California Department of Education
Assessment Development and Administration Division

Standards-based Tests in Spanish
Technical Report
Spring 2012 Administration

Submitted March 15, 2013

Educational Testing Service

Contract No. 5417

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Acronyms and Initialisms Used in the *STS Technical Report*

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

Chapter 1: Introduction

Background

In 1997 and 1998, the California State Board of Education (SBE) adopted 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 2012 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 an individualized education program (IEP) who meet the CMA eligibility criteria approved by the SBE
- California Alternate Performance Assessment (CAPA), produced for students with an IEP and who have 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)

Test Purpose

The purpose of the STS program is to permit Spanish-speaking English learners (ELs) to measure their achievement with respect to California's 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): [Note: the preceding Web address is no longer valid.]

"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 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

The STS is 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 end-of-course (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 EOC STS 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 2012, 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 designed for Spanish-speaking ELs 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 required for Spanish-speaking ELs 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 ELs 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 800 in grade eleven (RLA) to approximately 13,000 for grade two. Volumes for the EOC STS varied by content, with approximately 2,900 for Algebra I and approximately 500 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 (*Education Code [EC]* Section 60615).

Intended Use and Purpose of Test Scores

The results for tests within the STAR Program are used for three primary purposes, described as follows (excerpted from the *EC* Section 60602 Web page at http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=60001-61000&file=60600-60603) [Note: the preceding Web address is no longer valid.] :

“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 are used to provide data for school, district, and state purposes and to meet federal accountability requirements. STS results are not used for state or federal accountability purposes.

Testing Window

The STS is administered within a 25-day window which begins 12 instructional days before and ends 12 instructional days after the day on which 85 percent of the instructional year is completed. School districts may use all or any part of the 25 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 linked at http://www.cde.ca.gov/ta/tg/sr/resources.asp).

Significant Developments in 2012

Cut Scores and Score Scales for Newly Developed Tests

A standard setting was held in November 2011 to establish cut scores for the below basic, basic, proficient, and advanced performance levels for the RLA tests in grades eight through eleven and the EOC Algebra I and Geometry tests. While the scale for reporting each of these STS test results was developed, it was adopted by the SBE in July 2012 and not used to report scores for the spring 2012 administration.

Extension of the STAR Testing Window

The STAR testing window was extended by 4 days, to 25 days: 12 instructional days before and 12 instructional days after the date on which 85 percent of each school's, track's, or program's instructional days had been completed (formerly 21 days, 10 instructional days before and 10 instructional days after 85 percent of instructional days had been completed).

Release of Results Delayed to Investigate Psychometric Impact of Social Network Security Breaches

This breach involved CST items only. No CAPA, CMA, or STS items were found to be exposed. However, release of results was delayed for all STAR tests.

The spring 2012 security breach of multiple CST test questions through social networking Web sites raised serious concerns that required comprehensive investigations and additional statistical analyses. In recognizing the importance and the need to provide valid and reliable results to the state, districts, and schools, both the CDE and Educational Testing Service (ETS) took every precaution necessary, including extensive statistical analyses, to ensure that all test results maintained the highest levels of validity and reliability.

A preliminary investigation of the scope and magnitude of the security breach was completed by the end of May that resulted in the list of exposed test questions (test items) that were found on social networking sites. This process was needed to determine whether the exposed CST test questions were operational items that contributed to students' test scores, and more importantly, were linking items used in statistical analyses to maintain comparability of scores obtained on different test forms administered from one year to the next.

After the list of exposed CST items was determined, ETS proceeded to conduct additional statistical analyses to determine whether any test questions affected by the security breach needed to be removed from scoring to maintain the highest levels of validity of test results. An exhaustive review of statistical results did not provide evidence of performance changes that differed from that of nonexposed items. From a statistical perspective, results did not indicate the need to remove exposed items from scoring. However, to minimize the potential impact of exposed items, schools with confirmed item exposure were removed from statistical analyses.

Because it is critically important to provide the most valid and reliable results at all levels (state, district, school, and student), additional analyses were conducted. This included an assessment of the impact of removing exposed items from score linking analyses. Results showed that for most of the affected CSTs, scale scores and raw score performance cuts produced with exposed items retained or removed from analyses were very similar. In addition, for all tests, there was no change in the percent of students classified as proficient or above when exposed items were retained or removed from the analyses.

Limitations of the Assessment

Score Interpretation

Teachers and administrators should not use STAR results in isolation to make inferences about instructional needs. In addition, 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 local assessments, classroom tests, student grades, classroom work, and teacher recommendations in addition to the child's STS results (CDE, 2012; page 9). 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

Each STS is designed to measure the content corresponding to a specific grade or course and is appropriate for students in the specific grade or course. 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. School 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, the reviewer 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 2012 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 2012, the results for the STS for RLA in grades eight through eleven and the EOC mathematics 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 based on the number-correct scores divided by the total number of items in the test. When comparing percent-correct score results, the reviewer is limited to comparisons within the same content area, grade, and year. No direct comparisons should be made between grades, between content areas, or across the years.

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. In order to provide information on student progress in public schools, as essential for those programs, the SBE supervises the administration and progress of the STAR Program.

California Department of Education

The CDE oversees California's public school system, which is responsible for the education of more than 6,200,000 children and young adults in more than 9,800 schools. California

aims to provide a world-class education for all students, from early childhood to adulthood. The Department of Education serves California by innovating and collaborating with educators, schools, parents, and community partners which together, as a team, prepares students to live, work, and thrive in a highly connected world.

Contractors

Educational Testing Service

The CDE and the SBE contract with 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 2012. 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. 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 that guided the construction of the STS for 2012.
- Chapter 5 presents the processes involved in the actual administration of the 2012 STS 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 previously conducted for all the STS for RLA and mathematics tests.
- 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 2012 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 performance-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 differential item functioning (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 past three years, where applicable, and for the 2009 base year for RLA and mathematics in grades two through four; and for the spring 2012 administration, the spring 2011 administration, and the 2010 base year for RLA and mathematics in grades five through seven.

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.

References

California *Code of Regulations, Title 5,* Education, Division 1, Chapter 2, Subchapter 3.75, Article 2, § 855.

California Department of Education. (2012). *STAR Program information packet for school district and school staff*. Sacramento, CA. Downloaded from http://www.cde.ca.gov/ta/tg/sr/resources.asp

California Department of Education, EdSource, & the Fiscal Crisis Management Assistance Team. (2012). *Fiscal, demographic, and performance data on California's K–12 schools*. Sacramento, CA: Ed-Data. http://www.ed-data.k12.ca.us/App_Resx/EdDataClassic/fsTwoPanel.aspx?#!bottom=/_layouts/EdDataC lassic/profile.asp?Tab=1&level=04&reportNumber=16

California State Board of Education. (2012). SBE agenda for July 2012. http://www.cde.ca.gov/be/ag/ag/yr12/agenda201207.asp

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 the STS; these processes are similar to those undertaken to develop the CSTs. Also described are the specifications maintained by ETS to implement 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 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 and updates an item specifications document, otherwise known as “item writer guidelines,” 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 specifications, the item review process, and the item utilization plan are presented in Chapter 3, starting on page 101.

Item Banking

Before newly developed items are placed in the item bank, ETS prepares the items for review by content experts and various external review organizations such as the Assessment Review Panels (ARPs), which are described in Chapter 3 starting on page 105; and the Statewide Pupil Assessment Review (SPAR) panel, described in Chapter 3 starting on page 108.

Once the ARP review is complete, the items are placed in the item bank along with the associated information obtained at the review sessions. Items that are accepted by the content experts are updated to a “field-test ready” status. ETS then delivers the items to the CDE by means of a delivery of the California electronic item bank. Items are subsequently field-tested to obtain information about item performance and item statistics that can be used to assemble operational forms. The CDE then reviews the item data and makes decisions about which items could be used operationally (see page 109 for more information about the CDE’s data review). Any additional updates to item content and statistics are based on data collected from the 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 in Table 3.1 on page 102.

Test Assembly

Test Length

The number of operational items in each STS varies by content area and grade. There are 65 operational items on the STS for RLA in grades two and three and 75 operational items in grades four through eleven. The STS grade-level and end-of-course mathematics tests are each composed of 65 operational items. The considerations in deciding upon the test length are described on page 112 in Chapter 4.

Each STS also includes six field-test items in addition to the operational items. The total number of items, including operational and field-test items, in each STS form and the estimated time to complete a test form are presented in Appendix 2.A on page 19.

Test Blueprints

ETS selects all STS 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 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 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 set of linking items. These are items that appeared in previous operational test administrations and are then used to equate subsequent (new) test forms. After the linking items are approved, assessment specialists populate the rest of the test form. In 2012, linking items were used to equate grade-level STS tests in grades two through seven. (Note that equating was not implemented for the STS for RLA in grades eight through eleven or the EOC mathematics STS. Because the performance level cut scores for these tests were not used, results were not reported in the scale score metric but rather only in the raw score metric in 2012.)

Linking items are selected to proportionally represent the full blueprint. Each STS form is a collection of test items designed to reflect a reliable, fair, and valid measure of student learning within well-defined course content.

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 101.

Psychometric Criteria

The staff assesses the projected test characteristics during the preliminary review of the assembled forms. The statistical test targets used for the 2012 test development and the projected characteristics of the assembled forms are presented starting from page 113 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 113 in Chapter 4.

Test Administration

It is of utmost priority to administer the STS in an appropriate, consistent, secure, 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 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 of the following processes 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, as described in this section.

Test Administrators

The STS 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 site 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, 2012); see page 146 in Chapter 5 for more information.

Test Directions

A series of instructions compiled in detailed manuals are provided 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 to students to be followed exactly so that all students have an equal opportunity to demonstrate their academic achievement (See page 146 in Chapter 5 for more information.)

***District and Test Site Coordinator Manual*—**Test administration procedures for district STAR coordinators and test site coordinators (See page 146 in Chapter 5 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 147 in Chapter 5 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 IEPs take the STS under standard conditions. However, some students with IEPs may need assistance when taking the STS. This assistance takes the form of test variations, accommodations, or modifications. All students in these categories may have test administration directions simplified or clarified.

In addition, 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.

The purpose of test variations, accommodations, and modifications for the STS is to enable the students to take the assessments, not to give them an advantage over other students or to artificially inflate their scores. 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. Scores for students tested with

modifications are counted as far below basic on the STAR summary reports for the STS 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 with accommodations specified in their IEP or Section 504 plan for use on the STS or for use during classroom instruction and assessment. Examples of accommodations are large-print or braille versions of the STS 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 with modifications specified in the student's IEP or Section 504 plan for use on the STS or for use during classroom instruction and assessment. Examples of modifications include reading the test aloud to a student taking the RLA test or allowing the use of a calculator by a student to perform computations on the mathematics test.

Appendix 2.C on page 24 presents the 2012 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 2012.

Special Services Summaries

The percentage of students using various testing variations, accommodations, and modifications during the 2012 administration of the STS 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 or modification in the total testing population. The results for target and nontarget 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 enrolled in U.S. schools for less than 12 months and students enrolled in U.S. schools for 12 months or more. The final section presents the results for various categories based on EL program participation. The information within each section is presented for the relevant grades.

Scores

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

For grade-level STS in grades two through seven, total test raw scores are converted to three-digit scale scores using the equating process described starting on page 15. 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. Scale scores of 300 and 350 correspond to the cut scores for the basic and

proficient performance levels, respectively. The state's target is for all students to score at the proficient or advanced level.

Scale scores are reported for the total content-area test for the STS in grades two through seven; percent-correct scores are reported for RLA in grades eight through eleven and the EOC mathematics STS. In addition, performance on various reporting clusters is also reported for all of the STS. The subscore or reporting cluster score is obtained by summing an examinee's scores on the items in each reporting cluster. That information is reported in terms of a percent-correct score.

Detailed descriptions of STS scores are found in Chapter 7, which starts on page 156.

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 students and demographic subgroups. The following sections describe the summary results of individual and demographic subgroup STS scores aggregated at the state level.

Please note that aggregation is performed on valid scores only, which are cases where examinees met all of the following criteria:

1. Met attemptedness criteria.
2. Did not have a parental exemption.
3. Did not miss any part of the test due to illness or medical emergency.
4. Took the STS as a designated English learner.
5. Identified, in the case of the end-of-course Algebra I or Geometry tests, the particular test taken.
6. Did not test out of level (grade inappropriate).

Individual Scores

Table 7.1 through Table 7.3 starting on page 160 in Chapter 7 offer summary statistics for individual scores aggregated at the state level, describing overall student performance on each STS for the total, target, and nontarget 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.

Demographic Subgroup 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 172 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 163 provides definitions for the demographic groups included in the tables.

Equating

The STS 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 (IRT) (Hambleton & Swaminathan, 1985). The “base” or “reference” calibrations for the STS were established by calibrating samples of item response data from a specific administration. Doing so established a scale to which subsequent item calibrations could be linked. The 2012 item parameter estimates were placed on the reference scale using a set of linking items selected from the 2011 forms and readministered in 2012.

The procedure used for equating the STS involves three steps: item calibration, item scaling, and production of scoring tables. Each of those procedures, as described below, was applied to all STS grade-level tests in grades two through seven.

Standard setting for RLA in grades eight through eleven and the EOC mathematics was conducted based on 2011 operational test administration. Equating was not implemented for these tests in 2012.

As noted previously, equating was not implemented for the 2012 STS for RLA in grades eight through eleven or the EOC mathematics STS; due to the timing of adoption of performance level cut scores for these tests, results on these tests were not reported in the scale score metric but rather in the raw score metric only in 2012.

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 2012 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. As noted earlier, 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 (WRMSDs) between item characteristic curves (ICCs) based on the old and new difficulty estimates were removed from the linking set. The differences are 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 from the linking set. 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 (raw 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, which consists 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 is used to first solve 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 equation 2.3:

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

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 the grades five through seven grade-level tests, using equations 2.4 and 2.5:

$$\text{Slope} = \frac{350 - 300}{\theta_{proficient} - \theta_{basic}} \tag{2.4}$$

$$\text{Intercept} = 350 - \theta_{proficient} \times \left(\frac{350 - 300}{\theta_{proficient} - \theta_{basic}} \right) \tag{2.5}$$

where,

θ represents student ability that corresponds to a raw score,

$\theta_{proficient}$ represents theta cut score for proficient on the base scale, and

θ_{basic} represents theta cut score for basic on the base scale.

Complete raw-to-scale score conversion tables for the grade-level 2012 STS in grades two through seven are presented in Table 8.D.27 through Table 8.D.32 in Appendix 8.D, starting on page 298. The raw scores and corresponding transformed scale scores are also listed in those tables.

For all of the STS with performance levels, 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. Raw scores of zero and perfect raw scores were assigned scale scores of 150 and 600 respectively.

The scale-score ranges defining the various performance levels for the grade-level tests in grades two through seven are presented in Table 2.1.

Please note that the performance levels are not reported for the STS for RLA in grades eight through eleven and EOC mathematics tests for Algebra I and Geometry.

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 2012, all STS items could be translated into braille and therefore, no special braille form equating was needed.

References

California Department of Education. (2012). *2012 STAR district and test site coordinator manual*. Sacramento, CA. Downloaded from http://www.startest.org/pdfs/STAR.coord_man.2012.pdf

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

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.* Hillside, NJ: Lawrence Erlbaum Associates, Inc.

Stocking, M. L., and Lord, F. M. (1983). Developing a common metric in item response theory. *Applied Psychological Measurement, 7,* 201–10.

Appendix 2.A—STS Items 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	71	**150**	71	**150**	81	**170**	81	**170**	81	**170**	81	**170**	81	**170**	81	**170**	81	**170**	81	**170**
Part 1		50		50		85		85		85		85		85		85		85		85
Part 2		50		50		85		85		85		85		85		85		85		85
Part 3–only grades 2 & 3		50		50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mathematics	71	**150**	71	**150**	71	**150**	71	**150**	71	**150**	71[1]	**150**	71[2]	**180**	71[2]	**180**	71[2]	**180**	71[2]	**180**
Part 1		50		50		75		75		75		75		90		90		90		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). Items and estimated times for the STS for Algebra I are listed under grades eight through eleven mathematics.

[2] Eligible students in grades eight through eleven may take the STS for Algebra I or Geometry. Item totals and estimated testing times provided apply to both tests.

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—2012 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
Multiple-choice question responses dictated orally, or in MCE to a scribe, audio recorder, or speech-to-text converter for selected-response items	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 or test items enlarged (not duplicated) to a font size larger than that used 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
MCE or ASL to present test questions and answer options	2 Math
	3 RLA
Test questions and answer options 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
Dictionary	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—Special Services Summary Tables

Notes:

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 in 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 due to the fact that only valid codes were chosen to identify these subgroups.

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

Special Services 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	1	0.01%	1	0.01%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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	6	0.05%	10	0.12%
K: Had supervised breaks	41	0.32%	30	0.37%
L: Administered at most beneficial time of day	19	0.15%	6	0.07%
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	7	0.05%	3	0.04%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.02%	14	0.17%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	52	0.40%	40	0.50%
Any Accommodation or Modification	55	0.42%	45	0.56%
No Accommodation or Modification	12,948	99.58%	7,996	99.44%
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 noninterfering 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	0.03%
J: Tested over more than one day	4	0.04%	6	0.09%
K: Had supervised breaks	37	0.35%	25	0.37%
L: Administered at most beneficial time of day	16	0.15%	6	0.09%
M: Administered at home or in a hospital	0	0.00%	0	0.00%

Special Services 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	0	0.00%	0	0.00%
X: Used an unlisted accommodation	6	0.06%	2	0.03%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.03%	14	0.21%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	44	0.41%	35	0.51%
Any Accommodation or Modification	47	0.44%	39	0.57%
No Accommodation or Modification	10,642	99.56%	6,774	99.43%
Nontarget (Optional) Students Tested	**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 noninterfering 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	0.09%	4	0.33%
K: Had supervised breaks	4	0.17%	5	0.41%
L: Administered at most beneficial time of day	3	0.13%	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	1	0.04%	1	0.08%
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	8	0.35%	5	0.41%
Any Accommodation or Modification	8	0.35%	6	0.49%
No Accommodation or Modification	2,306	99.65%	1,222	99.51%
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 noninterfering 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%	3	0.04%
K: Had supervised breaks	3	0.02%	6	0.08%
L: Administered at most beneficial time of day	2	0.02%	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%

Special Services Summary for RLA, Grades Two and Three				
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	3	0.02%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	1	0.01%	1	0.01%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	7	0.06%	6	0.08%
Any Accommodation or Modification	8	0.06%	7	0.09%
No Accommodation or Modification	12,482	99.94%	7,663	99.91%
Students in Special Education	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	0	0.00%	1	0.27%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.20%	2	0.54%
J: Tested over more than one day	6	1.17%	7	1.91%
K: Had supervised breaks	38	7.44%	24	6.54%
L: Administered at most beneficial time of day	17	3.33%	4	1.09%
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	4	0.78%	3	0.82%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	2	0.39%	13	3.54%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	45	8.81%	34	9.26%
Any Accommodation or Modification	47	9.20%	38	10.35%
No Accommodation or Modification	464	90.80%	329	89.65%
Students in U.S. Schools < 12 Months	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.08%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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%	1	0.09%
K: Had supervised breaks	1	0.08%	1	0.09%
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%

Special Services Summary for RLA, Grades Two and Three				
X: Used an unlisted accommodation	1	0.08%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	2	0.17%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.08%	1	0.09%
Any Accommodation or Modification	2	0.16%	2	0.17%
No Accommodation or Modification	1,231	99.84%	1,142	99.83%
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%	1	0.01%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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	0.03%
J: Tested over more than one day	6	0.05%	9	0.13%
K: Had supervised breaks	40	0.34%	29	0.42%
L: Administered at most beneficial time of day	19	0.16%	6	0.09%
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	6	0.05%	3	0.04%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.03%	12	0.17%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	51	0.43%	39	0.57%
Any Accommodation or Modification	53	0.45%	43	0.62%
No Accommodation or Modification	11,717	99.55%	6,854	99.38%
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 noninterfering 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%

Special Services 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	227	100.00%	166	100.00%
EL Program: EL in ELD and SDAIE	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	1	0.11%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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%	1	0.12%
K: Had supervised breaks	0	0.00%	1	0.12%
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	0.12%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	1	0.12%
Any Accommodation or Modification	1	0.11%	1	0.12%
No Accommodation or Modification	921	99.89%	821	99.88%
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	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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	0.15%	4	0.44%
K: Had supervised breaks	4	0.30%	3	0.33%
L: Administered at most beneficial time of day	3	0.23%	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%

Special Services Summary for RLA, Grades Two and Three				
X: Used an unlisted accommodation	1	0.08%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.11%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	7	0.53%	3	0.33%
Any Accommodation or Modification	7	0.53%	5	0.55%
No Accommodation or Modification	1,321	99.47%	898	99.45%
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	0.02%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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	0.03%
J: Tested over more than one day	4	0.04%	5	0.08%
K: Had supervised breaks	36	0.37%	24	0.41%
L: Administered at most beneficial time of day	16	0.16%	6	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	5	0.05%	2	0.03%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.03%	12	0.20%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	43	0.44%	34	0.58%
Any Accommodation or Modification	45	0.46%	37	0.63%
No Accommodation or Modification	9,685	99.54%	5,865	99.37%
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 noninterfering 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	1.25%
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%

Special Services Summary for RLA, Grades Two and Three				
X: Used an unlisted accommodation	1	2.08%	1	1.25%
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	2.08%	1	1.25%
Any Accommodation or Modification	1	2.08%	1	1.25%
No Accommodation or Modification	47	97.92%	79	98.75%
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 noninterfering 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	51	100.00%	11	100.00%

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

Special Services 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%	7	0.19%
C: Dictated responses to a scribe	0	0.00%	1	0.03%
F: Used noninterfering assistive device	0	0.00%	2	0.06%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.04%	2	0.06%
J: Tested over more than one day	12	0.23%	10	0.28%
K: Had supervised breaks	24	0.46%	29	0.80%
L: Administered at most beneficial time of day	1	0.02%	5	0.14%
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	9	0.17%	4	0.11%
Y: Leave blank	0	0.00%	1	0.03%
Z: Examiner read test questions aloud	4	0.08%	4	0.11%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	34	0.65%	38	1.05%
Any Accommodation or Modification	34	0.65%	39	1.07%
No Accommodation or Modification	5,175	99.35%	3,591	98.93%
Target Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.04%	7	0.24%
C: Dictated responses to a scribe	0	0.00%	1	0.03%
F: Used noninterfering assistive device	0	0.00%	2	0.07%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.04%	2	0.07%
J: Tested over more than one day	10	0.22%	10	0.35%
K: Had supervised breaks	18	0.40%	28	0.97%
L: Administered at most beneficial time of day	1	0.02%	5	0.17%
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	6	0.13%	3	0.10%
Y: Leave blank	0	0.00%	1	0.03%
Z: Examiner read test questions aloud	4	0.09%	4	0.14%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	28	0.63%	37	1.28%
Any Accommodation or Modification	28	0.63%	38	1.32%
No Accommodation or Modification	4,423	99.37%	2,845	98.68%

Special Services Summary for RLA, Grades Four and Five				
Nontarget (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 noninterfering 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	0.26%	0	0.00%
K: Had supervised breaks	6	0.79%	1	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%
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	3	0.40%	1	0.13%
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	0.79%	1	0.13%
Any Accommodation or Modification	6	0.79%	1	0.13%
No Accommodation or Modification	752	99.21%	746	99.87%
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%	1	0.03%
F: Used noninterfering 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	0.03%
J: Tested over more than one day	2	0.04%	1	0.03%
K: Had supervised breaks	3	0.06%	2	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%
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	1	0.02%	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	0.06%	4	0.12%
Any Accommodation or Modification	3	0.06%	4	0.12%
No Accommodation or Modification	4,923	99.94%	3,402	99.88%

Special Services 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	0.71%	7	3.13%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering assistive device	0	0.00%	2	0.89%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.71%	1	0.45%
J: Tested over more than one day	10	3.53%	9	4.02%
K: Had supervised breaks	21	7.42%	27	12.05%
L: Administered at most beneficial time of day	1	0.35%	5	2.23%
M: Administered at home or in a hospital	1	0.35%	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	8	2.83%	4	1.79%
Y: Leave blank	0	0.00%	1	0.45%
Z: Examiner read test questions aloud	4	1.41%	4	1.79%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	31	10.95%	34	15.18%
Any Accommodation or Modification	31	10.95%	35	15.63%
No Accommodation or Modification	252	89.05%	189	84.38%
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 noninterfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.09%	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	1	0.09%	0	0.00%
M: Administered at home or in a hospital	1	0.09%	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	1	0.09%	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	0.18%	0	0.00%
Any Accommodation or Modification	2	0.18%	0	0.00%
No Accommodation or Modification	1,108	99.82%	1,025	100.00%

Special Services 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%	7	0.27%
C: Dictated responses to a scribe	0	0.00%	1	0.04%
F: Used noninterfering assistive device	0	0.00%	2	0.08%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.02%	2	0.08%
J: Tested over more than one day	12	0.29%	10	0.38%
K: Had supervised breaks	24	0.59%	29	1.11%
L: Administered at most beneficial time of day	0	0.00%	5	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%
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	8	0.20%	4	0.15%
Y: Leave blank	0	0.00%	1	0.04%
Z: Examiner read test questions aloud	4	0.10%	4	0.15%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	32	0.78%	38	1.46%
Any Accommodation or Modification	32	0.78%	39	1.50%
No Accommodation or Modification	4,067	99.22%	2,566	98.50%
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 noninterfering 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	147	100.00%	141	100.00%

Special Services 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 noninterfering 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	0.12%	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	0.12%	0	0.00%
Any Accommodation or Modification	1	0.12%	0	0.00%
No Accommodation or Modification	822	99.88%	661	100.00%
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 noninterfering 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	0.39%	0	0.00%
K: Had supervised breaks	3	0.58%	0	0.00%
L: Administered at most beneficial time of day	1	0.19%	0	0.00%
M: Administered at home or in a hospital	1	0.19%	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	2	0.39%	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	0.78%	0	0.00%
Any Accommodation or Modification	4	0.78%	0	0.00%
No Accommodation or Modification	512	99.22%	521	100.00%

Special Services 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%	7	0.36%
C: Dictated responses to a scribe	0	0.00%	1	0.05%
F: Used noninterfering assistive device	0	0.00%	2	0.10%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.06%	2	0.10%
J: Tested over more than one day	10	0.29%	10	0.51%
K: Had supervised breaks	18	0.51%	28	1.43%
L: Administered at most beneficial time of day	0	0.00%	5	0.25%
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	5	0.14%	3	0.15%
Y: Leave blank	0	0.00%	1	0.05%
Z: Examiner read test questions aloud	4	0.11%	4	0.20%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	27	0.77%	37	1.88%
Any Accommodation or Modification	27	0.77%	38	1.94%
No Accommodation or Modification	3,471	99.23%	1,925	98.06%
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 noninterfering 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	2.86%	1	0.48%
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	2	2.86%	1	0.48%
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	2.86%	1	0.48%
Any Accommodation or Modification	2	2.86%	1	0.48%
No Accommodation or Modification	68	97.14%	209	99.52%

Special Services 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 noninterfering 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	17	100.00%	18	100.00%

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

Special Services 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 noninterfering 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	0.15%	0	0.00%
K: Had supervised breaks	11	0.53%	9	0.55%
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	1	0.05%	0	0.00%
Y: Leave blank	2	0.10%	0	0.00%
Z: Examiner read test questions aloud	3	0.15%	1	0.06%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	14	0.68%	10	0.62%
Any Accommodation or Modification	14	0.68%	10	0.62%
No Accommodation or Modification	2,049	99.32%	1,615	99.38%
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 noninterfering 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	0.17%	0	0.00%
K: Had supervised breaks	8	0.45%	9	0.62%
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	1	0.06%	0	0.00%
Y: Leave blank	1	0.06%	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	10	0.56%	10	0.68%
Any Accommodation or Modification	10	0.56%	10	0.68%
No Accommodation or Modification	1,763	99.44%	1,451	99.32%

Special Services Summary for RLA, Grades Six and Seven				
Nontarget (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 noninterfering 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	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%
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	0.34%	0	0.00%
Z: Examiner read test questions aloud	3	1.03%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	4	1.38%	0	0.00%
Any Accommodation or Modification	4	1.38%	0	0.00%
No Accommodation or Modification	286	98.62%	164	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 noninterfering 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	0.10%	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%
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	0.10%	1	0.06%
Any Accommodation or Modification	2	0.10%	1	0.06%
No Accommodation or Modification	1,947	99.90%	1,564	99.94%

Special Services 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 noninterfering 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	2.63%	0	0.00%
K: Had supervised breaks	9	7.89%	8	13.33%
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	1	0.88%	0	0.00%
Y: Leave blank	2	1.75%	0	0.00%
Z: Examiner read test questions aloud	3	2.63%	1	1.67%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	12	10.53%	9	15.00%
Any Accommodation or Modification	12	10.53%	9	15.00%
No Accommodation or Modification	102	89.47%	51	85.00%
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 noninterfering 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	1	0.10%	0	0.00%
Y: Leave blank	1	0.10%	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	0.21%	0	0.00%
Any Accommodation or Modification	2	0.21%	0	0.00%
No Accommodation or Modification	952	99.79%	1,038	100.00%

Special Services 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 noninterfering 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	0.27%	0	0.00%
K: Had supervised breaks	11	0.99%	9	1.53%
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	0.09%	0	0.00%
Z: Examiner read test questions aloud	3	0.27%	1	0.17%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	12	1.08%	10	1.70%
Any Accommodation or Modification	12	1.08%	10	1.70%
No Accommodation or Modification	1,097	98.92%	577	98.30%
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 noninterfering 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	104	100.00%	145	100.00%

Special Services 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 noninterfering 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	0.52%	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	3	0.52%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	3	0.52%	0	0.00%
Any Accommodation or Modification	3	0.52%	0	0.00%
No Accommodation or Modification	569	99.48%	514	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 noninterfering 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	1	0.26%	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	387	99.74%	309	100.00%

Special Services 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 noninterfering 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	0.34%	0	0.00%
K: Had supervised breaks	8	0.91%	9	1.71%
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	0.11%	0	0.00%
Z: Examiner read test questions aloud	0	0.00%	1	0.19%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	9	1.03%	10	1.90%
Any Accommodation or Modification	9	1.03%	10	1.90%
No Accommodation or Modification	867	98.97%	515	98.10%
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 noninterfering 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	1	3.85%	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	3.85%	0	0.00%
Any Accommodation or Modification	1	3.85%	0	0.00%
No Accommodation or Modification	25	96.15%	59	100.00%

Special Services 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 noninterfering 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	14	100.00%	35	100.00%

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

Special Services 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 noninterfering 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	0.08%	0	0.00%
K: Had supervised breaks	6	0.48%	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	1	0.08%	0	0.00%
Y: Leave blank	2	0.16%	1	0.04%
Z: Examiner read test questions aloud	1	0.08%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	10	0.80%	1	0.04%
Any Accommodation or Modification	10	0.80%	1	0.04%
No Accommodation or Modification	1,242	99.20%	2,308	99.96%
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 noninterfering 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	0.09%	0	0.00%
K: Had supervised breaks	6	0.56%	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	0.09%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	7	0.65%	0	0.00%
Any Accommodation or Modification	7	0.65%	0	0.00%
No Accommodation or Modification	1,067	99.35%	1,996	100.00%

Special Services Summary for RLA, Grades Eight and Nine				
Nontarget (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 noninterfering 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	1	0.56%	0	0.00%
Y: Leave blank	2	1.12%	1	0.32%
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	1.69%	1	0.32%
Any Accommodation or Modification	3	1.69%	1	0.32%
No Accommodation or Modification	175	98.31%	312	99.68%
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 noninterfering 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	0.08%	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%
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	0.16%	0	0.00%
Any Accommodation or Modification	2	0.16%	0	0.00%
No Accommodation or Modification	1,227	99.84%	2,288	100.00%

Special Services 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 noninterfering 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	17.39%	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	1	4.35%	0	0.00%
Y: Leave blank	2	8.70%	1	4.76%
Z: Examiner read test questions aloud	1	4.35%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	8	34.78%	1	4.76%
Any Accommodation or Modification	8	34.78%	1	4.76%
No Accommodation or Modification	15	65.22%	20	95.24%
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 noninterfering 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: 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	895	100.00%	1,870	100.00%

Special Services 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 noninterfering 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	0.28%	0	0.00%
K: Had supervised breaks	6	1.68%	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	1	0.28%	0	0.00%
Y: Leave blank	2	0.56%	1	0.23%
Z: Examiner read test questions aloud	1	0.28%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	10	2.80%	1	0.23%
Any Accommodation or Modification	10	2.80%	1	0.23%
No Accommodation or Modification	347	97.20%	438	99.77%
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 noninterfering 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	1	0.84%	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	0.84%	0	0.00%
Any Accommodation or Modification	1	0.84%	0	0.00%
No Accommodation or Modification	118	99.16%	236	100.00%

Special Services 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 noninterfering 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	463	100.00%	838	100.00%
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 noninterfering 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: 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	275	100.00%	633	100.00%

Special Services 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 noninterfering 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	0.44%	0	0.00%
K: Had supervised breaks	6	2.62%	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	0.44%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	7	3.06%	0	0.00%
Any Accommodation or Modification	7	3.06%	0	0.00%
No Accommodation or Modification	222	96.94%	369	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 noninterfering 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	2.08%	1	1.03%
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	2.08%	1	1.03%
Any Accommodation or Modification	2	2.08%	1	1.03%
No Accommodation or Modification	94	97.92%	96	98.97%

Special Services 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 noninterfering 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	23	100.00%	34	100.00%

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

Special Services 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	1	0.07%	0	0.00%
F: Used noninterfering 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	1	0.07%	0	0.00%
No Accommodation or Modification	1,394	99.93%	819	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	1	0.08%	0	0.00%
F: Used noninterfering 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	1	0.08%	0	0.00%
No Accommodation or Modification	1,258	99.92%	722	100.00%

Special Services Summary for RLA, Grades Ten and Eleven				
Nontarget (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 noninterfering 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	136	100.00%	97	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 noninterfering 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	1,391	100.00%	811	100.00%

Special Services 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	1	25.00%	0	0.00%
F: Used noninterfering 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	1	25.00%	0	0.00%
No Accommodation or Modification	3	75.00%	8	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	1	0.09%	0	0.00%
F: Used noninterfering 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	1	0.09%	0	0.00%
No Accommodation or Modification	1,129	99.91%	567	100.00%

Special Services 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 noninterfering 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	265	100.00%	252	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 noninterfering 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	192	100.00%	101	100.00%

Special Services 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 noninterfering 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	497	100.00%	280	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	1	0.37%	0	0.00%
F: Used noninterfering 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	1	0.37%	0	0.00%
No Accommodation or Modification	271	99.63%	151	100.00%

Special Services 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 noninterfering 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	293	100.00%	208	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 noninterfering 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	85	100.00%	44	100.00%

Special Services 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 noninterfering 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%	12	100.00%

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

Special Services 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	2	0.02%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering assistive device	0	0.00%	1	0.01%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.01%	1	0.01%
J: Tested over more than one day	6	0.05%	9	0.11%
K: Had supervised breaks	38	0.29%	29	0.36%
L: Administered at most beneficial time of day	19	0.15%	7	0.09%
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	8	0.06%	3	0.04%
Y: Leave blank	1	0.01%	0	0.00%
Z: Examiner read test questions aloud	15	0.12%	26	0.32%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	55	0.42%	48	0.60%
Any Accommodation or Modification	61	0.47%	52	0.65%
No Accommodation or Modification	12,941	99.53%	7,984	99.35%
Target Students Tested	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	2	0.02%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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%	1	0.01%
J: Tested over more than one day	4	0.04%	6	0.09%
K: Had supervised breaks	35	0.33%	24	0.35%
L: Administered at most beneficial time of day	16	0.15%	6	0.09%
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%

Special Services Summary for Mathematics, Grades Two and Three				
X: Used an unlisted accommodation	7	0.07%	2	0.03%
Y: Leave blank	1	0.01%	0	0.00%
Z: Examiner read test questions aloud	10	0.09%	22	0.32%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	44	0.41%	40	0.59%
Any Accommodation or Modification	50	0.47%	44	0.65%
No Accommodation or Modification	10,640	99.53%	6,764	99.35%
Nontarget (Optional) Students Tested	**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 noninterfering assistive device	0	0.00%	1	0.08%
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	0.09%	3	0.24%
K: Had supervised breaks	3	0.13%	5	0.41%
L: Administered at most beneficial time of day	3	0.13%	1	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%
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	1	0.04%	1	0.08%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	5	0.22%	4	0.33%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	11	0.48%	8	0.65%
Any Accommodation or Modification	11	0.48%	8	0.65%
No Accommodation or Modification	2,301	99.52%	1,220	99.35%
Students Not in Special Education	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	2	0.02%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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%	3	0.04%
K: Had supervised breaks	3	0.02%	6	0.08%
L: Administered at most beneficial time of day	2	0.02%	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%	0	0.00%

Special Services 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%	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	3	0.02%	0	0.00%
Y: Leave blank	1	0.01%	0	0.00%
Z: Examiner read test questions aloud	1	0.01%	2	0.03%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	7	0.06%	5	0.07%
Any Accommodation or Modification	10	0.08%	6	0.08%
No Accommodation or Modification	12,477	99.92%	7,660	99.92%
Students 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 noninterfering assistive device	0	0.00%	1	0.27%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.19%	1	0.27%
J: Tested over more than one day	6	1.17%	6	1.64%
K: Had supervised breaks	35	6.82%	23	6.28%
L: Administered at most beneficial time of day	17	3.31%	5	1.37%
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	5	0.97%	3	0.82%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	14	2.73%	20	5.46%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	48	9.36%	39	10.66%
Any Accommodation or Modification	51	9.94%	42	11.48%
No Accommodation or Modification	462	90.06%	324	88.52%
Students in U.S. Schools < 12 Months	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	2	0.16%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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%	1	0.09%
K: Had supervised breaks	1	0.08%	1	0.09%
L: Administered at most beneficial time of day	0	0.00%	0	0.00%

Special Services 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	1	0.08%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	1	0.08%	2	0.17%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	1	0.08%	1	0.09%
Any Accommodation or Modification	3	0.24%	2	0.17%
No Accommodation or Modification	1,226	99.76%	1,141	99.83%
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%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering assistive device	0	0.00%	1	0.01%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.01%	1	0.01%
J: Tested over more than one day	6	0.05%	8	0.12%
K: Had supervised breaks	37	0.31%	28	0.41%
L: Administered at most beneficial time of day	19	0.16%	7	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%
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	7	0.06%	3	0.04%
Y: Leave blank	1	0.01%	0	0.00%
Z: Examiner read test questions aloud	14	0.12%	24	0.35%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	54	0.46%	47	0.68%
Any Accommodation or Modification	58	0.49%	50	0.73%
No Accommodation or Modification	11,715	99.51%	6,843	99.27%
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 noninterfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%

Special Services 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	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	227	100.00%	167	100.00%
EL Program: EL in ELD and SDAIE	**Grade 2**	**Pct. of Total**	**Grade 3**	**Pct. of Total**
B: Marked in test booklet	2	0.22%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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%	1	0.12%
K: Had supervised breaks	0	0.00%	1	0.12%
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	0.12%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	0	0.00%	1	0.12%
Any Accommodation or Modification	2	0.22%	1	0.12%
No Accommodation or Modification	917	99.78%	819	99.88%

Special Services 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	0	0.00%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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	0.15%	3	0.33%
K: Had supervised breaks	3	0.23%	3	0.33%
L: Administered at most beneficial time of day	3	0.23%	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	1	0.08%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.23%	4	0.44%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	8	0.60%	5	0.55%
Any Accommodation or Modification	8	0.60%	6	0.66%
No Accommodation or Modification	1,318	99.40%	898	99.34%
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%	0	0.00%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering 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%	1	0.02%
J: Tested over more than one day	4	0.04%	5	0.08%
K: Had supervised breaks	34	0.35%	23	0.39%
L: Administered at most beneficial time of day	16	0.16%	6	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%
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%

Special Services Summary for Mathematics, Grades Two and Three				
X: Used an unlisted accommodation	6	0.06%	2	0.03%
Y: Leave blank	1	0.01%	0	0.00%
Z: Examiner read test questions aloud	9	0.09%	20	0.34%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	43	0.44%	39	0.66%
Any Accommodation or Modification	47	0.48%	42	0.71%
No Accommodation or Modification	9,687	99.52%	5,854	99.29%
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 noninterfering 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	1	2.08%	1	1.25%
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	2.08%	1	1.25%
Any Accommodation or Modification	1	2.08%	1	1.25%
No Accommodation or Modification	47	97.92%	79	98.75%
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 noninterfering 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%

Special Services 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%	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	51	100.00%	11	100.00%

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

Special Services 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%	7	0.19%
C: Dictated responses to a scribe	0	0.00%	1	0.03%
F: Used noninterfering assistive device	0	0.00%	3	0.08%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.04%	2	0.06%
J: Tested over more than one day	14	0.27%	9	0.25%
K: Had supervised breaks	23	0.44%	29	0.80%
L: Administered at most beneficial time of day	2	0.04%	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%	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	9	0.17%	4	0.11%
Y: Leave blank	0	0.00%	1	0.03%
Z: Examiner read test questions aloud	9	0.17%	14	0.39%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	38	0.73%	40	1.10%
Any Accommodation or Modification	38	0.73%	42	1.16%
No Accommodation or Modification	5,164	99.27%	3,582	98.84%
Target Students Tested	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.05%	7	0.24%
C: Dictated responses to a scribe	0	0.00%	1	0.03%
F: Used noninterfering assistive device	0	0.00%	2	0.07%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.05%	2	0.07%
J: Tested over more than one day	10	0.23%	9	0.31%
K: Had supervised breaks	17	0.38%	29	1.01%
L: Administered at most beneficial time of day	0	0.00%	4	0.14%
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%

Special Services Summary for Mathematics, Grades Four and Five				
X: Used an unlisted accommodation	6	0.14%	3	0.10%
Y: Leave blank	0	0.00%	1	0.03%
Z: Examiner read test questions aloud	7	0.16%	14	0.49%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	30	0.68%	39	1.36%
Any Accommodation or Modification	30	0.68%	40	1.39%
No Accommodation or Modification	4,414	99.32%	2,837	98.61%
Nontarget (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 noninterfering assistive device	0	0.00%	1	0.13%
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	0.53%	0	0.00%
K: Had supervised breaks	6	0.79%	0	0.00%
L: Administered at most beneficial time of day	2	0.26%	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	3	0.40%	1	0.13%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	2	0.26%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	8	1.06%	1	0.13%
Any Accommodation or Modification	8	1.06%	2	0.27%
No Accommodation or Modification	750	98.94%	745	99.73%
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%	1	0.03%
F: Used noninterfering assistive device	0	0.00%	1	0.03%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	0	0.00%	1	0.03%
J: Tested over more than one day	2	0.04%	1	0.03%
K: Had supervised breaks	3	0.06%	2	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%

Special Services Summary for Mathematics, Grades Four and Five				
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	1	0.02%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	3	0.06%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	4	0.08%	4	0.12%
Any Accommodation or Modification	4	0.08%	5	0.15%
No Accommodation or Modification	4,916	99.92%	3,395	99.85%
Students in Special Education	**Grade 4**	**Pct. of Total**	**Grade 5**	**Pct. of Total**
B: Marked in test booklet	2	0.71%	7	3.13%
C: Dictated responses to a scribe	0	0.00%	0	0.00%
F: Used noninterfering assistive device	0	0.00%	2	0.89%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.71%	1	0.45%
J: Tested over more than one day	12	4.26%	8	3.57%
K: Had supervised breaks	20	7.09%	27	12.05%
L: Administered at most beneficial time of day	2	0.71%	4	1.79%
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	8	2.84%	4	1.79%
Y: Leave blank	0	0.00%	1	0.45%
Z: Examiner read test questions aloud	6	2.13%	14	6.25%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	34	12.06%	36	16.07%
Any Accommodation or Modification	34	12.06%	37	16.52%
No Accommodation or Modification	248	87.94%	187	83.48%
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 noninterfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.09%	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%

Special Services 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	1	0.09%	0	0.00%
Any Accommodation or Modification	1	0.09%	0	0.00%
No Accommodation or Modification	1,104	99.91%	1,021	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%	7	0.27%
C: Dictated responses to a scribe	0	0.00%	1	0.04%
F: Used noninterfering assistive device	0	0.00%	3	0.12%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	1	0.02%	2	0.08%
J: Tested over more than one day	14	0.34%	9	0.35%
K: Had supervised breaks	23	0.56%	29	1.11%
L: Administered at most beneficial time of day	2	0.05%	4	0.15%
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	9	0.22%	4	0.15%
Y: Leave blank	0	0.00%	1	0.04%
Z: Examiner read test questions aloud	9	0.22%	14	0.54%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	37	0.90%	40	1.54%
Any Accommodation or Modification	37	0.90%	42	1.61%
No Accommodation or Modification	4,060	99.10%	2,561	98.39%
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 noninterfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%

Special Services 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	147	100.00%	141	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 noninterfering 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	0.12%	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	0.12%	0	0.00%
Any Accommodation or Modification	1	0.12%	0	0.00%
No Accommodation or Modification	821	99.88%	658	100.00%

Special Services 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 noninterfering 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	0.78%	0	0.00%
K: Had supervised breaks	3	0.58%	0	0.00%
L: Administered at most beneficial time of day	2	0.39%	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	1	0.19%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	2	0.39%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	5	0.97%	0	0.00%
Any Accommodation or Modification	5	0.97%	0	0.00%
No Accommodation or Modification	510	99.03%	521	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%	7	0.36%
C: Dictated responses to a scribe	0	0.00%	1	0.05%
F: Used noninterfering assistive device	0	0.00%	2	0.10%
G: Used braille test	0	0.00%	0	0.00%
H: Used large-print test	2	0.06%	2	0.10%
J: Tested over more than one day	10	0.29%	9	0.46%
K: Had supervised breaks	17	0.49%	29	1.48%
L: Administered at most beneficial time of day	0	0.00%	4	0.20%
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%

Special Services Summary for Mathematics, Grades Four and Five				
X: Used an unlisted accommodation	6	0.17%	3	0.15%
Y: Leave blank	0	0.00%	1	0.05%
Z: Examiner read test questions aloud	7	0.20%	14	0.71%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	30	0.86%	39	1.99%
Any Accommodation or Modification	30	0.86%	40	2.04%
No Accommodation or Modification	3,465	99.14%	1,921	97.96%
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 noninterfering assistive device	0	0.00%	1	0.48%
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	2.86%	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	2	2.86%	1	0.48%
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	2.86%	1	0.48%
Any Accommodation or Modification	2	2.86%	2	0.95%
No Accommodation or Modification	68	97.14%	208	99.05%
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 noninterfering 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%

Special Services Summary for Mathematics, Grades Four and Five				
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	17	100.00%	17	100.00%

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

Special Services 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 noninterfering 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	0.15%	0	0.00%
K: Had supervised breaks	8	0.39%	8	0.51%
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	1	0.05%	0	0.00%
Y: Leave blank	1	0.05%	0	0.00%
Z: Examiner read test questions aloud	5	0.24%	1	0.06%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	14	0.68%	9	0.57%
Any Accommodation or Modification	14	0.68%	9	0.57%
No Accommodation or Modification	2,033	99.32%	1,564	99.43%
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 noninterfering 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	0.17%	0	0.00%
K: Had supervised breaks	7	0.40%	8	0.56%
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%

Special Services Summary for Mathematics, Grades Six and Seven				
X: Used an unlisted accommodation	1	0.06%	0	0.00%
Y: Leave blank	0	0.00%	0	0.00%
Z: Examiner read test questions aloud	4	0.23%	1	0.07%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	12	0.68%	9	0.63%
Any Accommodation or Modification	12	0.68%	9	0.63%
No Accommodation or Modification	1,753	99.32%	1,411	99.37%
Nontarget (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 noninterfering 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	0.35%	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	1	0.35%	0	0.00%
Z: Examiner read test questions aloud	1	0.35%	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	2	0.71%	0	0.00%
Any Accommodation or Modification	2	0.71%	0	0.00%
No Accommodation or Modification	280	99.29%	153	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 noninterfering 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	0.10%	1	0.07%
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%

Special Services 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	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	0.10%	1	0.07%
Any Accommodation or Modification	2	0.10%	1	0.07%
No Accommodation or Modification	1,933	99.90%	1,513	99.93%
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 noninterfering 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	2.68%	0	0.00%
K: Had supervised breaks	6	5.36%	7	11.86%
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	1	0.89%	0	0.00%
Y: Leave blank	1	0.89%	0	0.00%
Z: Examiner read test questions aloud	5	4.46%	1	1.69%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	12	10.71%	8	13.56%
Any Accommodation or Modification	12	10.71%	8	13.56%
No Accommodation or Modification	100	89.29%	51	86.44%
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 noninterfering 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%

Special Services 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	1	0.11%	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	2	0.21%	0	0.00%
Any Accommodation or Modification	2	0.21%	0	0.00%
No Accommodation or Modification	945	99.79%	1,003	100.00%
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 noninterfering 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	0.27%	0	0.00%
K: Had supervised breaks	8	0.73%	8	1.40%
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	1	0.09%	0	0.00%
Z: Examiner read test questions aloud	4	0.36%	1	0.18%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	12	1.09%	9	1.58%
Any Accommodation or Modification	12	1.09%	9	1.58%
No Accommodation or Modification	1,088	98.91%	561	98.42%
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 noninterfering assistive device	0	0.00%	0	0.00%
G: Used braille test	0	0.00%	0	0.00%

Special Services 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%	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	103	100.00%	139	100.00%
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 noninterfering 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%
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	1	0.18%	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	566	99.82%	501	100.00%

Special Services 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 noninterfering 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	1	0.26%	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	386	99.74%	295	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 noninterfering 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	0.34%	0	0.00%
K: Had supervised breaks	7	0.80%	8	1.54%
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%

Special Services Summary for Mathematics, Grades Six and Seven				
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	4	0.46%	1	0.19%
Accommodation or Modification is in Section 504 plan	0	0.00%	0	0.00%
Accommodation or Modification is in IEP	11	1.26%	9	1.74%
Any Accommodation or Modification	11	1.26%	9	1.74%
No Accommodation or Modification	864	98.74%	509	98.26%
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 noninterfering 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	1	3.85%	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	3.85%	0	0.00%
Any Accommodation or Modification	1	3.85%	0	0.00%
No Accommodation or Modification	25	96.15%	56	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 noninterfering 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%

Special Services 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	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	14	100.00%	33	100.00%

Table 2.D.9 Special Services Summary for Algebra I

Special Services 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 noninterfering 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	1	0	0	0	1	0.03%
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	1	0	0	1	0.03%
Z: Examiner read test questions aloud	0	1	0	0	0	1	0.03%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	2	1	0	0	3	0.10%
Any Accommodation or Modification	0	2	1	0	0	3	0.10%
No Accommodation or Modification	13	450	1,377	757	307	2,904	99.90%
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 noninterfering 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	1	0	0	0	1	0.04%
K: Had supervised breaks	0	1	0	0	0	1	0.04%
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%

Special Services 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	1	0	0	0	1	0.04%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	2	0	0	0	2	0.08%
Any Accommodation or Modification	0	2	0	0	0	2	0.08%
No Accommodation or Modification	10	388	1,234	699	282	2,613	99.92%
Nontarget (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 noninterfering 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	1	0	0	1	0.34%
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	1	0	0	1	0.34%
Any Accommodation or Modification	0	0	1	0	0	1	0.34%
No Accommodation or Modification	3	62	143	58	25	291	99.66%
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 noninterfering 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	1	0	0	0	1	0.03%
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%

Special Services 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	1	0	0	0	1	0.03%
Any Accommodation or Modification	0	1	0	0	0	1	0.03%
No Accommodation or Modification	13	443	1,370	755	305	2,886	99.97%
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 noninterfering 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	1	0	0	1	5.00%
Z: Examiner read test questions aloud	0	1	0	0	0	1	5.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	1	1	0	0	2	10.00%
Any Accommodation or Modification	0	1	1	0	0	2	10.00%
No Accommodation or Modification	0	7	7	2	2	18	90.00%
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 noninterfering 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%

Special Services 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	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	8	280	1,155	635	253	2,331	100.00%
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 noninterfering 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	1	0	0	0	1	0.17%
K: Had supervised breaks	0	1	0	0	0	1	0.17%
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	0.17%
Z: Examiner read test questions aloud	0	1	0	0	0	1	0.17%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	2	1	0	0	3	0.52%
Any Accommodation or Modification	0	2	1	0	0	3	0.52%
No Accommodation or Modification	5	170	222	122	54	573	99.48%
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 noninterfering assistive device	0	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0	0.00%

Special Services 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	0	45	140	95	48	328	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 noninterfering 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	6	145	515	262	119	1,047	100.00%

Special Services 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 noninterfering 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	4	92	333	176	79	684	100.00%
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 noninterfering 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	1	0	0	0	1	0.17%
K: Had supervised breaks	0	1	0	0	0	1	0.17%
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%

Special Services 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	1	0	0	0	1	0.17%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	2	0	0	0	2	0.35%
Any Accommodation or Modification	0	2	0	0	0	2	0.35%
No Accommodation or Modification	2	125	251	153	43	574	99.65%
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 noninterfering 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	1	0	0	1	0.69%
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	1	0	0	1	0.69%
Any Accommodation or Modification	0	0	1	0	0	1	0.69%
No Accommodation or Modification	1	26	58	48	11	144	99.31%
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 noninterfering 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%

Special Services 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	0	6	17	11	1	35	100.00%

Table 2.D.10 Special Services Summary for Geometry

Special Services 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 noninterfering 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	1	99	223	173	496	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 noninterfering 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%

Special Services 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	84	193	147	424	100.00%
Nontarget (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 noninterfering 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	1	15	30	26	72	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 noninterfering 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%

Special Services 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	1	98	223	171	493	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 noninterfering 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 noninterfering 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%

Special Services 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	69	149	82	300	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 noninterfering 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	1	30	74	91	196	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 noninterfering assistive device	0	0	0	0	0	0.00%
G: Used braille test	0	0	0	0	0	0.00%

Special Services 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	1	17	36	20	74	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 noninterfering 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	31	64	34	129	100.00%

Special Services 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 noninterfering 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	19	27	17	63	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 noninterfering 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%

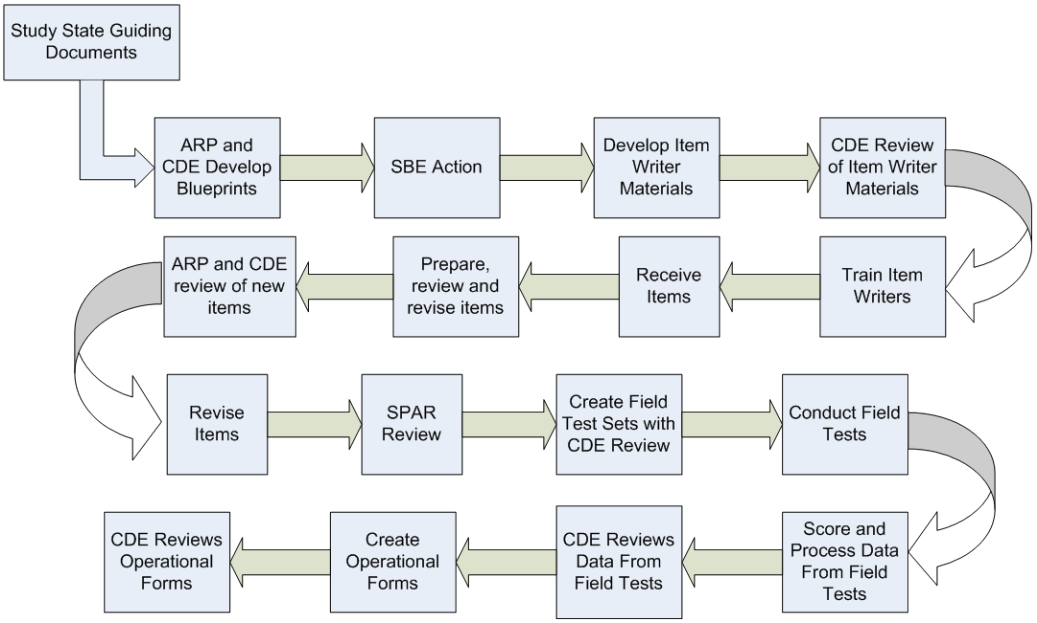
Special Services Summary for Geometry						
X: Used an unlisted accommodation	0	0	0	0	0	0.00%
Y: Leave blank	0	0	0	0	0	0.00%
Z: Examiner read test questions aloud	0	0	0	0	0	0.00%
Accommodation or Modification is in Section 504 plan	0	0	0	0	0	0.00%
Accommodation or Modification is in IEP	0	0	0	0	0	0.00%
Any Accommodation or Modification	0	0	0	0	0	0.00%
No Accommodation or Modification	0	26	73	82	181	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 noninterfering 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	2	13	15	30	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 noninterfering 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%

Special Services 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	1	8	2	11	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 Specifications

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 on the STS measure the content standards. To achieve this, the item specifications provide detailed information to item writers that are developing items for the STS. 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 expressions 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
- Appropriate readability levels for reading passages
- A list of topics to be avoided

Expected Item Ratio

ETS 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 Operational Items per Grade or Course	Number of Items to Be Field-Tested per Grade or Course
Reading/Language Arts	2	20%	111%	65	72
	3	20%	111%	65	72
	4	20%	72%	75	54
	5	15%	48%	75	36
	6	10%	32%	75	24

Content Area	Grade or Course	Refresh Rate (Percent)	Percentage of Operational Form to Be Field-Tested	Number of Operational Items per Grade or Course	Number of Items to Be Field-Tested per Grade or Course
Reading/Language Arts (cont.)	7	10%	32%	75	24
	8	10%	32%	75	24
	9	15%	40%	75	30
	10	10%	32%	75	24
	11	5%	16%	75	12
Mathematics	2	20%	111%	65	72
	3	20%	111%	65	72
	4	20%	83%	65	54
	5	20%	55%	65	36
	6	10%	37%	65	24
	7	10%	37%	65	24
	Algebra I	15%	46%	65	30
	Geometry	5%	9%	65	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 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 by 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 DOK
- 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 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, suggest revisions, or 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 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. 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 genders 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

STS	RLA	Math	Total
Total	**18**	**8**	**26**
Occupation (Members may teach multiple levels.)			
Teacher or Program Specialist, Elementary/Middle School	13	5	18
Teacher or Program Specialist, High School	2	1	3
Teacher or Program Specialist, K–12	4	1	5
University Personnel	3	0	3
Other District Personnel (e.g., Director of Special Services, etc.)	2	2	4
Highest Degree Earned			
Bachelor's Degree	9	4	13
Master's Degree	9	4	13
Doctorate	0	0	0
K–12 Teaching Credentials and Experience (Members may hold multiple credentials.)			
Elementary Teaching (multiple subjects)	13	6	19
Secondary Teaching (single subject)	5	4	9
Special Education	0	0	0
Reading Specialist	0	0	0
Bilingual Education (BCLAD)	9	4	13
Administrative	0	1	1
Other	1	0	1
None (teaching at the 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 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 divided further 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 test items 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 in grades two through seven occurred in the fall before the tests 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 seeded 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 Forms

The 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 also shows the number of forms administered for each STS in 2012 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 and were extracted from the P2 data file, which contains 100 percent of school district data that were received for ETS statistical analysis by approximately August 14, 2012.

