

2013 Colorado Alternate Assessment (CoAlt)

**Operational
Technical Report**

Submitted

October 16, 2013



**CTB/McGraw-Hill
Monterey, California 93940**

Copyright

Developed and published under contract with the Colorado Department of Education by CTB/McGraw-Hill LLC, 20 Ryan Ranch Road, Monterey, California 93940-5703. Copyright © 2013 by the Colorado Department of Education. Based on a template copyright © 1996 by CTB/McGraw-Hill LLC. All rights reserved. Only State of Colorado educators and citizens may copy, download and/or print the document, located online at <http://www.cde.state.co.us/assessment/CoAltAssess-AdditionalResources>. Any other use or reproduction of this document, in whole or in part, requires written permission of the Colorado Department of Education and the publisher.

Table of Contents

Copyright	i
Table of Contents.....	ii
List of Tables	iv
List of Figures	vii
Acronyms and Abbreviations.....	ix
Executive Summary	1
Overview.....	2
Introduction.....	2
Purpose of the CoAlt	3
Use of the Assessment Information	3
Part 1: Standards	4
Part 2: Test Development	4
Test Design	4
Item Review and Test Fairness.....	5
Item Selection.....	5
Part 3: Description of the Population	6
Description of Students	6
Student Eligibility Criteria.....	6
Population Characteristics.....	6
Part 4: Test Administration	7
Teacher/Test Examiner Training	8
Additional Training.....	8
Part 5: Scoring	8
Scoring Rubrics	8
<i>Level of Independence</i>	9
<i>Multiple-Choice Item Types</i>	9
<i>Constructed-Response Item Types</i>	10
Score Validation	11
Part 6: Standard Setting.....	11
Part 7: Analyses and Results	12
Item Level Statistics.....	13
<i>Item Difficulty (p-values)</i>	13
<i>Item Discrimination (point-biserial correlation)</i>	15
Content Standards Level Statistics	17
Total Test Level Statistics.....	18
Proficiency Level Data.....	19
Part 8: Summary of Results—Reliability and Validity.....	19
Reliability	19
<i>Item-specific reliability</i>	20
<i>Total test reliability</i>	20
Validity	23
Part 9: Special Studies.....	25
Level of Independence	25
Additional Reliability Measures	25
Student Scores	26
Performance Levels and Response Modes	27

Part 10: Longitudinal Analyses27

- Reading 27
- Writing..... 30
- Mathematics 34
- Science 37

Conclusion40

References53

Tables 1–9955

Figures 1–31419

Appendix A: Location of Information for Peer Review Critical Elements451

List of Tables

Table 1 Reading Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible	56
Table 2 Writing Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible	59
Table 3 Mathematics Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible	61
Table 4 Science Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible	63
Table 5 Test Design: Number of Items by Maximum Item Score	64
Table 6 Reading Descriptive Statistics by Gender and Race/Ethnicity	65
Table 7 Writing Descriptive Statistics by Gender and Race/Ethnicity	69
Table 8 Mathematics Descriptive Statistics by Gender and Race/Ethnicity	73
Table 9 Science Descriptive Statistics by Gender and Race/Ethnicity	77
Table 10 Reading Descriptive Statistics by English Language Proficiency	79
Table 11 Writing Descriptive Statistics by English Language Proficiency	87
Table 12 Mathematics Descriptive Statistics by English Language Proficiency	95
Table 13 Science Descriptive Statistics by English Language Proficiency	103
Table 14 Reading Descriptive Statistics by Free/Reduced Price Lunch Eligibility	106
Table 15 Writing Descriptive Statistics by Free/Reduced Price Lunch Eligibility	107
Table 16 Mathematics Descriptive Statistics by Free/Reduced Price Lunch Eligibility	108
Table 17 Science Descriptive Statistics by Free/Reduced Price Lunch Eligibility	109
Table 18 Reading Descriptive Statistics by Primary Disability	110
Table 19 Writing Descriptive Statistics by Primary Disability	118
Table 20 Mathematics Descriptive Statistics by Primary Disability	126
Table 21 Science Descriptive Statistics by Primary Disability	134
Table 22 Reading Descriptive Statistics by Expanded Accommodation	137
Table 23 Writing Descriptive Statistics by Expanded Accommodation	141
Table 24 Mathematics Descriptive Statistics by Expanded Accommodation	145
Table 25 Science Descriptive Statistics by Expanded Accommodation	149
Table 26 Scoring Rubric for Multiple-Choice Item Types	151
Table 27 Scoring Rubric for Constructed-Response Item Types	152
Table 28 Summary of Invalidations	153
Table 29 Breakdown of Invalidations Due to Test Examiners Marking Bubbles on Answer Document	154
Table 30 Writing Frequency Distributions of CR (6-Point) Items	156
Table 31 Mathematics Frequency Distributions of CR (6-Point) Items	158
Table 32 Science Frequency Distributions of CR (6-Point) Items	162
Table 33 Reading Item Level Statistics With and Without Level of Independence	163
Table 34 Writing Item Level Statistics With and Without Level of Independence	171
Table 35 Mathematics Item Level Statistics With and Without Level of Independence	179

Table 36 Science Item Level Statistics With and Without Level of Independence	191
Table 37 Summary of <i>P</i> -values and Point-Biserial by Grade and Content Area Including Level of Independence.....	194
Table 38 Summary of <i>P</i> -values and Point-Biserial by Grade and Content Area Without Including Level of Independence.....	195
Table 39 Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (<i>P</i> -value).....	196
Table 40 Writing Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (<i>P</i> -value).....	200
Table 41 Mathematics Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (<i>P</i> -value).....	203
Table 42 Science Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (<i>P</i> -value).....	206
Table 43 Reading Grade 3 Raw Score Frequency Distributions.....	207
Table 44 Reading Grade 4 Raw Score Frequency Distributions.....	211
Table 45 Reading Grade 5 Raw Score Frequency Distributions.....	215
Table 46 Reading Grade 6 Raw Score Frequency Distributions.....	219
Table 47 Reading Grade 7 Raw Score Frequency Distributions.....	223
Table 48 Reading Grade 8 Raw Score Frequency Distributions.....	227
Table 49 Reading Grade 9 Raw Score Frequency Distributions.....	231
Table 50 Reading Grade 10 Raw Score Frequency Distributions.....	234
Table 51 Writing Grade 3 Raw Score Frequency Distributions.....	237
Table 52 Writing Grade 4 Raw Score Frequency Distributions.....	241
Table 53 Writing Grade 5 Raw Score Frequency Distributions.....	245
Table 54 Writing Grade 6 Raw Score Frequency Distributions.....	249
Table 55 Writing Grade 7 Raw Score Frequency Distributions.....	253
Table 56 Writing Grade 8 Raw Score Frequency Distributions.....	257
Table 57 Writing Grade 9 Raw Score Frequency Distributions.....	261
Table 58 Writing Grade 10 Raw Score Frequency Distributions.....	265
Table 59 Mathematics Grade 3 Raw Score Frequency Distributions.....	269
Table 60 Mathematics Grade 4 Raw Score Frequency Distributions.....	273
Table 61 Mathematics Grade 5 Raw Score Frequency Distributions.....	277
Table 62 Mathematics Grade 6 Raw Score Frequency Distributions.....	283
Table 63 Mathematics Grade 7 Raw Score Frequency Distributions.....	288
Table 64 Mathematics Grade 8 Raw Score Frequency Distributions.....	292
Table 65 Mathematics Grade 9 Raw Score Frequency Distributions.....	297
Table 66 Mathematics Grade 10 Raw Score Frequency Distributions.....	302
Table 67 Science Grade 5 Raw Score Frequency Distributions	307
Table 68 Science Grade 8 Raw Score Frequency Distributions	310
Table 69 Science Grade 10 Raw Score Frequency Distributions	313
Table 70 Cut Scores and Percent of Students in Each Proficiency Level	316
Table 71 Total Group Statistics, Including Reliability	318

Table 72 Classification Consistency and Accuracy	319
Table 73 Level of Independence—Total Percentage by Level across All Items	320
Table 74 Reliability of Levels of Independence	321
Table 75 Percentages of Test Administrator Coding Errors.....	322
Table 76 Reading Average Level of Independence and Earned Proficiency Level	323
Table 77 Writing Average Level of Independence and Earned Proficiency Level	325
Table 78 Mathematics Average Level of Independence and Earned Proficiency Level	327
Table 79 Science Average Level of Independence and Earned Proficiency Level.....	329
Table 80 Reading Longitudinal Total Group Means and Standard Deviations	330
Table 81 Writing Longitudinal Total Group Means and Standard Deviations	331
Table 82 Mathematics Longitudinal Total Group Means and Standard Deviations	332
Table 83 Science Longitudinal Total Group Means and Standard Deviations	333
Table 84 Reading Longitudinal Subgroup Participation	334
Table 85 Writing Longitudinal Subgroup Participation	350
Table 86 Mathematics Longitudinal Subgroup Participation	366
Table 87 Science Longitudinal Subgroup Participation.....	382
Table 88 Reading Longitudinal Summary of <i>P</i> -values	388
Table 89 Writing Longitudinal Summary of <i>P</i> -values	390
Table 90 Mathematics Longitudinal Summary of <i>P</i> -values	392
Table 91 Science Longitudinal Summary of <i>P</i> -values	395
Table 92 Reading Longitudinal Summary of Point-Biserials	396
Table 93 Writing Longitudinal Summary of Point-Biserials	398
Table 94 Mathematics Longitudinal Summary of Point-Biserials	400
Table 95 Science Longitudinal Summary of Point-Biserials.....	402
Table 96 Reading Longitudinal Summary of Impact Data.....	403
Table 97 Writing Longitudinal Summary of Impact Data.....	407
Table 98 Mathematics Longitudinal Summary of Impact Data.....	411
Table 99 Science Longitudinal Summary of Impact Data	416

List of Figures

Figure 1 Total Number of Students Participating in CoAlt 2012-13 by Grade and Content	420
Figure 2 Percent of Participating Students by Coded Disability	421
Figure 3 Reading Percent of Students Utilizing Expanded Accommodations	422
Figure 4 Writing Percent of Students Utilizing Expanded Accommodations	423
Figure 5 Mathematics Percent of Students Utilizing Expanded Accommodations	424
Figure 6 Science Percent of Students Utilizing Expanded Accommodations	425
Figure 7 Reading Mean as Percent of Total Possible Score by Gender	426
Figure 8 Writing Mean as Percent of Total Possible Score by Gender	427
Figure 9 Mathematics Mean as Percent of Total Possible Score by Gender	428
Figure 10 Science Mean as Percent of Total Possible Score by Gender.....	429
Figure 11 Reading Mean as Percent of Total Possible Score by Race/Ethnicity	430
Figure 12 Writing Mean as Percent of Total Possible Score by Race/Ethnicity.....	431
Figure 13 Mathematics Mean as Percent of Total Possible Score by Race/Ethnicity	432
Figure 14 Science Mean as Percent of Total Possible Score by Race/Ethnicity	433
Figure 15 Reading Impact Data	434
Figure 16 Writing Impact Data.....	435
Figure 17 Mathematics Impact Data.....	436
Figure 18 Science Impact Data	437
Figure 19 Impact Data—Developing and Novice Combined.....	438
Figure 20 Total Number of Students Participating in CoAlt Reading 2008, 2009, 2010, 2011, 2012, and 2013.....	439
Figure 21 Total Number of Students Participating in CoAlt Writing 2008, 2009, 2010, 2011, 2012, and 2013.....	440
Figure 22 Total Number of Students Participating in CoAlt Mathematics 2007, 2008, 2009, 2010, 2011, 2012, and 2013	441
Figure 23 Total Number of Students Participating in CoAlt Science 2008, 2009, 2010, 2011, 2012, and 2013.....	442
Figure 24 Mean Score as Percent of Total for Reading 2008, 2009, 2010, 2011, 2012, and 2013.....	443
Figure 25 Mean Score as Percent of Total for Writing 2008, 2009, 2010, 2011, 2012, and 2013	444
Figure 26 Mean Score as Percent of Total for Mathematics 2007, 2008, 2009, 2010, 2011, 2012, and 2013.....	445
Figure 27 Mean Score as Percent of Total for Science 2008, 2009, 2010, 2011, 2012, and 2013.....	446
Figure 28 Percent of Participating Students by Coded Disability Longitudinally for Reading	447
Figure 29 Percent of Participating Students by Coded Disability Longitudinally for Writing	448
Figure 30 Percent of Participating Students by Coded Disability Longitudinally for Mathematics	449

Figure 31 Percent of Participating Students by Coded Disability Longitudinally for
Science.....450

Acronyms and Abbreviations

<u>AERA</u>	American Educational Research Association
<u>APA</u>	American Psychological Association
<u>AYP</u>	Adequate Yearly Progress
<u>CDE</u>	Colorado Department of Education
<u>CE</u>	Critical Element of Peer Review
<u>CR</u>	Constructed-Response
<u>CoAlt</u>	Colorado Alternate Assessment
<u>CTB</u>	CTB/McGraw-Hill
<u>ELL</u>	English Language Learner
<u>ESL</u>	English as a Second Language
<u>FEP</u>	Fluent English Proficient
<u>FERPA</u>	Family Education Rights & Privacy Act
<u>IDEA</u>	Individuals with Disabilities Education Act
<u>IEP</u>	Individualized Education Program
<u>LEP</u>	Limited English Proficient
<u>MA</u>	Mathematics
<u>MC</u>	Multiple-Choice
<u>NCLB</u>	No Child Left Behind Act
<u>NCME</u>	National Council on Measurement in Education
<u>NEP</u>	Not English Proficient
<u>PLD</u>	Performance Level Descriptor
<u>RD</u>	Reading
<u>SC</u>	Science
<u>SD</u>	Standard Deviation
<u>SEM</u>	Standard Error of Measurement
<u>TCAP</u>	Transitional Colorado Assessment Program
<u>USDOE</u>	United States Department of Education
<u>WR</u>	Writing

Executive Summary

The 2012–13 Colorado Alternate Assessment (CoAlt) Operational Technical Report documents the processes and procedures implemented in support of the 2012–13 spring administration of the CoAlt by CTB/McGraw-Hill (CTB) and the Colorado Department of Education (CDE). The technical report shows how the processes and procedures were applied as well as how the results relate to the issues of validity and reliability, the *Standards for Educational and Psychological Testing* [American Educational Research Association (AERA), American Psychological Association (APA), & National Council on Measurement in Education (NCME), 1999], and the federal Peer Review process as detailed in the *Standards and Assessments Peer Review Guidance* (USDOE, 2007). Some primary findings presented in this technical report are summarized below.

Purpose: As succinctly stated in the CoAlt Examiner’s Manual Spring 2013 (CDE, 2013a), the purpose of the CoAlt is as follows:

The Colorado Alternate Assessment (CoAlt) is a standards-based assessment designed specifically for eligible students with significant cognitive disabilities and is meant to provide a picture of student performance to schools, districts, educators, parents, and the community. The primary purpose of the assessment program is to determine the level at which Colorado students meet the Expanded Benchmarks that are linked to the Colorado Model Content Standards in the content areas assessed. The data should be used to keep abreast of individual student progress toward attaining achievement in the content areas. (p. 1)

Administration: The administration of the 2012–13 CoAlt occurred from February 6, 2013 through March 22, 2013. A high level of security is maintained on all testing materials at all levels. For all content areas, each test administration occurs on an individual student basis where teachers/test examiners mark the student’s response and the level of independence at which the student performed. The assessment administration is not timed and can be conducted over several days in order to accommodate the students and minimize fatigue.

Student Population: The CDE provides an eligibility checklist to be evaluated by a student’s Individualized Education Program (IEP) team in order to determine whether the student should be assessed with the Transitional Colorado Assessment Program (TCAP) or the CoAlt. Within the context of the 2012–13 administration, as few as 466 (grade 10 Reading and Science) and as many as 684 (grade 4 Writing) students participated in the CoAlt administration, compared to the 2011–12 administration where between 480 (grade 9 Writing) and 659 (grade 3 Writing) students participated.

Operational Analyses: The CoAlt uses raw score reporting, incorporating both the content score and the level of independence with which a student answers an item to determine the total score for the item and ultimately the content area. Standard setting activities conducted in 2007 and 2008 (dependent on the content area) were based upon approximately the same items that are currently presented. The test forms include some item overages by standard in order to ensure that if items must be suppressed from scoring, a sufficient number of items will remain for each reported score. Items undergo classical item analyses yearly in order to ensure that the item performance is not dramatically altered from year to year, which could suggest item exposure or other issues that would raise concerns about item validity and year-to-year comparability of scores. Any item that displays problematic classical statistics or dramatic changes across years is carefully reviewed to determine the appropriateness of continuing to include the item in scoring and reporting. Within the context of the 2012–13 CoAlt administration, no items required suppression due to classical statistics or due to changes in

item performance over time. This report contains information regarding the statistics for each item and for the forms overall for both this administration and longitudinal comparisons.

Results: In general, longitudinal results indicate that the percentage of students with the highest proficiency levels, *Developing* and *Novice*, has remained generally stable for all content areas since the 2011–12 administration. Across all grade levels the average change in *Developing* and *Novice* combined was –0.31% for Reading, 0.44% for Writing, 1.56% for Mathematics, and –0.15% for Science. The greatest increase was in Mathematics grade 3 with a 7.66% increase across the two administrations. The greatest decrease was in Mathematics grade 4 with a –4.01% decrease across the two administrations.

This report provides detailed information related to the items and issues addressed above and demonstrates that the processes and procedures applied in the CoAlt adhered to appropriate standards and practices of educational assessment. Ultimately, this report serves to document evidence that valid inferences about Colorado students assessed with the CoAlt can be made from the CoAlt scoring and reporting.

Overview

Introduction

This document describes the CoAlt with a specific focus on the results of the 2012–13 assessment year. The CoAlt is an alternate assessment for students with a significant cognitive disability who are unable to participate in the general, on-grade Colorado assessment (TCAP), even with accommodations (CDE, 2013a).

The 2012–13 CoAlt administration assessed students in Reading (RD), Writing (WR), and Mathematics (MA) at grades 3–10, and in Science (SC) at grades 5, 8, and 10. For all grade levels and content areas the forms and administration guidelines were consistent with the 2011–12 CoAlt. The testing window opened February 6, 2013, for all grade levels and closed March 22, 2013.

The work involved in the development of the curriculum standards, test forms, administration, scoring, standard setting, and analyses are all important steps in the process of developing a valid assessment system regardless of the format of the assessment (Barton, 2007). This document serves to capture a small portion of the enormous amount of time and effort devoted to the CoAlt in relation to the importance, reliability, and validity of the assessment as part of the Colorado assessment system. From the American Educational Research Association (AERA), American Psychological Association (APA), & National Council on Measurement in Education (NCME) *Standards for Educational and Psychological Testing* (1999), guidance is given in Standard 3.6 that is of particular relevance to alternate assessments and the uniqueness of the “intended test takers.” It reads as follows:

The type of items, the response formats, scoring procedures, and test administration procedures should be selected based on the purposes of the test, the domain to be measured, and the intended test takers. To the extent possible, test content should be chosen to ensure that intended inferences from test scores are equally valid for members of different groups of test takers. The test review process should include empirical analyses and, when appropriate, the use of expert judges to review items and response formats. The qualifications, relevant experiences, and demographic characteristics of expert judges should also be documented. (p. 44)

The entire CoAlt process pays close attention to each of these directions.

In addition to being guided by the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999), guidance from the *Standards and Assessments Peer Review Guidance* (USDOE, 2007) is beneficial. This technical report provides evidence toward a variety of Critical Elements of Peer Review (CE) as part of the guidance for Peer Review. The majority of this document covers evidence in Section 4: A system of assessment with high quality from the *Standards and Assessments Peer Review Guidance* (USDOE, 2007), including CEs 4.1 (validity), 4.2 (reliability), 4.3 (fairness and accessibility), 4.5 (administration, scoring, analysis, and reporting), and 4.6 (accommodations). For Critical Elements in other sections of the *Standards and Assessments Peer Review Guidance* (USDOE, 2007), Appendix A details the chapter in the *Standards and Assessments Peer Review Guidance* (USDOE, 2007) and the corresponding section in this technical report.

Purpose of the CoAlt

In the 2005–06 school year, the federal No Child Left Behind Act (NCLB) required all states to test all students in Reading and Mathematics in grades 3 through 8 and once in high school. Based on the NCLB legislation, student performance, reported in terms of proficiency categories, is used to determine the Adequate Yearly Progress (AYP) of students at the school, district, and state levels. Beginning in the 2007–08 school year, states were additionally required to administer Science assessments at least once in grades 3–5, once in grades 6–9, and once in grades 10–12.

The CoAlt is administered in Reading, Mathematics, and Writing in grades 3–10 and in Science in grades 5, 8, and 10. The addition of the Writing content area is critical within the state of Colorado, although it is not required by the federal government within the NCLB legislation. Reading and Writing are treated as separate content areas, are assessed with different items, have different Performance Level Descriptors (PLDs), and maintain separate scoring and reporting.

The 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA) requires participation of students with disabilities in state- and district-wide assessments. Specifically, IDEA stipulates in section 612 part A, number 16, “All children with disabilities are included in all general State and district wide assessment programs, including assessments described under section 1111 of the Elementary and Secondary Education Act of 1965, with appropriate accommodations and alternate assessments where necessary and as indicated in their respective individualized education programs” (USDOE, 2004). All decisions regarding the participation of a student with disabilities in the TCAP or CoAlt assessments must be addressed by the student’s Individualized Education Program (IEP) team, including the parent as an equal participant. The CoAlt is designed to meet the requirements of the NCLB accountability goals and IDEA and to provide students, parents, teachers, and schools with information about how students are progressing in relation to the Colorado Model Content Standards and Expanded Benchmarks, as summarized in the CoAlt Assessment Frameworks (CDE, 2012).

Use of the Assessment Information

The CoAlt provides achievement information serving multiple purposes to schools, teachers, parents, and students. In addition to providing results for use in state and federal accountability programs, CoAlt results may be used as one of many tools to provide parents and guardians with information about the academic performances of their children; to help inform school district and school level decision making related to student learning; to identify grade-level curricular strengths and weaknesses; and to identify curricular areas where additional diagnoses are indicated in order to prescribe a course of intervention or enhancement, corrective instruction, or specialized services.

In addition to the above mentioned uses, additional interventions that should be used only in conjunction with other related achievement information include identifying the level and range of achievement in a class or grade level and informing placement, retention, and promotion decisions for individual students.

Part 1: Standards

Alternate assessment standards were developed for CoAlt in accordance with NCLB regulations, which require that the content of alternate assessments be comparable to that of regular state assessments, and must show clear linkage to the content standards for the grade in which the student is enrolled. According to NCLB, alternate assessment standards may cover a more narrow range of content within a given content area, and grade-level content may be reduced in complexity (USDOE, 2007).

The 2012–13 CoAlt forms consist of custom multiple-choice (MC) and constructed-response (CR) performance task items measuring skills associated with the Colorado Model Content Standards and associated assessment frameworks for Reading, Writing, Mathematics, and Science. The Colorado Model Content Standards consist of a set of standards that are found across grades within a given content area. For each standard, the knowledge and skills students are expected to acquire at a given grade level are described by Benchmarks that vary across grade spans: K–4, 5–8, and 9–12. The Assessment Frameworks further describe the Assessment Objectives within each Benchmark by grade assessed. The CoAlt uses the Expanded Benchmarks, which are based on the Colorado Model Content Standards. These are the basis for the CoAlt Assessment Frameworks, which describe Critical Concepts (like the Benchmarks) and Assessment Objectives. The CoAlt Assessment Frameworks are available online at the following website:

http://www.cde.state.co.us/sites/default/files/documents/assessment/documents/coalt/coalt_assessment_framework.pdf.

Part 2: Test Development

The items for all grade levels and content areas were written by Development staff from CTB/McGraw-Hill (CTB) with guidance and input from the Colorado Department of Education (CDE). The tests consist of custom MC and CR items measuring skills associated with the CoAlt Assessment Frameworks. Information about the level of student independence demonstrated for each item is also gathered during the assessment administration. The test forms include some item overages by standard similar to the TCAP approach, thus providing ample alignment to the Colorado Model Content Standards even if some items do not perform to expectation and require suppression.¹

Test Design

The test items appear in a separate book for each grade level and content area. The exception is that the Reading and Writing content areas are contained within a single test book as two separate and clearly delineated sections. Tables 1–4 illustrate the test design (blueprints) by content area, where the total number of items and maximum points are provided per standard by grade and content area. Further illustration of the breakdown of the total number of items, the number of MC (3-point) and CR (6-point) items, and the maximum number of score points possible on each form appears in Table 5.

¹ Across all grade levels and content areas, no items were suppressed from scoring for the 2012–13 CoAlt administration.

Within the context of the CoAlt, MC items are worth up to 3 points and CR items are worth up to 6 points in order to incorporate the level of independence with which the student responds to the item into the item scoring. There is a separate rubric for each item type, and the rubrics are applicable across grade levels and content areas. The section on Scoring in Part 5 and Tables 26 and 27 provide more reference to the application of the scoring rules and logic. These scoring rubrics incorporate the level of student independence or assistance received for each item and each score level therein. This type of scoring was developed in an effort to both recognize and capture how students taking the CoAlt actually respond, their level of content knowledge, and the amount of support they need during the test administration—apart from typical expanded accommodations.² This type of scaffolded scoring rubric is often used in alternate assessments. According to Quenemoen, Perie, and Kearns (2010), 26 states use a scoring rubric that incorporates level of assistance (either with a multi-dimensional or scaffolded design). In addition, Almond and Case (2004) note that such a scoring approach, where level of assistance (independence) is captured, extends beyond scoring accuracy to provide additional and appropriate data for students with significant cognitive disabilities administered performance-type assessments.

Item Review and Test Fairness

All items are expected to be fair for all examinees. Various procedures are employed to review item fairness, also referred to as bias. Once the items are developed, they must go through a series of reviews and analyses prior to being selected as part of the item pool. A content and bias review has two purposes: to ensure that the items are grade-level appropriate and to ensure that any sensitivity issues are identified and addressed. Grade-level appropriateness is evaluated by grade-level experts who possess the on-the-ground knowledge of how content is taught in the classroom. Sensitivity reviews ensure that items are free of offensive, disturbing, or inappropriate language or content.

Content reviews and sensitivity and bias reviews were conducted on all items by internal and external experts. The Steering Committee reviewed all items before the assessment administration. The review was led by the CDE. CTB participated in the review process, under the direction of the CDE, by providing papers for the event and staff from the Project Development Team for instruction and interpretation.

Due to the small sample sizes, statistical bias analyses were not performed as part of the development, review, and fairness efforts. However, descriptions about the test level performances of various subgroups, including gender, ethnicity, English Language Learner (ELL) status, Free/Reduced price lunch eligibility, primary disability, and expanded accommodation, are described in detail in this report in Part 3: Description of the Population and Part 7: Analyses and Results.

Item Selection

Item selection was completed by content editors in CTB Publishing and reviewed and approved by the CDE. Items were selected to fulfill the test blueprint. The primary criterion for the selection of items was to meet the content specifications represented by test blueprints. Any future operational test item selections will also incorporate the statistical research guidelines

² The CDE refers to the accommodations used within the context of the CoAlt as expanded accommodations, due to the fact that the CoAlt already has some accommodations built into the administration (such as unlimited time and individual administration). The term expanded accommodations is used here and throughout CDE references to the CoAlt accommodations in order to differentiate the CoAlt accommodations from those used with the TCAP assessment.

and operational analyses results such that selected items will reflect the best content and statistical characteristics. Such characteristics are described in Part 7: Analyses and Results of this report.

Part 3: Description of the Population

Description of Students

Students assessed with the CoAlt typically have significant limitations in intellectual functioning, in adaptive behavior, and in academic functioning expressed in conceptual, social, and practical adaptive skills. Often these students are identified as having a Cognitive Disability; however, students with other types of disabilities may also satisfy the criteria for participation in the CoAlt.

Student Eligibility Criteria

When determining whether a student who is eligible for special education services should participate in the CoAlt or the TCAP, the student's IEP team must determine that the student meets the criteria from the Alternate Assessment Eligibility Criteria Worksheet (CDE, 2011a). When the IEP team concurs that the CoAlt is the most appropriate assessment, then the CoAlt should be administered as opposed to the TCAP in order to provide a meaningful evaluation of the student's current academic achievement. As stated on the CDE website, within the Eligibility Worksheet:

The IEP Team is responsible to determine that the student:

- 1) Meets eligibility as a student with a significant cognitive disability (Intellectual Disability).
- 2) Will access the general curriculum based on alternate academic achievement standards (Colorado Academic Standards/Extended Evidence Outcomes).
- 3) Will participate in alternate assessment based on alternate academic achievement standards (CoAlt, 11th Grade Alternate for Colorado ACT, and alternate classroom/district assessments).

Each year, the IEP Team will consider the academic achievement standard and assessments for each content area separately.

The CDE provides an Alternate Assessment Eligibility Criteria Worksheet to be evaluated by a student's IEP team in order to determine whether the student should be assessed with the TCAP or CoAlt. The Alternate Assessment Eligibility Criteria Worksheet can be found at the following website:

http://www.cde.state.co.us/sites/default/files/documents/cdesped/download/pdf/eligibilitycriteria_worksheet_alternateassessment.pdf.

Population Characteristics

It is important to understand the types of students participating in the CoAlt. It is anticipated that the characteristics and resulting performance of students who participate will provide clarity about which students benefit the most from the CoAlt.

Demographic data, such as gender and ethnicity information, are reported in Tables 6–9.³ Across grades and content areas as few as 466 (grade 10 Reading and Science) and as many

³ Subgroups with fewer than 16 students have only sample sizes reported (no statistics are calculated or reported) in accordance with Family Education Rights & Privacy Act (FERPA) and CO state regulations. This rule is instituted throughout all tables, figures, and reporting.

as 684 (grade 4 Writing) students participated in the 2012–13 CoAlt administration. As can be seen in Figure 1, the total number of participating students is highest for Reading, Writing, and Mathematics in grade 4 and is highest for Science in grade 5. In all grades and across all content areas, the population of students is primarily male, with the percentages of male students ranging from 59.57% (grade 10 Mathematics) to 65.37% (grade 3 Writing). Additionally, the majority of students are of White ethnicity, with the percentage of White students ranging from 46.13% (grade 3 Mathematics) to 54.80% (grade 9 Mathematics).

