sheets.
- Document counts are compared to the SGIDs.
- All school districts and grades are compared to the CDE County/District/School (CDS) Master File.

Any discrepancies identified in the steps outlined above are followed up by Pearson staff with the school districts for resolution.

Processing of Answer Documents

Prior to processing operational answer sheets and executing subsequent data processing programs, ETS conducts an end-to-end test. As part of this test, ETS prepares approximately 700 test cases covering all tests and many scenarios designed to exercise particular business rule logic. ETS marks answer sheets for those 700 test cases. They are then scanned, scored, and aggregated. The results at various inspection points are checked by psychometricians and Data Quality Services staff. Additionally, a post-scan test file of approximately 50,000 records across the STAR program is scored and aggregated to test a broader range of scoring and aggregation scenarios. These procedures assure that students and school districts get the correct scores when the actual scoring process is carried out.

Scoring and Reporting Specifications

ETS develops standardized scoring procedures and specifications so testing materials are processed and scored accurately. These documents include:

- General Reporting Specifications
- Form Planner Specifications
- Aggregation Rules
- ”What If” . . . List
- Edit Specifications
- Reporting Cluster Names and Item Numbers

Each of these documents is explained in detail in Chapter 7, starting on page 155. The scoring specifications are reviewed and revised by the CDE, ETS, and Pearson each year. After a version that all parties endorse is finalized, the CDE issues a formal approval of the scoring and reporting specifications.

Storing Answer Documents

After the answer documents have been scanned, edited, scored, and cleared the clean-post process, they are palletized and placed in the secure storage facilities at Pearson. The materials are stored until October 31 of each year, after which ETS requests permission to destroy the materials. After receiving CDE approval, the materials are destroyed in a secure manner.

Quality Control of Psychometric Processes

Score Key Verification Procedures

ETS and Pearson take various necessary measures to ascertain that the scoring keys are applied to the student responses as expected and the student scores are computed accurately. Scoring keys, provided in the form planners, are produced by ETS and verified thoroughly by performing multiple quality control checks. The form planners contain the information about an assembled test form; other information in the form planner includes the test name, administration year, subscore identification, and standards and statistics associated with each item. The quality control checks that are performed before keys are finalized are listed below:

1. The form planners are checked for accuracy against the Form Planner Specification document and the Score Key and Score Conversion document before the keys are loaded into the score key management system (SKM) at ETS.
2. The printed lists of the scoring keys are checked again once the keys have been loaded into the SKM system.
3. The sequence of linking items[1] in the form planners are matched with their sequence in the actual test booklets.
4. The demarcations of various sections in the actual test booklet are checked against the list of demarcations provided by test development staff.
5. Scoring is verified internally at Pearson. ETS independently generates scores and verifies Pearson's scoring of the data by comparing the two results. Any discrepancies are then resolved.
6. The entire scoring system is tested using a test deck that includes typical and extremely atypical responses vectors, as described earlier in "Processing of Answer Documents" on page 312.
7. Classical item analyses are run on an early sample of data to provide an additional check of the keys. Although rare, if an item is found to be problematic, a followup process is performed that will exclude it from further analyses.

Quality Control of Item Analyses, DIF, and the Equating Process

The psychometric analyses conducted at ETS undergo comprehensive quality checks by a team of psychometricians and data analysts. Detailed checklists are consulted by members of the team for each of the statistical procedures performed on each STS test. Quality assurance checks also include a review of the current year's statistics to statistics from previous years. The results of preliminary classical item analyses that provide a check on scoring keys are also reviewed by a senior psychometrician. The items that are flagged for questionable statistical attributes are sent to test development staff for their review; their comments are reviewed by the psychometricians before items are approved to be included in the equating process.

The results of the equating process are reviewed by a psychometric manager in addition to the aforementioned team of psychometricians and data analysts. If the senior psychometrician and the manager reach a consensus that an equating result does not

[1] Linking items are used to link the scores on current year's test form to scores obtained on the previous years' test forms to adjust for the difficulty level of the forms across years. This is accomplished during the equating process, as discussed in Chapter 2.

conform to the norm, special binders are prepared for review by senior psychometric advisors at ETS, along with several pieces of informative analyses to facilitate the process.