Table 3.3 Summary of Items and Forms Presented in the 2012 STS

Content Area	STS *	Operational		Field Test		
		No. Items	No. Examinees	No. Forms	No. Items	No. Examinees FIA Sample
Reading/ Language Arts	2	65	10,628	12	72	743–1,100
	3	65	6,770	12	72	543–589
	4	75	4,431	9	54	457–505
	5	75	2,875	6	36	437–484
	6	75	1,768	4	24	426–434
	7	75	1,456	4	24	341–378
	8	75	1,070	4	24	246–280
	9	75	1,987	5	30	347–457
	10	75	1,251	4	24	292–321
	11	75	718	2	12	343–368
Mathematics	2	65	10,621	12	72	745–1,096
	3	65	6,775	12	72	542–591
	4	65	4,430	9	54	455–504
	5	65	2,872	6	36	437–484
	6	65	1,759	4	24	421–433
	7	65	1,412	4	24	330–364
	Algebra I	65	2,603	5	30	450–600
	Geometry	65	423	1	6	423

* 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, SPAR, 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 California 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 psychometrics group at ETS, which carefully evaluates each item for its level of difficulty and discrimination as well as conformance to the IRT Rasch model. Psychometricians also determine if the item functions similarly for various subgroups of interest.

All unavailable items are clearly 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, and used operationally. All rejection 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), the California English Language Development Test (CELDT), 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, such as the CELDT, under contract with other vendors for inclusion into the item bank. ETS provides the item banking application using the LAN architecture and the relational database management system, SQL 2005/SQL 2008, 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. Downloaded from http://www.cde.ca.gov/be/st/ss/

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

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 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 desired 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 number of operational items on each STS varies across grades and content areas. There are 65 operational items on the STS for RLA in grades two and three and 75 operational items on the STS for RLA in grades four through eleven. The STS grade-level and EOC mathematics tests contain 65 operational items.

The number of items total also varies. There are 71 items total on the STS for RLA in grades two and three and 81 items total on the STS for RLA in grades four through eleven. The STS grade-level and EOC mathematics tests contain 71 items total.

In addition to operational items, a certain number of the items on each test are field-test items. Among the items on each STS, six items are field-test items. For more details on the distribution of items, see Appendix 2.A—STS Items 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, the percentage of questions correctly answered is reported on a student's score report. A list of the STS reporting clusters by test and the number of items in the cluster that appear in each test are 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 selected linking items are also reviewed to ensure that specific psychometric criteria are met.

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 a specified content 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. Chapter 3, starting on page 101, contains further information about this process.

Psychometric Criteria

The three goals of STS test development are as follows:

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 has been developed. These rules are referred to as statistical targets.

Three types of assembly targets are developed for each STS: the total test target, the linking block target, and (reporting) cluster targets. The test developers and psychometricians work together to design the tests to meet these targets.

Primary Statistical Targets

The total test target, or primary statistical targets, used for assembling the STS forms for the 2012 administration were the test information function (TIF) and an average point-biserial correlation.

The TIF is the sum of the item information function based on the item response theory (IRT) item parameters. When using an IRT model, the target TIF makes it possible to choose items to produce a test that has the desired precision of measurement at all ability levels.

Due to the unique characteristics of the Rasch IRT model, the information curve conditional on each ability level is determined by item difficulty (*b*-values) alone. In this case, the TIF would, therefore, suffice as the target for conditional test difficulty. Although additional item difficulty targets are not imperative when the target TIF is used for form construction, the target mean and standard deviation of item difficulty (*b*-values) consistent with the TIF were still provided to test development staff to help with the test construction process. 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 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 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.

Assembly Targets

The target values for the STS tests are presented in Table 4.1.

Table 4.1 Statistical Targets for the STS Test Assembly

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	–0.20	0.74	0.20	0.95	> 0.37	0.14
	9	–0.21	0.77	0.20	0.95	> 0.37	0.14
	10	–0.21	0.79	0.20	0.95	> 0.37	0.14
	11	–0.21	0.70	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	–0.27	0.65	0.20	0.95	0.31 – 0.35	0.14
	Geometry	–0.25	0.75	0.20	0.95	0.33 – 0.37	0.14

* Numbers indicate grade-level tests

The linking block target for each test consists of a proportionally adjusted (for numbers of items) total test 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 TIF and the projected TIF for the total test and the linking set.

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 information curves constructed for the new form 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.

Projected Psychometric Properties of the Assembled Tests

Prior to the 2012 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 in Table 4.A.1 were based on item *p*-values and point-biserial correlations. Chapter 8 presents item *p*-values, point-biserial correlations, and test reliability estimates based on the data from the 2012 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.

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. All passages are high interest and are selected and sequenced based on standards and blueprint requirements. Stand-alone items are placed throughout the form, where appropriate.
- Mathematics—The mathematics test forms are sequenced mostly 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. The exceptions are reporting clusters 1 and 2 for grades two through seven and reporting clusters 3 and 4 for grade seven. Reporting clusters 1 and 2 for grades two through seven both test Number Sense; items for these clusters are intertwined and administered together at the beginning of the test. Reporting clusters 3 and 4 for grade seven both test Algebra and Functions; items for these clusters are intertwined as well.

Reference

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

Appendix 4.A—Technical Characteristics

Table 4.A.1 Summary of 2012 STS Projected Technical Characteristics

Content Area	STS *	Number of Op. Items	Mean Raw Score	Std. Dev. of Raw Scores	Reliability
Reading/ Language Arts	2	65	39.59	12.85	0.93
	3	65	38.22	12.13	0.92
	4	75	43.10	14.38	0.93
	5	75	37.57	13.22	0.91
	6	75	37.56	12.80	0.90
	7	75	39.67	12.98	0.91
	8	75	40.78	12.75	0.91
	9	75	40.27	12.91	0.91
	10	75	41.07	12.20	0.90
	11	75	38.40	11.99	0.89
Mathematics	2	65	44.06	11.68	0.92
	3	65	41.46	12.97	0.93
	4	65	40.65	12.81	0.93
	5	65	33.72	12.16	0.91
	6	65	33.50	11.85	0.91
	7	65	30.20	10.45	0.87
	Algebra I	65	25.36	9.44	0.85
	Geometry	65	27.26	9.60	0.86

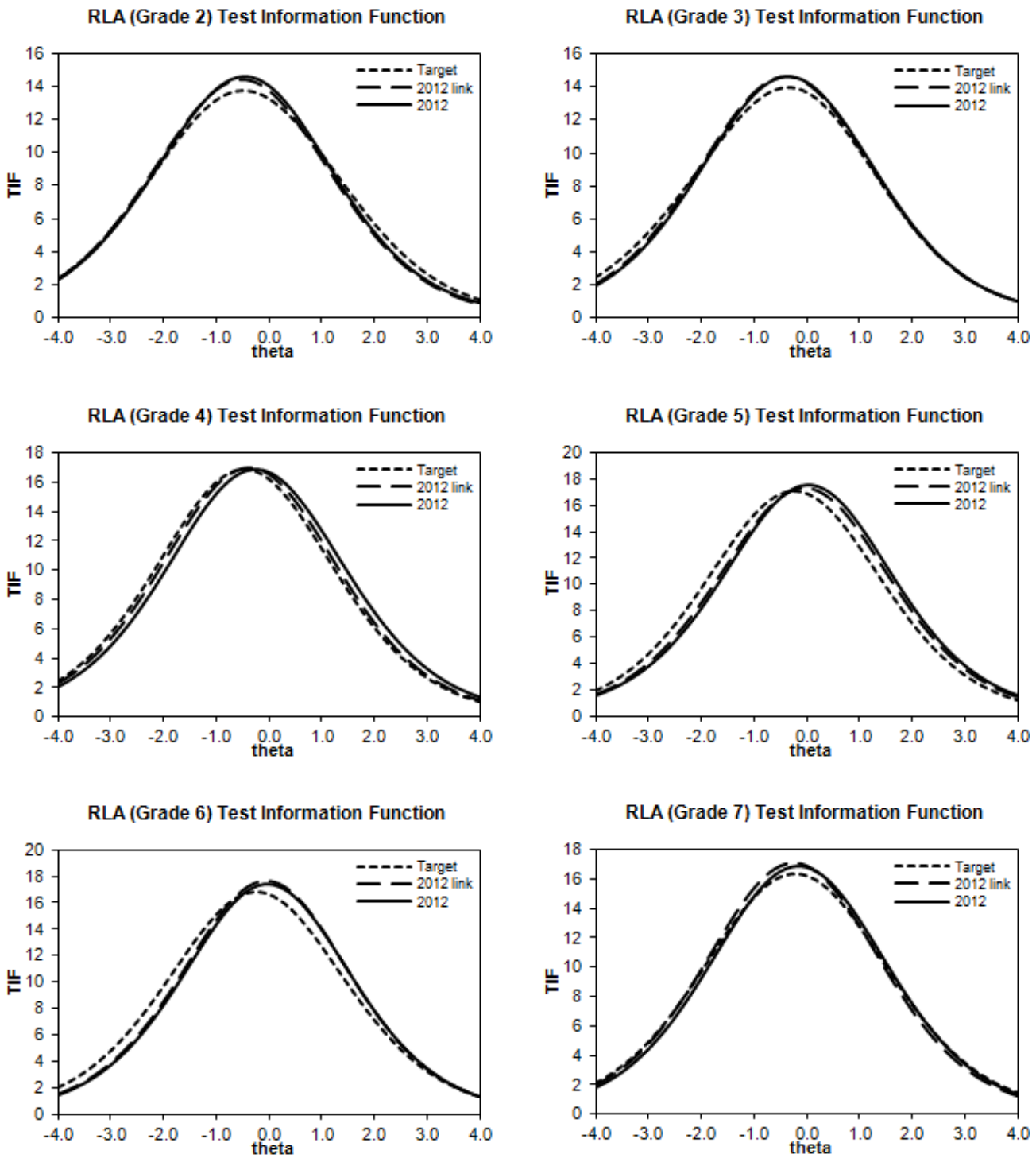
* Numbers indicate grade-level tests.

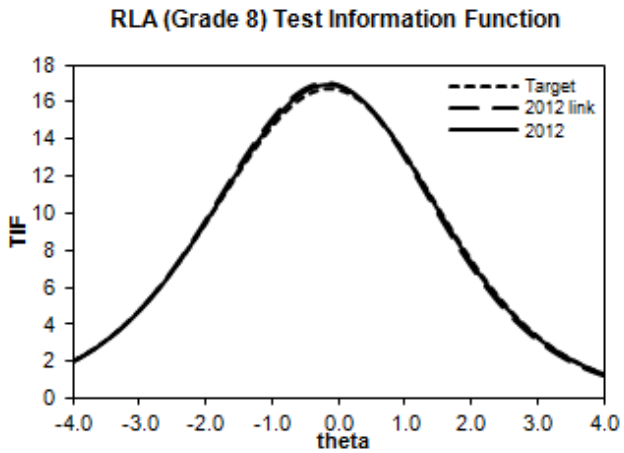
Table 4.A.2 Summary of 2012 STS Projected Statistical Attributes

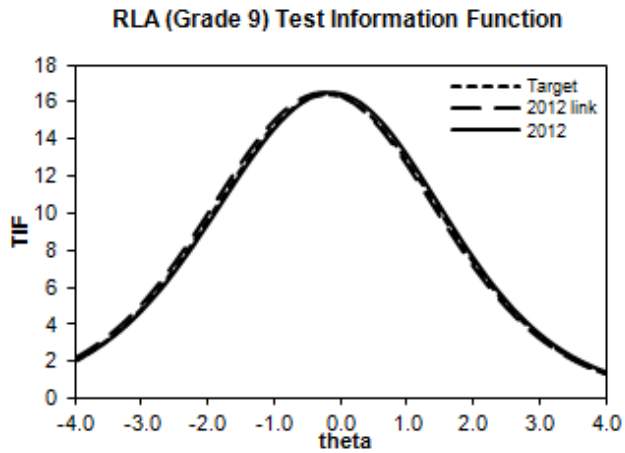
Content Area	STS *	Mean b	SD b	Mean *p*-value	Min *p*-value	Max *p*-value	Mean Point Biserial	Min Point Biserial
Reading/ Language Arts	2	–0.50	0.71	0.61	0.28	0.88	0.43	0.22
	3	–0.36	0.68	0.59	0.32	0.87	0.40	0.20
	4	–0.23	0.71	0.57	0.19	0.88	0.41	0.06
	5	0.02	0.55	0.50	0.30	0.82	0.36	0.20
	6	–0.03	0.52	0.50	0.24	0.82	0.35	0.16
	7	–0.15	0.67	0.53	0.23	0.77	0.36	0.00
	8	–0.20	0.68	0.54	0.28	0.84	0.36	0.17
	9	–0.17	0.75	0.54	0.24	0.82	0.36	0.15
	10	–0.24	0.76	0.55	0.27	0.87	0.35	0.13
	11	–0.05	0.73	0.51	0.08	0.86	0.33	0.07
Mathematics	2	–0.80	0.76	0.68	0.37	0.92	0.40	0.21
	3	–0.55	0.80	0.64	0.26	0.92	0.43	0.21
	4	–0.46	0.69	0.63	0.34	0.89	0.43	0.26
	5	0.01	0.64	0.52	0.26	0.82	0.39	0.09
	6	–0.05	0.66	0.52	0.21	0.83	0.38	0.20
	7	0.17	0.55	0.46	0.20	0.81	0.33	0.17
	Algebra I	0.47	0.61	0.39	0.18	0.70	0.31	0.00
	Geometry	0.35	0.68	0.42	0.15	0.77	0.31	0.01

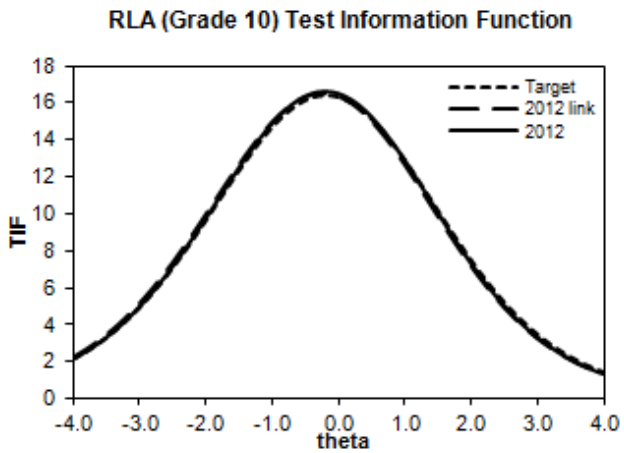
* Numbers indicate grade-level tests.

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
2012 link
2012


RLA (Grade 9) Test Information Function
TIF
theta
Target
2012 link
2012


RLA (Grade 10) Test Information Function
TIF
theta
Target
2012 link
2012

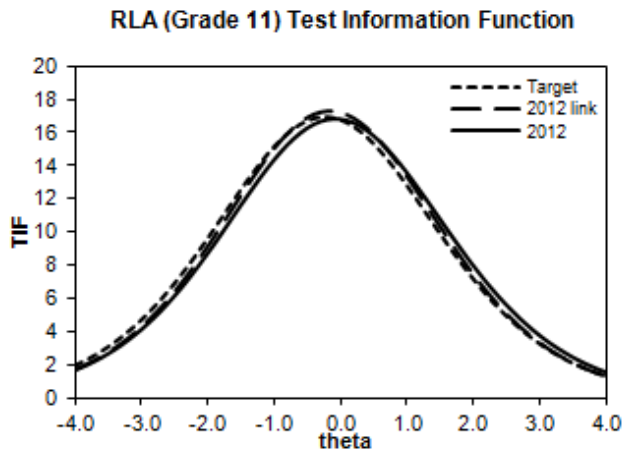
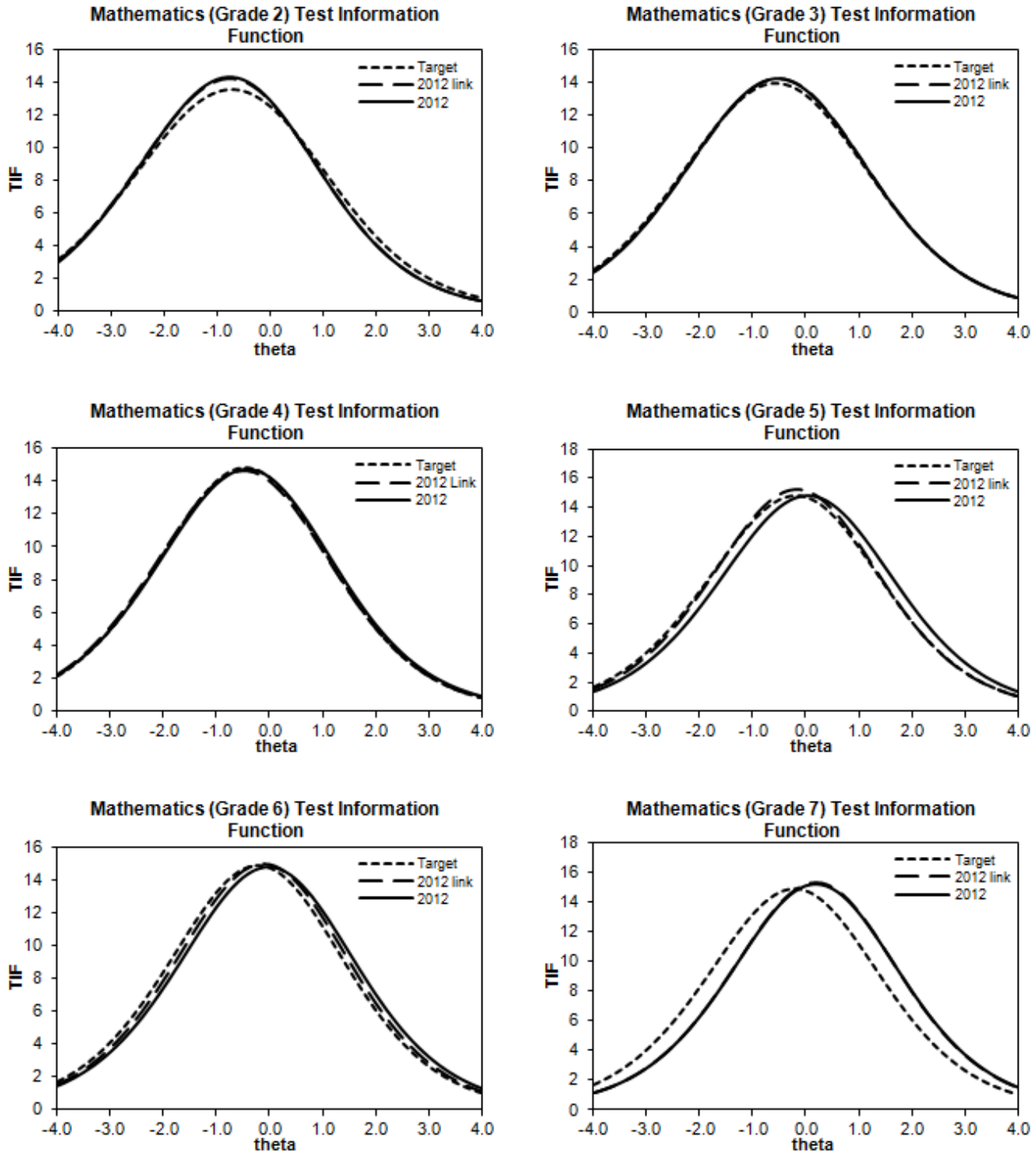
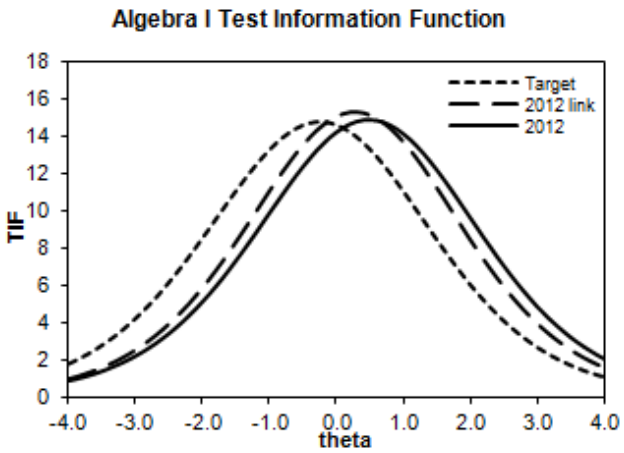

RLA (Grade 11) Test Information Function
TIF
theta
Target
2012 link
2012

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
2012 link
2012
18
16
14
12
10
8
6
4
2
0
-4.0
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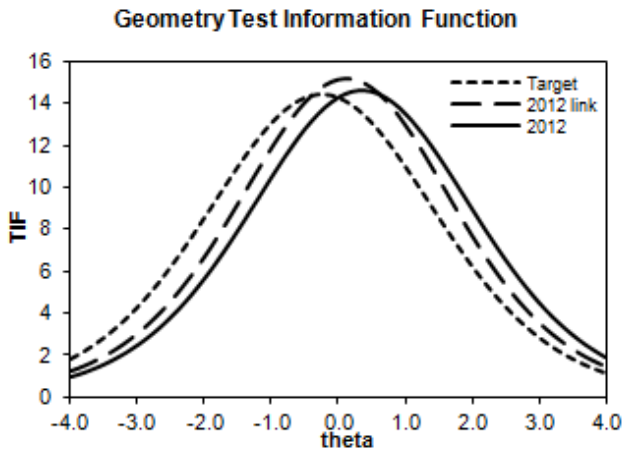
0.0
1.0
2.0
3.0
4.0


Geometry Test Information Function
TIF
theta
Target
2012 link
2012
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

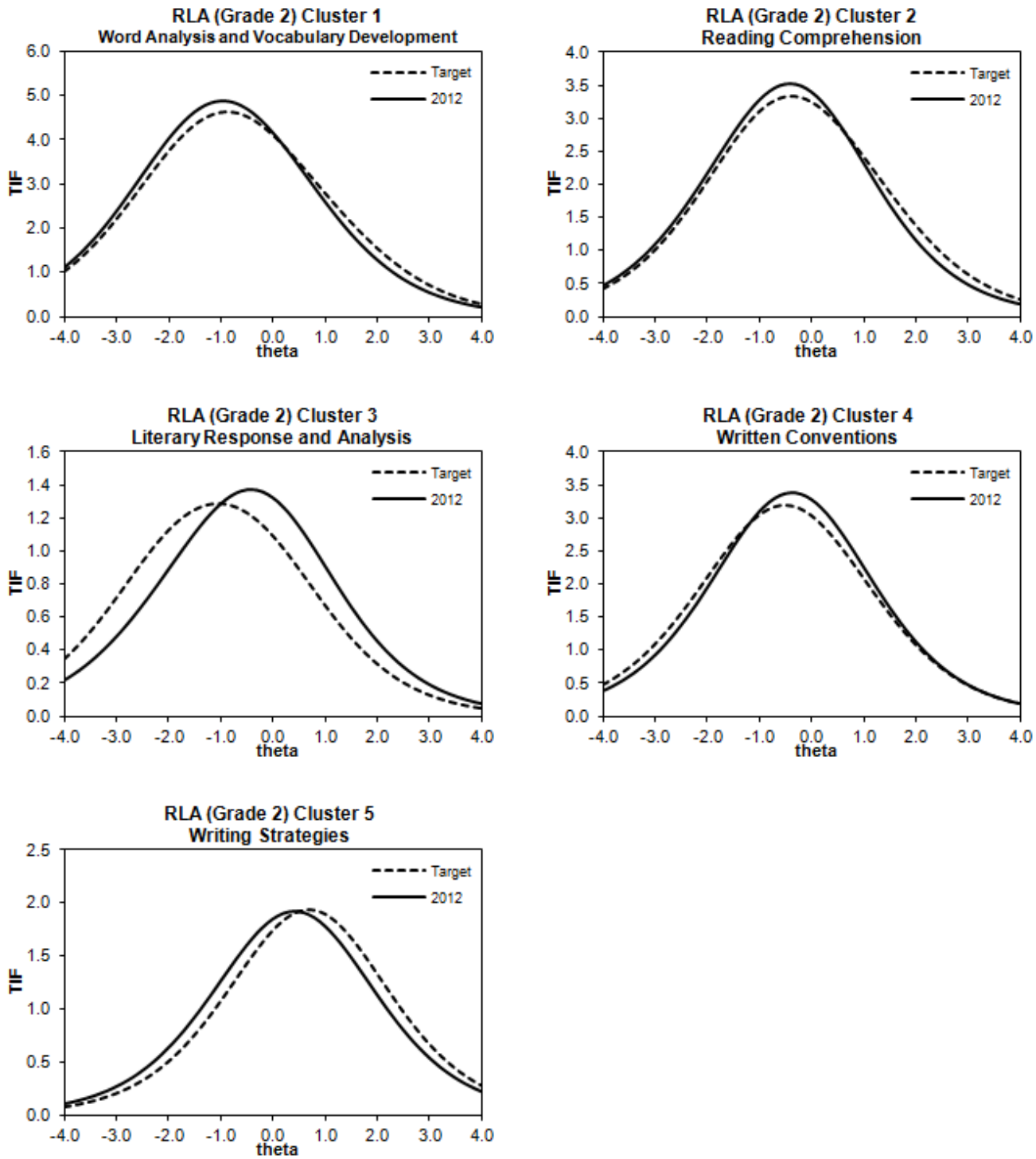


Figure 4.B.2 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Three

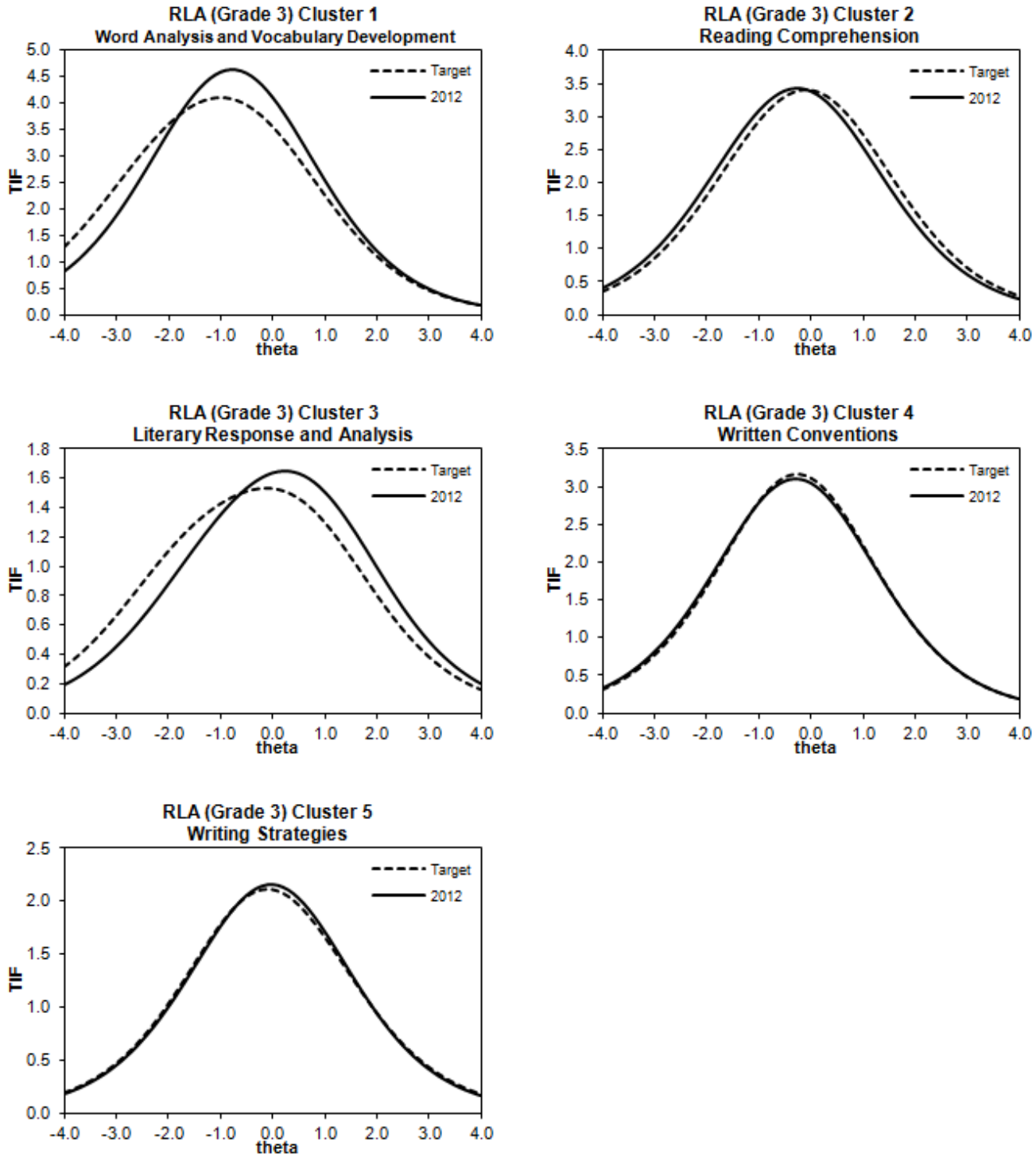


Figure 4.B.3 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Four

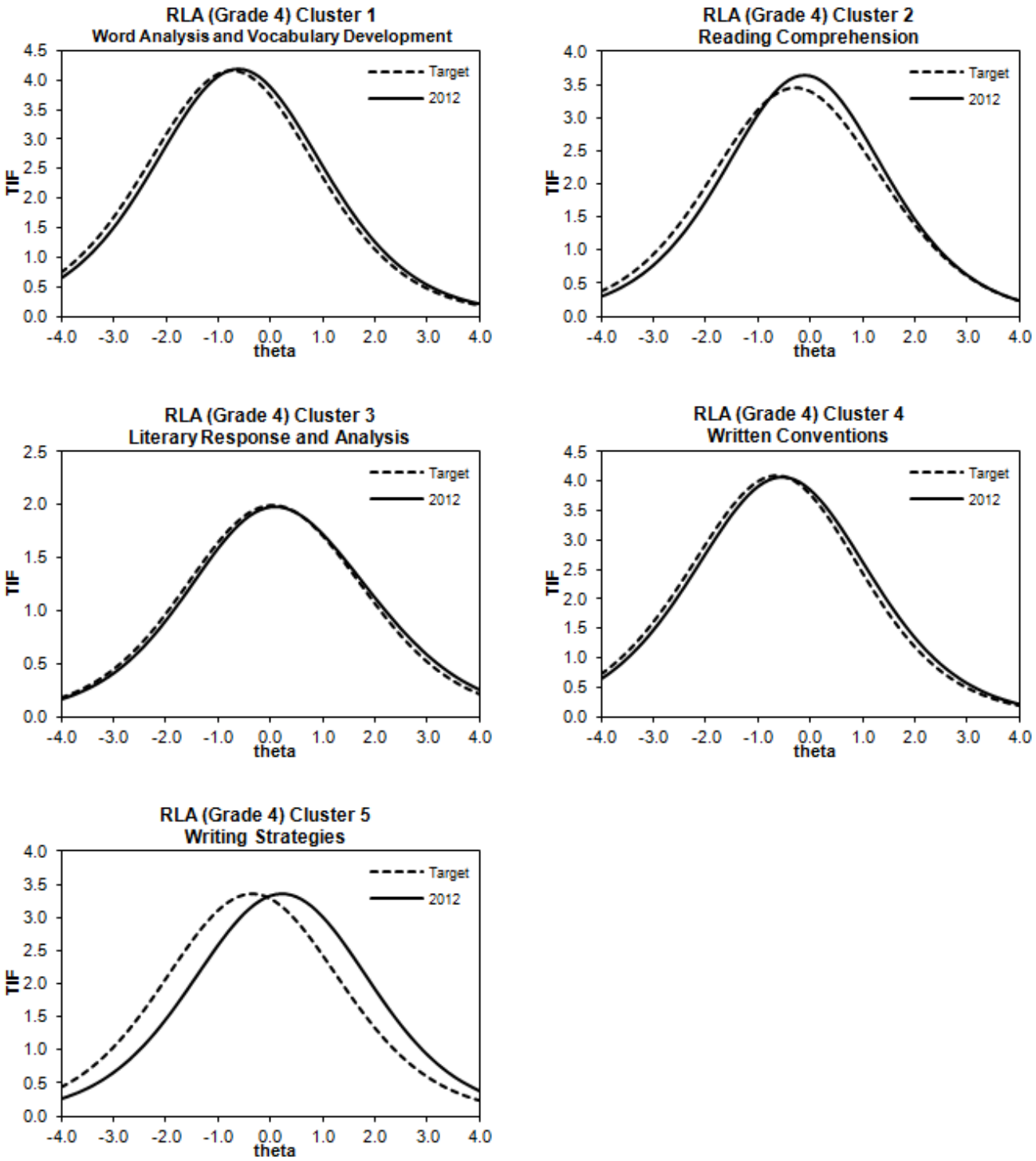


Figure 4.B.4 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Five

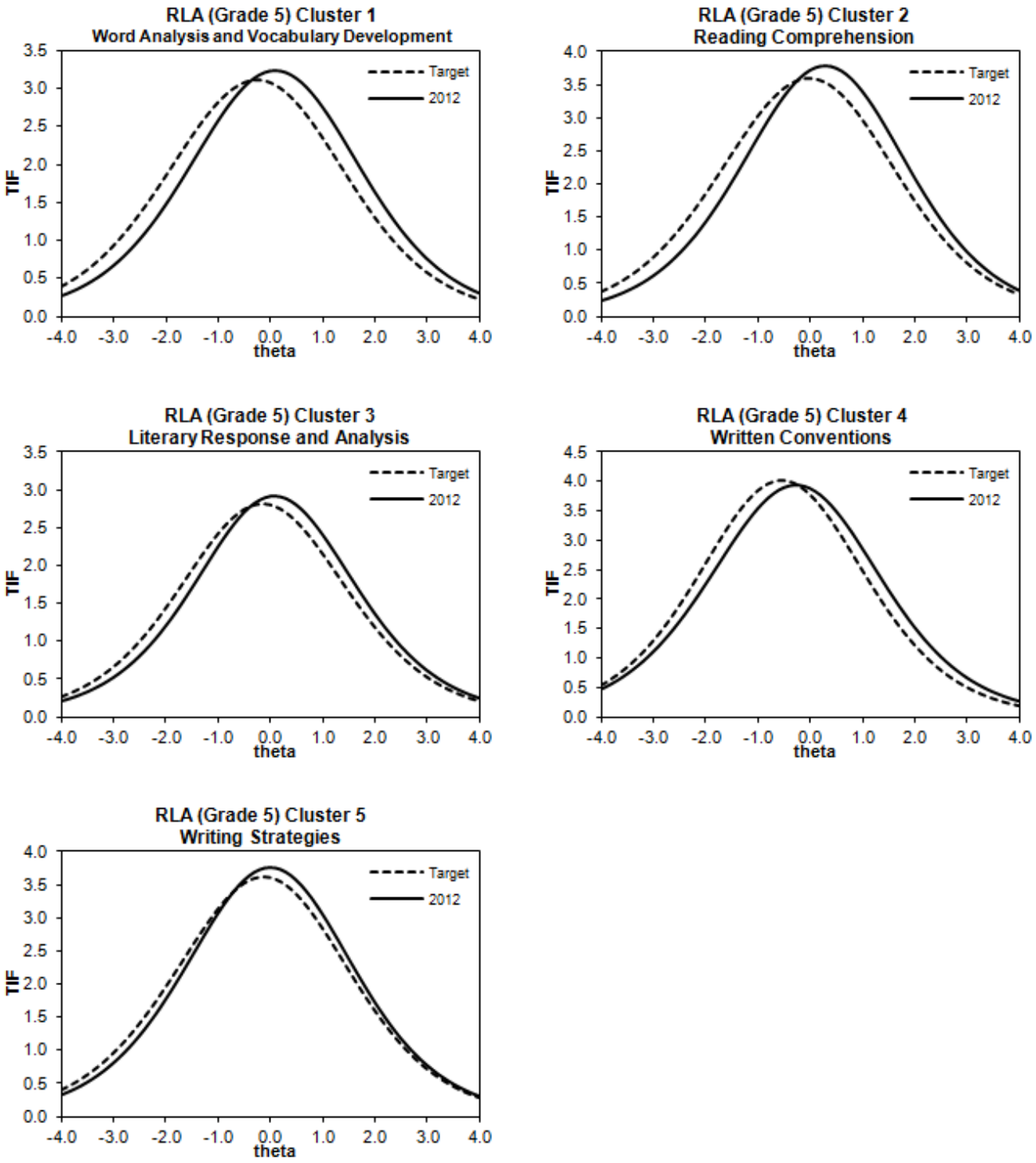


Figure 4.B.5 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Six

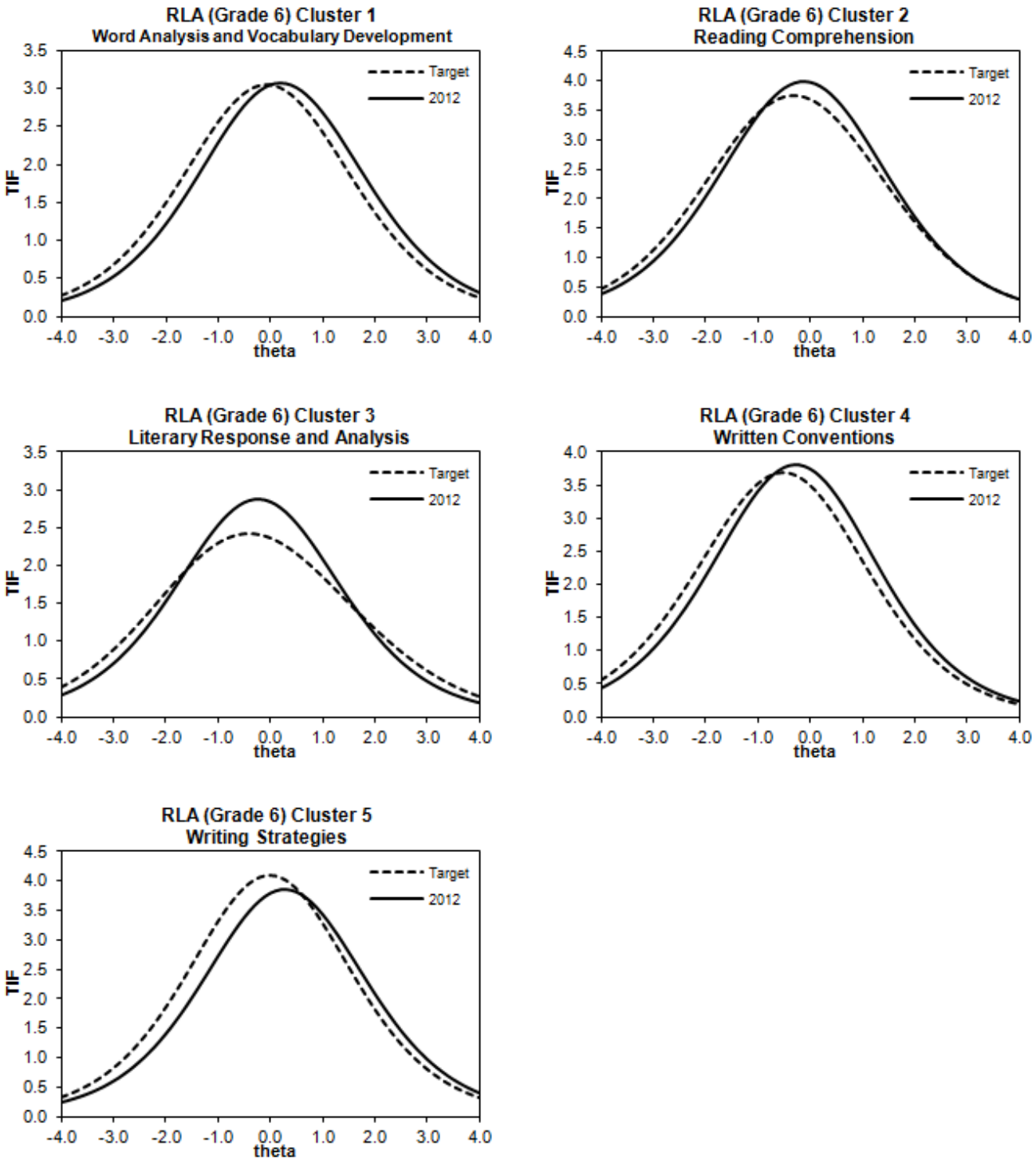


Figure 4.B.6 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Seven

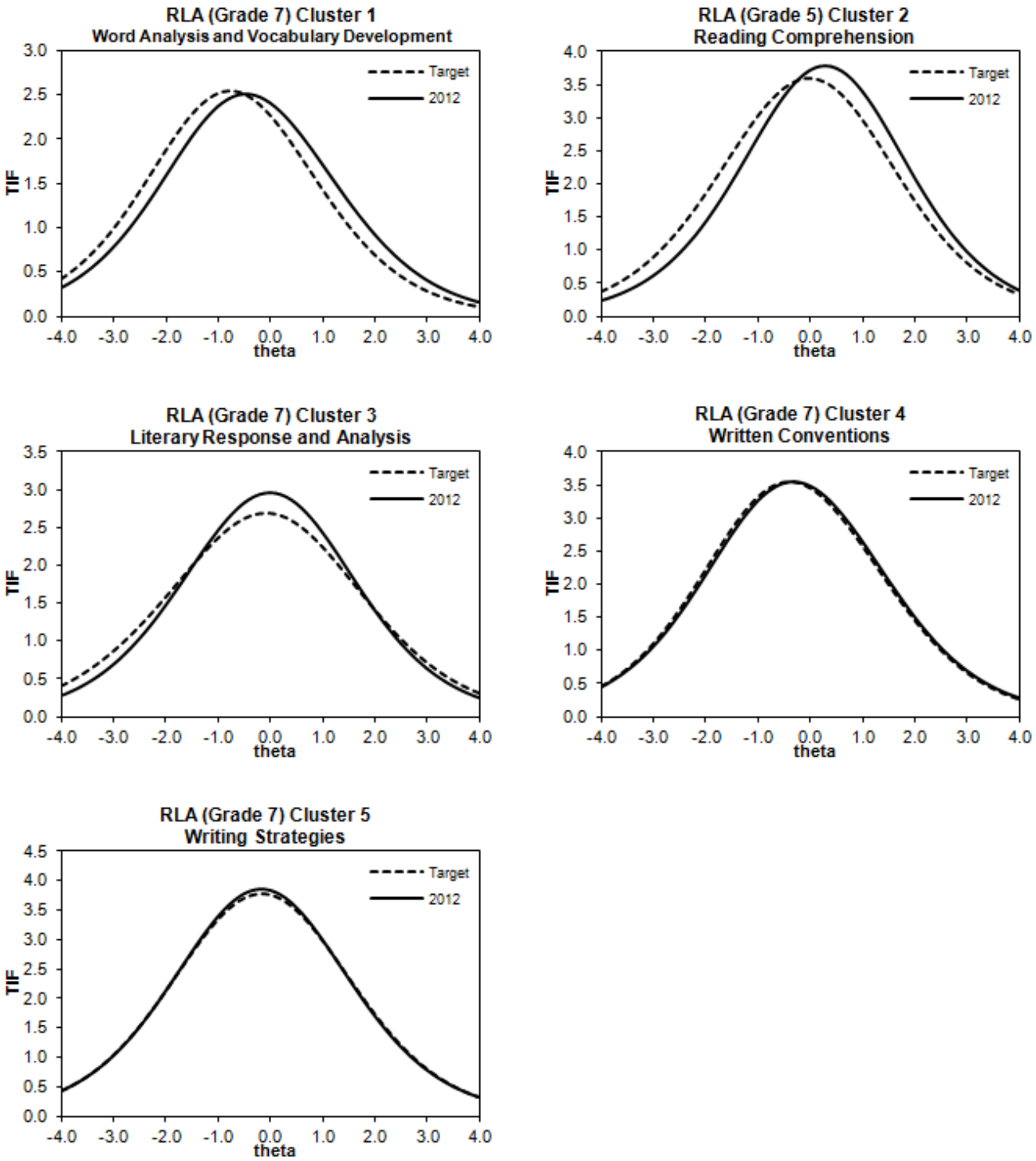


Figure 4.B.7 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Eight

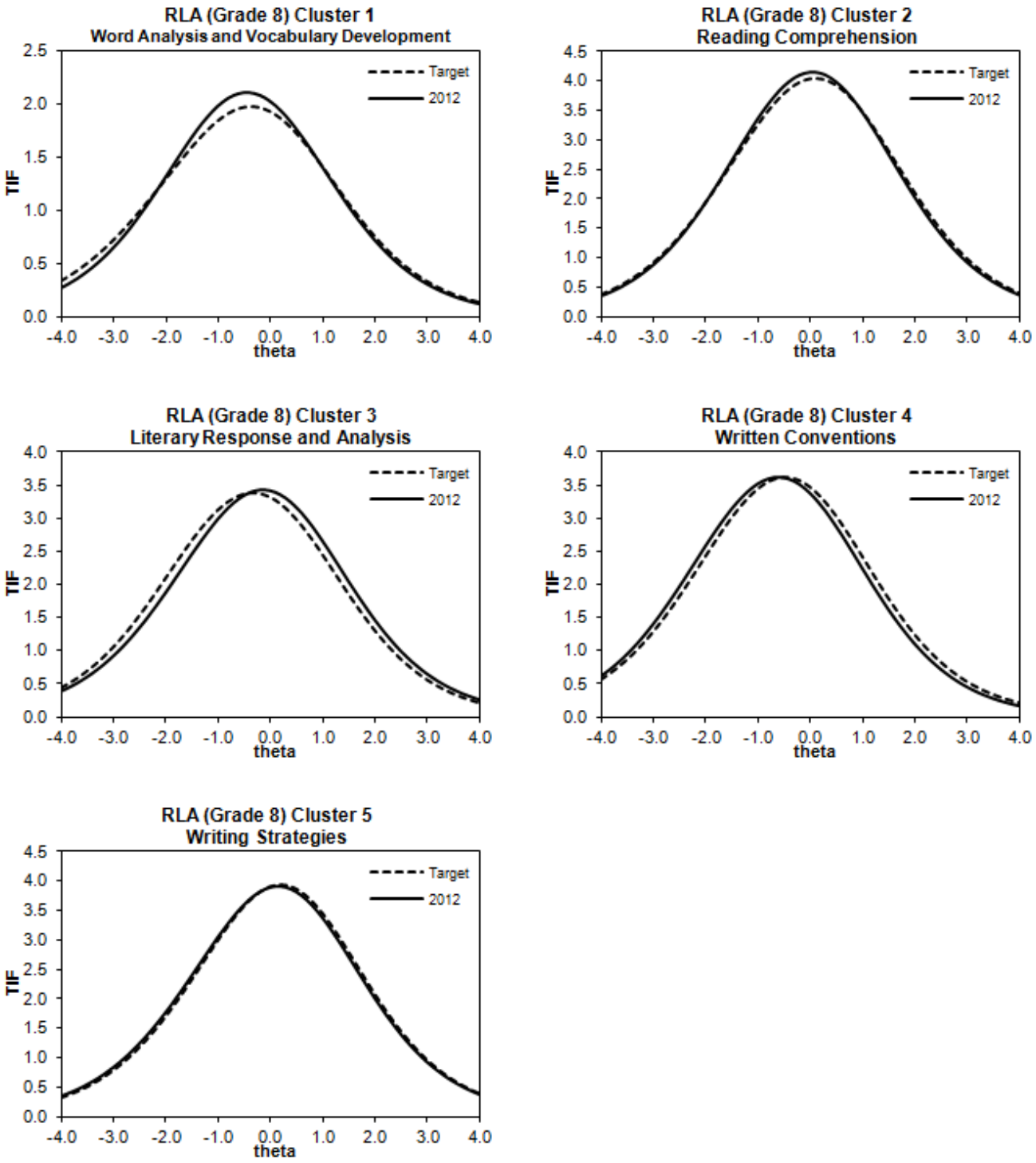


Figure 4.B.8 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Nine

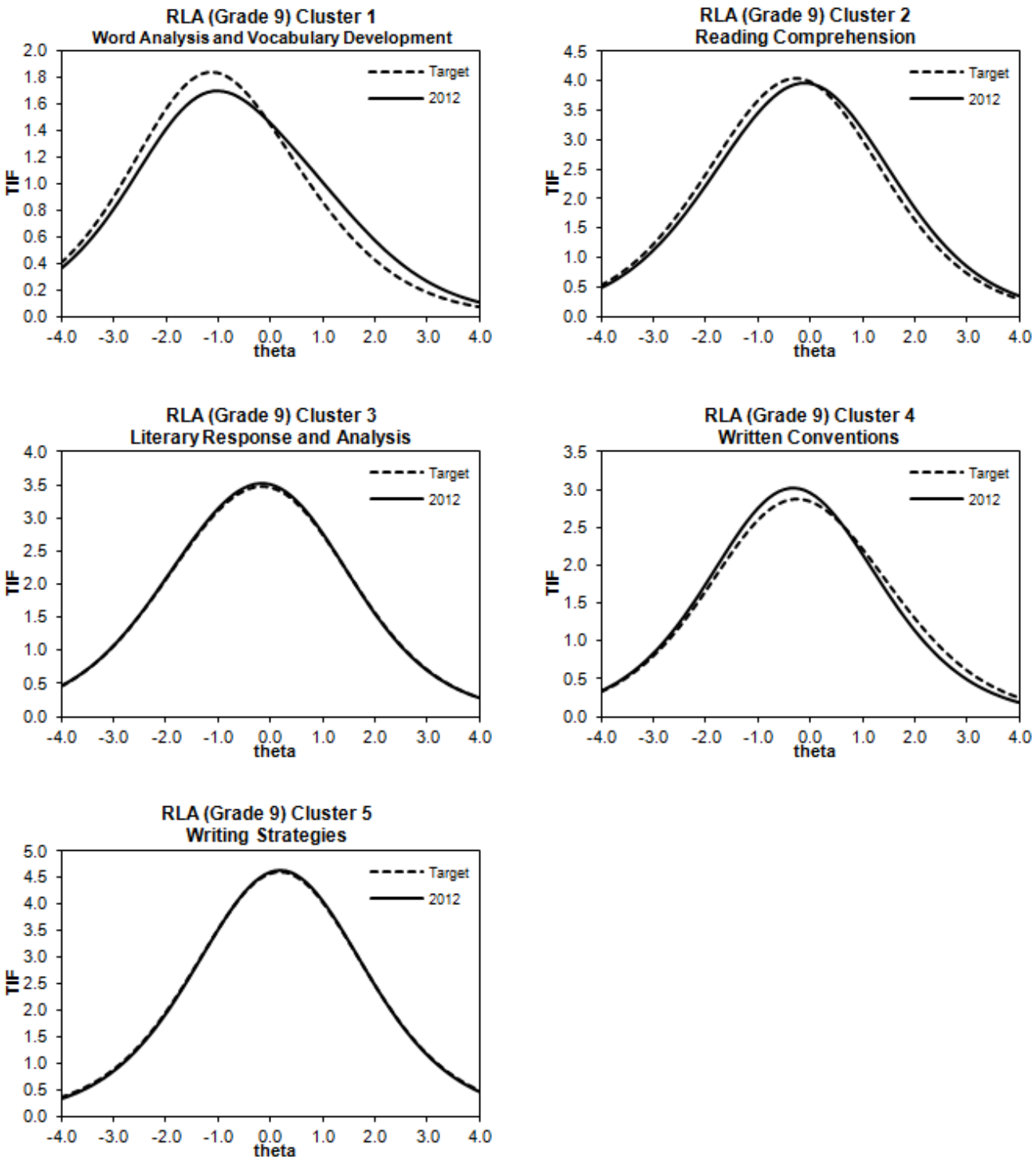


Figure 4.B.9 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Ten

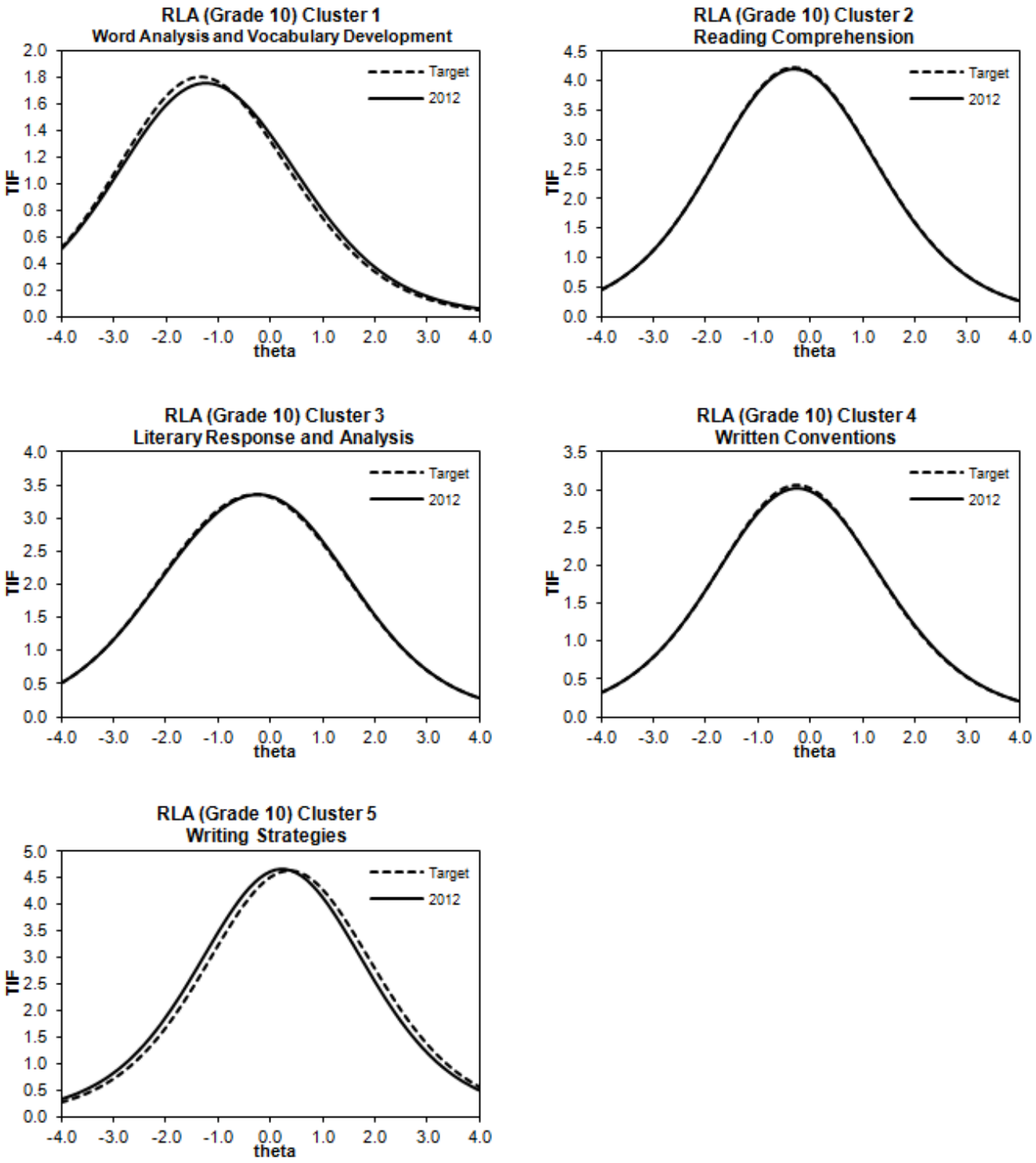


Figure 4.B.10 Plots of Target Information Functions and Projected Information for Clusters for RLA, Grade Eleven