Additional descriptive information includes ELL status, reported in Tables 10–13, for each content area. The tables include information related to Language Proficiency [Fluent English Proficient (FEP), Limited English Proficient (LEP), Not English Proficient (NEP), and Not Applicable (native English speaking)] and English Language Learner-Bilingual/English as a Second Language (ESL) status (No, Yes, Monitored in Year 1, Monitored in Year 2, Exited in Year 3+, and Choice). Across grades and content areas, the dominant classification is that Language Proficiency status is “Not Applicable,” with the range being a low of 79.94% (grade 5 Writing) to 85.84% (grade 10 Reading and Science). Nearly all students (roughly 99% across all content areas and grade levels), indicate ELL status for Bilingual students as “No.” The majority of students, ranging from 80.39% (grade 5 Writing) to 86.05% (grade 10 Reading and Science), indicate ELL status for ESL students as “No.”

Information is also collected regarding students’ eligibility for Free and Reduced Price Lunch programs and is reported in Tables 14–17 for each content area respectively. Across grades and content areas, most students are either eligible for a Free Lunch as opposed to a Reduced Price Lunch or they are not eligible. The percentage of students eligible for a Free Lunch ranges from 44.22% (grade 8 Mathematics) to 52.20% (grade 3 Mathematics). A small percentage of students are eligible for a Reduced Price Lunch, ranging from 6.50% (grade 7 Reading) to 9.64% (grade 6 Mathematics). The percentage of students not eligible for either program ranges from a low of 39.30% (grade 3 Mathematics) to 46.81% (grade 8 Mathematics).

Students’ primary disability information is categorized in Tables 18–21 by grade and content area. Within all content areas “Multiple Disabilities,” “Limited Intellectual Capacity,” and “Autism” are the most common primary disabilities indicated. Figure 2 also captures the data to more easily illustrate the predominant primary disabilities.

Expanded accommodations provided to students during the CoAlt assessment are reported in Tables 22–25. While the test is a one-on-one administration with no time limits, there are a variety of additional expanded accommodations teachers/test examiners utilize to assure accessibility by students to the test items. It is important to note that a given student can have more than one expanded accommodation, further, the percentages reported in Tables 22–25 are based on the total population. Across all grade levels and content areas, no expanded accommodations are provided to the vast majority of students for them to access the test items. This is most strikingly illustrated in Figures 3–6. There are between 82.09% (grade 3 Mathematics) to 90.69% (grade 9 Reading) of students provided no expanded accommodations. For those students requiring additional expanded accommodations, Assistive Technology is among the most commonly used but the typical expanded accommodation varies by content area. Across all grades and content areas, the most common expanded accommodation used for a grade level was always less than 7%.

Part 4: Test Administration

For all content areas, each test is administered on an individual student basis where teachers/test examiners mark the student’s response and the level of independence at which the student performed. Examiners mark two ratings per item: actual student raw response and

level of independence in the Test Protocol;⁴ these ratings are later transferred by the test examiner to the scannable answer document.⁵ The administration is guided by the Item Presentation Protocol, found at the following link: <http://www.cde.state.co.us/assessment/CoAltAssess-AdditionalResources>. The assessment can be administered over several days in order to accommodate the students and minimize fatigue. It is expected that all students be presented with and attempt all items for each content area.

Collecting the information about a student's level of independence (or engagement as defined by the Item Presentation and Level of Independence Protocols) and the amount of assistance provided by teachers provides specific data on the standardization of the administration of the assessment, the level at which students were able to respond independently, and specific data to help train examiners to administer the assessment in a supportive and valid environment.

Teacher/Test Examiner Training

District and School Assessment Coordinators and Special Education teachers were convened in various locations around the state for a train-the-trainer model of training on the administration of the CoAlt. Training was provided by the Assessment Unit from the CDE with the support of CTB. The participants were given sample items, the Item Presentation Protocol, and Level of Independence Protocol. (All participants signed security agreements prior to participation.) The training format included a PowerPoint™ presentation, video training clips of examiners administering sample items to students, small and large group discussions, and question/answer sessions. The participants were responsible for the training of the CoAlt test examiners within their districts and schools.

Additional Training

As the results of the operational administrations are evaluated, continuous improvements in administration training will be ongoing. The Assessment Unit of the CDE will continue to provide staff development and training on the operational administration and scoring of the CoAlt each year.

Part 5: Scoring

Scoring Rubrics

Two scoring rubrics are used to collect student responses and provide item-by-item scores. One rubric is applicable to MC items and this rubric appears in Table 26. The second rubric is applicable to CR items and appears in Table 27. Both rubrics are applicable for any grade level or content area assessed by the CoAlt. These scoring rubrics incorporate the level of student independence or assistance received for each item and each score level therein. This type of scoring was developed in an effort to both recognize and capture how students taking the CoAlt actually respond, their level of content knowledge and the amount of support they need during the test administration apart from typical accommodations. This type of scaffolded scoring rubric is often used in alternate assessments. According to Quenemoen, Perie, and Kearns (2010), 26 states use a scoring rubric that incorporates level of assistance (either with a multi-dimensional

⁴ The CoAlt test books are referred to as Test Protocols. The Test Protocol contains information for the test examiner to utilize during the assessment administration, such as: directions for item administration and preparation required a copy of the item as viewed by the student in the student materials, item protocols, and an area to mark both student response and the level of independence with which the student answered the item.

⁵ More information regarding scoring, marking student responses, and determining level of independence can be found in Part 5 of this report.

or scaffolded design). In addition, Almond and Case (2004) note that such a scoring approach, where level of assistance (independence) is captured, extends beyond scoring accuracy to provide additional and appropriate data for students with significant cognitive disabilities who are administered performance-type assessments.

Within the context of the test administration, the test examiner is to use the Test Protocol to mark the student responses. The test examiner marks directly within the Test Protocol the student response to the test question (A, B, C, D, E, or F) as well as the level of independence with which the student responded to the test question (Levels 1–4). Once the assessment is completed, the test examiner records the student responses and level of independence for each test question on the scannable answer document. Note that test examiners are not responsible for applying the scoring rubrics or scoring the items.

For all item types, the test examiner marks the student response (A, B, C, D, E, or F) on the answer document in the “student response” column. On the CoAlt, there are never more than four response options, though there can be as few as two. The following examples reflect the situation in which all possible bubbles are utilized. Answer choices A through D are actual responses that the student could provide in response to the test question (or indications by the teacher of the response given by the student in the case of CR items) and are detailed within the Test Protocol. Answer choice E allows the test examiner to indicate that the student has provided a response that is not reflected by answer choices A, B, C, or D. Answer choice F allows the test examiner to indicate that the student has provided no response to the test question. In the case that there are fewer options possible the selections would diminish in range (going from A to D as opposed to A to F for example). The number of answer choices available can vary by item and content area. Each item clearly delineates the possible/valid responses both within the Test Protocol and on the scannable answer document.

Level of Independence

Additionally, the test examiner marks the level of independence with which the student responds to the test question. There are four levels of independence captured within the context of the CoAlt. The Level of Independence Protocol, available at <http://www.cde.state.co.us/sites/default/files/documents/assessment/documents/coalt/coaltloiprotoocol.pdf>, clearly defines each level. Test examiners are required to move to the next level if the student is unable to respond to or complete the task at the higher level of independence; however, incorrect answers are captured by the actual student response code and do not necessarily indicate that more assistance is required. Level 4 indicates complete independence. The student responds to the test question without assistance from the test examiner. The student is fully engaged and performs the task independently and does not require assistance, or at most requires refocusing. Level 3 indicates a partially independent response. The student responds to the test question with a partial physical, verbal, or gestural prompt. The student becomes engaged and is able to perform the task without being shown/told the answer. Level 2 indicates a limited independent response. The student requires a full physical prompt in order to respond to the test question. The student is able to perform the task only after being shown/told what the answer is. Level 1 indicates that the student did not respond to the test question. This level is marked only when the student is unable to respond/complete the task even after being shown/told what the answer is.

Multiple-Choice Item Types

Table 26 describes the scoring rubric for all MC item types. These are items where students select their answer among options, such that the student response is evaluated as correct or incorrect (dichotomous) and then, depending upon the level of independence, a final score is

provided. For example, the examiner marks the response option chosen/demonstrated by the student (A, B, C, D, E, or F), and if the student received no help (level of independence is “Independent”), the examiner would mark Level 4 for Independence. If the response option selection is correct, the student would receive a score of “3” on that item. If the option is incorrect, the student would receive a score of “0.” However, the information about level of independence is still collected to provide item and test level data on the amount of assistance students receive or do not receive when their level of content knowledge is incorrect. This is important information for policy development to assure examiners are trained and able to assist students accurately, without over assisting, to provide adequate support to students while allowing opportunities to grow independently as well as to provide a clearer evaluation of what students really know and can do academically. (See the Item Presentation and the Level of Independence Protocols for additional information.)

Constructed-Response Item Types

The CoAlt also includes CR item types where student responses reflect multiple steps or where students provide multiple responses. The rubric for CR item types is found in Table 27. For multiple responses, the student receives up to 2 points for each correct response. This is akin to a 0–2 rubric. Thus it is possible for students to get full credit for their correct response (2 points), partial credit for their partially correct response (1 point), or no credit for their incorrect response (0 points). Within the context of the CR items, Level of Independence points are awarded as 4 points for a fully independent response where the student performs the task without assistance (Independent), 2 points for a partially independent response where the student performs the task with a partial physical, verbal, or gestural prompt from the test examiner (Partial), and 0 points for a limited independent response where the student performs the task with a full physical prompt from the test examiner (Limited).

The CR rubric and multi-step/multiple response item type is more clearly illustrated by an example. (Please note that this is only an example and not an actual item description.) An item might require the student to correctly group positive and negative numbers. The test examiner marks in the Test Protocol the frequency of numbers correctly identified, where the response options reflect: A) 5 out of 5, B) 3 or 4 out of 5, C) 2 or less out of 5, D) other, E) no response. Within this context, answer choice A is fully correct (2 points), answer choice B is partially correct (1 point), answer choice C is incorrect or does not illustrate sufficient mastery of the concept/skill being measured (0 points), and answer choices D and E are incorrect responses (0 points). Combining point values 0, 1, and 2 with the level of independence displayed by the student in responding, where 4 points are awarded for an Independent response, 2 points for a Partial Independence response, and 0 points for a Limited Independent response, result in the rubric in Table 27. A student with a correct response (A: 5 out of 5) earns 2 points for the correct response; if the item was answered independently (Independent), earning 4 points, then the item score is 6 points. A student with a partially correct response (B: 3 or 4 out of 5) earns 1 point; if the item was answered independently (Independent), earning 4 points, then the item score is 5 points. A student with a correct response (A: 5 out of 5) earns 2 points; if the item was answered with a partial physical, verbal, or gestural prompt (Partial Independence), earning 2 points, then the item score is 4 points. A student with a partially correct response (B: 3 or 4 out of 5) earns 1 point; if the item was answered with a partial physical, verbal, or gestural prompt (Partial Independence), earning 2 points, then the item score is 3 points. A student with a correct response (A: 5 out of 5) earns 2 points; if the item was answered with a full physical prompt (Limited Independence), earning 0 independence points, then the item score is 2. A student with a partially correct response (B: 3 or 4 out of 5) earns 1 point; if the item was answered with a full physical prompt (Limited Independence), earning 0 independence points, then the item score is 1. A student providing a response

corresponding to answer choices C (incorrect, 2 or less out of 5), D (incorrect, other), or E (no response) will receive 0 points for the item regardless of their level of independence. However, the test examiner will still mark the level of independence with which the student responded in the Test Protocol and ultimately within the scannable answer document.

The scoring rules are instituted automatically by computer, utilizing the scannable answer documents, based upon the test examiner's coded responses for all item types; meaning, all items are designed such that the examiner bubbles the student responses and level of independence as captured in the Test Protocol onto a scannable answer sheet, from which scoring programs assign item-by-item scores. Examiners are not responsible for applying the scoring rubrics appearing in Tables 26 and 27; rather examiners grid the appropriate student response for each item as well as the level of independence demonstrated by the student when responding to each item individually.

Score Validation

All students participating in the operational administration were scored. However, specific validation and logic rules are applied to the data to assure each student's score is based on a valid set of scored items. It is critical that the information reported is trustworthy. Without valid and therefore trustworthy data, valid conclusions and interpretations are not possible. Thus, there are safeguards in place to assure that reported data are valid, such that appropriate decisions can be made. For example, when a student's test is indicated as invalid by the examiner via a specific bubble on the answer document or if a student's response array includes 15% or more items that are flagged, the student does not receive a score. Student items are flagged if item scores are out of range (beyond the maximum value), invalid or illogical (such as a level of independence equal to 1 "no response" and a correct answer marked), items with multiple marks (i.e., more than one response option or level of independence bubbled), items with an incomplete response (either the response option OR level of independence are not marked), or when both the response option and level of independence are omitted (all items must be attempted and documented).

A summary of the percentages of invalid test scores due to the 15% rule or due to examiner bubbling of the "invalid" bubble on a student's answer document is located in Table 28. In Table 28, it is illustrated that between 90.74% (grade 8 Science) to 96.61% (grade 4 Writing) of responses were valid for scoring, reporting, and data summary. Table 29 provides further details about the types of bubbles available to examiners for test score invalidation and the frequency with which they were used on the CoAlt. The most common reason for invalidation were "Parental Refusal", "Test Not Completed", and "Taking TCAP Assessment".

Part 6: Standard Setting

Student performance on the CoAlt is described in terms of proficiency levels. The purpose of setting standards on a test is to enhance its validity by increasing the interpretability of students' scores. There were two distinct standard setting activities for the CSAPA. (At the time of the standard setting activities, the CoAlt was named the Colorado Student Assessment Program Alternate, or CSAPA.) The first occurred in 2007 for the Mathematics and Science (grade 10 only) content areas. Specific details of this standard setting are contained within the standard setting technical report available from the CDE entitled *Standard Setting Technical Report 2007 for Grades 3–10 Mathematics and Grade 10 Science* (CTB/McGraw-Hill, 2007). The second occurred

in 2008 for the Reading, Writing, and Science⁶ content areas for all grades. Specific details of this standard setting are contained within the standard setting technical report available from the CDE entitled *Standard Setting Technical Report 2008 for Grades 3–10 Reading, Grades 3–10 Writing, and Grades 5, 8, and 10 Science* (CTB/McGraw-Hill, 2008). The purpose of each standard setting was to identify cut scores that would separate students into five proficiency levels: *Inconclusive*, *Exploring*, *Emerging*, *Developing*, and *Novice*, with *Novice* representing the highest level of achievement.

It is important to note that the 2007 standard setting included Science grade 10, and cut scores were developed at that time. However, when the PLDs were developed for Science grades 5 and 8 for the 2008 administration, it was determined that the existing grade 10 PLDs were not congruent with the grades 5 and 8 PLDs. As such, the grade 10 PLDs were revised and a cut score review was undertaken for grade 10 within the context of the 2008 standard setting. Within the context of the cut score review (more detail can be found within the *Standard Setting Technical Report 2008 for Grades 3–10 Reading, Grades 3–10 Writing, and Grades 5, 8, and 10 Science* (CTB/McGraw-Hill, 2008)), it was determined that the grade 10 cut scores should be revised. Thus, the cut scores for Science grade 10 were new in 2008 and comparisons to 2007 data are not valid.

Recommended cut scores defining *Inconclusive*, *Exploring*, *Emerging*, *Developing*, and *Novice* were developed via Profile Sorting procedures, which were accompanied by a Contrasting Groups Survey administered to test examiners during the testing window. Live CSAPA data for all valid⁷ students were included in the Profile Sorting procedure. Standard setting participants sorted response profiles into proficiency levels by reflecting their judgments on the content-specific performance characterized by each profile.

Each standard setting was divided into three phases. In the first phase of the standard setting, Colorado special educators of students tested by the CSAPA were invited to participate in a modified Contrasting Groups study (Livingston & Zieky, 1982), in which they rated each of their students into one of the five proficiency levels, by content area.

In the second phase of the standard setting, a committee of educators from across the state of Colorado convened and engaged in a profile sorting study (Jaeger, 1995). During the CSAPA Profile Sorting workshop, participants examined scored response vectors (student profiles) and classified them into the five proficiency levels.

In the third phase of the standard setting, the participants at the CSAPA Profile Sorting workshop convened for synthesis discussions to review the results from both the modified Contrasting Groups study and the profile sorting study. A separate synthesis discussion was held for each content area. The participants identified trends in the data and recommended changes in the cut scores to promote cross-grade articulation within a content area. The impact data (percentages within each proficiency level) and cut scores approved by the CDE and applied to the 2011–12 data are shown in Table 70. More information about the cut scores and impact data can be found later in this report in Part 7: Analyses and Results—Proficiency Level Data.

Part 7: Analyses and Results

This section describes the item and total test level statistics calculated and analyzed along with the results thereof. Due to the small sample sizes at each grade, only raw score statistics were

⁶ Due to modifications to the Performance Level Descriptors, the cut scores for Science grade 10 were reviewed and revised within the context of the 2008 standard setting. For more information please see the 2008 standard setting technical report, available from the CDE.

⁷ Valid cases were defined previously in Part 5: Scoring—Score Validation.

calculated. These include raw scores at the total test level and at each standard. No scaling of scores was conducted. Furthermore, because the same test form is used each year, no equating was or will be conducted on these or future operational CoAlt items. This requires heavy reliance on raw score and classical test statistics.

Item Level Statistics

Item statistics were reviewed for all content areas in order to ensure that items contributing to operational scores were appropriate. Items were flagged for intensive review based on the following statistical characteristics: 1) if the p -value was less than 0.30, 2) if the point-biserial value was less than 0.15, and 3) if more than 5% of students omitted an item. Additionally, items were flagged for intensive review if the point-biserial value for a distractor was positive, and if the p -value for the item was greater than 0.95. Each item's frequency distribution (number of students at each score level) as well as each item's overall p -value (proportion of students choosing the correct answer) and point-biserial item-test correlation (how correlated each individual item is with the test as a whole), were reviewed and results are presented in Tables 33–36 and discussed below.

The frequency distribution for each CR item in Writing, Mathematics, and Science is found in Tables 30–32,⁸ where the number of students scoring at each score level for all 6-point items is illustrated. Interestingly, most CR items illustrate similar distributions, such that the majority of students obtain either the minimum (0 points) or the maximum (6 points) score. In general, the exception to this is a few items in most grade levels where there were also a high proportion of students scoring 5 points. This is likely reflective of the diversity of the population of students taking the CoAlt assessment.

Due to the nature of the rubrics, where level of independence weights each student's score, data analyses were conducted in two working sets: The weighted set (with level of independence) based on both student response and level of independence (data as received and ultimately used for operational scoring and reporting), and the non-weighted set (without level of independence) based on the transformation of all MC item scores of 0–2 as "0" and all scores of 3 as "1" for MC items such that only fully independent student scores are counted correct, and all CR item scores of 0, 1, 3, and 5 as "0" and 2, 4, and 6 as "1" for all CR items scored on the 6-point rubric. The purpose for removing the level of independence information from the data is to provide information about content-only performance apart from prompting or examiner-provided assistance. Additionally, classical item analysis indices typically assume that the item score is related only to item performance and not any additional information (Gulliksen, 1950).

Item Difficulty (p -values)

Typically in traditional assessments, and as seen in similar alternate assessments, p -values range between 0.30 and 0.90. Items with p -values less than 0.30 are considered more difficult, as less than 30% of the students are getting the correct answer, while p -values greater than 0.90 indicate a fairly easy item. Sometimes the lower bound of p -values can drop below 0.30. Those items should be reviewed in light of content to ensure the difficulty is due only to the content and skill assessed and not due to some illogic within the item. Items that are unduly easy, or above 0.90, should be reviewed in light of content as well and whether or not the item is providing additive information about students' skills. If the items are too easy, they are typically replaced by items that better discriminate between students who do or do not have certain skills. These approaches make for efficient use of test length and administration time.

⁸ There are no 6-point CR items in Reading as illustrated in Table 5.

Additionally, mean p -values by grade level should be approximately 0.50 in order to maximize the validity of the assessments (Gulliksen, 1950).

The CoAlt p -values are stable across grades and content areas for the group as a whole. Tables 33–36 illustrate the item level data for each content area respectively. The data are presented both weighted—with level of independence, and unweighted—without level of independence. Table 37 provides a summary including the minimum, mean, and maximum p -values for each grade level and content area with the level of independence included in the scoring, as is used in operational scoring and reporting. The mean p -values range from 0.45 (grade 10 Mathematics) to 0.71 (grade 8 Science), with a mean of 0.56. Table 38 provides a summary without including the level of independence. The mean p -values range from 0.39 (grade 10 Mathematics) to 0.68 (grade 8 Science), with a mean of 0.53. In general, the mean p -values across content areas are around the mean difficulty of 0.50 as suggested by Gulliksen (1950).

Weighted (with level of independence)

When the data are weighted by level of independence, the p -values of Reading items range from 0.23⁹ (grade 4) to 0.89 (grade 5). There are a total of 20 Reading items with p -values below 0.30, including five items with a p -value below 0.25. The grade 3 item with a 0.24 p -value measures students' ability to distinguish between fact and opinion. The second grade 3 item with a 0.25 p -value measures students' ability to make predications, make inferences or draw conclusions after reading a passage. The grade 4 item with a 0.23 p -value measures students' ability to make predictions or inferences or draw conclusions after reading a passage. The grade 6 item with a 0.23 p -value measures students' ability to understand figurative language or idioms. The grade 7 item with a 0.23 p -value measures students' ability to make predictions or inferences or draw conclusions after reading a passage. The mean p -value by grade-level ranges from a low of 0.50 (grade 10) to a high of 0.62 (grade 6), and the mean p -value across all Reading items is 0.55.

The p -values of Writing items range from 0.18 (grade 10) to 0.86 (grade 7). There are a total of 19 Writing items with p -values below 0.30, including five items with p -values below 0.25. The grade 4 item with a 0.20 value measures students' ability to identify parts of speech. The grade 7 item with a 0.23 value measures students' ability to use upper and lower case letters in creating a product. The grade 10 item with a 0.25 value measures students' ability to use correct spelling, punctuation and capitalization; the item with a 0.24 value measures students' ability to employ standard English usage. ; and the item with a 0.18 value measures students' ability to use upper and lower case letters in creating a product. The mean p -value, by grade level, ranges from a low of 0.18 (grade 10) to 0.86 (grade 7). The mean p -value across all Writing items is 0.55.

The p -values of Mathematics items range from 0.09 (grade 10) to 0.86 (grade 4). There are a total of 26 Mathematics items with p -values below 0.30, including 15 items with p -values below 0.25. There is one grade 4 item with a 0.10 p -value and one grade 7 item with a 0.14 p -value. There are two items in grade 8 items with p -values below 0.25; one item with a p -value of 0.21 and one item with a p -value of 0.23. There are five grade 9 items with p -values less than 0.25; one item with a p -value of 0.20, two items with a p -value of 0.24, one item with a p -value of 0.23, and one item with a p -value of 0.25. There are six grade 10 items with p -values less than 0.25; one item with a p -value of 0.21, one item with a p -value of 0.25, one item with a p -value of 0.23, one item with a p -value of 0.09, one item with a p -value of 0.18, and one item with a p -value of 0.17. These items measure a variety of content skills, and for purposes of brevity, the content measured by each individual item is not detailed. The mean p -value by grade-level

⁹ There are three values of 0.23; however, the grade 4 value of 0.233 is the lowest.

ranges from a low of 0.45 (grade 10) to a high of 0.62 (grade 3). The mean p -value across all Mathematics items is 0.55.

The p -values of Science items range from 0.26 (grade 10) to 0.88¹⁰ (grade 5). There are a total of three Science items with p -values below 0.30, none of which is below 0.25. The mean p -value by grade level is 0.60 (grade 10), 0.67 (grade 5), and 0.71 (grade 8), with a mean p -value across all Science items of 0.66.

Unweighted (not including level of independence)

When the data are not weighted by level of independence, in order to be more true to the classical item statistics being reported, the p -values of Reading items range from 0.21 (grade 4) to 0.87 (grade 5). There are a total of 26 items with p -values below 0.30, including 12 items with p -values below 0.25. The mean p -value across all Reading items is 0.53. The p -values of Writing items range from 0.16 (grade 10) to 0.83 (grade 7). There are a total of 27 items with p -values below 0.30, including 10 items with p -values below 0.25. The mean p -value across all Writing items is 0.51. The p -values of Mathematics items range from 0.07 (grade 10) to 0.84 (grade 4). There are a total of 41 items with p -values below 0.30, including 21 items with p -values below 0.25. The mean p -value across all Mathematics items is 0.49. The p -values for Science items range from 0.24 (grade 10) to 0.86¹¹ (grade 8). There are a total of three items with p -values below 0.30, two of which have a p -value below 0.25. The mean p -value across all Science items is 0.63.

The difference in the statistics as computed with and without level of independence included in scoring was also addressed. It was found that for all content areas, items are estimated to be easier (on average) when level of independence is included in the scoring. For Reading the mean difference is 0.02, for Writing it is 0.04, for Mathematics it is 0.06, and for Science it is 0.03. In general, grade and content area results indicate that the CoAlt items are not too easy or too difficult for the tested population as a whole. The items with low p -values were reviewed in light of content, complexity, and appropriateness for this population of students.

Item Discrimination (point-biserial correlation)

The point-biserial correlation, a derivation of the Pearson product moment correlation, is used here as an index of item discrimination. The point-biserial correlation assumes that item responses are based upon a dichotomy, or correct and incorrect. Additionally, there is no assumption of normality of the data, which is important given the frequency distributions observed (Schmeiser & Welch, 2006). Further, given that the value of the point-biserial correlation tends to be lower than the biserial correlation due to sensitivity to item difficulty, a conservative approach was chosen and point-biserial rather than biserial correlation coefficients are reported. Due to the assumption of a dichotomous variable (correct versus incorrect item response), the data in Tables 33–36 illustrate the values both with and without level of independence included in scoring. When the values include level of independence, the assumption of a dichotomous distribution is violated. When the values do not include level of independence, a dichotomy is possible for MC items.

Acceptable point-biserial item-test correlations are usually in the range of 0.30 and above. Crocker and Algina (1986), following Ebel (1965), suggest that point-biserial correlation values for items to be retained operationally should be significantly greater than zero, where significance is established by computing an approximation for the standard error for the Pearson product moment correlation. This approximation is based upon the sample size for each item,

¹⁰ There are two values of 0.88; however, the grade 5 value of 0.877 is higher.

¹¹ There are two values of 0.86; however, the grade 8 value of 0.863 is higher.

and the critical value should be set two standard errors above zero. The approximation is computed as $1 / \sqrt{N - 1}$. With the CoAlt data the minimum number of students tested, over all content areas, is 466 (grade 10 Reading and Science). Using this as the minimum N value, though it is noted that responses to individual items may have slightly lower N values, the obtained value is 0.0464. Thus the critical value for the correlation would be 0.0927. There is one item in the CoAlt assessment with a point-biserial value less than 0.0927. This item appears in Mathematics at grade 10 and has a point-biserial value of 0.01; this item also has a p -value of 0.21. A generally accepted critical cut-off for student assessments is 0.15, as with increasing sample sizes the formula above would ultimately provide for results that were not substantively different from zero. It is important to note that threshold values will vary based upon the purpose of the assessment and the needs of the testing program.

Tables 33–36 illustrate the item level data for each content area. The data are presented both weighted with level of independence and unweighted without level of independence. Table 37 provides a summary including the minimum, mean, and maximum values for each grade level and content area with the level of independence included in the scoring, as is done with operational scoring and reporting. Table 38 provides a summary including the minimum, mean, and maximum values for each grade level and content area without including the level of independence in the scoring.

The ranges and means of the Reading, Writing, Mathematics, and Science point-biserials including level of independence are as follows: Reading 0.19¹² (grade 5) to 0.74¹³ (grade 9) with a mean across all items of 0.54; Writing 0.15 (grade 4) to 0.87 (grade 8) with a mean across all items of 0.57; Mathematics 0.03 (grade 8) to 0.82 (grade 3) with a mean across all items of 0.58; and Science 0.11 (grade 8) to 0.79 (grade 10) with a mean across all items of 0.60.

Across all grade levels and content areas there are just four items with point-biserial values lower than the generally accepted critical cut-off of 0.15: three in Mathematics (grades 8 and 10), and one in Science (grade 8). The grade 8 Mathematics item has a point-biserial value of 0.03 and a p -value of 0.23 and the item measures students' ability to apply a variety of measurement skills. One of the grade 10 Mathematics items has a point-biserial value of 0.13 and a p -value of 0.21 and measure students' ability to identify, describe, and create patterns to solve problems, and the other has a point-biserial of 0.10 and a p -value of 0.18 and measure students' ability to apply a variety of measurement skills. One grade 8 Science item has a point-biserial value of 0.11 and a p -value of 0.28, and the item measures students' ability to interact with the weather and Earth systems. This means that these items have reduced discriminating power, such that students with high and low ability may have a similar probability of correctly responding to these items (since the p -values are also low).

The ranges and means of the Reading, Writing, Mathematics, and Science point-biserials without level of independence are as follows: Reading 0.22 (grade 7) to 0.74 (grade 9) with a mean of 0.55; Writing 0.17¹⁴ (grade 4) to 0.86 (grade 9) with a mean of 0.57; Mathematics 0.01 (grade 8) to 0.80 (grade 9) with a mean of 0.58; and Science 0.11 (grade 8) to 0.80 (grade 5) with a mean of 0.61.