A few additional checks are performed for each process, as described below:

Calibrations
During the calibration process, which is described in detail in Chapter 8 starting on page 230, checks are made to ascertain that the correct options for the analyses are selected. Checks are also made on the number of items, number of examinees with valid scores, IRT Rasch item difficulty estimates, standard errors for the Rasch item difficulty estimates, and the match of selected statistics to the results on the same statistics obtained during preliminary item analyses. Psychometricians also perform detailed reviews of plots and statistics to investigate if the data fit the model.

Scaling
During the scaling process, checks are made to ensure the following:

- Correct-linking items are used;
- Stability analysis and subsequent removal of items from the linking set (if any) during the scaling evaluation process are implemented according to specification (see details in the “Evaluation of Scaling” section in Chapter 8, on page 233); and
- The scaling constants are correctly applied to transform the new item difficulty estimates onto the item bank scale.

Scoring Tables
Once the equating activities are complete and scoring tables are generated, the psychometricians carry out quality control checks on each scoring table. Scoring tables are checked to verify the following:

- All raw scores are included in the tables;
- Scale scores/percent-correct scores increase as raw scores increase;
- The minimum reported scale score is 150 and maximum reported scale scores is 600; and
- For grades two through seven, the cut points for the performance levels are correctly identified.

As a check on the reasonableness of the performance levels, psychometricians compare results from the current year with results from the past year at the cut points and the percentage of all students in each performance level. After all quality control steps are completed and any differences are resolved, a senior psychometrician inspects the scoring tables as the final step in quality control.

Score Verification Process

Pearson utilizes the raw-to-scale scoring tables to assign scale scores for each grade-level test in grades two through seven, and the raw-to-percent-correct scoring tables to compute percent-correct scores for each RLA test in grades eight through eleven and each EOC mathematics test. ETS verifies Pearson’s scale scores/percent-correct scores by following procedures, such as:

- Independently generating the scale scores/percent-correct scores for students in a small number of school districts and comparing these scores with those generated by Pearson; the selection of districts is based on the availability of data for all schools included in those districts, known as “complete districts”

- Reviewing longitudinal data for reasonableness using over 90 percent of the entire testing population; the results are used to look at the trends for the state as well as few large districts

The results of the longitudinal analyses are provided to the CDE and jointly discussed. Any anomalies in the results are investigated further and jointly discussed. Resolution occurs after explanations that satisfy both CDE and ETS are obtained.

Offloads to Test Development

The statistics based on classical item analyses and the IRT analyses are obtained at two different times in the testing cycle. The first time, the statistics are obtained on the equating samples to ensure the quality of equating and then on larger sample sizes to ensure the stability of the statistics that are to be used for future test assembly. Statistics used to generate DIF flags are also obtained from the larger samples and are provided to test development staff in specially designed Excel spreadsheets called “statistical offloads.” The offloads are thoroughly checked by the psychometric staff before their release for test development review.

Quality Control of Reporting

For the quality control of various STAR student and summary reports, four general areas are evaluated, including the following:

1. Comparing report formats to input sources from the CDE-approved samples
2. Validating and verifying the report data by querying the appropriate student data
3. Evaluating the production print execution performance by comparing the number of report copies, sequence of report order, and offset characteristics to the CDE’s requirements
4. Proofreading reports at the CDE, ETS, and Pearson prior to any school district mailings

All reports are required to include a single, accurate CDS code, a charter school number (if applicable), a school district name, and a school name. All elements conform to the CDE’s official CDS code and naming records. From the start of processing through scoring and reporting, the CDS Master File is used to verify and confirm accurate codes and names. The CDE Master File is provided by the CDE to ETS throughout the year as updates are available.

After the reports are validated against the CDE’s requirements, a set of reports for pilot districts are provided to the CDE and ETS for review and approval. Pearson sends paper reports on the actual report forms, folded as they are expected to look in production. The CDE and ETS review and sign off on the report package after a thorough review.

Upon the CDE’s approval of the reports generated from the pilot test, Pearson proceeds with the first production batch test. The first production batch is selected to validate a subset of school districts that contain examples of key reporting characteristics representative of the state as a whole. The first production batch test incorporates client-selected school districts and provides the last check prior to generating all reports and mailing them to the districts.