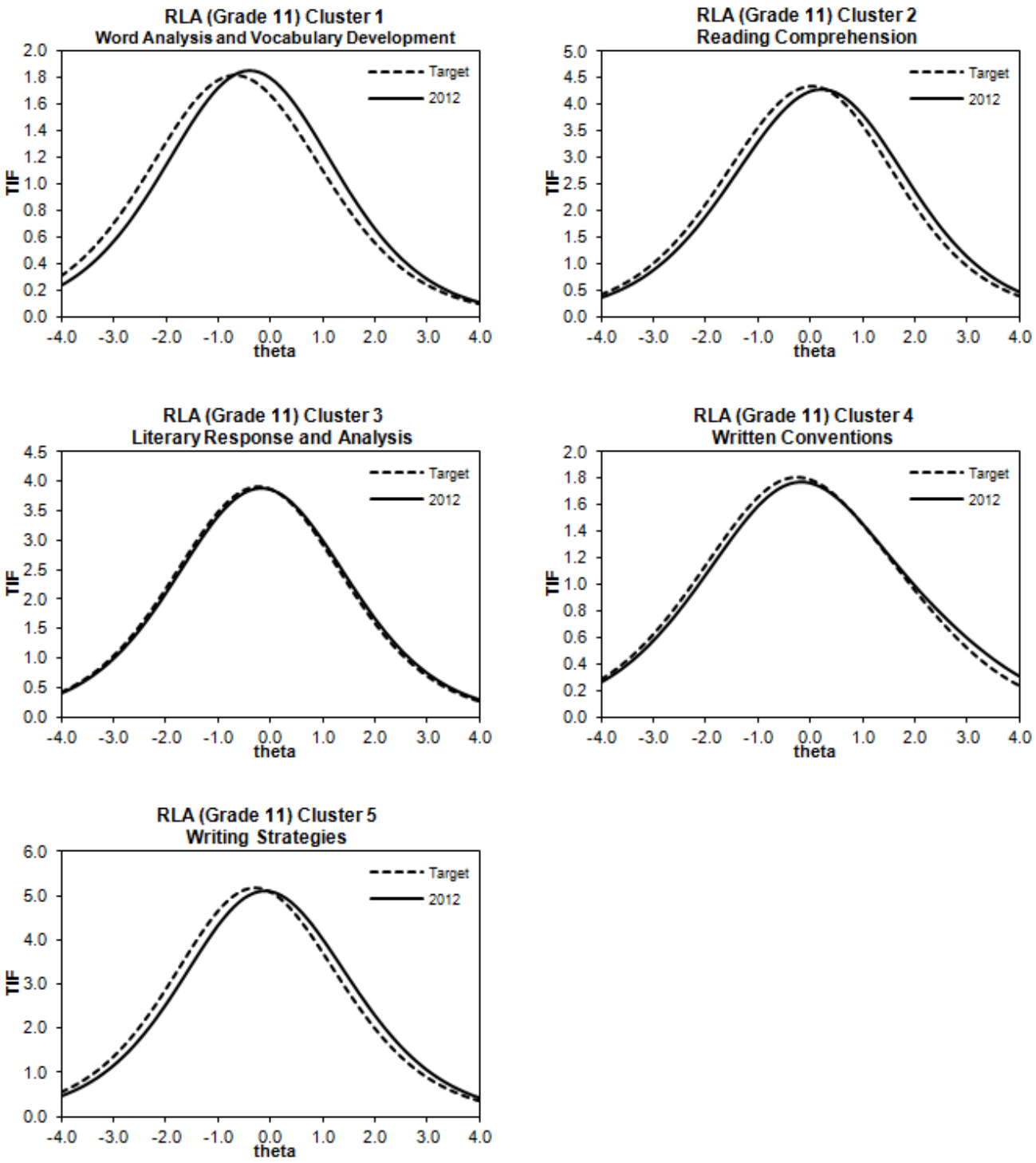


Figure 4.B.11 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Two

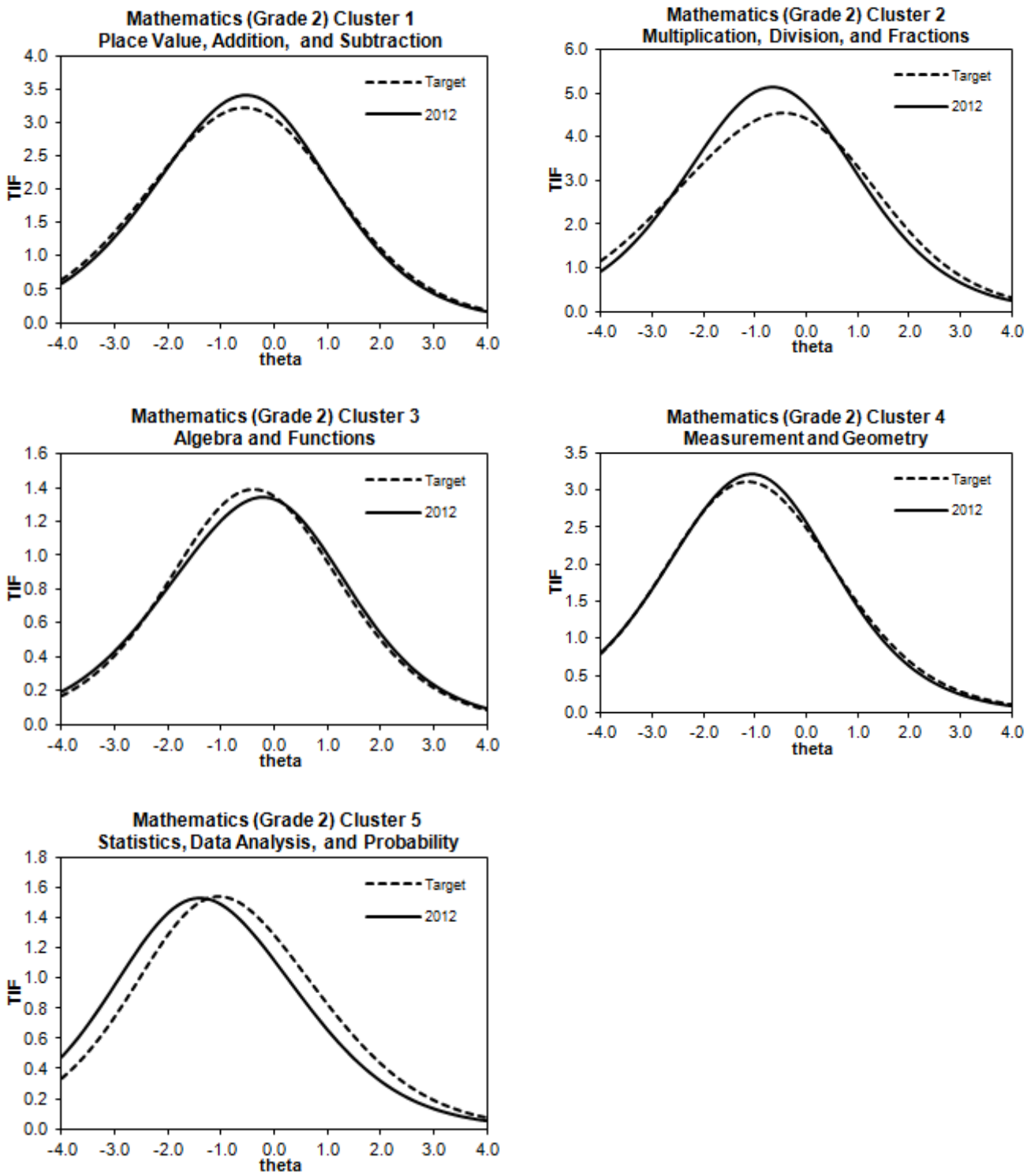


Figure 4.B.12 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Three

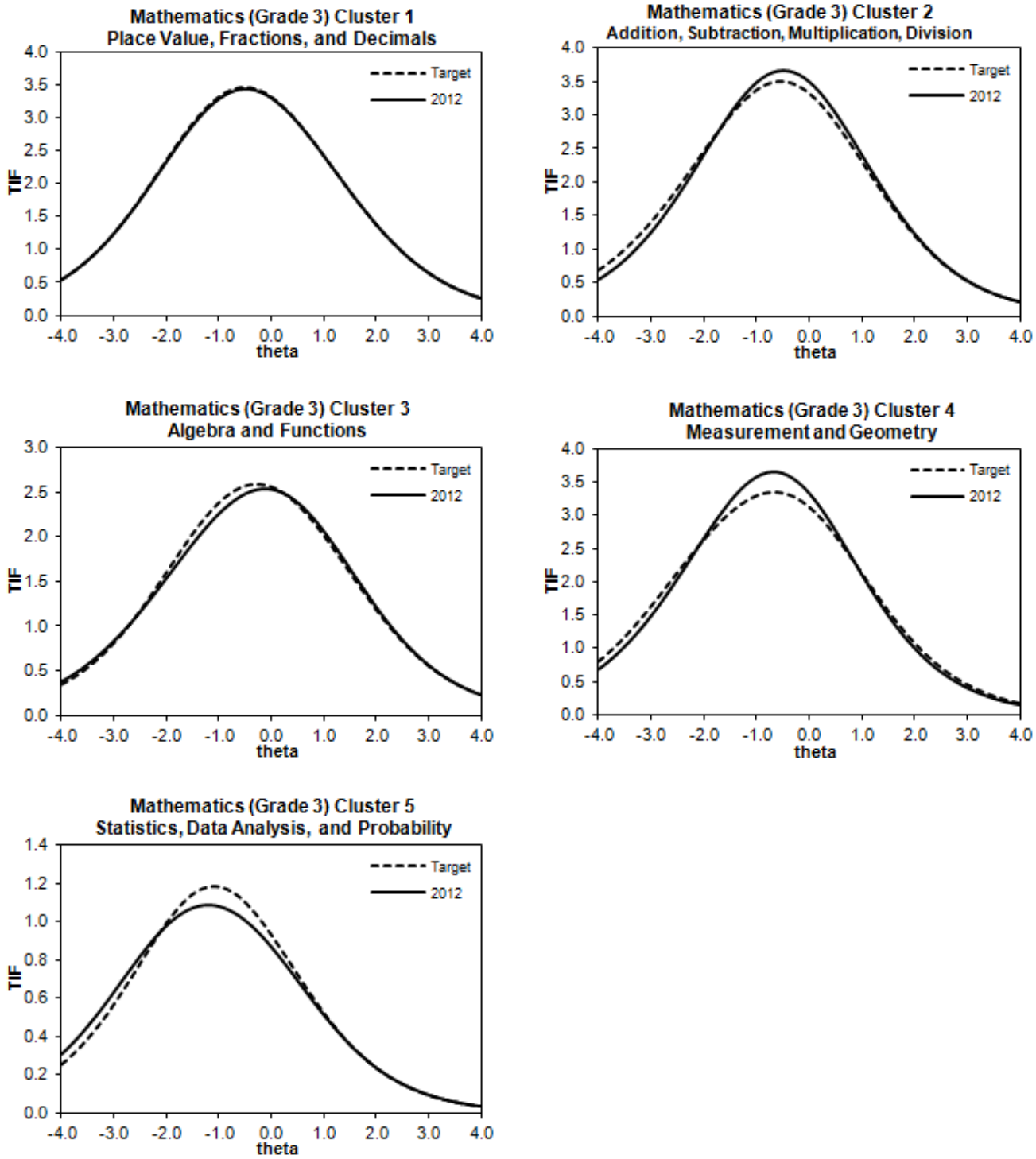


Figure 4.B.13 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Four

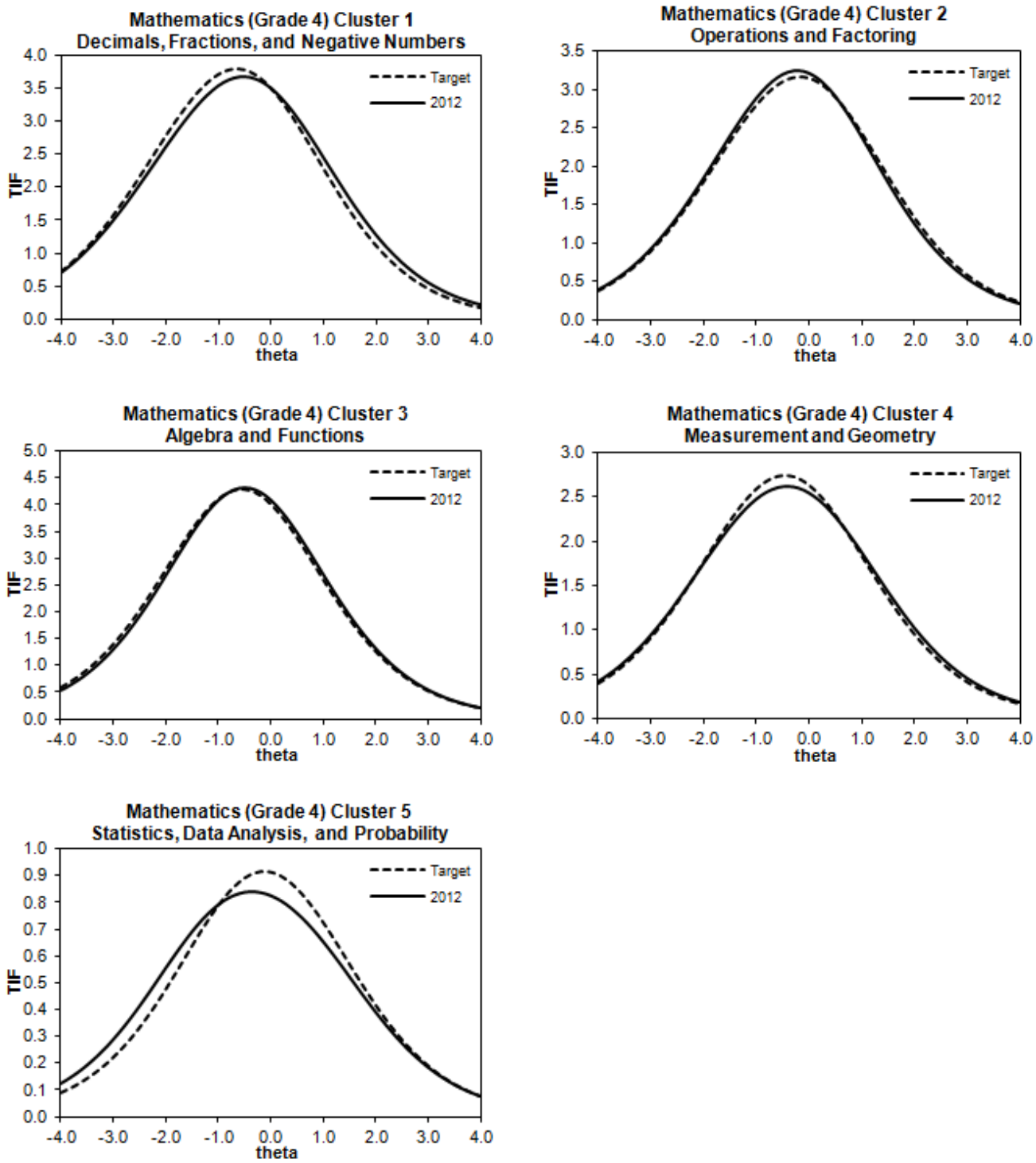


Figure 4.B.14 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Five

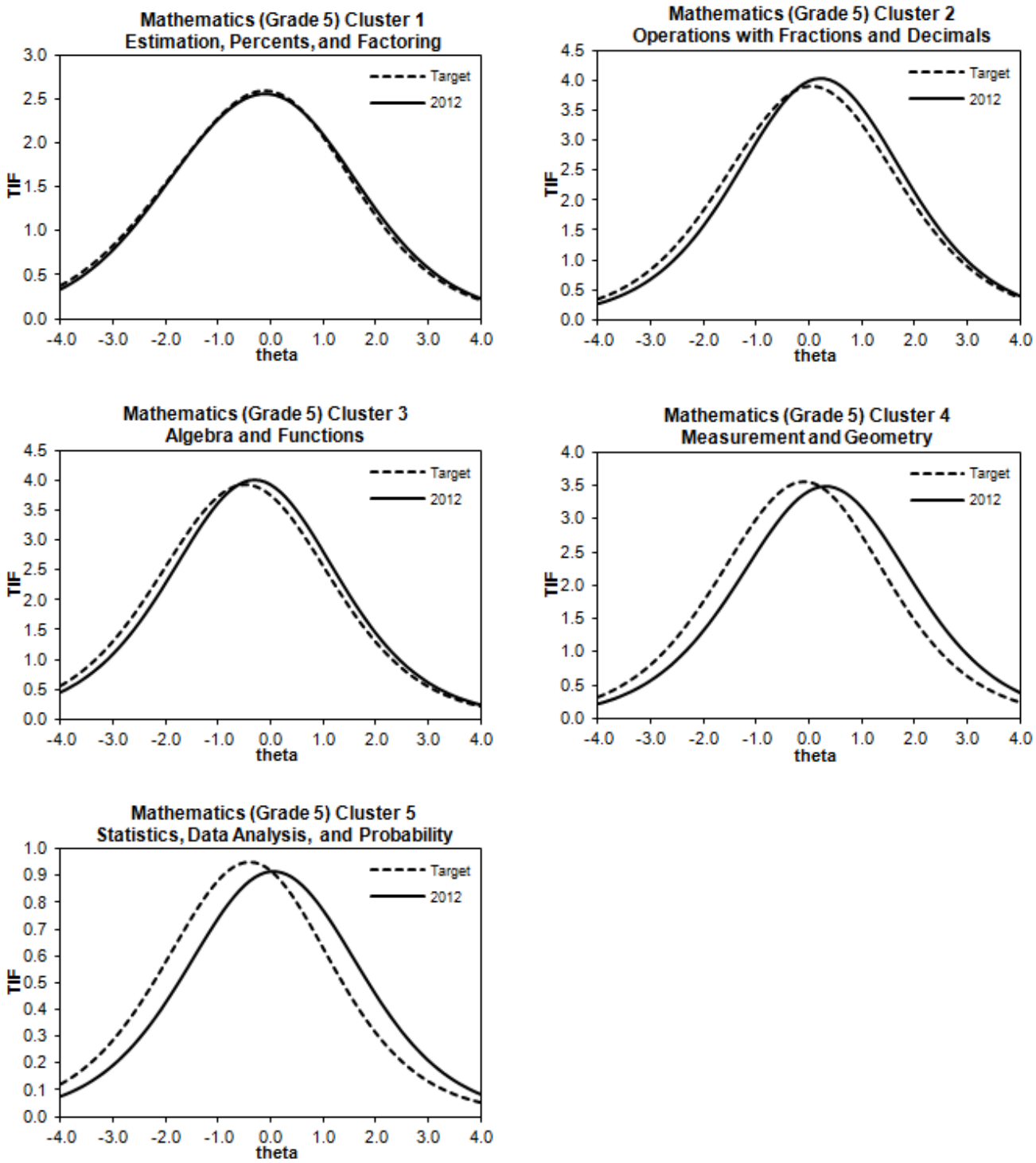


Figure 4.B.15 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Six

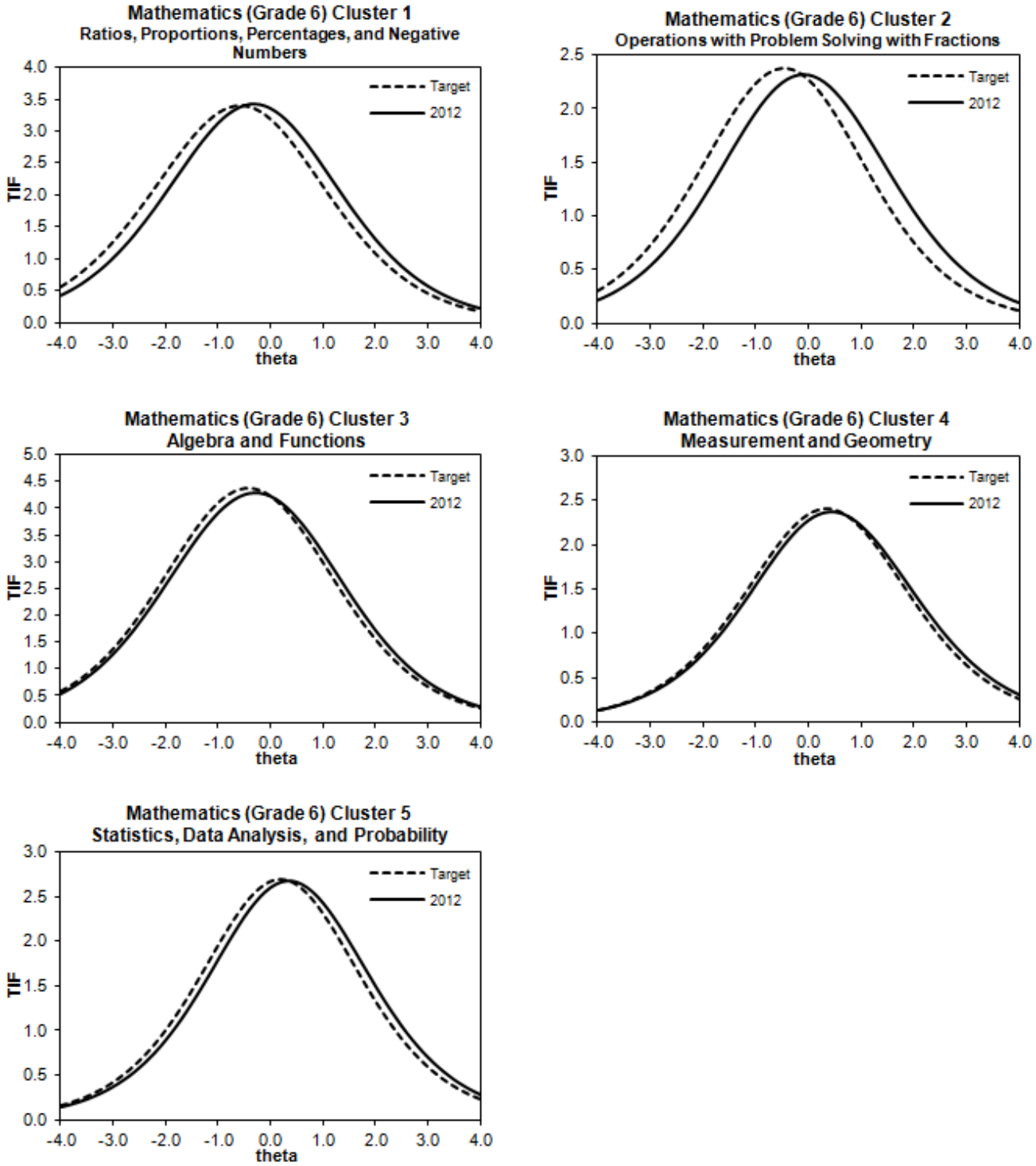


Figure 4.B.16 Plots of Target Information Functions and Projected Information for Clusters for Mathematics, Grade Seven

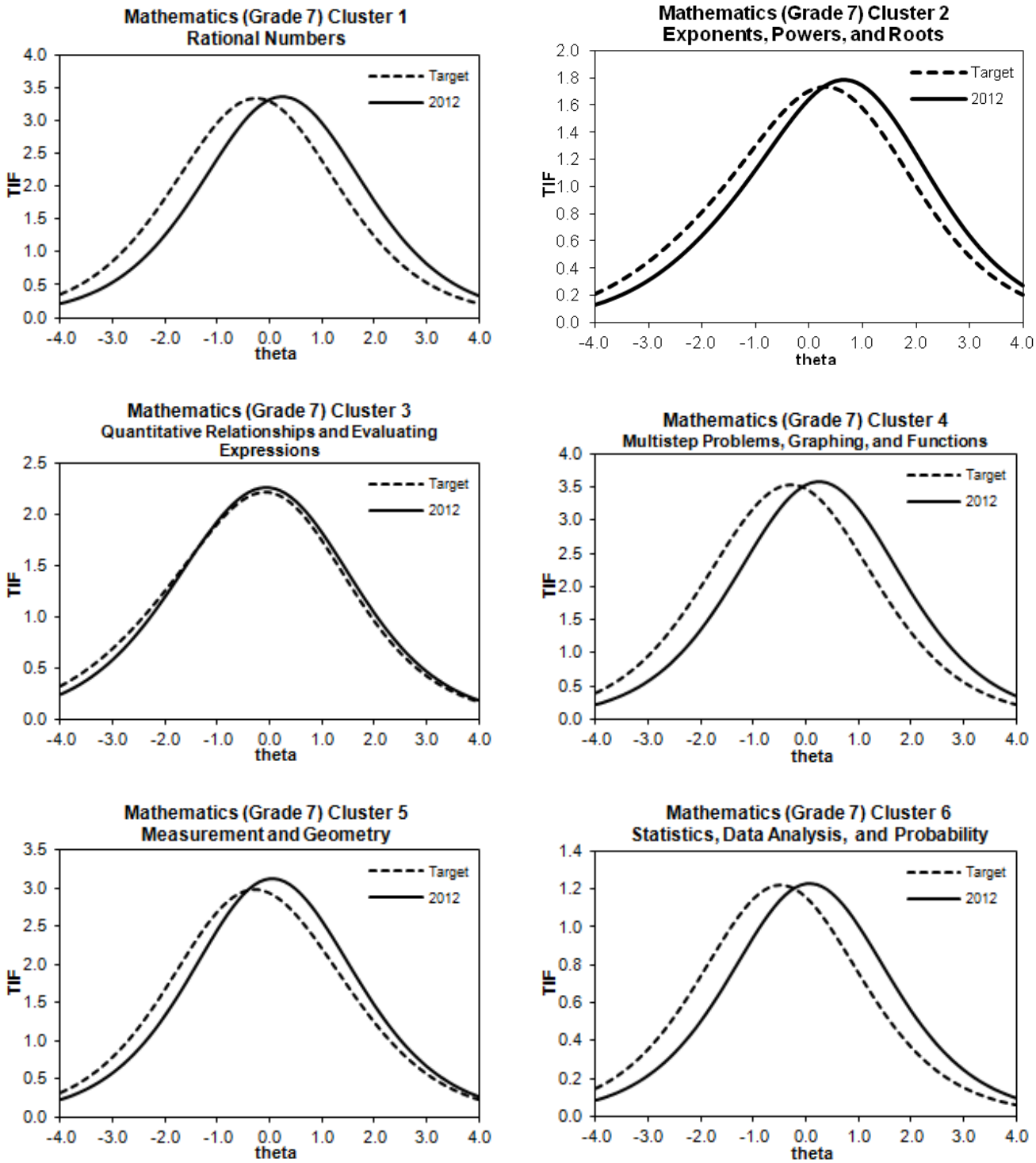


Figure 4.B.17 Plots of Target Information Functions and Projected Information for Clusters for Algebra I

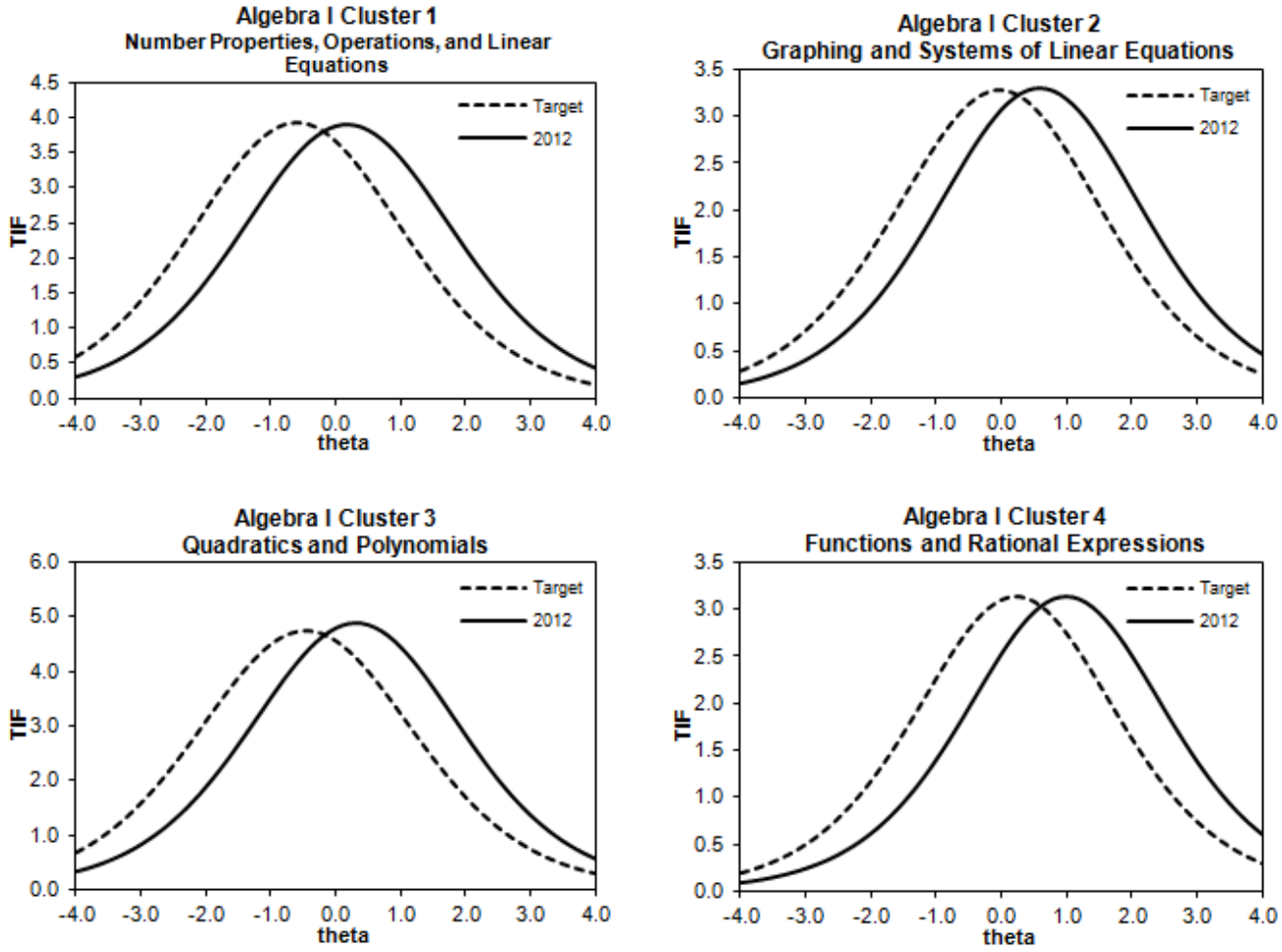
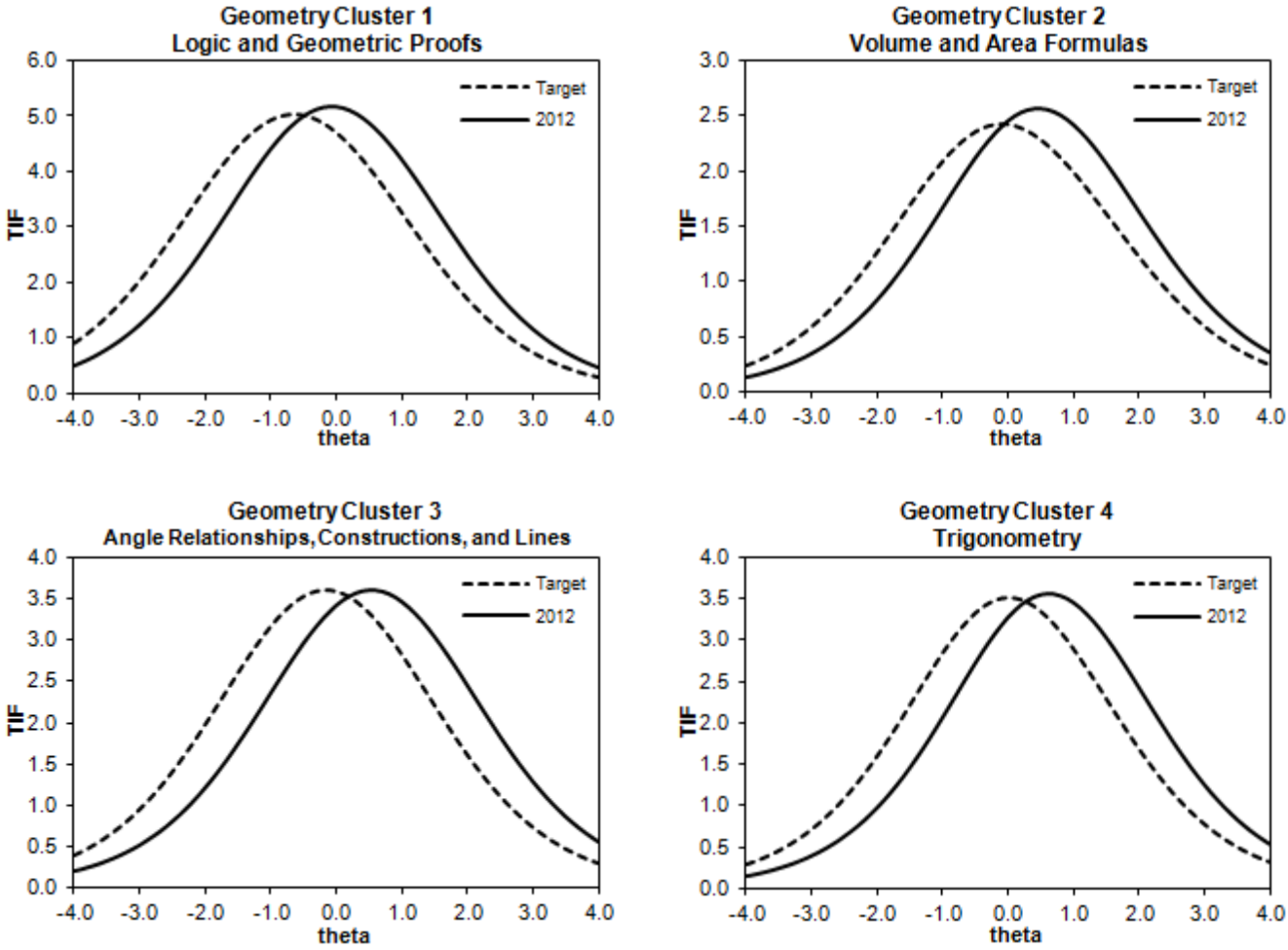


Figure 4.B.18 Plots of Target Information Functions and Projected Information for Clusters for Geometry



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 during 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 during 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 electronically, with the backups kept offsite, to prevent loss from a system breakdown or a natural disaster.
- 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, 2012a) 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 preapproves 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 school 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 its 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 its facilities. Entrances are monitored by security personnel and a computerized badge-reading system is utilized. Upon entering a facility, 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 keeps the files on secure servers and adheres to the ETS Code of Ethics and the ETS Information Protection Policies to prevent any unauthorized access.

Reporting and Posting Results

After statistical analysis has been completed on student data, the following deliverables are produced:

- Paper reports, some with individual student results and others with summary results
- Encrypted files of summary results (sent to the CDE by means of SFTP) (Any summary results that have fewer than 11 students are not reported.)
- Item-level statistics based on the results which are 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, 2012b). 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 in which these student demographic data 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 place 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. ETS is certified in the BS 25999-2 standard for business continuity and conducts disaster recovery exercises annually. ETS routinely backs up its data to either disk through deduplication or to tape, both of which are stored off site.

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
- 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 is 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.

The responsibilities for district and test site staff members are included in the *STAR District and Test Site Coordinator Manua*l (CDE, 2012c). 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 (LEA) designates a district STAR coordinator who is responsible for ensuring the proper and consistent administration of the STAR tests. LEAs include public school districts, statewide benefit charter schools, state board-authorized

charter schools, county office of education programs, and charter schools testing independently from their home district.

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

Test Site Coordinator

At each test site, the superintendent of the school district or the district STAR coordinator designates a STAR test site coordinator from among the employees of the school district. (*5 CCR* Section 858 [a])

Test site coordinators are responsible for making sure that the school has the proper testing materials, distributing testing materials within a school, securing materials before, during, and after the administration period, answering questions from test examiners, preparing and packaging materials to be returned to the school district after testing, and returning the materials to the school district. (CDE, 2012c)

Test Examiner

The STS is 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, 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, 2012d) 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 the proctor 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, 2012d). Test examiners 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, 2012c). 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, 2012e)
- **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, 2012f)
- **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, 2012b)
- **Extended Pre-ID Data Corrections—**This module allows school districts to correct the data that were submitted during Pre-ID prior to the last day of the school district's selected testing window. (CDE, 2012b)

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—comingled—and 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 STS versions are not spiraled; instead, versions are assigned by school because test 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 and braille testing materials.

Accommodations and Modifications for Students with Disabilities

All public school 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. This assistance takes the form of test accommodations or modifications (see Appendix 2.C on page 24 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 inflate their scores artificially. 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, 2012g)

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 where 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, 2012c).

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 *DFAs* (CDE, 2012d) and the *STAR District and Test Site Coordinator Manual* (CDE, 2012c). 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.

References

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Chapter 6: Performance Standards

Background

The STS for RLA and mathematics in 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 operational administration of those tests.

In spring 2008, the STS 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 operational administration.

The STS for RLA in grades eight through eleven and EOC mathematics were introduced in spring 2009. The performance standards for these tests were developed in November 2011 and adopted by the SBE in July 2012 for use starting with the 2013 operational administration. Thus, in 2012, scores for the STS for RLA in grades eight through eleven and EOC mathematics were reported as percent correct only.

The performance standards for the STS were defined by the SBE as far below basic, below basic, basic, proficient, and advanced. Performance standards are developed from a general description of the performance level (policy level descriptors) and competencies lists, which operationally define each level. Cut scores numerically define the performance levels.

The state target is to have all students achieve the proficient or advanced level by 2014. Schools and districts are expected to provide additional assistance to students scoring at or below the basic level.

California employed carefully designed standard-setting procedures to facilitate the development of performance standards for each STS. The standard-setting method used for the STS is the Bookmark method. These processes are described in the sections that follow.

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, 2011).

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 implemented for the STS required panelists to follow these steps, which include training and practice prior to making judgments:

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 included 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 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 identified 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 could revise their judgments during the process if they wished.
7. The final recommended cut scores were based on the median of panelists’ judgment scores at the end of three rounds (in the Bookmark method, the panel recommendation is calculated by taking the median of the small group [table] medians). For the STS, the cut scores recommended by the panelists and the recommendation of the State Superintendent of Public Instruction were presented for public comment at regional public hearings. Comments and recommendations were 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 was assembled to develop lists of competencies based on the California content standards and 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 taking 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 cut 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.

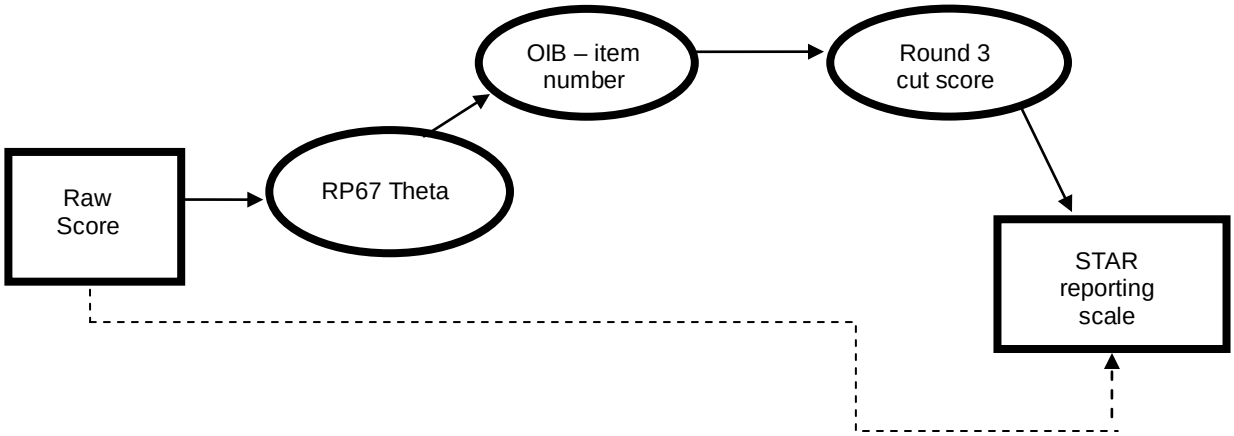
The Bookmark method is an item-mapping procedure in which panelists consider content covered by items in a specially constructed book where items are ordered from easiest to hardest, based on student performance data from a previous test administration. The "item map," which accompanies the ordered item booklet (OIB), includes information on the content measured by each operational test 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.

Panelists are asked to place a bookmark in the 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 (RP67 Theta), 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



Results

The cut scores obtained as a result of the standard-setting process are on the IRT scale; each recommended cut score is associated with a theta value in the OIB. This RP67 Theta has a corresponding number-correct or raw score for the test form upon which standards were set; 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. Each raw cut score for a given test is mapped to an IRT *theta* (θ) using the test characteristic function and then transformed to the scale score metric using the following equation:

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

where,

θ represents the student ability,

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

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

Please note that an IRT test characteristic function or 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.

The scale-score ranges for each performance level for grades two through seven are presented in Table 2.1 on page 17. 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 in Chapter 7 presents the percentages of examinees meeting each performance level in 2012 for grade-level tests in grades two through seven.

References

Educational Testing Service. (2009). *Technical report on the standard setting workshop for the California Standards-based Tests in Spanish: RLA grades two through four, mathematics grades two through four, March 20, 2009* (California Department of Education Contract Number 5417). Princeton, NJ: Author.

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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. These 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, ETS conducts 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 the STS 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 in an answer document. All questions are machine scored.

In order to score and report STS results, ETS follows an established set of written procedures. The specifications for these procedures 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 agreeable to all parties 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 selected last day of testing for each test administration period.

Types of Scores and Subscores

Raw Score

For all of the tests, the total test raw score equals the number of multiple-choice test items answered correctly.

Subscore

The items in each STS are aggregated into groups of related content standards to form 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 of Chapter 2, starting 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 15. Scale scores range from 150 to 600 for each of these tests. 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 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 that report performance levels—where scale scores are also reported—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 usually vary by grade and content area.

Percent-correct Score

The percent-correct score is the proportion of items on an examinee's test that were answered correctly. In 2012, percent-correct scores were reported for the STS for RLA in grades eight through eleven, the EOC STS for Algebra I in grades seven through eleven,

and the EOC STS for Geometry in grades eight through eleven. Scale scores were not reported for these tests.

Score Verification Procedures

Various necessary measures are taken to ascertain that the scoring keys are applied to the student responses as intended and the student scores are computed accurately.

Scoring Key Verification Process

Scoring keys, provided in the form planners, are produced by ETS and verified 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:

1. Keys in the form planners are checked against their matching test booklets to ensure that the correct keys are listed.
2. 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.
3. The printed lists of the scoring keys are checked again once the keys have been loaded into the SKM system.
4. The sequences of linking items in the form planners are matched with their sequences in the actual test booklets. Linking items are used to equate the scores on the current year's test form to scores obtained on the previous years' test forms so as to adjust for any differences in the difficulty level of the forms across years. This is accomplished during the equating process, as discussed in Chapter 2 on page 15.
5. The demarcations of various sections in the actual test booklets are checked against the list of demarcations provided by ETS test development staff.
6. 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.
7. The entire scoring system is tested using a test deck that includes typical and extremely atypical response vectors.
8. Classical item analyses are computed 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 2012, 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 2013, 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 differences between one test form and another. A series of quality control (QC) checks are carried out by ETS psychometricians to ensure the accuracy of each scoring table, as discussed in Chapter 9 on page 316.

Pearson utilizes the scoring 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 STS 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.

ETS verifies Pearson's scale scores/percent-correct scores by conducting QC and reasonableness checks, which are described in Chapter 9 on page 317.

Overview of Score 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 both for individual scores and group scores. The next section contains a description of 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 that describe the performance of students on each STS in the overall population are presented in Table 7.1 on the next page. Analogous results are given in Table 7.2 and Table 7.3 for students in the target population and the optional population, respectively. The target population consists of students receiving instruction in Spanish or students who have attended school in the United States for less than 12 cumulative 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 on page 2 for more information on the intended population of STS test-takers).

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 content-area section 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 such assessments are presented to students at a variety of grade levels, the majority of test-takers belong to that specific grade.

Please note that in the tables that follow, the means and standard deviations for scale scores are not provided for the STS for RLA in grades eight through eleven, Algebra I in grades seven through eleven, and Geometry in grades eight through eleven, because scale scores were not reported for these tests in 2012.

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

				Scale Score		Raw Score		Raw Score Percent Correct	
Content Area	STS *	No. of Items	No. of Examinees	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Reading/ Language Arts	2	65	12,927	332	57	41.39	13.47	63.68	20.72
	3	65	7,987	334	54	39.52	12.41	60.80	19.10
	4	75	5,188	327	54	44.11	14.46	58.81	19.28
	5	75	3,620	321	62	38.85	14.06	51.80	18.75
	6	75	2,053	324	60	38.87	13.35	51.82	17.80
	7	75	1,620	329	56	41.64	13.48	55.51	17.97
	8	75	1,248	–	–	40.39	13.15	53.85	17.53
	9	75	2,294	–	–	41.13	13.37	54.84	17.82
	10	75	1,387	–	–	43.12	12.08	57.49	16.11
	11	75	813	–	–	38.82	12.10	51.76	16.13
Mathematics	2	65	12,919	363	74	45.21	11.70	69.55	18.00
	3	65	7,988	366	74	43.80	12.88	67.38	19.81
	4	65	5,187	365	76	42.28	12.87	65.04	19.80
	5	65	3,618	356	94	34.83	12.50	53.58	19.23
	6	65	2,040	331	77	33.23	11.83	51.13	18.20
	7	65	1,565	322	69	31.13	11.15	47.90	17.16
	Algebra I	65	2,891	–	–	25.80	9.65	39.68	14.85
	Geometry	65	495	–	–	28.66	10.61	44.09	16.32
Grade-Specific	Algebra I – 8	65	450	–	–	24.22	9.15	37.26	14.08
	Geometry – 9	65	98	–	–	26.85	10.99	41.30	16.91

* 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 Score Percent Correct	
Content Area	STS *	No. of Items	No. of Examinees	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Reading/ Language Arts	2	65	10,628	333	57	41.51	13.50	63.86	20.77
	3	65	6,770	335	55	39.70	12.45	61.07	19.16
	4	75	4,431	327	53	44.23	14.30	58.97	19.07
	5	75	2,875	323	63	39.23	14.09	52.31	18.79
	6	75	1,768	325	61	39.09	13.41	52.12	17.87
	7	75	1,456	330	56	41.95	13.40	55.93	17.87
	8	75	1,070	–	–	40.76	13.11	54.35	17.48
	9	75	1,987	–	–	41.53	13.29	55.37	17.72
	10	75	1,251	–	–	43.73	11.84	58.30	15.79
	11	75	718	–	–	39.54	11.98	52.72	15.97
Mathematics	2	65	10,621	363	75	45.23	11.75	69.59	18.08
	3	65	6,775	366	75	43.89	12.86	67.52	19.79
	4	65	4,430	365	76	42.28	12.79	65.04	19.67
	5	65	2,872	356	94	34.79	12.58	53.52	19.36
	6	65	1,759	331	79	33.18	11.99	51.05	18.44
	7	65	1,412	323	69	31.28	11.11	48.12	17.09
	Algebra I	65	2,603	–	–	25.91	9.71	39.86	14.94
	Geometry	65	423	–	–	28.93	10.64	44.51	16.37
Grade-Specific	Algebra I – 8	65	388	–	–	24.47	9.16	37.64	14.10
	Geometry – 9	65	83	–	–	26.48	10.79	40.74	16.61

* 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 Score Percent Correct	
Content Area	**STS ***	**No. of Items**	**No. of Examinees**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**
Reading/ Language Arts	**2**	65	2,299	330	55	40.84	13.31	62.84	20.48
	3	65	1,217	330	52	38.54	12.16	59.29	18.70
	4	75	757	325	57	43.38	15.34	57.84	20.45
	5	75	745	314	60	37.39	13.88	49.86	18.51
	6	75	285	317	57	37.48	12.93	49.97	17.24
	7	75	164	317	58	38.84	13.86	51.79	18.49
	8	75	178	–	–	38.14	13.21	50.85	17.61
	9	75	307	–	–	38.54	13.57	51.39	18.09
	10	75	136	–	–	37.49	12.84	49.99	17.12
	11	75	95	–	–	33.37	11.71	44.49	15.61
Mathematics	**2**	65	2,298	362	72	45.07	11.44	69.34	17.61
	3	65	1,213	362	73	43.30	12.96	66.61	19.94
	4	65	757	366	80	42.27	13.36	65.04	20.55
	5	65	746	357	90	34.98	12.18	53.82	18.74
	6	65	281	332	68	33.56	10.83	51.63	16.66
	7	65	153	313	71	29.76	11.54	45.79	17.75
	Algebra I	65	288	–	–	24.74	9.07	38.06	13.96
	Geometry	65	72	–	–	27.04	10.35	41.60	15.92
Grade-Specific	**Algebra I – 8**	65	62	–	–	22.65	9.01	34.84	13.86
	Geometry – 9	65	15	–	–	28.87	12.24	44.41	18.82

* Numbers indicate grade-level tests.

The percentages of students in each performance level are presented in Table 7.4; please note that the percentages of students in each performance level were not reported for the STS for RLA in grades eight through eleven or the EOC mathematics STS administered in grades seven through eleven for the spring 2012 operational administration. The last column of 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 because of 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 Percentages of Examinees in Each Performance Level

Content Area	STS *	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Proficient/ Advanced †
Reading/ Language Arts	**2**	4%	25%	30%	23%	18%	40%
	3	5%	22%	33%	25%	15%	40%
	4	10%	21%	32%	22%	14%	36%
	5	22%	17%	30%	19%	13%	32%
	6	15%	22%	30%	22%	11%	34%
	7	9%	24%	30%	25%	12%	37%

Content Area	STS *	Far Below Basic	Below Basic	Basic	Proficient	Advanced	Proficient/ Advanced †
Mathematics	2	1%	19%	27%	30%	23%	53%
	3	2%	18%	22%	35%	22%	58%
	4	3%	19%	21%	33%	23%	56%
	5	12%	18%	20%	25%	25%	49%
	6	16%	23%	23%	21%	17%	38%
	7	18%	24%	28%	19%	11%	30%

* Numbers indicate grade-level tests.

† May not exactly match the sum of percent proficient and percent advanced due to rounding.

Table 7.A.1 through Table 7.A.4 in Appendix 7.A starting on page **Error! Bookmark not defined.** show the distributions of scale scores for each STS in grades two through seven for which scale scores were provided for the overall and target populations, respectively.

The results are reported in terms of 15 score intervals, each of which contains 30 scale score points. A cell value of “N/A” indicates that there are no obtainable scale scores within that scale-score range for the particular STS.

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 2012. 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 for selected groups of students are provided starting on page 172 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. When a test is administered at more than one grade level, the results are reported for all students tested and also by grade.

In these 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.

For the STS with established reporting scales and performance levels, the tables show, for each demographic group, the numbers of valid cases, scale score means and standard deviations, the percentages of students in each performance level, as well as the mean-percent correct in each reporting cluster. 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, on the next page, 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 10 or fewer, summary statistics are not reported and are presented as hyphens. Percentages in these tables may not sum up to 100 due to rounding.

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 mathematics STS. 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 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;
2. Informing decisions needed to support student achievement;
3. Evaluating school programs; and
4. 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.

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 report(s) to the child's parent or guardian 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. The performance levels reported 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 for proficient students, which is presented as a range from the percent-correct score associated with the lowest proficient score on the total test to the percent-correct score associated with the lowest advanced score on the total test, less one percent. The average percent correct estimates associated with the lowest proficient and advanced scores were 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 (Lu & Smith, 2009).

For students who took 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 nonaccommodated students. Modifications, however, change what is being tested and, therefore, change scores. If students use modifications, their scores are counted differently from nonmodified 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 213.

Score Report Applications

STS results provide parents and guardians with information about their child’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 while talking with teachers about ways to improve their child’s achievement of the California content standards.

Schools may use the STS results to help make decisions about how best to 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 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, 2012a). 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 were retested.

Criteria for Interpreting Score Reports

The information presented in 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. This is because the score scales are different for each content area and grade. The user may compare scale scores for the same content area and grade, 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 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 but also test year. For more details on the criteria for interpreting information provided on the score reports, see the *2012 STAR Post-Test Guide* (CDE, 2012b).

References

California Department of Education. (2012a). *2012 STAR CST/CMA, CAPA, and STS printed reports*. Sacramento, CA. Downloaded from http://www.startest.org/pdfs/STAR.reports.2012.pdf

California Department of Education. (2012b). *STAR 2012 post-test guide.* Sacramento, CA. Downloaded from http://www.startest.org/pdfs/STAR.post-test_guide.2012.pdf

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

Lu, Y. & Smith, R. L. (2009, April). *An alternative method to estimate cluster performance of proficient students on a large scale state assessment.* Paper presented at the annual meeting of the National Council on Measurement in Education, San Diego, CA.

Appendix 7.A—Scale Score Distribution Tables

In Appendix 7.A, a cell value of "N/A" indicates that there are no obtainable scale scores within that scale-score range for the particular STS.

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	16	6	0	1	1	0
540 – 569	N/A	N/A	1	2	0	1
510 – 539	N/A	6	N/A	10	5	0
480 – 509	53	23	6	21	4	7
450 – 479	110	130	40	70	34	24
420 – 449	676	325	120	139	96	66
390 – 419	1,385	644	436	315	147	143
360 – 389	1,845	1,345	885	356	300	229
330 – 359	2,548	1,723	1,042	578	351	301
300 – 329	2,432	1,560	998	678	350	309
270 – 299	1,991	1,166	761	626	365	287
240 – 269	1,433	829	657	559	257	188
210 – 239	411	221	227	215	112	62
180 – 209	27	9	15	50	28	3
150 – 179	0	0	0	0	3	0

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	15	6	0	1	1	0
540 – 569	N/A	N/A	1	2	0	1
510 – 539	N/A	4	N/A	9	4	0
480 – 509	47	21	4	20	4	5
450 – 479	92	118	35	58	31	23
420 – 449	565	280	100	123	88	62
390 – 419	1,152	556	373	253	129	131
360 – 389	1,545	1,155	747	284	256	211
330 – 359	2,082	1,462	907	456	303	274
300 – 329	1,987	1,324	871	558	306	275
270 – 299	1,615	957	659	479	310	259
240 – 269	1,164	685	537	431	215	162
210 – 239	340	193	186	164	95	52
180 – 209	24	9	11	37	23	1
150 – 179	0	0	0	0	3	0

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	206	116	24	91	14	3
540 – 569	N/A	N/A	45	34	18	7
510 – 539	224	127	89	123	20	14
480 – 509	589	381	200	175	26	13
450 – 479	721	431	411	200	82	50
420 – 449	1,198	711	460	271	87	77
390 – 419	1,570	1,170	727	337	184	82
360 – 389	2,005	1,092	726	476	246	144
330 – 359	1,774	1,288	661	349	259	221
300 – 329	2,058	1,068	681	470	311	288
270 – 299	1,451	852	547	387	310	282
240 – 269	691	509	434	341	277	249
210 – 239	326	216	157	253	140	107
180 – 209	98	25	19	88	59	22
150 – 179	8	2	6	23	7	6

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	171	105	21	76	14	3
540 – 569	N/A	N/A	38	27	17	7
510 – 539	191	110	71	107	18	13
480 – 509	485	331	167	130	23	11
450 – 479	607	369	345	162	74	44
420 – 449	1,005	602	391	203	75	71
390 – 419	1,263	973	634	269	152	72
360 – 389	1,651	943	628	374	208	136
330 – 359	1,460	1,089	571	267	221	201
300 – 329	1,667	899	577	381	265	261
270 – 299	1,195	728	472	307	262	258
240 – 269	553	426	368	279	246	221
210 – 239	282	177	128	198	129	92
180 – 209	83	21	14	72	49	17
150 – 179	8	2	5	20	6	5

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	3	2	0	0
66 – 70	23	40	10	1
61 – 65	64	121	77	14
56 – 60	105	209	143	51
51 – 55	122	263	198	90
46 – 50	132	300	217	115
41 – 45	142	276	190	111
36 – 40	164	266	169	112
31 – 35	166	248	146	86
26 – 30	153	224	100	96
21 – 25	103	201	83	77
16 – 20	60	107	47	44
11 – 15	10	30	7	15
06 – 10	1	5	0	0
00 – 05	0	2	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	3	2	0	0
66 – 70	23	35	10	1
61 – 65	59	112	74	13
56 – 60	92	184	136	50
51 – 55	101	237	183	85
46 – 50	111	263	197	103
41 – 45	122	238	178	105
36 – 40	148	234	152	97
31 – 35	140	211	131	75
26 – 30	136	187	85	82
21 – 25	83	173	65	59
16 – 20	44	84	35	36
11 – 15	7	21	5	11
06 – 10	1	4	0	0
00 – 05	0	2	0	1

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

Raw Score	Algebra I	Geometry
61 – 65	1	0
56 – 60	21	5
51 – 55	28	12
46 – 50	92	29
41 – 45	137	34
36 – 40	189	41
31 – 35	295	67
26 – 30	473	68
21 – 25	673	112
16 – 20	669	93
11 – 15	290	31
06 – 10	23	3
00 – 05	0	0

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

Raw Score	Algebra I	Geometry
61 – 65	1	0
56 – 60	20	4
51 – 55	27	10
46 – 50	84	28
41 – 45	124	28
36 – 40	171	37
31 – 35	266	59
26 – 30	429	63
21 – 25	611	88
16 – 20	592	79
11 – 15	257	24
06 – 10	21	3
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	0	0
56 – 60	3	0
51 – 55	3	3
46 – 50	11	6
41 – 45	18	5
36 – 40	22	7
31 – 35	28	9
26 – 30	74	7
21 – 25	102	27
16 – 20	126	21
11 – 15	60	13
06 – 10	3	0
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	0	0
56 – 60	3	0
51 – 55	3	2
46 – 50	8	5
41 – 45	17	4
36 – 40	18	5
31 – 35	27	9
26 – 30	66	6
21 – 25	86	22
16 – 20	108	18
11 – 15	50	12
06 – 10	2	0
00 – 05	0	0

Appendix 7.B—Demographic Summaries

To protect privacy when the number of students in a subgroup is 10 or fewer, the summary statistics at the test- and reporting-cluster–level are not reported and are presented as hyphens in the tables in Appendix 7.C. Percentages in these tables may not sum up to 100 due to rounding.