When not including level of independence, there were four items across all grade levels and content areas with a point-biserial value lower than the critical cut-off of 0.15. The grade 8 Mathematics item has a point-biserial of 0.01 and a p -value 0.21; one grade 10 Mathematics item has a point-biserial of 0.14 and a p -value 0.19 and the other has a point-biserial of 0.12

¹² There are two values of 0.19; however the grade 5 value of 0.193 is lower.

¹³ There are two values of 0.74; however, the grade 9 value of 0.737 is higher.

¹⁴ There are two values of 0.17; however, the grade 4 value of 0.167 is lower.

and a p -value of 0.16; and the grade 8 Science item has a point-biserial of 0.11 and a p -value 0.26. Again, these items have reduced discriminating power, such that students with high and low ability may have a similar probability of correctly responding to this item (since the p -value is also somewhat low).

The difference in the statistics as computed with and without level of independence included in scoring was also addressed. It was found that for all content areas, item discrimination statistics were stable (on average) regardless of the inclusion of level of independence in the scoring. For Reading the mean difference is -0.009 , for Writing the mean difference is -0.003 , for Mathematics the mean difference is 0.005 , and for Science the mean difference is -0.006 .

Detailed lists of p -values and item-test correlations by item, content, and grade level, both with and without level of independence included in scoring, are provided in Tables 33–36. A summary of the range of p -values and point-biserial item-test correlations by grade and content area is found in Table 37, presenting just the values including the level of independence in the scoring as is done for operational scoring and reporting of CoAlt results. A summary of the range of p -values and point-biserial item-test correlations by grade and content area without including level of independence is found in Table 38.

Content Standards Level Statistics

Student performance on individual content standards (critical concepts) is reported in terms of the percentage of items within each critical concept students answered correctly. This proportion can be considered an average p -value across items within a specific critical concept. The critical concepts' p -values can also be compared from the standpoint of difficulty across the individual critical concepts. To illustrate the level of difficulty by critical concept, critical concepts at each grade are ranked according to the average proportion of students responding correctly to items within each critical concept. This type of analysis is also meant to show the most difficult critical concepts for the tested population. The results of the rankings are found in Tables 39–42. As the tables indicate, the areas that are difficult for Reading, Writing, Mathematics, and Science vary by grade.

In Reading, “demonstrate understanding of symbolic representation” is the least difficult (by mean p -value) for grades 3–5, while “demonstrate understanding of beginning principles of phonics” is the least difficult for grades 6–10. The most difficult critical concept for grades 3, 4, and 8 is “identify elements of literature,” while for grades 5–7, 9 and 10 it is “demonstrate knowledge that various texts have different purposes.” The range of mean p -values is 0.37 (grade 7 Expanded Benchmark 3.1) to 0.75 (grade 7 Expanded Benchmark 1.3).

For Writing, the least difficult critical concept for grade 3 is “organize writing to create a draft document”, for grade 4 is “use systematic conventions to make written product understandable to others”, and for all other grades is “demonstrate an understanding that writing communicates a message”. The most difficult critical concept varies by grade level. The range of mean p -values is 0.37 (grade 3 Expanded Benchmark 2.2) to 0.76 (grade 8 Expanded Benchmark 1.1).

Mean p -values in Mathematics indicate that the least difficult critical concept for grades 3, 5, and 8 is “identifies, sorts, and matches geometric shapes,” while the least difficult critical concept for grades 4, 6, 7, 9, and 10 is “counts, represents quantities, reads and writes numbers.” The most difficult Mathematics critical concept at grades 3 and 6 is “applies a variety of measurement skills,” for grades 4, 7, and 9 it is “uses calculation strategies to compute problems”, and for grades 5, 8, and 10 it is “identifies, describes, and creates patterns to solve problems”.

In Science, the least difficult critical concept for grade 5 is “interacts with the weather and Earth systems”, and for grades 8 and 10 is “analyzes data and communicates results of scientific

investigations”. The most difficult critical concept in Science also varies by grade. For grade 5 it is “analyzes data and communicates results of scientific investigations” and for grades 8 and 10 it is “demonstrates an understanding of the fundamental properties of matter and energy”. It is interesting to note that the most difficult critical concept for grade 5 is the least difficult critical concept for grades 8 and 10. The range of mean p -values is 0.40 (grade 10 Expanded Benchmark 3) to 0.77 (grade 8 Expanded Benchmark 2).

In general, the range of mean p -values by critical concept is fairly consistent across all critical concepts in each grade/content area demonstrating a balance of difficulty across critical concepts. Again, all low p -value items were reviewed for content and appropriateness by CTB content experts and the CDE.

The average point-biserial value across the critical concepts was also computed in order to evaluate the degree of relationship between the critical concepts and the test as a whole. In general, the range of mean point-biserial values by critical concept/expanded benchmark illustrates critical concepts that are sufficiently correlated with the total test. Specifically, the Reading average values range from 0.29 (grade 7 Expanded Benchmark 3.1) to 0.65 (grade 3 Expanded Benchmark 1.2). In Writing, the average values range from 0.43 (grade 9 Expanded Benchmark 2.3) to 0.73 (grade 8 Expanded Benchmark 1.1). In Mathematics, the average values range from 0.33 (grade 10 Expanded Benchmark 2) to 0.71 (grade 8 Expanded Benchmark 3). Finally, in Science, the average values range from 0.41 (grade 10 Expanded Benchmark 3) to 0.69 (grade 10 Expanded Benchmark 2).

Total Test Level Statistics

Student performance is described in different ways, including total raw scores, performance on specific content expanded benchmarks/critical concepts, and proficiency levels (the details of which are described in the CoAlt standard setting technical reports). The maximum number of points per grade and content area varies across grades and content areas and can be found in Table 5. Given that the maximum number of total possible points varies by grade level within content areas, as seen in Table 5, Figures 7–14 illustrate mean scores as the percent of the total possible score. For example, if the mean score was 60 for a test with 120 possible total points, the figures would illustrate that the mean score was 50% of the total possible score. In this way, differences in mean scores that are related to the number of possible points are not directly confounded. It is important to note that the forms are not equated across grade levels, so comparisons in performance across grade levels are not appropriate.

The raw score performance statistics by grade and content, broken down by gender and race/ethnicity, can be found in Tables 6–9. In general, males and females perform similarly in Reading, Writing, Mathematics, and Science (Figures 7–10). The largest difference is for Mathematics grade 8 where, on average, males have a higher score than females by 7.35%. In general, students also perform similarly across race and ethnicity (Figures 11–14). In Reading, illustrated in Figure 11, White students slightly outperform other races/ethnicities at grade 3, while Black/African American students somewhat outperform other races/ethnicities at grades 4, 5, 7, 8 and 10, and students designating two or more races slightly outperform other races/ethnicities at grades 6 and 9. In Writing, illustrated in Figure 12, Black/African American students somewhat outperform other race/ethnicities in grades 4, 5, 7, 8, 9, and 10, students identified with Two or More Races largely outperform other races/ethnicities at grade 6, and Hispanic/Latino students outperform others in grade 3. In Mathematics, illustrated in Figure 13, Black/African American students have the highest performance at grades 4, 5, 8, 9, and 10, students identified with Two or More Races largely outperform other races/ethnicities at grade 6, and Hispanic students slightly outperform other races/ethnicities at grades 3 and 7. In Science,

illustrated in Figure 14, Black/African American students slightly outperform other race/ethnicities in all grades.

Raw score frequency distributions by grade and content area are found in Tables 43–69.

Proficiency Level Data

Student performance on the CoAlt is also described in terms of proficiency levels. The CoAlt categorizes performance into five categories: *Inconclusive*, *Exploring*, *Emerging*, *Developing*, and *Novice*, with *Novice* representing the highest level of proficiency.

Table 70 details the final cut scores for each proficiency level by grade and content area, along with the associated impact data (percentages of students in each proficiency level). To see the impact data in graphical form, refer to Figures 15–18. All impact data are calculated on the basis of performance on the 2013 CoAlt test administration; however, the cut scores were developed at the 2007 and 2008 standard settings. Overall pass rates, as defined by the combination of the two highest proficiency levels, *Developing* and *Novice* (shown in Figure 19), are highest for Mathematics grade 5 and 6 and Science grade 8 (higher than 50%). Pass rates range from 21% to 46% in Reading, 25% to 44% in Writing, 26% to 51% in Mathematics, and 36% to 51% in Science.

Part 8: Summary of Results—Reliability and Validity

This section summarizes results and describes some of the evidence that establishes the degree to which the CoAlt results are reliable and valid.

Reliability

Assessment scores always contain some amount of measurement error. There are two types of error customarily defined in measurement: random and systematic. Both random and systematic errors can easily threaten and compromise the accessibility and therefore the precision, reliability (to include accuracy), and validity of an assessment.

Random errors are just that—random. They are varied, inconsistent, and usually are inherent to the assessment or administration thereof. Standardization of assessments is meant to minimize random errors that occur because of random factors that affect a student's performance on the assessment.

Systematic errors are inherent to examinees and are typically specific to some subgroup characteristic (e.g., students who need accommodations, but are not offered them). Systematic error arises if the test or test administration in and of itself presents an inaccessible situation of students to items and items measuring to student ability. An example of a systematic error is when students with disabilities are administered a test without the accommodation(s) they require (for example, giving a blind student a regular, non-Braille, non-Large Print form). Other systematic errors can include improper test administrator training, mishandled test materials, or scanner malfunctions.

Errors are also introduced if the sampling of content on a test is too narrow and does not provide a solid representation of the skills being measured. This is circumvented by clear blueprints that show a variety of items and item approaches to assess each standard.

Reliability refers to the degree to which students' scores are free from such errors, and provides a measure of consistency. In other words, reliability helps to describe how consistent students' performances would be if given the assessment over multiple occasions.

For the CoAlt, several measures of reliability are available. First, the tests are administered in standard fashion to all students, where examiners administer the assessments to the students in an individualized manner. In addition, students all respond to the same items in the same forms, and those who need expanded accommodations in order to access the test items are provided such. Providing expanded accommodations ensures that what is standard for the student in daily instruction carries over to and supports the validity of the CoAlt administration. CTB's policy (CTB/McGraw-Hill, 2004) on accommodations and their use on standardized tests stands by the philosophy that what is standard for the student in the classroom and instruction should be what is standard for that student during the assessment, minimizing systematic errors.

Item-specific reliability

Item-specific reliability statistics include the point-biserial correlation, also called an item-test correlation. It is one type of internal consistency measure that is a derivation of the Pearson product moment correlation measuring the correlation between each item and the group of items remaining on the test overall. The correlation provides an indication of how consistently each item measures information similar to the other items on a test measuring a single overall construct, such as Mathematics. Tables 33–36 illustrate point-biserials item by item, while Table 37 summarizes the point-biserials (and p -values) for each grade and content area based upon the operational scoring, including level of independence, and Table 38 summarizes the point-biserials (and p -values) for each grade and content area without including level of independence. In general, the point-biserial correlations including level of independence as done in operational scoring and reporting, are within acceptable ranges and above the critical cut-off value of 0.15, with only four exceptions as previously noted (three items in Mathematics, one in grade 8 and two in grade 10; and one item in Science grade 8).

Total test reliability

Total test reliability measures consider the level of consistency (reliability) of student performance over all test questions in a given form, the results of which imply how well the questions measure the content domain and could continue to do so over repeated administrations.

Cronbach's alpha

Total test reliability coefficients, in this case measured by Cronbach's alpha (1951), may range from 0.00 to 1.00, where 1.00 refers to a perfectly consistent test. Achievement tests are typically considered of sound reliability when their reliability coefficients are 0.80 and above. The total test reliabilities of the CoAlt forms were evaluated first by Cronbach's alpha (α) index of internal consistency (Cronbach, 1951). The specific calculation for Cronbach's alpha is:

$$\hat{\alpha} = \frac{k}{k-1} \left(1 - \frac{\sum \hat{\sigma}_i^2}{\hat{\sigma}_X^2} \right)$$

where k is the number of items on the test form, $\hat{\sigma}_i^2$ is the variance of item i , and $\hat{\sigma}_X^2$ is the total test variance. Cronbach's alpha is appropriate for both dichotomously scored items and those with a wide range of scoring weights (Crocker & Algina, 1986), making it an appropriate statistic for use with the CoAlt.

There are a number of factors that influence reliability coefficients, including group variation, time limits, test length, and the assumption of independence in the data. When the individuals participating in an assessment are sufficiently diverse, the reliability estimates will be increased,

while a more homogeneous group will produce lower reliability estimates (Crocker & Algina, 1986). Given the very diverse population of students who participate in the CoAlt, it is likely that the reliability estimates will be quite high. Since the CoAlt is untimed, time limits are irrelevant. Further, test length has been established based upon sufficient measurement of the standards as identified by the CDE, thus test length is unlikely to be significantly modified. However, because the teacher is a constant variable across all student responses, the reliability coefficients should be interpreted in light of the fact that the data across items are not strictly independent.

Tables 6–25 show the reliability coefficients (Cronbach’s alpha) for all grades and content areas from the 2012–13 CoAlt test administration based upon the total group and relevant subgroups. As is evident in the tables, the coefficients are quite high. At the total group level (summarized in Table 71), the ranges for the reliabilities by content area are as follows: Reading 0.91¹⁵ (grade 7) to 0.93¹⁶ (grade 6); Writing 0.92 (grade 10) to 0.93¹⁷ (grade 7); Mathematics 0.93¹⁸ (grade 9) to 0.95¹⁹ (grade 5); and Science 0.93 (grade 10) to 0.94²⁰ (grade 5). It is likely that the heterogeneity of the CoAlt population contributes to the high reliabilities.

At the subgroup level the reliabilities remain high. As seen in Tables 6–9, the lowest total score reliability by gender is for males in grade 10 Reading where the reliability value equals 0.91²¹. The lowest total score reliability by race/ethnicity is for the Two or More Races subgroup in grade 3 Reading with a value of 0.86. Tables 10–13 illustrate that the lowest total score reliability by Language Proficiency status is 0.86 for Reading grade 6 “NEP”, the lowest total score reliability by ELL program—Bilingual status is 0.91 for Reading grade 7 “No,” and the lowest total score reliability by ELL program—English as a Second Language status is 0.84 for Science grade 8 “Yes.” As seen in Tables 14–17, the range for total score reliability by Free/Reduced Price Lunch status is 0.90 for Writing grade 8 “Reduced Lunch Eligible” to 0.96 for Mathematics grade 5 “not Eligible”.

Tables 18–21 illustrate that the lowest total score reliability by Primary Disability is –0.06 for Reading grade 9 “Specific learning disability” with a sample size of 23. Cronbach’s alpha can have a value less than zero when the covariance among items is negative. This may occur as a result of small sample size. In addition, homogeneity in the sample can decrease variance and the magnitude of the correlation. This group of students has a mean score of 85.39 out of 102 possible points and the standard deviation for the group is 5.79. Given the small sample size and homogenous sample, the reliability statistic was rendered ineffectual. For those subgroups with sufficient sample sizes for reporting (greater than 15), fewer than 10% had reliabilities less than 0.80, with sample sizes ranging from 22 to a maximum of 32, thus those reliability estimates should be interpreted with caution due to the small sample sizes. The highest total score reliability by Primary Disability was 0.96 for Mathematics grade 5 “Multiple disabilities”. The vast majority of total score reliability values by Primary Disability were above 0.80.

As seen in Tables 22–25, the lowest total score reliability by Expanded Accommodation is 0.61 for Reading grade 8 “Assistive Technology”. The highest total score reliability value is 0.97 for Mathematics grade 5 “Objects”.

¹⁵ There are three values of 0.91; however the grade 7 value of 0.911 is the lowest.

¹⁶ There are four values of 0.93; however the grade 6 value of 0.934 is the highest.

¹⁷ There are seven values of 0.93; however the grade 7 value of 0.935 is the highest.

¹⁸ There are three values of 0.93; however the grade 9 value of 0.931 is the lowest.

¹⁹ There are three values of 0.95; however the grade 5 value of 0.954 is the highest.

²⁰ There are two values of 0.94; however, the grade 3 value of 0.937 is the highest.

²¹ There are four values of 0.91; however, the grade 7 value of 0.907 is lowest.

Standard Error of Measurement

Another measure of reliability is a direct estimate of the degree of measurement error in students' total score on a test, which is a raw score for the CoAlt. This second measure is called a standard error of measurement (SEM). This represents the number of score points about which a given score can vary, similar to the standard deviation of a score: the smaller the SEM, the smaller the variability and the higher the reliability. The SEMs are computed with the following formula:

$$SEM = SD_TS(\sqrt{1 - \hat{\alpha}})$$

where SD_TS is the standard deviation of the total score and $\hat{\alpha}$ is the result of the calculation of Cronbach's alpha shown previously. The SEMs represent the total standard error of measurement in the raw score metric across all items in a given form. It is important to note that for the CoAlt a MC item contributes up to 3 points and a CR item contributes up to 6 points.

The SEMs by test for the total group and all subgroups are given in Tables 6–25 and are summarized at the total group level in Table 71. At the total group level, SEMs for Reading range from 6.60 (grade 6, 105 total possible points) to 7.26 (grade 10, 102 total possible points); for Writing from 7.39²² (grade 7, 108 total possible point) to 7.83 (grade 4, 108 total possible points); for Mathematics from 7.99 (grade 3, 126 total possible points) to 9.96 (grade 5, 171 total possible points); and for Science from 6.09 (grade 8, 99 total possible points) to 7.36 (grade 10, 102 total possible points). These are within acceptable ranges given that the CoAlt is on a raw score scale, with each item contributing up to 3 or 6 points (dependent on item type). Therefore, even the highest SEM value of 9.96 (grade 5 Mathematics) reflects approximately three MC items or two CR items, or some combination thereof.

Classification Consistency and Accuracy

Classification consistency and accuracy are additional measures of reliability, as well as validity. Reliability coefficients, such as Cronbach's alpha, are used to check for the internal consistency within a test. Test-retest reliability requires two administrations of the same test which requires another testing as an external reference. When retesting students is not feasible, classification consistency is a viable and often utilized alternative. Consistency in the classification sense represents how well two forms of an assessment with equal difficulty agree (Livingston & Lewis, 1995). It is estimated using actual response data and total test reliability from an administered form of an assessment, from which two parallel forms of the assessment are statistically modeled and classifications compared.

Table 72 illustrates classification consistency and classification accuracy indices based on the Livingston and Lewis (1995) methodology. Note that the values of all indices depend on several factors, such as the reliability of the actual test form, the distribution of scores, the number of cut scores, and the location of each cut score. The probability of a correct classification (PC) is the probability that the classification the student received is consistent with the classification that the student would have received on a parallel form. This is akin to the exact agreement rate in inter-rater reliability and the expectation is that this probability would be high. For Reading the average PC is 0.65 across all grades and ranges from 0.61 (grade 10) to 0.69 (grade 6). For Writing the average PC is 0.61 across all grades and ranges from 0.56 (grade 8) to 0.68 (grade 3). For Mathematics the average PC is 0.65 across all grades and ranges from 0.62 (grade 7) to 0.68 (grade 4). For Science the average PC is 0.59 across all grades and ranges from 0.57 (grade 8) to 0.62 (grade 10). Probability of misclassification (PM) is 1 minus PC.

²² There are two values of 7.39; however, the grade 7 value of 7.389 is the lowest.

The probability of a correct classification by chance (Chance) is the probability that the classification is correct and is due to chance alone. The probability of Chance is estimated under a complete random assignment procedure using the marginal distribution of each form. The Chance probability is expected to be low. For Reading the average Chance is 0.24 across all grades and ranges from 0.21 (grade 10) to 0.27 (grade 6). For Writing the average Chance is 0.23 across all grades and ranges from 0.21 (grade 8) to 0.26 (grade 3). For Mathematics the average Chance is 0.23 across all grades and ranges from 0.21²³ (grade 6) to 0.26²⁴ (grade 4). For Science the average Chance is 0.21 across all grades and ranges from 0.21²⁵ (grade 5) to 0.22 (grade 8).

Cohen's kappa (kappa) provides the same type of reliability or agreement statistic as described previously with the Livingston and Lewis (1995) classification consistency methodology, representing the agreement of the classifications between the two parallel forms with the consideration of the probability of a correct classification by chance, PC minus Chance divided by one minus Chance. In general, the value of kappa is lower than the value of PC because the probability of a correct classification by chance is larger than zero. This is true of the CoAlt data in Table 72. For Reading the average kappa is 0.54 across all grades and ranges from 0.50 (grade 10) to 0.58 (grade 6). For Writing the average kappa is 0.50 across all grades and ranges from 0.44 (grade 8) to 0.57 (grade 3). For Mathematics the average kappa is 0.55 across all grades and ranges from 0.51 (grade 7) to 0.57 (grade 4). For Science, the average kappa is 0.49 across all grades and ranges from 0.45 (grade 8) to 0.51 (grade 10). Landis and Koch (1977, p. 165) suggest the following as guidelines for interpretations of kappa:

- <0.00 Poor
- 0.00–0.20 Slight
- 0.21–0.40 Fair
- 0.41–0.60 Moderate
- 0.61–0.80 Substantial
- 0.81–1.00 Almost Perfect

Consistency and accuracy are important to consider in concert. The probability of accuracy (PA) represents the agreement between the observed classification based on the actual test form and true classification, given the modeled form. For Reading the average PA is 0.75 across all grades and ranges from 0.71 (grade 10) to 0.79 (grade 6). For Writing the average PA is 0.71 across all grades and ranges from 0.64 (grade 8) to 0.78 (grade 3). For Mathematics the average PA is 0.75 across all grades and ranges from 0.72²⁶ (grade 7) to 0.78 (grade 4). For Science the average PA is 0.69 across all grades and ranges from 0.67 (grade 8) to 0.71 (grade 10). Finally, Table 72 provides the probability of false positives (FP) and false negatives (FN) as measures of error in the data table and these are low, as expected.

Validity

Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of the test (AERA, APA, & NCME, 1999). The *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999) address the concept of validity in testing:

Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests. Validity is,

²³ There are three values of 0.21; however, the grade 6 value of 0.214 is lowest.

²⁴ There are two values of 0.26; however, the grade 4 value of 0.263 is higher.

²⁵ There are two values of 0.21; however, the grade 5 value of 0.207 is lower.

²⁶ There are two values of 0.72; however, the grade 7 value of 0.716 is lower.

therefore, the most fundamental consideration in developing and evaluating tests. The process of validation involves accumulating evidence to provide a sound scientific basis for the proposed score interpretations. It is the interpretations of test scores required by proposed uses that are evaluated, not the test itself. When test scores are used or interpreted in more than one way, each intended interpretation must be validated (p. 9).

Test validation is an ongoing process of gathering evidence from many sources to evaluate the soundness of the desired score interpretation or use. This evidence is acquired from studies of the procedures surrounding the targeted student group, the history of the content standards and their development, and the development of the test (procedural validity), the content of the test (content validity), and from studies involving scores produced by the test. Additionally, reliability is a necessary element for validity. A test cannot be valid if it is not also reliable. There are various sources of validity evidence, such as evidence based on procedures and processes in the development and scoring of the assessment, alignment of the assessment items with standards, and relations to other variables.

The purpose of the assessment, as described in the Overview of this document, is not only to meet accountability requirements, but also to provide students, parents, teachers, and schools with information on how their students are progressing relative to the Colorado Model Content Standards and Expanded Benchmarks, as described in Part 1: Standards.

Generally, achievement tests are used for student level outcomes, either 1) making predictions about students, or 2) describing students' performance (Mehrens & Lehmann, 1991). In addition, tests are now also used for the purpose of accountability and measuring AYP. As stated by R. L. Linn (2008), "Tests are used as policy tools to hold teachers and school administrators accountable for student learning and as levers to change instruction in the classroom" (p. 4). The CDE uses various assessment data in reporting AYP and in various programmatic and policy level decisions. Specific to student level outcomes, the CoAlt documents student performance in the areas of Reading, Writing, Mathematics, and Science as defined by the standards. To ensure that test scores allow interpretations appropriate for this purpose, the content of the test must be carefully matched to the specified standards. The 1999 AERA, APA, & NCME *Standards for Educational and Psychological Testing* state:

Important validity evidence can be obtained from an analysis of the relationship between a test's content and the construct it is intended to measure. Evidence based on test content can include logical or empirical analyses of the adequacy with which the test content represents the content domain and of the relevance of the content domain to the proposed interpretation of test scores. Evidence based on content can also come from expert judgments of the relationship between parts of the test and the construct. (p.11)

In regards to content validity evidence, logical analyses of test content indicate the degree to which the content of a test covers the domain of content the test is intended to measure. In the case of the CoAlt, the content is defined by test blueprints that describe the skills that must be measured to assess the content standards. The test development process requires specific attention to content representation and the balance thereof within each test form. In addition, several item review committees contribute to the item review and approval process, assuring the items assess the content standards and are mapped accordingly. Part 2: Test Development of this report contains more information specific to these reviews. The reviews also help to assure fair and unbiased items so that items function similarly for members of different race/ethnic, gender, or disability groups.

The internal structure of the test also provides evidence of validity. For example, high internal consistency like that described by the reliability coefficients, constitutes evidence of validity. This is because high reliability coefficients imply that the test questions are measuring the same domain of skill, are reliable and are consistent.

The validity of an assessment is also evidenced by establishing that the population of students for which the assessment is purposed and built is well targeted, and that those are the students who participate. The targeted student population for the CoAlt is defined as students with a severe cognitive disability who cannot otherwise participate in the general TCAP even with accommodations. Given the high-stakes nature of the CoAlt and the requirements of NCLB and Peer Review Evidence, as well as the need for eligibility criteria data, it is important to note who was actually included in the CoAlt and gather data on their performance. The number of students in various subgroups who participated, along with each group's summary scores, is presented in Tables 6–9 (specific to gender and race/ethnicity), Tables 10–13 (specific to ELL status), Tables 14–17 (specific to Free/Reduced Price Lunch eligibility), Tables 18–21 (specific to primary disability), and Tables 22–25 (specific to expanded accommodation provided on the CoAlt).

It is also important to demonstrate via student performance that students are able to demonstrate a range of performances commensurate with the expectation of the targeted population. Total raw score results for each grade and content area for the total groups are found in Table 71 and raw score frequency distributions by grade and content area are found in Tables 43–69. Data by expanded benchmark or critical concept are found in Tables 39–42. These data are reviewed and explained in greater detail in Part 7: Analyses and Results in this report.

An assessment that is valid should be similarly reliable for subgroups of similar sample sizes. Therefore, in addition to the total group data, subgroup total test performance and the associated test reliabilities and standard errors must also be reported. Tables 6–25 show these by subgroup for only those subgroups with ample sample sizes to report statistics (no groups less than 16 have statistics reported, only sample size information). Specific details on test reliability and standard errors are further described in the reliability section.

Part 9: Special Studies

Special studies, which were conducted as specific data analyses for the CoAlt, are meant to inform policy and provide additional evidence regarding reliability and validity.

Level of Independence

To get a sense of the magnitude of student levels of independence, the percent of each was evaluated. The percentages of total items across all grades, by content area, on which students responded with each level of independence, are found in Table 73. Overall, students responded independently to most items. In Reading, 87% of items were responded to independently (Level 4 according to the Level of Independence Protocol). In Writing this value is 87%, in Mathematics it is 80%, and in Science it is 89%.

Additional Reliability Measures

Additional reliability coefficients were calculated (KR20) in an effort to describe the consistency of the levels of independence performed by students and documented by test examiners. The KR20 statistic yields the same results as Cronbach's alpha for dichotomously scored items (Crocker & Algina, 1986). The goal was to determine the consistency of the level of independence rating for each student, as it was assumed that a student would perform at approximately the same level of independence across all items. The belief is that a student

answering an item independently would be likely to answer more items independently than they would be to require assistance (lower levels of independence) on other items. This helps to confirm that level of independence is about the student's ability as opposed to the type of item being administered. The concern is that there is no way to determine whether the rating is truly a reflection of the independent functioning of the student or the way in which the test examiner administered the assessment. The data in Table 74 illustrates the consistency of the level of independence ratings, describing by grade and content area the reliability of students at the highest level of independence (Level 4) compared with students at the remaining lower levels. The data demonstrate high reliabilities of 0.96 and above across all grade and content areas. This is an indication that the level of independence at which students perform and/or examiners provide assistance is consistent across items.

Given that students tend to respond independently is a good sign that examiners are not over-assisting their students on CoAlt and provides clearer data on the students' level of content-based understanding. An additional bit of information regarding the level of independence is looking at the number of occurrences where the student performed at the lowest level of independence, level 1 "no response," but responded correctly to the item, or where students performed at the upper levels of independence (2–4), but had no response to the test item marked, per test administrator coding. This is believed to be an indication of coding errors more than anything else. The percentages of item responses where these errors occurred are found in Table 75. The occurrences of coding errors due to a level 1 "no response" and a correct response given (average 0.38%, maximum 0.99%) are on average higher than error due to no response provided to the item with level of independence coded as 2–4 (average 0.19%, maximum 0.38%).

Student Scores

It is also important to gauge the range of scores across students. One way to look at this is to evaluate the number of students earning the maximum total raw score (the ceiling) and those not earning any points (the floor). This type of data can help provide information regarding eligibility policy. The number of students at the maximum and minimum raw scores for the total student population is found in Tables 6–9 and 71. In all grades and content areas there are fewer students achieving the maximum score than the minimum score. In Reading, at two grade levels, no students achieved the maximum possible score, while as many as 22 and 26 students (grades 4 and 9) earned the minimum possible score. In Writing, there are 5 grade levels with no students achieving the maximum possible score and there were 4 grade levels (grades 3, 4, 7, and 9) in which 20 or more students earned the minimum possible score. In Mathematics, there are 3 grade levels in which no students earned the maximum possible score and the minimum score was earned by 27 students in grade 9. Science is different in that there were no grades in which zero students scored the maximum possible score. In grade 5 there are 16 students earning the maximum possible score, for grade 8 there are 13 students earning the maximum possible score, and at grade 10 there are 4 students achieving the maximum possible score. In both grades 8 and 10 there are 11 students earning the minimum possible score and in grade 5 there are 9 students earning the minimum possible score. This information is also illustrated by subgroups in Tables 6–25.