Excluding Student Scores from Summary Reports

ETS provides specifications to the CDE that document when to exclude student scores from summary reports. These specifications include the logic for handling answer documents

that, for example, indicate the student tested but marked no answers, was absent, was not tested due to parent/guardian request, or did not complete the test due to illness. The methods for handling other anomalies (for example, for a grade eight mathematics test where the specific mathematics test is unknown) are also covered in the specifications.

Chapter 10: Historical Comparisons

Base Year Comparisons

Historical comparisons of the STS results are performed to identify the trends in examinee performance and test characteristics over time. Such comparisons were performed for RLA and mathematics in grades two through four over spring 2010 and the base year 2009. The indicators of examinee performance include the mean and standard deviation of scale scores, observed score ranges, and the percentage of examinees classified into proficient and advanced performance levels. Test characteristics are compared by looking at the mean proportion correct, overall reliability and SEM, as well as the mean IRT *b*-value for each STS. The base year of the STS refers to the year in which the base score scale was established. Operational forms administered in the years following the base year are linked to the base year score scale using procedures described in Chapter 2.

The STS for RLA and mathematics in grades two through four were first administered operationally in spring 2007. Percent correct scores were reported in 2007 and 2008 administrations. A standard setting was held in fall 2008 to establish new cut scores for the below basic, basic, proficient, and advanced performance levels. Spring 2009 was the first administration in which test results were reported using the new scales and cut scores for the four performance levels; thus, 2009 became the base year for these tests.

Examinee Performance

Given in Table 10.A.1 for each STS are the number of examinees assessed and the means and standard deviations of examinees' scale scores in the base year (2009) and in 2010.

Students taking each STS are classified into one of five performance levels: far below basic, below basic, basic, proficient, and advanced. The percentages of students qualifying for the proficient and advanced levels are presented in Table 10.A.2[1] on page 319. The goal is for all students to achieve at or above the proficient level by 2014. This goal for all students is consistent with school growth targets for state accountability and the federal requirements under the Elementary and Secondary Education Act.

Table 10.A.3 and Table 10.A.4 show the distribution of scale scores observed in the base year and in 2010 for STS in RLA and mathematics in grades two through four. Frequency counts are provided for each scale score interval of 30. A frequency count of "–" indicates that either there are no obtainable scale score within that scale score range or there are no students obtaining a scale score within the scale score range. For all STS tests, a minimum score of 300 is required for a student to reach the basic level of performance and a minimum score of 350 is required for a student to reach the proficient level of performance.

Test Characteristics

The item and test analysis results of STS over the comparison years indicate that the STS meet the technical criteria established in professional standards for high-stake tests. In addition, every year, efforts are made to improve the technical quality of each STS.

[1] This information may differ slightly from information found on the CDE's STAR reporting Web page at http://star.cde.ca.gov due to differing dates on which data were accessed.

Table 10.B.1 and Table 10.B.2 present, respectively, the average proportion correct values and the mean equated IRT *b*-values[2] for the STS operational items in grades two through four in the base year and in 2010.

The mean proportion correct is affected by both the difficulty of the items and the abilities of the students taking them. The mean equated IRT *b*-values reflect only average item difficulty of operational items.

The average point-biserial correlations for grades two through four STS operational tests in the base year and in 2010 are presented in Table 10.B.3. The reliabilities and standard errors expressed in raw score units for grades two through four STS operational tests in the base year and in 2010 appear in Table 10.B.4. Like the average proportion correct, point-biserial correlations and reliabilities of the operational items are affected by both item characteristics and student characteristics.

[2] Comparisons of mean *b*-values should only be made within a given test. These statistics are based on the equating samples.

Appendix 10.A—Historical Comparisons Tables

Table 10.A.1 Number of Examinees Tested, Scale Score Means and Standard Deviations of STS for Base Year (2009) and 2010

Content Area	Grade-level STS	Number of Examinees (valid scores)		Scale Score Mean and Standard Deviation			
				Base		2010	
		Base	2010	Mean	S.D.	Mean	S.D.
Reading/Language Arts	**2**	13,300	11,518	333	53	331	52
	3	8,992	8,444	333	51	333	52
	4	4,897	4,459	325	51	326	54
Mathematics	**2**	13,250	11,505	360	72	367	75
	3	8,940	8,382	359	74	366	73
	4	4,893	4,428	359	72	363	74

Table 10.A.2 Percentage of Proficient and Above and Percentage of Advanced for Base Year (2009) and 2010