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	12,927	332	57	4%	26%	30%	22%	17%	71%	61%	61%	64%	50%
Male	6,449	324	56	6%	30%	31%	20%	14%	68%	57%	57%	61%	47%
Female	6,464	341	57	3%	21%	30%	25%	21%	74%	65%	64%	67%	53%
Gender unknown	14	330	60	7%	29%	21%	29%	14%	70%	60%	54%	63%	55%
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	13	317	49	8%	31%	38%	15%	8%	67%	62%	55%	54%	39%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	113	316	57	13%	23%	31%	26%	7%	63%	58%	57%	55%	47%
Guatemala	90	320	55	4%	37%	29%	14%	16%	67%	59%	54%	58%	43%
Mexico	1,279	324	60	8%	30%	28%	19%	16%	67%	59%	58%	59%	46%
Nicaragua	7	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Peru	15	333	56	0%	33%	20%	20%	27%	70%	64%	56%	66%	52%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–	–	–	–	–	–	–
United States	10,918	334	56	4%	25%	31%	23%	18%	72%	62%	61%	65%	50%
Uruguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	57	311	55	9%	33%	32%	16%	11%	62%	54%	51%	55%	45%
Country unknown	405	334	60	5%	27%	27%	20%	20%	71%	60%	62%	64%	51%
Not economically disadvantaged	926	343	59	5%	19%	28%	26%	23%	74%	65%	65%	68%	54%
Economically disadvantaged	11,767	332	57	4%	26%	31%	22%	17%	71%	61%	60%	64%	50%
Economic status unknown	234	317	51	6%	32%	35%	18%	9%	65%	56%	57%	58%	44%
In U.S. schools < 12 months	1,215	298	56	15%	41%	25%	11%	7%	57%	50%	49%	47%	38%
In U.S. schools ≥ 12 months	11,712	336	56	3%	24%	31%	23%	18%	73%	62%	62%	66%	51%
EL in ELD	227	301	54	11%	44%	25%	13%	8%	59%	50%	50%	48%	40%
EL in ELD and SDAIE	907	308	58	12%	37%	25%	15%	11%	61%	53%	53%	51%	41%
EL in ELD and SDAIE with primary language support	1,314	327	57	6%	28%	30%	20%	17%	69%	59%	58%	62%	49%
EL in ELD and academic subjects through primary language	9,685	337	56	3%	23%	31%	24%	19%	73%	63%	62%	66%	52%

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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
Other EL instructional services	48	296	40	13%	33%	46%	8%	0%	61%	46%	49%	47%	38%
None (EL only)	51	298	53	20%	39%	25%	10%	6%	57%	52%	53%	45%	37%
Program participation unknown	695	321	54	5%	32%	33%	20%	11%	67%	56%	57%	59%	46%
No special education	12,421	334	56	4%	25%	31%	23%	18%	72%	62%	61%	65%	50%
Special education	504	289	47	13%	48%	27%	9%	3%	55%	44%	45%	45%	37%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	10,628	333	57	4%	25%	30%	23%	18%	71%	62%	61%	64%	50%
Male	5,301	324	56	6%	29%	31%	20%	14%	69%	58%	58%	61%	47%
Female	5,318	341	57	3%	21%	29%	25%	21%	74%	65%	64%	67%	53%
Gender unknown	9	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	12	316	51	8%	33%	33%	17%	8%	67%	61%	56%	54%	39%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	101	315	58	14%	23%	33%	23%	8%	63%	58%	57%	54%	47%
Guatemala	79	319	55	4%	38%	29%	16%	13%	66%	59%	53%	57%	42%
Mexico	1,101	323	61	8%	32%	26%	18%	16%	66%	59%	58%	58%	46%
Nicaragua	6	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Peru	14	337	56	0%	29%	21%	21%	29%	72%	65%	54%	70%	53%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–	–	–	–	–	–	–
United States	9,050	334	56	4%	24%	31%	23%	18%	72%	62%	61%	65%	51%
Uruguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	46	309	59	11%	35%	28%	13%	13%	60%	53%	51%	53%	43%
Country unknown	192	339	66	6%	27%	24%	19%	25%	72%	62%	64%	66%	50%
Not economically disadvantaged	731	343	59	4%	19%	29%	25%	23%	74%	65%	65%	67%	53%
Economically disadvantaged	9,821	332	57	4%	26%	30%	22%	17%	71%	61%	60%	64%	50%
Economic status unknown	76	317	50	4%	36%	34%	16%	11%	65%	53%	60%	60%	43%
In U.S. schools < 12 months	1,215	298	56	15%	41%	25%	11%	7%	57%	50%	49%	47%	38%
In U.S. schools ≥ 12 months	9,413	337	56	3%	23%	31%	24%	19%	73%	63%	62%	66%	52%
EL in ELD	94	288	51	15%	51%	22%	7%	4%	52%	45%	46%	43%	39%
EL in ELD and SDAIE	471	287	51	20%	45%	21%	10%	4%	52%	47%	47%	42%	34%
EL in ELD and SDAIE with primary language support	299	290	50	16%	47%	23%	8%	6%	54%	48%	44%	43%	36%
EL in ELD and academic subjects through primary language	9,685	337	56	3%	23%	31%	24%	19%	73%	63%	62%	66%	52%
Other EL instructional services	13	281	44	15%	38%	46%	0%	0%	51%	43%	47%	40%	33%
None (EL only)	30	279	39	27%	40%	33%	0%	0%	50%	44%	47%	37%	30%
Program participation unknown	36	289	54	19%	44%	19%	14%	3%	54%	42%	50%	46%	38%
No special education	10,191	335	57	4%	24%	30%	23%	18%	72%	62%	61%	65%	51%
Special education	435	290	46	12%	48%	28%	9%	3%	55%	44%	44%	45%	37%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	7,987	334	54	5%	23%	33%	25%	14%	69%	57%	52%	61%	57%
Male	3,890	327	53	7%	26%	34%	23%	11%	67%	54%	50%	59%	55%
Female	4,087	341	55	4%	20%	32%	27%	17%	71%	59%	54%	64%	59%
Gender unknown	10	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	14	329	60	7%	29%	21%	29%	14%	71%	53%	53%	54%	56%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	4	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	6	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	111	318	55	11%	30%	28%	23%	9%	65%	51%	51%	51%	50%
Guatemala	78	311	53	14%	31%	29%	17%	9%	62%	49%	46%	51%	45%
Mexico	1,149	327	57	8%	26%	30%	23%	13%	68%	55%	51%	56%	53%
Nicaragua	5	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	8	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–	–	–	–	–	–
United States	6,360	336	54	5%	22%	34%	26%	15%	69%	57%	53%	63%	58%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	4	–	–	–	–	–	–	–	–	–	–	–	–
Other	32	314	54	9%	28%	38%	9%	16%	62%	50%	47%	53%	49%
Country unknown	197	327	51	4%	27%	38%	22%	9%	66%	53%	50%	60%	55%
Not economically disadvantaged	635	340	56	5%	20%	31%	26%	18%	70%	59%	56%	63%	60%
Economically disadvantaged	7,211	334	54	5%	23%	33%	25%	14%	69%	56%	52%	61%	56%
Economic status unknown	141	319	49	7%	29%	35%	20%	9%	64%	51%	46%	56%	52%
In U.S. schools < 12 months	1,131	311	55	13%	33%	28%	18%	8%	63%	49%	47%	48%	47%
In U.S. schools ≥ 12 months	6,856	338	53	4%	21%	34%	26%	15%	70%	58%	53%	63%	58%
EL in ELD	166	319	57	8%	34%	26%	19%	12%	64%	52%	47%	54%	50%
EL in ELD and SDAIE	811	313	54	12%	33%	30%	17%	9%	62%	50%	48%	51%	47%
EL in ELD and SDAIE with primary language support	898	324	53	8%	27%	33%	21%	11%	66%	53%	50%	56%	53%
EL in ELD and academic subjects through primary language	5,869	339	54	4%	20%	34%	27%	16%	71%	58%	54%	64%	59%
Other EL instructional services	79	334	54	5%	28%	24%	30%	13%	68%	55%	54%	62%	57%
None (EL only)	11	313	26	0%	18%	73%	9%	0%	60%	51%	49%	49%	57%
Program participation unknown	153	316	57	8%	35%	27%	22%	7%	61%	50%	46%	54%	51%
No special education	7,635	336	54	5%	22%	33%	26%	15%	70%	57%	53%	62%	57%
Special education	348	292	46	18%	42%	29%	8%	3%	52%	42%	40%	45%	41%
Special education unknown	4	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	6,770	335	55	5%	22%	33%	25%	15%	69%	57%	53%	61%	57%
Male	3,296	328	54	7%	25%	33%	24%	11%	67%	54%	51%	59%	55%
Female	3,467	341	55	4%	19%	33%	27%	18%	72%	59%	54%	64%	59%
Gender unknown	7	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	309	49	9%	36%	27%	27%	0%	65%	47%	45%	47%	48%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	4	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	102	317	56	12%	29%	28%	22%	9%	64%	51%	51%	51%	49%
Guatemala	71	310	53	15%	30%	30%	17%	8%	62%	48%	46%	51%	44%
Mexico	998	328	58	8%	26%	30%	24%	13%	68%	55%	52%	56%	53%
Nicaragua	4	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	6	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	5,432	337	54	5%	21%	34%	26%	15%	70%	57%	53%	63%	58%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	4	–	–	–	–	–	–	–	–	–	–	–	–
Other	21	304	48	10%	33%	43%	5%	10%	59%	45%	45%	50%	46%
Country unknown	94	322	47	3%	31%	39%	19%	7%	66%	51%	48%	57%	54%
Not economically disadvantaged	518	340	56	5%	19%	32%	26%	17%	70%	59%	55%	62%	60%
Economically disadvantaged	6,200	334	55	5%	22%	33%	25%	14%	69%	57%	52%	61%	57%
Economic status unknown	52	316	51	10%	33%	31%	17%	10%	61%	49%	45%	56%	54%
In U.S. schools < 12 months	1,131	311	55	13%	33%	28%	18%	8%	63%	49%	47%	48%	47%
In U.S. schools ≥ 12 months	5,639	339	54	4%	20%	34%	27%	16%	71%	58%	54%	64%	59%
EL in ELD	90	317	60	10%	37%	23%	18%	12%	64%	50%	48%	52%	46%
EL in ELD and SDAIE	503	304	54	16%	35%	28%	15%	6%	59%	47%	46%	45%	43%
EL in ELD and SDAIE with primary language support	254	303	50	15%	35%	29%	16%	4%	60%	46%	43%	45%	44%
EL in ELD and academic subjects through primary language	5,869	339	54	4%	20%	34%	27%	16%	71%	58%	54%	64%	59%
Other EL instructional services	19	296	57	16%	47%	16%	16%	5%	57%	39%	40%	44%	41%
None (EL only)	9	–	–	–	–	–	–	–	–	–	–	–	–
Program participation unknown	26	316	56	19%	19%	23%	35%	4%	62%	53%	49%	51%	53%
No special education	6,469	337	54	5%	21%	33%	26%	15%	70%	57%	53%	62%	58%
Special education	297	290	46	19%	43%	28%	7%	3%	52%	41%	39%	44%	41%
Special education unknown	4	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	5,188	327	54	10%	22%	32%	22%	14%	65%	58%	51%	64%	50%
Male	2,589	318	54	14%	25%	31%	20%	11%	62%	55%	48%	60%	48%
Female	2,589	336	52	7%	19%	33%	25%	17%	68%	61%	55%	68%	53%
Gender unknown	10	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	16	336	56	6%	19%	44%	13%	19%	67%	65%	57%	66%	49%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	139	309	55	18%	27%	33%	17%	6%	59%	52%	44%	56%	45%
Guatemala	65	323	50	9%	28%	34%	20%	9%	62%	60%	49%	62%	49%
Mexico	1,053	328	54	10%	23%	30%	22%	16%	65%	59%	53%	64%	50%
Nicaragua	7	–	–	–	–	–	–	–	–	–	–	–	–
Panama	2	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–	–	–	–	–	–
United States	3,654	328	53	10%	21%	32%	23%	14%	65%	58%	51%	65%	51%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	49	321	54	14%	20%	31%	22%	12%	63%	56%	49%	62%	49%
Country unknown	163	315	54	13%	31%	28%	20%	8%	61%	55%	48%	58%	46%
Not economically disadvantaged	397	337	55	8%	19%	29%	27%	17%	68%	61%	56%	67%	54%
Economically disadvantaged	4,651	326	53	11%	22%	32%	22%	14%	64%	58%	51%	64%	50%
Economic status unknown	140	314	55	13%	31%	30%	17%	9%	61%	55%	46%	58%	45%
In U.S. schools < 12 months	1,104	321	54	12%	26%	32%	19%	12%	62%	58%	51%	61%	47%
In U.S. schools ≥ 12 months	4,084	329	54	10%	20%	32%	23%	14%	65%	58%	52%	65%	51%
EL in ELD	146	313	60	16%	29%	27%	15%	13%	58%	55%	47%	58%	44%
EL in ELD and SDAIE	822	323	55	12%	24%	30%	22%	13%	63%	58%	52%	62%	49%
EL in ELD and SDAIE with primary language support	512	323	57	13%	24%	29%	22%	13%	63%	58%	51%	61%	48%
EL in ELD and academic subjects through primary language	3,484	330	53	9%	20%	33%	23%	14%	66%	59%	52%	66%	51%
Other EL instructional services	69	333	53	12%	14%	30%	25%	19%	68%	59%	52%	68%	54%
None (EL only)	17	292	49	29%	29%	29%	12%	0%	50%	47%	42%	49%	39%
Program participation unknown	138	313	49	12%	29%	37%	12%	9%	60%	54%	45%	59%	45%
No special education	4,914	329	53	9%	21%	32%	23%	14%	66%	59%	52%	65%	51%
Special education	274	284	46	32%	35%	21%	9%	3%	48%	41%	36%	47%	37%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	4,431	327	53	10%	21%	32%	22%	14%	65%	59%	52%	64%	50%
Male	2,193	319	53	13%	25%	31%	20%	10%	62%	55%	48%	61%	48%
Female	2,233	336	52	7%	18%	34%	24%	17%	68%	62%	55%	68%	53%
Gender unknown	5	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	14	327	49	7%	21%	43%	14%	14%	65%	63%	55%	63%	47%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	128	309	56	19%	27%	32%	16%	6%	59%	52%	44%	55%	45%
Guatemala	61	321	51	10%	30%	33%	18%	10%	61%	59%	48%	62%	48%
Mexico	946	327	55	10%	23%	30%	22%	15%	64%	59%	53%	63%	50%
Nicaragua	6	–	–	–	–	–	–	–	–	–	–	–	–
Panama	2	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	9	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	3,132	329	52	10%	20%	33%	23%	14%	65%	59%	51%	65%	51%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	39	318	50	13%	23%	36%	21%	8%	61%	54%	48%	61%	48%
Country unknown	65	313	53	12%	34%	34%	11%	9%	58%	56%	48%	56%	45%
Not economically disadvantaged	335	339	55	7%	20%	30%	26%	18%	68%	62%	57%	68%	55%
Economically disadvantaged	4,038	327	53	10%	21%	33%	22%	13%	64%	58%	51%	64%	50%
Economic status unknown	58	323	46	5%	33%	33%	21%	9%	63%	60%	49%	62%	49%
In U.S. schools < 12 months	1,104	321	54	12%	26%	32%	19%	12%	62%	58%	51%	61%	47%
In U.S. schools ≥ 12 months	3,327	329	53	9%	20%	33%	23%	14%	66%	59%	52%	65%	51%
EL in ELD	66	324	56	8%	30%	27%	21%	14%	60%	60%	52%	62%	48%
EL in ELD and SDAIE	536	319	53	13%	26%	31%	20%	10%	61%	57%	51%	60%	47%
EL in ELD and SDAIE with primary language support	283	319	55	12%	27%	30%	19%	11%	61%	56%	50%	60%	47%
EL in ELD and academic subjects through primary language	3,484	330	53	9%	20%	33%	23%	14%	66%	59%	52%	66%	51%
Other EL instructional services	18	328	64	22%	11%	17%	22%	28%	65%	59%	51%	65%	51%
None (EL only)	10	–	–	–	–	–	–	–	–	–	–	–	–
Program participation unknown	34	321	47	6%	26%	44%	12%	12%	60%	63%	50%	59%	48%
No special education	4,201	330	52	9%	21%	33%	23%	14%	66%	59%	52%	65%	51%
Special education	230	285	47	31%	33%	23%	9%	3%	49%	41%	37%	48%	38%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	3,620	321	62	23%	17%	29%	19%	12%	51%	47%	52%	58%	51%
Male	1,822	310	60	28%	19%	27%	16%	9%	49%	44%	49%	54%	47%
Female	1,791	332	62	17%	15%	31%	22%	15%	54%	49%	55%	62%	54%
Gender unknown	7	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	4	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	359	69	9%	9%	18%	36%	27%	64%	52%	64%	70%	65%
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	2	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	8	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	122	318	62	25%	15%	33%	16%	11%	51%	43%	56%	56%	50%
Guatemala	70	320	71	27%	19%	21%	19%	14%	51%	44%	55%	57%	51%
Mexico	912	327	65	20%	16%	28%	21%	15%	54%	47%	56%	58%	53%
Nicaragua	12	368	55	0%	17%	8%	42%	33%	68%	53%	78%	71%	64%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	356	47	0%	8%	33%	42%	17%	64%	58%	68%	71%	56%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	1	–	–	–	–	–	–	–	–	–	–	–	–
United States	2,320	318	60	24%	18%	30%	18%	10%	50%	47%	50%	58%	50%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	54	312	60	26%	22%	30%	9%	13%	49%	37%	48%	59%	52%
Country unknown	79	317	66	27%	16%	25%	20%	11%	48%	44%	52%	56%	52%
Not economically disadvantaged	291	339	65	14%	16%	28%	22%	20%	56%	52%	58%	63%	56%
Economically disadvantaged	3,223	320	62	23%	17%	29%	19%	11%	51%	46%	52%	58%	50%
Economic status unknown	106	306	61	28%	18%	30%	15%	8%	46%	42%	46%	55%	47%
In U.S. schools < 12 months	1,022	324	66	21%	17%	29%	18%	15%	52%	45%	56%	58%	52%
In U.S. schools ≥ 12 months	2,598	320	61	23%	17%	29%	20%	11%	51%	47%	51%	58%	50%
EL in ELD	140	311	59	24%	21%	30%	16%	10%	48%	42%	51%	56%	48%
EL in ELD and SDAIE	657	326	66	21%	17%	28%	19%	15%	53%	46%	56%	59%	52%
EL in ELD and SDAIE with primary language support	521	324	66	24%	16%	25%	20%	15%	52%	47%	55%	58%	52%
EL in ELD and academic subjects through primary language	1,958	321	61	22%	17%	30%	20%	11%	51%	47%	51%	59%	51%
Other EL instructional services	210	302	51	28%	25%	30%	13%	4%	45%	44%	46%	52%	44%
None (EL only)	18	297	63	50%	6%	11%	28%	6%	47%	36%	49%	51%	42%
Program participation unknown	116	321	67	24%	16%	28%	22%	10%	51%	47%	52%	58%	50%
No special education	3,400	323	62	21%	17%	30%	20%	13%	52%	47%	53%	59%	52%
Special education	220	281	51	48%	23%	18%	10%	2%	39%	36%	39%	46%	38%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	2,875	323	63	22%	17%	30%	19%	13%	52%	47%	53%	58%	51%
Male	1,431	312	61	28%	19%	29%	15%	10%	49%	43%	50%	54%	48%
Female	1,437	333	62	16%	15%	30%	23%	15%	54%	50%	56%	63%	55%
Gender unknown	7	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	4	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	2	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	8	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	114	318	64	26%	14%	31%	17%	12%	51%	43%	56%	56%	50%
Guatemala	66	319	72	29%	18%	20%	20%	14%	50%	43%	55%	57%	50%
Mexico	770	327	65	20%	15%	29%	21%	15%	54%	47%	57%	59%	53%
Nicaragua	12	368	55	0%	17%	8%	42%	33%	68%	53%	78%	71%	64%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	356	47	0%	8%	33%	42%	17%	64%	58%	68%	71%	56%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	1	–	–	–	–	–	–	–	–	–	–	–	–
United States	1,779	320	61	23%	17%	31%	18%	11%	51%	47%	51%	58%	50%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	48	313	62	25%	25%	25%	10%	15%	49%	38%	48%	58%	52%
Country unknown	37	324	66	27%	11%	24%	24%	14%	51%	45%	57%	56%	56%
Not economically disadvantaged	234	345	65	12%	15%	29%	22%	23%	58%	54%	59%	65%	58%
Economically disadvantaged	2,602	321	62	23%	17%	30%	19%	12%	51%	46%	52%	58%	51%
Economic status unknown	39	313	58	23%	15%	41%	8%	13%	48%	44%	49%	57%	48%
In U.S. schools < 12 months	1,022	324	66	21%	17%	29%	18%	15%	52%	45%	56%	58%	52%
In U.S. schools ≥ 12 months	1,853	322	61	22%	16%	30%	20%	11%	51%	47%	51%	59%	51%
EL in ELD	78	320	55	17%	18%	38%	14%	13%	51%	44%	57%	58%	50%
EL in ELD and SDAIE	498	327	67	20%	17%	28%	18%	16%	53%	46%	57%	59%	53%
EL in ELD and SDAIE with primary language support	293	322	69	25%	16%	27%	17%	15%	51%	44%	56%	57%	52%
EL in ELD and academic subjects through primary language	1,958	321	61	22%	17%	30%	20%	11%	51%	47%	51%	59%	51%
Other EL instructional services	14	344	55	7%	14%	43%	14%	21%	59%	53%	59%	63%	61%
None (EL only)	10	–	–	–	–	–	–	–	–	–	–	–	–
Program participation unknown	24	338	74	21%	13%	21%	25%	21%	54%	49%	61%	63%	56%
No special education	2,697	325	62	20%	16%	30%	20%	13%	52%	47%	54%	59%	52%
Special education	178	285	54	46%	20%	20%	11%	3%	40%	38%	40%	47%	40%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	2,053	324	60	15%	22%	30%	22%	11%	49%	52%	55%	58%	46%
Male	1,100	315	60	19%	25%	29%	19%	9%	47%	50%	52%	54%	43%
Female	949	335	59	10%	19%	31%	27%	13%	51%	55%	59%	63%	49%
Gender unknown	4	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	10	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	154	322	57	16%	23%	29%	24%	8%	47%	50%	59%	54%	46%
Guatemala	54	299	65	26%	24%	33%	9%	7%	41%	41%	54%	51%	38%
Mexico	747	332	61	11%	21%	31%	24%	13%	52%	55%	59%	60%	47%
Nicaragua	15	310	39	13%	33%	33%	20%	0%	44%	47%	53%	53%	43%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	926	319	60	17%	23%	29%	21%	10%	47%	51%	51%	58%	45%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	50	312	61	22%	28%	24%	20%	6%	45%	45%	53%	57%	43%
Country unknown	68	322	59	16%	21%	24%	29%	10%	46%	50%	53%	59%	49%
Not economically disadvantaged	181	345	66	12%	14%	27%	28%	19%	55%	58%	61%	63%	51%
Economically disadvantaged	1,845	322	59	15%	23%	30%	22%	10%	48%	51%	54%	58%	45%
Economic status unknown	27	317	65	22%	26%	22%	19%	11%	45%	52%	53%	54%	45%
In U.S. schools < 12 months	950	331	62	14%	19%	29%	25%	13%	51%	54%	59%	59%	48%
In U.S. schools ≥ 12 months	1,103	318	58	16%	25%	30%	21%	8%	47%	50%	51%	58%	44%
EL in ELD	102	328	64	15%	16%	38%	16%	16%	49%	51%	57%	60%	49%
EL in ELD and SDAIE	566	332	62	13%	20%	27%	28%	12%	51%	54%	59%	59%	48%
EL in ELD and SDAIE with primary language support	387	323	60	16%	22%	29%	22%	11%	48%	52%	56%	57%	45%
EL in ELD and academic subjects through primary language	875	319	59	16%	25%	31%	20%	9%	47%	51%	51%	58%	44%
Other EL instructional services	26	324	59	19%	19%	27%	27%	8%	48%	55%	52%	58%	46%
None (EL only)	14	316	56	21%	21%	29%	21%	7%	43%	51%	55%	49%	49%
Program participation unknown	83	318	56	16%	24%	30%	22%	8%	48%	51%	52%	54%	45%
No special education	1,942	326	60	14%	21%	30%	23%	11%	49%	53%	56%	59%	46%
Special education	111	281	46	31%	40%	23%	5%	2%	35%	40%	39%	45%	35%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	1,768	325	61	15%	22%	30%	22%	11%	49%	52%	55%	58%	46%
Male	948	316	60	19%	24%	29%	19%	9%	47%	50%	52%	55%	43%
Female	818	336	59	10%	19%	31%	26%	14%	51%	55%	59%	63%	49%
Gender unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	142	322	57	15%	25%	28%	23%	9%	47%	50%	59%	54%	46%
Guatemala	48	298	66	27%	25%	31%	8%	8%	41%	40%	54%	51%	38%
Mexico	656	333	60	11%	20%	31%	25%	13%	52%	55%	59%	60%	47%
Nicaragua	15	310	39	13%	33%	33%	20%	0%	44%	47%	53%	53%	43%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	3	–	–	–	–	–	–	–	–	–	–	–	–
United States	779	320	61	17%	23%	29%	21%	10%	47%	51%	52%	58%	45%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	47	311	58	21%	30%	23%	21%	4%	44%	44%	53%	57%	42%
Country unknown	44	332	62	16%	18%	18%	32%	16%	50%	53%	55%	62%	52%
Not economically disadvantaged	154	347	68	12%	12%	28%	27%	21%	56%	59%	62%	64%	52%
Economically disadvantaged	1,600	323	60	15%	23%	30%	22%	10%	48%	52%	55%	58%	45%
Economic status unknown	14	327	67	14%	29%	29%	14%	14%	47%	53%	55%	56%	50%
In U.S. schools < 12 months	950	331	62	14%	19%	29%	25%	13%	51%	54%	59%	59%	48%
In U.S. schools ≥ 12 months	818	318	59	16%	25%	30%	20%	9%	47%	50%	51%	58%	44%
EL in ELD	90	329	66	16%	13%	39%	16%	17%	49%	52%	57%	61%	49%
EL in ELD and SDAIE	469	334	62	12%	20%	28%	28%	13%	52%	54%	61%	59%	48%
EL in ELD and SDAIE with primary language support	288	326	62	16%	19%	30%	23%	12%	49%	53%	58%	58%	45%
EL in ELD and academic subjects through primary language	875	319	59	16%	25%	31%	20%	9%	47%	51%	51%	58%	44%
Other EL instructional services	9	–	–	–	–	–	–	–	–	–	–	–	–
None (EL only)	12	309	46	25%	17%	33%	25%	0%	43%	50%	55%	45%	46%
Program participation unknown	25	333	63	16%	20%	20%	24%	20%	52%	58%	58%	58%	49%
No special education	1,686	327	61	14%	21%	30%	23%	12%	50%	53%	56%	59%	47%
Special education	82	282	44	30%	38%	24%	6%	1%	34%	40%	39%	47%	35%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	1,620	329	56	9%	24%	30%	24%	12%	61%	53%	54%	57%	55%
Male	869	318	55	13%	28%	30%	20%	9%	58%	50%	51%	53%	51%
Female	747	341	55	5%	19%	31%	29%	16%	64%	57%	57%	62%	59%
Gender unknown	4	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	15	350	68	13%	13%	20%	33%	20%	72%	61%	55%	61%	63%
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	155	318	57	12%	29%	32%	18%	10%	57%	52%	50%	51%	51%
Guatemala	71	308	57	20%	30%	25%	15%	10%	51%	46%	48%	50%	50%
Mexico	689	334	54	7%	23%	30%	28%	12%	64%	55%	56%	57%	57%
Nicaragua	12	337	26	0%	8%	58%	33%	0%	67%	58%	55%	59%	58%
Panama	2	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	11	366	75	0%	27%	18%	9%	45%	74%	63%	60%	70%	64%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	555	327	56	10%	23%	32%	23%	11%	59%	52%	53%	59%	54%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	38	296	42	18%	39%	24%	18%	0%	52%	43%	44%	46%	42%
Country unknown	52	340	63	6%	23%	29%	23%	19%	65%	53%	58%	60%	60%
Not economically disadvantaged	175	345	63	6%	17%	29%	28%	20%	69%	59%	57%	61%	59%
Economically disadvantaged	1,405	326	55	9%	25%	31%	24%	11%	60%	52%	53%	56%	54%
Economic status unknown	40	335	68	15%	20%	18%	25%	23%	61%	56%	59%	58%	54%
In U.S. schools < 12 months	1,034	335	58	8%	23%	27%	27%	15%	64%	55%	56%	58%	57%
In U.S. schools ≥ 12 months	586	318	52	12%	26%	36%	19%	7%	56%	49%	50%	56%	50%
EL in ELD	144	334	59	8%	19%	36%	24%	12%	63%	54%	56%	58%	56%
EL in ELD and SDAIE	511	330	58	9%	26%	27%	25%	14%	62%	54%	53%	56%	56%
EL in ELD and SDAIE with primary language support	309	330	58	8%	26%	26%	27%	13%	62%	53%	54%	56%	55%
EL in ELD and academic subjects through primary language	524	323	52	10%	24%	36%	21%	8%	57%	52%	52%	57%	52%
Other EL instructional services	59	346	61	12%	10%	25%	32%	20%	70%	59%	59%	61%	60%
None (EL only)	35	320	57	9%	29%	29%	23%	11%	57%	49%	51%	56%	51%
Program participation unknown	38	338	55	5%	18%	37%	24%	16%	62%	56%	61%	59%	58%
No special education	1,562	330	56	9%	24%	30%	25%	12%	62%	54%	54%	57%	55%
Special education	58	293	45	24%	28%	41%	3%	3%	43%	44%	42%	50%	40%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	1,456	330	56	9%	24%	30%	25%	12%	61%	54%	54%	57%	55%
Male	770	319	55	12%	28%	30%	21%	9%	59%	51%	51%	53%	51%
Female	682	342	55	5%	19%	31%	29%	16%	64%	57%	58%	62%	60%
Gender unknown	4	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	14	344	66	14%	14%	21%	36%	14%	69%	60%	52%	60%	61%
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	143	319	57	10%	29%	32%	17%	10%	57%	51%	50%	52%	52%
Guatemala	65	309	58	20%	29%	25%	15%	11%	51%	47%	47%	50%	50%
Mexico	611	335	54	6%	24%	30%	28%	12%	64%	56%	56%	58%	57%
Nicaragua	11	338	27	0%	9%	55%	36%	0%	66%	59%	55%	60%	60%
Panama	1	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–
United States	504	329	56	10%	22%	32%	24%	12%	60%	53%	54%	59%	55%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	37	296	43	19%	38%	24%	19%	0%	52%	43%	44%	46%	42%
Country unknown	40	344	62	5%	18%	35%	20%	23%	66%	54%	58%	62%	62%
Not economically disadvantaged	162	347	63	6%	17%	28%	28%	20%	69%	59%	58%	61%	60%
Economically disadvantaged	1,273	327	54	9%	25%	31%	24%	11%	60%	53%	54%	57%	54%
Economic status unknown	21	349	75	14%	14%	14%	19%	38%	63%	61%	62%	63%	60%
In U.S. schools < 12 months	1,034	335	58	8%	23%	27%	27%	15%	64%	55%	56%	58%	57%
In U.S. schools ≥ 12 months	422	318	50	11%	26%	38%	18%	6%	55%	49%	51%	56%	51%
EL in ELD	124	336	61	8%	21%	31%	26%	14%	63%	54%	57%	59%	57%
EL in ELD and SDAIE	440	332	57	8%	25%	26%	25%	15%	63%	54%	54%	57%	56%
EL in ELD and SDAIE with primary language support	274	333	57	7%	25%	26%	29%	13%	63%	54%	56%	57%	57%
EL in ELD and academic subjects through primary language	524	323	52	10%	24%	36%	21%	8%	57%	52%	52%	57%	52%
Other EL instructional services	37	355	61	8%	11%	24%	32%	24%	75%	62%	60%	63%	63%
None (EL only)	32	321	58	9%	25%	31%	22%	13%	57%	51%	51%	56%	51%
Program participation unknown	25	339	53	8%	12%	40%	20%	20%	60%	57%	62%	58%	61%
No special education	1,407	331	56	8%	24%	30%	25%	13%	62%	54%	55%	58%	56%
Special education	49	293	42	22%	27%	47%	2%	2%	43%	43%	42%	50%	41%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	1,248	40	13	58%	49%	54%	63%	48%
Male	652	38	13	55%	47%	52%	58%	45%
Female	594	43	13	61%	51%	56%	67%	51%
Gender unknown	2	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–
Costa Rica	2	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–
El Salvador	147	40	14	55%	51%	56%	62%	48%
Guatemala	48	36	10	49%	44%	49%	57%	40%
Mexico	632	41	13	61%	50%	56%	64%	49%
Nicaragua	3	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	13	42	14	62%	51%	60%	59%	51%
Puerto Rico	3	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–
United States	306	39	12	55%	46%	51%	62%	48%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–
Other	31	37	14	53%	45%	49%	59%	41%
Country unknown	36	37	13	48%	44%	48%	61%	44%
Not economically disadvantaged	173	45	14	66%	54%	60%	68%	53%
Economically disadvantaged	1,051	40	13	57%	48%	53%	62%	47%
Economic status unknown	24	40	13	57%	52%	55%	57%	47%
In U.S. schools < 12 months	892	41	13	60%	50%	56%	64%	49%
In U.S. schools ≥ 12 months	356	38	12	54%	45%	51%	60%	47%
EL in ELD	119	42	14	60%	52%	57%	64%	48%
EL in ELD and SDAIE	461	42	13	60%	51%	56%	65%	49%
EL in ELD and SDAIE with primary language support	275	41	14	58%	50%	55%	62%	49%
EL in ELD and academic subjects through primary language	228	39	12	55%	45%	51%	60%	48%
Other EL instructional services	96	38	13	56%	44%	52%	60%	46%
None (EL only)	23	34	14	48%	41%	45%	53%	40%
Program participation unknown	46	38	13	54%	44%	55%	61%	46%
No special education	1,226	41	13	58%	49%	55%	63%	48%
Special education	22	30	11	36%	35%	36%	49%	42%
Special education unknown	0	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	1,070	41	13	58%	49%	55%	63%	49%
Male	547	39	13	55%	48%	53%	59%	46%
Female	521	43	13	62%	51%	57%	68%	52%
Gender unknown	2	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–
Costa Rica	2	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–
El Salvador	136	41	14	55%	51%	55%	63%	48%
Guatemala	45	36	10	48%	44%	48%	57%	41%
Mexico	543	42	13	61%	50%	56%	64%	49%
Nicaragua	3	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	12	41	14	61%	50%	59%	57%	50%
Puerto Rico	3	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–
United States	245	40	12	56%	47%	52%	64%	49%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–
Other	26	38	13	56%	47%	51%	61%	44%
Country unknown	28	38	12	50%	45%	50%	62%	45%
Not economically disadvantaged	161	45	14	66%	54%	60%	69%	53%
Economically disadvantaged	893	40	13	57%	49%	54%	62%	48%
Economic status unknown	16	42	13	60%	55%	56%	61%	52%
In U.S. schools < 12 months	892	41	13	60%	50%	56%	64%	49%
In U.S. schools ≥ 12 months	178	38	12	53%	44%	49%	61%	48%
EL in ELD	98	42	13	61%	52%	56%	65%	49%
EL in ELD and SDAIE	414	42	13	60%	51%	56%	65%	50%
EL in ELD and SDAIE with primary language support	251	41	13	59%	50%	56%	63%	49%
EL in ELD and academic subjects through primary language	228	39	12	55%	45%	51%	60%	48%
Other EL instructional services	32	39	13	56%	46%	54%	60%	45%
None (EL only)	20	35	14	51%	43%	46%	55%	41%
Program participation unknown	27	40	13	54%	47%	55%	65%	48%
No special education	1,054	41	13	59%	50%	55%	64%	49%
Special education	16	29	9	33%	36%	35%	47%	40%
Special education unknown	0	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	2,294	41	13	66%	56%	55%	57%	48%
Male	1,329	39	13	64%	53%	52%	53%	45%
Female	958	44	13	69%	59%	59%	63%	53%
Gender unknown	7	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	6	–	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–
Colombia	21	48	13	79%	67%	63%	63%	56%
Costa Rica	4	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–
El Salvador	374	40	13	66%	52%	56%	55%	46%
Guatemala	241	36	13	59%	47%	49%	50%	42%
Mexico	1,029	43	13	68%	58%	56%	59%	50%
Nicaragua	20	45	13	74%	62%	64%	58%	49%
Panama	2	–	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–	–
Peru	12	59	6	90%	78%	73%	81%	75%
Puerto Rico	2	–	–	–	–	–	–	–
Spain	3	–	–	–	–	–	–	–
United States	409	41	13	65%	57%	55%	58%	48%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–
Other	60	36	13	57%	47%	51%	54%	42%
Country unknown	95	38	14	64%	52%	50%	49%	44%
Not economically disadvantaged	374	41	14	65%	57%	56%	55%	48%
Economically disadvantaged	1,860	41	13	66%	55%	55%	58%	48%
Economic status unknown	60	40	12	67%	54%	55%	53%	45%
In U.S. schools < 12 months	1,861	42	13	67%	56%	56%	58%	49%
In U.S. schools ≥ 12 months	433	39	14	62%	54%	52%	55%	45%
EL in ELD	234	41	13	64%	56%	54%	57%	50%
EL in ELD and SDAIE	829	41	14	66%	55%	55%	57%	48%
EL in ELD and SDAIE with primary language support	629	41	13	65%	55%	56%	57%	48%
EL in ELD and academic subjects through primary language	369	41	14	66%	56%	54%	56%	48%
Other EL instructional services	97	42	13	68%	57%	56%	59%	50%
None (EL only)	34	44	14	70%	61%	60%	60%	51%
Program participation unknown	102	43	12	67%	58%	58%	60%	49%
No special education	2,275	41	13	66%	56%	55%	57%	48%
Special education	19	25	13	38%	36%	30%	33%	34%
Special education unknown	0	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	1,987	42	13	67%	56%	56%	58%	49%
Male	1,156	39	13	65%	53%	52%	54%	46%
Female	825	45	12	69%	60%	60%	63%	53%
Gender unknown	6	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	6	–	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–
Colombia	20	49	13	79%	68%	64%	65%	57%
Costa Rica	4	–	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–
El Salvador	345	40	13	66%	52%	56%	55%	46%
Guatemala	224	36	13	58%	47%	49%	50%	43%
Mexico	849	44	13	69%	59%	57%	60%	52%
Nicaragua	19	46	11	76%	63%	66%	61%	50%
Panama	2	–	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–	–
Peru	11	59	7	90%	78%	74%	80%	75%
Puerto Rico	2	–	–	–	–	–	–	–
Spain	3	–	–	–	–	–	–	–
United States	351	42	13	65%	57%	55%	58%	48%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–
Other	56	37	13	58%	48%	50%	54%	42%
Country unknown	79	38	14	64%	52%	51%	50%	43%
Not economically disadvantaged	355	41	14	65%	57%	56%	55%	49%
Economically disadvantaged	1,586	42	13	67%	56%	55%	58%	49%
Economic status unknown	46	41	11	69%	56%	57%	57%	47%
In U.S. schools < 12 months	1,861	42	13	67%	56%	56%	58%	49%
In U.S. schools ≥ 12 months	126	40	14	64%	57%	52%	56%	47%
EL in ELD	212	41	13	65%	56%	54%	58%	50%
EL in ELD and SDAIE	705	42	13	68%	57%	56%	58%	49%
EL in ELD and SDAIE with primary language support	524	41	13	66%	55%	56%	57%	48%
EL in ELD and academic subjects through primary language	369	41	14	66%	56%	54%	56%	48%
Other EL instructional services	59	43	13	70%	56%	59%	59%	52%
None (EL only)	30	45	14	70%	62%	59%	61%	52%
Program participation unknown	88	43	12	66%	58%	58%	60%	50%
No special education	1,978	42	13	67%	56%	56%	58%	49%
Special education	9	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	1,387	43	12	75%	59%	58%	57%	48%
Male	788	41	13	73%	57%	56%	54%	46%
Female	595	46	11	79%	63%	61%	61%	51%
Gender unknown	4	–	–	–	–	–	–	–
Argentina	0	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–
Cuba	2	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–
El Salvador	104	39	11	74%	53%	56%	47%	41%
Guatemala	54	34	10	60%	48%	50%	41%	36%
Mexico	724	44	12	76%	60%	58%	58%	49%
Nicaragua	4	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	9	–	–	–	–	–	–	–
Puerto Rico	2	–	–	–	–	–	–	–
Spain	8	–	–	–	–	–	–	–
United States	393	45	11	77%	62%	60%	59%	50%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–
Other	27	36	12	66%	48%	51%	47%	39%
Country unknown	44	41	12	70%	54%	54%	56%	47%
Not economically disadvantaged	214	45	12	78%	61%	61%	60%	51%
Economically disadvantaged	1,131	43	12	75%	59%	58%	57%	48%
Economic status unknown	42	39	13	68%	54%	50%	51%	44%
In U.S. schools < 12 months	1,122	44	12	77%	61%	60%	58%	49%
In U.S. schools ≥ 12 months	265	39	12	68%	54%	53%	51%	43%
EL in ELD	190	44	12	76%	61%	58%	58%	49%
EL in ELD and SDAIE	493	43	12	75%	59%	58%	57%	47%
EL in ELD and SDAIE with primary language support	271	43	12	75%	59%	57%	56%	48%
EL in ELD and academic subjects through primary language	293	44	12	77%	60%	60%	58%	48%
Other EL instructional services	85	45	12	77%	62%	60%	58%	51%
None (EL only)	26	43	12	75%	59%	57%	55%	51%
Program participation unknown	29	41	14	71%	55%	51%	55%	49%
No special education	1,383	43	12	75%	60%	58%	57%	48%
Special education	4	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	1,251	44	12	77%	60%	59%	58%	49%
Male	711	42	12	74%	57%	57%	55%	47%
Female	537	46	10	80%	64%	62%	62%	52%
Gender unknown	3	–	–	–	–	–	–	–
Argentina	0	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–
Cuba	2	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–
El Salvador	86	39	11	74%	53%	57%	47%	42%
Guatemala	45	35	10	64%	49%	53%	43%	38%
Mexico	662	44	12	77%	61%	59%	59%	50%
Nicaragua	4	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	8	–	–	–	–	–	–	–
Puerto Rico	2	–	–	–	–	–	–	–
Spain	8	–	–	–	–	–	–	–
United States	359	45	11	79%	62%	61%	60%	51%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–
Other	25	36	12	65%	48%	51%	46%	40%
Country unknown	34	42	11	74%	55%	57%	59%	47%
Not economically disadvantaged	201	45	12	79%	61%	61%	60%	51%
Economically disadvantaged	1,026	43	12	76%	60%	59%	57%	48%
Economic status unknown	24	45	11	79%	61%	57%	62%	52%
In U.S. schools < 12 months	1,122	44	12	77%	61%	60%	58%	49%
In U.S. schools ≥ 12 months	129	40	12	72%	55%	55%	52%	43%
EL in ELD	174	44	12	78%	62%	59%	60%	49%
EL in ELD and SDAIE	433	43	12	76%	59%	59%	57%	48%
EL in ELD and SDAIE with primary language support	244	44	12	77%	61%	59%	57%	49%
EL in ELD and academic subjects through primary language	293	44	12	77%	60%	60%	58%	48%
Other EL instructional services	63	46	12	80%	62%	63%	59%	53%
None (EL only)	22	44	11	78%	59%	57%	56%	52%
Program participation unknown	22	41	15	73%	54%	53%	53%	50%
No special education	1,248	44	12	77%	60%	59%	58%	49%
Special education	3	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	813	39	12	59%	47%	54%	51%	52%
Male	445	37	12	57%	46%	50%	49%	49%
Female	366	41	11	61%	48%	58%	54%	56%
Gender unknown	2	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–
Colombia	5	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–
El Salvador	59	34	11	53%	42%	49%	47%	42%
Guatemala	48	33	12	52%	41%	45%	43%	42%
Mexico	417	40	12	60%	48%	55%	53%	54%
Nicaragua	5	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	14	41	10	69%	47%	58%	48%	54%
Puerto Rico	1	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–
United States	200	40	11	60%	48%	56%	53%	55%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–
Other	14	32	12	46%	43%	40%	46%	41%
Country unknown	31	35	11	51%	43%	47%	47%	46%
Not economically disadvantaged	158	41	12	64%	49%	57%	54%	57%
Economically disadvantaged	625	38	12	58%	46%	53%	51%	51%
Economic status unknown	30	37	14	57%	46%	48%	49%	51%
In U.S. schools < 12 months	563	41	12	62%	49%	56%	53%	55%
In U.S. schools ≥ 12 months	250	35	12	52%	42%	49%	47%	47%
EL in ELD	101	38	11	58%	45%	52%	51%	50%
EL in ELD and SDAIE	274	40	12	61%	48%	55%	51%	54%
EL in ELD and SDAIE with primary language support	151	39	12	60%	46%	53%	52%	53%
EL in ELD and academic subjects through primary language	208	37	12	54%	45%	52%	50%	51%
Other EL instructional services	44	42	12	66%	51%	59%	55%	54%
None (EL only)	12	39	12	56%	49%	56%	51%	51%
Program participation unknown	23	39	10	58%	47%	50%	50%	55%
No special education	805	39	12	59%	47%	54%	51%	52%
Special education	8	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster				
	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	718	40	12	60%	47%	55%	52%	54%
Male	399	38	12	58%	46%	51%	50%	51%
Female	317	42	11	62%	49%	59%	55%	57%
Gender unknown	2	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–
Colombia	5	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–
Cuba	2	–	–	–	–	–	–	–
Ecuador	3	–	–	–	–	–	–	–
El Salvador	52	35	11	55%	42%	51%	49%	44%
Guatemala	41	33	12	52%	42%	45%	44%	44%
Mexico	375	40	12	61%	49%	55%	53%	55%
Nicaragua	4	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–
Peru	14	41	10	69%	47%	58%	48%	54%
Puerto Rico	1	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–
United States	178	40	11	60%	48%	56%	53%	56%
Uruguay	0	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–
Other	12	33	13	48%	44%	39%	48%	43%
Country unknown	18	36	11	53%	44%	51%	47%	49%
Not economically disadvantaged	150	42	12	64%	49%	57%	54%	57%
Economically disadvantaged	553	39	12	58%	47%	54%	52%	52%
Economic status unknown	15	44	13	67%	51%	59%	59%	64%
In U.S. schools < 12 months	563	41	12	62%	49%	56%	53%	55%
In U.S. schools ≥ 12 months	155	36	12	51%	43%	50%	48%	49%
EL in ELD	89	39	11	61%	46%	54%	53%	53%
EL in ELD and SDAIE	245	41	12	63%	49%	57%	53%	55%
EL in ELD and SDAIE with primary language support	130	40	11	61%	48%	53%	54%	54%
EL in ELD and academic subjects through primary language	208	37	12	54%	45%	52%	50%	51%
Other EL instructional services	23	44	13	71%	54%	60%	58%	58%
None (EL only)	11	39	13	55%	49%	57%	49%	51%
Program participation unknown	12	41	10	57%	50%	53%	56%	59%
No special education	712	40	12	60%	48%	55%	52%	54%
Special education	6	–	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	12,919	363	74	1%	19%	27%	31%	23%	66%	70%	58%	74%	76%
Male	6,448	362	75	1%	19%	26%	31%	23%	65%	70%	59%	75%	76%
Female	6,457	364	73	1%	18%	28%	31%	23%	66%	71%	56%	74%	77%
Gender unknown	14	351	65	0%	21%	29%	43%	7%	69%	64%	40%	76%	78%
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	13	323	52	8%	15%	46%	31%	0%	58%	59%	49%	68%	65%
Costa Rica	3	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	113	344	79	6%	23%	27%	27%	18%	57%	66%	52%	71%	71%
Guatemala	88	359	69	0%	19%	26%	34%	20%	65%	71%	55%	72%	77%
Mexico	1,282	350	76	2%	23%	28%	29%	18%	61%	67%	55%	72%	72%
Nicaragua	7	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Peru	13	367	65	0%	15%	23%	38%	23%	69%	69%	69%	74%	79%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–	–	–	–	–	–	–
United States	10,914	365	74	1%	18%	27%	31%	23%	66%	71%	58%	75%	77%
Uruguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	58	339	71	5%	21%	38%	21%	16%	62%	64%	52%	68%	65%
Country unknown	402	372	75	2%	16%	21%	34%	27%	70%	72%	60%	76%	77%
Not economically disadvantaged	925	376	75	1%	14%	24%	32%	29%	70%	73%	62%	77%	77%
Economically disadvantaged	11,762	362	74	1%	19%	27%	30%	22%	65%	70%	58%	74%	76%
Economic status unknown	232	343	70	3%	24%	29%	31%	13%	60%	64%	53%	71%	73%
In U.S. schools < 12 months	1,212	324	75	5%	35%	27%	20%	12%	53%	60%	51%	65%	62%
In U.S. schools ≥ 12 months	11,707	367	73	1%	17%	27%	32%	24%	67%	71%	58%	75%	78%
EL in ELD	227	330	73	3%	31%	35%	19%	12%	53%	62%	52%	67%	66%
EL in ELD and SDAIE	903	336	78	4%	31%	27%	22%	16%	57%	63%	52%	67%	67%
EL in ELD and SDAIE with primary language support	1,314	357	74	2%	21%	25%	32%	20%	64%	69%	57%	74%	74%
EL in ELD and academic subjects through primary language	9,680	368	73	1%	17%	26%	32%	25%	67%	72%	59%	76%	78%
Other EL instructional services	48	333	50	0%	25%	42%	27%	6%	58%	61%	57%	68%	72%
None (EL only)	51	333	50	2%	22%	41%	31%	4%	56%	65%	55%	72%	64%
Program participation unknown	696	351	73	1%	24%	30%	28%	17%	61%	67%	56%	71%	75%
No special education	12,409	365	74	1%	18%	27%	31%	23%	66%	71%	58%	75%	77%
Special education	508	313	70	6%	41%	28%	15%	10%	52%	56%	47%	62%	63%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	10,621	363	75	1%	19%	27%	30%	23%	66%	70%	58%	74%	76%
Male	5,302	362	76	2%	19%	26%	30%	23%	65%	69%	59%	75%	76%
Female	5,310	364	73	1%	18%	27%	30%	23%	67%	71%	56%	74%	77%
Gender unknown	9	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	12	324	54	8%	17%	42%	33%	0%	58%	59%	49%	68%	64%
Costa Rica	3	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	1	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	101	345	79	6%	23%	28%	26%	18%	57%	67%	53%	70%	72%
Guatemala	77	357	71	0%	21%	26%	32%	21%	64%	70%	56%	71%	77%
Mexico	1,104	349	77	3%	24%	28%	28%	18%	61%	67%	56%	72%	71%
Nicaragua	6	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	374	62	0%	8%	25%	42%	25%	71%	70%	71%	78%	82%
Puerto Rico	2	–	–	–	–	–	–	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–	–	–	–	–	–	–
United States	9,048	365	74	1%	18%	27%	31%	24%	66%	71%	58%	75%	77%
Uruguay	2	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	46	338	71	4%	20%	41%	22%	13%	61%	65%	53%	67%	66%
Country unknown	189	374	81	3%	19%	17%	32%	30%	69%	72%	61%	76%	76%
Not economically disadvantaged	730	377	77	1%	15%	23%	31%	30%	70%	73%	62%	77%	77%
Economically disadvantaged	9,817	362	74	1%	19%	27%	30%	23%	65%	70%	58%	74%	76%
Economic status unknown	74	358	64	3%	16%	28%	36%	16%	65%	71%	50%	76%	76%
In U.S. schools < 12 months	1,212	324	75	5%	35%	27%	20%	12%	53%	60%	51%	65%	62%
In U.S. schools ≥ 12 months	9,409	368	73	1%	17%	26%	32%	25%	67%	72%	59%	75%	78%
EL in ELD	94	314	75	2%	48%	28%	13%	10%	46%	58%	52%	61%	59%
EL in ELD and SDAIE	470	310	70	7%	41%	28%	15%	9%	49%	56%	48%	62%	58%
EL in ELD and SDAIE with primary language support	298	313	70	7%	40%	25%	20%	8%	50%	58%	49%	62%	58%
EL in ELD and academic subjects through primary language	9,680	368	73	1%	17%	26%	32%	25%	67%	72%	59%	76%	78%
Other EL instructional services	13	318	60	0%	38%	31%	23%	8%	54%	57%	49%	62%	67%
None (EL only)	30	318	43	3%	27%	53%	17%	0%	53%	58%	57%	67%	59%
Program participation unknown	36	322	67	6%	36%	25%	22%	11%	58%	59%	50%	63%	62%
No special education	10,181	365	74	1%	18%	27%	31%	24%	66%	71%	58%	75%	77%
Special education	438	314	70	6%	40%	28%	16%	10%	52%	56%	47%	62%	64%
Special education unknown	2	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	7,988	366	74	2%	18%	23%	35%	22%	65%	67%	61%	71%	78%
Male	3,891	367	75	2%	19%	22%	35%	23%	66%	67%	62%	72%	76%
Female	4,087	364	73	2%	18%	23%	36%	21%	64%	68%	60%	71%	79%
Gender unknown	10	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	14	360	81	7%	21%	7%	29%	36%	69%	62%	59%	69%	79%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	4	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	6	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	112	325	74	8%	37%	14%	29%	12%	51%	56%	53%	60%	65%
Guatemala	78	334	74	8%	32%	19%	26%	15%	53%	61%	54%	62%	65%
Mexico	1,150	351	77	4%	24%	23%	31%	18%	59%	64%	58%	67%	70%
Nicaragua	5	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	8	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–	–	–	–	–	–
United States	6,361	370	73	1%	17%	23%	36%	23%	66%	68%	62%	73%	79%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	4	–	–	–	–	–	–	–	–	–	–	–	–
Other	33	333	82	12%	21%	24%	24%	18%	55%	56%	55%	61%	68%
Country unknown	195	361	69	2%	18%	27%	33%	21%	64%	67%	59%	71%	77%
Not economically disadvantaged	632	371	76	1%	18%	20%	34%	26%	67%	69%	63%	71%	78%
Economically disadvantaged	7,215	366	74	2%	18%	23%	35%	22%	65%	67%	61%	72%	78%
Economic status unknown	141	347	65	1%	22%	30%	33%	13%	60%	62%	58%	66%	74%
In U.S. schools < 12 months	1,129	328	72	6%	34%	23%	26%	11%	53%	59%	53%	59%	61%
In U.S. schools ≥ 12 months	6,859	372	73	1%	16%	23%	37%	24%	67%	69%	63%	73%	80%
EL in ELD	166	341	75	7%	26%	23%	28%	16%	57%	61%	58%	63%	68%
EL in ELD and SDAIE	811	340	74	4%	29%	23%	31%	13%	57%	61%	55%	63%	66%
EL in ELD and SDAIE with primary language support	893	354	76	4%	23%	22%	32%	19%	61%	65%	58%	67%	74%
EL in ELD and academic subjects through primary language	5,876	373	73	1%	15%	22%	37%	24%	67%	69%	63%	74%	80%
Other EL instructional services	79	351	72	4%	22%	20%	41%	14%	61%	66%	57%	65%	73%
None (EL only)	11	312	38	0%	27%	73%	0%	0%	42%	59%	49%	57%	65%
Program participation unknown	152	338	72	5%	30%	23%	28%	15%	56%	59%	55%	64%	70%
No special education	7,623	368	74	2%	17%	22%	36%	23%	65%	68%	62%	72%	78%
Special education	361	316	66	6%	40%	25%	22%	7%	51%	52%	49%	56%	63%
Special education unknown	4	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	6,775	366	75	2%	18%	22%	35%	22%	65%	68%	62%	72%	78%
Male	3,300	368	76	2%	18%	21%	35%	24%	66%	68%	63%	72%	76%
Female	3,468	364	74	2%	18%	23%	36%	21%	64%	68%	60%	71%	79%
Gender unknown	7	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	344	84	9%	27%	9%	27%	27%	64%	56%	55%	64%	73%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	4	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	103	323	75	9%	37%	15%	28%	12%	50%	55%	52%	60%	63%
Guatemala	71	333	74	7%	35%	17%	27%	14%	52%	61%	54%	62%	63%
Mexico	999	352	78	4%	25%	23%	30%	19%	59%	65%	58%	67%	70%
Nicaragua	4	–	–	–	–	–	–	–	–	–	–	–	–
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	6	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	5,437	371	73	1%	16%	22%	37%	24%	66%	69%	63%	73%	80%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	4	–	–	–	–	–	–	–	–	–	–	–	–
Other	21	314	74	14%	24%	33%	19%	10%	49%	50%	50%	57%	64%
Country unknown	93	350	69	2%	24%	27%	29%	18%	61%	64%	56%	68%	72%
Not economically disadvantaged	516	371	74	2%	17%	21%	35%	26%	67%	69%	63%	72%	77%
Economically disadvantaged	6,207	366	75	2%	18%	22%	35%	22%	65%	67%	61%	72%	78%
Economic status unknown	52	341	73	4%	27%	25%	31%	13%	57%	64%	54%	64%	70%
In U.S. schools < 12 months	1,129	328	72	6%	34%	23%	26%	11%	53%	59%	53%	59%	61%
In U.S. schools ≥ 12 months	5,646	374	73	1%	15%	22%	37%	25%	67%	69%	63%	74%	81%
EL in ELD	91	337	85	9%	32%	16%	23%	20%	54%	61%	56%	61%	62%
EL in ELD and SDAIE	502	323	70	7%	36%	22%	26%	9%	52%	57%	52%	58%	59%
EL in ELD and SDAIE with primary language support	253	323	71	8%	36%	22%	25%	9%	50%	58%	52%	58%	59%
EL in ELD and academic subjects through primary language	5,876	373	73	1%	15%	22%	37%	24%	67%	69%	63%	74%	80%
Other EL instructional services	19	312	64	5%	47%	16%	26%	5%	47%	59%	47%	54%	53%
None (EL only)	9	–	–	–	–	–	–	–	–	–	–	–	–
Program participation unknown	25	317	63	8%	40%	20%	24%	8%	51%	56%	54%	53%	59%
No special education	6,463	369	74	2%	17%	22%	36%	23%	65%	68%	62%	72%	78%
Special education	308	313	66	6%	42%	26%	19%	7%	50%	50%	48%	55%	61%
Special education unknown	4	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	5,187	365	76	4%	19%	21%	33%	24%	64%	63%	68%	64%	64%
Male	2,586	363	79	4%	20%	21%	31%	24%	65%	62%	67%	63%	62%
Female	2,591	367	73	3%	18%	22%	34%	24%	64%	64%	69%	65%	66%
Gender unknown	10	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	16	346	76	0%	25%	44%	6%	25%	58%	59%	60%	61%	58%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	139	324	79	9%	39%	19%	21%	12%	55%	51%	51%	55%	54%
Guatemala	65	349	80	6%	25%	25%	22%	23%	60%	61%	61%	60%	57%
Mexico	1,050	352	76	5%	23%	23%	29%	19%	61%	60%	63%	61%	62%
Nicaragua	7	–	–	–	–	–	–	–	–	–	–	–	–
Panama	2	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	5	–	–	–	–	–	–	–	–	–	–	–	–
United States	3,656	372	75	3%	16%	20%	35%	26%	66%	65%	71%	66%	65%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	49	344	80	8%	24%	24%	24%	18%	61%	59%	58%	59%	55%
Country unknown	163	347	71	3%	25%	30%	27%	15%	61%	57%	61%	61%	61%
Not economically disadvantaged	394	378	80	2%	17%	21%	30%	30%	67%	68%	71%	66%	66%
Economically disadvantaged	4,654	365	76	4%	19%	21%	33%	23%	64%	63%	68%	64%	64%
Economic status unknown	139	343	74	6%	26%	25%	27%	16%	58%	54%	63%	59%	62%
In U.S. schools < 12 months	1,098	335	75	7%	31%	23%	24%	14%	57%	57%	56%	57%	58%
In U.S. schools ≥ 12 months	4,089	373	74	3%	16%	21%	35%	26%	67%	65%	71%	66%	65%
EL in ELD	147	336	79	11%	29%	22%	26%	13%	56%	55%	58%	57%	57%
EL in ELD and SDAIE	821	347	79	6%	27%	21%	26%	19%	60%	60%	61%	59%	59%
EL in ELD and SDAIE with primary language support	510	351	80	6%	24%	23%	27%	20%	60%	61%	61%	61%	61%
EL in ELD and academic subjects through primary language	3,488	374	73	2%	16%	21%	36%	26%	67%	65%	71%	66%	65%
Other EL instructional services	69	372	74	1%	19%	20%	35%	25%	64%	66%	71%	66%	69%
None (EL only)	17	326	63	0%	41%	18%	29%	12%	53%	57%	55%	56%	50%
Program participation unknown	135	349	77	4%	27%	25%	22%	21%	59%	61%	62%	60%	61%
No special education	4,906	368	75	3%	18%	21%	33%	25%	65%	64%	69%	65%	64%
Special education	281	311	67	10%	43%	22%	18%	7%	51%	46%	51%	51%	53%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	4,430	365	76	3%	19%	21%	33%	23%	65%	63%	68%	64%	64%
Male	2,190	363	79	4%	20%	21%	32%	24%	65%	62%	67%	63%	62%
Female	2,235	367	72	3%	18%	21%	35%	23%	64%	64%	69%	65%	66%
Gender unknown	5	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	2	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	1	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	2	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	14	341	74	0%	29%	43%	7%	21%	58%	56%	59%	60%	57%
Costa Rica	4	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	5	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	5	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	128	323	80	10%	40%	16%	22%	12%	55%	51%	51%	55%	54%
Guatemala	61	347	78	7%	23%	26%	21%	23%	59%	60%	61%	60%	57%
Mexico	942	350	76	5%	24%	24%	28%	19%	61%	60%	62%	60%	61%
Nicaragua	6	–	–	–	–	–	–	–	–	–	–	–	–
Panama	2	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	9	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	3	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	3,135	373	74	2%	16%	20%	36%	26%	66%	65%	71%	66%	65%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	2	–	–	–	–	–	–	–	–	–	–	–	–
Other	39	330	77	10%	28%	28%	21%	13%	59%	55%	52%	55%	54%
Country unknown	65	327	64	6%	29%	37%	18%	9%	57%	53%	54%	55%	57%
Not economically disadvantaged	333	379	80	2%	17%	21%	30%	30%	67%	68%	70%	66%	67%
Economically disadvantaged	4,040	364	75	3%	19%	21%	34%	23%	64%	63%	68%	64%	64%
Economic status unknown	57	351	65	0%	28%	26%	26%	19%	61%	57%	65%	62%	64%
In U.S. schools < 12 months	1,098	335	75	7%	31%	23%	24%	14%	57%	57%	56%	57%	58%
In U.S. schools ≥ 12 months	3,332	375	73	2%	15%	21%	36%	26%	67%	65%	72%	66%	66%
EL in ELD	67	340	86	12%	28%	19%	24%	16%	56%	59%	56%	60%	57%
EL in ELD and SDAIE	534	334	75	8%	31%	22%	24%	14%	56%	57%	56%	56%	58%
EL in ELD and SDAIE with primary language support	281	333	75	7%	31%	23%	24%	14%	57%	57%	55%	56%	57%
EL in ELD and academic subjects through primary language	3,488	374	73	2%	16%	21%	36%	26%	67%	65%	71%	66%	65%
Other EL instructional services	18	346	73	0%	33%	22%	28%	17%	60%	61%	65%	51%	60%
None (EL only)	10	–	–	–	–	–	–	–	–	–	–	–	–
Program participation unknown	32	323	72	3%	44%	31%	9%	13%	55%	54%	48%	55%	56%
No special education	4,194	368	75	3%	18%	21%	34%	24%	65%	64%	69%	65%	64%
Special education	236	314	68	8%	43%	22%	19%	8%	52%	47%	52%	51%	54%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	3,618	356	94	12%	18%	20%	25%	25%	58%	48%	63%	46%	52%
Male	1,819	355	96	13%	18%	20%	24%	25%	57%	48%	62%	46%	51%
Female	1,792	358	91	11%	18%	21%	26%	24%	58%	49%	64%	46%	53%
Gender unknown	7	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	4	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	11	357	107	18%	9%	9%	36%	27%	50%	50%	64%	49%	61%
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	2	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	8	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	122	325	99	25%	25%	20%	10%	20%	48%	42%	54%	42%	50%
Guatemala	70	332	93	23%	21%	17%	19%	20%	50%	46%	53%	45%	48%
Mexico	910	343	96	17%	19%	20%	23%	21%	52%	48%	58%	44%	51%
Nicaragua	12	344	93	17%	17%	17%	25%	25%	51%	48%	61%	43%	54%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	394	75	0%	8%	17%	50%	25%	68%	61%	71%	48%	54%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	1	–	–	–	–	–	–	–	–	–	–	–	–
United States	2,320	365	90	9%	17%	21%	27%	27%	61%	49%	66%	47%	52%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	54	338	98	22%	20%	15%	22%	20%	52%	43%	59%	42%	56%
Country unknown	79	345	105	16%	25%	15%	15%	28%	55%	46%	59%	45%	49%
Not economically disadvantaged	290	379	100	9%	14%	19%	23%	36%	61%	54%	66%	52%	57%
Economically disadvantaged	3,222	355	93	12%	18%	20%	25%	24%	58%	48%	63%	46%	52%
Economic status unknown	106	325	86	18%	25%	26%	17%	14%	50%	42%	56%	40%	43%
In U.S. schools < 12 months	1,017	326	94	21%	25%	20%	18%	16%	48%	45%	52%	41%	50%
In U.S. schools ≥ 12 months	2,601	369	91	8%	15%	20%	28%	28%	61%	49%	67%	48%	53%
EL in ELD	140	316	78	23%	20%	25%	23%	9%	47%	43%	52%	38%	48%
EL in ELD and SDAIE	655	337	97	18%	23%	18%	21%	19%	52%	47%	55%	43%	53%
EL in ELD and SDAIE with primary language support	520	343	96	17%	21%	19%	20%	23%	54%	47%	58%	44%	50%
EL in ELD and academic subjects through primary language	1,960	370	91	8%	15%	21%	28%	28%	61%	50%	68%	49%	53%
Other EL instructional services	210	345	85	15%	17%	23%	25%	20%	56%	46%	61%	43%	47%
None (EL only)	17	309	71	18%	35%	18%	24%	6%	53%	40%	45%	36%	51%
Program participation unknown	116	364	98	11%	18%	16%	26%	29%	59%	50%	65%	47%	50%
No special education	3,394	359	94	12%	18%	20%	26%	26%	58%	49%	64%	47%	52%
Special education	224	316	82	18%	27%	27%	16%	12%	51%	37%	54%	38%	48%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	2,872	356	94	12%	18%	20%	25%	25%	57%	48%	63%	46%	52%
Male	1,428	354	97	14%	19%	20%	24%	24%	57%	48%	62%	47%	51%
Female	1,437	358	91	10%	18%	21%	26%	25%	58%	49%	64%	46%	53%
Gender unknown	7	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	4	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–
Chile	5	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	2	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	8	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	114	324	100	25%	23%	22%	10%	20%	48%	42%	54%	42%	49%
Guatemala	66	332	94	23%	21%	18%	17%	21%	50%	46%	53%	45%	49%
Mexico	768	341	96	17%	21%	20%	22%	20%	52%	47%	57%	44%	51%
Nicaragua	12	344	93	17%	17%	17%	25%	25%	51%	48%	61%	43%	54%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Peru	12	394	75	0%	8%	17%	50%	25%	68%	61%	71%	48%	54%
Puerto Rico	4	–	–	–	–	–	–	–	–	–	–	–	–
Spain	1	–	–	–	–	–	–	–	–	–	–	–	–
United States	1,778	367	91	8%	17%	21%	27%	27%	61%	49%	66%	48%	53%
Uruguay	1	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–
Other	48	337	100	25%	21%	10%	23%	21%	52%	42%	59%	43%	56%
Country unknown	37	332	103	19%	27%	19%	11%	24%	49%	44%	56%	44%	49%
Not economically disadvantaged	233	382	102	8%	15%	17%	23%	36%	61%	54%	66%	53%	57%
Economically disadvantaged	2,600	354	93	12%	19%	21%	25%	24%	57%	48%	62%	46%	52%
Economic status unknown	39	332	85	10%	31%	26%	18%	15%	53%	44%	58%	42%	41%
In U.S. schools < 12 months	1,017	326	94	21%	25%	20%	18%	16%	48%	45%	52%	41%	50%
In U.S. schools ≥ 12 months	1,855	373	90	7%	15%	21%	28%	29%	62%	50%	69%	49%	53%
EL in ELD	78	308	77	29%	19%	24%	19%	8%	46%	42%	48%	37%	48%
EL in ELD and SDAIE	495	331	98	20%	25%	19%	19%	18%	50%	46%	53%	42%	52%
EL in ELD and SDAIE with primary language support	292	319	94	23%	27%	19%	15%	15%	47%	43%	50%	41%	47%
EL in ELD and academic subjects through primary language	1,960	370	91	8%	15%	21%	28%	28%	61%	50%	68%	49%	53%
Other EL instructional services	14	380	84	7%	7%	14%	43%	29%	61%	56%	70%	51%	48%
None (EL only)	9	–	–	–	–	–	–	–	–	–	–	–	–
Program participation unknown	24	319	97	17%	29%	25%	13%	17%	43%	45%	50%	43%	49%
No special education	2,690	359	95	12%	18%	20%	25%	25%	58%	49%	63%	47%	52%
Special education	182	320	82	16%	26%	29%	16%	13%	52%	38%	56%	38%	49%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	2,040	331	77	15%	23%	23%	21%	17%	57%	52%	57%	40%	42%
Male	1,098	332	82	16%	23%	20%	21%	19%	57%	53%	58%	41%	40%
Female	939	330	72	14%	24%	26%	22%	14%	57%	51%	56%	40%	43%
Gender unknown	3	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	10	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	152	300	73	28%	25%	24%	16%	7%	47%	44%	49%	32%	39%
Guatemala	54	279	73	37%	37%	11%	7%	7%	42%	36%	44%	32%	32%
Mexico	742	334	81	16%	22%	21%	22%	19%	58%	52%	58%	40%	43%
Nicaragua	15	299	52	20%	40%	20%	13%	7%	47%	51%	48%	31%	35%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	9	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	4	–	–	–	–	–	–	–	–	–	–	–	–
United States	924	338	73	11%	23%	25%	23%	18%	59%	54%	59%	43%	42%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	49	324	79	20%	18%	22%	20%	18%	57%	53%	51%	41%	41%
Country unknown	68	326	70	12%	25%	34%	21%	9%	54%	51%	56%	40%	42%
Not economically disadvantaged	179	346	84	12%	23%	19%	21%	25%	61%	58%	60%	42%	44%
Economically disadvantaged	1,834	330	76	15%	23%	23%	21%	16%	57%	52%	57%	40%	41%
Economic status unknown	27	290	73	37%	30%	7%	22%	4%	45%	45%	45%	32%	33%
In U.S. schools < 12 months	941	323	82	21%	24%	20%	18%	17%	55%	49%	54%	37%	42%
In U.S. schools ≥ 12 months	1,099	338	72	11%	23%	25%	24%	17%	58%	55%	60%	43%	41%
EL in ELD	103	319	91	26%	21%	22%	13%	17%	54%	50%	53%	36%	41%
EL in ELD and SDAIE	563	331	81	18%	23%	19%	22%	18%	57%	51%	57%	39%	43%
EL in ELD and SDAIE with primary language support	385	318	75	19%	28%	21%	18%	13%	54%	49%	53%	36%	41%
EL in ELD and academic subjects through primary language	875	339	74	10%	22%	25%	24%	18%	59%	55%	60%	44%	42%
Other EL instructional services	25	327	85	24%	8%	28%	20%	20%	55%	54%	54%	39%	44%
None (EL only)	14	288	63	36%	21%	29%	7%	7%	39%	49%	50%	27%	34%
Program participation unknown	75	330	65	12%	23%	36%	16%	13%	58%	52%	57%	39%	41%
No special education	1,928	333	78	15%	23%	23%	22%	18%	58%	53%	58%	41%	42%
Special education	112	294	63	29%	29%	22%	13%	7%	47%	44%	47%	33%	34%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster				
	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	1,759	331	79	16%	23%	23%	21%	17%	57%	52%	57%	41%	42%
Male	945	332	83	17%	23%	20%	20%	19%	57%	53%	57%	41%	40%
Female	812	330	73	14%	23%	26%	21%	15%	57%	51%	56%	40%	43%
Gender unknown	2	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	0	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–	–	–	–	–	–	–
Chile	1	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	9	–	–	–	–	–	–	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	140	298	72	27%	26%	25%	16%	6%	47%	44%	48%	32%	38%
Guatemala	48	281	76	38%	35%	10%	8%	8%	43%	37%	45%	33%	32%
Mexico	652	336	83	16%	22%	20%	21%	20%	58%	53%	58%	40%	44%
Nicaragua	15	299	52	20%	40%	20%	13%	7%	47%	51%	48%	31%	35%
Panama	0	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Peru	9	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	5	–	–	–	–	–	–	–	–	–	–	–	–
Spain	3	–	–	–	–	–	–	–	–	–	–	–	–
United States	780	337	75	12%	23%	25%	22%	18%	59%	54%	59%	43%	42%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–	–	–	–	–	–	–
Other	46	325	79	20%	20%	22%	22%	17%	58%	53%	51%	42%	41%
Country unknown	44	331	76	11%	25%	32%	20%	11%	57%	49%	57%	43%	42%
Not economically disadvantaged	153	349	87	12%	23%	20%	18%	27%	62%	58%	60%	43%	45%
Economically disadvantaged	1,592	330	78	16%	24%	23%	21%	17%	57%	51%	57%	40%	42%
Economic status unknown	14	301	86	43%	21%	0%	29%	7%	48%	49%	46%	39%	34%
In U.S. schools < 12 months	941	323	82	21%	24%	20%	18%	17%	55%	49%	54%	37%	42%
In U.S. schools ≥ 12 months	818	340	73	10%	22%	26%	24%	18%	59%	55%	60%	44%	41%
EL in ELD	89	316	95	29%	24%	19%	10%	18%	53%	49%	52%	34%	41%
EL in ELD and SDAIE	464	328	82	19%	24%	20%	20%	18%	57%	50%	56%	39%	43%
EL in ELD and SDAIE with primary language support	286	318	79	21%	28%	19%	16%	15%	54%	48%	53%	36%	41%
EL in ELD and academic subjects through primary language	875	339	74	10%	22%	25%	24%	18%	59%	55%	60%	44%	42%
Other EL instructional services	8	–	–	–	–	–	–	–	–	–	–	–	–
None (EL only)	12	277	56	42%	17%	33%	8%	0%	37%	44%	48%	25%	30%
Program participation unknown	25	320	63	20%	8%	44%	16%	12%	57%	49%	55%	33%	43%
No special education	1,677	333	79	15%	23%	23%	21%	18%	57%	52%	57%	41%	42%
Special education	82	294	60	26%	33%	23%	11%	7%	48%	45%	47%	32%	32%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster					
	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	1,565	322	69	18%	25%	28%	19%	10%	47%	42%	54%	47%	49%	49%
Male	842	320	72	21%	23%	26%	19%	11%	47%	42%	52%	47%	48%	48%
Female	719	324	66	14%	26%	31%	18%	10%	47%	42%	56%	47%	49%	50%
Gender unknown	4	–	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	15	306	88	33%	27%	27%	0%	13%	38%	33%	55%	40%	47%	47%
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	152	294	64	35%	30%	20%	9%	7%	40%	34%	48%	39%	40%	44%
Guatemala	71	286	58	37%	30%	20%	11%	3%	36%	38%	47%	37%	37%	42%
Mexico	664	328	70	14%	24%	28%	22%	11%	48%	43%	54%	50%	52%	51%
Nicaragua	11	308	46	9%	27%	55%	9%	0%	40%	39%	61%	39%	45%	49%
Panama	2	–	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Peru	11	400	87	9%	0%	18%	27%	45%	62%	67%	77%	62%	71%	67%
Puerto Rico	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–	–
United States	536	328	68	15%	22%	33%	19%	12%	49%	44%	56%	49%	50%	49%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Other	38	284	42	26%	37%	32%	5%	0%	41%	32%	46%	36%	37%	38%
Country unknown	46	316	63	17%	37%	15%	22%	9%	48%	38%	50%	44%	50%	49%
Not economically disadvantaged	171	330	76	16%	26%	27%	16%	15%	49%	42%	56%	48%	50%	54%
Economically disadvantaged	1,354	321	68	18%	24%	28%	19%	10%	47%	42%	53%	47%	49%	48%
Economic status unknown	40	303	60	25%	25%	33%	15%	3%	41%	34%	49%	43%	46%	50%
In U.S. schools < 12 months	997	321	70	18%	26%	28%	18%	11%	47%	40%	53%	47%	50%	50%
In U.S. schools ≥ 12 months	568	322	67	18%	23%	29%	20%	10%	48%	44%	55%	48%	47%	47%
EL in ELD	138	319	73	19%	26%	28%	17%	9%	46%	40%	53%	46%	48%	49%
EL in ELD and SDAIE	496	318	71	20%	27%	26%	16%	11%	46%	40%	52%	45%	49%	51%
EL in ELD and SDAIE with primary language support	295	319	70	20%	24%	28%	18%	10%	45%	40%	52%	48%	48%	49%
EL in ELD and academic subjects through primary language	516	329	67	15%	21%	30%	22%	11%	49%	46%	57%	49%	49%	47%
Other EL instructional services	56	331	68	11%	23%	30%	25%	11%	48%	40%	54%	51%	54%	52%
None (EL only)	33	302	67	24%	39%	18%	9%	9%	41%	33%	49%	44%	45%	41%
Program participation unknown	31	309	56	10%	32%	42%	10%	6%	42%	33%	54%	44%	47%	49%
No special education	1,506	323	70	17%	24%	28%	19%	11%	47%	42%	54%	48%	49%	49%
Special education	59	282	45	34%	31%	29%	7%	0%	36%	31%	48%	38%	35%	43%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–	–