Another way of looking at this is to view the distribution of students across the raw score scale. Raw score frequency distributions are found in Tables 43–69. It is seen that students are fairly evenly spread out across the range of scores, though there is some "clumping" evident at the top and bottom of the distributions as is typical with this population of students.

Performance Levels and Response Modes

Tables 76–79 illustrate the average level of independence with which a student answers the test items by content area in relation to the percentage of students in each of the proficiency levels. The student's average level of independence was calculated as a simple average of the level of independence scores across all test items by content area. This provided a range for the levels of independence with which students tended to respond. Then, for each of the five proficiency levels, the percentage of students within each range of independence was calculated. It can be seen that zero percent of students with an average level of independence less than 3.5 achieved a proficiency rating of *Novice*. All students with an average level of independence of 1.0–1.4 achieved a proficiency level of *Inconclusive*. The greater the average level of independence with which a student responds the more likely they are to have a higher proficiency rating. It is important to note that it is appropriate for independent responses to receive low scores (such as the percentage of students with the highest average level of independence scoring in the *Inconclusive* level) due to the possibility for an incorrect though independent response to be given. This finding is reassuring as it illustrates that examiners are not simply redirecting if the student answers the question incorrectly at first.

Part 10: Longitudinal Analyses

Reading, Writing, and Science comparisons examine the differences across six years, 2007–08, 2008–09, 2009–10, 2010–11, 2011–12 and 2012–13 while Mathematics comparisons examine differences for seven years, 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, 2011–12 and 2012–13. Throughout this section, differences are calculated as the most recent year compared to the prior year. As such, differences are calculated as 2012–2013 minus 2011–12, 2011–12 minus 2010–11, 2010–11 minus 2009–10, and so forth as appropriate. Given this calculation of differences, negative values indicate that the values have decreased in the more recent year.

Over time it would be expected that there would be only minimal differences in test statistics such as *p*-values (item difficulty) and point-biserial correlations (item-test correlation) assuming that the tested population remains stable. Given the reporting and use of raw score results without equating, the assumption of relative population invariance becomes critical in the examination of student performance over time.

Reading

Figure 20 illustrates the number of students participating in the CSAPA/CoAlt Reading assessment by year. It can be seen that between 2008 and 2013 there has been a variety of increasing and decreasing trends in the number of students across all grades.

Table 80 illustrates the means and standard deviations at the total group level by grade for Reading. It is seen that differences from 2007–08 to 2008–09 were as small as –0.42 points for grade 4 and as large as 3.73 points for grade 10. It is also seen that the means for grades 3, 4, 8, and 9 decreased (–0.42 to –2.28 points), while the means for grades 5–7 and 10 increased (1.08 to 3.73 points). Differences from 2008–09 to 2009–10 were as small as –0.04 points for grade 7 and as large as –2.67 points for grade 10. It is also seen that the means for grades 3–5, 7, 9, and 10 decreased (–0.04 to –2.67 points), while the means for grades 6 and 8 increased (0.06 to 0.57 points). Differences from 2009–10 to 2010–11 were as small as 0.06 points for grade 6 and as large as 1.93 points for grade 7. It is also seen that the means for grades 3, 4, and 8–10 decreased (–0.09 to –0.88 points), while the means for grades 5–7 increased (0.06 to 1.93 points). Differences from 2010–11 to 2011–12 were as small as 0.30 points for grade 9 and as large as 3.89 points for grade 5. It is also seen that the means for grades 3–5, and 7 decreased (–0.66 to –3.89 points), while the means for grades 6 and 8–10 increased (0.30 to 2.90 points). Differences

from 2011–12 to 2012–13 were as small as 0.17 in grade 8 and as large as 3.45 in grade 5. It is also seen that means increased in grades 3, 5, and 7–10 (0.17 to 3.45 points) whereas the means decreased in grades 4 and 6 (–0.35 to –2.14 points). This trend is also illustrated in Figure 24 where the mean score as a percent of the total possible score is presented. Given the nature of the Reading assessment, ranging by grade from 102 to 105 possible points, these small differences in mean scores over time reflect very minor variations in student performance.

Table 84 illustrates the population of students participating in the CSAPA/CoAlt Reading assessment by year based upon gender and primary disability, as well as indicating any differences in the population between the four years. The largest change by gender group from 2007–08 to 2008–09 was seen in grade 7 with a nearly 5% shift in the gender groupings. The smallest difference was observed at grade 10 with less than 0.75% of variation. The largest change by gender group from 2008–09 to 2009–10 was seen in grade 8 with a –3.5% decline in the percentage of male students. The smallest difference was observed at grade 7 with less than 0.25% of variation in the percentage of male students. The largest change by gender group from 2009–10 to 2010–11 is seen in grade 9 with a $\pm 4.29\%$ change for male (–) and female (+) students. The smallest difference is observed at grade 10 with –0.46% of change in the percentage of female students. The largest change by gender group from 2010–11 to 2011–12 was seen in grade 10 with a –2.66% decline in the percentage of male students. The smallest difference was observed at grade 6 with a 0.22% of variation in the percentage of male students. The smallest change by gender group from 2011–12 to 2012–13 was observed at grade 8 with a $\pm 0.08\%$ change in the percentage of male (+) and female (–) students. The largest difference was seen in grade 10 with a 1.88% increase in male students.

The primary disability classifications have also remained relatively stable as detailed in Table 84 by grade level and as illustrated for the overall group in Figure 28, only differences for groups containing students in both administrations are referenced here. The smallest difference between the 2007–08 and 2008–09 administrations in the percentage of students classified with a specific primary disability was a zero percent change for the percent of students classified as having a “Visual Disability” in grade 6. The largest difference was 7.17% for “Limited Intellectual Capacity” in grade 6. The smallest difference between the 2008–09 and 2009–10 administrations in the percentage of students classified with a specific primary disability was a zero percent change for the percent of students classified as having a “Visual Disability” in grade 7. The largest difference was an increase of 5.91% for “Limited Intellectual Capacity” in grade 4. The smallest difference between the 2009–10 and 2010–11 administrations in the percentage of students classified with a specific primary disability is a –0.01% change for the percent of students classified as having a “Physical Disability” in grade 7. The largest difference is an increase of 5.77% for “Multiple Disabilities” in grade 4. The smallest difference between the 2010–11 and 2011–12 administrations in the percentage of students classified with a specific primary disability is a zero percent change for the percent of students classified as “Deaf-Blind” in grades 6, 9, and 10. The largest difference is an increase of 5.24% for “Multiple Disabilities” in grade 7. The smallest difference between the 2011–12 and 2012–13 administrations is a –0.01% change in grade 4 students classified with “Visual Disability” and in grade 6 students classified with “Hearing Disability”. The largest difference is a 5.97% decrease in grade 6 students with the classification “Physical Disability”.

The *p*-values for 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13 are illustrated in Table 88 for Reading. The mean *p*-values remain quite stable across administrations with the smallest difference from 2007–08 to 2008–09 of –0.004²⁷ at grade 4; for 2008–09 to 2009–10 the smallest difference was at grade 9, –0.001; for 2009–10 to 2010–11 the smallest difference is at grade 3, –0.004; for 2010–11 to 2011–12 the smallest difference is at grade 9, 0.003; and for

²⁷ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

2011–12 to 2012–13 the smallest difference was at grade 8, at 0.0005. The largest difference for 2007–08 to 2008–09 was observed at grade 10 with a difference of 0.036; for 2008–09 to 2009–10 the largest difference, of -0.027 , was at grade 10; for 2009–10 to 2010–11 the largest difference of 0.018, is at grade 7, for 2010–11 to 2011–12 the largest difference of -0.036 , is at grade 5. Equally, the range of p -values remained stable and for 2011–12 to 2012–13 the largest difference of 0.033 was at grade 5. The highest observed p -value was 0.88 in grade 4 (2007–08); 0.89 in grade 5 (2008–09); 0.88 in grade 6 (2009–10); 0.87^{28} in grade 5 (2010–11); 0.89 in grade 6 (2011–12), and 0.89 in grade 5 (2012–13). The lowest observed p -value has historically always been in grade 6. It was 0.18 in 2007–08; 0.23 in 2008–09; 0.24 in 2009–10; 0.21 in 2010–11, and 0.23^{29} in 2010–11. In 2012–13 the lowest observed p -value was 0.23^{30} in grade 4.

Table 92 illustrates the point-biserial statistics for 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13 and provides results of the differences. The mean point-biserials remain quite stable across administrations with grade 8 illustrating a difference of just -0.001^{31} from 2007–08 to 2008–09; 0.002 for grade 9 from 2008–09 to 2009–10; 0.007 for grade 4 from 2009–10 to 2010–11; 0.001 for grade 8 from 2010–11 to 2011–12; and -0.002^{32} grade 4 from 2011–12 to 2012–13. The largest difference in mean point-biserials between 2007–08 and 2008–09 was -0.019 for grade 6; from 2008–09 to 2009–10 the largest difference was -0.017 for grade 4; from 2009–10 to 2010–11 the largest difference was -0.026 for grade 6; from 2010–11 to 2011–12 the largest difference was -0.029 for grade 7. Equally, the range of point-biserial values remained stable; and from 2011–12 to 2012–13 the largest difference was -0.024 for grade 3. The highest observed point-biserial in 2007–08 was 0.74 in grade 9; in 2008–09 it was 0.75 in grade 5; in 2009–10 the highest observed point-biserial was 0.75 in grade 5; and in 2010–11 the highest observed point-biserial was 0.73^{33} in grade 6; in 2011–12 the highest observed point-biserial was 0.74 in grade 3; and in 2012–13 the highest observed point-biserial was 0.74^{34} in grade 9. The lowest observed point-biserial was in grade 7, in 2007–08 it was 0.24; in 2008–09 it was 0.20; in 2009–10 it was 0.16, in 2010–11 it was 0.14. In 2011–12 it was 0.16 in grade 3; and in 2012–13 it was 0.19^{35} in grade 5.

Another important trait to examine longitudinally is the impact data and differences over time, presented in Table 96. At the level of *Inconclusive* from 2007–08 to 2008–09 the largest decrease was 3.55% for grade 10, and the largest increase at this level was 3.34% for grade 4. From 2008–09 to 2009–10 the largest decrease at this level was 1.83% for grade 6, and the largest increase was 3.61% for grade 5. From 2009–10 to 2010–11 the largest decrease at the *Inconclusive* level was 3.93% for grade 7, and the only increase was 1.03% for grade 6. From 2010–11 to 2011–12 the largest decrease at this level was 1.96% for grade 6, and the largest increase was 4.50% for grade 3. From 2011–12 to 2012–13 the largest decrease at the *Inconclusive* level was 2.22% for grade 7 and the largest increase was 2.57% for grade 4. At the *Exploring* level from 2007–08 to 2008–09 there was a 3.90% decrease in students at grade 6, and the largest increase at this level was 3.51% for grade 8. From 2008–09 to 2009–10 the largest decrease in *Exploring* students was 3.50% for grade 5 and the largest increase was 3.86% for grade 6. From 2009–10 to 2010–11 the only decrease at this level was 0.17% for grade 8 and the largest increase was 4.66% for grade 10. From 2010–11 to 2011–12 the largest decrease in *Exploring* students was 3.79% for grade 9 and the largest increase was 4.88% for grade 5. From 2011–12 to 2012–13 the largest decrease at the

²⁸ There are two values of 0.87; however, the 0.874 grade 5 value is higher.

²⁹ There are two values of 0.23; however, the 0.228 grade 6 value is lower.

³⁰ There are three values of 0.23; however, the 0.233 grade 4 value is the lowest.

³¹ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

³² There are two values of ± 0.002 ; however, the -0.0017 grade 4 value is a smaller difference.

³³ There are three values of 0.73; however, the 0.729 grade 6 value is highest.

³⁴ There are two values of 0.74; however the grade 9 value of 0.737 is higher.

³⁵ There are two values of 0.19; however, the grade 5 value of 0.193 is lower.

Exploring level was 6.18% for grade 10 and the largest increase was 2.07% for grade 7. At the level of *Emerging*, from 2007–08 to 2008–09 there was a decrease of 4.03% in students at grade 4, while there was a 6.25% increase at grade 6. From 2008–09 to 2009–10, the largest decrease in *Emerging* students was 3.98% for grade 6 and the largest increase was 2.53% for grade 5. From 2009–10 to 2010–11 the largest decrease at this level was 3.85% for grade 6 and the largest increase was 4.53% for grade 8. From 2010–11 to 2011–12, the largest decrease in *Emerging* students was 4.83% for grade 3, and the largest increase was 2.86% for grade 6. From 2011–12 to 2012–13, at the *Emerging* level there was an increase for all grades ranging from 0.24% for grade 6 to 5.50% for grade 10. At the *Developing* level, from 2007–08 to 2008–09 there was a 5.32% decrease in students in grade 9, while there was an increase of 2.79% in grade 10. From 2008–09 to 2009–10 there was a 1.58% decrease in students in grade 4, while there was an increase of 4.58% in grade 8. From 2009–10 to 2010–11 the largest decrease in *Developing* was 1.35% for grade 3, and the largest increase was 2.09% for grade 7. From 2010–11 to 2011–12 there was a 2.27% decrease in students in grade 5, while there was an increase of 1.41% in grade 9. From 2011–12 to 2012–13 at the *Developing* level the largest decrease was 3.72% for grade 4 and the largest increase was 3.12% for grade 5. At the *Novice* level, from 2007–08 to 2008–09 there was a decrease of 1.35% of students in grade 6, with the greatest increase of 2.84% in grade 10. From 2008–09 to 2009–10 there was a 4.09% decrease in students in grade 10, while there was an increase of 0.35% in grade 6. From 2009–10 to 2010–11 the largest decrease in *Novice* was 3.12% for grade 8, and the largest increase was 1.22% for grade 10. From 2010–11 to 2011–12 there was a 3.18% decrease in students in grade 5, while there was an increase of 2.95% in grade 8. From 2011–12 to 2012–13 at the *Novice* level the largest decrease was 2.80% for grade 8 and the largest increase was 2.20% for grade 5. From 2007–08 to 2008–09 the percentage of students classified as *Developing* and *Novice* combined decreased by 4.42% in grade 8 and increased by 5.64% in grade 10. From 2008–09 to 2009–10 the percentage of students in the combined *Developing* and *Novice* categories decreased by 5.10% for grade 10 and increased by 4.62% for grade 8. From 2009–10 to 2010–11 the percentage of students in the combined *Developing* and *Novice* categories decreased by 3.71% for grade 8 and increased by 1.65% for grade 6. From 2010–11 to 2011–12 the percentage of students in the combined *Developing* and *Novice* categories decreased by 5.45% for grade 5 and increased by 3.18% for grade 8. In general, the impact data are relatively stable across the administrations. Finally, from 2011–12 to 2012–13 at the combined *Developing and Novice* level the largest decrease was 3.82% for grade 4 and the largest increase was 5.33% for grade 5.

Writing

Figure 21 illustrates the number of students participating in the CSAPA/CoAlt Writing assessment in 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13. It is illustrated that between 2008 and 2013, there has been a variety of increasing and decreasing trends in the number of students across all grades.

Table 81 illustrates the means and standard deviations at the total group level by grade for Writing. It is seen that the 2007–08 to 2008–09 differences are as small as –0.30 points for grade 9 and as large as 4.08 points for grade 10. It is also seen that the means for grades 3, 4, 8, and 9 decreased (from –0.30 to –2.24 points), while the means for grades 5–7 and 10 increased (from 1.15 to 4.08 points). The 2008–09 to 2009–10 differences are as small as –0.35 points for grade 4 and as large as –2.00 points for grade 10. It is also seen that the means for grades 3–5, 7, 9, and 10 decreased (from –0.35 to –2.00 points), while the means for grades 6 and 8 increased (from 0.76 to 0.83 points). The 2009–10 to 2010–11 differences are as small as –0.01 points for grade 9 and as large as –3.67 points for grade 4. It is also seen that the means for grades 3, 4, 6, 9, and 10 decreased (from –0.01 to –3.67 points), while the means for grades 5, 7, and 8 increased (from 0.19 to 1.50 points). The 2010–11 to 2011–12 differences are as small as 0.60 points for grade 9 and as large

as -4.44 points for grade 5. It is also seen that the means for grades 3, 5, and 7 decreased (from -1.30 to -4.44 points), while the means for grades 4, 6, and 8–10 increased (from 0.60 to 2.08 points). The 2011–12 to 2012–13 differences are as small as 0.60 points for grade 10 and as large as 4.15 points for grade 5. It is also seen that the mean scores increased for grades 3, 5, and 7–10, whereas the means decreased for grades 4 and 6. This trend is also illustrated in Figure 25 where the mean score as a percent of the total possible score is presented. Given the nature of the Writing assessment, ranging by grade from 105 to 108 possible points, these small differences in mean scores reflect very minor variations in student performance.

Table 85 illustrates the population of students participating in the CSAPA/CoAlt Writing assessment based upon gender and primary disability. The largest change by gender group between 2007–08 and 2008–09 was seen in grade 7 with a 4.98% decrease in male students, while the smallest difference was observed at grade 5 with a 0.60% increase in the percentage of female students. For 2008–09 to 2009–10 the largest difference by gender group is observed for grade 8 female students with a 4.02% increase, while the smallest difference is observed for grade 7 female students with a 0.03% decrease. For 2009–10 to 2010–11 the largest difference by gender group is observed for grade 9 male students with a 4.37% decrease, while the smallest difference is observed for grade 7 male students with a 0.39% increase. For 2010–11 to 2011–12 the largest difference by gender group is observed for grade 10 male students with a 3.28% decrease, while the smallest difference is observed for grade 6 male students with a 0.25% increase. For 2011–12 to 2012–13 the largest difference by gender group is seen for grade 6 with a 1.68% decrease in male students, and the smallest difference is seen in grade 4 with a 0.24% decrease in male students.

The primary disability classifications have also remained quite stable by grade level as detailed in Table 85 and as illustrated for the overall group in Figure 29, only differences for groups containing students in both administrations are referenced here. The smallest difference in the percentage of students classified with a specific primary disability between 2007–08 and 2008–09 was a zero percent change for the percent of students classified as having “Multiple Disabilities” in grade 3; while from 2008–09 to 2009–10 the smallest difference was a zero percent change for students classified with a “Visual Disability” in grade 7; the smallest difference from 2009–10 to 2010–11 was a -0.02% change for students classified with a “Traumatic Brain Injury” in grade 10; the smallest difference from 2010–11 to 2011–12 was a zero percent change for students classified with as “Deaf-Blind” in grades 6, 9, and 10; and the smallest difference from 2011–12 to 2012–13 was a -0.01% change for students classified as “Visual Disability” in grade 4 and for students with the classification “Hearing Disability” in grade 6. The largest difference between 2007–08 and 2008–09 was a 6.79% increase for “Limited Intellectual Capacity” in grade 6; while for 2008–09 to 2009–10 the largest difference was a 5.99% increase for students classified as “Limited Intellectual Capacity” in grade 7; the largest difference from 2009–10 to 2010–11 was a 5.82% increase for students classified with “Multiple Disabilities” in grade 4; the largest difference from 2010–11 to 2011–12 was a 5.24% increase for students classified with “Multiple Disabilities” in grade 7; finally, the largest difference from 2011–12 to 2012–13 was a 5.95% decrease for students with the classification “Physical Disability” in grade 6.

The p -values for 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12 are illustrated in Table 89, providing results of the differences between years. The mean p -values remain quite stable across administrations with the smallest difference from 2007–08 to 2008–09 of -0.003³⁶ at grade 9; the smallest difference from 2008–09 to 2009–10 of -0.006 at grade 7; the smallest difference from 2009–10 to 2010–11 of 0.000 at grade 8; the smallest difference from 2010–11 to 2011–12 of 0.006 at grade 9; and the smallest difference from 2011–13 to 2012–13 was an increase of 0.003

³⁶ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

for grade 10. The largest difference observed between 2007–08 and 2008–09 was 0.031 for grade 10; the largest difference from 2008–09 to 2009–10 was -0.018 at grade 10; the largest difference observed between 2009–10 and 2010–11 was -0.029 at grade 4; the largest difference observed between 2010–11 and 2011–12 was -0.040 at grade 5; and the largest difference observed between 2011–12 and 2012–13 was 0.039 at grade 5. Equally, the range of p -values remained stable. The highest observed p -value in 2007–08 was 0.86 in grade 8; in 2008–09 it was 0.85 in grade 7; in 2009–10 it was 0.86 in grade 6; in 2010–11 the highest observed p -value was 0.85 in grade 7; in 2011–12 the highest observed p -value was 0.86 in grade 8; and in 2012–13 the highest observed p -value was 0.86 in grade 7. Historically, the lowest observed p -value has always been in grade 10; in 2007–08 was 0.17; in 2008–09 it was 0.19; in 2009–10 it was 0.16; in 2010–11 the lowest observed p -value was 0.15; and in 2012–13 it was 0.18 in grade 10. However, in 2011–12, the lowest observed p -value is 0.19³⁷, observed in grade 4.

Table 93 illustrates the point-biserial statistics for 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13 and provides results of the differences. The mean point-biserials remain quite stable across administrations with grade 3 historically illustrating the smallest differences across most years with a difference of 0.0002³⁸ from 2007–08 to 2008–09; a difference of 0.002 from 2008–09 to 2009–10; and a difference of 0.000 from 2009–10 to 2010–11. The smallest difference between the mean point-biserials for 2010–11 to 2011–12 is -0.004 and occurred in grade 4, and for 2012–13 it was -0.001 in grade 6. The largest difference from 2007–08 to 2008–09 was observed at grade 6 with a difference of -0.018 ; for 2008–09 to 2009–10 the largest difference was 0.023 in grade 9; from 2009–10 to 2010–11 the largest difference was -0.034 in grade 5, from 2010–11 to 2011–12 the largest difference was 0.037 in grade 7; and from 2011–12 to 2012–13 the largest difference was -0.018 in grade 7. Equally, the range of point-biserial values remained stable. The highest observed point-biserial in 2007–08 was 0.86 in grade 7; in 2008–09 it was 0.88 in grade 8; in 2009–10 it was 0.87 in grade 8; in 2010–11 the highest observed point-biserial was 0.87³⁹ in grade 6; in 2011–12 the highest observed point-biserial was 0.88 in grade 7; and in 2012–13 the highest observed point-biserial was 0.87 in grade 8. The lowest observed point-biserial in 2007–08 was 0.13 in grade 7; in 2008–09 it was 0.17 in grade 9; in 2009–10 it was 0.12 in grade 10; and in 2010–11 the lowest observed point-biserial was 0.12⁴⁰ in grade 7; in 2011–12 the lowest observed point-biserial was 0.14⁴¹ in grade 10; and in 2012–13 the lowest observed point-biserial was 0.15 in grade 4.

Another important trait to examine over time is the impact data which is presented in Table 97. At the level of *Inconclusive* from 2007–08 to 2008–09 the largest decrease was 4.33% for grade 7, for 2008–09 to 2009–10 the largest decrease was 2.41% for grade 8, from 2009–10 to 2010–11 the largest decrease was 2.37% for grade 7, from 2010–11 to 2011–12 the largest decrease in *Inconclusive* students was 4.61% for grade 8; and from 2011–12 to 2012–13 the largest decrease at the *Inconclusive* level was 2.90% for grade 7. At this level there was a 2.62% increase in students in grade 8 from 2007–08 to 2008–09, the greatest increase from 2008–09 to 2009–10 was 4.15% for grade 9, from 2009–10 to 2010–11 the greatest increase was 2.90% for grade 4, from 2010–11 to 2011–12 the greatest increase in *Inconclusive* students, of 4.02%, occurred at grade 7; and from 2011–12 to 2012–13 the greatest increase at the *Inconclusive* level was 1.37% for grade 10. At the *Exploring* level there was a 6.75% decrease at grade 10 from 2007–08 to 2008–09, from 2008–09 to 2009–10 the largest decrease was 1.44% for grade 7, from 2009–10 to

³⁷ There are two values of 0.19; however, the 0.1857 grade 4 value is lower.

³⁸ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

³⁹ There are two values of 0.87; however, the 0.868 grade 6 value is higher.

⁴⁰ There are two values of 0.12; however, the 0.118 grade 7 value is lower.

⁴¹ There are two values of 0.14; however, the 0.139 grade 10 value is lower.

2010–11 the largest decrease in *Exploring* students was 5.08% for grade 8, from 2010–11 to 2011–12 the largest decrease in *Exploring* students was 2.92% for grade 10, and from 2011–12 to 2012–13 the largest decrease at the *Exploring* level was 3.78% for grade 10. There was an increase in students classified as *Exploring* from 2007–08 to 2008–09 for grade 3 of 2.30%, from 2008–09 to 2009–10 the greatest increase was for grade 6 with a 5.77% increase, from 2009–10 to 2010–11 the greatest increase in *Exploring* students was for grade 10 with a 3.81% increase, from 2010–11 to 2011–12 the greatest increase in *Exploring* students was for grade 5 with a 4.81% increase; and from 2011–12 to 2012–13 the greatest increase at the *Exploring* level was 4.58% for grade 4. From 2007–08 to 2008–09 there was a 2.86% decrease for grade 5 students classified as *Emerging*, from 2008–09 to 2009–10 the greatest decrease of 5.53% was observed for grade 9, from 2009–10 to 2010–11 the greatest decrease in *Emerging* students, of 6.35%, was observed for grade 10, from 2010–11 to 2011–12 the greatest decrease in *Emerging* students, of 5.48%, was observed for grade 7; and from 2011–12 to 2012–13 the greatest decrease at the *Emerging* level was 2.76% for grade 6. From 2007–08 to 2008–09 there was a 2.42% increase in *Emerging* students at grade 6, from 2008–09 to 2009–10 the greatest increase was 2.11% for grade 7, from 2009–10 to 2010–11 there was a 2.92% increase in *Emerging* students for grade 5, from 2010–11 to 2011–12 there was a 4.07% increase in *Emerging* students for grade 10, and from 2011–12 to 2012–13 the greatest increase at the *Emerging* level was 3.06. There was a 4.30% decrease in students classified as *Developing* in grade 9 from 2007–08 to 2008–09, from 2008–09 to 2009–10 the greatest decrease of 3.14% was for grade 7, from 2009–10 to 2010–11 the greatest decrease in *Developing* students of 5.83% was for grade 4 students, from 2010–11 to 2011–12 the greatest decrease in *Developing* students of 3.55% was for grade 5 students, and from 2011–12 to 2012–13 the greatest decrease at the *Developing* level was 5.06% for grade 4. From 2007–08 to 2008–09 there was a 6.25% increase at grade 6 in students classified as *Developing*, from 2008–09 to 2009–10 there was a 2.48% increase at grade 4, from 2009–10 to 2010–11 there was a 3.44% increase in *Developing* students at grade 9, from 2010–11 to 2011–12 there was a 3.06% increase in *Developing* students at grade 10, and from 2011–12 to 2012–13 the greatest increase at the *Developing* level was 2.95% for grade 5. Within the *Novice* classification there was a 2.89% decrease at grade 6 (the only decrease evidenced) from 2007–08 to 2008–09, from 2008–09 to 2009–10 the greatest decrease of 4.68% was observed at grade 10, from 2009–10 to 2010–11 the greatest decrease in *Novice* students, of 3.36%, occurred at grade 5, from 2010–11 to 2011–12 the greatest decrease in *Novice* students, of 2.42%, occurred at grade 10, and from 2011–12 to 2012–13 the greatest decrease at the *Novice* level was 0.64% for grade 7. From 2007–08 to 2008–09 there was a 4.69% increase in *Novice* students at grade 10, from 2008–09 to 2009–10 the largest increase was 4.22% for grade 6, from 2009–10 to 2010–11 the largest increase in *Novice* students of 3.44% was for grade 10, from 2010–11 to 2011–12 the largest increase in *Novice* students, of 2.20% was for grade 8, and from 2011–12 to 2012–13 the largest increase at the *Novice* level was 2.89% for grade 5. Within the combined levels of *Developing* and *Novice* there were decreases of 1.17% to 3.77% in the impact data at grades 3, 4, 8, and 9, and increases of 1.91% to 4.99% at grades 5–7 and 10 from 2007–08 to 2008–09. For 2008–09 to 2009–10 there were decreases of 1.18% to 2.77% in the impact data at grades 3, 7, and 10, and increases of 0.23% to 1.95% at grades 4–6, 8, and 9. For 2009–10 to 2010–11 for the percentage of students classified as *Developing* and *Novice* there were decreases of 1.16% to 6.09% at grades 3–6, and increases of 0.45% to 1.41% at grades 7–10. For 2010–11 to 2011–12 for the percentage of students classified as *Developing* and *Novice* category decreased by 4.68% for grade 5 and increased by 2.27% for grade 7. In general, the impact data are relatively stable across the four administrations. From 2011–12 to 2012–13 there were decreases at the *Developing and Novice* combined levels for grades 3, 4, and 6 ranging from 1.06% to 4.01% and increases for grades 5 and 7–10 ranging from 0.28% to 5.85%.

Mathematics

Figure 22 illustrates the number of students participating in the CSAPA/CoAlt Mathematics assessment in 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13. It is shown that between 2008 and 2013 there has been a variety of increasing and decreasing trends in the number of students across all grades.

Table 82 illustrates the means and standard deviations at the total group level by grade for Mathematics. It is seen that the 2006–07 versus 2007–08 differences are as small as 0.70 points for grade 6 and as large as 3.65 points for grade 8, and that the means for grades 3–5 and 7 decrease while the means for grades 6 and 8–10 increase. The 2007–08 versus 2008–09 differences are as small as 0.18 for grade 9 and as large as –4.66 points for grade 8, and the means for grades 3, 4, and 8 decrease, while the means for grades 5–7, 9, and 10 increase. The 2008–09 versus 2009–10 differences are as small as –0.10 points for grade 7 and as large as –4.20 points for grade 5, and the means for grades 3, 5, 7, 9, and 10 decrease, while the means for grades 4, 6, and 8 increase. The 2009–10 versus 2010–11 differences are as small as –0.17 points for grade 9 and as large as –4.13 points for grade 4, and the means for grades 3, 4, 6, 9, and 10 decrease, while the means for grades 5, 7, and 8 increase. The 2010–11 versus 2011–12 differences are as small as 0.23 points for grade 4 and as large as –5.20 points for grade 5, and the means for grades 3, 5, and 7 decrease, while the means for grades 4, 6, and 8–10 increase. The 2011–12 versus 2012–13 differences were as small as –0.51 for grade 8 and as large as 5.88 for grade 5, and the means for grades 3, 5, 7, 9 and 10 increase while the means for grades 4, 6, and 8 decrease. This trend is also illustrated in Figure 26 where the mean score as a percent of the total possible score is presented. Given the nature of the Mathematics assessment, ranging by grade from 126 to 171 possible points, these small differences in mean scores reflect very minor variations in student performance.