Content Area	Grade-level STS	% Proficient and Above		% Advanced	
		Base	2010	Base	2010
Reading/Language Arts	**2**	40%	36%	17%	14%
	3	37%	35%	13%	12%
	4	35%	35%	12%	14%
Mathematics	**2**	54%	56%	21%	25%
	3	51%	55%	19%	23%
	4	52%	57%	19%	22%

Table 10.A.3 Observed Score Distributions of the STS for Base Year (2009) and 2010 for RLA

Observed Score Distributions	RLA Grade 2		RLA Grade 3		RLA Grade 4	
	Base	2010	Base	2010	Base	2010
570 – 600	8	13	2	4	–	–
540 – 569	–	–	–	–	1	2
510 – 539	–	21	7	9	1	–
480 – 509	18	0	23	26	1	15
450 – 479	150	99	100	80	19	28
420 – 449	385	453	404	281	105	111
390 – 419	1,320	1,006	646	817	364	452
360 – 389	2,187	1,910	1,382	1,278	818	634
330 – 359	3,203	2,276	2,032	1,926	1,007	977
300 – 329	2,416	2,464	1,860	1,666	955	807
270 – 299	1,941	1,870	1,587	1,367	846	669
240 – 269	1,231	1,062	812	823	584	546
210 – 239	409	325	126	153	181	200
180 – 209	29	19	11	14	15	18
150 – 179	3	–	–	–	–	–

Table 10.A.4 Observed Score Distributions of the STS for Base Year (2009) and 2010 for Mathematics

Observed Score Distributions	Mathematics Grade 2		Mathematics Grade 3		Mathematics Grade 4	
	Base	2010	Base	2010	Base	2010
570 – 600	130	177	42	136	28	8
540 – 569	–	–	86	–	20	21
510 – 539	322	184	136	111	48	52
480 – 509	272	518	365	356	130	161
450 – 479	580	631	442	398	342	346
420 – 449	1,437	967	657	955	381	383
390 – 419	1,648	1,693	1,235	970	668	664
360 – 389	1,977	1,684	1,146	1,313	686	673
330 – 359	2,289	1,874	1,487	1,217	875	613
300 – 329	1,894	1,552	1,361	1,374	620	520
270 – 299	1,345	1,329	1,115	852	527	518
240 – 269	978	637	632	588	384	289
210 – 239	290	205	198	104	149	150
180 – 209	78	45	35	8	32	28
150 – 179	10	9	3	–	3	2

Appendix 10.B—Historical Comparisons Tables

Table 10.B.1 Average Proportion-Correct for Operational Test Items for Base Year (2009) and 2010

Content Area	Grade-level STS	Average *p*-value	
		Base	2010
Reading/Language Arts	**2**	0.65	0.62
	3	0.59	0.59
	4	0.57	0.58
Mathematics	**2**	0.67	0.69
	3	0.66	0.67
	4	0.63	0.64

Table 10.B.2 Overall IRT *b*-values for Operational Test Items for Base Year (2009) and 2010

Content Area	Grade-level STS	Mean IRT *b*-value	
		Base	2010
Reading/Language Arts	**2**	–0.59	–0.46
	3	–0.31	–0.31
	4	–0.18	–0.24
Mathematics	**2**	–0.77	–0.77
	3	–0.62	–0.57
	4	–0.48	–0.46

Table 10.B.3 Average Point-Biserial Correlation for Operational Test Items for Base Year (2009) and 2010

Content Area	Grade-level STS	Average Point-Biserial Correlation	
		Base	2010
Reading/Language Arts	**2**	0.43	0.42
	3	0.39	0.40
	4	0.39	0.41
Mathematics	**2**	0.40	0.41
	3	0.44	0.43
	4	0.41	0.43

Table 10.B.4 Score Reliabilities (Cronbach's Alpha) and Standard Error of Measurement (SEM) for Base Year (2009) and 2010

Content Area	Grade-level STS	Reliability		SEM	
		Base	2010	Base	2010
Reading/Language Arts	**2**	0.93	0.93	3.34	3.42
	3	0.91	0.92	3.51	3.52
	4	0.93	0.93	3.79	3.77
Mathematics	**2**	0.92	0.92	3.31	3.28
	3	0.93	0.93	3.30	3.29
	4	0.92	0.93	3.42	3.38