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

				Percent in Performance Level					Mean Percent Correct in Reporting Cluster					
	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	1,412	323	69	18%	24%	28%	19%	11%	47%	42%	54%	47%	49%	49%
Male	747	322	71	20%	23%	27%	19%	11%	47%	43%	52%	48%	49%	48%
Female	661	324	66	15%	25%	30%	19%	10%	47%	41%	56%	47%	50%	50%
Gender unknown	4	–	–	–	–	–	–	–	–	–	–	–	–	–
Argentina	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Bolivia	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Chile	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Colombia	14	298	84	36%	29%	29%	0%	7%	36%	35%	53%	36%	44%	43%
Costa Rica	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–	–	–	–	–	–	–	–
Ecuador	4	–	–	–	–	–	–	–	–	–	–	–	–	–
El Salvador	141	293	63	34%	30%	21%	8%	6%	40%	33%	48%	39%	40%	45%
Guatemala	65	284	50	37%	29%	22%	11%	2%	35%	38%	47%	36%	36%	42%
Mexico	590	329	70	14%	24%	27%	23%	12%	48%	44%	54%	50%	52%	50%
Nicaragua	10	–	–	–	–	–	–	–	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Peru	10	–	–	–	–	–	–	–	–	–	–	–	–	–
Puerto Rico	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–	–	–	–	–	–	–	–
United States	490	331	67	14%	22%	33%	20%	12%	49%	44%	57%	50%	51%	50%
Uruguay	0	–	–	–	–	–	–	–	–	–	–	–	–	–
Venezuela	1	–	–	–	–	–	–	–	–	–	–	–	–	–
Other	37	285	42	24%	38%	32%	5%	0%	42%	31%	46%	36%	37%	38%
Country unknown	35	319	65	17%	34%	14%	26%	9%	48%	38%	49%	45%	53%	51%
Not economically disadvantaged	158	331	76	15%	25%	29%	16%	15%	49%	43%	56%	48%	50%	53%
Economically disadvantaged	1,233	322	68	18%	24%	28%	20%	10%	47%	42%	53%	47%	49%	49%
Economic status unknown	21	310	67	19%	24%	38%	14%	5%	44%	35%	51%	42%	51%	49%
In U.S. schools < 12 months	997	321	70	18%	26%	28%	18%	11%	47%	40%	53%	47%	50%	50%
In U.S. schools ≥ 12 months	415	326	65	16%	22%	30%	23%	10%	48%	46%	56%	49%	47%	47%
EL in ELD	118	322	74	19%	24%	28%	19%	10%	47%	39%	54%	46%	50%	51%
EL in ELD and SDAIE	426	318	70	20%	27%	26%	17%	10%	46%	39%	52%	45%	50%	51%
EL in ELD and SDAIE with primary language support	262	322	70	18%	24%	29%	17%	11%	46%	42%	52%	48%	49%	50%
EL in ELD and academic subjects through primary language	516	329	67	15%	21%	30%	22%	11%	49%	46%	57%	49%	49%	47%
Other EL instructional services	35	336	71	9%	29%	23%	26%	14%	48%	41%	55%	52%	58%	53%
None (EL only)	30	299	62	23%	40%	20%	10%	7%	42%	31%	47%	44%	45%	38%
Program participation unknown	25	302	55	12%	36%	36%	12%	4%	39%	33%	53%	45%	44%	46%
No special education	1,362	324	69	17%	24%	28%	20%	11%	47%	42%	54%	48%	50%	49%
Special education	50	284	44	32%	34%	26%	8%	0%	36%	32%	47%	37%	37%	44%
Special education unknown	0	–	–	–	–	–	–	–	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster			
	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	2,891	26	10	45%	38%	43%	29%
Grade 7	13	25	14	40%	37%	40%	33%
Grade 8	450	24	9	42%	36%	41%	27%
Grade 9	1,370	25	9	43%	36%	42%	27%
Grade 10	751	28	10	50%	40%	47%	31%
Grade 11	307	27	10	50%	39%	45%	30%
Male	1,608	25	10	45%	37%	42%	29%
Female	1,278	27	10	46%	38%	45%	29%
Gender unknown	5	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–
Bolivia	4	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–
Colombia	17	25	10	44%	37%	45%	25%
Costa Rica	4	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–
Ecuador	8	–	–	–	–	–	–
El Salvador	407	24	9	40%	36%	39%	27%
Guatemala	182	23	8	41%	36%	39%	25%
Mexico	1,356	26	10	47%	38%	45%	29%
Nicaragua	17	25	8	43%	36%	44%	29%
Panama	1	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–
Peru	24	32	12	60%	42%	51%	38%
Puerto Rico	3	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–
United States	690	27	10	47%	38%	45%	31%
Uruguay	1	–	–	–	–	–	–
Venezuela	3	–	–	–	–	–	–
Other	68	22	8	37%	32%	37%	27%
Country unknown	88	23	9	41%	36%	38%	26%
Not economically disadvantaged	468	26	10	46%	38%	43%	30%
Economically disadvantaged	2,346	26	10	45%	37%	44%	28%
Economic status unknown	77	24	9	42%	33%	39%	26%
In U.S. schools < 12 months	2,322	26	10	45%	38%	44%	29%
In U.S. schools ≥ 12 months	569	25	9	45%	37%	42%	27%
EL in ELD	322	25	9	45%	37%	42%	28%
EL in ELD and SDAIE	1,044	26	10	46%	38%	43%	29%
EL in ELD and SDAIE with primary language support	680	26	10	45%	37%	44%	29%
EL in ELD and academic subjects through primary language	573	26	9	45%	37%	43%	28%
Other EL instructional services	145	27	9	47%	38%	47%	29%
None (EL only)	35	28	13	50%	42%	48%	31%
Program participation unknown	92	25	9	45%	37%	43%	27%

				Mean Percent Correct in Reporting Cluster			
	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	2,873	26	10	45%	38%	43%	29%
Special education	18	23	9	33%	37%	40%	26%
Special education unknown	0	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster			
	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	2,603	26	10	45%	38%	44%	29%
Grade 7	10	–	–	–	–	–	–
Grade 8	388	24	9	42%	37%	41%	28%
Grade 9	1,229	25	9	43%	36%	42%	28%
Grade 10	694	28	10	50%	40%	48%	31%
Grade 11	282	28	10	50%	40%	46%	30%
Male	1,445	25	10	44%	37%	42%	29%
Female	1,154	27	10	47%	39%	46%	29%
Gender unknown	4	–	–	–	–	–	–
Argentina	3	–	–	–	–	–	–
Bolivia	4	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–
Colombia	17	25	10	44%	37%	45%	25%
Costa Rica	4	–	–	–	–	–	–
Cuba	6	–	–	–	–	–	–
Ecuador	8	–	–	–	–	–	–
El Salvador	371	24	9	40%	36%	40%	27%
Guatemala	166	23	8	41%	35%	39%	26%
Mexico	1,208	27	10	47%	38%	45%	29%
Nicaragua	16	25	8	44%	36%	44%	28%
Panama	1	–	–	–	–	–	–
Paraguay	2	–	–	–	–	–	–
Peru	23	31	12	59%	40%	50%	37%
Puerto Rico	3	–	–	–	–	–	–
Spain	6	–	–	–	–	–	–
United States	628	27	10	47%	39%	45%	31%
Uruguay	1	–	–	–	–	–	–
Venezuela	3	–	–	–	–	–	–
Other	61	23	8	38%	32%	39%	27%
Country unknown	71	24	10	41%	37%	39%	27%
Not economically disadvantaged	448	26	10	46%	39%	44%	30%
Economically disadvantaged	2,099	26	10	45%	37%	44%	29%
Economic status unknown	56	24	8	43%	34%	40%	27%
In U.S. schools < 12 months	2,322	26	10	45%	38%	44%	29%
In U.S. schools ≥ 12 months	281	26	9	45%	38%	43%	28%
EL in ELD	289	26	9	45%	37%	44%	29%
EL in ELD and SDAIE	919	26	10	46%	38%	43%	29%
EL in ELD and SDAIE with primary language support	619	26	10	45%	38%	44%	29%
EL in ELD and academic subjects through primary language	573	26	9	45%	37%	43%	28%
Other EL instructional services	95	26	9	46%	36%	46%	31%
None (EL only)	29	29	13	51%	42%	50%	31%
Program participation unknown	79	25	8	44%	37%	43%	26%

				Mean Percent Correct in Reporting Cluster			
	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	2,588	26	10	45%	38%	44%	29%
Special education	15	22	7	33%	35%	37%	26%
Special education unknown	0	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster			
	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	495	29	11	52%	39%	40%	39%
Grade 8	1	–	–	–	–	–	–
Grade 9	98	27	11	48%	35%	39%	38%
Grade 10	223	29	11	53%	41%	40%	39%
Grade 11	173	29	10	53%	40%	42%	40%
Male	276	28	11	51%	39%	41%	39%
Female	219	29	10	53%	39%	40%	40%
Gender unknown	0	–	–	–	–	–	–
Argentina	0	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–
Colombia	2	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–
El Salvador	44	22	7	39%	29%	30%	33%
Guatemala	31	20	5	37%	27%	28%	25%
Mexico	250	31	11	55%	44%	44%	42%
Nicaragua	3	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–
Peru	2	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–
United States	129	30	10	56%	40%	41%	41%
Uruguay	0	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–
Other	8	–	–	–	–	–	–
Country unknown	16	26	12	48%	33%	39%	37%
Not economically disadvantaged	82	27	10	49%	35%	36%	40%
Economically disadvantaged	395	29	11	53%	41%	42%	40%
Economic status unknown	18	23	9	44%	33%	33%	29%
In U.S. schools < 12 months	299	29	11	53%	41%	43%	40%
In U.S. schools ≥ 12 months	196	27	10	51%	37%	37%	38%
EL in ELD	73	27	11	50%	36%	38%	40%
EL in ELD and SDAIE	129	28	11	51%	40%	41%	36%
EL in ELD and SDAIE with primary language support	63	30	11	54%	41%	45%	40%
EL in ELD and academic subjects through primary language	181	29	10	54%	40%	39%	41%
Other EL instructional services	30	30	9	56%	43%	41%	42%
None (EL only)	11	24	10	41%	32%	35%	38%
Program participation unknown	8	–	–	–	–	–	–

				Mean Percent Correct in Reporting Cluster			
	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	492	29	11	52%	39%	40%	39%
Special education	3	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–

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

				Mean Percent Correct in Reporting Cluster			
	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	423	29	11	52%	40%	41%	40%
Grade 8	0	–	–	–	–	–	–
Grade 9	83	26	11	46%	35%	39%	39%
Grade 10	193	29	11	54%	41%	40%	40%
Grade 11	147	30	10	54%	41%	43%	41%
Male	238	29	11	51%	40%	41%	39%
Female	185	29	10	54%	39%	40%	41%
Gender unknown	0	–	–	–	–	–	–
Argentina	0	–	–	–	–	–	–
Bolivia	2	–	–	–	–	–	–
Brazil	0	–	–	–	–	–	–
Chile	0	–	–	–	–	–	–
Colombia	2	–	–	–	–	–	–
Costa Rica	0	–	–	–	–	–	–
Cuba	3	–	–	–	–	–	–
Ecuador	2	–	–	–	–	–	–
El Salvador	32	22	7	39%	30%	31%	34%
Guatemala	26	20	5	35%	28%	30%	26%
Mexico	219	31	11	55%	43%	44%	42%
Nicaragua	2	–	–	–	–	–	–
Panama	1	–	–	–	–	–	–
Paraguay	0	–	–	–	–	–	–
Peru	2	–	–	–	–	–	–
Puerto Rico	0	–	–	–	–	–	–
Spain	2	–	–	–	–	–	–
United States	114	30	10	56%	40%	41%	41%
Uruguay	0	–	–	–	–	–	–
Venezuela	0	–	–	–	–	–	–
Other	7	–	–	–	–	–	–
Country unknown	9	–	–	–	–	–	–
Not economically disadvantaged	77	27	10	48%	34%	36%	39%
Economically disadvantaged	343	29	11	53%	41%	42%	40%
Economic status unknown	3	–	–	–	–	–	–
In U.S. schools < 12 months	299	29	11	53%	41%	43%	40%
In U.S. schools ≥ 12 months	124	28	9	51%	37%	36%	40%
EL in ELD	60	29	12	51%	37%	40%	43%
EL in ELD and SDAIE	98	28	10	51%	40%	42%	36%
EL in ELD and SDAIE with primary language support	49	31	11	54%	43%	47%	44%
EL in ELD and academic subjects through primary language	181	29	10	54%	40%	39%	41%
Other EL instructional services	16	29	8	54%	43%	41%	36%
None (EL only)	11	24	10	41%	32%	35%	38%
Program participation unknown	8	–	–	–	–	–	–

				Mean Percent Correct in Reporting Cluster			
	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	421	29	11	52%	40%	41%	40%
Special education	2	–	–	–	–	–	–
Special education unknown	0	–	–	–	–	–	–

Appendix 7.C—Types of Score Reports

Table 7.C.1 Score Reports Reflecting STS Results

2012 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 eight through eleven RLA and EOC Algebra I and Geometry, the report shows percent correct for each content area and reporting cluster (instead of performance levels) within the content area. For grades two through seven only (but not for Algebra I), data presented include the following: • 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	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 distributed by the school district to parents/ guardians. Because students who take the STS must also take the grade-level CSTs or CMA, those students will likely receive two or as many as three Student Reports.
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 scores • Performance levels (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.
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): • Percent correct for each reporting cluster within each content area tested • A scale score and a performance level 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. It is recommended that Student Master List reports be retained until the grade level exits the school.

2012 STAR STS Printed Reports	
Description	**Distribution**
For the STS for RLA in grades eight through eleven and EOC Algebra I and Geometry, the percent correct for each content area tested as well as the percent correct for each reporting cluster are presented.	
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 for mathematics across grades are provided in the Student Master List Summary—End-of-Course report. For each content area tested, the following data are summarized: • 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 the STS, the number of items and mean percent correct for each reporting cluster 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. It is recommended that Student Master List reports be retained until the grade level exits the school.
Student Master List Summary—End-of-Course	
This report summarizes Student Master List information for the end-of-course STS for Algebra I, administered to students in grades seven through eleven, and Geometry, administered to students in grades eight through eleven, at the school, district, county, and state levels. It does not include any individual student information. For each of these STS, the following data are summarized by grade and content area: • Number of students enrolled • Number and percent of students tested • Number and percent of valid scores • Number tested with scores • Mean percent correct For each reporting cluster: • Number of items • Mean percent correct	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. It is recommended that Student Master List reports be retained until the grade level exits the school.

2012 STAR STS Printed Reports	
Description	**Distribution**
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 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. It is recommended that Student Master List reports be retained until the grade level exits the school.

Chapter 8: Analyses

This chapter summarizes the item- and test-level statistics obtained for the STS administered during the spring of 2012.

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 on page 240 presents the classical item analyses including proportion-correct value (*p*-value) and point-biserial correlation (Pt-Bis) for each item in each operational test. In addition, the average and median *p*-value and Pt-Bis for each operational test are presented in Table 8.1 on page 218.
2. Appendix 8.B on page 247 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 on page 274 presents tables showing the correlation between scores obtained on the STS measured in the different content areas, which are provided as an example of the evidence of the 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 on page 290 presents the results of IRT analyses including the distribution of items based on their fit to the Rasch model and the summaries of Rasch item difficulty statistics (*b*-values) for the operational and field-test items. In addition, the appendix presents the scoring tables for the 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 235; these linking items were used in the equating process discussed later in this chapter.
5. Appendix 8.E on page 304 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 the P2 data file. This data

file contained all test results except for the corrected demographic information (CDE, 2012) which only affected a few examinees.

Following the *Standards for Educational and Psychological Testing* (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 1999, Standard 6.4), the results of the classical item analyses and reliability analyses for the EOC mathematics tests in Algebra I and Geometry are also presented for the grade-specific population in addition to the overall target population. “Grade-specific population” refers to test-takers in the particular grade for which the course has been recommended by the SBE, that is, in grade eight for Algebra I and grade nine for Geometry. 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.

The raw-to-scale score conversion tables presented in Appendix 8.D were based on equating data available in early June 2012, which contained more than 30 percent of the test results for the target population.

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 attempted the item

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:

$$r_{X_iT} = \frac{\mathrm{cov}(X_i, T)}{s_{X_i} s_T} \tag{8.2}$$

where,

$cov(X_i, T)$ is the covariance between the score of item *i* and total score T,

s_{X_i} is the standard deviation for the score of item i, and

s_T is the standard deviation for total score T.

The classical statistics for the overall test are presented in Table 8.1, on the next page. The item-by-item values for the indices are presented in Table 8.A.1 through Table 8.A.3, which start on page 240.

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	10,628	0.64	0.45	0.62	0.46
	3	65	6,770	0.61	0.41	0.61	0.41
	4	75	4,431	0.59	0.40	0.60	0.42
	5	75	2,875	0.52	0.39	0.53	0.39
	6	75	1,768	0.52	0.37	0.52	0.36
	7	75	1,456	0.56	0.37	0.56	0.38
	8	75	1,070	0.54	0.37	0.52	0.38
	9	75	1,987	0.55	0.38	0.54	0.38
	10	75	1,251	0.58	0.34	0.58	0.35
	11	75	718	0.53	0.33	0.55	0.36
Mathematics	2	65	10,621	0.70	0.41	0.71	0.42
	3	65	6,775	0.68	0.44	0.67	0.46
	4	65	4,430	0.65	0.43	0.66	0.43
	5	65	2,872	0.54	0.40	0.53	0.41
	6	65	1,759	0.51	0.38	0.50	0.39
	7	65	1,412	0.48	0.35	0.49	0.36
	Algebra I	65	2,603	0.40	0.31	0.39	0.32
	Geometry	65	423	0.45	0.34	0.43	0.38
Grade Specific	Algebra I – 8	65	388	0.38	0.30	0.37	0.32
	Geometry – 9	65	83	0.41	0.34	0.40	0.36

* STS 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 distribution 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 as measured by Cronbach's Alpha (Cronbach, 1951) is defined by equation 8.3:

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

where,

n is the number of items,

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

s_t^2 is the variance of the total score.

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

$$s_e = s_t\sqrt{1-\alpha} \tag{8.4}$$

where,

α is the reliability estimated in equation 8.3, and

s_t is the standard deviation of the total score (either the total raw score or scale score).

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 ±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 ± 3.76 rounded to the nearest integer).

Table 8.2 gives the reliability and SEM for each of the 18 operational STS, along with the number of items and examinees upon which those analyses were performed. The results for the grade-specific population for the EOC Algebra I and Geometry STS are also presented in this table.

Table 8.2 Reliabilities and SEMs for the STS

Content Area	STS *	Test Length	No. Examinees	Reliab.	Scale Score Mean	Scale Score SD	Scale Score SEM	Raw Score Mean	Raw Score SD	Raw Score SEM
Reading/ Language Arts	2	65	10,628	0.94	333	57	14.31	41.51	13.50	3.38
	3	65	6,770	0.92	335	55	15.26	39.70	12.45	3.47
	4	75	4,431	0.93	327	53	14.03	44.23	14.30	3.78
	5	75	2,875	0.92	323	63	17.38	39.23	14.09	3.91
	6	75	1,768	0.91	325	61	17.89	39.09	13.41	3.95
	7	75	1,456	0.92	330	56	16.19	41.95	13.40	3.87
	8 †	75	1,070	0.91	–	–	–	40.76	13.11	3.89
	9 †	75	1,987	0.92	–	–	–	41.53	13.29	3.82
	10 †	75	1,251	0.89	–	–	–	43.73	11.84	3.85
	11 †	75	718	0.89	–	–	–	39.54	11.98	3.92
Mathematics	2	65	10,621	0.92	363	75	20.71	45.23	11.75	3.27
	3	65	6,775	0.94	366	75	18.92	43.89	12.86	3.26
	4	65	4,430	0.93	365	76	19.85	42.28	12.79	3.36
	5	65	2,872	0.92	356	94	26.71	34.79	12.58	3.56
	6	65	1,759	0.91	331	79	23.68	33.18	11.99	3.61
	7	65	1,412	0.89	323	69	22.97	31.28	11.11	3.70
	Algebra I †	65	2,603	0.86	–	–	–	25.91	9.71	3.63
	Geometry †	65	423	0.88	–	–	–	28.93	10.64	3.63

Content Area	STS *	Test Length	No. Examinees	Reliab.	Scale Score Mean	Scale Score SD	Scale Score SEM	Raw Score Mean	Raw Score SD	Raw Score SEM
Grade-Specific	Algebra I – 8 †	65	388	0.84	–	–	–	24.47	9.16	3.65
	Geometry – 9 †	65	83	0.89	–	–	–	26.48	10.79	3.62

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

† Scale scores were not reported for RLA grades eight through eleven, Algebra I, and Geometry for the spring 2012 administration. Scores for these tests were reported as a percent correct.

Intercorrelations, Reliabilities, and SEMs for Reporting Clusters

For each STS, number-correct scores are computed for four to six reporting clusters. The number of items within each reporting cluster is limited and cluster scores alone should not be used in making inferences about individual students.

Intercorrelations and reliability estimates for the reporting clusters for the total group are presented in Table 8.B.1 and Table 8.B.2 starting on page 247. Results are also reported in these tables for grade-specific samples of the EOC Algebra I and Geometry tests. Consistent with results from previous years, the reliabilities across reporting clusters varied according to the number of items in each cluster.

Subgroup Reliabilities and SEMs

The reliabilities of the 18 operational STS 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 SEM information for the total test scores and the reporting cluster scores are reported for each subgroup analysis. Table 8.B.3 through Table 8.B.7 present the overall test reliabilities for the various subgroups. Table 8.B.8 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 hyphens. Finally, results based on samples that contain 50 or fewer examinees should be interpreted with caution due to small sample sizes.

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 IRT 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:

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

where,

$CSEM(\hat{\theta})$ is the standard error of measurement, and

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

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 content area.

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

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 scores are available. Note that scale score CSEMs are not provided for the STS for RLA in grades eight through eleven, Algebra I, and Geometry because scale scores were not reported for these tests in the spring 2012 administration.

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	12	350	14	386	17
	3	251	15	300	14	350	15	393	18
	4	256	14	300	13	350	14	387	16
	5	271	17	300	16	350	17	401	19
	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	22
	4	243	19	300	17	350	18	420	22
	5	245	27	300	25	350	25	416	26
	6	251	23	300	22	350	22	403	23
	7	257	23	300	22	350	21	415	24

* STS 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 following 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 following question: What is the agreement between the classifications based on two nonoverlapping, 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.

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	Misclassification
	Achieves a performance level	Misclassification	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	Misclassification
	Achieves a performance level	Misclassification	Correct classification

The results of these analyses for the STS in grades two through seven are presented in Table 8.B.17 through Table 8.B.28 in Appendix 8.B. It should be noted that 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 reported for these tests in the spring 2012 administration.

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 involves more than a single study or gathering one particular kind of 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, followed by a description and discussion of the kinds of validity evidence that have 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 STS, administered 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 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.

Interpretations and Uses of the Scores Generated

Total test scores expressed as scale scores and student performance levels are generated for the STS in grades two through seven. The total test scale score is used to draw inferences about a student's achievement in the content area and to classify the achievement into one of five performance levels: advanced, proficient, basic, below basic, and far below basic. For the STS for RLA in grades eight through eleven, Algebra I in grades seven through eleven, and Geometry in grades eight through eleven, students' total scores were expressed in the raw score metric and no performance levels were reported.

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 on the total test 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, minus one percent. A detailed description of the uses and applications of STS scores is presented in Chapter 7, which starts on page 157.

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 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. Only those students whose parents/guardians have submitted written requests to exempt them from STAR Program testing do not take the tests.

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 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, starting on page 101. 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. 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.

Item development process— A detailed description of the item development process for the STS is presented in Chapter 3, starting on page 101.

Item review process—Chapter 3 explains in detail the extensive item review process applied to items written for use in the STS. In brief, items written for the STS 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. Additional targets for item difficulty and discrimination that are used for test construction were defined in light of what are desirable statistical characteristics in test items and statistical evaluations of the STS items.

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 112.

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 the 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 scores 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 for which sufficient student samples were available.

The results of the DIF analyses are presented in Appendix 8.E, which starts on page 304. 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 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 and/or CMA at their grade level; both tests measure the same California content standards.

The convergent validity evidence was collected using data from the 2012 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 the associated CSTs 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 2012 STS tests for RLA and the scores on the CSTs for ELA. For the CST for ELA in grades four and seven, only multiple-choice questions are included for the analysis. 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 and CMA 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	12,927	12,770	0.78	10,628	10,500	0.78
3	7,987	7,883	0.73	6,770	6,679	0.73
4	5,188	5,059	0.68	4,431	4,314	0.67
5	3,620	3,535	0.61	2,875	2,799	0.60
6	2,053	1,980	0.45	1,768	1,702	0.46
7	1,620	1,545	0.51	1,456	1,389	0.51
8	1,248	1,200	0.44	1,070	1,029	0.46
9	2,294	2,122	0.43	1,987	1,834	0.49
10	1,387	1,294	0.56	1,251	1,168	0.58
11	813	752	0.56	718	665	0.58

Table 8.5, on the next page, presents correlations between scores on 2012 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 the same standards. 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	12,919	12,777	0.87	10,621	10,506	0.87
3	7,988	7,884	0.88	6,775	6,683	0.88
4	5,187	5,076	0.87	4,430	4,332	0.88
5	3,618	3,538	0.87	2,872	2,800	0.87
6	2,040	1,970	0.83	1,759	1,696	0.83
7	1,565	1,494	0.82	1,412	1,350	0.81
Algebra I	2,891	2,558	0.78	2,603	2,301	0.78
Geometry	495	464	0.83	423	399	0.82

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

Correlations Between Content-area Test Scores

To the degree that students' content-area test scores correlate as expected, evidence of the validity in regarding those scores as measures of the intended constructs is provided. Table 8.6 on the next page provides the correlations between scores on the 2012 STS content-area tests and the numbers of students on which these correlations were based. Sample sizes for individual tests are shown in bold font 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 are based on all students in the STS target population with valid STS scores and are provided by grade to account for different course-taking patterns in the upper grades.

Results for these students 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 test score 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, while the correlations are reported only for samples that comprise 11 or more examinees, results based on samples that contain 50 or fewer examinees should be interpreted with caution due to small sample sizes. Correlations between scores on any two content area tests where 10 or fewer examinees took the tests are expressed as hyphens. Correlations between scores on two content area tests that cannot be administered together to the same group of students 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." refers to "1. Reading/Language Arts" and "2." refers to "2. Mathematics").

Table 8.6 STS Content-area Correlations (Target Valid Scores)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**10,628**	0.74	
	2. Mathematics	10,575	**10,621**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**6,770**	0.77	
	2. Mathematics	6,748	**6,775**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**4,431**	0.71	
	2. Mathematics	4,415	**4,430**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**2,875**	0.65	
	2. Mathematics	2,866	**2,872**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**1,768**	0.67	
	2. Mathematics	1,756	**1,759**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**1,456**	0.67	–
	2. Mathematics	1,409	**1,412**	N/A
	3. Algebra I	10	N/A	**10**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**1,070**	0.51	
	2. Algebra I	385	**388**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**1,987**	0.57	0.6
	2. Algebra I	1,216	**1,229**	N/A
	3. Geometry	80	N/A	**83**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**1,251**	0.54	0.6
	2. Algebra I	686	**694**	N/A
	3. Geometry	190	N/A	**193**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**718**	0.57	0.7
	2. Algebra I	281	**282**	N/A
	3. Geometry	141	N/A	**147**

Correlations between the reporting cluster scores are presented in Table 8.B.1 and Table 8.B.2 for the 18 STS 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 correlations ranged between 0.51 and 0.77. As also would be expected, the correlations 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 APA, AERA, 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* (AERA, APA, & NCME, 1999), 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 the 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 studying this aspect of the construct. 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. As shown in Table 8.1, the mean point-biserial was greater than 0.40 for STS in grades two through four and between 0.33 and 0.40 for all other tests. The exception was the EOC mathematics STS for Algebra I, where the mean point-biserial was 0.31. The point biserials for the individual items in the STS are presented in Table 8.A.1 through Table 8.A.3.

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 IRT difficulty indicator *b*-values are given in Table 8.D.23 and Table 8.D.24 for operational items.

The data in Table 8.1 indicate that all STS, with the exception of the EOC mathematics tests, had *p*-values with means ranging from 0.48 to 0.70. The *p*-values for the EOC mathematics tests tend to be somewhat lower as compared with other tests. Taken together with the distribution of item *b*-values provided in Table 8.D.23 and Table 8.D.24, these results indicate a broad range of item difficulty that spanned the ability scale.

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 in grades two through nine and for mathematics tests in grades two through six were relatively high, ranging from 0.91 to 0.94. Reliability estimates for RLA in grades ten and eleven and the mathematics tests given in grades seven or higher were lower—ranging from 0.86 to 0.89.

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 for the 18 operational STS. The reliabilities of reporting clusters invariably are lower than those for the total tests since they are based on fewer items. Consistent with the findings of previous years, the cluster reliabilities also are affected by the number of items in each cluster, with cluster scores based on fewer items having somewhat lower reliabilities than cluster scores based on more items.

Because the reliabilities of scores at the cluster level are lower, schools supplement the score results with other information when interpreting the results.

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.

Reliability of performance classifications—The methodology used for estimating the reliability of classification decisions is described in the section “Decision Classification Analyses” on page 221. The results of these analyses are presented for the STS for which the performance levels were reported. These results are presented in Table 8.B.17 through Table 8.B.28 in Appendix 8.B; these tables start on page 270. 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 ranged from 0.92 to 0.93 for all the STS 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.

IRT Analyses

The STS 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 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 2012 items were placed on the reference scale through a set of linking items that appeared in the 2011 operational forms and were readministered in 2012.

The procedures used for equating the grade-level STS 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).

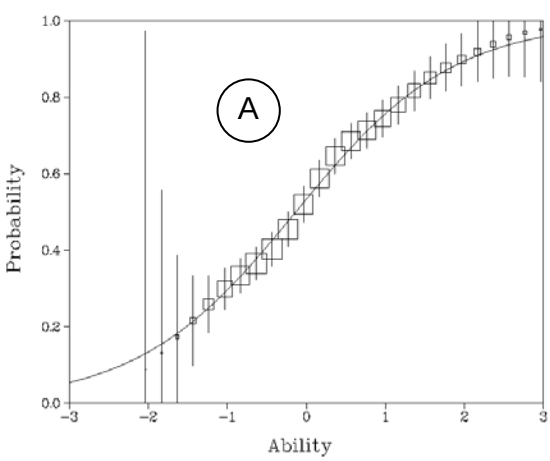
For the STS for RLA tests in grades eight through eleven and the EOC mathematics STS for Algebra I and Geometry (grades seven through eleven and eight through eleven, respectively), no scale scores were reported and, therefore, no equating procedure was implemented in 2012. The only IRT analyses for these tests were item calibrations and scaling to obtain item difficulty estimates.

The details on all equating procedures are presented in Chapter 2 starting on page 15.

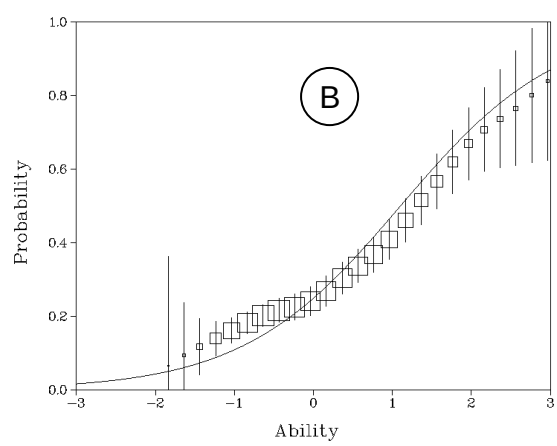
IRT Model-Data Fit Analyses

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 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 page 233. 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, along with the corresponding rating categories.

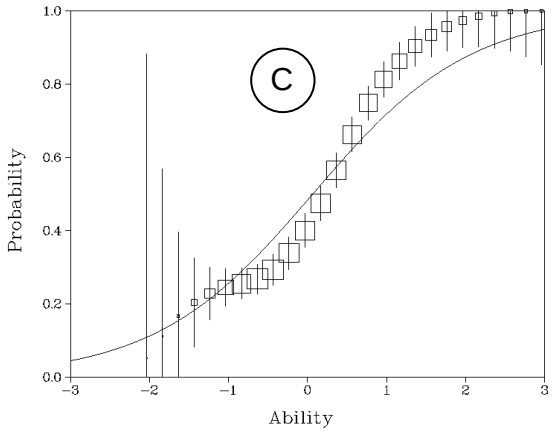
Figure 8.3 Items from the 2005 CST for History–Social Science Grade Ten Field-test Calibration



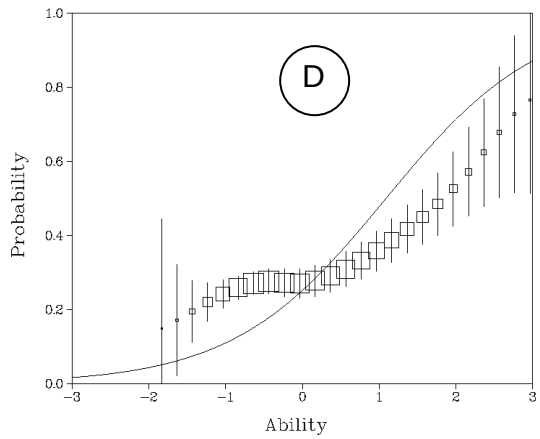
Version 30, Seq 29 (#236) CSV23487 4-Choice P+ = 0.563
a = 0.588 F, b = –0.135, c = 0.000 F, CHI = 5.41, N = 5,912



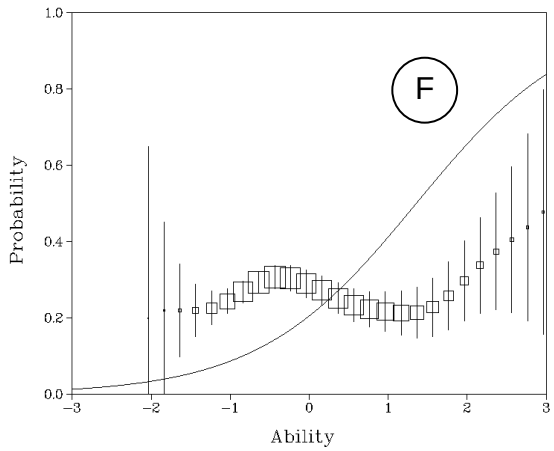
Version 1, Seq 28 (#61) CSV22589 4 Choice P+ = 0.307
a = 0.588 F, b = 1.104, c = 0.000 F, CHI = 66.70, N = 6,348



Version 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 number of the operational items in each IRT model-data fit classification is presented in Table 8.D.1 and Table 8.D.2, which start on page 290. The fit classification information for the field-test items are presented in Table 8.D.3 and Table 8.D.4, which start on page 290.

Evaluation of Scaling

Calibrations of the 2012 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 in grades two through seven. Details on the scaling procedures are provided on page 15 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 (WRMSDs) 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, on the next page, presents, for each grade-level STS in grades two through seven, the number of linking items between the 2012 (new) and the test form to which it was linked (2011); 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	51	0	0.98	0.03
	3	51	0	0.99	0.02
	4	56	0	0.99	0.02
	5	52	0	0.99	0.02
	6	62	0	0.98	0.02
	7	63	0	0.98	0.02
Mathematics	2	52	0	0.98	0.03
	3	52	0	0.99	0.03
	4	52	0	0.99	0.02
	5	43	0	0.97	0.03
	6	53	0	0.99	0.02
	7	51	0	0.98	0.02

* STS 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, 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.

Table 8.D.5 through Table 8.D.22 present univariate statistics (mean, standard deviation, minimum, and maximum) for the scaled IRT *b*-values based on the FIA samples. 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 “greater than or equal to 3.5” to “less than –3.5” points within each interval.

Post-equating Results

As described on page 15 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 2012 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 2012 STS in grades two through seven are presented in Table 8.D.27 through Table 8.D.32 starting on page 298. The raw scores and corresponding transformed scale scores are listed on those tables. The scale 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 17.

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 the DIF analyses were 100 in the focal group and 400 in the combined focal and reference groups. These sample sizes 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 following:

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 in:

fm = focal group at ability m,

rm = reference group at ability m, and

tm = total group at ability 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 15 years. The definitions of the categories based on evaluations of the item-level MH D-DIF statistics are 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, which starts on page 304.