Table 86 illustrates the population of students participating in the CSAPA/CoAlt Mathematics assessment based upon gender and primary disability. The largest change by gender group between 2006–07 and 2007–08 was –7.61% for grade 6 males, while the smallest difference was observed for grade 4 females with a decrease of 0.23%. For 2007–08 to 2008–09 the largest difference by gender group was observed for grade 7 males with a 5.34% decrease, while the smallest difference was observed for grade 4 females with a 0.11% decrease. The largest change by gender group between 2008–09 and 2009–10 was a 3.04% increase in grade 4 males, while the smallest difference was observed at grade 5 with a 0.16% decrease in female students and a 0.16% increase in male students. The largest change by gender group between 2009–10 and 2010–11 was a 3.92% decrease in grade 9 male students, while the smallest difference was observed at grade 4 with a 0.19% increase in female students. The largest change by gender group between 2010–11 and 2011–12 was a 2.67% increase in grade 9 male students, while the smallest difference was observed at grade 3 with a 0.01% decrease in female students. The largest difference by gender from 2011–12 to 2012–13 was observed at grade 9 with a 1.48% decrease in female students, while the smallest difference was observed at grade 4 with a zero percent change in female students.

The primary disability classifications have also remained quite stable as detailed in Table 86, by grade level and as illustrated for the total group in Figure 30, only differences for groups containing students in both administrations are referenced here. The smallest difference in the percentage of students classified with a specific primary disability between 2006–07 and 2007–08 was a 0.01% change at grade 9 for the students classified as having “Multiple Disabilities;” for 2007–08 to 2008–09 the smallest difference was a zero percent change for the percent of students classified as having a “Speech/Language Disability” in grade 10; for 2008–09 to 2009–10 the smallest difference was a zero percent change for students classified with “Visual Disability” in grade 7; and for 2009–10 to 2010–11 the smallest difference was a zero percent change for students classified

with a “Traumatic Brain Injury” in grade 10; for 2010–11 to 2011–12 the smallest difference was a zero percent change for students classified as “Deaf-Blind” in grades 6, 9, and 10, and for 2011–12 to 2012–13 the smallest differences were a -0.01% change in students with the classification “Visual Disability” in grade 4 and a -0.01% change in students with the classification “Traumatic Brain Injury” in grade 9. The largest difference between 2006–07 and 2007–08 was -5.17% for grade 3 “Limited Intellectual Capacity;” for 2007–08 to 2008–09 the largest difference was -6.55% for grade 6 students classified as having “Multiple Disabilities;” for 2008–09 to 2009–10 the greatest difference was 6.22% for students in grade 4 classified with “Limited Intellectual Capacity;” for 2009–10 to 2010–11 the greatest difference was 5.54% for students in grade 5 classified with “Limited Intellectual Capacity”, for 2010–11 to 2011–12 the greatest difference was 5.71% for students in grade 7 classified with “Multiple Disabilities”, and for 2011–12 to 2012–13 the greatest difference was -5.85% in grade 6 students with the classification “Physical Disability”.

The p -values for 2006–07, 2007–08, 2008–09, 2009–10, and 2010–11 are illustrated in Table 90 providing results of the difference between years. The mean p -values remain quite stable across administrations with the smallest 2006–07 to 2007–08 difference of 0.007^{42} at grade 6; the smallest 2007–08 to 2008–09 difference of 0.000 at grade 7; the smallest 2008–09 to 2009–10 difference of -0.002 at grade 7; the smallest 2009–10 to 2010–11 difference of -0.003 at grade 9; the smallest 2009–10 to 2010–11 difference of 0.001 at grade 4; and the smallest 2011–12 to 2012–13 difference was 0.007^{43} at grades 8 and 9. Grade 8 illustrated the largest difference for 2006–07 to 2007–08 and 2007–08 to 2008–09 with differences of 0.025 and -0.032 , respectively. From 2008–09 to 2009–10 the greatest difference was -0.022 for grade 5, from 2009–10 to 2010–11 the greatest difference was -0.029 for grade 4, from 2009–10 to 2010–11 the greatest difference was -0.035 for grade 5; and from 2011–12 to 2012–13 the greatest difference was 0.036 for grade 5. Equally the range of p -values remained stable. The highest observed p -values from 2006–07 through 2009–10 were at grade 4 with values of 0.90 (2006–07); 0.91 (2007–08); 0.89 (2008–09); and 0.89 (2009–10). In 2010–11, the highest observed p -value was 0.89 at grade 3, in 2011–12 the highest observed p -value was 0.86 at grade 6, and in 2012–13 the highest observed p -value was 0.86 at grade 4. The lowest observed p -values across all years were at grade 10 with values of 0.08 (2006–07); 0.07 (2007–08); 0.09 (2008–09); 0.08 (2009–10); and 0.06 (2010–11); 0.07 (2011–12); and 0.09 (2012–13).

Table 94 illustrates the point-biserial statistics for 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13 and provides results of the differences. The mean point-biserials remain quite stable across administrations with grade 9 illustrating the smallest differences of -0.001^{44} for 2006–07 to 2007–08 and -0.005 for 2007–08 to 2008–09, from 2008–09 to 2009–10 the smallest difference of 0.002 was for grade 8, from 2009–10 to 2010–11 the smallest difference in point-biserials was 0.0049 for grade 3, from 2010–11 to 2011–12 the smallest difference in point-biserials was 0.0001 for grade 3, and from 2011–12 to 2012–13 the smallest difference was ± 0.003 for grades 3 (-) and 5 (+). Grade 6 illustrated the largest difference in point-biserials of 0.030 from 2006–07 to 2007–08 and -0.040 from 2007–08 to 2008–09, while from 2008–09 to 2009–10 the largest difference of -0.019 was observed at grade 7, from 2009–10 to 2010–11 the largest difference in point-biserials of -0.020 was observed at grade 10, and from 2010–11 to 2011–12 the largest difference in point-biserials of 0.021 was observed at grade 7. From 2011–12 to 2012–13 the largest difference in point-biserials was 0.022 for grade 10. Equally, the range of point-biserial

⁴² Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

⁴³ There are five values of ± 0.01 ; however the grades 8 (-) and 9 (+) values of ± 0.007 are the smallest differences.

⁴⁴ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

values remained stable. The highest observed point-biserial in 2006–07 was 0.81 in grade 9; in 2007–08 it was 0.82 in grade 6; in 2008–09 it was 0.83 in grade 3; in 2009–10 it was 0.82 in grade 3; in 2010–11 it was 0.82 in grade 3; in 2011–12 the highest observed point-biserial was 0.83 in grade 4; and in 2012–13 the highest observed point-biserial was 0.82 in grade 3. The lowest observed point-biserial across previous years was observed in grade 10 with a 2006–07 value of 0.12; a 2007–08 value of 0.09; a 2008–09 value of 0.14; a 2009–10 value of 0.09; a 2010–11 value of 0.03; and a 2011–12 value of 0.07. In 2012–13, the lowest observed point-biserial was a value of 0.03 in grade 10.

The impact data for 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12, and 2012–13 as well as the differences are presented in Table 98. At the level of *Inconclusive*, from 2006–07 to 2007–08 the largest decrease was 3.65% for grade 10; from 2007–08 to 2008–09 the greatest decrease was 4.47% for grade 6; from 2008–09 to 2009–10 the largest decrease was 3.08% for grade 8; from 2009–10 to 2010–11 the largest decrease was 3.88% for grade 7, from 2010–11 to 2011–12 the largest decrease was 2.35% for grade 8, and from 2012–13 the largest decrease was 2.38% for grade 7. The largest increase from 2006–07 to 2007–08 was 6.10% for grade 7; from 2007–08 to 2008–09 was 3.73% for grade 8; from 2008–09 to 2009–10 the largest increase was 2.98% for grade 5, from 2009–10 to 2010–11 the largest increase was 1.84% for grade 8, from 2010–11 to 2011–12 the largest increase was 3.58% for grade 7, and from 2011–12 to 2012–13 the largest increase was 1.51% for grade 10. At the *Exploring* level, from 2006–07 to 2007–08 all values decreased, from 0.02% for grade 10 to 2.99% for grade 8; for 2007–08 to 2008–09 the largest decrease was 2.07% for grade 9; from 2008–09 to 2009–10 the largest decrease was 3.03% for grade 10; from 2009–10 to 2010–11 the largest decrease was 4.18% for grade 8; from 2010–11 to 2011–12 the largest decrease was 2.37% for grade 4, and from 2011–12 to 2012–13 the largest decrease was 4.53% for grade 10. At the *Exploring* level, the largest increase from 2007–08 to 2008–09 was 3.43% for grade 5; from 2008–09 to 2009–10 the largest increase was 3.60% for grade 4; from 2009–10 to 2010–11 the largest increase was 5.77% for grade 10; from 2010–11 to 2011–12 the largest increase was 4.07% for grade 3, and from 2011–12 to 2012–13 the largest increase was 3.47% for grade 4. At the *Emerging* level, from 2006–07 to 2007–08 the largest decrease was 4.72% for grade 8; from 2007–08 to 2008–09 it was 7.05% for grade 5; from 2008–09 to 2009–10 it was 2.51% for grade 4; and from 2009–10 to 2010–11 the largest decrease was 2.14% for grade 7; from 2010–11 to 2011–12 the largest decrease was 5.56% for grade 8, and from 2011–12 to 2012–13 the largest decrease was 6.51% for grade 3. The largest increase from 2006–07 to 2007–08 was 2.43% for grade 10; from 2007–08 to 2008–09 it was 3.20% for grade 8; from 2008–09 to 2009–10 the largest increase was 3.39% for grade 5; from 2009–10 to 2010–11 the largest increase in students at the *Emerging* level was for grade 6 with a 2.63% increase; from 2010–11 to 2011–12 the largest increase in students at the *Emerging* level was for grade 3 with a 2.41% increase, and from 2011–12 to 2012–13 the largest increase was for grade 8 with a 4.80% increase. At the *Developing* level, from 2006–07 to 2007–08 the largest decrease was 5.57% for grade 7; from 2007–08 to 2008–09 it was 7.00% for grade 8; from 2008–09 to 2009–10 it was 4.22% for grade 9; from 2009–10 to 2010–11 the largest decrease was 6.17% for grade 4; from 2010–11 to 2011–12 the largest decrease was 6.37% for grade 3, and from 2011–12 to 2012–13 the largest decrease was 1.54% for grade 4. The largest increase from 2006–07 to 2007–08 was 6.25% for grade 4; from 2007–08 to 2008–09 it was 5.55% for grade 6; from 2008–09 to 2009–10 it was 4.08% for grade 4; from 2009–10 to 2010–11 the largest increase in *Developing* was for grade 9 with 2.83%; from 2010–11 to 2011–12 the largest increase in *Developing* was for grade 8 with 3.53%, and from 2011–12 to 2012–13 the largest increase was 7.15% for grade 3. At the *Novice* level, from 2006–07 to 2007–08 the largest decrease was 6.11% for grade 4; from 2007–08 to 2008–09 it was 3.83% for grade 6; from 2008–09 to 2009–10 it was 3.21% for grade 4; and from 2009–10 to 2010–11 the largest decrease was 2.86% for grade 10. In 2010–11 to 2011–12 there were no decreases in any grade. From 2011–12 to 2012–13 the largest

decrease was 6.01% for grade 6. The largest increase from 2006–07 to 2007–08 was 5.61% for grade 6; from 2007–08 to 2008–09 it was 2.80% for grade 10; from 2008–09 to 2009–10 it was 5.50% for grade 6; from 2009–10 to 2010–11 the largest increase in *Novice* was 2.47% for grade 7; from 2010–11 to 2011–12 the largest increase in *Novice* was 4.12% for grade 6, and from 2011–12 to 2012–13 the largest increase was 2.74% for grade 5. When combining *Developing* and *Novice* from 2006–07 to 2007–08 the largest decrease was 2.91% for grade 7; from 2007–08 to 2008–09 it was 7.29% for grade 8; from 2008–09 to 2009–10 it was 6.11% for grade 5; from 2009–10 to 2010–11 the largest decrease was 7.17% for grade 10; from 2010–11 to 2011–12 the largest decrease was 5.96% for grade 3, and from 2011–12 to 2012–13 the largest decrease was 3.52% for grade 8. The largest increase in the percentage of students classified as *Developing* and *Novice* from 2006–07 to 2007–08 was 7.62% for grade 8; from 2007–08 to 2008–09 it was 6.21% for grade 5; from 2008–09 to 2009–10 it was 2.17% for grade 8; from 2009–10 to 2010–11 the largest increase was 4.45% in grade 7; from 2010–11 to 2011–12 the largest increase in the percentage of students classified as *Developing* and *Novice* was 5.19% in grade 8, and from 2011–12 to 2012–13 the largest increase was 7.66% for grade 3. In general, the impact data are relatively stable across administrations.

Science

Figure 23 illustrates the number of students participating in the CSAPA/CoAlt Science assessment in 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13. It is illustrated that between 2008 and 2013 there has been a variety of increasing and decreasing trends in the number of students across all grades.

Table 83 illustrates the means and standard deviations at the total group level by grade for Science. It is seen that differences from 2007–08 to 2008–09 ranged from –1.32 points (grade 8) to 3.19 points (grade 10), the differences for 2008–09 to 2009–10 ranged from –2.84 points (grade 10) to 0.52 points (grade 8), the differences for 2009–10 to 2010–11 ranged from –0.68 points (grade 10) to 0.25 points (grade 5), the differences for 2010–11 to 2011–12 ranged from –2.96 points (grade 5) to 0.33 points (grade 10), and the differences for 2011–12 to 2012–13 ranged from –0.71 to 3.23. This is also illustrated in Figure 27 where the mean score as a percent of the total possible score is presented. Given the nature of the Science assessment, ranging by grade from 96 to 102 possible points, these small differences in mean scores reflect very minor variations in student performance.

Table 87 illustrates the population of students participating in the CSAPA/CoAlt Science assessment based upon gender and primary disability, as well as indicating any differences in the population between administration years. From 2007–08 to 2008–09 the largest change by gender group was in grade 5 with just a 1.10% decrease in the percentage of male students, from 2008–09 to 2009–10 the largest change in gender groups was a 1.85% decrease in the percentage of male students in grade 8, while from 2009–10 to 2010–11 the largest change in gender groups was a 2.67% decrease in the percentage of female students in grade 5. The largest change by gender group between 2010–11 and 2011–12 was a $\pm 2.71\%$ difference in grade 8⁴⁵, while the smallest difference was observed at grade 5 with a 1.38% increase in female students. The largest change by gender group from 2011–12 to 2012–13 was a –1.57% change in female students at grade 10.

The primary disability classifications have also remained quite stable as detailed in Table 87 by grade level and as illustrated for the overall group in Figure 31, only differences for groups containing students in both administrations are referenced here. The smallest difference in the percentage of students classified with a specific primary disability from 2007–08 to 2008–09 was

⁴⁵ Both males and females in grade 8 had identical differences of 2.71% between 2010–11 and 2011–12.

a 0.01% change for the percent of students classified as having a “Speech/Language Disability” in grade 10, from 2008–09 to 2009–10 the smallest difference was for students in the grade 5 “Hearing Disability” group with a –0.03% change, from 2009–10 to 2010–11 the smallest difference was for students in the grade 8 “Hearing Disability” group with a 0.02%⁴⁶ change, and from 2010–11 to 2011–12 the smallest difference was for students in the grade 10 “Deaf-Blind” group with a 0.00%. The smallest difference from 2011–12 to 2012–13 was a difference of –0.03% for “Emotional Disability” in grade 5. The largest difference from 2007–08 to 2008–09 was 3.52% for “Autism” in grade 5, from 2008–09 to 2009–10 the largest difference was a 3.99% increase for students with “Multiple Disabilities” in grade 10, from 2009–10 to 2010–11 the largest difference was a 5.49% increase for students with “Limited Intellectual Capacity” in grade 5, from 2010–11 to 2011–12 the largest difference was a 3.67% increase for students with “Autism” in grade 8, and from 2011–12 to 2012–13 the largest difference was a 5.64% increase for students with the classification “Multiple Disabilities” in grade 8.

The p -values are illustrated in Table 91 providing results of the difference between years. The mean p -values remain quite stable across the 2007–08 and 2008–09 administrations with a grade 5 difference of 0.010,⁴⁷ a grade 8 difference of –0.017, and a grade 10 difference of 0.034. A reversed pattern is observed between the 2008–09 and 2009–10 administrations with a grade 5 difference of –0.024, a grade 8 difference of 0.004, and a grade 10 difference of –0.032. The pattern from 2009–10 to 2010–11 illustrates continued stability, the mean p -value difference for grade 5 is 0.007, grade 8 is 0.000, and grade 10 is –0.004. The pattern from 2010–11 to 2011–12 also shows very little variance; the mean p -value difference for grade 5 is –0.031, grade 8 is 0.020, and grade 10 is 0.004. From 2011–12 to 2012–13 the p -value differences are minimal ranging from ± 0.01 in grades 8 (–) and 10 (+) to 0.03 in grade 5. Equally the range of p -values remained stable. The highest observed p -value each year, with the exception of 2011–12, was in grade 5 with values of 0.88 (2007–08); 0.89 (2008–09); 0.87 (2009–10); 0.88 (2010–11); and 0.88⁴⁸ (2012–13). In 2011–12 the highest observed p -value 0.87 in grade 8. The lowest observed p -value in each year was in grade 10 with values of 0.26 (2007–08); 0.27 (2008–09); 0.26 (2009–10); 0.24 (2010–11); 0.24 (2010–11), and 0.26 (2012–13).

Table 95 illustrates the point-biserial statistics. The mean point-biserials remain quite stable across administrations, where from 2007–08 to 2008–09 grade 8 illustrated the smallest difference of 0.001,⁴⁹ and the largest difference was observed at grade 10 with a difference of 0.008. From 2008–09 to 2009–10 the differences in point-biserial values were 0.016 (grade 5), 0.023 (grade 8), and 0.001 (grade 10). From 2009–10 to 2010–11 the differences in point-biserial values were –0.024 (grade 5), –0.006 (grade 8), and –0.020 (grade 10). From 2010–11 to 2011–12 the differences in point-biserial values were 0.000 (grade 5), –0.028 (grade 8), and 0.014 (grade 10). Equally, the range of point-biserial values remained stable. Finally, from 2011–12 to 2012–13 the differences in point-biserial values were –0.011 (grade 5), –0.017 (grade 8), and 0.007 (grade 10). The highest observed point-biserial in 2007–08 was 0.79 in grade 5; in 2008–09 it was 0.77 in grade 8; in 2009–10 it was 0.80 in grade 8; in 2010–11 the highest point-biserial was 0.78 in grade 8; in 2011–12 the highest point-biserial was 0.76⁵⁰ in grade 10, and in 2012–13 the highest point-biserial was 0.79 for grade 10. The lowest observed point-biserial from 2007–08 through 2009–10 was 0.17 in grade 8, in 2010–11, 2011–12, and in 2012–13 the lowest observed point-biserial remained at grade 8, but with a value of 0.16, 0.24, and 0.11 respectively.

⁴⁶ There are two values of 0.02%; however, the 0.021% grade 8 value is lower.

⁴⁷ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

⁴⁸ There are two values of 0.88; however, the 0.877 grade 5 value is higher.

⁴⁹ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

⁵⁰ There are two values of 0.76; however, the 0.7567 grade 10 value is higher.

The impact data for Science is presented in Table 99. The percentage of students classified as *Inconclusive* from 2007–08 to 2008–09 decreased for grades 5 and 10, and increased by less than 1% for grade 8, from 2008–09 to 2009–10 the percentage increased for all grade levels from 0.43% (grade 8) to 3.64% (grade 5), and from 2009–10 to 2010–11 the percentage decreased for grade 5 (0.89%) and increased for grades 8 (1.31%) and 10 (0.61%), from 2010–11 to 2011–12 the percentage decreased for grade 8 (4.01%) and increased for grades 5 (1.16%) and 10 (0.08%), and from 2011–12 to 2012–13 the percentages decreased for grade 5 (1.86%) and grade 8 (0.66%) and increased for grade 10 (0.47%). The percentage of students scoring at the *Exploring* level from 2007–08 to 2008–09 increased for grades 5 and 8 (2.15% and 0.86%, respectively), but declined by 6.89% for grade 10, from 2008–09 to 2009–10 the percentages decreased for grade 8 (1.70%) and increased for grades 5 and 10 (0.15% and 4.81%, respectively), from 2009–10 to 2010–11 the percentage of students decreased for grade 8 (2.83%) and increased for grade 5 (0.98%) and grade 10 (1.32%), from 2010–11 to 2011–12 the percentage of students decreased for grade 10 (1.43%) and increased for grade 5 (6.39%) and grade 10 (3.71%), finally from 2011–12 to 2012–13 the percentage of students decreased for grade 5 (4.11%) and grade 10 (4.28%) and increased for grade 8 (1.99%). The percentage of students classified as *Emerging* from 2007–08 to 2008–09 declined at grades 5 and 8 (1.73% and 0.46%, respectively), but increased by nearly 6% for grade 10, while from 2008–09 to 2009–10 it declined at grades 5 and 10 by approximately 3% and increased by 1.17% at grade 8, from 2009–10 to 2010–11 the percentage of *Emerging* students decreased at grade 8 (0.60%) and grade 10 (0.55%) and increased by 0.94% at grade 5. From 2010–11 to 2011–12 the percentage of *Emerging* students decreased at grades 5 (3.06%) and 8 (0.29%) and increased by 0.74% at grade 10, and from 2011–12 to 2012–13 the percentage of *Emerging* students increased at all grades by 1.07% in grade 5, 1.83% in grade 8, and 1.65% in grade 10. The percentage of students scoring at the *Developing* level from 2007–08 to 2008–09 decreased for grades 5 and 10 (0.35% and 2.83%, respectively) while increasing by 1.56% at grade 8, from 2008–09 to 2009–10 the percentages decreased for grade 8 (3.03%) and increased for grades 5 and 10 (1.93% and 2.36%, respectively), from 2009–10 to 2010–11 the percentages decreased for grade 5 (1.49%) and grade 10 (2.13%) and increased for grade 8 (6.35%) from 2010–11 to 2011–12 the percentages decreased for grade 5 (1.83%) and grade 8 (5.81%) and increased for grade 10 (0.06%), and from 2011–12 to 2012–13 the percentages decreased for grade 10 (1.21%) and increased for grades 5 (1.82%) and 8 (1.80%). The percentage of students scoring at the *Novice* level from 2007–08 to 2008–09 increased for grades 5 (2.04%) and 10 (5.72%), though the percentage decreased for grade 8 by 2.68%, from 2008–09 to 2009–10 the percentages decreased for grades 5 and 10, by 2.31% and 5.07% respectively, and increased for grade 8 by 3.13%, from 2009–10 to 2010–11 the percentages decreased for grade 8 (4.23%) and increased for grade 5 (0.47%) and grade 10 (0.74%), while from 2010–11 to 2011–12 the percentages decreased for grade 5 (2.65%) and increased for grade 8 (6.40%) and grade 10 (0.54%), and from 2011–12 to 2012–13 the percentages decreased for grade 8 (4.97%) and increased for grade 5 (3.08%) and grade 10 (3.37%). A similar trend is seen in the combination of the *Developing* and *Novice* categories, where from 2007–08 to 2008–09 grade 5 increased by 1.69%, grade 8 decreased by 1.12%, and grade 10 increased by 2.89%, from 2008–09 to 2009–10 the percentages increased for grade 8 by 0.10%, and decreased for grades 5 and 10 by 0.37% and 2.70%, respectively, from 2009–10 to 2010–11 the percentage decreased for grade 5 (1.02%) and grade 10 (1.39%), and increased for grade 8 (2.12%), from 2010–11 to 2011–12 the percentage decreased for grade 5 (4.49%) and increased for grade 8 (0.59%) and grade 10 (0.61%), and from 2011–12 to 2012–13 the percentages decreased for grade 8 (3.16%) and increased for grade 5 (4.90%) and grade 10 (2.16%). In general, the impact data are relatively stable across administrations.

Conclusion

The 2012–13 CoAlt Operational Technical Report documents the processes and procedures implemented to support the 2012–13 spring CoAlt administration by CTB and the CDE. The Technical Report shows how the applied processes and procedures, as well as the results, relate to the issues of validity and reliability, the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999), and the federal Peer Review process.

The CSAPA/ CoAlt began with the item and test development process. Alternate assessment standards were developed in accordance with NCLB regulations, requiring that the content of alternate assessments be comparable to that of regular state assessments, and that they must show clear linkage to the content standards for the grade in which the student is enrolled. The 2012–13 CoAlt forms consisted of custom MC and CR performance task items measuring skills associated with the Colorado Model Content Standards and associated assessment frameworks for Reading, Writing, Mathematics, and Science. Raw scores incorporating both content knowledge and the level of independence with which the student responds to the item are reported and analyzed at the level of the item, the standard, and the total score for the content area. The reliability and validity of all applied processes, procedures, and the results were evaluated. A brief content summary of the Technical Report is provided below:

Test Development (Part 2)

- Items for spring 2013 CoAlt were the same as those used in the spring 2008, spring 2009, spring 2010, and spring 2011 CSAPA forms and spring 2012 CoAlt forms.
- Review of items using classical item statistics yielded no rationale for item scoring suppressions.

Description of the Population (Part 3)

- Students typically have significant limitations in intellectual functioning, in adaptive behavior, and in academic functioning.
- The student's IEP team determines participation in the TCAP or CoAlt based upon eligibility criteria provided by the CDE.
- Population characteristics
 - Participation rate ranged from a minimum of 466 (grade 10 Reading and Science) and as many as 684 (grade 4 Writing).
 - Majority male students, 60% (grade 10 Mathematics) to 65% (grade 3 Writing)
 - Majority White students, 46% (grade 3 Mathematics) to 55% (grade 9 Mathematics)
 - Majority Language Proficiency status of Not Applicable, 80% (grade 5 Writing) to 86% (grade 10 Reading and Science)
 - Free/Reduced Price Lunch Program eligibility is largely divided between not eligible and Free Lunch eligible.
 - Free lunch eligibility ranges from 44% (grade 8 Mathematics) to 52% (grade 3 Mathematics)
 - Not eligible ranges from 39% (grade 3 Mathematics) to 47% (grade 8 Mathematics)
 - Most common primary disability of either "Multiple Disabilities," "Limited Intellectual Capacity," or "Autism"
 - Most students did not use expanded accommodations, beyond those built into the assessment, such as one-on-one administration with no time limits, in order for them to access the CoAlt items.

Test Administration (Part 4)

- District and School Assessment Coordinators and Special Education teachers are trained on the administration of the CoAlt, with a train-the-trainer model of training provided by the Unit of Student Assessment within the CDE.
- The test administration window was from February 6, 2013, through March 22, 2013.
- Test items appear in a separate book for each grade level and content area, with the exception of Reading and Writing, which are packaged in a single book, but with a clear differentiation between the sections.

Scoring (Part 5)

- Two scoring rubrics are used to collect student responses and provide item-by-item scores.
 - One rubric is for MC items (0 to 3 point score range).
 - One rubric is for CR items (0 to 6 point score range).
- Both rubrics incorporate the level of independence with which a student responds to the item within the scoring for the item.
- Scoring is automated based upon a scannable answer document; teachers/test examiners do not apply the scoring rubrics.

Standard Setting (Part 6)

- The profile sorting method of standard setting was utilized in 2007 for the Mathematics and Science grade 10 forms, as well as in 2008 for the Reading, Writing, and Science forms (all grade levels).
- The 2007 and 2008 cut scores have been implemented again, as was done in 2008–09, 2009–10, and 2010–11 CSAPA, and 2011–12 CoAlt without revision, within the context of the 2012–13 CoAlt administration.

Analyses and Results (Part 7)

- Item level statistics, including item difficulty (p -value) and item discrimination (point-biserial correlation), were evaluated both with and without the level of independence with which the student responded to the item included in the calculation of the statistics.
 - Including level of independence
 - p -value minimum = 0.09 in grade 10 Mathematics
 - p -value maximum = 0.89 in grade 5 Reading
 - Point-biserial minimum = 0.03 in grade 8 Mathematics
 - Point-biserial maximum = 0.87 in grade 8 Writing
 - Not including level of independence
 - p -value minimum = 0.07 in grade 4 Mathematics
 - p -value maximum = 0.87 in grade 5 Reading
 - Point-biserial minimum = 0.01 in grade 8 Mathematics
 - Point-biserial maximum = 0.86 in grade 9 Writing
- Student performance on individual content standards (expanded benchmarks) was reported in terms of the percentage of items within each expanded benchmark students answered correctly (an average p -value across the items within each expanded benchmark).
 - Over all grade levels and content areas, the least difficult expanded benchmark was for grade 8 Science, “Analyzes data and communicates results of scientific investigations” with a mean p -value = 0.77.
 - Over all grade levels and content areas, the most difficult expanded benchmark was for grade 10 Mathematics, “Identifies, describes, and creates patterns to solve problems” with a mean p -value = 0.32.