Table 8.E.1 on page 304 lists the operational items exhibiting significant DIF (C-DIF). Table 8.E.2 on the same page 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	0.91	0.29	0.92	0.39	0.52	0.45	0.70	0.35	0.62	0.33	0.64	0.26	0.52	0.36	0.37	0.23	0.58	0.34	0.43	0.30
2	0.76	0.49	0.80	0.49	0.69	0.43	0.67	0.34	0.42	0.23	0.72	0.43	0.48	0.42	0.43	0.25	0.79	0.28	0.67	0.39
3	0.31	0.25	0.92	0.28	0.70	0.46	0.56	0.26	0.65	0.40	0.71	0.25	0.77	0.41	0.73	0.24	0.54	0.33	0.48	0.21
4	0.73	0.45	0.51	0.27	0.61	0.40	0.46	0.30	0.68	0.35	0.52	0.33	0.65	0.33	0.40	0.32	0.79	0.27	0.65	0.20
5	0.71	0.31	0.74	0.46	0.45	0.36	0.55	0.47	0.65	0.33	0.59	0.42	0.51	0.29	0.41	0.29	0.62	0.39	0.47	0.20
6	0.60	0.33	0.63	0.47	0.67	0.52	0.52	0.39	0.63	0.40	0.74	0.43	0.48	0.32	0.27	0.37	0.62	0.35	0.69	0.37
7	0.82	0.46	0.39	0.32	0.80	0.46	0.46	0.29	0.49	0.33	0.32	0.35	0.53	0.46	0.82	0.38	0.46	0.23	0.51	0.32
8	0.76	0.52	0.60	0.41	0.77	0.35	0.34	0.26	0.47	0.34	0.77	0.42	0.73	0.39	0.77	0.42	0.48	0.36	0.65	0.41
9	0.67	0.43	0.74	0.41	0.70	0.43	0.73	0.42	0.41	0.39	0.74	0.44	0.74	0.44	0.58	0.31	0.73	0.33	0.70	0.35
10	0.80	0.53	0.86	0.45	0.69	0.50	0.56	0.50	0.59	0.35	0.49	0.40	0.48	0.37	0.84	0.44	0.71	0.48	0.38	0.23
11	0.47	0.36	0.71	0.48	0.70	0.44	0.68	0.53	0.65	0.45	0.48	0.28	0.49	0.23	0.77	0.47	0.54	0.43	0.70	0.47
12	0.91	0.42	0.50	0.39	0.62	0.37	0.54	0.50	0.58	0.45	0.68	0.38	0.72	0.30	0.84	0.51	0.56	0.34	0.25	0.07
13	0.62	0.48	0.66	0.40	0.69	0.46	0.65	0.48	0.59	0.49	0.39	0.40	0.70	0.31	0.49	0.32	0.82	0.43	0.75	0.15
14	0.63	0.54	0.53	0.30	0.60	0.46	0.48	0.42	0.70	0.36	0.51	0.49	0.58	0.25	0.48	0.29	0.73	0.35	0.65	0.45
15	0.64	0.53	0.79	0.36	0.52	0.35	0.60	0.42	0.49	0.26	0.60	0.37	0.45	0.26	0.40	0.28	0.49	0.21	0.56	0.12
16	0.62	0.47	0.54	0.42	0.51	0.31	0.41	0.23	0.52	0.34	0.54	0.36	0.42	0.38	0.79	0.38	0.84	0.45	0.38	0.35
17	0.68	0.38	0.32	0.19	0.73	0.48	0.48	0.53	0.67	0.46	0.76	0.42	0.53	0.37	0.54	0.40	0.35	0.40	0.43	0.17
18	0.78	0.35	0.66	0.56	0.78	0.48	0.33	0.31	0.66	0.46	0.55	0.42	0.56	0.49	0.61	0.47	0.43	0.25	0.80	0.53
19	0.66	0.47	0.61	0.46	0.65	0.42	0.58	0.52	0.53	0.44	0.54	0.35	0.34	0.21	0.32	0.19	0.77	0.47	0.36	0.35
20	0.73	0.57	0.52	0.34	0.54	0.40	0.44	0.34	0.52	0.40	0.39	0.27	0.74	0.43	0.29	0.24	0.69	0.35	0.55	0.37
21	0.80	0.45	0.44	0.29	0.51	0.35	0.42	0.38	0.54	0.43	0.56	0.36	0.42	0.48	0.71	0.46	0.66	0.45	0.57	0.42
22	0.62	0.45	0.56	0.38	0.55	0.47	0.36	0.28	0.36	0.25	0.51	0.17	0.63	0.49	0.64	0.38	0.32	0.17	0.52	0.29
23	0.56	0.50	0.72	0.43	0.49	0.32	0.39	0.34	0.42	0.41	0.37	0.30	0.46	0.29	0.70	0.57	0.72	0.44	0.42	0.32
24	0.59	0.47	0.57	0.53	0.36	0.27	0.56	0.37	0.53	0.37	0.60	0.55	0.37	0.38	0.59	0.34	0.65	0.36	0.41	0.22
25	0.60	0.47	0.56	0.45	0.50	0.42	0.38	0.43	0.61	0.40	0.58	0.46	0.66	0.39	0.82	0.52	0.72	0.43	0.47	0.25
26	0.66	0.45	0.61	0.44	0.55	0.40	0.42	0.39	0.44	0.32	0.44	0.34	0.60	0.54	0.42	0.31	0.53	0.33	0.49	0.46
27	0.63	0.47	0.64	0.43	0.62	0.52	0.41	0.34	0.56	0.42	0.43	0.31	0.43	0.30	0.82	0.48	0.90	0.37	0.35	0.24
28	0.43	0.27	0.62	0.46	0.53	0.38	0.54	0.45	0.42	0.24	0.72	0.49	0.71	0.41	0.57	0.43	0.88	0.41	0.46	0.25
29	0.79	0.51	0.51	0.36	0.68	0.54	0.47	0.31	0.56	0.48	0.47	0.37	0.49	0.42	0.54	0.45	0.43	0.29	0.56	0.50
30	0.81	0.49	0.82	0.41	0.71	0.53	0.36	0.41	0.45	0.27	0.50	0.34	0.60	0.48	0.58	0.41	0.36	0.27	0.24	0.11
31	0.59	0.49	0.76	0.49	0.65	0.54	0.50	0.41	0.51	0.36	0.45	0.38	0.54	0.32	0.50	0.37	0.55	0.31	0.50	0.14
32	0.63	0.47	0.74	0.39	0.63	0.39	0.39	0.25	0.30	0.22	0.57	0.49	0.28	0.28	0.40	0.32	0.44	0.21	0.33	0.17

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
33	0.64	0.44	0.63	0.47	0.22	0.06	0.37	0.36	0.43	0.35	0.62	0.34	0.33	0.32	0.46	0.34	0.70	0.38	0.30	0.15
34	0.48	0.46	0.74	0.29	0.56	0.39	0.49	0.45	0.45	0.28	0.58	0.50	0.35	0.33	0.61	0.51	0.58	0.28	0.62	0.40
35	0.56	0.37	0.34	0.27	0.39	0.22	0.50	0.54	0.37	0.27	0.39	0.19	0.51	0.45	0.47	0.34	0.60	0.40	0.46	0.42
36	0.59	0.44	0.41	0.37	0.58	0.26	0.56	0.40	0.26	0.13	0.47	0.36	0.45	0.43	0.70	0.44	0.72	0.49	0.74	0.46
37	0.80	0.50	0.37	0.31	0.86	0.42	0.67	0.50	0.41	0.29	0.65	0.47	0.49	0.40	0.74	0.45	0.63	0.40	0.52	0.38
38	0.51	0.44	0.53	0.45	0.88	0.45	0.57	0.45	0.63	0.39	0.46	0.30	0.36	0.35	0.46	0.31	0.40	0.32	0.42	0.33
39	0.56	0.43	0.32	0.33	0.76	0.46	0.51	0.39	0.46	0.36	0.62	0.36	0.48	0.36	0.37	0.33	0.82	0.45	0.70	0.36
40	0.55	0.44	0.61	0.46	0.66	0.41	0.84	0.36	0.49	0.51	0.70	0.35	0.78	0.45	0.53	0.40	0.66	0.44	0.69	0.41
41	0.80	0.40	0.70	0.49	0.74	0.40	0.73	0.30	0.67	0.31	0.77	0.38	0.27	0.13	0.43	0.25	0.38	0.27	0.64	0.26
42	0.79	0.54	0.68	0.52	0.78	0.41	0.74	0.45	0.56	0.42	0.56	0.40	0.61	0.26	0.48	0.32	0.60	0.03	0.28	0.09
43	0.73	0.53	0.68	0.36	0.51	0.35	0.64	0.44	0.48	0.40	0.54	0.38	0.71	0.38	0.43	0.21	0.71	0.41	0.64	0.40
44	0.69	0.54	0.60	0.50	0.70	0.50	0.56	0.37	0.51	0.38	0.56	0.46	0.44	0.29	0.48	0.35	0.62	0.27	0.88	0.45
45	0.59	0.48	0.58	0.31	0.62	0.45	0.57	0.35	0.47	0.31	0.70	0.38	0.52	0.25	0.31	0.20	0.64	0.43	0.43	0.33
46	0.62	0.44	0.66	0.48	0.49	0.37	0.75	0.45	0.41	0.30	0.26	0.00	0.42	0.22	0.65	0.48	0.54	0.34	0.55	0.45
47	0.42	0.29	0.52	0.36	0.32	0.27	0.48	0.30	0.86	0.43	0.49	0.37	0.84	0.43	0.77	0.42	0.51	0.38	0.58	0.32
48	0.46	0.34	0.53	0.53	0.60	0.42	0.53	0.23	0.52	0.33	0.70	0.43	0.52	0.39	0.60	0.39	0.68	0.44	0.60	0.39
49	0.58	0.47	0.72	0.46	0.60	0.39	0.54	0.43	0.36	0.38	0.83	0.39	0.39	0.28	0.68	0.38	0.44	0.32	0.55	0.47
50	0.77	0.55	0.64	0.37	0.35	0.15	0.49	0.36	0.62	0.42	0.69	0.34	0.53	0.29	0.60	0.44	0.54	0.30	0.60	0.51
51	0.63	0.42	0.55	0.42	0.37	0.30	0.55	0.37	0.51	0.32	0.65	0.48	0.53	0.34	0.51	0.33	0.40	0.23	0.63	0.36
52	0.48	0.35	0.79	0.55	0.56	0.45	0.69	0.42	0.66	0.51	0.35	0.38	0.85	0.39	0.71	0.41	0.55	0.27	0.44	0.29
53	0.44	0.47	0.57	0.32	0.69	0.51	0.33	0.28	0.47	0.32	0.74	0.43	0.53	0.34	0.38	0.33	0.42	0.25	0.55	0.37
54	0.73	0.53	0.75	0.53	0.70	0.44	0.57	0.32	0.57	0.38	0.68	0.49	0.39	0.37	0.63	0.33	0.55	0.46	0.44	0.28
55	0.62	0.49	0.49	0.36	0.52	0.52	0.65	0.42	0.55	0.42	0.64	0.41	0.51	0.46	0.48	0.43	0.35	0.24	0.62	0.41
56	0.55	0.46	0.45	0.33	0.52	0.44	0.50	0.34	0.52	0.36	0.76	0.41	0.78	0.44	0.45	0.27	0.50	0.37	0.45	0.43
57	0.59	0.46	0.56	0.41	0.54	0.44	0.68	0.48	0.45	0.29	0.41	0.32	0.76	0.38	0.64	0.46	0.40	0.41	0.22	0.30
58	0.68	0.54	0.60	0.54	0.63	0.48	0.56	0.26	0.52	0.52	0.49	0.48	0.63	0.38	0.54	0.41	0.58	0.40	0.63	0.49
59	0.59	0.40	0.74	0.55	0.36	0.31	0.59	0.49	0.40	0.36	0.43	0.28	0.62	0.51	0.68	0.35	0.79	0.35	0.42	0.44
60	0.69	0.46	0.62	0.41	0.58	0.28	0.58	0.39	0.40	0.29	0.50	0.45	0.68	0.43	0.27	0.32	0.71	0.33	0.69	0.41
61	0.61	0.55	0.54	0.55	0.36	0.28	0.51	0.40	0.45	0.35	0.51	0.39	0.62	0.50	0.52	0.38	0.34	0.25	0.63	0.43
62	0.62	0.54	0.55	0.25	0.60	0.44	0.42	0.43	0.65	0.50	0.60	0.41	0.46	0.35	0.50	0.47	0.34	0.22	0.56	0.37
63	0.46	0.38	0.75	0.54	0.71	0.48	0.54	0.38	0.55	0.38	0.67	0.43	0.61	0.40	0.78	0.42	0.88	0.40	0.56	0.33
64	0.59	0.51	0.43	0.30	0.41	0.36	0.55	0.35	0.63	0.45	0.65	0.51	0.46	0.33	0.73	0.53	0.75	0.43	0.38	0.30
65	0.58	0.40	0.55	0.46	0.72	0.48	0.31	0.31	0.42	0.32	0.41	0.37	0.54	0.39	0.66	0.41	0.59	0.28	0.70	0.51
66					0.36	0.28	0.54	0.49	0.64	0.46	0.77	0.33	0.69	0.46	0.50	0.44	0.28	0.23	0.40	0.23
67					0.56	0.44	0.33	0.26	0.70	0.41	0.60	0.47	0.56	0.36	0.49	0.42	0.61	0.36	0.73	0.49

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**
68					0.50	0.42	0.64	0.52	0.49	0.34	0.36	0.26	0.38	0.37	0.41	0.39	0.66	0.47	0.53	0.39
69					0.62	0.42	0.53	0.42	0.58	0.51	0.40	0.25	0.46	0.40	0.61	0.50	0.38	0.29	0.54	0.47
70					0.64	0.43	0.43	0.45	0.66	0.48	0.48	0.45	0.43	0.30	0.63	0.51	0.65	0.36	0.51	0.41
71					0.63	0.46	0.53	0.34	0.32	0.23	0.56	0.41	0.49	0.40	0.31	0.32	0.55	0.34	0.72	0.50
72					0.67	0.45	0.48	0.42	0.57	0.51	0.59	0.40	0.43	0.29	0.73	0.53	0.56	0.30	0.58	0.40
73					0.71	0.53	0.46	0.43	0.39	0.23	0.42	0.30	0.41	0.30	0.48	0.46	0.34	0.32	0.60	0.43
74					0.42	0.33	0.34	0.28	0.50	0.35	0.54	0.47	0.52	0.38	0.31	0.28	0.70	0.36	0.26	0.04
75					0.49	0.31	0.42	0.36	0.32	0.29	0.26	-0.04	0.80	0.40	0.34	0.28	0.35	0.16	0.13	-0.03

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	0.90	0.32	0.79	0.45	0.38	0.29	0.41	0.36	0.49	0.47	0.41	0.24	0.74	0.30	0.35	0.14
2	0.84	0.44	0.61	0.48	0.62	0.54	0.85	0.43	0.78	0.35	0.66	0.35	0.43	0.51	0.60	0.13
3	0.84	0.45	0.73	0.46	0.63	0.48	0.31	0.29	0.64	0.39	0.53	0.29	0.24	0.23	0.56	0.40
4	0.75	0.46	0.79	0.35	0.83	0.41	0.37	0.47	0.48	0.31	0.42	0.41	0.38	0.32	0.66	0.38
5	0.63	0.47	0.80	0.56	0.69	0.39	0.58	0.43	0.60	0.32	0.54	0.40	0.53	0.26	0.44	0.20
6	0.69	0.51	0.68	0.58	0.79	0.47	0.46	0.41	0.59	0.38	0.38	0.25	0.33	0.26	0.59	0.38
7	0.91	0.39	0.74	0.52	0.66	0.43	0.34	0.48	0.56	0.51	0.21	0.24	0.66	0.44	0.23	0.38
8	0.63	0.50	0.71	0.56	0.56	0.42	0.45	0.38	0.52	0.45	0.53	0.23	0.47	0.34	0.36	0.32
9	0.75	0.45	0.43	0.54	0.62	0.42	0.58	0.44	0.51	0.40	0.51	0.31	0.22	0.31	0.70	0.44
10	0.54	0.43	0.45	0.50	0.89	0.30	0.48	0.49	0.38	0.34	0.49	0.42	0.49	0.31	0.63	0.34
11	0.79	0.44	0.66	0.45	0.60	0.50	0.42	0.58	0.72	0.37	0.52	0.36	0.40	0.15	0.84	0.42
12	0.83	0.40	0.59	0.52	0.72	0.48	0.64	0.46	0.67	0.35	0.83	0.38	0.49	0.47	0.43	0.48
13	0.63	0.44	0.67	0.50	0.90	0.33	0.60	0.50	0.50	0.41	0.45	0.32	0.41	0.43	0.63	0.46
14	0.58	0.52	0.82	0.58	0.40	0.30	0.40	0.25	0.55	0.39	0.38	0.28	0.37	0.40	0.78	0.43
15	0.82	0.39	0.64	0.41	0.80	0.44	0.32	0.29	0.58	0.46	0.41	0.43	0.59	0.48	0.31	0.31
16	0.70	0.35	0.55	0.49	0.38	0.14	0.38	0.38	0.58	0.45	0.37	0.22	0.35	0.34	0.36	0.26
17	0.65	0.49	0.32	0.32	0.56	0.44	0.82	0.25	0.82	0.41	0.53	0.33	0.62	0.39	0.69	0.51
18	0.76	0.40	0.61	0.46	0.72	0.50	0.82	0.38	0.53	0.46	0.33	0.27	0.28	0.21	0.29	0.23
19	0.82	0.39	0.53	0.48	0.68	0.46	0.63	0.50	0.45	0.44	0.46	0.42	0.47	0.37	0.35	0.23
20	0.70	0.42	0.66	0.44	0.50	0.29	0.59	0.52	0.64	0.43	0.35	0.48	0.37	0.37	0.53	0.49
21	0.55	0.44	0.71	0.44	0.64	0.42	0.45	0.24	0.62	0.42	0.33	0.48	0.38	0.32	0.57	0.20
22	0.55	0.46	0.68	0.51	0.44	0.36	0.61	0.47	0.48	0.39	0.34	0.38	0.24	0.31	0.53	0.43
23	0.80	0.41	0.62	0.55	0.65	0.41	0.39	0.50	0.54	0.47	0.47	0.22	0.45	0.34	0.58	0.45
24	0.56	0.39	0.84	0.46	0.90	0.37	0.57	0.45	0.25	0.29	0.34	0.23	0.33	0.28	0.27	0.15
25	0.59	0.47	0.64	0.54	0.66	0.48	0.41	0.32	0.24	0.31	0.55	0.38	0.30	0.35	0.42	0.35
26	0.52	0.36	0.66	0.49	0.51	0.42	0.46	0.38	0.54	0.26	0.57	0.51	0.19	0.28	0.27	0.40
27	0.73	0.24	0.87	0.46	0.82	0.36	0.54	0.31	0.49	0.28	0.40	0.38	0.61	0.34	0.43	0.20
28	0.78	0.50	0.79	0.41	0.54	0.45	0.55	0.46	0.43	0.45	0.49	0.42	0.41	0.38	0.70	0.43
29	0.59	0.40	0.32	0.43	0.65	0.54	0.65	0.40	0.47	0.52	0.43	0.45	0.45	0.37	0.41	0.36
30	0.73	0.41	0.73	0.37	0.52	0.45	0.63	0.50	0.70	0.50	0.58	0.35	0.47	0.28	0.42	0.25
31	0.54	0.48	0.85	0.34	0.53	0.42	0.80	0.42	0.62	0.52	0.50	0.49	0.31	0.13	0.48	0.43
32	0.62	0.43	0.67	0.36	0.68	0.37	0.75	0.54	0.41	0.30	0.43	0.27	0.58	0.46	0.18	0.28
33	0.61	0.43	0.81	0.56	0.77	0.48	0.56	0.48	0.72	0.44	0.68	0.45	0.55	0.45	0.44	0.36
34	0.57	0.55	0.53	0.49	0.73	0.48	0.68	0.56	0.34	0.32	0.50	0.43	0.59	0.35	0.36	0.44
35	0.63	0.41	0.54	0.57	0.76	0.57	0.79	0.53	0.57	0.40	0.46	0.39	0.43	0.36	0.57	0.40

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**
36	0.75	0.31	0.78	0.50	0.75	0.57	0.58	0.31	0.72	0.43	0.35	0.28	0.27	0.29	0.55	0.38
37	0.33	0.32	0.52	0.42	0.61	0.56	0.65	0.49	0.68	0.43	0.67	0.44	0.71	0.29	0.30	0.19
38	0.85	0.41	0.68	0.48	0.50	0.40	0.67	0.46	0.34	0.30	0.55	0.35	0.42	0.47	0.39	0.32
39	0.51	0.48	0.34	0.09	0.69	0.60	0.60	0.47	0.64	0.59	0.62	0.38	0.32	0.27	0.26	0.29
40	0.91	0.37	0.87	0.30	0.61	0.54	0.62	0.52	0.72	0.41	0.40	0.17	0.56	0.48	0.48	0.46
41	0.54	0.41	0.55	0.49	0.74	0.54	0.44	0.24	0.57	0.53	0.41	0.40	0.26	0.30	0.49	0.47
42	0.49	0.40	0.48	0.52	0.77	0.57	0.49	0.48	0.80	0.38	0.82	0.36	0.42	0.37	0.13	-0.10
43	0.52	0.42	0.43	0.44	0.58	0.50	0.69	0.43	0.61	0.54	0.62	0.47	0.25	0.07	0.34	0.35
44	0.67	0.44	0.85	0.46	0.70	0.50	0.51	0.41	0.45	0.29	0.53	0.24	0.41	0.24	0.64	0.51
45	0.53	0.51	0.84	0.35	0.75	0.55	0.61	0.43	0.45	0.47	0.41	0.37	0.39	0.36	0.35	0.49
46	0.89	0.27	0.69	0.27	0.69	0.60	0.61	0.45	0.53	0.32	0.35	0.16	0.34	0.40	0.63	0.43
47	0.72	0.39	0.65	0.33	0.59	0.51	0.47	0.37	0.41	0.38	0.34	0.26	0.40	0.38	0.42	0.40
48	0.64	0.24	0.60	0.40	0.64	0.52	0.48	0.40	0.35	0.28	0.44	0.36	0.54	0.43	0.37	0.47
49	0.72	0.33	0.64	0.48	0.65	0.49	0.53	0.29	0.52	0.29	0.56	0.40	0.57	0.42	0.28	0.23
50	0.71	0.32	0.68	0.42	0.66	0.34	0.53	0.41	0.35	0.40	0.45	0.34	0.49	0.42	0.32	0.14
51	0.67	0.33	0.92	0.28	0.40	0.30	0.31	0.27	0.44	0.31	0.53	0.40	0.35	0.19	0.24	0.23
52	0.75	0.48	0.62	0.41	0.84	0.39	0.44	0.34	0.35	0.25	0.55	0.47	0.31	0.35	0.45	0.27
53	0.74	0.48	0.71	0.48	0.68	0.41	0.63	0.36	0.22	0.15	0.58	0.40	0.19	0.15	0.39	0.26
54	0.88	0.31	0.69	0.31	0.74	0.36	0.38	0.30	0.42	0.33	0.38	0.26	0.27	0.18	0.40	0.40
55	0.78	0.44	0.84	0.28	0.36	0.19	0.52	0.45	0.30	0.34	0.47	0.45	0.26	0.23	0.42	0.41
56	0.58	0.54	0.60	0.48	0.66	0.48	0.27	0.44	0.50	0.41	0.62	0.31	0.20	0.11	0.27	0.36
57	0.65	0.40	0.67	0.54	0.86	0.38	0.73	0.33	0.32	0.34	0.27	0.20	0.32	0.19	0.31	0.44
58	0.93	0.29	0.79	0.33	0.63	0.48	0.48	0.37	0.46	0.49	0.54	0.39	0.37	0.32	0.48	0.39
59	0.90	0.44	0.66	0.48	0.52	0.38	0.29	0.37	0.47	0.43	0.52	0.32	0.42	0.24	0.53	0.39
60	0.73	0.46	0.88	0.37	0.58	0.37	0.43	0.39	0.40	0.31	0.49	0.33	0.29	0.29	0.31	0.09
61	0.81	0.38	0.66	0.47	0.73	0.47	0.50	0.48	0.43	0.21	0.44	0.31	0.22	0.05	0.45	0.40
62	0.81	0.42	0.88	0.47	0.77	0.43	0.52	0.30	0.37	0.30	0.51	0.35	0.16	0.22	0.36	0.24
63	0.83	0.33	0.81	0.38	0.82	0.38	0.72	0.40	0.51	0.34	0.55	0.42	0.38	0.34	0.44	0.45
64	0.82	0.47	0.87	0.45	0.39	0.29	0.50	0.35	0.39	0.34	0.54	0.38	0.39	0.30	0.51	0.42
65	0.45	0.30	0.67	0.46	0.58	0.31	0.35	0.15	0.45	0.36	0.41	0.37	0.29	0.13	0.46	0.36

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	0.66	0.26	0.33	0.19
2	0.41	0.51	0.52	0.26
3	0.19	0.16	0.52	0.40
4	0.33	0.32	0.58	0.36
5	0.50	0.19	0.43	0.20
6	0.37	0.22	0.51	0.44
7	0.60	0.37	0.19	0.50
8	0.43	0.25	0.29	0.27
9	0.20	0.33	0.65	0.38
10	0.47	0.23	0.57	0.39
11	0.42	0.18	0.80	0.38
12	0.45	0.45	0.40	0.42
13	0.37	0.38	0.57	0.48
14	0.33	0.33	0.73	0.43
15	0.54	0.51	0.25	0.23
16	0.31	0.37	0.33	0.26
17	0.51	0.36	0.60	0.57
18	0.27	0.31	0.27	0.29
19	0.44	0.33	0.31	0.31
20	0.36	0.42	0.41	0.36
21	0.38	0.24	0.45	0.08
22	0.28	0.39	0.52	0.50
23	0.43	0.34	0.48	0.31
24	0.35	0.33	0.34	0.15
25	0.28	0.31	0.33	0.18
26	0.19	0.29	0.23	0.28
27	0.55	0.38	0.42	0.15
28	0.35	0.33	0.58	0.52
29	0.43	0.36	0.28	0.36
30	0.42	0.33	0.40	0.19
31	0.38	0.15	0.37	0.47
32	0.51	0.45	0.20	0.37
33	0.56	0.39	0.43	0.43
34	0.57	0.31	0.25	0.31
35	0.43	0.32	0.53	0.25
36	0.28	0.23	0.49	0.38
37	0.69	0.28	0.34	0.11
38	0.33	0.42	0.31	0.22
39	0.26	0.17	0.29	0.31
40	0.48	0.46	0.48	0.45
41	0.22	0.24	0.43	0.56
42	0.41	0.36	0.10	-0.11
43	0.25	0.12	0.37	0.36
44	0.39	0.24	0.58	0.53
45	0.40	0.35	0.29	0.62
46	0.36	0.41	0.60	0.38
47	0.37	0.44	0.34	0.51
48	0.52	0.41	0.34	0.32
49	0.51	0.42	0.37	0.27
50	0.52	0.42	0.31	0.23
51	0.30	0.18	0.23	0.18
52	0.28	0.30	0.45	0.32
53	0.22	0.11	0.33	0.25
54	0.26	0.20	0.39	0.44
55	0.23	0.21	0.45	0.59

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	0.20	0.02	0.25	0.25
57	0.32	0.14	0.24	0.47
58	0.36	0.32	0.45	0.38
59	0.39	0.15	0.52	0.28
60	0.30	0.25	0.33	0.11
61	0.23	0.05	0.42	0.40
62	0.17	0.12	0.35	0.38
63	0.31	0.33	0.46	0.54
64	0.37	0.30	0.49	0.47
65	0.26	0.11	0.45	0.39

Appendix 8.B—Reliability Analyses

The reliabilities are reported only for samples that are comprised of 11 or more examinees. Also, in some cases in Appendix 8.B, score reliabilities were not estimable and are presented in the tables as hyphens. Finally, results based on samples that contain 50 or fewer examinees should be interpreted with caution due to small sample sizes.

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	.	.	.	.	0.84	1.84
2. Reading Comprehension	15	0.76	1.00	.	.	.	0.79	1.65
3. Literary Response and Analysis	6	0.65	0.66	1.00	.	.	0.60	1.05
4. Written Conventions	14	0.77	0.73	0.64	1.00	.	0.81	1.56
5. Writing Strategies	8	0.63	0.63	0.58	0.66	1.00	0.62	1.28
Grade 3		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	20	1.00	.	.	.	.	0.82	1.80
2. Reading Comprehension	15	0.72	1.00	.	.	.	0.70	1.72
3. Literary Response and Analysis	8	0.62	0.63	1.00	.	.	0.57	1.22
4. Written Conventions	13	0.70	0.66	0.58	1.00	.	0.74	1.56
5. Writing Strategies	9	0.65	0.63	0.57	0.66	1.00	0.66	1.33
Grade 4		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	18	1.00	.	.	.	.	0.80	1.78
2. Reading Comprehension	15	0.73	1.00	.	.	.	0.76	1.72
3. Literary Response and Analysis	9	0.61	0.62	1.00	.	.	0.58	1.34
4. Written Conventions	18	0.73	0.69	0.59	1.00	.	0.79	1.78
5. Writing Strategies	15	0.70	0.68	0.58	0.69	1.00	0.69	1.74
Grade 5		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	14	1.00	.	.	.	.	0.71	1.68
2. Reading Comprehension	16	0.67	1.00	.	.	.	0.73	1.81
3. Literary Response and Analysis	12	0.68	0.65	1.00	.	.	0.72	1.54
4. Written Conventions	17	0.65	0.62	0.62	1.00	.	0.75	1.82
5. Writing Strategies	16	0.66	0.65	0.66	0.71	1.00	0.71	1.81
Grade 6		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	13	1.00	.	.	.	.	0.65	1.64
2. Reading Comprehension	17	0.65	1.00	.	.	.	0.72	1.88
3. Literary Response and Analysis	12	0.60	0.62	1.00	.	.	0.64	1.58
4. Written Conventions	16	0.62	0.65	0.58	1.00	.	0.76	1.75
5. Writing Strategies	17	0.61	0.64	0.60	0.67	1.00	0.70	1.90
Grade 7		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	11	1.00	.	.	.	.	0.70	1.43
2. Reading Comprehension	18	0.68	1.00	.	.	.	0.72	1.92
3. Literary Response and Analysis	13	0.64	0.69	1.00	.	.	0.68	1.63
4. Written Conventions	16	0.61	0.61	0.58	1.00	.	0.71	1.75
5. Writing Strategies	17	0.68	0.65	0.61	0.65	1.00	0.73	1.83
Grade 8		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	9	1.00	.	.	.	.	0.66	1.31
2. Reading Comprehension	18	0.66	1.00	.	.	.	0.72	1.92
3. Literary Response and Analysis	15	0.65	0.65	1.00	.	.	0.71	1.74
4. Written Conventions	16	0.60	0.60	0.57	1.00	.	0.74	1.71
5. Writing Strategies	17	0.62	0.64	0.58	0.66	1.00	0.67	1.89

Grade 9		1	2	3	4	5		
1. Word Analysis and Vocabulary Development	8	1.00	.	.	.	.	0.63	1.11
2. Reading Comprehension	18	0.67	1.00	.	.	.	0.75	1.85
3. Literary Response and Analysis	16	0.65	0.69	1.00	.	.	0.67	1.79
4. Written Conventions	13	0.62	0.65	0.58	1.00	.	0.71	1.57
5. Writing Strategies	20	0.60	0.67	0.62	0.70	1.00	0.75	2.02
Grade 10		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	8	1.00	.	.	.	.	0.64	1.04
2. Reading Comprehension	18	0.64	1.00	.	.	.	0.72	1.89
3. Literary Response and Analysis	16	0.57	0.64	1.00	.	.	0.63	1.76
4. Written Conventions	13	0.57	0.62	0.56	1.00	.	0.65	1.61
5. Writing Strategies	20	0.56	0.61	0.57	0.63	1.00	0.62	2.08
Grade 11		**1**	**2**	**3**	**4**	**5**		
1. Word Analysis and Vocabulary Development	8	1.00	.	.	.	.	0.60	1.24
2. Reading Comprehension	19	0.50	1.00	.	.	.	0.54	2.02
3. Literary Response and Analysis	17	0.60	0.57	1.00	.	.	0.67	1.88
4. Written Conventions	9	0.46	0.45	0.54	1.00	.	0.47	1.29
5. Writing Strategies	22	0.62	0.61	0.69	0.62	1.00	0.78	2.10

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	.	.	.	.	–	0.78	1.61
2. Number Sense: Multiplication, Division, and Fractions	23	0.75	1.00	.	.	.	–	0.83	1.89
3. Algebra and Functions	6	0.58	0.59	1.00	.	.	–	0.60	1.07
4. Measurement and Geometry	14	0.64	0.69	0.49	1.00	.	–	0.69	1.48
5. Statistics, Data Analysis, and Probability	7	0.60	0.62	0.45	0.58	1.00	–	0.58	0.97
Grade 3		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Place Value, Fractions, and Decimals	16	1.00	.	.	.	.	–	0.80	1.61
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.78	1.00	.	.	.	–	0.83	1.60
3. Algebra and Functions	12	0.73	0.75	1.00	.	.	–	0.74	1.42
4. Measurement and Geometry	16	0.69	0.67	0.66	1.00	.	–	0.75	1.61
5. Statistics, Data Analysis, and Probability	5	0.58	0.56	0.56	0.58	1.00	–	0.63	0.79
Grade 4		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	1.00	.	.	.	.	–	0.73	1.71
2. Number Sense: Operations, and Factoring	14	0.69	1.00	.	.	.	–	0.79	1.56
3. Algebra and Functions	18	0.67	0.73	1.00	.	.	–	0.88	1.65
4. Measurement and Geometry	12	0.58	0.59	0.64	1.00	.	–	0.69	1.45
5. Statistics, Data Analysis, and Probability	4	0.44	0.45	0.47	0.46	1.00	–	0.38	0.84
Grade 5		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Estimation, Percents, and Factoring	12	1.00	.	.	.	.	–	0.71	1.46
2. Number Sense: Operations with Fractions and Decimals	17	0.65	1.00	.	.	.	–	0.78	1.84
3. Algebra and Functions	17	0.70	0.66	1.00	.	.	–	0.82	1.73
4. Measurement and Geometry	15	0.63	0.66	0.64	1.00	.	–	0.71	1.74
5. Statistics, Data Analysis, and Probability	4	0.35	0.39	0.42	0.39	1.00	–	0.31	0.91
Grade 6		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Ratios, Proportions, Percentages, and Negative Numbers	15	1.00	.	.	.	.	–	0.77	1.68
2. Number Sense: Operations with Problem Solving with Fractions	10	0.61	1.00	.	.	.	–	0.65	1.40
3. Algebra and Functions	19	0.66	0.62	1.00	.	.	–	0.80	1.89
4. Measurement and Geometry	10	0.52	0.47	0.51	1.00	.	–	0.56	1.44
5. Statistics, Data Analysis, and Probability	11	0.54	0.46	0.57	0.49	1.00	–	0.65	1.50
Grade 7		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Sense: Rational Numbers	14	1.00	.	.	.	.	.	0.61	1.74
2. Number Sense: Exponent, Powers and Roots	8	0.54	1.00	.	.	.	.	0.62	1.19
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.48	0.48	1.00	.	.	.	0.53	1.44
4. Algebra and Functions: Multistep Problems, Graphing, and Functions	15	0.58	0.54	0.53	1.00	.	.	0.70	1.76
5. Measurement and Geometry	13	0.51	0.44	0.50	0.63	1.00	.	0.67	1.65
6. Statistics, Data Analysis, and Probability	5	0.43	0.36	0.39	0.48	0.49	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	.	.	.	–	–	0.70	1.85
2. Graphing and Systems of Linear Equations	14	0.52	1.00	.	.	–	–	0.60	1.68
3. Quadratics and Polynomials	21	0.64	0.58	1.00	.	–	–	0.73	2.07
4. Functions and Rational Expressions	13	0.42	0.36	0.44	1.00	–	–	0.37	1.57
Geometry		**1**	**2**	**3**	**4**	**5**	**6**		
1. Logic and Geometric Proofs	23	1.00	.	.	.	–	–	0.76	2.13
2. Volume and Area Formulas	11	0.57	1.00	.	.	–	–	0.58	1.48
3. Angle Relationships, Constructions, and Lines	16	0.60	0.54	1.00	.	–	–	0.70	1.77
4. Trigonometry	15	0.58	0.50	0.57	1.00	–	–	0.68	1.75
Algebra I – 8		**1**	**2**	**3**	**4**	**5**	**6**		
1. Number Properties, Operations, and Linear Equations	17	1.00	.	.	.	–	–	0.64	1.88
2. Graphing and Systems of Linear Equations	14	0.53	1.00	.	.	–	–	0.62	1.68
3. Quadratics and Polynomials	21	0.63	0.60	1.00	.	–	–	0.70	2.07
4. Functions and Rational Expressions	13	0.37	0.32	0.35	1.00	–	–	0.28	1.58
Geometry – 9		**1**	**2**	**3**	**4**	**5**	**6**		
1. Logic and Geometric Proofs	23	1.00	.	.	.	–	–	0.75	2.15
2. Volume and Area Formulas	11	0.64	1.00	.	.	–	–	0.49	1.49
3. Angle Relationships, Constructions, and Lines	16	0.59	0.56	1.00	.	–	–	0.70	1.77
4. Trigonometry	15	0.64	0.53	0.63	1.00	–	–	0.70	1.73

Table 8.B.3 Reliabilities and SEMs by Gender

		Male			Female		
Content Area	**STS ***	**N**	**Reliab.**	**SEM**	**N**	**Reliab.**	**SEM**
Reading/ Language Arts	2	5,301	0.94	3.45	5,318	0.94	3.31
	3	3,296	0.92	3.52	3,467	0.92	3.43
	4	2,193	0.93	3.83	2,233	0.93	3.73
	5	1,431	0.92	3.94	1,437	0.92	3.88
	6	948	0.91	3.97	818	0.91	3.92
	7	770	0.91	3.92	682	0.91	3.81
	8	547	0.91	3.92	521	0.91	3.86
	9	1,156	0.92	3.85	825	0.91	3.76
	10	711	0.90	3.87	537	0.87	3.81
	11	399	0.90	3.95	317	0.88	3.87
Mathematics	2	5,302	0.93	3.27	5,310	0.92	3.25
	3	3,300	0.94	3.24	3,468	0.93	3.26
	4	2,190	0.94	3.36	2,235	0.93	3.35
	5	1,428	0.92	3.56	1,437	0.92	3.56
	6	945	0.92	3.58	812	0.90	3.64
	7	747	0.90	3.69	661	0.88	3.70
	Algebra I	1,445	0.86	3.64	1,154	0.86	3.63
	Geometry	238	0.90	3.61	185	0.86	3.63
Grade-Specific	Algebra I – 8	192	0.84	3.62	196	0.84	3.65
	Geometry – 9	48	0.90	3.61	35	0.86	3.64

* 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	731	0.94	3.30	9,821	0.94	3.39
	3	518	0.92	3.46	6,200	0.92	3.47
	4	335	0.93	3.70	4,038	0.93	3.78
	5	234	0.93	3.85	2,602	0.92	3.91
	6	154	0.93	3.83	1,600	0.91	3.96
	7	162	0.93	3.74	1,273	0.91	3.89
	8	161	0.92	3.79	893	0.91	3.91
	9	355	0.93	3.79	1,586	0.91	3.82
	10	201	0.89	3.83	1,026	0.89	3.85
	11	150	0.90	3.88	553	0.89	3.93
Mathematics	2	730	0.93	3.17	9,817	0.92	3.27
	3	516	0.94	3.22	6,207	0.94	3.26
	4	333	0.94	3.27	4,040	0.93	3.37
	5	233	0.93	3.49	2,600	0.92	3.56
	6	153	0.93	3.52	1,592	0.91	3.62
	7	158	0.91	3.66	1,233	0.89	3.71
	Algebra I	448	0.87	3.64	2,099	0.86	3.63
	Geometry	77	0.87	3.63	343	0.88	3.62
Grade-Specific	Algebra I – 8	61	0.88	3.64	321	0.83	3.65
	Geometry – 9	18	0.90	3.62	64	0.88	3.63

* 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	10,191	0.94	3.37	435	0.91	3.64
	3	6,469	0.92	3.46	297	0.89	3.67
	4	4,201	0.93	3.77	230	0.91	3.94
	5	2,697	0.92	3.91	178	0.90	3.93
	6	1,686	0.91	3.95	82	0.84	4.00
	7	1,407	0.92	3.87	49	0.85	4.03
	8	1,054	0.91	3.89	16	0.79	4.01
	9	1,978	0.92	3.82	9	–	–
	10	1,248	0.89	3.85	3	–	–
	11	712	0.89	3.92	6	–	–
Mathematics	2	10,181	0.92	3.25	438	0.92	3.51
	3	6,463	0.93	3.24	308	0.92	3.55
	4	4,194	0.93	3.34	236	0.91	3.62
	5	2,690	0.92	3.55	182	0.90	3.62
	6	1,677	0.91	3.61	82	0.86	3.66
	7	1,362	0.89	3.70	50	0.75	3.73
	Algebra I	2,588	0.86	3.63	15	0.71	3.69
	Geometry	421	0.88	3.62	2	–	–
Grade-Specific	Algebra I – 8	381	0.84	3.65	7	–	–
	Geometry – 9	82	0.89	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	1,215	0.94	3.56	9,413	0.93	3.36
	3	1,131	0.93	3.55	5,639	0.92	3.45
	4	1,104	0.93	3.81	3,327	0.93	3.76
	5	1,022	0.93	3.87	1,853	0.92	3.91
	6	950	0.92	3.91	818	0.91	3.97
	7	1,034	0.92	3.83	422	0.89	3.96
	8	892	0.92	3.88	178	0.88	3.96
	9	1,861	0.92	3.82	126	0.93	3.79
	10	1,122	0.89	3.84	129	0.89	3.92
	11	563	0.89	3.91	155	0.89	3.97
Mathematics	2	1,212	0.93	3.49	9,409	0.92	3.23
	3	1,129	0.94	3.47	5,646	0.93	3.21
	4	1,098	0.93	3.51	3,332	0.93	3.30
	5	1,017	0.92	3.59	1,855	0.91	3.53
	6	941	0.92	3.59	818	0.90	3.61
	7	997	0.89	3.69	415	0.88	3.71
	Algebra I	2,322	0.86	3.63	281	0.82	3.67
	Geometry	299	0.89	3.61	124	0.85	3.66
Grade-Specific	Algebra I – 8	278	0.83	3.63	110	0.85	3.67
	Geometry – 9	68	0.90	3.61	15	0.84	3.65

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

Table 8.B.7 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	94	0.92	3.63	471	0.93	3.59	299	0.92	3.60	9,685	0.93	3.36	13	0.91	3.64	30	0.88	3.71
	3	90	0.94	3.49	503	0.92	3.56	254	0.91	3.59	5,869	0.92	3.45	19	0.92	3.61	9	–	–
	4	66	0.93	3.84	536	0.93	3.81	283	0.94	3.80	3,484	0.93	3.76	18	0.96	3.67	10	–	–
	5	78	0.91	3.95	498	0.93	3.87	293	0.94	3.85	1,958	0.92	3.91	14	0.90	3.98	10	–	–
	6	90	0.93	3.88	469	0.92	3.91	288	0.92	3.92	875	0.91	3.96	9	–	–	12	0.87	4.01
	7	124	0.92	3.83	440	0.92	3.84	274	0.92	3.83	524	0.90	3.93	37	0.93	3.71	32	0.92	3.90
	8	98	0.92	3.86	414	0.91	3.86	251	0.92	3.88	228	0.89	3.96	32	0.91	3.92	20	0.93	3.91
	9	212	0.92	3.84	705	0.92	3.80	524	0.91	3.84	369	0.93	3.81	59	0.92	3.80	30	0.93	3.73
	10	174	0.90	3.84	433	0.90	3.85	244	0.89	3.83	293	0.89	3.85	63	0.90	3.76	22	0.86	3.95
	11	89	0.87	3.93	245	0.90	3.89	130	0.88	3.92	208	0.90	3.95	23	0.91	3.82	11	0.91	4.00
Mathematics	2	94	0.92	3.55	470	0.92	3.54	298	0.92	3.53	9,680	0.92	3.23	13	0.90	3.60	30	0.83	3.64
	3	91	0.95	3.37	502	0.93	3.50	253	0.94	3.47	5,876	0.93	3.21	19	0.93	3.49	9	–	–
	4	67	0.95	3.40	534	0.93	3.51	281	0.93	3.52	3,488	0.93	3.31	18	0.93	3.51	10	–	–
	5	78	0.89	3.63	495	0.92	3.58	292	0.92	3.60	1,960	0.91	3.53	14	0.91	3.47	9	–	–
	6	89	0.93	3.53	464	0.92	3.59	286	0.91	3.61	875	0.90	3.61	8	–	–	12	0.85	3.57
	7	118	0.90	3.67	426	0.90	3.68	262	0.89	3.70	516	0.88	3.71	35	0.89	3.68	30	0.86	3.73
	Algebra I	289	0.85	3.63	919	0.87	3.62	619	0.86	3.63	573	0.83	3.66	95	0.84	3.66	29	0.93	3.58
	Geometry	60	0.91	3.58	98	0.88	3.64	49	0.90	3.61	181	0.87	3.63	16	0.80	3.67	11	0.87	3.64
Grade-Specific	Algebra I – 8	35	0.81	3.59	133	0.85	3.62	75	0.74	3.67	127	0.86	3.67	7	–	–	4	–	–
	Geometry – 9	16	0.93	3.52	19	0.82	3.68	16	0.89	3.62	26	0.89	3.62	2	–	–	1	–	–

* 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	0.84	1.88	0.83	1.79	0.84	1.78	0.84	1.84
2. Reading Comprehension	15	0.78	1.69	0.79	1.61	0.80	1.60	0.79	1.65
3. Literary Response and Analysis	6	0.59	1.06	0.60	1.03	0.60	1.02	0.60	1.05
4. Written Conventions	14	0.81	1.59	0.81	1.52	0.82	1.51	0.81	1.56
5. Writing Strategies	8	0.61	1.28	0.61	1.28	0.65	1.26	0.61	1.28
Grade 3									
1. Word Analysis and Vocabulary Development	20	0.81	1.84	0.81	1.77	0.80	1.81	0.82	1.80
2. Reading Comprehension	15	0.70	1.74	0.70	1.70	0.72	1.71	0.70	1.72
3. Literary Response and Analysis	8	0.56	1.23	0.58	1.22	0.58	1.21	0.57	1.23
4. Written Conventions	13	0.74	1.58	0.74	1.54	0.73	1.56	0.74	1.56
5. Writing Strategies	9	0.65	1.34	0.65	1.32	0.67	1.31	0.65	1.33
Grade 4									
1. Word Analysis and Vocabulary Development	18	0.81	1.80	0.78	1.76	0.80	1.73	0.80	1.78
2. Reading Comprehension	15	0.76	1.73	0.75	1.70	0.78	1.67	0.76	1.72
3. Literary Response and Analysis	9	0.58	1.34	0.56	1.33	0.55	1.33	0.58	1.34
4. Written Conventions	18	0.78	1.83	0.78	1.73	0.80	1.73	0.79	1.78
5. Writing Strategies	15	0.69	1.75	0.69	1.73	0.71	1.72	0.69	1.74
Grade 5									
1. Word Analysis and Vocabulary Development	14	0.69	1.69	0.72	1.66	0.72	1.66	0.71	1.68
2. Reading Comprehension	16	0.72	1.82	0.73	1.81	0.73	1.81	0.73	1.81
3. Literary Response and Analysis	12	0.71	1.55	0.72	1.54	0.75	1.50	0.71	1.54
4. Written Conventions	17	0.73	1.85	0.74	1.79	0.72	1.78	0.75	1.82
5. Writing Strategies	16	0.72	1.82	0.69	1.81	0.76	1.77	0.71	1.82
Grade 6									
1. Word Analysis and Vocabulary Development	13	0.65	1.64	0.63	1.64	0.71	1.59	0.63	1.65
2. Reading Comprehension	17	0.74	1.87	0.69	1.88	0.77	1.81	0.71	1.88
3. Literary Response and Analysis	12	0.64	1.60	0.62	1.56	0.69	1.52	0.63	1.59
4. Written Conventions	16	0.75	1.78	0.75	1.72	0.79	1.68	0.76	1.76
5. Writing Strategies	17	0.69	1.90	0.70	1.90	0.76	1.86	0.69	1.90
Grade 7									
1. Word Analysis and Vocabulary Development	11	0.71	1.45	0.69	1.41	0.75	1.34	0.69	1.45
2. Reading Comprehension	18	0.72	1.94	0.70	1.91	0.74	1.88	0.71	1.93
3. Literary Response and Analysis	13	0.67	1.64	0.67	1.60	0.71	1.59	0.67	1.63
4. Written Conventions	16	0.68	1.79	0.70	1.70	0.74	1.70	0.70	1.76
5. Writing Strategies	17	0.73	1.85	0.71	1.79	0.76	1.77	0.72	1.84
Grade 8									
1. Word Analysis and Vocabulary Development	9	0.65	1.32	0.65	1.30	0.71	1.23	0.64	1.33
2. Reading Comprehension	18	0.73	1.92	0.69	1.92	0.76	1.89	0.70	1.93
3. Literary Response and Analysis	15	0.72	1.74	0.69	1.73	0.71	1.71	0.71	1.74
4. Written Conventions	16	0.74	1.76	0.71	1.67	0.73	1.64	0.74	1.73
5. Writing Strategies	17	0.66	1.89	0.67	1.88	0.69	1.87	0.66	1.89
Grade 9									
1. Word Analysis and Vocabulary Development	8	0.65	1.13	0.58	1.07	0.63	1.14	0.63	1.10
2. Reading Comprehension	18	0.75	1.86	0.73	1.83	0.78	1.83	0.75	1.85
3. Literary Response and Analysis	16	0.68	1.80	0.62	1.76	0.69	1.77	0.67	1.79

		Male		Female		Not Econ. Dis.		Econ. Dis.	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
4. Written Conventions	13	0.72	1.59	0.67	1.54	0.76	1.56	0.70	1.57
5. Writing Strategies	20	0.74	2.03	0.75	2.01	0.80	2.00	0.74	2.03
Grade 10									
1. Word Analysis and Vocabulary Development	8	0.67	1.07	0.56	1.00	0.61	1.02	0.64	1.04
2. Reading Comprehension	18	0.74	1.91	0.67	1.86	0.72	1.88	0.72	1.89
3. Literary Response and Analysis	16	0.65	1.77	0.59	1.74	0.61	1.75	0.64	1.76
4. Written Conventions	13	0.68	1.61	0.56	1.61	0.64	1.61	0.65	1.61
5. Writing Strategies	20	0.64	2.07	0.57	2.10	0.67	2.07	0.61	2.08
Grade 11									
1. Word Analysis and Vocabulary Development	8	0.63	1.24	0.53	1.22	0.60	1.21	0.59	1.24
2. Reading Comprehension	19	0.57	2.02	0.48	2.01	0.58	2.02	0.52	2.02
3. Literary Response and Analysis	17	0.68	1.90	0.62	1.86	0.71	1.84	0.65	1.90
4. Written Conventions	9	0.44	1.32	0.49	1.25	0.56	1.29	0.44	1.29
5. Writing Strategies	22	0.78	2.11	0.77	2.08	0.80	2.07	0.77	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	0.79	1.61	0.77	1.60	0.78	1.56	0.78	1.61
2. Number Sense: Multiplication, Division, and Fractions	23	0.84	1.90	0.82	1.88	0.83	1.84	0.83	1.89
3. Algebra and Functions	6	0.60	1.06	0.58	1.08	0.62	1.04	0.59	1.07
4. Measurement and Geometry	14	0.70	1.48	0.68	1.49	0.68	1.43	0.69	1.49
5. Statistics, Data Analysis and Probability	7	0.59	0.98	0.57	0.96	0.62	0.96	0.58	0.97
Grade 3									
1. Number Sense: Place Value, Fractions, and Decimals	16	0.80	1.60	0.80	1.61	0.80	1.58	0.80	1.61
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.83	1.60	0.83	1.60	0.84	1.57	0.83	1.60
3. Algebra and Functions	12	0.74	1.41	0.73	1.43	0.72	1.42	0.74	1.42
4. Measurement and Geometry	16	0.76	1.61	0.75	1.61	0.76	1.61	0.75	1.61
5. Statistics, Data Analysis and Probability	5	0.62	0.80	0.63	0.77	0.65	0.78	0.62	0.79
Grade 4									
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	0.75	1.70	0.71	1.72	0.76	1.66	0.73	1.72
2. Number Sense: Operations and Factoring	14	0.79	1.57	0.79	1.55	0.79	1.52	0.79	1.56
3. Algebra and Functions	18	0.88	1.66	0.87	1.64	0.89	1.59	0.88	1.66
4. Measurement and Geometry	12	0.71	1.46	0.68	1.44	0.73	1.41	0.69	1.45
5. Statistics, Data Analysis, and Probability	4	0.44	0.85	0.29	0.83	0.41	0.82	0.38	0.84
Grade 5									
1. Number Sense: Estimation, Percents, and Factoring	12	0.72	1.46	0.71	1.45	0.74	1.43	0.71	1.46
2. Number Sense: Operations with Fractions and Decimals	17	0.79	1.84	0.77	1.84	0.83	1.77	0.77	1.84
3. Algebra and Functions	17	0.83	1.74	0.82	1.72	0.82	1.70	0.83	1.73
4. Measurement and Geometry	15	0.71	1.74	0.70	1.75	0.72	1.74	0.70	1.74
5. Statistics, Data Analysis, and Probability	4	0.34	0.91	0.29	0.91	0.32	0.91	0.31	0.91
Grade 6									
1. Number Sense: Ratios, Proportions, Percentages and Negative Numbers	15	0.79	1.66	0.74	1.69	0.80	1.61	0.76	1.68
2. Number Sense: Operations with Problem Solving with Fractions	10	0.68	1.38	0.60	1.42	0.71	1.34	0.64	1.41
3. Algebra and Functions	19	0.82	1.87	0.78	1.90	0.82	1.84	0.80	1.89
4. Measurement and Geometry	10	0.57	1.44	0.56	1.43	0.65	1.41	0.55	1.44
5. Statistics, Data Analysis, and Probability	11	0.67	1.49	0.62	1.51	0.74	1.46	0.64	1.50
Grade 7									
1. Number Sense: Rational Numbers	14	0.65	1.73	0.57	1.75	0.63	1.74	0.61	1.74
2. Number Sense: Exponent, Powers and Roots	8	0.61	1.21	0.64	1.18	0.67	1.18	0.62	1.20
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.55	1.44	0.48	1.44	0.63	1.40	0.51	1.45
4. Algebra and Functions: Multistep	15	0.72	1.75	0.69	1.77	0.73	1.75	0.70	1.77

		Male		Female		Not Econ. Dis.		Econ. Dis.	
Subscore Area	**No. of Items**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**	**Reliab.**	**SEM**
Problems, Graphing and Functions									
5. Measurement and Geometry	13	0.69	1.65	0.63	1.66	0.67	1.65	0.66	1.65
6. Statistics, Data Analysis, and Probability	5	0.50	1.02	0.49	1.01	0.46	1.03	0.49	1.02
Algebra I									
1. Number Properties, Operations, and Linear Equations	17	0.71	1.85	0.69	1.85	0.72	1.84	0.70	1.85
2. Graphing and Systems of Linear Equations	14	0.61	1.68	0.59	1.69	0.63	1.68	0.59	1.68
3. Quadratics and Polynomials	21	0.73	2.07	0.74	2.06	0.74	2.07	0.73	2.07
4. Functions and Rational Expressions	13	0.38	1.58	0.37	1.57	0.43	1.58	0.36	1.57
Geometry									
1. Logic and Geometric Proofs	23	0.79	2.12	0.69	2.13	0.78	2.15	0.75	2.12
2. Volume and Area Formulas	11	0.61	1.48	0.54	1.47	0.50	1.46	0.59	1.48
3. Angle Relationships, Constructions, and Lines	16	0.73	1.75	0.64	1.78	0.66	1.77	0.70	1.77
4. Trigonometry	15	0.69	1.74	0.66	1.76	0.69	1.74	0.68	1.76

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	0.65	1.86	0.62	1.88	0.69	1.87	0.63	1.88
2. Graphing and Systems of Linear Equations	14	0.59	1.65	0.62	1.71	0.68	1.67	0.61	1.68
3. Quadratics and Polynomials	21	0.71	2.07	0.68	2.07	0.72	2.05	0.71	2.07
4. Functions and Rational Expressions	13	0.27	1.58	0.29	1.57	0.34	1.62	0.26	1.57
Geometry – 9									
1. Logic and Geometric Proofs	23	0.79	2.14	0.68	2.16	0.80	2.16	0.74	2.15
2. Volume and Area Formulas	11	0.57	1.47	0.33	1.51	0.65	1.41	0.44	1.50
3. Angle Relationships, Constructions, and Lines	16	0.68	1.78	0.72	1.75	0.77	1.75	0.67	1.78
4. Trigonometry	15	0.72	1.73	0.69	1.73	0.70	1.75	0.71	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	0.83	1.83	0.80	2.06	0.84	2.02	0.82	1.81
2. Reading Comprehension	15	0.79	1.65	0.73	1.74	0.78	1.71	0.78	1.64
3. Literary Response and Analysis	6	0.60	1.05	0.40	1.14	0.58	1.08	0.59	1.04
4. Written Conventions	14	0.81	1.55	0.77	1.66	0.80	1.64	0.80	1.54
5. Writing Strategies	8	0.62	1.28	0.47	1.29	0.54	1.27	0.61	1.28
Grade 3									
1. Word Analysis and Vocabulary Development	20	0.81	1.79	0.78	1.99	0.83	1.87	0.81	1.78
2. Reading Comprehension	15	0.70	1.72	0.62	1.77	0.72	1.75	0.69	1.71
3. Literary Response and Analysis	8	0.57	1.22	0.45	1.26	0.59	1.22	0.56	1.22
4. Written Conventions	13	0.74	1.55	0.59	1.68	0.75	1.60	0.72	1.55
5. Writing Strategies	9	0.65	1.33	0.59	1.36	0.61	1.37	0.65	1.32
Grade 4									
1. Word Analysis and Vocabulary Development	18	0.80	1.77	0.81	1.88	0.80	1.80	0.80	1.76
2. Reading Comprehension	15	0.76	1.71	0.66	1.79	0.75	1.72	0.77	1.71
3. Literary Response and Analysis	9	0.57	1.34	0.55	1.34	0.55	1.36	0.59	1.33
4. Written Conventions	18	0.78	1.77	0.74	1.91	0.82	1.80	0.78	1.77
5. Writing Strategies	15	0.69	1.74	0.54	1.78	0.70	1.73	0.69	1.74
Grade 5									
1. Word Analysis and Vocabulary Development	14	0.71	1.67	0.64	1.70	0.74	1.66	0.70	1.68
2. Reading Comprehension	16	0.73	1.81	0.69	1.80	0.73	1.81	0.73	1.80
3. Literary Response and Analysis	12	0.71	1.54	0.69	1.52	0.73	1.53	0.71	1.54
4. Written Conventions	17	0.75	1.82	0.69	1.87	0.79	1.80	0.73	1.81
5. Writing Strategies	16	0.71	1.81	0.67	1.82	0.73	1.79	0.71	1.83
Grade 6									
1. Word Analysis and Vocabulary Development	13	0.65	1.64	0.39	1.63	0.68	1.62	0.60	1.65
2. Reading Comprehension	17	0.72	1.88	0.68	1.88	0.72	1.87	0.72	1.88
3. Literary Response and Analysis	12	0.63	1.58	0.61	1.55	0.64	1.56	0.62	1.59
4. Written Conventions	16	0.76	1.75	0.57	1.87	0.77	1.74	0.75	1.76
5. Writing Strategies	17	0.70	1.90	0.41	1.92	0.70	1.88	0.70	1.91
Grade 7									
1. Word Analysis and Vocabulary Development	11	0.70	1.43	0.61	1.50	0.72	1.40	0.61	1.50
2. Reading Comprehension	18	0.72	1.92	0.64	1.99	0.72	1.91	0.69	1.95
3. Literary Response and Analysis	13	0.68	1.62	0.31	1.73	0.70	1.60	0.59	1.68
4. Written Conventions	16	0.71	1.75	0.59	1.83	0.72	1.74	0.68	1.77
5. Writing Strategies	17	0.73	1.83	0.52	1.91	0.74	1.81	0.69	1.87
Grade 8									
1. Word Analysis and Vocabulary Development	9	0.65	1.31	0.34	1.37	0.67	1.30	0.56	1.38
2. Reading Comprehension	18	0.72	1.92	0.44	1.98	0.72	1.92	0.65	1.93
3. Literary Response and Analysis	15	0.71	1.73	0.41	1.77	0.72	1.73	0.63	1.77
4. Written Conventions	16	0.74	1.71	0.49	1.83	0.74	1.71	0.73	1.75
5. Writing Strategies	17	0.67	1.89	0.56	1.91	0.67	1.89	0.68	1.87

		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 9									
1. Word Analysis and Vocabulary Development	8	0.62	1.11	–	–	0.62	1.11	0.68	1.10
2. Reading Comprehension	18	0.75	1.85	–	–	0.75	1.85	0.77	1.83
3. Literary Response and Analysis	16	0.67	1.79	–	–	0.67	1.79	0.69	1.79
4. Written Conventions	13	0.71	1.57	–	–	0.71	1.57	0.74	1.57
5. Writing Strategies	20	0.75	2.02	–	–	0.75	2.03	0.81	1.98
Grade 10									
1. Word Analysis and Vocabulary Development	8	0.63	1.04	–	–	0.64	1.02	0.62	1.14
2. Reading Comprehension	18	0.72	1.89	–	–	0.72	1.88	0.69	1.94
3. Literary Response and Analysis	16	0.63	1.76	–	–	0.63	1.76	0.69	1.74
4. Written Conventions	13	0.65	1.61	–	–	0.64	1.61	0.66	1.65
5. Writing Strategies	20	0.62	2.08	–	–	0.62	2.08	0.59	2.09
Grade 11									
1. Word Analysis and Vocabulary Development	8	0.59	1.24	–	–	0.58	1.23	0.57	1.27
2. Reading Comprehension	19	0.53	2.02	–	–	0.53	2.02	0.52	2.02
3. Literary Response and Analysis	17	0.67	1.88	–	–	0.66	1.88	0.71	1.89
4. Written Conventions	9	0.47	1.29	–	–	0.48	1.28	0.42	1.34
5. Writing Strategies	22	0.78	2.10	–	–	0.78	2.09	0.78	2.13

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	1.61	0.78	1.68	0.77	1.69	0.77	1.60
2. Number Sense: Multiplication, Division, and Fractions	23	0.83	1.88	0.83	2.07	0.85	2.02	0.82	1.87
3. Algebra and Functions	6	0.60	1.07	0.52	1.10	0.54	1.09	0.60	1.06
4. Measurement and Geometry	14	0.68	1.48	0.74	1.60	0.74	1.59	0.67	1.47
5. Statistics, Data Analysis and Probability	7	0.57	0.97	0.61	1.11	0.63	1.12	0.54	0.95
Grade 3									
1. Number Sense: Place Value, Fractions, and Decimals	16	0.80	1.60	0.78	1.74	0.81	1.70	0.78	1.59
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.83	1.59	0.79	1.75	0.83	1.68	0.83	1.58
3. Algebra and Functions	12	0.74	1.42	0.64	1.52	0.75	1.47	0.73	1.41
4. Measurement and Geometry	16	0.74	1.60	0.74	1.76	0.74	1.75	0.73	1.58
5. Statistics, Data Analysis and Probability	5	0.62	0.78	0.60	0.92	0.64	0.92	0.58	0.76
Grade 4									
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	0.73	1.70	0.70	1.83	0.75	1.76	0.70	1.69
2. Number Sense: Operations and Factoring	14	0.79	1.55	0.71	1.67	0.77	1.63	0.79	1.53
3. Algebra and Functions	18	0.88	1.64	0.84	1.83	0.87	1.79	0.87	1.60
4. Measurement and Geometry	12	0.69	1.44	0.65	1.56	0.70	1.50	0.68	1.43
5. Statistics, Data Analysis, and Probability	4	0.37	0.83	0.42	0.88	0.40	0.87	0.36	0.83
Grade 5									
1. Number Sense: Estimation, Percents, and Factoring	12	0.71	1.46	0.67	1.49	0.70	1.48	0.67	1.44
2. Number Sense: Operations with Fractions and Decimals	17	0.78	1.84	0.70	1.85	0.79	1.82	0.77	1.84
3. Algebra and Functions	17	0.82	1.72	0.80	1.82	0.81	1.81	0.80	1.68
4. Measurement and Geometry	15	0.71	1.74	0.61	1.74	0.68	1.74	0.71	1.74
5. Statistics, Data Analysis, and Probability	4	0.31	0.91	0.34	0.91	0.28	0.93	0.33	0.90
Grade 6									
1. Number Sense: Ratios, Proportions, Percentages and Negative Numbers	15	0.76	1.68	0.74	1.70	0.78	1.68	0.75	1.67
2. Number Sense: Operations with Problem Solving with Fractions	10	0.65	1.40	0.57	1.45	0.65	1.39	0.64	1.40
3. Algebra and Functions	19	0.80	1.88	0.75	1.93	0.83	1.87	0.76	1.88
4. Measurement and Geometry	10	0.57	1.44	0.45	1.40	0.56	1.41	0.55	1.46
5. Statistics, Data Analysis, and Probability	11	0.65	1.50	0.29	1.51	0.66	1.50	0.64	1.49
Grade 7									
1. Number Sense: Rational Numbers	14	0.61	1.74	0.31	1.73	0.62	1.74	0.58	1.75
2. Number Sense: Exponent, Powers and Roots	8	0.63	1.19	0.34	1.20	0.62	1.19	0.62	1.19
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.53	1.44	0.22	1.48	0.50	1.45	0.57	1.41

		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**
4. Algebra and Functions: Multistep Problems, Graphing and Functions	15	0.70	1.76	0.65	1.75	0.71	1.75	0.69	1.77
5. Measurement and Geometry	13	0.66	1.65	0.58	1.64	0.68	1.64	0.61	1.67
6. Statistics, Data Analysis, and Probability	5	0.50	1.01	0.25	1.08	0.49	1.01	0.49	1.02
Algebra I									
1. Number Properties, Operations, and Linear Equations	17	0.70	1.85	0.74	1.80	0.70	1.85	0.69	1.87
2. Graphing and Systems of Linear Equations	14	0.60	1.68	0.24	1.76	0.61	1.68	0.55	1.70
3. Quadratics and Polynomials	21	0.73	2.07	0.62	2.10	0.74	2.07	0.68	2.09
4. Functions and Rational Expressions	13	0.37	1.57	0.19	1.54	0.38	1.57	0.33	1.58
Geometry									
1. Logic and Geometric Proofs	23	0.76	2.13	–	–	0.78	2.11	0.70	2.16
2. Volume and Area Formulas	11	0.59	1.48	–	–	0.60	1.48	0.52	1.47
3. Angle Relationships, Constructions, and Lines	16	0.69	1.77	–	–	0.71	1.77	0.61	1.77
4. Trigonometry	15	0.68	1.75	–	–	0.68	1.74	0.68	1.77

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	0.64	1.88	–	–	0.61	1.87	0.69	1.88
2. Graphing and Systems of Linear Equations	14	0.62	1.68	–	–	0.59	1.67	0.66	1.69
3. Quadratics and Polynomials	21	0.71	2.07	–	–	0.71	2.06	0.67	2.09
4. Functions and Rational Expressions	13	0.28	1.58	–	–	0.26	1.57	0.32	1.60
Geometry – 9									
1. Logic and Geometric Proofs	23	0.76	2.15	–	–	0.77	2.15	0.55	2.15
2. Volume and Area Formulas	11	0.50	1.49	–	–	0.51	1.48	0.36	1.54
3. Angle Relationships, Constructions, and Lines	16	0.69	1.77	–	–	0.71	1.77	0.57	1.78
4. Trigonometry	15	0.71	1.73	–	–	0.70	1.73	0.75	1.74

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	0.79	2.10	0.83	2.07	0.82	2.05	0.82	1.81	0.75	2.06	0.80	2.11
2. Reading Comprehension	15	0.76	1.73	0.77	1.72	0.76	1.73	0.78	1.64	0.73	1.78	0.62	1.81
3. Literary Response and Analysis	6	0.46	1.13	0.58	1.08	0.54	1.09	0.59	1.04	0.72	1.03	0.50	1.13
4. Written Conventions	14	0.79	1.64	0.76	1.66	0.76	1.67	0.80	1.54	0.70	1.72	0.66	1.70
5. Writing Strategies	8	0.48	1.30	0.52	1.25	0.50	1.27	0.61	1.28	0.28	1.32	0.06	1.29
Grade 3													
1. Word Analysis and Vocabulary Development	20	0.84	1.86	0.84	1.89	0.81	1.92	0.81	1.78	0.85	1.88	–	–
2. Reading Comprehension	15	0.75	1.74	0.71	1.75	0.73	1.73	0.69	1.71	0.71	1.78	–	–
3. Literary Response and Analysis	8	0.55	1.20	0.60	1.21	0.56	1.21	0.56	1.22	0.57	1.24	–	–
4. Written Conventions	13	0.82	1.53	0.75	1.59	0.68	1.63	0.72	1.55	0.76	1.60	–	–
5. Writing Strategies	9	0.65	1.34	0.59	1.37	0.53	1.39	0.65	1.32	0.65	1.36	–	–
Grade 4													
1. Word Analysis and Vocabulary Development	18	0.82	1.82	0.80	1.82	0.80	1.81	0.80	1.76	0.84	1.73	–	–
2. Reading Comprehension	15	0.72	1.74	0.75	1.72	0.78	1.71	0.76	1.71	0.85	1.62	–	–
3. Literary Response and Analysis	9	0.65	1.34	0.50	1.37	0.59	1.35	0.59	1.33	0.64	1.36	–	–
4. Written Conventions	18	0.83	1.77	0.82	1.80	0.82	1.81	0.78	1.77	0.85	1.75	–	–
5. Writing Strategies	15	0.71	1.76	0.71	1.73	0.69	1.74	0.69	1.74	0.81	1.69	–	–
Grade 5													
1. Word Analysis and Vocabulary Development	14	0.68	1.68	0.76	1.64	0.74	1.66	0.69	1.68	0.74	1.65	–	–
2. Reading Comprehension	16	0.59	1.88	0.73	1.81	0.74	1.80	0.73	1.80	0.77	1.82	–	–
3. Literary Response and Analysis	12	0.53	1.62	0.73	1.53	0.76	1.51	0.71	1.54	0.56	1.60	–	–
4. Written Conventions	17	0.78	1.80	0.79	1.79	0.81	1.77	0.72	1.82	0.55	1.91	–	–
5. Writing Strategies	16	0.67	1.81	0.73	1.79	0.75	1.77	0.70	1.83	0.42	1.89	–	–

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	0.69	1.60	0.70	1.61	0.64	1.65	0.61	1.65	–	–	0.21	1.75
2. Reading Comprehension	17	0.78	1.85	0.72	1.87	0.72	1.88	0.71	1.88	–	–	0.69	1.90
3. Literary Response and Analysis	12	0.63	1.56	0.63	1.55	0.67	1.55	0.62	1.59	–	–	0.53	1.61
4. Written Conventions	16	0.77	1.71	0.77	1.74	0.79	1.73	0.75	1.76	–	–	0.55	1.83
5. Writing Strategies	17	0.73	1.88	0.69	1.89	0.71	1.87	0.70	1.91	–	–	0.78	1.79
Grade 7													
1. Word Analysis and Vocabulary Development	11	0.72	1.41	0.73	1.41	0.70	1.41	0.65	1.47	0.80	1.21	0.71	1.47
2. Reading Comprehension	18	0.78	1.88	0.73	1.91	0.69	1.92	0.71	1.94	0.63	1.92	0.73	1.92
3. Literary Response and Analysis	13	0.66	1.63	0.69	1.61	0.71	1.60	0.63	1.66	0.70	1.61	0.72	1.62
4. Written Conventions	16	0.71	1.74	0.71	1.75	0.73	1.72	0.68	1.76	0.77	1.68	0.73	1.79
5. Writing Strategies	17	0.73	1.82	0.74	1.81	0.73	1.82	0.71	1.85	0.79	1.75	0.75	1.82
Grade 8													
1. Word Analysis and Vocabulary Development	9	0.60	1.31	0.69	1.28	0.66	1.31	0.59	1.36	0.60	1.35	0.66	1.37
2. Reading Comprehension	18	0.73	1.92	0.70	1.94	0.75	1.90	0.67	1.93	0.73	1.88	0.69	1.92
3. Literary Response and Analysis	15	0.78	1.68	0.71	1.73	0.71	1.73	0.64	1.77	0.73	1.73	0.75	1.75
4. Written Conventions	16	0.70	1.71	0.74	1.68	0.74	1.72	0.73	1.76	0.76	1.77	0.75	1.78
5. Writing Strategies	17	0.69	1.89	0.69	1.87	0.64	1.90	0.66	1.89	0.51	1.94	0.76	1.82
Grade 9													
1. Word Analysis and Vocabulary Development	8	0.61	1.13	0.65	1.09	0.57	1.14	0.68	1.10	0.57	1.05	0.63	1.10
2. Reading Comprehension	18	0.73	1.88	0.76	1.83	0.72	1.87	0.78	1.84	0.73	1.89	0.78	1.79
3. Literary Response and Analysis	16	0.70	1.77	0.68	1.78	0.65	1.80	0.68	1.80	0.63	1.79	0.65	1.74
4. Written Conventions	13	0.73	1.58	0.72	1.56	0.69	1.57	0.72	1.58	0.75	1.54	0.77	1.53
5. Writing Strategies	20	0.75	2.03	0.75	2.02	0.74	2.03	0.78	2.00	0.77	2.00	0.83	1.96
Grade 10													
1. Word Analysis and Vocabulary Development	8	0.61	1.05	0.66	1.04	0.67	1.00	0.61	1.06	0.64	0.95	0.23	1.08
2. Reading Comprehension	18	0.73	1.88	0.72	1.90	0.73	1.88	0.70	1.89	0.78	1.80	0.65	1.96
3. Literary Response and Analysis	16	0.61	1.78	0.63	1.76	0.63	1.74	0.66	1.74	0.56	1.78	0.52	1.86

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	0.68	1.59	0.63	1.63	0.63	1.61	0.68	1.60	0.66	1.59	0.58	1.67
5. Writing Strategies	20	0.65	2.08	0.65	2.07	0.59	2.08	0.57	2.10	0.61	2.06	0.63	2.07
Grade 11													
1. Word Analysis and Vocabulary Development	8	0.56	1.24	0.61	1.22	0.54	1.24	0.59	1.25	0.67	1.13	0.52	1.29
2. Reading Comprehension	19	0.44	2.01	0.52	2.02	0.60	2.00	0.53	2.02	0.53	2.03	0.57	2.11
3. Literary Response and Analysis	17	0.60	1.92	0.68	1.86	0.62	1.91	0.71	1.88	0.65	1.89	0.82	1.79
4. Written Conventions	9	0.42	1.27	0.51	1.28	0.38	1.29	0.45	1.32	0.70	1.19	0.45	1.26
5. Writing Strategies	22	0.78	2.09	0.80	2.07	0.75	2.11	0.79	2.12	0.83	2.02	0.75	2.23

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	0.73	1.73	0.74	1.72	0.76	1.70	0.77	1.60	0.67	1.74	0.42	1.79
2. Number Sense: Multiplication, Division, and Fractions	23	0.84	2.04	0.84	2.05	0.85	2.03	0.82	1.87	0.83	2.06	0.56	2.15
3. Algebra and Functions	6	0.51	1.10	0.53	1.10	0.52	1.10	0.60	1.06	0.57	1.09	0.35	1.13
4. Measurement and Geometry	14	0.74	1.62	0.72	1.62	0.71	1.64	0.67	1.47	0.48	1.73	0.67	1.60
5. Statistics, Data Analysis and Probability	7	0.60	1.15	0.60	1.16	0.66	1.13	0.54	0.95	0.35	1.16	0.45	1.21
Grade 3													
1. Number Sense: Place Value, Fractions, and Decimals	16	0.84	1.66	0.81	1.70	0.81	1.70	0.78	1.59	0.77	1.65	–	–
2. Number Sense: Addition, Subtraction, Multiplication, Division	16	0.87	1.62	0.83	1.70	0.83	1.68	0.83	1.58	0.81	1.70	–	–
3. Algebra and Functions	12	0.81	1.39	0.75	1.48	0.72	1.47	0.73	1.41	0.72	1.50	–	–
4. Measurement and Geometry	16	0.80	1.69	0.71	1.77	0.73	1.76	0.74	1.58	0.82	1.75	–	–
5. Statistics, Data Analysis and Probability	5	0.64	0.92	0.63	0.93	0.62	0.93	0.59	0.76	0.56	0.97	–	–
Grade 4													
1. Number Sense: Decimals, Fractions, and Negative Numbers	17	0.78	1.75	0.76	1.76	0.75	1.75	0.71	1.70	0.82	1.74	–	–
2. Number Sense: Operations and Factoring	14	0.81	1.55	0.78	1.62	0.78	1.62	0.79	1.54	0.73	1.64	–	–
3. Algebra and Functions	18	0.90	1.71	0.86	1.81	0.87	1.80	0.87	1.61	0.89	1.69	–	–
4. Measurement and Geometry	12	0.71	1.47	0.70	1.51	0.72	1.50	0.68	1.44	0.70	1.52	–	–
5. Statistics, Data Analysis, and Probability	4	0.49	0.88	0.47	0.85	0.31	0.90	0.36	0.83	0.44	0.86	–	–

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	0.60	1.48	0.72	1.47	0.69	1.49	0.68	1.45	0.78	1.39	–	–
2. Number Sense: Operations with Fractions and Decimals	17	0.69	1.87	0.80	1.82	0.80	1.81	0.77	1.84	0.62	1.85	–	–
3. Algebra and Functions	17	0.77	1.84	0.81	1.80	0.82	1.80	0.80	1.69	0.84	1.64	–	–
4. Measurement and Geometry	15	0.56	1.75	0.71	1.72	0.66	1.74	0.71	1.74	0.30	1.78	–	–
5. Statistics, Data Analysis, and Probability	4	0.24	0.94	0.22	0.94	0.33	0.91	0.33	0.90	0.13	0.93	–	–
Grade 6													
1. Number Sense: Ratios, Proportions, Percentages and Negative Numbers	15	0.79	1.67	0.78	1.67	0.75	1.71	0.75	1.67	–	–	0.51	1.72
2. Number Sense: Operations with Problem Solving with Fractions	10	0.71	1.36	0.66	1.39	0.62	1.41	0.64	1.40	–	–	0.60	1.44
3. Algebra and Functions	19	0.86	1.84	0.82	1.87	0.84	1.87	0.76	1.88	–	–	0.67	2.00
4. Measurement and Geometry	10	0.59	1.40	0.55	1.43	0.58	1.40	0.55	1.46	–	–	0.57	1.21
5. Statistics, Data Analysis, and Probability	11	0.69	1.48	0.66	1.50	0.67	1.49	0.63	1.50	-	-	0.26	1.47
Grade 7													
1. Number Sense: Rational Numbers	14	0.64	1.73	0.62	1.74	0.62	1.74	0.59	1.74	0.61	1.75	0.61	1.72
2. Number Sense: Exponent, Powers and Roots	8	0.59	1.20	0.61	1.19	0.60	1.21	0.65	1.19	0.45	1.23	0.43	1.19
3. Algebra and Functions: Quantitative Relationships and Evaluating Expressions	10	0.54	1.45	0.51	1.45	0.51	1.45	0.55	1.42	0.54	1.44	0.46	1.47
4. Algebra and Functions: Multistep Problems, Graphing and Functions	15	0.68	1.76	0.73	1.73	0.67	1.78	0.70	1.77	0.66	1.77	0.67	1.79
5. Measurement and Geometry	13	0.75	1.59	0.69	1.64	0.66	1.65	0.62	1.68	0.74	1.59	0.55	1.71
6. Statistics, Data Analysis, and Probability	5	0.58	0.98	0.45	1.03	0.52	1.00	0.49	1.02	0.32	1.05	0.73	0.88

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	0.69	1.84	0.71	1.85	0.71	1.85	0.70	1.85	0.60	1.88	0.75	1.86
2. Graphing and Systems of Linear Equations	14	0.53	1.69	0.65	1.67	0.58	1.69	0.55	1.69	0.58	1.68	0.71	1.68
3. Quadratics and Polynomials	21	0.72	2.07	0.75	2.06	0.75	2.06	0.68	2.09	0.71	2.08	0.86	2.00
4. Functions and Rational Expressions	13	0.33	1.58	0.41	1.57	0.39	1.57	0.28	1.59	0.34	1.61	0.68	1.53
Geometry													
1. Logic and Geometric Proofs	23	0.82	2.10	0.78	2.12	0.72	2.13	0.71	2.14	0.66	2.19	0.81	2.04
2. Volume and Area Formulas	11	0.63	1.44	0.55	1.50	0.60	1.50	0.60	1.47	0.40	1.54	-0.47	1.57
3. Angle Relationships, Constructions, and Lines	16	0.70	1.74	0.67	1.81	0.76	1.76	0.68	1.75	0.49	1.76	0.70	1.82
4. Trigonometry	15	0.66	1.79	0.69	1.70	0.73	1.72	0.69	1.76	0.32	1.81	0.42	1.83

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	0.68	1.81	0.60	1.87	0.61	1.88	0.67	1.89	–	–	–	–
2. Graphing and Systems of Linear Equations	14	0.42	1.72	0.67	1.65	0.48	1.68	0.66	1.69	–	–	–	–
3. Quadratics and Polynomials	21	0.61	2.05	0.74	2.05	0.62	2.07	0.67	2.08	–	–	–	–
4. Functions and Rational Expressions	13	0.24	1.54	0.27	1.58	0.09	1.59	0.35	1.60	–	–	–	–
Geometry – 9													
1. Logic and Geometric Proofs	23	0.84	2.09	0.63	2.23	0.74	2.15	0.65	2.11	–	–	–	–
2. Volume and Area Formulas	11	0.74	1.39	0.44	1.51	0.47	1.49	0.27	1.55	–	–	–	–
3. Angle Relationships, Constructions, and Lines	16	0.78	1.67	0.48	1.84	0.75	1.79	0.71	1.78	–	–	–	–
4. Trigonometry	15	0.68	1.77	0.67	1.67	0.68	1.69	0.78	1.74	–	–	–	–

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	0–17	0.03	0.01	0.00	0.00	0.00	0.04
	18–33	0.01	0.20	0.04	0.00	0.00	0.25
	34–47	0.00	0.02	0.26	0.02	0.00	0.30
	48–55	0.00	0.01	0.04	0.15	0.02	0.23
	56–65	0.00	0.00	0.00	0.03	0.14	0.18
	Estimated Proportion Correctly Classified: Total = 0.79, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–17	0.03	0.01	0.00	0.00	0.00	0.04
	18–33	0.02	0.18	0.05	0.00	0.00	0.25
	34–47	0.00	0.03	0.23	0.04	0.00	0.30
	48–55	0.00	0.01	0.05	0.13	0.04	0.23
	56–65	0.00	0.00	0.00	0.04	0.14	0.18
	Estimated Proportion Consistently Classified: Total = 0.71, Proficient & Above = 0.89						

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	0–18	0.03	0.02	0.00	0.00	0.00	0.05
	19–31	0.01	0.18	0.03	0.00	0.00	0.22
	32–44	0.00	0.03	0.26	0.04	0.00	0.33
	45–53	0.00	0.00	0.04	0.18	0.03	0.25
	54–65	0.00	0.00	0.00	0.03	0.12	0.15
	Estimated Proportion Correctly Classified: Total = 0.76, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–18	0.03	0.02	0.00	0.00	0.00	0.05
	19–31	0.02	0.15	0.05	0.00	0.00	0.22
	32–44	0.00	0.05	0.22	0.06	0.00	0.33
	45–53	0.00	0.00	0.06	0.15	0.05	0.25
	54–65	0.00	0.00	0.00	0.04	0.11	0.15
	Estimated Proportion Consistently Classified: Total = 0.66, Proficient & Above = 0.88						

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	0.07	0.03	0.00	0.00	0.00	0.10
	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	0.32
	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	0.10
	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	0.32
	52–60	0.00	0.00	0.05	0.13	0.05	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	0–26	0.18	0.04	0.00	0.00	0.00	0.22
	27–33	0.04	0.09	0.04	0.00	0.00	0.17
	34–46	0.00	0.04	0.22	0.03	0.00	0.30
	47–57	0.00	0.00	0.04	0.14	0.02	0.19
	58–75	0.00	0.00	0.00	0.03	0.10	0.13
	Estimated Proportion Correctly Classified: Total = 0.73, Proficient & Above = 0.93						
Decision Consistency Alternate Form	0–26	0.16	0.05	0.01	0.00	0.00	0.22
	27–33	0.05	0.07	0.05	0.00	0.00	0.17
	34–46	0.01	0.05	0.19	0.05	0.00	0.30
	47–57	0.00	0.00	0.04	0.12	0.03	0.19
	58–75	0.00	0.00	0.00	0.03	0.10	0.13
	Estimated Proportion Consistently Classified: Total = 0.64, 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	0–23	0.11	0.04	0.00	0.00	0.00	0.15
	24–33	0.02	0.16	0.04	0.00	0.00	0.22
	34–45	0.00	0.04	0.22	0.04	0.00	0.30
	46–56	0.00	0.00	0.04	0.16	0.02	0.22
	57–75	0.00	0.00	0.00	0.03	0.09	0.11
	Estimated Proportion Correctly Classified: Total = 0.72, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–23	0.10	0.04	0.00	0.00	0.00	0.15
	24–33	0.04	0.13	0.05	0.00	0.00	0.22
	34–45	0.00	0.06	0.18	0.05	0.00	0.30
	46–56	0.00	0.00	0.05	0.14	0.03	0.22
	57–75	0.00	0.00	0.00	0.03	0.08	0.11
	Estimated Proportion Consistently Classified: Total = 0.62, 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	0–23	0.06	0.03	0.00	0.00	0.00	0.09
	24–34	0.02	0.17	0.04	0.00	0.00	0.24
	35–47	0.00	0.04	0.24	0.03	0.00	0.30
	48–58	0.00	0.00	0.04	0.18	0.02	0.25
	59–75	0.00	0.00	0.00	0.02	0.10	0.12
	Estimated Proportion Correctly Classified: Total = 0.75, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–23	0.05	0.03	0.00	0.00	0.00	0.09
	24–34	0.04	0.15	0.05	0.00	0.00	0.24
	35–47	0.00	0.05	0.20	0.05	0.00	0.30
	48–58	0.00	0.00	0.05	0.15	0.04	0.25
	59–75	0.00	0.00	0.00	0.03	0.09	0.12
	Estimated Proportion Consistently Classified: Total = 0.65, 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	0–17	0.00	0.01	0.00	0.00	0.00	0.01
	18–34	0.00	0.15	0.03	0.00	0.00	0.19
	35–45	0.00	0.03	0.20	0.04	0.00	0.27
	46–55	0.00	0.00	0.04	0.23	0.03	0.30
	56–65	0.00	0.00	0.00	0.04	0.19	0.23
	Estimated Proportion Correctly Classified: Total = 0.78, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–17	0.01	0.01	0.00	0.00	0.00	0.01
	18–34	0.01	0.14	0.04	0.00	0.00	0.19
	35–45	0.00	0.04	0.17	0.06	0.00	0.27
	46–55	0.00	0.00	0.06	0.20	0.05	0.30
	56–65	0.00	0.00	0.00	0.05	0.18	0.23
	Estimated Proportion Consistently Classified: Total = 0.69, Proficient & Above = 0.88						

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	0–16	0.01	0.01	0.00	0.00	0.00	0.02
	17–31	0.00	0.15	0.03	0.00	0.00	0.18
	32–42	0.00	0.02	0.17	0.03	0.00	0.22
	43–55	0.00	0.00	0.03	0.29	0.03	0.35
	56–65	0.00	0.00	0.00	0.03	0.19	0.22
	Estimated Proportion Correctly Classified: Total = 0.80, Proficient & Above = 0.93						
Decision Consistency Alternate Form	0–16	0.01	0.01	0.00	0.00	0.00	0.02
	17–31	0.01	0.13	0.04	0.00	0.00	0.18
	32–42	0.00	0.03	0.14	0.05	0.00	0.22
	43–55	0.00	0.00	0.05	0.26	0.04	0.35
	56–65	0.00	0.00	0.00	0.04	0.18	0.22
	Estimated Proportion Consistently Classified: Total = 0.73, 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	0.02	0.01	0.00	0.00	0.00	0.03
	19–30	0.01	0.13	0.04	0.01	0.00	0.19
	31–41	0.00	0.02	0.17	0.02	0.00	0.21
	42–53	0.00	0.00	0.04	0.26	0.02	0.33
	54–65	0.00	0.00	0.00	0.04	0.19	0.23
	Estimated Proportion Correctly Classified: Total = 0.77, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–18	0.02	0.01	0.00	0.00	0.00	0.03
	19–30	0.02	0.11	0.05	0.01	0.00	0.19
	31–41	0.00	0.03	0.14	0.04	0.00	0.21
	42–53	0.00	0.00	0.06	0.23	0.04	0.33
	54–65	0.00	0.00	0.00	0.05	0.18	0.23
	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	0.08	0.04	0.00	0.00	0.00	0.12
	20–26	0.03	0.11	0.04	0.00	0.00	0.18
	27–34	0.00	0.04	0.13	0.03	0.00	0.20
	35–44	0.00	0.00	0.04	0.17	0.03	0.25
	45–65	0.00	0.00	0.00	0.03	0.21	0.25
	Estimated Proportion Correctly Classified: Total = 0.71, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–19	0.07	0.04	0.00	0.00	0.00	0.12
	20–26	0.04	0.09	0.05	0.01	0.00	0.18
	27–34	0.00	0.05	0.11	0.05	0.00	0.20
	35–44	0.00	0.01	0.05	0.14	0.04	0.25
	45–65	0.00	0.00	0.00	0.04	0.21	0.25
	Estimated Proportion Consistently Classified: Total = 0.62, Proficient & Above = 0.89						

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	0–20	0.11	0.05	0.00	0.00	0.00	0.16
	21–28	0.03	0.16	0.04	0.00	0.00	0.23
	29–36	0.00	0.05	0.14	0.04	0.00	0.23
	37–45	0.00	0.00	0.04	0.14	0.02	0.21
	46–65	0.00	0.00	0.00	0.03	0.15	0.17
	Estimated Proportion Correctly Classified: Total = 0.70, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–20	0.10	0.05	0.00	0.00	0.00	0.16
	21–28	0.05	0.12	0.05	0.00	0.00	0.23
	29–36	0.00	0.06	0.12	0.05	0.00	0.23
	37–45	0.00	0.01	0.05	0.11	0.04	0.21
	46–65	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	0–20	0.12	0.06	0.00	0.00	0.00	0.18
	21–27	0.04	0.16	0.05	0.00	0.00	0.24
	28–36	0.00	0.06	0.18	0.04	0.00	0.28
	37–47	0.00	0.00	0.04	0.14	0.01	0.19
	48–65	0.00	0.00	0.00	0.02	0.08	0.11
	Estimated Proportion Correctly Classified: Total = 0.68, Proficient & Above = 0.92						
Decision Consistency Alternate Form	0–20	0.10	0.07	0.01	0.00	0.00	0.18
	21–27	0.06	0.12	0.06	0.00	0.00	0.24
	28–36	0.01	0.07	0.15	0.05	0.00	0.28
	37–47	0.00	0.00	0.05	0.12	0.02	0.19
	48–65	0.00	0.00	0.00	0.03	0.07	0.11
	Estimated Proportion Consistently Classified: Total = 0.57, Proficient & Above = 0.89						

Appendix 8.C—Validity Analyses

Note that, while the correlations are reported only for samples that comprise 11 or more examinees, results based on samples that contain 50 or fewer examinees should be interpreted with caution due to small sample sizes. Correlations between scores on any two content-area tests where 10 or fewer examinees took the tests are expressed as hyphens. Correlations between scores on two content-area tests that cannot be administered together to the same group of students are expressed as "N/A."

Table 8.C.1 STS Content Area Correlations (Female)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**5,318**	0.74	
	2. Mathematics	5,295	**5,310**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**3,467**	0.78	
	2. Mathematics	3,458	**3,468**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**2,233**	0.71	
	2. Mathematics	2,227	**2,235**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**1,437**	0.66	
	2. Mathematics	1,433	**1,437**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**818**	0.65	
	2. Mathematics	810	**812**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**682**	0.66	–
	2. Mathematics	660	**661**	N/A
	3. Algebra I	3	N/A	**3**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**521**	0.48	
	2. Algebra I	194	**196**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**825**	0.56	0.55
	2. Algebra I	528	**534**	N/A
	3. Geometry	33	N/A	**35**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**537**	0.52	0.57
	2. Algebra I	297	**301**	N/A
	3. Geometry	84	N/A	**85**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**317**	0.58	0.64
	2. Algebra I	120	**120**	N/A
	3. Geometry	61	N/A	**65**

Table 8.C.2 STS Content Area Correlations (Male)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**5,301**	0.74	
	2. Mathematics	5,271	**5,302**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**3,296**	0.77	
	2. Mathematics	3,283	**3,300**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**2,193**	0.72	
	2. Mathematics	2,183	**2,190**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**1,431**	0.64	
	2. Mathematics	1,426	**1,428**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**948**	0.7	
	2. Mathematics	944	**945**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**770**	0.7	–
	2. Mathematics	745	**747**	N/A
	3. Algebra I	7	N/A	**7**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**547**	0.5	
	2. Algebra I	191	**192**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**1,156**	0.58	0.67
	2. Algebra I	686	**693**	N/A
	3. Geometry	47	N/A	**48**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**711**	0.57	0.62
	2. Algebra I	388	**392**	N/A
	3. Geometry	106	N/A	**108**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**399**	0.56	0.73
	2. Algebra I	160	**161**	N/A
	3. Geometry	80	N/A	**82**

Table 8.C.3 STS Content Area Correlations (Not Economically Disadvantaged)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**731**	0.77	
	2. Mathematics	726	**730**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**518**	0.76	
	2. Mathematics	513	**516**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**335**	0.75	
	2. Mathematics	333	**333**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**234**	0.65	
	2. Mathematics	233	**233**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**154**	0.7	
	2. Mathematics	153	**153**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**162**	0.69	–
	2. Mathematics	157	**158**	N/A
	3. Algebra I	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**161**	0.52	
	2. Algebra I	59	**61**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**355**	0.66	0.63
	2. Algebra I	226	**229**	N/A
	3. Geometry	18	N/A	**18**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**201**	0.59	0.65
	2. Algebra I	96	**97**	N/A
	3. Geometry	32	N/A	**32**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**150**	0.58	0.82
	2. Algebra I	60	**60**	N/A
	3. Geometry	27	N/A	**27**

Table 8.C.4 STS Content Area Correlations (Economically Disadvantaged)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**9,821**	0.74	
	2. Mathematics	9,775	**9,817**	
3	1. Reading/Language Arts	**6,200**	0.77	
	2. Mathematics	6,184	**6,207**	
4	1. Reading/Language Arts	**4,038**	0.71	
	2. Mathematics	4,025	**4,040**	
5	1. Reading/Language Arts	**2,602**	0.64	
	2. Mathematics	2,594	**2,600**	
6	1. Reading/Language Arts	**1,600**	0.66	
	2. Mathematics	1,589	**1,592**	
7	1. Reading/Language Arts	**1,273**	0.67	–
	2. Mathematics	1,231	**1,233**	N/A
	3. Algebra I	9	N/A	**9**
8	1. Reading/Language Arts	**893**	0.5	
	2. Algebra I	320	**321**	
9	1. Reading/Language Arts	**1,586**	0.56	0.58
	2. Algebra I	961	**971**	N/A
	3. Geometry	61	N/A	**64**
10	1. Reading/Language Arts	**1,026**	0.53	0.6
	2. Algebra I	574	**581**	N/A
	3. Geometry	158	N/A	**161**
11	1. Reading/Language Arts	**553**	0.56	0.67
	2. Algebra I	216	**217**	N/A
	3. Geometry	112	N/A	**118**

Table 8.C.5 STS Content Area Correlations (Economic Status unknown)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**76**	0.58	
	2. Mathematics	74	**74**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**52**	0.71	
	2. Mathematics	51	**52**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**58**	0.68	
	2. Mathematics	57	**57**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**39**	0.73	
	2. Mathematics	39	**39**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**14**	0.76	
	2. Mathematics	14	**14**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**21**	0.8	–
	2. Mathematics	21	**21**	N/A
	3. Algebra I	0	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**16**	–	
	2. Algebra I	6	**6**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**46**	0.28	–
	2. Algebra I	29	**29**	N/A
	3. Geometry	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**24**	0.57	–
	2. Algebra I	16	**16**	N/A
	3. Geometry	0	N/A	**0**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**15**	–	–
	2. Algebra I	5	**5**	N/A
	3. Geometry	2	N/A	**2**

Table 8.C.6 STS Content Area Correlations (In U.S. Schools >= 12 Months)

Grade	STS	1.	2.	
2	1. Reading/Language Arts	**9,413**	0.73	
	2. Mathematics	9,371	**9,409**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**5,639**	0.75	
	2. Mathematics	5,626	**5,646**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**3,327**	0.7	
	2. Mathematics	3,318	**3,332**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**1,853**	0.63	
	2. Mathematics	1,851	**1,855**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**818**	0.64	
	2. Mathematics	817	**818**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**422**	0.62	–
	2. Mathematics	413	**415**	N/A
	3. Algebra I	2	N/A	**2**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**178**	0.61	
	2. Algebra I	108	**110**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**126**	0.58	0.43
	2. Algebra I	77	**78**	N/A
	3. Geometry	13	N/A	**15**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**129**	0.61	0.61
	2. Algebra I	58	**62**	N/A
	3. Geometry	44	N/A	**44**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**155**	0.56	0.71
	2. Algebra I	28	**29**	N/A
	3. Geometry	63	N/A	**65**

Table 8.C.7 STS Content Area Correlations (In U.S. Schools < 12 Months)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**1,215**	0.72	
	2. Mathematics	1,204	**1,212**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**1,131**	0.78	
	2. Mathematics	1,122	**1,129**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**1,104**	0.75	
	2. Mathematics	1,097	**1,098**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**1,022**	0.73	
	2. Mathematics	1,015	**1,017**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**950**	0.72	
	2. Mathematics	939	**941**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**1,034**	0.71	–
	2. Mathematics	996	**997**	N/A
	3. Algebra I	8	N/A	**8**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**892**	0.51	
	2. Algebra I	277	**278**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**1,861**	0.57	0.62
	2. Algebra I	1,139	**1,151**	N/A
	3. Geometry	67	N/A	**68**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**1,122**	0.53	0.61
	2. Algebra I	628	**632**	N/A
	3. Geometry	146	N/A	**149**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**563**	0.56	0.65
	2. Algebra I	253	**253**	N/A
	3. Geometry	78	N/A	**82**

Table 8.C.8 STS Content Area Correlations (EL in ELD)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**94**	0.68	
	2. Mathematics	94	**94**	
Grade	STS	1.	2.	
3	1. Reading/Language Arts	**90**	0.81	
	2. Mathematics	90	**91**	
Grade	STS	1.	2.	
4	1. Reading/Language Arts	**66**	0.77	
	2. Mathematics	66	**67**	
Grade	STS	1.	2.	
5	1. Reading/Language Arts	**78**	0.69	
	2. Mathematics	78	**78**	
Grade	STS	1.	2.	
6	1. Reading/Language Arts	**90**	0.79	
	2. Mathematics	89	**89**	
Grade	STS	1.	2.	3.
7	1. Reading/Language Arts	**124**	0.77	–
	2. Mathematics	118	**118**	N/A
	3. Algebra I	0	N/A	**0**
Grade	STS	1.	2.	
8	1. Reading/Language Arts	**98**	0.51	
	2. Algebra I	35	**35**	
Grade	STS	1.	2.	3.
9	1. Reading/Language Arts	**212**	0.68	0.76
	2. Algebra I	123	**123**	N/A
	3. Geometry	16	N/A	**16**
Grade	STS	1.	2.	3.
10	1. Reading/Language Arts	**174**	0.45	0.76
	2. Algebra I	86	**86**	N/A
	3. Geometry	30	N/A	**31**
Grade	STS	1.	2.	3.
11	1. Reading/Language Arts	**89**	0.5	0.29
	2. Algebra I	45	**45**	N/A
	3. Geometry	12	N/A	**13**

Table 8.C.9 STS Content Area Correlations (EL in ELD and SDAIE)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**471**	0.67	
	2. Mathematics	464	**470**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**503**	0.77	
	2. Mathematics	499	**502**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**536**	0.76	
	2. Mathematics	534	**534**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**498**	0.74	
	2. Mathematics	494	**495**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**469**	0.72	
	2. Mathematics	462	**464**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**440**	0.7	–
	2. Mathematics	425	**426**	N/A
	3. Algebra I	6	N/A	**6**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**414**	0.52	
	2. Algebra I	132	**133**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**705**	0.58	0.71
	2. Algebra I	430	**436**	N/A
	3. Geometry	19	N/A	**19**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**433**	0.61	0.59
	2. Algebra I	233	**235**	N/A
	3. Geometry	50	N/A	**50**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**245**	0.55	0.68
	2. Algebra I	109	**109**	N/A
	3. Geometry	28	N/A	**29**

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	**299**	0.68	
	2. Mathematics	297	**298**	
Grade	STS	1.	2.	
3	1. Reading/Language Arts	**254**	0.78	
	2. Mathematics	251	**253**	
Grade	STS	1.	2.	
4	1. Reading/Language Arts	**283**	0.76	
	2. Mathematics	281	**281**	
Grade	STS	1.	2.	
5	1. Reading/Language Arts	**293**	0.77	
	2. Mathematics	291	**292**	
Grade	STS	1.	2.	
6	1. Reading/Language Arts	**288**	0.71	
	2. Mathematics	286	**286**	
Grade	STS	1.	2.	3.
7	1. Reading/Language Arts	**274**	0.69	–
	2. Mathematics	262	**262**	N/A
	3. Algebra I	2	N/A	**2**
Grade	STS	1.	2.	
8	1. Reading/Language Arts	**251**	0.54	
	2. Algebra I	75	**75**	
Grade	STS	1.	2.	3.
9	1. Reading/Language Arts	**524**	0.52	0.37
	2. Algebra I	297	**300**	N/A
	3. Geometry	16	N/A	**16**
Grade	STS	1.	2.	3.
10	1. Reading/Language Arts	**244**	0.46	0.44
	2. Algebra I	166	**166**	N/A
	3. Geometry	20	N/A	**20**
Grade	STS	1.	2.	3.
11	1. Reading/Language Arts	**130**	0.56	0.74
	2. Algebra I	76	**76**	N/A
	3. Geometry	13	N/A	**13**

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	**9,685**	0.73	
	2. Mathematics	9,641	**9,680**	
Grade	STS	1.	2.	
3	1. Reading/Language Arts	**5,869**	0.75	
	2. Mathematics	5,855	**5,876**	
Grade	STS	1.	2.	
4	1. Reading/Language Arts	**3,484**	0.7	
	2. Mathematics	3,474	**3,488**	
Grade	STS	1.	2.	
5	1. Reading/Language Arts	**1,958**	0.63	
	2. Mathematics	1,956	**1,960**	
Grade	STS	1.	2.	
6	1. Reading/Language Arts	**875**	0.64	
	2. Mathematics	874	**875**	
Grade	STS	1.	2.	3.
7	1. Reading/Language Arts	**524**	0.63	–
	2. Mathematics	514	**516**	N/A
	3. Algebra I	2	N/A	**2**
Grade	STS	1.	2.	
8	1. Reading/Language Arts	**228**	0.56	
	2. Algebra I	125	**127**	
Grade	STS	1.	2.	3.
9	1. Reading/Language Arts	**369**	0.56	0.44
	2. Algebra I	247	**250**	N/A
	3. Geometry	23	N/A	**26**
Grade	STS	1.	2.	3.
10	1. Reading/Language Arts	**293**	0.58	0.61
	2. Algebra I	146	**151**	N/A
	3. Geometry	73	N/A	**73**
Grade	STS	1.	2.	3.
11	1. Reading/Language Arts	**208**	0.72	0.71
	2. Algebra I	42	**43**	N/A
	3. Geometry	79	N/A	**82**

Table 8.C.12 STS Content Area Correlations (Other EL Instructional Services)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**13**	0.63	
	2. Mathematics	13	**13**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**19**	0.85	
	2. Mathematics	19	**19**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**18**	0.67	
	2. Mathematics	18	**18**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**14**	0.59	
	2. Mathematics	14	**14**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**9**	–	
	2. Mathematics	8	**8**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**37**	0.66	–
	2. Mathematics	35	**35**	N/A
	3. Algebra I	0	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**32**	–	
	2. Algebra I	7	**7**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**59**	0.61	–
	2. Algebra I	45	**45**	N/A
	3. Geometry	2	N/A	**2**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**63**	0.59	–
	2. Algebra I	36	**37**	N/A
	3. Geometry	8	N/A	**9**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**23**	–	–
	2. Algebra I	6	**6**	N/A
	3. Geometry	4	N/A	**5**

Table 8.C.13 STS Content Area Correlations (None (EL only))

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**30**	0.42	
	2. Mathematics	30	**30**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**9**	–	
	2. Mathematics	9	**9**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**10**	–	
	2. Mathematics	10	**10**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**10**	–	
	2. Mathematics	9	**9**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**12**	0.5	
	2. Mathematics	12	**12**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**32**	0.75	–
	2. Mathematics	30	**30**	N/A
	3. Algebra I	0	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**20**	–	
	2. Algebra I	4	**4**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**30**	0.82	–
	2. Algebra I	16	**16**	N/A
	3. Geometry	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**22**	–	–
	2. Algebra I	9	**9**	N/A
	3. Geometry	8	N/A	**8**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**11**	–	–
	2. Algebra I	0	**0**	N/A
	3. Geometry	2	N/A	**2**

Table 8.C.14 STS Content Area Correlations (Program Participation unknown)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**36**	0.77	
	2. Mathematics	36	**36**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**26**	0.76	
	2. Mathematics	25	**25**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**34**	0.64	
	2. Mathematics	32	**32**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**24**	0.85	
	2. Mathematics	24	**24**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**25**	0.77	
	2. Mathematics	25	**25**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**25**	0.76	–
	2. Mathematics	25	**25**	N/A
	3. Algebra I	0	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**27**	–	
	2. Algebra I	7	**7**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**88**	0.55	–
	2. Algebra I	58	**59**	N/A
	3. Geometry	3	N/A	**3**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**22**	–	–
	2. Algebra I	10	**10**	N/A
	3. Geometry	1	N/A	**2**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**12**	–	–
	2. Algebra I	3	**3**	N/A
	3. Geometry	3	N/A	**3**

Table 8.C.15 STS Content Area Correlations (No Special Education)

Grade	STS	1.	2.	3.
2	**1. Reading/Language Arts**	**10,191**	0.73	
	2. Mathematics	10,140	**10,181**	
Grade	**STS**	**1.**	**2.**	
3	**1. Reading/Language Arts**	**6,469**	0.76	
	2. Mathematics	6,449	**6,463**	
Grade	**STS**	**1.**	**2.**	
4	**1. Reading/Language Arts**	**4,201**	0.7	
	2. Mathematics	4,186	**4,194**	
Grade	**STS**	**1.**	**2.**	
5	**1. Reading/Language Arts**	**2,697**	0.65	
	2. Mathematics	2,688	**2,690**	
Grade	**STS**	**1.**	**2.**	
6	**1. Reading/Language Arts**	**1,686**	0.67	
	2. Mathematics	1,674	**1,677**	
Grade	**STS**	**1.**	**2.**	**3.**
7	**1. Reading/Language Arts**	**1,407**	0.67	–
	2. Mathematics	1,361	**1,362**	N/A
	3. Algebra I	10	N/A	**10**
Grade	**STS**	**1.**	**2.**	
8	**1. Reading/Language Arts**	**1,054**	0.51	
	2. Algebra I	379	**381**	
Grade	**STS**	**1.**	**2.**	**3.**
9	**1. Reading/Language Arts**	**1,978**	0.57	0.6
	2. Algebra I	1,212	**1,225**	N/A
	3. Geometry	79	N/A	**82**
Grade	**STS**	**1.**	**2.**	**3.**
10	**1. Reading/Language Arts**	**1,248**	0.54	0.6
	2. Algebra I	684	**692**	N/A
	3. Geometry	190	N/A	**193**
Grade	**STS**	**1.**	**2.**	**3.**
11	**1. Reading/Language Arts**	**712**	0.57	0.69
	2. Algebra I	279	**280**	N/A
	3. Geometry	140	N/A	**146**

Table 8.C.16 STS Content Area Correlations (Special Education)

Grade	STS	1.	2.	3.
2	1. Reading/Language Arts	**435**	0.72	
	2. Mathematics	433	**438**	
Grade	**STS**	**1.**	**2.**	
3	1. Reading/Language Arts	**297**	0.76	
	2. Mathematics	295	**308**	
Grade	**STS**	**1.**	**2.**	
4	1. Reading/Language Arts	**230**	0.66	
	2. Mathematics	229	**236**	
Grade	**STS**	**1.**	**2.**	
5	1. Reading/Language Arts	**178**	0.54	
	2. Mathematics	178	**182**	
Grade	**STS**	**1.**	**2.**	
6	1. Reading/Language Arts	**82**	0.5	
	2. Mathematics	82	**82**	
Grade	**STS**	**1.**	**2.**	**3.**
7	1. Reading/Language Arts	**49**	0.5	–
	2. Mathematics	48	**50**	N/A
	3. Algebra I	0	N/A	**0**
Grade	**STS**	**1.**	**2.**	
8	1. Reading/Language Arts	**16**	–	
	2. Algebra I	6	**7**	
Grade	**STS**	**1.**	**2.**	**3.**
9	1. Reading/Language Arts	**9**	–	–
	2. Algebra I	4	**4**	N/A
	3. Geometry	1	N/A	**1**
Grade	**STS**	**1.**	**2.**	**3.**
10	1. Reading/Language Arts	**3**	–	–
	2. Algebra I	2	**2**	N/A
	3. Geometry	0	N/A	**0**
Grade	**STS**	**1.**	**2.**	**3.**
11	1. Reading/Language Arts	**6**	–	–
	2. Algebra I	2	**2**	N/A
	3. Geometry	1	N/A	**1**

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	27	42%	26	40%	33	44%	19	25%	30	40%	27	36%	26	35%	12	16%	29	39%	23	31%
B	12	18%	12	18%	17	23%	20	27%	19	25%	25	33%	26	35%	22	29%	22	29%	15	20%
C	25	38%	27	42%	23	31%	36	48%	25	33%	19	25%	23	31%	41	55%	23	31%	29	39%
D	1	2%	0	0%	2	3%	0	0%	1	1%	2	3%	0	0%	0	0%	1	1%	8	11%
F	0	0%	0	0%	0	0%	0	0%	0	0%	2	3%	0	0%	0	0%	0	0%	0	0%
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	32	49%	27	42%	19	29%	8	12%	13	20%	24	37%	23	35%	6	9%
B	19	29%	18	28%	24	37%	26	40%	18	28%	20	31%	15	23%	6	9%
C	13	20%	19	29%	20	31%	30	46%	30	46%	19	29%	22	34%	44	68%
D	1	2%	0	0%	2	3%	1	2%	4	6%	2	3%	3	5%	8	12%
F	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%	2	3%	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%	18	25%	1	2%	2	6%	1	4%	3	13%	2	8%	0	0%	2	8%	0	0%
B	13	18%	12	17%	7	13%	5	14%	2	8%	3	13%	3	13%	3	10%	5	21%	1	8%
C	44	61%	30	42%	33	61%	21	58%	16	67%	14	58%	16	67%	15	50%	15	63%	9	75%
D	5	7%	10	14%	11	20%	8	22%	4	17%	1	4%	2	8%	10	33%	2	8%	2	17%
F	1	1%	2	3%	2	4%	0	0%	1	4%	3	13%	1	4%	2	7%	0	0%	0	0%
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	33	46%	18	25%	4	7%	1	3%	0	0%	3	13%	2	7%	2	33%
B	13	18%	16	22%	7	13%	6	17%	1	4%	5	21%	1	3%	1	17%
C	22	31%	34	47%	34	63%	18	50%	13	54%	13	54%	13	43%	2	33%
D	4	6%	3	4%	9	17%	8	22%	7	29%	2	8%	11	37%	1	17%
F	0	0%	1	1%	0	0%	3	8%	3	13%	1	4%	3	10%	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	–1.00	0.83	–2.58	1.21
Reading Comprehension	15	–0.40	0.58	–1.53	0.56
Literary Response and Analysis	6	–0.36	0.60	–1.46	0.33
Written Conventions	14	–0.53	0.34	–1.29	–0.20
Writing Strategies	8	0.21	0.37	–0.40	0.63
All operational items	65	–0.55	0.72	–2.58	1.21
Field-test items	72	–0.07	0.84	–1.73	1.98

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	–0.87	0.80	–2.67	0.23
Reading Comprehension	15	–0.14	0.69	–1.35	1.11
Literary Response and Analysis	8	0.05	0.99	–1.60	1.11
Written Conventions	13	–0.38	0.51	–1.36	0.28
Writing Strategies	9	–0.13	0.49	–1.06	0.54
All operational items	65	–0.39	0.77	–2.67	1.11
Field-test items	72	0.28	0.85	–1.61	1.95

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	–0.52	0.61	–1.38	0.78
Reading Comprehension	15	–0.18	0.35	–0.76	0.22
Literary Response and Analysis	9	0.17	0.79	–0.72	1.73
Written Conventions	18	–0.53	0.75	–2.07	1.00
Writing Strategies	15	0.21	0.69	–0.99	1.14
All operational items	75	–0.23	0.71	–2.07	1.73
Field-test items	54	0.68	0.57	–0.81	2.06

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	0.01	0.59	–1.04	1.05
Reading Comprehension	16	0.26	0.46	–0.80	0.85
Literary Response and Analysis	12	–0.05	0.49	–0.90	0.93
Written Conventions	17	–0.33	0.63	–1.82	0.91
Writing Strategies	16	0.02	0.56	–1.12	0.94
All operational items	75	–0.02	0.57	–1.82	1.05
Field-test items	36	0.40	0.69	–1.20	1.67

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	0.12	0.59	–0.66	1.27
Reading Comprehension	17	–0.04	0.51	–0.77	0.75
Literary Response and Analysis	12	–0.19	0.44	–0.88	0.49
Written Conventions	16	–0.35	0.60	–1.95	0.44
Writing Strategies	17	0.26	0.42	–0.50	0.94
All operational items	75	–0.03	0.55	–1.95	1.27
Field-test items	24	0.41	0.73	–0.81	1.78

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	–0.44	0.53	–1.29	0.53
Reading Comprehension	18	–0.07	0.60	–1.10	0.97
Literary Response and Analysis	13	–0.10	0.56	–1.22	0.64
Written Conventions	16	–0.26	0.81	–1.69	1.30
Writing Strategies	17	–0.14	0.71	–1.26	1.34
All operational items	75	–0.18	0.66	–1.69	1.34
Field-test items	24	0.25	0.71	–1.04	1.67

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	–0.39	0.55	–1.15	0.37
Reading Comprehension	18	0.04	0.63	–1.05	1.12
Literary Response and Analysis	15	–0.22	0.61	–1.37	0.78
Written Conventions	16	–0.66	0.71	–1.89	0.38
Writing Strategies	17	0.07	0.64	–1.40	1.17
All operational items	75	–0.21	0.68	–1.89	1.17
Field-test items	24	0.28	0.64	–0.71	1.42

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	–0.79	1.06	–1.76	1.14
Reading Comprehension	18	–0.22	0.85	–1.83	1.25
Literary Response and Analysis	16	–0.20	0.78	–1.67	0.71
Written Conventions	13	–0.27	0.68	–1.32	1.04
Writing Strategies	20	0.16	0.60	–0.94	1.23
All operational items	75	–0.18	0.80	–1.83	1.25
Field-test items	30	0.70	0.86	–1.32	2.47

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	–1.28	0.82	–2.22	0.02
Reading Comprehension	18	–0.30	0.57	–0.93	1.00
Literary Response and Analysis	16	–0.30	0.87	–1.63	0.89
Written Conventions	13	–0.19	0.64	–1.31	0.91
Writing Strategies	20	0.24	0.60	–0.79	1.23
All operational items	75	–0.24	0.79	–2.22	1.23
Field-test items	24	0.38	0.78	–0.80	1.58

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	–0.40	0.63	–1.46	0.61
Reading Comprehension	19	0.19	0.73	–1.18	1.37
Literary Response and Analysis	17	–0.14	0.58	–1.09	0.85
Written Conventions	9	–0.03	1.24	–2.12	2.19
Writing Strategies	22	–0.09	0.61	–1.06	1.47
All operational items	75	–0.06	0.74	–2.12	2.19
Field-test items	12	0.01	0.90	–1.75	1.48

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	–0.61	0.72	–2.42	0.08
Multiplication, Division, and Fractions	23	–0.90	0.89	–2.51	1.15
Algebra and Functions	6	–0.14	0.49	–0.93	0.30
Measurement and Geometry	14	–1.13	0.75	–2.73	–0.12
Statistics, Data Analysis, and Probability	7	–1.28	0.89	–2.29	0.53
All operational items	65	–0.85	0.83	–2.73	1.15
Field-test items	72	–0.65	1.06	–3.10	2.42

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	–0.41	0.97	–1.90	1.39
Addition, Subtraction, Multiplication, Division	16	–0.55	0.62	–1.72	0.68
Algebra and Functions	12	–0.26	1.06	–1.95	1.26
Measurement and Geometry	16	–0.83	0.72	–2.46	–0.10
Statistics, Data Analysis, and Probability	5	–1.21	0.75	–1.97	–0.41
All operational items	65	–0.58	0.86	–2.46	1.39
Field-test items	72	–0.33	1.13	–3.02	2.09

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	–0.51	1.06	–2.31	0.98
Operations and Factoring	14	–0.38	0.65	–1.59	0.28
Algebra and Functions	18	–0.61	0.43	–1.16	0.34
Measurement and Geometry	12	–0.43	0.88	–1.84	1.08
Statistics, Data Analysis, and Probability	4	–0.43	1.09	–1.50	0.92
All operational items	65	–0.49	0.78	–2.31	1.08
Field-test items	54	0.31	0.87	–1.82	2.09

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	–0.21	1.00	–1.81	1.14
Operations with Fractions and Decimals	17	0.30	0.50	–0.47	1.10
Algebra and Functions	17	–0.44	0.51	–1.40	0.50
Measurement and Geometry	15	0.38	0.62	–0.95	1.40
Statistics, Data Analysis, and Probability	4	0.09	0.77	–0.93	0.95
All operational items	65	0.02	0.73	–1.81	1.40
Field-test items	36	0.86	0.94	–1.42	2.53

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	–0.33	0.70	–1.74	1.28
Operations with Problem Solving with Fractions	10	–0.07	0.69	–1.09	1.36
Algebra and Functions	19	–0.33	0.68	–1.55	0.80
Measurement and Geometry	10	0.48	0.47	–0.11	1.46
Statistics, Data Analysis, and Probability	11	0.41	0.34	–0.02	1.02
All operational items	65	–0.04	0.69	–1.74	1.46
Field-test items	24	0.74	0.80	–0.94	2.26

Table 8.D.20 IRT *b*-values for Mathematics, Grade Seven

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Rational Numbers	14	0.23	0.43	–0.63	0.89
Exponents, Powers, and Roots	8	0.46	0.93	–1.61	1.60
Quant. Relationships and Evaluating Expressions	10	–0.09	0.71	–1.56	0.77
Multistep Problems, Graphing, and Functions	15	0.22	0.47	–0.73	0.86
Measurement and Geometry	13	0.13	0.44	–0.47	1.22
Statistics, Data Analysis, and Probability	5	0.13	0.28	–0.15	0.48
All operational items	65	0.18	0.56	–1.61	1.60
Field-test items	24	1.04	0.45	0.16	2.10

Table 8.D.21 IRT *b*-values for Algebra I

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Number Properties, Operations, and Linear Equations	17	0.21	0.67	–1.12	1.37
Graphing and Systems of Linear Equations	14	0.58	0.54	–0.49	1.61
Quadratics and Polynomials	21	0.29	0.60	–0.99	1.20
Functions and Rational Expressions	13	1.02	0.46	0.35	1.78
All operational items	65	0.48	0.64	–1.12	1.78
Field-test items	30	1.10	0.46	–0.02	2.17

Table 8.D.22 IRT *b*-values for Geometry

Content Area	No. of items	Mean	Standard Deviation	Minimum	Maximum
Logic and Geometric Proofs	23	–0.03	0.81	–1.76	1.44
Volume and Area Formulas	11	0.58	0.67	–0.83	1.76
Angle Relationships, Constructions, and Lines	16	0.54	0.72	–0.55	2.15
Trigonometry	15	0.55	0.43	–0.08	1.38
All operational items	65	0.35	0.73	–1.76	2.15
Field-test items	6	0.57	0.21	0.32	0.93

Table 8.D.23 Distribution of IRT Difficulty (*b*-values) for RLA

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	0	0	0	0	0	1
1.5 < 2.0	0	0	1	0	0	0	0	0	0	0
1.0 < 1.5	1	3	1	1	2	2	2	6	2	6
0.5 < 1.0	3	4	9	12	9	10	8	10	15	7
0.0 < 0.5	6	13	17	23	25	19	22	20	9	19
–0.5 < 0.0	27	19	20	24	22	20	20	13	21	20
–1.0 < –0.5	10	11	20	10	16	15	11	12	17	17
–1.5 < –1.0	12	11	5	4	0	8	9	9	6	4
–2.0 < –1.5	4	2	1	1	1	1	3	5	2	0
–2.5 < –2.0	0	0	1	0	0	0	0	0	3	1
–3.0 < –2.5	2	2	0	0	0	0	0	0	0	0
–3.5 < –3.0	0	0	0	0	0	0	0	0	0	0
< –3.5	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0
2.0 < 2.5	0	0	0	0	0	0	0	1
1.5 < 2.0	0	0	0	0	0	1	4	1
1.0 < 1.5	1	3	1	5	4	1	10	9
0.5 < 1.0	1	4	6	12	9	17	18	16
0.0 < 0.5	9	6	9	18	20	21	20	18
–0.5 < 0.0	15	19	19	17	16	20	9	10
–1.0 < –0.5	13	13	15	7	9	3	3	8
–1.5 < –1.0	10	9	8	3	5	0	1	1
–2.0 < –1.5	9	10	4	3	2	2	0	1
–2.5 < –2.0	5	1	3	0	0	0	0	0
–3.0 < –2.5	2	0	0	0	0	0	0	0
–3.5 < –3.0	0	0	0	0	0	0	0	0
< –3.5	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0
2.0 – < 2.5	0	0	1	0	0	0	0	2	0	0
1.5 – < 2.0	1	6	2	2	2	1	0	2	2	0
1.0 – < 1.5	7	12	13	3	3	3	4	8	5	2
0.5 – < 1.0	10	8	21	10	4	4	5	8	3	1
0.0 – < 0.5	13	18	10	13	10	7	4	3	2	4
–0.5 – < 0.0	23	17	5	3	1	5	10	5	9	2
–1.0 – < –0.5	7	4	2	3	4	3	1	1	3	2
–1.5 – < –1.0	8	5	0	2	0	1	0	1	0	0
–2.0 – < –1.5	3	2	0	0	0	0	0	0	0	1
–2.5 – < –2.0	0	0	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	0	0	0	0	0	0	0	0	0	0
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	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	1	0	0	0	0
2.0 – < 2.5	1	1	1	2	2	1	1	0
1.5 – < 2.0	0	3	3	5	3	2	4	0
1.0 – < 1.5	4	7	7	11	3	10	13	0
0.5 – < 1.0	5	5	11	6	7	8	10	4
0.0 – < 0.5	9	12	14	5	6	3	1	2
–0.5 – < 0.0	11	11	9	2	1	0	1	0
–1.0 – < –0.5	14	12	5	3	2	0	0	0
–1.5 – < –1.0	13	8	2	1	0	0	0	0
–2.0 – < –1.5	8	11	2	0	0	0	0	0
–2.5 – < –2.0	6	1	0	0	0	0	0	0
–3.0 – < –2.5	0	0	0	0	0	0	0	0
–3.5 – < –3.0	1	1	0	0	0	0	0	0
< –3.5	0	0	0	0	0	0	0	0
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									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**33**	161	–0.5094	296.8017	297
1	0	–4.9758	150.0000	150	**34**	229	–0.4412	300.0635	300
2	0	–4.2540	150.0000	150	**35**	204	–0.3728	303.3319	303
3	0	–3.8201	150.0000	150	**36**	203	–0.3042	306.6128	307
4	0	–3.5042	153.6182	154	**37**	223	–0.2352	309.9120	310
5	0	–3.2531	165.6257	166	**38**	212	–0.1657	313.2360	313
6	0	–3.0429	175.6740	176	**39**	239	–0.0955	316.5913	317
7	3	–2.8610	184.3700	184	**40**	198	–0.0245	319.9849	320
8	0	–2.6998	192.0774	192	**41**	232	0.0474	323.4244	323
9	7	–2.5544	199.0300	199	**42**	247	0.1205	326.9178	327
10	14	–2.4214	205.3897	205	**43**	238	0.1949	330.4740	330
11	18	–2.2983	211.2716	211	**44**	248	0.2708	334.1027	334
12	26	–2.1835	216.7612	217	**45**	265	0.3484	337.8145	338
13	51	–2.0755	221.9240	222	**46**	221	0.4281	341.6250	342
14	46	–1.9733	226.8100	227	**47**	259	0.5101	345.5442	346
15	91	–1.8761	231.4608	231	**48**	257	0.5947	349.5901	350
16	108	–1.7830	235.9093	236	**49**	301	0.6824	353.7816	354
17	108	–1.6936	240.1828	240	**50**	293	0.7736	358.1411	358
18	124	–1.6074	244.3040	244	**51**	323	0.8688	362.6955	363
19	145	–1.5240	248.2925	248	**52**	293	0.9689	367.4772	367
20	134	–1.4430	252.1646	252	**53**	278	1.0745	372.5263	373
21	162	–1.3642	255.9350	256	**54**	325	1.1867	377.8924	378
22	160	–1.2872	259.6167	260	**55**	326	1.3070	383.6439	384
23	167	–1.2118	263.2194	263	**56**	328	1.4370	389.8603	390
24	164	–1.1379	266.7545	267	**57**	304	1.5792	396.6578	397
25	194	–1.0652	270.2307	270	**58**	260	1.7369	404.1954	404
26	179	–0.9935	273.6564	274	**59**	260	1.9148	412.7042	413
27	176	–0.9228	277.0387	277	**60**	209	2.1209	422.5576	423
28	153	–0.8528	280.3852	280	**61**	188	2.3675	434.3475	434
29	198	–0.7834	283.7023	284	**62**	168	2.6784	449.2106	449
30	184	–0.7145	286.9966	287	**63**	92	3.1069	469.6975	470
31	188	–0.6459	290.2747	290	**64**	47	3.8221	503.8919	504
32	182	–0.5776	293.5406	294	**65**	15	–	N/A	600