- Summary descriptive statistics for the reported raw scores were reported for the total group as well as relevant subgroups such as: gender, race/ethnicity, ELL, Free/Reduced Price Lunch Program eligibility, primary disability, and expanded accommodation.
 - Reading total group
 - Means range from 51.18 (grade 10, 102 possible points) to 65.00 (grade 6, 105 possible points)
 - Standard deviations range from 23.33 (grade 7, 105 possible points) to 26.51 (grade 5, 105 possible points)
 - Writing total group
 - Means range from 53.88 (grade 3, 105 possible points) to 65.47 (grade 7, 108 possible point)
 - Standard deviations range from 27.84 (grade 8, 108 possible points) to 28.93 (grade 7, 108 possible points)
 - Mathematics total group
 - Means range from 71.00 (grade 9, 144 possible points) to 102.19 (grade 5, 171 possible points)
 - Standard deviations range from 33.90 (grade 7, 132 possible points) to 46.65 (grade 5, 171 possible points)
 - Science total group
 - Means range from 60.68 (grade 10, 102 possible points) to 71.48 (grade 8, 99 possible points)
 - Standard deviations range from 24.35 (grade 5, 96 possible points) to 27.17 (grade 10, 102 possible points)
- The percentage of students at each performance level was analyzed. The range for each performance level was
 - *Inconclusive*: 7.09% (grade 4 Mathematics) to 20.80% (grade 4 Reading)
 - *Exploring*: 14.44% (grade 5 Mathematics) to 29.39% (grade 4 Mathematics)
 - *Emerging*: 18.72% (grade 5 Science) to 37.45% (grade 10 Mathematics)
 - *Developing*: 14.16% (grade 10 Science) to 38.05% (grade 5 Mathematics)
 - *Novice*: 2.70% (grade 3 Writing) to 30.80% (grade 8 Science)
 - *Developing and Novice Combined*: 21.13% (grade 3 Reading) to 51.40% (grade 8 Science)
- Data files containing the demographic information of each student, as well as item responses and raw scores for all content areas, were provided to the CDE.

Summary of Results—Reliability and Validity (Part 8)

- The reliability of the 2012–13 CoAlt was estimated in four ways
 - Point-biserial correlation—item specific reliability
 - Including level of independence ranges: 0.03 (grade 8 Mathematics) to 0.87 (grade 8 Writing)
 - Not including level of independence ranges: 0.01 (grade 8 Mathematics) to 0.86 (grade 9 Writing)
 - Internal consistency using Cronbach’s alpha—total test reliability ranges
 - Reading: 0.91 (grade 7) to 0.93 (grade 6)
 - Writing: 0.92 (grade 10) to 0.93 (grade 7)
 - Mathematics: 0.93 (grade 9) to 0.95 (grade 5)
 - Science: 0.93 (grade 10) to 0.94 (grade 8)
 - Standard error of measurement (SEM)—total test reliability ranges
 - Reading: 6.60 (grade 6, 105 possible points) to 7.26 (grade 10, 102 possible points)
 - Writing: 7.39 (grade 7, 108 possible points) to 7.83, (grade 4, 108 possible points)
 - Mathematics: 7.99 (grade 3, 126 possible points) to 9.96 (grade 5, 171 possible points)
 - Science: 6.09 (grade 8, 99 possible points) to 7.36 (grade 10, 102 possible points)
 - Classification consistency and accuracy—total test reliability
 - Probability of a correct classification ranges from 0.56 (grade 8 Writing) to 0.69 (grade 6 Reading).
 - Probability of accuracy ranges from 0.64 (grade 8 Writing) to 0.79 (grade 6 Reading).
 - Kappa ranges from 0.44 (grade 8 Writing) to 0.58 (grade 6 Reading).
- The Technical Report provided detailed documentation concerning the different phases of the testing cycle and highlighted the meaning and significance of the procedures, processes, and results in terms of validity and their relationship to the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999). The final issues in validity were addressed in Part 8.
 - Assessment purpose
 - Content validity evidence
 - Internal structure of the assessment
 - Population of students participating in the assessment
 - Reliability

Special Studies (Part 9)

- The Level of Independence was examined across grades by content area across all items in each content area.
 - Level 1 ranges: 3.35% (Science) to 5.71% (Mathematics)
 - Level 2 ranges: 2.61% (Science) to 4.92% (Mathematics)
 - Level 3 ranges: 5.32% (Reading) to 9.04% (Mathematics)
 - Level 4 ranges: 80.31% (Mathematics) to 88.51% (Science)
- An additional reliability coefficient (KR20) was used to describe the consistency of the levels of independence performed by students and documented by test examiners.
 - All coefficients were very high, at 0.96 and above.

- Test examiner coding errors have decreased or remained stable in comparison to prior years.
 - Indicating Level 1 for Level of Independence, but providing a correct answer ranges: 0.05% (grade 5 Science) to 0.99% (grade 8 Science)
 - Indicating Levels 2–4 for Level of Independence, but not providing a response ranges: 0.02% (grade 5 Reading) to 0.38% (grade 7 Mathematics)
- Range of scores across students—examining the number of students at the ceiling and the floor
 - The most students obtained the ceiling in grade 5 Science (16 students obtained the maximum possible score).
 - The most students obtained the floor in grade 9 Writing and Mathematics (27 students obtained the minimum possible score).
- Average Level of Independence related to Proficiency Level
 - The proficiency level of *Novice* contains average Level of Independence of 3.5 to 4.0 for all content areas.
 - The combined Proficiency level of *Developing* and *Novice* only contains average Level of Independence of 3.0 to 4.0 for all content areas.
 - The average Level of Independence equal to 1.0 to 1.4 always scores as *Inconclusive* for all content areas.

Longitudinal Analyses (Part 10)

- Completed for all four content areas
 - Reading, Writing, and Science (all grades) included 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13 assessment years.
 - Mathematics examined 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, 2011–12, and 2012–13.
- Descriptive statistics including
 - Number of students participating
 - Reading and Writing both 2007–08 to 2008–09:
 - increased at grades 3–5, 7, 8, and 10
 - decreased at grades 6 and 9
 - Reading and Writing both 2008–09 to 2009–10:
 - increased at grades 4–7 and 9
 - decreased at grades 3, 8, and 10
 - Reading and Writing both 2009–10 to 2010–11:
 - increased at grades 5, 7, and 10
 - decreased at grades 3, 4, 6, 8, and 9
 - Reading and Writing both 2010–11 to 2011–12:
 - increased at grades 3, 4, 6, 8, and 10
 - decreased at grades 5, 7, and 9
 - Reading and Writing both 2011–12 to 2012–13;
 - increased at grades 3–7 and 9
 - decreased at grades 8 and 10
 - Mathematics 2006–07 to 2007–08
 - increased at grades 3–7, 9, and 10
 - decreased at grade 8
 - Mathematics 2007–08 to 2008–09
 - increased at grades 3–8 and 10
 - decreased at grade 9

- Mathematics 2008–09 to 2009–10
 - increased at grades 4–7 and 9
 - decreased at grades 3, 8, and 10
- Mathematics 2009–10 to 2010–11
 - increased at grades 5, 7, and 10
 - decreased at grades 3, 4, 6, 8, and 9
- Mathematics 2010–11 to 2011–12:
 - increased at grades 3, 4, 6, 8, and 10
 - decreased at grades 5, 7, and 9
- Mathematics 2011–12 to 2012–13:
 - increased at grades 3–7 and 9
 - decreased at grades 8 and 10
- Science increased at all grades from 2007–08 to 2008–09
- Science 2008–09 to 2009–10
 - increased at grade 5
 - decreased at grades 8 and 10
- Science 2009–10 to 2010–11
 - increased at grades 5 and 10
 - decreased at grade 8
- Science 2010–22 to 2011–12:
 - increased at grades 8 and 10
 - decreased at grade 5
- Science 2010–11 to 2012–13:
 - increased at grade 5
 - decreased at grades 8 and 10
- Percentage change over time (largest changes observed).
 - Gender
 - 2006–07 to 2007–08 Mathematics grade 6, males with a 7.61% decrease
 - 2007–08 to 2008–09 Mathematics grade 7, males with a 5.34% decrease
 - 2008–09 to 2009–10 Writing grade 8, females with a 4.02% increase
 - 2009–10 to 2010–11 Writing grade 9, males with a 4.37% decrease
 - 2010–11 to 2011–12 Writing grade 10, males with 3.28% decrease
 - 2011–12 to 2012–13 Reading grade 10, males with a 1.88% increase
 - Primary disability
 - 2006–07 to 2007–08 Mathematics grade 3, Limited Intellectual Capacity with a decrease of 5.17%
 - 2007–08 to 2008–09 Reading grade 6, Limited Intellectual Capacity with an increase of 7.17%
 - 2008–09 to 2009–10 Mathematics grade 4, Limited Intellectual Capacity with an increase of 6.22%
 - 2009–10 to 2010–11 Writing grade 4, Multiple Disabilities with an increase of 5.82%

- 2010–11 to 2011–12 grade 7 Mathematics, Multiple Disabilities with an increase of 5.71%
- 2011–12 to 2012–13 grade 6 Reading, Physical Disability with a decrease of 5.97%
- Differences in raw score means and standard deviations over time
 - Reading 2007–08 to 2008–09
 - The mean score increases at grades 5–7 and 10 and decreases at grades 3, 4, 8, and 9.
 - The standard deviation increases at grades 3, 4, and 9 and decreases at grades 5–8 and 10.
 - Reading 2008–09 to 2009–10
 - The mean score increases at grades 6 and 8 and decreases at grades 3–5, 7, 9, and 10.
 - The standard deviation increases at grades 5, 6, 8, and 9 and decreases at grades 3, 4, 7, and 10.
 - Reading 2009–10 to 2010–11
 - The mean score increases at grades 5–7 and decreases at grades 3, 4, and 8–10.
 - The standard deviation increases at grades 4 and 6 and decreases at grades 3, 5, and 7–10.
 - Reading 2010–11 to 2011–12
 - The mean score increases at grades 6, 8, 9, and 10 and decreases at grades 3, 4, 5, and 7.
 - The standard deviation increases at grades 3, 5, 7, 8, and 9 and decreases at grades 4, 6, and 10.
 - Reading 2011–12 to 2012–13
 - The mean score increases at grades 3, 5, and 7–10 and decreases at grades 4 and 6.
 - The standard deviation increases at grades 4, 6, and 10 and decreases at grades 3, 5, and 7–9.
 - Writing 2007–08 to 2008–09
 - The mean score increases at grades 5–7 and 10 and decreases at grades 3, 4, 8, and 9.
 - The standard deviation increases at grades 3, 4, and 8 and decreases at grades 5–7, 9, and 10.
 - Writing 2008–09 to 2009–10
 - The mean score increases at grades 6 and 8 and decreases at grades 3–5, 7, 9, and 10.
 - The standard deviation increases at grades 3, 5, and 7–9 and decreases at grades 4, 6, and 10.
 - Writing 2009–10 to 2010–11
 - The mean score increases at grades 5, 7, and 8 and decreases at grades 3, 4, 6, 9, and 10.
 - The standard deviation increases at grades 3, 4, 6, and 10 and decreases at grades 5 and 7–9.
 - Writing 2010–11 to 2011–12
 - The mean score increases at grades 4, 6, 8, 9, and 10 and decreases at grades 3, 5, and 7.

- The standard deviation increases at grades 5, 7, and 9 and decreases at grades 3, 4, 6, 8, and 10.
- Writing 2011–12 to 2012–13
 - The mean score increases at grades 3, 5, and 7–10 and decreases at grades 4 and 6.
 - The standard deviation increases at grades 2, 6, and 10 and decreases at grades 3, 5, and 7–9.
- Mathematics 2006–07 to 2007–08
 - The mean score increases at grades 6 and 8–10 and decreases at grades 3–5 and 7.
 - The standard deviation increases at grades 3 and 5–9 and decreases at grades 4 and 10.
- Mathematics 2007–08 to 2008–09
 - The mean score increases at grades 5–7, 9, and 10 and decreases at grades 3, 4, and 8.
 - The standard deviation increases at grades 3–5, 8, and 10 and decreases at grades 6, 7, and 9.
- Mathematics 2008–09 to 2009–10
 - The mean score increases at grades 4, 6, and 8 and decreases at grades 3, 5, 7, 9, and 10.
 - The standard deviation increases at grades 5, 6, and 9 and decreases at grades 3, 4, 7, 8, and 10.
- Mathematics 2009–10 to 2010–11
 - The mean score increases at grades 5, 7, and 8 and decreases at grades 3, 4, 6, 9, and 10.
 - The standard deviation increases at grades 3, 4, 6, and 8 and decreases at grades 5, 7, 9, and 10.
- Mathematics 2010–11 to 2011–12
 - The mean score increases at grades 4, 6, 8, 9, and 10 and decreases at grades 3, 5, and 7.
 - The standard deviation increases at grades 3, 4, 5, 6, 7, 9, and 10 and decreases at 8.
- Mathematics 2011–12 to 2012–13
 - The mean score increases at grades 3, 5, 7, 9, and 10 and decreases at grades 4, 6, and 8.
 - The standard deviation increases at grade 10 and decreases at grades 3–9.
- Science 2007–08 to 2008–09
 - The mean score increases at grades 5 and 10 and decreases at grade 8.
 - The standard deviation increases at grades 8 and 10 and decreases at grade 5.
- Science 2008–09 to 2009–10
 - The mean score increases at grade 8 and decreases at grades 5 and 10.
 - The standard deviation increases at all grades.

- Science 2009–10 to 2010–11
 - The mean score increases at grade 5 and decreases at grades 8 and 10.
 - The standard deviation decreases at all grades.
- Science 2010–11 to 2011–12
 - The mean score increases at grades 8 and 10 and decreases at grade 5.
 - The standard deviation increases at grades 5 and 10 and decreases at grade 8.
- Science 2011–12 to 2012–13
 - The mean score increases at grades 5 and 10 and decreases at grade 8.
 - The standard deviation increases at grade 10 and decreases at grades 5 and 8.
- Changes in item statistics (including Level of Independence)
 - *P*-values
 - High values
 - 2006–07 Mathematics ranged from 0.72 in grade 9 to 0.90 in grade 4
 - 2007–08 ranged from 0.70 in grade 10 Reading to 0.91 in grade 4 Mathematics
 - 2008–09 ranged from 0.76 in grade 10 Reading to 0.89 in grade 5 Science
 - 2009–10 ranged from 0.74 in grade 10 Reading to 0.89 in grade 4 Mathematics
 - 2010–11 ranged from 0.74 in grade 10 Reading to 0.89 in grade 3 Mathematics
 - 2011–12 ranged from 0.75 in grade 10 Reading to 0.89 in grade 6 Reading
 - 2012–13 ranged from 0.74 in grade 10 Reading to 0.89 in grade 5 Reading
 - Mean values
 - 2006–07 Mathematics ranged from 0.41 in grade 10 to 0.67 in grade 3
 - 2007–08 ranged from 0.44 in grade 10 Mathematics to 0.71 in grade 8 Science
 - 2008–09 ranged from 0.45 in grade 10 Mathematics to 0.70 in grade 8 Science
 - 2009–10 ranged from 0.45 in grade 10 Mathematics to 0.70 in grade 8 Science
 - 2010–11 ranged from 0.42 in grade 10 Mathematics to 0.70 in grade 8 Science
 - 2011–12 ranged from 0.44 in grade 10 Mathematics to 0.72 in grade 8 Science
 - 2012–13 ranged from 0.45 in grade 10 Mathematics to 0.71 in grade 8 Science

- Low values
 - 2006–07 Mathematics ranged from 0.08 in grade 10 to 0.39 in grade 3
 - 2007–08 ranged from 0.07 in grade 10 Mathematics to 0.42 in grade 5 Science
 - 2008–09 ranged from 0.09 in grade 10 Mathematics to 0.41 in grade 5 Science
 - 2009–10 ranged from 0.08 in grade 10 Mathematics to 0.39 in grade 5 Science
 - 2010–11 ranged from 0.06 in grade 10 Mathematics to 0.41 in grade 5 Science
 - 2011–12 ranged from 0.07 in grade 10 Mathematics to 0.37 in grade 5 Science
 - 2012–13 ranged from 0.09 in grade 10 Mathematics to 0.40 in grade 5 Science
- Point-biserial values
 - High values
 - 2006–07 Mathematics ranged from 0.74 in grade 7 to 0.81 in grade 9
 - 2007–08 ranged from 0.68 in grade 4 Reading to 0.86 in grade 7 Writing
 - 2008–09 ranged from 0.68 in grade 10 Reading to 0.88 in grade 8 Writing
 - 2009–10 ranged from 0.69 in grade 10 Reading to 0.87 in grade 8 Writing
 - 2010–11 ranged from 0.68 in grade 7 Reading to 0.87 in grade 6 Writing
 - 2011–12 ranged from 0.68 in grade 10 Reading to 0.88 in grade 7 Writing
 - 2012–13 ranged from 0.67 in grade 8 Reading to 0.87 in grade 8 Writing
 - Mean values
 - 2006–07 Mathematics ranged from 0.52 in grade 10 to 0.63 in grade 4
 - 2007–08 ranged from 0.49 in grade 10 Mathematics to 0.64 in grade 6 Mathematics
 - 2008–09 ranged from 0.52 in grade 10 Reading to 0.65 in grade 3 Mathematics
 - 2009–10 ranged from 0.50 in grade 10 Mathematics to 0.66 in grade 8 Science
 - 2010–11 ranged from 0.48 in grade 10 Mathematics to 0.66 in grade 8 Science
 - 2011–12 ranged from 0.49 in grade 10 Mathematics to 0.65 grade 4 Mathematics
 - 2012–13 ranged from 0.51 in grade 10 Reading to 0.64 in grade 3 Mathematics

- Low values
 - 2006–07 Mathematics ranged from 0.12 in grade 10 to 0.36 in grade 3
 - 2007–08 ranged from 0.09 in grade 10 Mathematics to 0.42 in grade 5 Science
 - 2008–09 ranged from 0.14 in grade 10 Mathematics to 0.38 in grade 5 Mathematics
 - 2009–10 ranged from 0.09 in grade 10 Mathematics to 0.43 in grade 5 Science
 - 2010–11 ranged from 0.03 in grade 10 Mathematics to 0.39 in grade 5 Mathematics
 - 2011–12 ranged from 0.07 in grade 10 Mathematics to 0.40 in grade 3 Mathematics
 - 2012–13 ranged from 0.03 in grade 8 Mathematics to 0.36 in grade 5 Mathematics
- Impact Data over time
 - *Inconclusive*
 - 2006–07 Mathematics ranged from 6% in grade 3 to 18% in grade 10
 - 2007–08 ranged from 6% in grade 4 Mathematics to 17% in grade 8 Reading
 - 2008–09 ranged from 7% in grade 4 Mathematics to 18% in grade 8 Writing
 - 2009–10 ranged from 6% in grade 4 Mathematics to 18% in grade 8 Reading
 - 2010–11 ranged from 7% in grade 4 Mathematics to 19% in grade 8 Writing
 - 2011–12 ranged from 8% in grade 4 Mathematics to 20% in grade 3 Reading
 - 2012–13 ranged from 7% in grade 4 Mathematics to 21% in grade 4 Reading
 - *Exploring*
 - 2006–07 Mathematics ranged from 15% in grade 5 to 29% in grade 8
 - 2007–08 ranged from 12% in grade 5 Mathematics to 28% in grade 10 Reading
 - 2008–09 ranged from 14% in grade 6 Mathematics to 30% in grade 8 Reading
 - 2009–10 ranged from 15% in grade 6 Mathematics to 29% in grade 8 Reading
 - 2010–11 ranged from 13% in grade 8 Science to 31% in grade 10 Reading
 - 2011–12 ranged from 16% in grade 6 Mathematics to 31% in grade 10 Reading
 - 2012–13 ranged from 14% grade 5 Mathematics to 29% in grade 4 Mathematics

- *Emerging*
 - 2006–07 Mathematics ranged from 23% in grade 5 to 36% in grade 10
 - 2007–08 ranged from 17% in grade 8 Science to 38% in grade 10 Mathematics
 - 2008–09 ranged from 17% in grade 8 Science to 38% in grade 10 Writing
 - 2009–10 ranged from 18% in grade 8 Science to 39% in grade 10 Mathematics
 - 2010–11 ranged from 17% in grade 8 Science to 39% in grade 10 Mathematics
 - 2011–12 ranged from 17% in grade 8 Science to 38% in grade 10 Mathematics
 - 2012–13 ranged from 19% in grade 5 Science to 37% in grade 10 Mathematics
- *Developing*
 - 2006–07 Mathematics ranged from 16% in grade 10 to 42% in grade 5
 - 2007–08 ranged from 17% in grade 10 Mathematics to 38% in grade 5 Mathematics
 - 2008–09 ranged from 15% in grade 10 Science to 43% in grade 5 Mathematics
 - 2009–10 ranged from 16% in grade 9 Mathematics to 39% in grade 5 Mathematics
 - 2010–11 ranged from 14% in grade 10 Mathematics to 41% in grade 5 Mathematics
 - 2011–12 ranged from 15% in grade 10 Science to 35% in grade 5 Mathematics
 - 2012–13 ranged from 14% in grade 10 Science to 38% in grade 5 Mathematics
- *Novice*
 - 2006–07 Mathematics ranged from 4% in grade 10 to 26% in grade 3
 - 2007–08 ranged from 3% in grade 3 Writing to 33% in grade 8 Science
 - 2008–09 ranged from 3% in grade 3 Writing to 30% in grade 8 Science
 - 2009–10 ranged from 4% in grade 3 Writing to 34% in grade 8 Science
 - 2010–11 ranged from 3% in grade 3 Writing to 29% in grade 8 Science
 - 2011–12 ranged from 3% in grade 3 Writing to 36% in grade 8 Science
 - 2012–13 ranged from 3% in grade 3 Writing to 31% in grade 8 Science

- *Developing and Novice* combined
 - 2006–07 Mathematics ranged from 20% in grade 10 to 53% in grade 3
 - 2007–08 ranged from 22% in grade 10 Mathematics to 53% in grade 8 Science
 - 2008–09 Mathematics ranged from 26% in grade 10 to 55% in grade 5
 - 2009–10 ranged from 25% in grade 3 Reading to 53% in grade 6 Mathematics
 - 2010–11 ranged from 19% in grade 10 Mathematics to 54% in grade 8 Science
 - 2011–12 ranged from 22% in grade 10 Mathematics to 55% in grade 8 Science
 - 2012–13 ranged from 21% in grade 3 Reading to 51% in grade 8 Science

References

- Almond, P., & Case, B. (2004). *Alternate assessments for students with significant cognitive disabilities*. Harcourt. Retrieved from:
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, D.C.: American Educational Research Association.
- Barton, K. (2007). Validity and accommodations: The journey toward accessible assessments. In C. Cahalan Laitusis & L. Cook (Eds). *Large-scale assessment and accommodations: What works?* (pp. 81–94). Arlington, VA: Council for Exceptional Children.
- Colorado Department of Education (2012). *Alternate Assessment Eligibility Criteria Worksheet*. Retrieved from:
http://www.cde.state.co.us/sites/default/files/documents/cdesped/download/pdf/eligibility_criteriaworksheet_alternateassessment.pdf
- Colorado Department of Education (2013a). *Examiners manual spring 2013*. CTB/McGraw-Hill.
- Colorado Department of Education (2013b). *Parent Brochure Colorado Alternate Assessment (CoAlt)*. Retrieved from:
http://www.cde.state.co.us/sites/default/files/documents/assessment/documents/parents/coalt_parent_brochure.pdf
- Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory*. New York: Harcourt Brace Jovanovich College Publishers.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- CTB/McGraw-Hill (2004). *Guidelines to inclusive test administration*. CTB/McGraw-Hill.
<http://www.ctb.com/ctb.com/control/assetDetailsViewAction?articleId=475&assetType=article¤tPage=1&p=library>
- CTB/McGraw-Hill (2007). *Standard setting technical report 2007 for grades 3–10 mathematics and grade 10 science*. Monterey, CA: Author.
- CTB/McGraw-Hill (2008). *Standard setting technical report 2008 for grades 3–10 reading, grades 3–10 writing, and grades 5, 8, and 10 science*. Monterey, CA: Author.
- Ebel, R. L. (1965). *Measuring educational achievement*. Englewood Cliffs, NJ: Prentice-Hall.
- Gulliksen, H. (1950). *Theory of mental tests*. New York: Wiley.
- Jaeger, R. M. (1995). Setting performance standards through two-stage judgmental policy capturing. *Applied Measurement in Education*, 8, 15–40.
- Landis, J.R., & Koch, G.G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174.
- Linn, R. L. (2008). Educational accountability systems. In K. E. Ryan & L. A. Shepard (Eds.), *The future of test-based educational accountability* (pp. 3–24). New York: Routledge.
- Livingston, S. A., & Lewis, C. (1995). Estimating the consistency and accuracy of classifications based on test scores. *Journal of Educational Measurement*, 32, 179–197.

- Livingston, S. A., & Zieky, M. J. (1982). *Passing scores*. Princeton, NJ: Educational Testing Service.
- Mehrens, W. A., & Lehmann, I. J. (1991). *Measurement and evaluation in education and psychology* (3rd ed.). New York: Holt, Rinehart, and Winston.
- Quenemoen, M., Perie, M., & Kearns, J. (2010). *Scoring Alternate Assessments Based on Alternate Achievement Standards: A Proposed Typology of AA-AAS Scoring Practices*. Lexington, KY: National Alternate Assessment Center. Retrieved from: <http://www.cehd.umn.edu/nceo/projects/NCSC/ScoringTypology.pdf>
- Schmeiser, C. B., & Welch, C. J. (2006). Test development. In R. L. Brennan (Ed.) *Educational measurement* (4th ed., pp. 307–353). Westport, CT: Praeger.
- United States Department of Education (2004). *Individuals with disabilities education improvement act of 2004*. U.S. Department of Education. Retrieved from: <http://idea.ed.gov/download/statute.html>
- United States Department of Education (2007). *Standards and assessments peer review guidance: Information and examples for meeting requirements of the No Child Left Behind Act of 2001*. U.S. Department of Education, Office of Elementary and Secondary Education. Retrieved from: <http://www.ed.gov/policy/elsec/guid/saaprguidance.pdf>

Tables 1–99

Table 1
Reading Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
RD	3	1.2	Demonstrate understanding of symbolic representation	5	15	105
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	5	15	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	
	4	1.2	Demonstrate understanding of symbolic representation	5	15	105
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	5	15	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	
	5	1.2	Demonstrate understanding of symbolic representation	5	15	105
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	5	15	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	

Table 1
Reading Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible (continued)

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
RD	6	1.2	Demonstrate understanding of symbolic representation	5	15	105
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	5	15	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	
	7	1.2	Demonstrate understanding of symbolic representation	5	15	105
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	5	15	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	
	8	1.2	Demonstrate understanding of symbolic representation	5	15	105
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	5	15	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	

Table 1
Reading Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible (continued)

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
RD	9	1.2	Demonstrate understanding of symbolic representation	4	12	102
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	5	15	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	
	10	1.2	Demonstrate understanding of symbolic representation	5	15	102
		1.3	Demonstrate understanding of beginning principles of phonics	5	15	
		1.4	Use a variety of strategies to make meaning of text	4	12	
		2.1	Make connections to reading passages	5	15	
		2.2	Identify elements of literature (character, plot, setting)	5	15	
		3.1	Demonstrate knowledge that various texts have different purposes	5	15	
		3.2	Understands informational and functional text	5	15	

Table 2
Writing Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
WR	3	1.1	Demonstrate an understanding that writing communicates a message	5	18	105
		1.2	Organize writing to create a draft document	5	18	
		2.1	Use systematic conventions to make written product understandable by others	6	21	
		2.2	Apply elements of writing through appropriate word usage	6	24	
		2.3	Edit a written product using legible handwriting/word processor for publication	7	24	
	4	1.1	Demonstrate an understanding that writing communicates a message	5	18	108
		1.2	Organize writing to create a draft document	5	18	
		2.1	Use systematic conventions to make written product understandable by others	6	21	
		2.2	Apply elements of writing through appropriate word usage	7	27	
		2.3	Edit a written product using legible handwriting/word processor for publication	7	24	
	5	1.1	Demonstrate an understanding that writing communicates a message	5	18	105
		1.2	Organize writing to create a draft document	5	18	
		2.1	Use systematic conventions to make written product understandable by others	6	21	
		2.2	Apply elements of writing through appropriate word usage	6	24	
		2.3	Edit a written product using legible handwriting/word processor for publication	7	24	
6	1.1	Demonstrate an understanding that writing communicates a message	5	18	105	
	1.2	Organize writing to create a draft document	5	18		
	2.1	Use systematic conventions to make written product understandable by others	6	21		
	2.2	Apply elements of writing through appropriate word usage	6	24		
	2.3	Edit a written product using legible handwriting/word processor for publication	7	24		

Table 2
Writing Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible (continued)

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
WR	7	1.1	Demonstrate an understanding that writing communicates a message	6	24	108
		1.2	Organize writing to create a draft document	5	18	
		2.1	Use systematic conventions to make written product understandable by others	6	21	
		2.2	Apply elements of writing through appropriate word usage	7	27	
		2.3	Edit a written product using legible handwriting/word processor for publication	6	18	
	8	1.1	Demonstrate an understanding that writing communicates a message	6	24	108
		1.2	Organize writing to create a draft document	5	18	
		2.1	Use systematic conventions to make written product understandable by others	6	21	
		2.2	Apply elements of writing through appropriate word usage	7	27	
		2.3	Edit a written product using legible handwriting/word processor for publication	6	18	
	9	1.1	Demonstrate an understanding that writing communicates a message	6	24	105
		1.2	Organize writing to create a draft document	5	18	
		2.1	Use systematic conventions to make written product understandable by others	6	21	
		2.2	Apply elements of writing through appropriate word usage	6	24	
		2.3	Edit a written product using legible handwriting/word processor for publication	6	18	
	10	1.1	Demonstrate an understanding that writing communicates a message	6	24	108
		1.2	Organize writing to create a draft document	5	18	
		2.1	Use systematic conventions to make written product understandable by others	6	21	
		2.2	Apply elements of writing through appropriate word usage	7	27	
		2.3	Edit a written product using legible handwriting/word processor for publication	6	18	