Grade 3									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**33**	150	–0.3368	305.1467	305
1	0	–4.8701	150.0000	150	**34**	167	–0.2676	308.7542	309
2	0	–4.1426	150.0000	150	**35**	176	–0.1983	312.3684	312
3	0	–3.7035	150.0000	150	**36**	164	–0.1288	315.9958	316
4	0	–3.3829	150.0000	150	**37**	173	–0.0588	319.6430	320
5	0	–3.1276	159.6097	160	**38**	161	0.0116	323.3165	323
6	0	–2.9137	170.7651	171	**39**	182	0.0827	327.0250	327
7	0	–2.7284	180.4267	180	**40**	183	0.1546	330.7747	331
8	0	–2.5642	188.9930	189	**41**	177	0.2275	334.5743	335
9	3	–2.4160	196.7225	197	**42**	190	0.3015	338.4326	338
10	6	–2.2804	203.7926	204	**43**	184	0.3768	342.3592	342
11	10	–2.1550	210.3307	210	**44**	171	0.4536	346.3667	346
12	23	–2.0380	216.4321	216	**45**	175	0.5322	350.4646	350
13	29	–1.9280	222.1673	222	**46**	183	0.6128	354.6676	355
14	24	–1.8239	227.5944	228	**47**	199	0.6957	358.9909	359
15	51	–1.7249	232.7585	233	**48**	185	0.7813	363.4524	363
16	56	–1.6302	237.6965	238	**49**	187	0.8699	368.0729	368
17	90	–1.5393	242.4386	242	**50**	191	0.9620	372.8768	373
18	71	–1.4516	247.0105	247	**51**	204	1.0582	377.8933	378
19	80	–1.3668	251.4337	251	**52**	192	1.1591	383.1577	383
20	100	–1.2845	255.7268	256	**53**	196	1.2657	388.7148	389
21	112	–1.2043	259.9061	260	**54**	147	1.3789	394.6182	395
22	108	–1.1261	263.9851	264	**55**	158	1.5001	400.9385	401
23	124	–1.0496	267.9769	268	**56**	140	1.6311	407.7678	408
24	114	–0.9745	271.8927	272	**57**	111	1.7742	415.2301	415
25	103	–0.9007	275.7425	276	**58**	117	1.9327	423.4980	423
26	131	–0.8279	279.5355	280	**59**	98	2.1117	432.8346	433
27	113	–0.7561	283.2800	283	**60**	65	2.3186	443.6242	444
28	134	–0.6851	286.9841	287	**61**	76	2.5661	456.5300	457
29	114	–0.6147	290.6551	291	**62**	42	2.8779	472.7898	473
30	138	–0.5448	294.3002	294	**63**	21	3.3072	495.1772	495
31	110	–0.4753	297.9261	298	**64**	4	4.0238	532.5473	533
32	151	–0.4060	301.5395	302	**65**	6	–	N/A	600

Table 8.D.28 New Conversions for RLA, Grades Four and Five

Grade 4									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**38**	88	–0.2025	303.5189	304
1	0	–4.7575	150.0000	150	**39**	77	–0.1434	306.6961	307
2	0	–4.0436	150.0000	150	**40**	85	–0.0842	309.8804	310
3	0	–3.6173	150.0000	150	**41**	83	–0.0247	313.0763	313
4	0	–3.3085	150.0000	150	**42**	85	0.0350	316.2880	316
5	0	–3.0643	150.0000	150	**43**	83	0.0952	319.5201	320
6	0	–2.8608	160.6341	161	**44**	85	0.1557	322.7772	323
7	0	–2.6853	170.0653	170	**45**	104	0.2169	326.0642	326
8	0	–2.5304	178.3941	178	**46**	97	0.2787	329.3862	329
9	1	–2.3910	185.8830	186	**47**	108	0.3413	332.7487	333
10	1	–2.2640	192.7117	193	**48**	133	0.4047	336.1573	336
11	4	–2.1468	199.0084	199	**49**	101	0.4691	339.6199	340
12	5	–2.0378	204.8679	205	**50**	113	0.5346	343.1414	343
13	5	–1.9356	210.3631	210	**51**	110	0.6014	346.7301	347
14	13	–1.8391	215.5488	216	**52**	127	0.6695	350.3943	350
15	24	–1.7476	220.4711	220	**53**	106	0.7393	354.1433	354
16	23	–1.6602	225.1660	225	**54**	109	0.8108	357.9875	358
17	25	–1.5765	229.6634	230	**55**	104	0.8843	361.9386	362
18	44	–1.4961	233.9880	234	**56**	102	0.9601	366.0101	366
19	52	–1.4185	238.1609	238	**57**	116	1.0383	370.2173	370
20	52	–1.3433	242.1999	242	**58**	89	1.1194	374.5780	375
21	56	–1.2704	246.1203	246	**59**	130	1.2038	379.1125	379
22	73	–1.1994	249.9361	250	**60**	111	1.2919	383.8486	384
23	63	–1.1302	253.6578	254	**61**	95	1.3843	388.8129	389
24	62	–1.0625	257.2968	257	**62**	79	1.4816	394.0428	394
25	85	–0.9961	260.8621	261	**63**	93	1.5846	399.5832	400
26	81	–0.9310	264.3628	264	**64**	73	1.6945	405.4904	405
27	65	–0.8670	267.8044	268	**65**	80	1.8126	411.8363	412
28	61	–0.8039	271.1953	271	**66**	48	1.9406	418.7150	419
29	66	–0.7416	274.5418	275	**67**	35	2.0810	426.2611	426
30	85	–0.6801	277.8496	278	**68**	31	2.2370	434.6465	435
31	82	–0.6192	281.1242	281	**69**	34	2.4135	444.1367	444
32	78	–0.5588	284.3705	284	**70**	20	2.6182	455.1378	455
33	64	–0.4988	287.5937	288	**71**	15	2.8635	468.3236	468
34	85	–0.4392	290.7982	291	**72**	2	3.1736	484.9942	485
35	63	–0.3798	293.9887	294	**73**	2	3.6013	507.9807	508
36	75	–0.3207	297.1695	297	**74**	1	4.3166	546.4295	546
37	84	–0.2616	300.3448	300	**75**	0	–	N/A	600

Grade 5									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**38**	66	0.0125	315.6744	316
1	0	–4.4953	150.0000	150	**39**	72	0.0698	319.5253	320
2	0	–3.7824	150.0000	150	**40**	54	0.1273	323.3827	323
3	0	–3.3570	150.0000	150	**41**	76	0.1849	327.2518	327
4	0	–3.0493	150.0000	150	**42**	61	0.2428	331.1381	331
5	0	–2.8061	150.0000	150	**43**	53	0.3011	335.0470	335
6	0	–2.6036	150.0000	150	**44**	66	0.3597	338.9843	339
7	0	–2.4292	151.7572	152	**45**	59	0.4189	342.9558	343
8	0	–2.2753	162.0878	162	**46**	60	0.4786	346.9679	347
9	0	–2.1371	171.3687	171	**47**	52	0.5391	351.0271	351
10	1	–2.0111	179.8243	180	**48**	49	0.6004	355.1405	355
11	3	–1.8951	187.6147	188	**49**	56	0.6626	359.3189	359
12	3	–1.7872	194.8587	195	**50**	64	0.7259	363.5663	364
13	12	–1.6861	201.6455	202	**51**	48	0.7903	367.8939	368
14	18	–1.5907	208.0462	208	**52**	42	0.8562	372.3117	372
15	19	–1.5003	214.1167	214	**53**	49	0.9235	376.8312	377
16	23	–1.4141	219.9022	220	**54**	36	0.9925	381.4653	381
17	28	–1.3316	225.4400	225	**55**	45	1.0635	386.2282	386
18	52	–1.2524	230.7609	231	**56**	54	1.1366	391.1364	391
19	42	–1.1760	235.8916	236	**57**	50	1.2121	396.2082	396
20	46	–1.1021	240.8529	241	**58**	42	1.2905	401.4688	401
21	64	–1.0304	245.6653	246	**59**	45	1.3720	406.9406	407
22	58	–0.9607	250.3452	250	**60**	28	1.4571	412.6554	413
23	58	–0.8927	254.9071	255	**61**	34	1.5464	418.6503	419
24	65	–0.8263	259.3640	259	**62**	40	1.6406	424.9701	425
25	75	–0.7613	263.7273	264	**63**	28	1.7404	431.6704	432
26	65	–0.6976	268.0073	268	**64**	33	1.8469	438.8206	439
27	78	–0.6349	272.2136	272	**65**	22	1.9614	446.5097	447
28	68	–0.5732	276.3556	276	**66**	25	2.0858	454.8627	455
29	63	–0.5124	280.4385	280	**67**	19	2.2224	464.0303	464
30	67	–0.4523	284.4714	284	**68**	14	2.3745	474.2394	474
31	71	–0.3929	288.4611	288	**69**	12	2.5469	485.8169	486
32	72	–0.3340	292.4138	292	**70**	8	2.7473	499.2669	499
33	60	–0.2756	296.3356	296	**71**	8	2.9883	515.4491	515
34	63	–0.2175	300.2321	300	**72**	1	3.2936	535.9432	536
35	66	–0.1598	304.1089	304	**73**	2	3.7162	564.3135	564
36	75	–0.1023	307.9714	308	**74**	1	4.4264	600.0000	600
37	86	–0.0449	311.8252	312	**75**	0	–	N/A	600

Table 8.D.29 New Conversions for RLA, Grades Six and Seven

Grade 6										Grade 7									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**38**	38	–0.0059	319.1278	319	**0**	0	–	N/A	150	**38**	25	–0.1561	312.4842	312
1	0	–4.4960	150.0000	150	**39**	45	0.0511	323.1370	323	**1**	0	–4.6831	150.0000	150	**39**	31	–0.0976	316.1314	316
2	0	–3.7834	150.0000	150	**40**	43	0.1082	327.1538	327	**2**	0	–3.9710	150.0000	150	**40**	38	–0.0390	319.7856	320
3	0	–3.3583	150.0000	150	**41**	35	0.1656	331.1836	331	**3**	0	–3.5463	150.0000	150	**41**	32	0.0198	323.4510	323
4	0	–3.0510	150.0000	150	**42**	38	0.2231	335.2322	335	**4**	0	–3.2392	150.0000	150	**42**	31	0.0789	327.1350	327
5	0	–2.8082	150.0000	150	**43**	47	0.2811	339.3051	339	**5**	0	–2.9963	150.0000	150	**43**	32	0.1383	330.8402	331
6	0	–2.6062	150.0000	150	**44**	52	0.3394	343.4085	343	**6**	0	–2.7941	150.0000	150	**44**	31	0.1982	334.5727	335
7	0	–2.4323	150.0000	150	**45**	50	0.3983	347.5486	348	**7**	0	–2.6198	158.9065	159	**45**	36	0.2586	338.3381	338
8	0	–2.2790	159.3254	159	**46**	31	0.4578	351.7319	352	**8**	0	–2.4660	168.4957	168	**46**	29	0.3196	342.1423	342
9	0	–2.1413	169.0057	169	**47**	50	0.5181	355.9654	356	**9**	0	–2.3277	177.1166	177	**47**	41	0.3814	345.9913	346
10	3	–2.0159	177.8206	178	**48**	45	0.5791	360.2564	360	**10**	1	–2.2016	184.9763	185	**48**	22	0.4440	349.8918	350
11	4	–1.9004	185.9382	186	**49**	29	0.6411	364.6163	365	**11**	0	–2.0854	192.2231	192	**49**	43	0.5075	353.8530	354
12	4	–1.7931	193.4835	193	**50**	45	0.7042	369.0494	369	**12**	0	–1.9772	198.9667	199	**50**	40	0.5721	357.8800	358
13	4	–1.6926	200.5496	201	**51**	39	0.7684	373.5671	374	**13**	0	–1.8757	205.2910	205	**51**	29	0.6379	361.9826	362
14	11	–1.5978	207.2116	207	**52**	31	0.8340	378.1803	378	**14**	3	–1.7800	211.2596	211	**52**	36	0.7051	366.1702	366
15	11	–1.5080	213.5280	214	**53**	31	0.9012	382.9009	383	**15**	9	–1.6891	216.9252	217	**53**	34	0.7738	370.4535	370
16	16	–1.4224	219.5463	220	**54**	36	0.9700	387.7423	388	**16**	8	–1.6024	222.3294	222	**54**	34	0.8443	374.8444	375
17	20	–1.3405	225.3055	225	**55**	24	1.0408	392.7197	393	**17**	11	–1.5193	227.5067	228	**55**	32	0.9166	379.3564	379
18	26	–1.2618	230.8382	231	**56**	35	1.1138	397.8503	398	**18**	7	–1.4395	232.4854	232	**56**	24	0.9912	384.0048	384
19	22	–1.1859	236.1726	236	**57**	31	1.1893	403.1534	403	**19**	14	–1.3624	237.2896	237	**57**	22	1.0682	388.8075	389
20	30	–1.1125	241.3297	241	**58**	20	1.2675	408.6547	409	**20**	15	–1.2878	241.9399	242	**58**	43	1.1481	393.7846	394
21	33	–1.0414	246.3319	246	**59**	19	1.3489	414.3786	414	**21**	20	–1.2154	246.4545	246	**59**	22	1.2311	398.9591	399
22	44	–0.9722	251.1959	251	**60**	18	1.4340	420.3583	420	**22**	21	–1.1449	250.8470	251	**60**	20	1.3178	404.3651	404
23	32	–0.9047	255.9372	256	**61**	24	1.5232	426.6325	427	**23**	16	–1.0762	255.1323	255	**61**	22	1.4087	410.0308	410
24	32	–0.8389	260.5692	261	**62**	14	1.6173	433.2484	433	**24**	31	–1.0090	259.3221	259	**62**	24	1.5045	416.0002	416
25	44	–0.7744	265.1040	265	**63**	17	1.7171	440.2640	440	**25**	24	–0.9431	263.4269	263	**63**	17	1.6059	422.3251	422
26	37	–0.7111	269.5525	270	**64**	15	1.8236	447.7525	448	**26**	35	–0.8785	267.4561	267	**64**	20	1.7141	429.0703	429
27	45	–0.6489	273.9244	274	**65**	16	1.9382	455.8068	456	**27**	39	–0.8149	271.4192	271	**65**	14	1.8304	436.3189	436
28	31	–0.5877	278.2299	278	**66**	7	2.0627	464.5576	465	**28**	23	–0.7523	275.3218	275	**66**	11	1.9565	444.1794	444
29	45	–0.5273	282.4743	282	**67**	8	2.1993	474.1636	474	**29**	28	–0.6905	279.1728	279	**67**	4	2.0950	452.8087	453
30	37	–0.4676	286.6672	287	**68**	2	2.3515	484.8621	485	**30**	45	–0.6295	282.9787	283	**68**	11	2.2489	462.4040	462
31	35	–0.4086	290.8156	291	**69**	2	2.5241	496.9957	497	**31**	27	–0.5690	286.7457	287	**69**	8	2.4232	473.2731	473
32	40	–0.3502	294.9260	295	**70**	1	2.7246	511.0929	511	**32**	28	–0.5091	290.4796	290	**70**	1	2.6256	485.8862	486
33	40	–0.2922	299.0049	299	**71**	3	2.9658	528.0523	528	**33**	37	–0.4497	294.1860	294	**71**	4	2.8686	501.0348	501
34	45	–0.2345	303.0580	303	**72**	0	3.2713	549.5304	550	**34**	32	–0.3906	297.8701	298	**72**	0	3.1759	520.1936	520
35	47	–0.1771	307.0913	307	**73**	0	3.6942	579.2608	579	**35**	36	–0.3317	301.5370	302	**73**	1	3.6008	546.6758	547
36	46	–0.1200	311.1104	311	**74**	1	4.4047	600.0000	600	**36**	41	–0.2731	305.1918	305	**74**	0	4.3131	591.0786	591
37	42	–0.0629	315.1203	315	**75**	0	–	N/A	600	**37**	41	–0.2146	308.8392	309	**75**	0	–	N/A	600

Table 8.D.30 New Conversions for Mathematics, Grades Two and Three

Grade 2									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**33**	215	–0.8073	292.6105	293
1	0	–5.3469	150.0000	150	**34**	221	–0.7363	297.1237	297
2	0	–4.6254	150.0000	150	**35**	214	–0.6652	301.6467	302
3	0	–4.1912	150.0000	150	**36**	212	–0.5938	306.1842	306
4	0	–3.8746	150.0000	150	**37**	242	–0.5221	310.7451	311
5	0	–3.6224	150.0000	150	**38**	225	–0.4499	315.3379	315
6	0	–3.4110	150.0000	150	**39**	258	–0.3770	319.9699	320
7	1	–3.2275	150.0000	150	**40**	253	–0.3033	324.6538	325
8	0	–3.0645	150.0000	150	**41**	263	–0.2287	329.3972	329
9	3	–2.9171	158.4686	158	**42**	292	–0.1530	334.2112	334
10	1	–2.7819	167.0620	167	**43**	304	–0.0760	339.1075	339
11	3	–2.6567	175.0278	175	**44**	295	0.0025	344.0993	344
12	6	–2.5395	182.4789	182	**45**	264	0.0827	349.2014	349
13	10	–2.4290	189.5011	190	**46**	305	0.1650	354.4302	354
14	17	–2.3243	196.1610	196	**47**	318	0.2495	359.8040	360
15	27	–2.2244	202.5120	203	**48**	331	0.3367	365.3470	365
16	23	–2.1287	208.5975	209	**49**	330	0.4269	371.0819	371
17	39	–2.0366	214.4527	214	**50**	340	0.5206	377.0396	377
18	38	–1.9476	220.1079	220	**51**	332	0.6184	383.2560	383
19	54	–1.8614	225.5883	226	**52**	312	0.7209	389.7745	390
20	66	–1.7777	230.9155	231	**53**	311	0.8290	396.6485	397
21	85	–1.6960	236.1084	236	**54**	314	0.9437	403.9451	404
22	64	–1.6162	241.1834	241	**55**	326	1.0665	411.7497	412
23	84	–1.5380	246.1553	246	**56**	349	1.1991	420.1793	420
24	86	–1.4612	251.0381	251	**57**	362	1.3438	429.3811	429
25	82	–1.3856	255.8411	256	**58**	294	1.5041	439.5699	440
26	113	–1.3111	260.5770	261	**59**	312	1.6847	451.0565	451
27	124	–1.2376	265.2556	265	**60**	295	1.8933	464.3179	464
28	137	–1.1647	269.8862	270	**61**	274	2.1427	480.1782	480
29	161	–1.0925	274.4773	274	**62**	211	2.4565	500.1263	500
30	147	–1.0208	279.0383	279	**63**	191	2.8879	527.5559	528
31	145	–0.9494	283.5745	284	**64**	124	3.6066	573.2528	573
32	169	–0.8783	288.0963	288	**65**	47	–	N/A	600

Grade 3									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**33**	110	–0.5559	305.9679	306
1	0	–5.0783	150.0000	150	**34**	138	–0.4844	310.1825	310
2	0	–4.3584	150.0000	150	**35**	137	–0.4127	314.4086	314
3	0	–3.9257	150.0000	150	**36**	137	–0.3407	318.6535	319
4	0	–3.6106	150.0000	150	**37**	121	–0.2682	322.9248	323
5	0	–3.3598	150.0000	150	**38**	143	–0.1952	327.2304	327
6	0	–3.1497	153.0670	153	**39**	123	–0.1214	331.5786	332
7	1	–2.9674	163.8087	164	**40**	161	–0.0468	335.9784	336
8	1	–2.8056	173.3483	173	**41**	164	0.0289	340.4391	340
9	1	–2.6593	181.9737	182	**42**	168	0.1058	344.9713	345
10	3	–2.5252	189.8813	190	**43**	154	0.1841	349.5861	350
11	4	–2.4008	197.2119	197	**44**	156	0.2640	354.2957	354
12	13	–2.2845	204.0696	204	**45**	163	0.3457	359.1136	359
13	13	–2.1748	210.5345	211	**46**	181	0.4296	364.0593	364
14	25	–2.0708	216.6664	217	**47**	189	0.5159	369.1459	369
15	30	–1.9715	222.5163	223	**48**	211	0.6049	374.3958	374
16	32	–1.8764	228.1238	228	**49**	184	0.6972	379.8329	380
17	32	–1.7848	233.5220	234	**50**	178	0.7931	385.4854	385
18	45	–1.6963	238.7383	239	**51**	164	0.8932	391.3870	391
19	65	–1.6105	243.7960	244	**52**	215	0.9982	397.5782	398
20	66	–1.5271	248.7153	249	**53**	196	1.1090	404.1091	404
21	76	–1.4457	253.5136	254	**54**	193	1.2266	411.0413	411
22	66	–1.3661	258.2069	258	**55**	205	1.3525	418.4608	418
23	67	–1.2881	262.8063	263	**56**	216	1.4883	426.4655	426
24	86	–1.2114	267.3260	267	**57**	198	1.6364	435.1995	435
25	110	–1.1359	271.7766	272	**58**	188	1.8003	444.8599	445
26	79	–1.0614	276.1681	276	**59**	178	1.9847	455.7321	456
27	102	–0.9877	280.5102	281	**60**	191	2.1976	468.2786	468
28	105	–0.9148	284.8099	285	**61**	184	2.4512	483.2285	483
29	106	–0.8424	289.0772	289	**62**	147	2.7693	501.9827	502
30	107	–0.7704	293.3192	293	**63**	110	3.2055	527.6926	528
31	119	–0.6988	297.5446	298	**64**	74	3.9292	570.3540	570
32	113	–0.6273	301.7577	302	**65**	31	–	N/A	600

Table 8.D.31 New Conversions for Mathematics, Grades Four and Five

Grade 4									
Raw Scr.	**Freq. Dist.**	**Theta**	**Scale Score**	**Rprtd Score**	**Raw Scr.**	**Freq. Dist.**	**Theta**	**Scale Score**	**Rprtd Score**
0	0	–	N/A	150	**33**	85	–0.4479	310.9836	311
1	0	–4.9369	150.0000	150	**34**	79	–0.3782	315.5725	316
2	0	–4.2162	150.0000	150	**35**	79	–0.3084	320.1726	320
3	0	–3.7831	150.0000	150	**36**	105	–0.2383	324.7921	325
4	0	–3.4677	150.0000	150	**37**	82	–0.1677	329.4393	329
5	0	–3.2168	150.0000	150	**38**	84	–0.0966	334.1229	334
6	0	–3.0067	150.0000	150	**39**	95	–0.0248	338.8521	339
7	0	–2.8248	154.4481	154	**40**	74	0.0479	343.6366	344
8	2	–2.6633	165.0806	165	**41**	111	0.1215	348.4868	348
9	3	–2.5175	174.6820	175	**42**	103	0.1963	353.4137	353
10	1	–2.3840	183.4734	183	**43**	104	0.2725	358.4297	358
11	3	–2.2605	191.6125	192	**44**	134	0.3502	363.5477	364
12	4	–2.1450	199.2162	199	**45**	112	0.4297	368.7862	369
13	6	–2.0363	206.3741	206	**46**	118	0.5113	374.1583	374
14	7	–1.9334	213.1548	213	**47**	126	0.5952	379.6850	380
15	21	–1.8353	219.6149	220	**48**	138	0.6818	385.3887	385
16	29	–1.7414	225.7994	226	**49**	118	0.7715	391.2955	391
17	41	–1.6511	231.7456	232	**50**	128	0.8648	397.4365	397
18	30	–1.5639	237.4847	237	**51**	120	0.9621	403.8484	404
19	52	–1.4795	243.0431	243	**52**	130	1.0643	410.5758	411
20	53	–1.3975	248.4437	248	**53**	138	1.1721	417.6737	418
21	57	–1.3176	253.7062	254	**54**	125	1.2865	425.2137	425
22	63	–1.2395	258.8482	259	**55**	133	1.4090	433.2811	433
23	68	–1.1631	263.8842	264	**56**	133	1.5413	441.9936	442
24	75	–1.0880	268.8287	269	**57**	119	1.6858	451.5078	452
25	72	–1.0141	273.6941	274	**58**	138	1.8458	462.0425	462
26	69	–0.9413	278.4917	278	**59**	88	2.0262	473.9246	474
27	74	–0.8693	283.2319	283	**60**	93	2.2345	487.6455	488
28	87	–0.7981	287.9245	288	**61**	74	2.4835	504.0405	504
29	80	–0.7274	292.5788	293	**62**	71	2.7966	524.6642	525
30	90	–0.6571	297.2045	297	**63**	38	3.2275	553.0431	553
31	72	–0.5873	301.8076	302	**64**	18	3.9456	600.0000	600
32	75	–0.5176	306.3980	306	**65**	3	–	N/A	600

Grade 5									
Raw Scr.	**Freq. Dist.**	**Theta**	**Scale Score**	**Rprtd Score**	**Raw Scr.**	**Freq. Dist.**	**Theta**	**Scale Score**	**Rprtd Score**
0	0	–	N/A	150	**33**	67	0.0703	340.6343	341
1	0	–4.4113	150.0000	150	**34**	66	0.1393	347.1358	347
2	0	–3.6908	150.0000	150	**35**	65	0.2084	353.6494	354
3	0	–3.2577	150.0000	150	**36**	74	0.2778	360.1868	360
4	1	–2.9424	150.0000	150	**37**	92	0.3476	366.7598	367
5	0	–2.6916	150.0000	150	**38**	73	0.4179	373.3807	373
6	0	–2.4815	150.0000	150	**39**	70	0.4888	380.0624	380
7	0	–2.2996	150.0000	150	**40**	65	0.5606	386.8185	387
8	0	–2.1382	150.0000	150	**41**	91	0.6332	393.6634	394
9	6	–1.9925	150.0000	150	**42**	79	0.7070	400.6127	401
10	2	–1.8590	158.8991	159	**43**	40	0.7821	407.6886	408
11	11	–1.7355	170.5337	171	**44**	59	0.8587	414.9038	415
12	14	–1.6201	181.4020	181	**45**	51	0.9371	422.2824	422
13	25	–1.5115	191.6311	192	**46**	54	1.0174	429.8487	430
14	33	–1.4087	201.3203	201	**47**	50	1.1000	437.6304	438
15	33	–1.3107	210.5491	211	**48**	48	1.1852	445.6588	446
16	45	–1.2169	219.3819	219	**49**	57	1.2734	453.9695	454
17	49	–1.1268	227.8722	228	**50**	43	1.3652	462.6154	463
18	71	–1.0398	236.0640	236	**51**	62	1.4610	471.6389	472
19	55	–0.9556	243.9955	244	**52**	45	1.5615	481.1075	481
20	58	–0.8739	251.6991	252	**53**	42	1.6676	491.0998	491
21	75	–0.7942	259.2028	259	**54**	43	1.7803	501.7146	502
22	91	–0.7164	266.5314	267	**55**	34	1.9009	513.0779	513
23	77	–0.6402	273.7067	274	**56**	43	2.0313	525.3544	525
24	81	–0.5655	280.7483	281	**57**	30	2.1738	538.7788	539
25	81	–0.4919	287.6749	288	**58**	27	2.3317	553.6529	554
26	68	–0.4195	294.5002	295	**59**	23	2.5099	570.4408	570
27	83	–0.3479	301.2409	301	**60**	15	2.7160	589.8521	590
28	56	–0.2771	307.9108	308	**61**	22	2.9626	600.0000	600
29	72	–0.2069	314.5229	315	**62**	10	3.2735	600.0000	600
30	90	–0.1372	321.0894	321	**63**	3	3.7017	600.0000	600
31	80	–0.0679	327.6225	328	**64**	2	4.4173	600.0000	600
32	69	0.0013	334.1337	334	**65**	1	–	N/A	600

Table 8.D.32 New Conversions for Mathematics, Grades Six and Seven

Grade 6										Grade 7									
Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score	Raw Scr.	Freq. Dist.	Theta	Scale Score	Rprtd Score
0	0	–	N/A	150	**33**	51	–0.0013	327.4666	327	**0**	0	–	N/A	150	**33**	46	0.2158	331.2121	331
1	0	–4.4444	150.0000	150	**34**	45	0.0669	333.1108	333	**1**	0	–4.1534	150.0000	150	**34**	29	0.2816	336.6771	337
2	0	–3.7257	150.0000	150	**35**	41	0.1353	338.7669	339	**2**	0	–3.4361	150.0000	150	**35**	29	0.3476	342.1545	342
3	0	–3.2945	150.0000	150	**36**	47	0.2040	344.4453	344	**3**	1	–3.0064	150.0000	150	**36**	35	0.4139	347.6545	348
4	0	–2.9810	150.0000	150	**37**	45	0.2731	350.1561	350	**4**	0	–2.6946	150.0000	150	**37**	33	0.4805	353.1874	353
5	1	–2.7319	150.0000	150	**38**	43	0.3427	355.9104	356	**5**	0	–2.4473	150.0000	150	**38**	29	0.5477	358.7640	359
6	0	–2.5235	150.0000	150	**39**	49	0.4129	361.7194	362	**6**	0	–2.2409	150.0000	150	**39**	37	0.6155	364.3958	364
7	0	–2.3432	150.0000	150	**40**	38	0.4840	367.5950	368	**7**	0	–2.0627	150.0000	150	**40**	25	0.6841	370.0945	370
8	1	–2.1833	150.0000	150	**41**	41	0.5560	373.5500	374	**8**	0	–1.9050	155.1259	155	**41**	29	0.7537	375.8731	376
9	2	–2.0391	158.9742	159	**42**	38	0.6292	379.6007	380	**9**	2	–1.7629	166.9188	167	**42**	23	0.8244	381.7452	382
10	2	–1.9071	169.8884	170	**43**	42	0.7037	385.7593	386	**10**	2	–1.6332	177.6875	178	**43**	22	0.8965	387.7286	388
11	10	–1.7849	179.9873	180	**44**	38	0.7797	392.0441	392	**11**	5	–1.5134	187.6336	188	**44**	17	0.9701	393.8371	394
12	9	–1.6709	189.4165	189	**45**	30	0.8574	398.4740	398	**12**	3	–1.4018	196.9044	197	**45**	18	1.0454	400.0909	400
13	14	–1.5636	198.2883	198	**46**	31	0.9372	405.0703	405	**13**	9	–1.2969	205.6127	206	**46**	13	1.1227	406.5112	407
14	16	–1.4620	206.6898	207	**47**	20	1.0193	411.8576	412	**14**	16	–1.1977	213.8465	214	**47**	24	1.2023	413.1220	413
15	31	–1.3652	214.6904	215	**48**	33	1.1040	418.8639	419	**15**	23	–1.1034	221.6763	222	**48**	10	1.2846	419.9534	420
16	27	–1.2726	222.3466	222	**49**	34	1.1918	426.1212	426	**16**	26	–1.0133	229.1585	229	**49**	24	1.3699	427.0362	427
17	28	–1.1836	229.7055	230	**50**	26	1.2831	433.6709	434	**17**	27	–0.9268	236.3407	236	**50**	15	1.4587	434.4097	434
18	43	–1.0978	236.8042	237	**51**	15	1.3785	441.5567	442	**18**	44	–0.8434	243.2622	243	**51**	22	1.5516	442.1205	442
19	50	–1.0147	243.6775	244	**52**	16	1.4786	449.8355	450	**19**	49	–0.7628	249.9565	250	**52**	7	1.6492	450.2248	450
20	45	–0.9339	250.3532	250	**53**	26	1.5843	458.5766	459	**20**	41	–0.6846	256.4521	256	**53**	22	1.7524	458.7919	459
21	51	–0.8553	256.8558	257	**54**	21	1.6967	467.8669	468	**21**	42	–0.6085	262.7738	263	**54**	7	1.8622	467.9088	468
22	56	–0.7785	263.2068	263	**55**	11	1.8170	477.8173	478	**22**	45	–0.5341	268.9434	269	**55**	8	1.9800	477.6861	478
23	44	–0.7033	269.4253	269	**56**	11	1.9471	488.5730	489	**23**	58	–0.4614	274.9803	275	**56**	7	2.1075	488.2764	488
24	63	–0.6295	275.5283	276	**57**	12	2.0894	500.3373	500	**24**	43	–0.3901	280.9025	281	**57**	4	2.2471	499.8703	500
25	43	–0.5568	281.5322	282	**58**	15	2.2471	513.3788	513	**25**	52	–0.3200	286.7231	287	**58**	10	2.4022	512.7478	513
26	53	–0.4853	287.4490	287	**59**	3	2.4252	528.1040	528	**26**	63	–0.2509	292.4584	292	**59**	3	2.5777	527.3135	527
27	59	–0.4146	293.2931	293	**60**	8	2.6312	545.1371	545	**27**	42	–0.1827	298.1211	298	**60**	4	2.7809	544.1915	544
28	44	–0.3447	299.0767	299	**61**	9	2.8776	565.5139	566	**28**	59	–0.1153	303.7234	304	**61**	3	3.0249	564.4465	564
29	60	–0.2753	304.8110	305	**62**	6	3.1887	591.2327	591	**29**	42	–0.0484	309.2767	309	**62**	2	3.3330	590.0319	590
30	45	–0.2064	310.5068	311	**63**	3	3.6170	600.0000	600	**30**	56	0.0181	314.7930	315	**63**	0	3.7585	600.0000	600
31	53	–0.1379	316.1746	316	**64**	4	4.3327	600.0000	600	**31**	50	0.0841	320.2794	320	**64**	1	4.4715	600.0000	600
32	56	–0.0695	321.8251	322	**65**	1	–	N/A	600	**32**	54	0.1500	325.7495	326	**65**	0	–	N/A	600

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	STR20733.065	7	24	–1.69	MALE/FEMALE	MALE
	STR20858.140	7	49	1.53	MALE/FEMALE	FEMALE
	STR30725.OSA	11	74	1.68	MALE/FEMALE	FEMALE
Mathematics	STM10758	3	62	–1.53	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	STR30223.276	9	45	2.02	MALE/FEMALE	FEMALE
Mathematics	STM15477	3	49	–1.93	MALE/FEMALE	MALE
	STM15432	3	17	–2.64	MALE/FEMALE	MALE

Table 8.E.3 DIF Classifications for RLA, Grades Two through Four (operational items)

	Grade 2						Grade 3						Grade 4					
	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-	0	0	1	2	1	2	0	0	2	3	2	3	0	0	0	0	0	0
A-	34	52	30	46	32	49	34	52	31	48	26	40	37	49	36	48	33	44
A+	30	46	34	52	31	48	31	48	32	49	37	57	38	51	39	52	42	56
B+	1	2	0	0	1	2	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
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					
	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	1	1	0	0	1	1
B-	1	1	1	1	2	3	1	1	0	0	1	1	1	1	0	0	1	1
A-	37	49	36	48	34	45	28	37	0	0	28	37	35	47	0	0	35	47
A+	37	49	37	49	38	51	46	61	0	0	46	61	37	49	0	0	37	49
B+	0	0	1	1	1	1	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	1	1	0	0	1	1
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	0	0	0	0	0	0
B-	1	1	0	0	1	1	3	4	0	0	3	4	2	3	0	0	2	3	3	4	0	0	3	4
A-	33	44	0	0	33	44	33	44	0	0	33	44	32	43	0	0	32	43	34	45	0	0	34	45
A+	40	53	0	0	40	53	37	49	0	0	37	49	41	55	0	0	41	55	34	45	0	0	34	45
B+	1	1	0	0	1	1	2	3	0	0	2	3	0	0	0	0	0	0	3	4	0	0	3	4
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
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	1	2	0	0	1	2	0	0	0	0	0	0
B-	0	0	0	0	0	0	3	5	0	0	3	5	2	3	1	2	3	5
A-	28	43	30	46	33	51	23	35	35	54	30	46	26	40	29	45	33	51
A+	37	57	35	54	32	49	38	58	29	45	30	46	34	52	35	54	26	40
B+	0	0	0	0	0	0	0	0	1	2	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	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-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B-	1	2	1	2	2	3	3	5	0	0	3	5	2	3	0	0	2	3
A-	27	42	27	42	28	43	30	46	0	0	30	46	27	42	0	0	27	42
A+	37	57	36	55	34	52	31	48	0	0	31	48	35	54	0	0	35	54
B+	0	0	1	2	1	2	1	2	0	0	1	2	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	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-	0	0	0	0	0	0	1	2	0	0	1	2
A-	37	57	0	0	37	57	33	51	0	0	33	51
A+	28	43	0	0	28	43	29	45	0	0	29	45
B+	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
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					
	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-	4	6	0	0	4	6	1	1	0	0	1	1	1	2	0	0	1	2
A-	40	56	0	0	40	56	40	56	0	0	40	56	23	43	0	0	23	43
A+	26	36	0	0	26	36	30	42	0	0	30	42	30	56	0	0	30	56
B+	2	3	0	0	2	3	1	1	0	0	1	1	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	72	100	0	0	0	0	72	100	0	0	0	0	54	100	0	0
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					
	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-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A-	22	61	0	0	22	61	8	33	0	0	8	33	0	0	0	0	0	0
A+	13	36	0	0	13	36	15	63	0	0	15	63	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
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	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	0	0	0	0	0	0	0	0	0	0
A-	0	0	0	0	0	0	1	3	0	0	1	3	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	0	0	0	0	0	0
B+	0	0	0	0	0	0	1	3	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
C+	0	0	0	0	0	0	1	3	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
Small N	24	100	24	100	24	100	18	60	30	100	18	60	24	100	24	100	24	100	12	100	12	100	12	100
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	2	3	0	0	2	3	0	0	0	0	0	0
B-	8	11	0	0	8	11	5	7	0	0	5	7	0	0	0	0	0	0
A-	28	39	0	0	28	39	28	39	0	0	28	39	29	54	0	0	29	54
A+	32	44	0	0	32	44	35	49	0	0	35	49	23	43	0	0	23	43
B+	4	6	0	0	4	6	2	3	0	0	2	3	2	4	0	0	2	4
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	0	0	54	100	0	0
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-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A-	22	61	0	0	22	61	13	54	0	0	13	54	0	0	0	0	0	0
A+	12	33	0	0	12	33	9	38	0	0	9	38	0	0	0	0	0	0
B+	2	6	0	0	2	6	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.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-	1	3	0	0	1	3	2	33	0	0	2	33
A-	13	43	0	0	13	43	1	17	0	0	1	17
A+	15	50	0	0	15	50	2	33	0	0	2	33
B+	1	3	0	0	1	3	1	17	0	0	1	17
C+	0	0	0	0	0	0	0	0	0	0	0	0
Small N	0	0	30	100	0	0	0	0	6	100	0	0
TOTAL	30	100	30	100	30	100	6	100	6	100	6	100

Chapter 9: Quality Control Procedures

Rigorous quality control procedures were implemented 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. The 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 its 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 the quality control of item development.

Item Specifications

ETS maintains item 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. Adherence to the specifications ensures the maintenance of quality and consistency of the item development process.

Item Writers

The items for each STS are written by item writers who 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 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. See page 105 in Chapter 3 for additional information on the function of ARPs within the item-review process.

Statewide Pupil Assessment Review Panel Review

The SPAR panel is responsible for reviewing and approving the achievement tests that are 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 60602. See page 108 in Chapter 3 for additional information on the function of the SPAR panel within the item-review process.

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, 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 ETS content experts make recommendations about whether to accept or reject each item for inclusion in the California item bank. The CDE content experts review the recommendations and make the final decision on each item.

Quality Control of the Item Bank

After the data review, 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 off site, 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 (QC) 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 document is then reviewed by all team members who build forms at a training session specific to form planners before the form-building process starts. 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 coordinators 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 to assure that all errors have been corrected.

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.

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 documents 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 documents 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 receive 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 156. 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 on page 158 in Chapter 7.

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. Quality assurance

checks also include a comparison 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 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 2 starting on page 15, 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 model fits the data.

Scaling

During the scaling process, checks are made to ensure the following:

- The correct items are used for linking;
- The scaling evaluation process, including stability analysis and subsequent removal of items from the linking set (if any), is implemented according to specification (see details in the "Evaluation of Scaling" section in Chapter 8, on page 234); and
- The resulting 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 raw-to-scale score conversion 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 score 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 students in each performance level within the equating samples. 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 before ETS delivers them to Pearson.

Score Verification Process

Pearson utilizes the raw-to-scale scoring tables to assign scale scores for each student. ETS verifies Pearson's scale scores by 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 districts is based on the availability of data for all schools included in those districts, known as "pilot districts."

Year-to-Year Comparison Analyses

Year-to-year comparison analyses are conducted each year for quality control of the scoring procedure in general and as reasonableness checks for the STS results. The year-to-year comparison analyses uses over 90 percent of the entire testing population to look at the tendencies and trends for the state as a whole as well as a few large districts.

The results of the year-to-year comparison analyses are provided to the CDE and their reasonableness is jointly discussed. Any anomalies in the results are investigated further, and scores are released only after explanations that satisfy both the 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. The resulting classical, IRT, and DIF statistics for all items 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 by 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 CDS 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, foldered 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 districts, 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 CDE-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.

Reference

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

Chapter 10: Historical Comparisons

Base Year Comparisons

Historical comparisons of the STS results are routinely 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 a period of the three most recent years of administration—2010, 2011, and 2012—and the 2009 base year; and for RLA and mathematics in grades five through seven, comparisons were performed for the base year 2010 and a period of the two most recent years of administration, 2011 and 2012.

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 each 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 base years for the STS are presented in Table 10.1.

Table 10.1 Base Years for STS

Content Area	STS	Base Year
Reading/ Language Arts	2	2009
	3	2009
	4	2009
	5	2010
	6	2010
	7	2010
Mathematics	2	2009
	3	2009
	4	2009
	5	2010
	6	2010
	7	2010

The base years differ over STS by grade. Reasons for these differences are as follows:

- The STS for RLA and mathematics in grades two through four were first administered operationally in spring 2007. Percent-correct scores were reported in the 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 (below basic, basic, proficient, and advanced); thus, 2009 became the base year for these tests.
- The STS for RLA and mathematics in grades five through seven were first administered operationally in spring 2008. Percent-correct scores were reported in the 2008 and 2009 administrations. A standard setting was held in fall 2009 to establish new cut scores for the below basic, basic, proficient, and advanced performance levels. Spring 2010 was the first administration in which test results were reported using the new scales and cut

scores for the four performance levels (below basic, basic, proficient, and advanced); thus, 2010 became the base year for these tests.

Examinee Performance

Table 10.A.1 and Table 10.A.2 on page 323 contain the number of examinees assessed and the means and standard deviations of examinees' scale scores in the base year and subsequent administrations. This information is provided in Table 10.A.1 for each STS in grades two through four for base year 2009 and in 2010, 2011, and 2012; and in Table 10.A.2 for each STS in grades five through seven in base year 2010 and in 2011 and 2012. As noted in previous chapters, the STS reporting scales range from 150 to 600 for all content areas.

STS scale scores are used to classify student results 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.3 for grades two through four on page 323 and in Table 10.A.4 for grades five through seven on page 323; please note that 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. 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.5 and Table 10.A.6 show the distribution of scale scores observed from the base year to 2012 for the STS in RLA in grades two through four and in grades five through seven, respectively; Table 10.A.7 and Table 10.A.8 show these data for mathematics. Frequency counts are provided for each scale score interval of 30. A frequency count of "N/A" indicates that there are no obtainable scale scores within that scale-score range. For all STS, 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 the STS over the comparison years indicate that the STS meets the technical criteria established in professional standards for high-stakes tests. In addition, every year, efforts are made to improve the technical quality of each STS. The item and test analysis results are provided for the base year of each STS and the subsequent administrations through 2012; specifically, base year 2009 and the 2010, 2011, and 2012 administrations for grades two through four; and base year 2010 and the 2011 and 2012 administrations for grades five through seven.

Table 10.B.1 and Table 10.B.2 in Appendix 10.B, which starts on page 326, present the average proportion-correct values for the STS operational items in grades two through seven grade-level tests from the base year to 2012. The mean proportion correct is affected by both the difficulty of the items and the abilities of the students administered the items.

Table 10.B.3 and Table 10.B.4 show the mean equated IRT *b*-values for the STS operational items in grades two through seven grade-level tests from the base year to 2012. The mean equated IRT *b*-values reflect only average item difficulty. Please note that comparisons of mean *b*-values should only be made within a given test; they should not be compared across grade levels or content areas.

The average point-biserial correlations for grades two through four grade-level STS operational tests in the base year, 2010, 2011, and 2012 are presented in Table 10.B.5, and for grades five through seven in the base year, 2011, and 2012, in Table 10.B.6. The reliabilities and standard error of measurement (SEM) expressed in raw score units for the grade-level STS operational tests in grades two through four in the base year, 2010, 2011, and 2012 appear in Table 10.B.7 and, for grades five through seven in the base year and 2011, and 2012, in Table 10.B.8. Like the average proportion correct, point-biserial correlations and reliabilities are affected by both item characteristics and student characteristics.

Appendix 10.A—Historical Comparisons Tables

Table 10.A.1 Number of Examinees Tested, Scale Score Means and Standard Deviations of STS Across Base Year (2009), 2010, 2011, and 2012, Grades Two through Four

		Number of Examinees (valid scores)				Scale Score Mean and Standard Deviation							
						Base		2010		2011		2012	
Content Area	STS	Base	2010	2011	2012	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Reading/ Language Arts	2	13,300	11,518	10,783	10,628	333	53	331	52	331	55	333	57
	3	8,992	8,444	7,596	6,770	333	51	333	52	333	51	335	55
	4	4,897	4,459	4,411	4,431	325	51	326	54	327	54	327	53
Mathematics	2	13,250	11,505	10,771	10,621	360	72	367	75	365	73	363	75
	3	8,940	8,382	7,585	6,775	359	74	366	73	368	75	366	75
	4	4,893	4,428	4,409	4,430	359	72	363	74	368	75	365	76

Table 10.A.2 Number of Examinees Tested, Scale Score Means and Standard Deviations of STS for Base Year (2010), 2011, and 2012, Grades Five through Seven

		Number of Examinees (valid scores)			Scale Score Mean and Standard Deviation					
					Base		2011		2012	
Content Area	Grade-level STS	Base	2011	2012	Mean	S.D.	Mean	S.D.	Mean	S.D.
Reading/Language Arts	5	3,049	2,898	2,875	318	56	319	60	323	63
	6	1,962	1,918	1,768	318	54	322	57	325	61
	7	1,587	1,462	1,456	322	52	331	54	330	56
Mathematics	5	3,043	2,889	2,872	349	88	350	85	356	94
	6	1,952	1,905	1,759	332	77	332	77	331	79
	7	1,549	1,457	1,412	316	63	321	65	323	69

Table 10.A.3 Percentage of Proficient and Above and Percentage of Advanced Across Base Year (2009), 2010, 2011, and 2011, Grades Two through Four

		% Proficient and Above				% Advanced			
Content Area	STS	Base	2010	2011	2012	Base	2010	2011	2012
Reading/ Language Arts	2	40%	36%	39%	40%	17%	14%	15%	18%
	3	37%	35%	35%	40%	13%	12%	13%	15%
	4	35%	35%	36%	36%	12%	14%	15%	14%
Mathematics	2	54%	56%	57%	53%	21%	25%	24%	23%
	3	51%	55%	56%	58%	19%	23%	25%	22%
	4	52%	57%	58%	56%	19%	22%	25%	23%

Table 10.A.4 Percentage of Proficient and Above and Percentage of Advanced for Base Year (2010), 2011, and 2012, Grades Five through Seven

		% Proficient and Above			% Advanced		
Content Area	Grade-level STS	Base	2011	2012	Base	2011	2012
Reading/ Language Arts	5	29%	30%	32%	9%	10%	13%
	6	28%	33%	34%	7%	9%	11%
	7	31%	36%	37%	8%	10%	12%
Mathematics	5	46%	48%	49%	22%	21%	25%
	6	38%	35%	38%	17%	16%	17%
	7	27%	31%	30%	8%	9%	11%

Table 10.A.5 Observed Score Distributions of the STS Across Base Year (2009), 2010, 2011, and 2012 for RLA, Grades Two through Four

Observed Score Distributions	RLA Grade 2				RLA Grade 3				RLA Grade 4			
	Base	2010	2011	2012	Base	2010	2011	2012	Base	2010	2011	2012
570 – 600	8	13	9	15	2	4	1	6	0	0	0	0
540 – 569	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	2	1	1
510 – 539	N/A	21	N/A	N/A	7	9	7	4	1	N/A	N/A	N/A
480 – 509	18	N/A	56	47	23	26	15	21	1	15	6	4
450 – 479	150	99	176	92	100	80	82	118	19	28	32	35
420 – 449	385	453	360	565	404	281	304	280	105	111	115	100
390 – 419	1,320	1,006	1,013	1,152	646	817	552	556	364	452	393	373
360 – 389	2,187	1,910	1,599	1,545	1,382	1,278	1,306	1,155	818	634	731	747
330 – 359	3,203	2,276	2,314	2,082	2,032	1,926	1,685	1,462	1,007	977	834	907
300 – 329	2,416	2,464	1,946	1,987	1,860	1,666	1,593	1,324	955	807	902	871
270 – 299	1,941	1,870	1,742	1,615	1,587	1,367	1,272	957	846	669	670	659
240 – 269	1,231	1,062	1,110	1,164	812	823	663	685	584	546	511	537
210 – 239	409	325	413	340	126	153	111	193	181	200	206	186
180 – 209	29	19	44	24	11	14	5	9	15	18	10	11
150 – 179	3	0	1	0	0	0	0	0	0	0	0	0

A frequency count of "N/A" indicates that there are no obtainable scale scores within that scale-score range.

Table 10.A.6 Observed Score Distributions of the STS for Base Year (2010), 2011, and 2012 for RLA, Grades Five through Seven

Observed Score Distributions	RLA Grade 5			RLA Grade 6			RLA Grade 7		
	Base	2011	2012	Base	2011	2012	Base	2011	2012
570 – 600	0	0	1	0	0	1	0	0	0
540 – 569	0	4	2	0	0	0	0	0	1
510 – 539	2	4	9	1	1	4	0	1	0
480 – 509	10	17	20	4	3	4	3	2	5
450 – 479	27	41	58	11	17	31	8	18	23
420 – 449	116	120	123	50	76	88	49	75	62
390 – 419	186	187	253	148	145	129	122	113	131
360 – 389	359	355	284	207	306	256	224	234	211
330 – 359	511	425	456	369	325	303	251	289	274
300 – 329	602	557	558	412	326	306	327	290	275
270 – 299	583	562	479	388	345	310	327	226	259
240 – 269	460	397	431	271	241	215	208	166	162
210 – 239	169	212	164	88	123	95	66	47	52
180 – 209	23	16	37	13	7	23	1	1	1
150 – 179	1	1	0	0	3	3	1	0	0

Table 10.A.7 Observed Score Distributions of the STS Across Base Year (2009), 2010, 2011, and 2012 for Mathematics, Grades Two through Four

Observed Score Distributions	Math Grade 2				Math Grade 3				Math Grade 4			
	Base	2010	2011	2012	Base	2010	2011	2012	Base	2010	2011	2012
570 – 600	130	177	141	171	42	136	109	105	28	8	24	21
540 – 569	N/A	N/A	N/A	N/A	86	N/A	N/A	N/A	20	21	32	38
510 – 539	322	184	174	191	136	111	115	110	48	52	55	71
480 – 509	272	518	424	485	365	356	326	331	130	161	172	167
450 – 479	580	631	556	607	442	398	662	369	342	346	390	345
420 – 449	1,437	967	932	1,005	657	955	688	602	381	383	432	391
390 – 419	1,648	1,693	1,387	1,263	1,235	970	978	973	668	664	639	634
360 – 389	1,977	1,684	1,940	1,651	1,146	1,313	990	943	686	673	604	628
330 – 359	2,289	1,874	1,736	1,460	1,487	1,217	1,253	1,089	875	613	604	571
300 – 329	1,894	1,552	1,450	1,667	1,361	1,374	1,021	899	620	520	575	577
270 – 299	1,345	1,329	1,147	1,195	1,115	852	749	728	527	518	426	472
240 – 269	978	637	591	553	632	588	500	426	384	289	300	368
210 – 239	290	205	238	282	198	104	164	177	149	150	133	128
180 – 209	78	45	48	83	35	8	28	21	32	28	21	14
150 – 179	10	9	7	8	3	0	2	2	3	2	2	5

A frequency count of "N/A" indicates that there are no obtainable scale scores within that scale-score range.

Table 10.A.8 Observed Score Distributions of the STS for Base Year (2010), 2011, and 2012 for Mathematics, Grades Five through Seven

Observed Score Distributions	Math Grade 5			Math Grade 6			Math Grade 7		
	Base	2011	2012	Base	2011	2012	Base	2011	2012
570 – 600	49	50	76	16	9	14	2	3	3
540 – 569	54	25	27	11	15	17	4	3	7
510 – 539	75	68	107	14	19	18	6	6	13
480 – 509	62	76	130	36	51	23	5	15	11
450 – 479	190	122	162	56	61	74	38	31	44
420 – 449	171	207	203	100	94	75	41	63	71
390 – 419	327	284	269	189	176	152	98	103	72
360 – 389	311	395	374	218	206	208	154	139	136
330 – 359	395	432	267	271	247	221	192	200	201
300 – 329	474	395	381	291	305	265	325	294	261
270 – 299	338	323	307	304	293	262	311	295	258
240 – 269	289	266	279	253	257	246	224	187	221
210 – 239	210	164	198	143	123	129	128	102	92
180 – 209	81	59	72	39	40	49	20	15	17
150 – 179	17	23	20	11	9	6	1	1	5

A frequency count of "N/A" indicates that there are no obtainable scale scores within that scale-score range.

Appendix 10.B—Historical Comparisons Tables

Table 10.B.1 Average Proportion-Correct for Operational Test Items Across Base Year (2009), 2010, 2011, and 2012, Grades Two through Four

Content Area	Grade-level STS	Average *p*-value			
		Base	2010	2011	2012
Reading/Language Arts	2	0.65	0.62	0.64	0.64
	3	0.59	0.59	0.58	0.61
	4	0.57	0.58	0.59	0.59
Mathematics	2	0.67	0.69	0.69	0.70
	3	0.66	0.67	0.67	0.68
	4	0.63	0.64	0.66	0.65

Table 10.B.2 Average Proportion-Correct for Operational Test Items for Base Year (2010), 2011, and 2012, Grades Five through Seven

Content Area	Grade-level STS	Average *p*-value		
		Base	2011	2012
Reading/Language Arts	5	0.49	0.51	0.52
	6	0.48	0.51	0.52
	7	0.53	0.55	0.56
Mathematics	5	0.54	0.55	0.54
	6	0.50	0.50	0.51
	7	0.44	0.46	0.48

Table 10.B.3 Overall IRT *b*-values for Operational Test Items Across Base Year (2009), 2010, 2011, and 2012, Grades Two through Four

Content Area	Grade-level STS	Mean IRT *b*-value			
		Base	2010	2011	2012
Reading/Language Arts	2	–0.59	–0.46	–0.59	–0.55
	3	–0.31	–0.31	–0.26	–0.39
	4	–0.18	–0.24	–0.24	–0.23
Mathematics	2	–0.77	–0.77	–0.78	–0.85
	3	–0.62	–0.57	–0.56	–0.58
	4	–0.48	–0.46	–0.48	–0.49

Table 10.B.4 Overall IRT *b*-values for Operational Test Items for Base Year (2010), 2011, and 2012, Grades Five through Seven

Content Area	Grade-level STS	Mean IRT *b*-value		
		Base	2011	2012
Reading/Language Arts	5	0.09	0.00	–0.02
	6	0.05	–0.03	–0.03
	7	–0.16	–0.16	–0.18
Mathematics	5	–0.06	–0.08	0.02
	6	0.04	0.00	–0.04
	7	0.29	0.28	0.18

Table 10.B.5 Average Point-Biserial Correlation for Operational Test Items Across Base Year (2009), 2010, 2011, and 2012, Grades Two through Four

Content Area	Grade-level STS	Average Point-Biserial Correlation			
		Base	2010	2011	2012
Reading/Language Arts	2	0.43	0.42	0.44	0.45
	3	0.39	0.40	0.39	0.41
	4	0.39	0.41	0.41	0.40
Mathematics	2	0.40	0.41	0.41	0.41
	3	0.44	0.43	0.44	0.44
	4	0.41	0.43	0.43	0.43

Table 10.B.6 Average Point-Biserial Correlation for Operational Test Items for Base Year (2010), 2011, and 2012, Grades Five through Seven

Content Area	Grade-level STS	Average Point-Biserial Correlation		
		Base	2011	2012
Reading/Language Arts	5	0.36	0.38	0.39
	6	0.33	0.36	0.37
	7	0.35	0.36	0.37
Mathematics	5	0.39	0.37	0.41
	6	0.37	0.38	0.38
	7	0.33	0.33	0.35

Table 10.B.7 Score Reliabilities (Cronbach's Alpha) and Standard Error of Measurement (SEM) Across Base Year (2009), 2010, 2011, and 2012, Grades Two through Four

Content Area	Grade-level STS	Reliability				SEM			
		Base	2010	2011	2012	Base	2010	2011	2012
Reading/ Language Arts	2	0.93	0.93	0.93	0.94	3.34	3.42	3.38	3.38
	3	0.91	0.92	0.91	0.92	3.51	3.52	3.55	3.47
	4	0.93	0.93	0.93	0.93	3.79	3.77	3.78	3.78
Mathematics	2	0.92	0.92	0.92	0.92	3.31	3.28	3.28	3.27
	3	0.93	0.93	0.94	0.94	3.30	3.29	3.24	3.26
	4	0.92	0.93	0.93	0.93	3.42	3.38	3.33	3.36

Table 10.B.8 Score Reliabilities (Cronbach's Alpha) and Standard Error of Measurement (SEM) for Base Year (2010), 2011, and 2012, Grades Five through Seven

Content Area	Grade-level STS	Reliability			SEM		
		Base	2011	2012	Base	2011	2012
Reading/Language Arts	5	0.91	0.92	0.92	3.96	3.94	3.91
	6	0.89	0.91	0.91	3.95	3.95	3.95
	7	0.90	0.91	0.92	3.89	3.87	3.87
Mathematics	5	0.91	0.90	0.92	3.62	3.65	3.56
	6	0.91	0.91	0.91	3.61	3.62	3.61
	7	0.87	0.88	0.89	3.69	3.68	3.70