Table 3
Mathematics Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
MA	3	1	Counts, represents quantities, reads and writes numbers	8	33	126
		2	Identifies, describes, and creates patterns to solve problems	4	18	
		3	Displays and analyzes data	5	21	
		4	Identifies, sorts, and matches geometric shapes	6	21	
		5	Applies a variety of measurement skills	5	21	
		6	Uses calculation strategies to compute problems	4	12	
	4	1	Counts, represents quantities, reads and writes numbers	8	33	129
		2	Identifies, describes, and creates patterns to solve problems	4	18	
		3	Displays and analyzes data	5	21	
		4	Identifies, sorts, and matches geometric shapes	6	24	
		5	Applies a variety of measurement skills	5	21	
		6	Uses calculation strategies to compute problems	4	12	
	5	1	Counts, represents quantities, reads and writes numbers	12	54	171
		2	Identifies, describes, and creates patterns to solve problems	6	27	
		3	Displays and analyzes data	5	21	
		4	Identifies, sorts, and matches geometric shapes	6	27	
		5	Applies a variety of measurement skills	7	30	
		6	Uses calculation strategies to compute problems	4	12	
	6	1	Counts, represents quantities, reads and writes numbers	8	39	138
		2	Identifies, describes, and creates patterns to solve problems	5	18	
		3	Displays and analyzes data	6	27	
		4	Identifies, sorts, and matches geometric shapes	5	15	
		5	Applies a variety of measurement skills	6	27	
		6	Uses calculation strategies to compute problems	4	12	

Table 3
Mathematics Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible (continued)

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
MA	7	1	Counts, represents quantities, reads and writes numbers	7	36	132
		2	Identifies, describes, and creates patterns to solve problems	7	21	
		3	Displays and analyzes data	5	24	
		4	Identifies, sorts, and matches geometric shapes	4	12	
		5	Applies a variety of measurement skills	6	27	
		6	Uses calculation strategies to compute problems	4	12	
	8	1	Counts, represents quantities, reads and writes numbers	8	42	147
		2	Identifies, describes, and creates patterns to solve problems	6	18	
		3	Displays and analyzes data	6	24	
		4	Identifies, sorts, and matches geometric shapes	5	15	
		5	Applies a variety of measurement skills	8	33	
		6	Uses calculation strategies to compute problems	5	15	
	9	1	Counts, represents quantities, reads and writes numbers	7	36	144
		2	Identifies, describes, and creates patterns to solve problems	6	18	
		3	Displays and analyzes data	6	24	
		4	Identifies, sorts, and matches geometric shapes	5	15	
		5	Applies a variety of measurement skills	8	33	
		6	Uses calculation strategies to compute problems	6	18	
10	1	Counts, represents quantities, reads and writes numbers	8	42	156	
	2	Identifies, describes, and creates patterns to solve problems	7	21		
	3	Displays and analyzes data	6	24		
	4	Identifies, sorts, and matches geometric shapes	5	18		
	5	Applies a variety of measurement skills	8	33		
	6	Uses calculation strategies to compute problems	6	18		

Table 4
Science Test Design: Number of Items and Score Points per Expanded Benchmark by Grade and Maximum Score Possible

Content	Grade	Expanded Benchmark	Critical Concept	No. Items	Total No. Score Points	Max Score Possible
SC	5	1	Makes observations, collects and organizes data	5	15	96
		2	Analyzes data and communicates results of scientific investigations	1	3	
		3	Demonstrates an understanding of the fundamental properties of matter and energy	6	18	
		4	Interacts with living things	8	27	
		5	Interacts with the weather and Earth systems	10	33	
	8	1	Makes observations, collects and organizes data	4	15	99
		2	Analyzes data and communicates results of scientific investigations	4	12	
		3	Demonstrates an understanding of the fundamental properties of matter and energy	8	24	
		4	Interacts with living things	6	24	
		5	Interacts with the weather and Earth systems	8	24	
	10	1	Makes observations, collects and organizes data	6	18	102
		2	Analyzes data and communicates results of scientific investigations	3	15	
		3	Demonstrates an understanding of the fundamental properties of matter and energy	5	15	
		4	Interacts with living things	8	30	
		5	Interacts with the weather and Earth systems	8	24	

Table 5
Test Design: Number of Items by Maximum Item Score

Content	Grade	Total Number of Items	Number of Items with a Maximum Score of:		Max Score
			3	6	
RD	3	35	35	0	105
	4	35	35	0	105
	5	35	35	0	105
	6	35	35	0	105
	7	35	35	0	105
	8	35	35	0	105
	9	34	34	0	102
	10	34	34	0	102
WR	3	29	23	6	105
	4	30	24	6	108
	5	29	23	6	105
	6	29	23	6	105
	7	30	24	6	108
	8	30	24	6	108
	9	29	23	6	105
	10	30	24	6	108
MA	3	32	22	10	126
	4	32	21	11	129
	5	40	23	17	171
	6	34	22	12	138
	7	33	22	11	132
	8	38	27	11	147
	9	38	28	10	144
	10	40	28	12	156
SC	5	30	28	2	96
	8	30	27	3	99
	10	30	26	4	102

Table 6
Reading Descriptive Statistics by Gender and Race/Ethnicity

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	3	Total	672	100%	57.07	25.07	0	16	0.92	6.90
		Female	232	34.52%	56.14	25.00	0	6	0.92	6.94
		Male	438	65.18%	57.54	25.16	0	10	0.93	6.87
		American Indian/Alaska Native	5	0.74%	-	-	-	-	-	-
		Asian	13	1.93%	-	-	-	-	-	-
		Black/ African American	50	7.44%	54.36	28.39	0	2	0.94	6.78
		Hispanic/ Latino	256	38.10%	56.40	24.41	0	6	0.92	7.00
		White	311	46.28%	58.10	25.88	0	8	0.93	6.77
		Native Hawaiian/ Other Pacific Islander	2	0.30%	-	-	-	-	-	-
		Two or More Races	33	4.91%	54.88	19.39	0	0	0.86	7.32
	4	Total	678	100%	55.59	26.44	2	22	0.93	6.90
		Female	249	36.73%	58.06	26.76	0	11	0.93	6.91
		Male	429	63.27%	54.16	26.17	2	11	0.93	6.90
		American Indian/Alaska Native	9	1.33%	-	-	-	-	-	-
		Asian	25	3.69%	52.28	27.15	0	0	0.93	7.04
		Black/ African American	44	6.49%	63.55	20.70	1	0	0.88	7.15
		Hispanic/ Latino	251	37.02%	53.78	26.93	0	11	0.93	6.99
		White	327	48.23%	56.21	26.11	1	8	0.93	6.83
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
		Two or More Races	21	3.10%	50.67	32.05	0	2	0.96	6.45

Table 6
Reading Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	5	Total	669	100%	62.15	26.51	2	10	0.93	6.86
		Female	250	37.37%	60.93	27.53	0	6	0.94	6.81
		Male	418	62.48%	62.89	25.91	2	4	0.93	6.88
		American Indian/Alaska Native	9	1.35%	-	-	-	-	-	-
		Asian	16	2.39%	46.44	26.81	0	1	0.93	7.13
		Black/ African American	38	5.68%	66.34	24.23	0	0	0.92	6.88
		Hispanic/ Latino	253	37.82%	59.87	26.19	0	6	0.93	6.98
		White	329	49.18%	64.12	27.03	2	3	0.94	6.70
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
		Two or More Races	24	3.59%	60.04	23.79	0	0	0.91	7.30
	6	Total	647	100%	65.00	25.77	6	12	0.93	6.60
		Female	247	38.18%	65.87	25.12	4	3	0.93	6.66
		Male	397	61.36%	64.51	26.23	2	9	0.94	6.56
		American Indian/Alaska Native	9	1.39%	-	-	-	-	-	-
		Asian	11	1.70%	-	-	-	-	-	-
		Black/ African American	49	7.57%	68.76	21.32	1	0	0.90	6.82
		Hispanic/ Latino	209	32.30%	67.03	22.89	1	2	0.92	6.66
		White	340	52.55%	63.02	28.49	4	10	0.95	6.48
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
		Two or More Races	24	3.71%	69.25	23.22	0	0	0.92	6.49

Table 6
Reading Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	7	Total	615	100%	58.17	23.33	0	18	0.91	6.98
		Female	232	37.72%	61.53	23.21	0	7	0.91	6.90
		Male	379	61.63%	56.36	23.11	0	11	0.91	7.03
		American Indian/Alaska Native	7	1.14%	-	-	-	-	-	-
		Asian	10	1.63%	-	-	-	-	-	-
		Black/ African American	46	7.48%	61.26	22.85	0	3	0.91	6.70
		Hispanic/ Latino	228	37.07%	57.44	21.71	0	7	0.89	7.05
		White	303	49.27%	57.86	24.25	0	8	0.92	7.00
		Native Hawaiian/ Other Pacific Islander	2	0.33%	-	-	-	-	-	-
	Two or More Races	15	2.44%	-	-	-	-	-	-	
	8	Total	506	100%	56.79	24.76	1	11	0.91	7.23
		Female	193	38.14%	55.45	25.63	0	5	0.92	7.23
		Male	313	61.86%	57.61	24.21	1	6	0.91	7.23
		American Indian/Alaska Native	9	1.78%	-	-	-	-	-	-
		Asian	9	1.78%	-	-	-	-	-	-
		Black/ African American	37	7.31%	61.00	21.04	0	1	0.88	7.43
		Hispanic/ Latino	170	33.60%	56.30	24.33	0	5	0.91	7.30
		White	269	53.16%	57.29	25.28	1	4	0.92	7.15
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		12	2.37%	-	-	-	-	-	-	

Table 6
Reading Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	9	Total	548	100%	54.67	26.49	1	26	0.93	6.87
		Female	203	37.04%	52.91	25.75	0	10	0.93	6.98
		Male	344	62.77%	55.86	26.80	1	16	0.94	6.81
		American Indian/Alaska Native	5	0.91%	-	-	-	-	-	-
		Asian	10	1.82%	-	-	-	-	-	-
		Black/ African American	38	6.93%	55.53	24.72	0	1	0.92	6.97
		Hispanic/ Latino	180	32.85%	52.80	26.89	0	12	0.94	6.82
		White	297	54.20%	56.00	26.44	1	12	0.93	6.89
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	17	3.10%	56.41	26.82	0	0	0.94	6.81	
	10	Total	466	100%	51.18	24.31	4	13	0.91	7.26
		Female	184	39.48%	50.36	24.75	2	7	0.92	7.19
		Male	282	60.52%	51.72	24.04	2	6	0.91	7.31
		American Indian/Alaska Native	6	1.29%	-	-	-	-	-	-
		Asian	15	3.22%	-	-	-	-	-	-
		Black/ African American	42	9.01%	56.45	25.81	0	1	0.92	7.25
		Hispanic/ Latino	161	34.55%	49.47	24.62	2	5	0.91	7.24
		White	231	49.57%	51.28	23.85	2	6	0.91	7.28
		Native Hawaiian/ Other Pacific Islander	1	0.21%	-	-	-	-	-	-
Two or More Races		10	2.15%	-	-	-	-	-	-	

Table 7
Writing Descriptive Statistics by Gender and Race/Ethnicity

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	3	Total	667	100%	53.88	28.20	0	21	0.93	7.71
		Female	229	34.33%	53.04	29.08	0	7	0.93	7.69
		Male	436	65.37%	54.30	27.81	0	14	0.92	7.72
		American Indian/Alaska Native	5	0.75%	-	-	-	-	-	-
		Asian	13	1.95%	-	-	-	-	-	-
		Black/ African American	50	7.50%	52.34	30.32	0	3	0.93	7.83
		Hispanic/ Latino	252	37.78%	54.52	27.62	0	8	0.92	7.65
		White	310	46.48%	53.50	28.91	0	10	0.93	7.64
		Native Hawaiian/ Other Pacific Islander	2	0.30%	-	-	-	-	-	-
	Two or More Races	33	4.95%	51.03	25.73	0	0	0.89	8.43	
	4	Total	684	100%	55.29	28.88	2	24	0.93	7.83
		Female	251	36.70%	57.16	29.15	0	10	0.93	7.81
		Male	433	63.30%	54.21	28.70	2	14	0.93	7.84
		American Indian/Alaska Native	9	1.32%	-	-	-	-	-	-
		Asian	25	3.65%	52.72	30.89	0	0	0.93	8.01
		Black/ African American	44	6.43%	64.48	26.33	1	0	0.92	7.52
		Hispanic/ Latino	252	36.84%	52.90	29.02	0	11	0.93	7.92
		White	332	48.54%	56.16	28.38	1	9	0.92	7.80
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
Two or More Races		21	3.07%	50.05	33.35	0	3	0.95	7.65	

Table 7
Writing Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	5	Total	663	100%	63.24	27.94	0	16	0.93	7.39
		Female	246	37.10%	61.52	29.30	0	10	0.94	7.41
		Male	416	62.75%	64.22	27.12	0	6	0.93	7.39
		American Indian/Alaska Native	9	1.36%	-	-	-	-	-	-
		Asian	16	2.41%	52.38	29.25	0	2	0.94	7.43
		Black/ African American	37	5.58%	70.73	22.47	0	0	0.89	7.32
		Hispanic/ Latino	251	37.86%	61.39	28.48	0	8	0.93	7.49
		White	326	49.17%	64.57	27.88	0	6	0.93	7.26
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	24	3.62%	56.38	29.50	0	0	0.92	8.17	
	6	Total	646	100%	63.86	28.75	3	15	0.93	7.42
		Female	245	37.93%	64.45	28.65	2	6	0.93	7.42
		Male	398	61.61%	63.59	28.87	1	9	0.93	7.42
		American Indian/Alaska Native	9	1.39%	-	-	-	-	-	-
		Asian	10	1.55%	-	-	-	-	-	-
		Black/ African American	49	7.59%	65.96	24.51	0	0	0.91	7.44
		Hispanic/ Latino	208	32.20%	66.54	26.73	0	3	0.93	7.31
		White	342	52.94%	61.30	30.86	3	12	0.94	7.44
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
Two or More Races		23	3.56%	69.39	28.20	0	0	0.93	7.29	

Table 7
Writing Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	7	Total	612	100%	65.47	28.93	0	22	0.93	7.39
		Female	228	37.25%	69.36	28.90	0	9	0.94	7.13
		Male	380	62.09%	63.43	28.57	0	12	0.93	7.54
		American Indian/Alaska Native	7	1.14%	-	-	-	-	-	-
		Asian	10	1.63%	-	-	-	-	-	-
		Black/ African American	46	7.52%	67.83	29.57	0	3	0.94	7.35
		Hispanic/ Latino	228	37.25%	66.55	25.98	0	7	0.92	7.50
		White	300	49.02%	63.69	30.66	0	10	0.94	7.39
		Native Hawaiian/ Other Pacific Islander	2	0.33%	-	-	-	-	-	-
	Two or More Races	15	2.45%	-	-	-	-	-	-	
	8	Total	504	100%	63.41	27.84	0	13	0.93	7.56
		Female	191	37.90%	60.46	30.05	0	5	0.93	7.71
		Male	313	62.10%	65.21	26.29	0	8	0.92	7.45
		American Indian/Alaska Native	9	1.79%	-	-	-	-	-	-
		Asian	10	1.98%	-	-	-	-	-	-
		Black/ African American	37	7.34%	69.22	26.44	0	1	0.92	7.27
		Hispanic/ Latino	169	33.53%	64.64	26.78	0	5	0.92	7.52
		White	267	52.98%	62.49	28.50	0	5	0.93	7.55
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		12	2.38%	-	-	-	-	-	-	

Table 7
Writing Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	9	Total	553	100%	60.21	28.86	2	27	0.93	7.44
		Female	205	37.07%	59.84	29.05	0	11	0.93	7.44
		Male	347	62.75%	60.58	28.69	2	16	0.93	7.44
		American Indian/Alaska Native	5	0.90%	-	-	-	-	-	-
		Asian	10	1.81%	-	-	-	-	-	-
		Black/ African American	39	7.05%	64.21	29.80	0	2	0.94	7.27
		Hispanic/ Latino	181	32.73%	58.34	28.64	0	11	0.93	7.42
		White	300	54.25%	61.14	29.05	2	13	0.93	7.43
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	17	3.07%	59.00	27.42	0	0	0.92	7.86	
	10	Total	467	100%	60.69	28.07	0	19	0.92	7.74
		Female	187	40.04%	59.18	28.95	0	7	0.93	7.71
		Male	279	59.74%	61.92	27.27	0	11	0.92	7.77
		American Indian/Alaska Native	6	1.28%	-	-	-	-	-	-
		Asian	16	3.43%	48.63	28.73	0	1	0.92	8.18
		Black/ African American	42	8.99%	64.36	30.12	0	2	0.94	7.47
		Hispanic/ Latino	161	34.48%	59.56	28.49	0	7	0.92	7.94
		White	231	49.46%	60.75	27.55	0	9	0.92	7.67
		Native Hawaiian/ Other Pacific Islander	1	0.21%	-	-	-	-	-	-
Two or More Races		10	2.14%	-	-	-	-	-	-	

Table 8
Mathematics Descriptive Statistics by Gender and Race/Ethnicity

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	3	Total	659	100%	78.53	35.39	1	17	0.95	7.99
		Female	231	35.05%	78.10	36.42	1	5	0.95	7.89
		Male	426	64.64%	78.70	34.92	0	12	0.95	8.05
		American Indian/Alaska Native	5	0.76%	-	-	-	-	-	-
		Asian	12	1.82%	-	-	-	-	-	-
		Black/ African American	49	7.44%	72.18	38.67	0	2	0.96	8.15
		Hispanic/ Latino	253	38.39%	81.11	34.81	1	7	0.95	7.87
		White	304	46.13%	77.24	35.65	0	8	0.95	8.03
		Native Hawaiian/ Other Pacific Islander	2	0.30%	-	-	-	-	-	-
	Two or More Races	32	4.86%	76.97	35.56	0	0	0.95	8.16	
	4	Total	677	100%	78.31	36.28	5	19	0.95	8.30
		Female	247	36.48%	80.65	35.15	2	7	0.94	8.32
		Male	430	63.52%	76.97	36.89	3	12	0.95	8.28
		American Indian/Alaska Native	9	1.33%	-	-	-	-	-	-
		Asian	25	3.69%	70.44	38.36	0	0	0.95	8.42
		Black/ African American	44	6.50%	88.70	31.34	1	0	0.93	8.30
		Hispanic/ Latino	248	36.63%	77.62	37.80	2	9	0.95	8.19
		White	329	48.60%	78.37	35.07	2	6	0.94	8.39
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
Two or More Races		21	3.10%	68.19	40.68	0	3	0.96	8.17	

Table 8
Mathematics Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	5	Total	665	100%	102.19	46.65	2	16	0.95	9.96
		Female	251	37.74%	98.75	47.65	1	10	0.96	9.95
		Male	413	62.11%	104.26	46.03	1	6	0.95	9.96
		American Indian/Alaska Native	9	1.35%	-	-	-	-	-	-
		Asian	16	2.41%	77.19	49.01	0	1	0.96	9.61
		Black/ African American	37	5.56%	108.70	39.88	0	0	0.93	10.25
		Hispanic/ Latino	251	37.74%	100.75	47.72	0	8	0.96	10.06
		White	327	49.17%	103.72	46.54	2	7	0.96	9.81
		Native Hawaiian/ Other Pacific Islander	0	0.00%	-	-	-	-	-	-
	Two or More Races	25	3.76%	95.12	47.57	0	0	0.95	10.27	
	6	Total	643	100%	82.13	36.63	3	15	0.94	8.82
		Female	242	37.64%	83.24	36.62	2	6	0.94	8.71
		Male	398	61.90%	81.61	36.61	1	9	0.94	8.89
		American Indian/Alaska Native	8	1.24%	-	-	-	-	-	-
		Asian	11	1.71%	-	-	-	-	-	-
		Black/ African American	45	7.00%	85.04	30.36	0	0	0.91	8.97
		Hispanic/ Latino	209	32.50%	86.65	34.35	2	4	0.94	8.75
		White	342	53.19%	78.62	38.82	1	11	0.95	8.78
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
Two or More Races		23	3.58%	88.61	36.86	0	0	0.94	8.86	

Table 8
Mathematics Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	7	Total	606	100%	76.40	33.90	0	11	0.93	8.68
		Female	225	37.13%	78.04	31.65	0	3	0.93	8.65
		Male	378	62.38%	75.84	34.96	0	8	0.94	8.67
		American Indian/Alaska Native	7	1.16%	-	-	-	-	-	-
		Asian	11	1.82%	-	-	-	-	-	-
		Black/ African American	44	7.26%	77.30	36.15	0	1	0.94	8.74
		Hispanic/ Latino	224	36.96%	78.32	30.42	0	4	0.92	8.75
		White	300	49.50%	74.36	35.57	0	6	0.94	8.67
		Native Hawaiian/ Other Pacific Islander	2	0.33%	-	-	-	-	-	-
	Two or More Races	15	2.48%	-	-	-	-	-	-	
	8	Total	502	100%	84.02	37.67	0	11	0.94	9.18
		Female	193	38.45%	77.37	38.66	0	6	0.94	9.38
		Male	309	61.55%	88.17	36.49	0	5	0.94	9.02
		American Indian/Alaska Native	9	1.79%	-	-	-	-	-	-
		Asian	10	1.99%	-	-	-	-	-	-
		Black/ African American	38	7.57%	90.63	33.97	0	0	0.93	8.83
		Hispanic/ Latino	166	33.07%	87.02	35.93	0	5	0.93	9.22
		White	268	53.39%	82.43	38.79	0	5	0.94	9.15
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		11	2.19%	-	-	-	-	-	-	

Table 8
Mathematics Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	9	Total	562	100%	71.00	35.77	1	27	0.93	9.41
		Female	208	37.01%	68.68	35.58	0	14	0.93	9.37
		Male	353	62.81%	72.54	35.78	1	13	0.93	9.43
		American Indian/Alaska Native	5	0.89%	-	-	-	-	-	-
		Asian	10	1.78%	-	-	-	-	-	-
		Black/ African American	39	6.94%	73.05	37.14	0	2	0.94	9.17
		Hispanic/ Latino	182	32.38%	70.60	35.91	0	12	0.93	9.42
		White	308	54.80%	71.68	35.70	1	12	0.93	9.42
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	17	3.02%	70.12	35.44	0	0	0.93	9.51	
	10	Total	470	100%	75.15	37.00	0	14	0.93	9.73
		Female	189	40.21%	71.13	36.32	0	6	0.93	9.80
		Male	280	59.57%	78.13	37.04	0	7	0.93	9.68
		American Indian/Alaska Native	6	1.28%	-	-	-	-	-	-
		Asian	16	3.40%	53.19	38.37	0	2	0.94	9.59
		Black/ African American	42	8.94%	83.07	40.13	0	0	0.95	9.31
		Hispanic/ Latino	163	34.68%	74.98	39.08	0	5	0.94	9.69
		White	233	49.57%	74.48	34.62	0	7	0.92	9.82
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		10	2.13%	-	-	-	-	-	-	

Table 9
Science Descriptive Statistics by Gender and Race/Ethnicity

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	5	Total	657	100%	65.89	24.35	16	9	0.94	6.11
		Female	247	37.60%	63.78	25.53	4	6	0.94	6.18
		Male	409	62.25%	67.17	23.58	12	3	0.93	6.06
		American Indian/Alaska Native	9	1.37%	-	-	-	-	-	-
		Asian	16	2.44%	49.13	24.76	0	0	0.93	6.69
		Black/ African American	37	5.63%	69.43	20.33	1	0	0.91	6.11
		Hispanic/ Latino	249	37.90%	65.43	24.63	5	6	0.94	6.12
		White	322	49.01%	66.78	24.45	9	3	0.94	6.02
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	24	3.65%	60.50	24.65	1	0	0.92	6.76	
	8	Total	500	100%	71.48	24.37	13	11	0.94	6.09
		Female	192	38.40%	68.22	25.04	2	4	0.93	6.40
		Male	308	61.60%	73.51	23.77	11	7	0.94	5.87
		American Indian/Alaska Native	9	1.80%	-	-	-	-	-	-
		Asian	10	2.00%	-	-	-	-	-	-
		Black/ African American	37	7.40%	77.70	20.06	2	0	0.92	5.79
		Hispanic/ Latino	169	33.80%	72.04	24.07	3	5	0.94	6.04
		White	264	52.80%	71.38	24.59	8	5	0.94	6.09
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		11	2.20%	-	-	-	-	-	-	

Table 9
Science Descriptive Statistics by Gender and Race/Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	10	Total	466	100%	60.68	27.17	4	11	0.93	7.36
		Female	184	39.48%	58.05	26.98	1	4	0.93	7.29
		Male	281	60.30%	62.62	26.99	3	6	0.92	7.40
		American Indian/Alaska Native	6	1.29%	-	-	-	-	-	-
		Asian	15	3.22%	-	-	-	-	-	-
		Black/ African American	41	8.80%	62.32	27.69	0	0	0.93	7.22
		Hispanic/ Latino	162	34.76%	60.40	27.38	2	4	0.93	7.47
		White	231	49.57%	60.90	27.30	2	6	0.93	7.27
		Native Hawaiian/ Other Pacific Islander	1	0.21%	-	-	-	-	-	-
		Two or More Races	10	2.15%	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency

Content	Grade	Variable	Subgroup	Sample		Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
				Size	%	Mean	SD					
RD	3	Language Proficiency	Not Applicable	555	82.59%	57.99	24.95	0	10	0.92	6.88	
			NEP	100	14.88%	52.58	24.15	0	5	0.92	7.03	
			LEP	7	1.04%	-	-	-	-	-	-	-
			FEP	8	1.19%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	666	99.11%	57.04	25.01	0	15	0.92	6.90	
			Yes	2	0.30%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	558	83.04%	58.04	25.12	0	11	0.93	6.87	
			Yes	102	15.18%	53.86	24.32	0	5	0.92	7.00	
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	5	0.74%	-	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-	-
			Choice	3	0.45%	-	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
RD	4	Language Proficiency	Not Applicable	552	81.42%	56.13	26.49	2	19	0.93	6.88
			NEP	110	16.22%	52.41	25.63	0	3	0.92	7.05
			LEP	6	0.88%	-	-	-	-	-	-
			FEP	10	1.47%	-	-	-	-	-	-
		ELL Program - Bilingual	No	674	99.41%	55.61	26.47	2	22	0.93	6.90
			Yes	1	0.15%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	555	81.86%	56.04	26.48	2	19	0.93	6.89
			Yes	108	15.93%	54.98	26.23	0	3	0.93	6.98
			Monitored Y1	1	0.15%	-	-	-	-	-	-
			Monitored Y2	2	0.29%	-	-	-	-	-	-
			Exited Y3+	4	0.59%	-	-	-	-	-	-
			Choice	7	1.03%	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
RD	5	Language Proficiency	Not Applicable	537	80.27%	62.26	26.89	2	8	0.94	6.80	
			NEP	108	16.14%	61.82	25.01	0	1	0.92	7.09	
			LEP	9	1.35%	-	-	-	-	-	-	-
			FEP	15	2.24%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	665	99.40%	62.16	26.53	2	10	0.93	6.86	
			Yes	3	0.45%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	540	80.72%	62.24	26.89	2	8	0.94	6.80	
			Yes	106	15.84%	63.88	24.49	0	1	0.92	7.07	
			Monitored Y1	1	0.15%	-	-	-	-	-	-	-
			Monitored Y2	3	0.45%	-	-	-	-	-	-	-
			Exited Y3+	10	1.49%	-	-	-	-	-	-	-
			Choice	8	1.20%	-	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
RD	6	Language Proficiency	Not Applicable	542	83.77%	64.81	26.84	5	12	0.94	6.54
			NEP	89	13.76%	67.52	18.40	1	0	0.86	6.86
			LEP	5	0.77%	-	-	-	-	-	-
			FEP	8	1.24%	-	-	-	-	-	-
		ELL Program - Bilingual	No	641	99.07%	65.04	25.85	6	12	0.93	6.60
			Yes	2	0.31%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	545	84.23%	64.80	26.80	5	12	0.94	6.54
			Yes	81	12.52%	66.47	18.00	1	0	0.85	6.96
			Monitored Y1	1	0.15%	-	-	-	-	-	-
			Monitored Y2	2	0.31%	-	-	-	-	-	-
			Exited Y3+	5	0.77%	-	-	-	-	-	-
			Choice	9	1.39%	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
RD	7	Language Proficiency	Not Applicable	511	83.09%	58.65	23.88	0	17	0.92	6.94	
			NEP	80	13.01%	54.28	19.89	0	1	0.87	7.21	
			LEP	11	1.79%	-	-	-	-	-	-	-
			FEP	9	1.46%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	607	98.70%	58.23	23.30	0	18	0.91	6.98	
			Yes	3	0.49%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			No	513	83.41%	58.67	23.83	0	17	0.92	6.94	
			Yes	76	12.36%	54.78	20.50	0	1	0.88	7.17	
		ELL Program - ESL	Monitored Y1	2	0.33%	-	-	-	-	-	-	-
			Monitored Y2	4	0.65%	-	-	-	-	-	-	-
			Exited Y3+	3	0.49%	-	-	-	-	-	-	-
			Choice	12	1.95%	-	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
RD	8	Language Proficiency	Not Applicable	434	85.77%	56.77	25.22	1	9	0.92	7.19
			NEP	54	10.67%	54.57	21.96	0	2	0.88	7.60
			LEP	9	1.78%	-	-	-	-	-	-
			FEP	9	1.78%	-	-	-	-	-	-
		ELL Program - Bilingual	No	506	100.00%	56.79	24.76	1	11	0.91	7.23
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	435	85.97%	56.70	25.24	1	9	0.92	7.19
			Yes	52	10.28%	60.48	20.08	0	0	0.86	7.54
			Monitored Y1	1	0.20%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	7	1.38%	-	-	-	-	-	-
			Choice	11	2.17%	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
RD	9	Language Proficiency	Not Applicable	467	85.22%	54.89	26.37	1	19	0.93	6.88	
			NEP	61	11.13%	52.25	26.30	0	5	0.93	6.97	
			LEP	6	1.09%	-	-	-	-	-	-	-
			FEP	12	2.19%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	545	99.45%	54.85	26.37	1	25	0.93	6.88	
			Yes	0	0%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	467	85.22%	54.89	26.37	1	19	0.93	6.88	
			Yes	59	10.77%	54.29	26.07	0	5	0.93	7.00	
			Monitored Y1	2	0.36%	-	-	-	-	-	-	-
			Monitored Y2	1	0.18%	-	-	-	-	-	-	-
			Exited Y3+	9	1.64%	-	-	-	-	-	-	-
			Choice	8	1.46%	-	-	-	-	-	-	-

Table 10
Reading Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
RD	10	Language Proficiency	Not Applicable	400	85.84%	51.54	23.90	2	10	0.91	7.30	
			NEP	48	10.30%	49.52	27.02	2	3	0.93	7.00	
			LEP	5	1.07%	-	-	-	-	-	-	-
			FEP	13	2.79%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	466	100.00%	51.18	24.31	4	13	0.91	7.26	
			Yes	0	0%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	401	86.05%	51.44	23.95	2	10	0.91	7.29	
			Yes	47	10.09%	49.13	25.51	2	3	0.92	7.13	
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	4	0.86%	-	-	-	-	-	-	-
			Exited Y3+	8	1.72%	-	-	-	-	-	-	-
			Choice	6	1.29%	-	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
WR	3	Language Proficiency	Not Applicable	553	82.91%	54.18	28.07	0	15	0.92	7.72	
			NEP	97	14.54%	53.00	27.99	0	5	0.92	7.69	
			LEP	7	1.05%	-	-	-	-	-	-	-
			FEP	8	1.20%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	661	99.10%	53.83	28.19	0	20	0.93	7.71	
			Yes	2	0.30%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	556	83.36%	54.20	28.15	0	16	0.92	7.72	
			Yes	99	14.84%	54.04	28.55	0	5	0.93	7.61	
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	5	0.75%	-	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-	-
			Choice	3	0.45%	-	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
WR	4	Language Proficiency	Not Applicable	559	81.73%	55.72	28.95	2	21	0.93	7.81
			NEP	109	15.94%	53.51	27.74	0	3	0.92	8.03
			LEP	6	0.88%	-	-	-	-	-	-
			FEP	10	1.46%	-	-	-	-	-	-
		ELL Program - Bilingual	No	680	99.42%	55.40	28.90	2	24	0.93	7.83
			Yes	1	0.15%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	562	82.16%	55.59	28.96	2	21	0.93	7.81
			Yes	107	15.64%	56.97	27.99	0	3	0.92	7.90
			Monitored Y1	1	0.15%	-	-	-	-	-	-
			Monitored Y2	2	0.29%	-	-	-	-	-	-
			Exited Y3+	4	0.58%	-	-	-	-	-	-
			Choice	7	1.02%	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
WR	5	Language Proficiency	Not Applicable	530	79.94%	63.16	28.23	0	13	0.93	7.38
			NEP	109	16.44%	63.99	26.79	0	2	0.92	7.38
			LEP	9	1.36%	-	-	-	-	-	-
			FEP	15	2.26%	-	-	-	-	-	-
		ELL Program - Bilingual	No	659	99.40%	63.22	27.94	0	16	0.93	7.39
			Yes	3	0.45%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	533	80.39%	63.11	28.26	0	13	0.93	7.39
			Yes	107	16.14%	65.58	26.06	0	2	0.92	7.30
			Monitored Y1	1	0.15%	-	-	-	-	-	-
			Monitored Y2	3	0.45%	-	-	-	-	-	-
			Exited Y3+	10	1.51%	-	-	-	-	-	-
			Choice	8	1.21%	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
WR	6	Language Proficiency	Not Applicable	543	84.06%	63.52	29.57	3	15	0.94	7.40
			NEP	88	13.62%	67.07	23.17	0	0	0.90	7.42
			LEP	4	0.62%	-	-	-	-	-	-
			FEP	8	1.24%	-	-	-	-	-	-
		ELL Program - Bilingual	No	640	99.07%	63.85	28.81	3	15	0.93	7.42
			Yes	2	0.31%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	546	84.52%	63.57	29.49	3	15	0.94	7.40
			Yes	79	12.23%	65.34	23.33	0	0	0.90	7.51
			Monitored Y1	1	0.15%	-	-	-	-	-	-
			Monitored Y2	2	0.31%	-	-	-	-	-	-
			Exited Y3+	5	0.77%	-	-	-	-	-	-
			Choice	9	1.39%	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
WR	7	Language Proficiency	Not Applicable	507	82.84%	65.30	29.71	0	19	0.94	7.36	
			NEP	81	13.24%	65.80	24.93	0	2	0.91	7.56	
			LEP	11	1.80%	-	-	-	-	-	-	-
			FEP	9	1.47%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	604	98.69%	65.50	28.84	0	21	0.93	7.40	
			Yes	3	0.49%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	509	83.17%	65.36	29.67	0	19	0.94	7.36	
			Yes	77	12.58%	65.92	24.25	0	2	0.90	7.59	
			Monitored Y1	2	0.33%	-	-	-	-	-	-	-
			Monitored Y2	4	0.65%	-	-	-	-	-	-	-
			Exited Y3+	3	0.49%	-	-	-	-	-	-	-
			Choice	12	1.96%	-	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
WR	8	Language Proficiency	Not Applicable	431	85.52%	63.27	28.25	0	11	0.93	7.57	
			NEP	55	10.91%	62.00	25.47	0	2	0.91	7.71	
			LEP	9	1.79%	-	-	-	-	-	-	-
			FEP	9	1.79%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	504	100.00%	63.41	27.84	0	13	0.93	7.56	
			Yes	0	0%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	432	85.71%	63.17	28.30	0	11	0.93	7.57	
			Yes	52	10.32%	67.08	22.81	0	0	0.89	7.50	
			Monitored Y1	1	0.20%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	7	1.39%	-	-	-	-	-	-	-
			Choice	12	2.38%	-	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
WR	9	Language Proficiency	Not Applicable	471	85.17%	60.25	29.00	2	23	0.93	7.46
			NEP	61	11.03%	60.54	26.76	0	2	0.92	7.36
			LEP	6	1.08%	-	-	-	-	-	-
			FEP	13	2.35%	-	-	-	-	-	-
		ELL Program - Bilingual	No	550	99.46%	60.39	28.73	2	26	0.93	7.44
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	471	85.17%	60.25	29.00	2	23	0.93	7.46
			Yes	60	10.85%	62.53	25.95	0	2	0.92	7.19
			Monitored Y1	2	0.36%	-	-	-	-	-	-
			Monitored Y2	1	0.18%	-	-	-	-	-	-
			Exited Y3+	10	1.81%	-	-	-	-	-	-
			Choice	7	1.27%	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
WR	10	Language Proficiency	Not Applicable	400	85.65%	60.87	27.85	0	15	0.92	7.73
			NEP	48	10.28%	61.42	28.75	0	4	0.93	7.65
			LEP	6	1.28%	-	-	-	-	-	-
			FEP	13	2.78%	-	-	-	-	-	-
		ELL Program - Bilingual	No	467	100.00%	60.69	28.07	0	19	0.92	7.74
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	401	85.87%	60.74	27.92	0	15	0.92	7.74
			Yes	48	10.28%	60.44	28.73	0	4	0.93	7.67
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	4	0.86%	-	-	-	-	-	-
			Exited Y3+	8	1.71%	-	-	-	-	-	-
			Choice	6	1.28%	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
MA	3	Language Proficiency	Not Applicable	542	82.25%	78.56	34.99	0	11	0.95	8.02	
			NEP	100	15.17%	79.54	36.40	0	5	0.95	7.87	
			LEP	7	1.06%	-	-	-	-	-	-	-
			FEP	8	1.21%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	653	99.09%	78.47	35.35	1	16	0.95	8.00	
			Yes	2	0.30%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			No	545	82.70%	78.56	35.13	0	12	0.95	8.01	
			Yes	102	15.48%	80.90	36.29	1	5	0.95	7.82	
		ELL Program - ESL	Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	5	0.76%	-	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-	-
			Choice	3	0.46%	-	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
MA	4	Language Proficiency	Not Applicable	553	81.68%	78.42	36.39	3	17	0.95	8.30	
			NEP	108	15.95%	78.74	35.02	2	2	0.94	8.30	
			LEP	6	0.89%	-	-	-	-	-	-	-
			FEP	10	1.48%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	673	99.41%	78.39	36.33	5	19	0.95	8.29	
			Yes	1	0.15%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	556	82.13%	78.26	36.37	3	17	0.95	8.31	
			Yes	106	15.66%	82.31	35.07	2	2	0.95	8.13	
			Monitored Y1	1	0.15%	-	-	-	-	-	-	-
			Monitored Y2	2	0.30%	-	-	-	-	-	-	-
			Exited Y3+	4	0.59%	-	-	-	-	-	-	-
			Choice	7	1.03%	-	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
MA	5	Language Proficiency	Not Applicable	533	80.15%	102.13	47.08	2	13	0.96	9.92
			NEP	109	16.39%	103.17	45.12	0	2	0.95	10.15
			LEP	9	1.35%	-	-	-	-	-	-
			FEP	14	2.11%	-	-	-	-	-	-
		ELL Program - Bilingual	No	661	99.40%	102.15	46.67	2	16	0.95	9.96
			Yes	3	0.45%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	535	80.45%	102.14	47.15	2	13	0.96	9.92
			Yes	108	16.24%	106.39	43.96	0	2	0.95	10.06
			Monitored Y1	1	0.15%	-	-	-	-	-	-
			Monitored Y2	3	0.45%	-	-	-	-	-	-
			Exited Y3+	10	1.50%	-	-	-	-	-	-
			Choice	7	1.05%	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
MA	6	Language Proficiency	Not Applicable	538	83.67%	81.83	37.49	2	14	0.94	8.80
			NEP	90	14.00%	86.87	30.27	1	1	0.91	8.87
			LEP	4	0.62%	-	-	-	-	-	-
			FEP	8	1.24%	-	-	-	-	-	-
		ELL Program - Bilingual	No	637	99.07%	82.20	36.67	3	15	0.94	8.82
			Yes	2	0.31%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	541	84.14%	81.86	37.43	2	14	0.94	8.80
			Yes	81	12.60%	84.81	30.41	1	1	0.91	8.96
			Monitored Y1	1	0.16%	-	-	-	-	-	-
			Monitored Y2	2	0.31%	-	-	-	-	-	-
			Exited Y3+	5	0.78%	-	-	-	-	-	-
			Choice	9	1.40%	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
MA	7	Language Proficiency	Not Applicable	505	83.33%	76.42	34.69	0	10	0.94	8.62	
			NEP	78	12.87%	77.56	29.32	0	1	0.91	8.88	
			LEP	11	1.82%	-	-	-	-	-	-	-
			FEP	9	1.49%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	599	98.84%	76.47	33.78	0	11	0.93	8.68	
			Yes	3	0.50%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	507	83.66%	76.50	34.65	0	10	0.94	8.62	
			Yes	74	12.21%	74.77	29.06	0	1	0.90	9.01	
			Monitored Y1	2	0.33%	-	-	-	-	-	-	-
			Monitored Y2	4	0.66%	-	-	-	-	-	-	-
			Exited Y3+	3	0.50%	-	-	-	-	-	-	-
			Choice	12	1.98%	-	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
MA	8	Language Proficiency	Not Applicable	428	85.26%	83.29	38.25	0	10	0.94	9.21
			NEP	56	11.16%	85.48	33.79	0	1	0.93	9.06
			LEP	9	1.79%	-	-	-	-	-	-
			FEP	9	1.79%	-	-	-	-	-	-
		ELL Program - Bilingual	No	502	100%	84.02	37.67	0	11	0.94	9.18
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	429	85.46%	83.20	38.25	0	10	0.94	9.21
			Yes	53	10.56%	92.47	31.05	0	0	0.92	8.99
			Monitored Y1	1	0.20%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	7	1.39%	-	-	-	-	-	-
			Choice	12	2.39%	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
						Mean	SD					
MA	9	Language Proficiency	Not Applicable	480	85.41%	70.80	35.71	1	21	0.93	9.41	
			NEP	61	10.85%	72.30	35.42	0	5	0.93	9.42	
			LEP	6	1.07%	-	-	-	-	-	-	-
			FEP	13	2.31%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	559	99.47%	71.19	35.66	1	27	0.93	9.41	
			Yes	0	0%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	480	85.41%	70.80	35.71	1	21	0.93	9.41	
			Yes	59	10.50%	75.44	34.43	0	5	0.93	9.40	
			Monitored Y1	2	0.36%	-	-	-	-	-	-	-
			Monitored Y2	1	0%	-	-	-	-	-	-	-
			Exited Y3+	10	1.78%	-	-	-	-	-	-	-
			Choice	8	1.42%	-	-	-	-	-	-	-

Table 12
Mathematics Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
MA	10	Language Proficiency	Not Applicable	402	85.53%	74.87	36.23	0	9	0.93	9.75
			NEP	48	10.21%	78.42	41.63	0	4	0.95	9.60
			LEP	7	1.49%	-	-	-	-	-	-
			FEP	13	2.77%	-	-	-	-	-	-
		ELL Program - Bilingual	No	470	100%	75.15	37.00	0	14	0.93	9.73
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	403	85.74%	74.74	36.28	0	9	0.93	9.76
			Yes	48	10.21%	77.33	41.47	0	5	0.95	9.62
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	4	0.85%	-	-	-	-	-	-
			Exited Y3+	8	1.70%	-	-	-	-	-	-
			Choice	7	1.49%	-	-	-	-	-	-

Table 13
Science Descriptive Statistics by English Language Proficiency

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
SC	5	Language Proficiency	Not Applicable	526	80.06%	65.81	24.74	12	7	0.94	6.09
			NEP	107	16.29%	66.26	22.37	4	1	0.92	6.19
			LEP	9	1.37%	-	-	-	-	-	-
			FEP	15	2.28%	-	-	-	-	-	-
		ELL Program - Bilingual	No	653	99.39%	65.85	24.38	16	9	0.94	6.11
			Yes	3	0.46%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	529	80.52%	65.89	24.73	12	7	0.94	6.09
			Yes	106	16.13%	67.54	21.39	4	1	0.92	6.16
			Monitored Y1	1	0.15%	-	-	-	-	-	-
			Monitored Y2	3	0.46%	-	-	-	-	-	-
			Exited Y3+	10	1.52%	-	-	-	-	-	-
			Choice	7	1.07%	-	-	-	-	-	-

Table 13
Science Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
SC	8	Language Proficiency	Not Applicable	427	85.40%	70.97	24.87	13	9	0.94	6.10
			NEP	55	11.00%	72.84	21.61	0	2	0.92	6.22
			LEP	9	1.80%	-	-	-	-	-	-
			FEP	9	1.80%	-	-	-	-	-	-
		ELL Program - Bilingual	No	500	100%	71.48	24.37	13	11	0.94	6.09
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	428	85.60%	70.86	24.94	13	9	0.94	6.10
			Yes	52	10.40%	77.65	15.38	0	0	0.84	6.12
			Monitored Y1	1	0.20%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	7	1.40%	-	-	-	-	-	-
			Choice	12	2.40%	-	-	-	-	-	-

Table 13
Science Descriptive Statistics by English Language Proficiency (continued)

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
SC	10	Language Proficiency	Not Applicable	400	85.84%	60.73	26.81	3	7	0.92	7.39
			NEP	47	10.09%	60.19	30.79	1	4	0.95	7.10
			LEP	6	1.29%	-	-	-	-	-	-
			FEP	13	2.79%	-	-	-	-	-	-
		ELL Program - Bilingual	No	466	100%	60.68	27.17	4	11	0.93	7.36
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	401	86.05%	60.63	26.85	3	7	0.92	7.39
			Yes	46	9.87%	60.61	29.89	1	4	0.94	7.12
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	4	0.86%	-	-	-	-	-	-
			Exited Y3+	8	1.72%	-	-	-	-	-	-
			Choice	7	1.50%	-	-	-	-	-	-

Table 14
Reading Descriptive Statistics by Free/Reduced Price Lunch Eligibility

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	3	Free Lunch Eligible	348	51.79%	58.63	23.95	0	7	0.92	6.91
		Reduced Lunch Eligible	51	7.59%	57.06	27.51	0	1	0.94	6.89
		Not Eligible	269	40.03%	54.86	25.98	0	8	0.93	6.88
	4	Free Lunch Eligible	336	49.56%	57.47	25.43	1	5	0.93	6.96
		Reduced Lunch Eligible	58	8.55%	52.91	27.56	0	3	0.94	6.97
		Not Eligible	279	41.15%	54.17	27.34	1	14	0.94	6.81
	5	Free Lunch Eligible	313	46.79%	65.13	25.36	1	4	0.93	6.87
		Reduced Lunch Eligible	57	8.52%	58.46	25.63	0	0	0.92	7.05
		Not Eligible	294	43.95%	59.79	27.72	1	6	0.94	6.81
	6	Free Lunch Eligible	301	46.52%	66.39	23.57	3	1	0.92	6.69
		Reduced Lunch Eligible	62	9.58%	69.02	23.70	0	1	0.92	6.60
		Not Eligible	276	42.66%	62.68	28.21	3	9	0.95	6.50
	7	Free Lunch Eligible	315	51.22%	59.97	22.76	0	10	0.91	6.94
		Reduced Lunch Eligible	40	6.50%	55.15	24.76	0	1	0.92	7.04
		Not Eligible	254	41.30%	56.80	23.56	0	7	0.91	7.02
	8	Free Lunch Eligible	226	44.66%	58.46	23.79	1	5	0.91	7.25
		Reduced Lunch Eligible	46	9.09%	57.85	23.54	0	0	0.90	7.45
		Not Eligible	234	46.25%	54.96	25.87	0	6	0.92	7.18
	9	Free Lunch Eligible	249	45.44%	56.99	25.37	0	9	0.92	6.96
		Reduced Lunch Eligible	42	7.66%	55.69	27.43	0	2	0.94	6.88
		Not Eligible	251	45.80%	52.73	27.15	1	14	0.94	6.80
	10	Free Lunch Eligible	227	48.71%	54.33	24.23	3	2	0.91	7.24
		Reduced Lunch Eligible	38	8.15%	42.18	26.09	0	3	0.93	7.05
		Not Eligible	197	42.27%	49.32	23.59	1	8	0.90	7.31

Table 15
Writing Descriptive Statistics by Free/Reduced Price Lunch Eligibility

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	3	Free Lunch Eligible	345	51.72%	56.33	26.73	0	8	0.92	7.68
		Reduced Lunch Eligible	51	7.65%	55.76	31.15	0	3	0.94	7.48
		Not Eligible	267	40.03%	50.13	29.27	0	10	0.93	7.74
	4	Free Lunch Eligible	340	49.71%	57.46	27.75	1	5	0.92	7.84
		Reduced Lunch Eligible	58	8.48%	54.55	29.85	0	5	0.93	7.75
		Not Eligible	281	41.08%	53.27	29.90	1	14	0.93	7.80
	5	Free Lunch Eligible	313	47.21%	66.47	26.18	0	7	0.92	7.33
		Reduced Lunch Eligible	57	8.60%	58.49	28.53	0	0	0.93	7.63
		Not Eligible	288	43.44%	60.59	29.46	0	9	0.94	7.41
	6	Free Lunch Eligible	299	46.28%	65.69	26.65	0	2	0.92	7.41
		Reduced Lunch Eligible	61	9.44%	69.05	27.33	0	1	0.93	7.04
		Not Eligible	278	43.03%	60.91	30.83	3	11	0.94	7.48
	7	Free Lunch Eligible	315	51.47%	69.14	26.89	0	11	0.93	7.25
		Reduced Lunch Eligible	40	6.54%	56.50	32.02	0	2	0.94	7.56
		Not Eligible	251	41.01%	62.73	30.06	0	8	0.94	7.49
	8	Free Lunch Eligible	225	44.64%	65.88	26.19	0	5	0.92	7.39
		Reduced Lunch Eligible	47	9.33%	66.38	23.91	0	0	0.90	7.65
		Not Eligible	232	46.03%	60.41	29.87	0	8	0.93	7.69
	9	Free Lunch Eligible	251	45.39%	63.30	27.19	1	8	0.93	7.32
		Reduced Lunch Eligible	43	7.78%	62.88	28.56	0	3	0.93	7.50
		Not Eligible	253	45.75%	57.09	29.97	1	15	0.94	7.53
	10	Free Lunch Eligible	228	48.82%	64.29	26.01	0	6	0.91	7.72
		Reduced Lunch Eligible	38	8.14%	50.92	30.98	0	4	0.93	7.92
		Not Eligible	196	41.97%	58.90	29.10	0	8	0.93	7.68

Table 16
Mathematics Descriptive Statistics by Free/Reduced Price Lunch Eligibility

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	3	Free Lunch Eligible	344	52.20%	84.03	33.34	1	9	0.95	7.78
		Reduced Lunch Eligible	52	7.89%	77.13	36.15	0	1	0.95	8.09
		Not Eligible	259	39.30%	71.15	36.78	0	7	0.95	8.19
	4	Free Lunch Eligible	338	49.93%	83.19	34.53	4	4	0.94	8.18
		Reduced Lunch Eligible	58	8.57%	71.57	38.54	0	4	0.95	8.47
		Not Eligible	276	40.77%	74.33	37.15	1	11	0.95	8.35
	5	Free Lunch Eligible	312	46.92%	108.78	44.56	0	8	0.95	9.93
		Reduced Lunch Eligible	57	8.57%	97.40	47.38	1	1	0.95	10.12
		Not Eligible	293	44.06%	96.00	48.09	1	7	0.96	9.95
	6	Free Lunch Eligible	296	46.03%	87.18	34.14	1	1	0.93	8.74
		Reduced Lunch Eligible	62	9.64%	87.55	34.20	0	1	0.93	8.89
		Not Eligible	277	43.08%	75.87	38.63	2	12	0.95	8.85
	7	Free Lunch Eligible	309	50.99%	81.22	32.33	0	5	0.93	8.55
		Reduced Lunch Eligible	40	6.60%	67.40	32.68	0	0	0.92	9.08
		Not Eligible	252	41.58%	72.65	34.75	0	6	0.94	8.71
	8	Free Lunch Eligible	222	44.22%	88.91	35.67	0	6	0.93	9.10
		Reduced Lunch Eligible	45	8.96%	87.69	32.06	0	0	0.92	9.26
		Not Eligible	235	46.81%	78.69	39.87	0	5	0.95	9.22
	9	Free Lunch Eligible	253	45.02%	75.55	34.57	0	10	0.93	9.38
		Reduced Lunch Eligible	44	7.83%	73.50	35.51	0	2	0.93	9.42
		Not Eligible	259	46.09%	66.79	36.46	1	15	0.93	9.40
	10	Free Lunch Eligible	230	48.94%	80.91	36.36	0	4	0.93	9.62
		Reduced Lunch Eligible	38	8.09%	61.58	38.61	0	3	0.94	9.63
		Not Eligible	197	41.91%	71.88	36.20	0	6	0.93	9.83

Table 17
Science Descriptive Statistics by Free/Reduced Price Lunch Eligibility

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	5	Free Lunch Eligible	308	46.88%	70.34	22.19	8	4	0.93	5.93
		Reduced Lunch Eligible	57	8.68%	61.67	25.89	2	0	0.94	6.26
		Not Eligible	287	43.68%	61.96	25.65	6	5	0.94	6.25
	8	Free Lunch Eligible	222	44.40%	73.91	23.47	7	5	0.94	5.94
		Reduced Lunch Eligible	46	9.20%	73.83	23.10	2	1	0.93	5.97
		Not Eligible	232	46.40%	68.69	25.26	4	5	0.94	6.24
	10	Free Lunch Eligible	229	49.14%	65.10	26.40	3	3	0.93	7.17
		Reduced Lunch Eligible	37	7.94%	52.59	28.51	0	0	0.93	7.34
		Not Eligible	195	41.85%	57.47	26.89	1	7	0.92	7.53

Table 18
Reading Descriptive Statistics by Primary Disability

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	3	Autism	116	17.26%	52.81	23.73	0	0	0.92	6.77
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	2	0.30%	-	-	-	-	-	-
		Hearing Disability	2	0.30%	-	-	-	-	-	-
		Limited Intellectual Capacity	172	25.60%	67.83	20.10	0	1	0.89	6.76
		Multiple Disabilities	245	36.46%	46.30	24.87	0	11	0.92	7.04
		Physical Disability	81	12.05%	60.64	24.63	0	4	0.92	6.86
		Specific Learning Disability	24	3.57%	78.13	11.16	0	0	0.67	6.44
		Speech/Language Disability	20	2.98%	75.60	18.87	0	0	0.88	6.46
		Traumatic Brain Injury	9	1.34%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	1	0.15%	-	-	-	-	-	-		

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	4	Autism	143	21.09%	53.81	24.54	1	4	0.92	6.89
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	4	0.59%	-	-	-	-	-	-
		Hearing Disability	2	0.29%	-	-	-	-	-	-
		Limited Intellectual Capacity	186	27.43%	65.81	21.65	0	0	0.90	7.00
		Multiple Disabilities	225	33.19%	44.24	26.66	0	16	0.93	6.90
		Physical Disability	69	10.18%	52.41	25.27	0	2	0.93	6.87
		Specific Learning Disability	23	3.39%	83.74	14.56	0	0	0.82	6.10
		Speech/Language Disability	18	2.65%	75.39	18.03	0	0	0.86	6.68
		Traumatic Brain Injury	7	1.03%	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	5	Autism	109	16.29%	60.61	24.14	1	1	0.92	6.99
		Deaf-Blind	1	0.15%	-	-	-	-	-	-
		Emotional Disability	3	0.45%	-	-	-	-	-	-
		Hearing Disability	1	0.15%	-	-	-	-	-	-
		Limited Intellectual Capacity	202	30.19%	71.05	19.82	0	0	0.88	6.89
		Multiple Disabilities	224	33.48%	49.78	27.74	0	8	0.94	6.95
		Physical Disability	74	11.06%	64.77	28.12	0	1	0.94	6.61
		Specific Learning Disability	34	5.08%	83.59	16.88	1	0	0.87	6.04
		Speech/Language Disability	8	1.20%	-	-	-	-	-	-
		Traumatic Brain Injury	12	1.79%	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	6	Autism	105	16.23%	56.01	26.13	0	1	0.93	6.76
		Deaf-Blind	1	0.15%	-	-	-	-	-	-
		Emotional Disability	6	0.93%	-	-	-	-	-	-
		Hearing Disability	2	0.31%	-	-	-	-	-	-
		Limited Intellectual Capacity	219	33.85%	75.54	19.79	5	0	0.90	6.39
		Multiple Disabilities	219	33.85%	54.50	26.99	1	11	0.94	6.79
		Physical Disability	51	7.88%	66.94	24.00	0	0	0.92	6.70
		Specific Learning Disability	25	3.86%	86.96	10.38	0	0	0.70	5.68
		Speech/Language Disability	10	1.55%	-	-	-	-	-	-
		Traumatic Brain Injury	5	0.77%	-	-	-	-	-	-
		Visual Disability	4	0.62%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-		

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	7	Autism	93	15.12%	52.55	20.79	0	0	0.89	7.02
		Deaf-Blind	1	0.16%	-	-	-	-	-	-
		Emotional Disability	3	0.49%	-	-	-	-	-	-
		Hearing Disability	2	0.33%	-	-	-	-	-	-
		Limited Intellectual Capacity	213	34.63%	66.38	18.79	0	1	0.87	6.88
		Multiple Disabilities	207	33.66%	48.93	24.48	0	14	0.92	7.10
		Physical Disability	68	11.06%	66.31	24.05	0	3	0.92	6.64
		Specific Learning Disability	14	2.28%	-	-	-	-	-	-
		Speech/Language Disability	3	0.49%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.30%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	3	0.49%	-	-	-	-	-	-

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	8	Autism	71	14.03%	52.70	20.57	0	1	0.87	7.43
		Deaf-Blind	1	0.20%	-	-	-	-	-	-
		Emotional Disability	4	0.79%	-	-	-	-	-	-
		Hearing Disability	0	0%	-	-	-	-	-	-
		Limited Intellectual Capacity	170	33.60%	67.80	19.51	1	0	0.87	7.16
		Multiple Disabilities	199	39.33%	45.54	25.08	0	9	0.92	7.29
		Physical Disability	38	7.51%	65.50	24.54	0	0	0.92	6.89
		Specific Learning Disability	15	2.96%	-	-	-	-	-	-
		Speech/Language Disability	3	0.59%	-	-	-	-	-	-
		Traumatic Brain Injury	4	0.79%	-	-	-	-	-	-
		Visual Disability	1	0.20%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	9	Autism	85	15.51%	51.07	25.90	0	3	0.93	6.84
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.55%	-	-	-	-	-	-
		Hearing Disability	1	0.18%	-	-	-	-	-	-
		Limited Intellectual Capacity	200	36.50%	62.92	22.23	1	2	0.90	6.96
		Multiple Disabilities	197	35.95%	41.99	25.62	0	19	0.93	6.89
		Physical Disability	30	5.47%	62.73	25.71	0	2	0.93	6.68
		Specific Learning Disability	23	4.20%	85.39	5.79	0	0	-0.06	5.96
		Speech/Language Disability	1	0.18%	-	-	-	-	-	-
		Traumatic Brain Injury	6	1.09%	-	-	-	-	-	-
		Visual Disability	1	0.18%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	1	0.18%	-	-	-	-	-	-

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	10	Autism	57	12.23%	47.79	23.82	1	0	0.91	7.19
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	1.07%	-	-	-	-	-	-
		Hearing Disability	7	1.50%	-	-	-	-	-	-
		Limited Intellectual Capacity	155	33.26%	61.12	20.11	3	0	0.87	7.33
		Multiple Disabilities	191	40.99%	40.50	23.69	0	13	0.91	7.19
		Physical Disability	34	7.30%	60.79	21.92	0	0	0.89	7.11
		Specific Learning Disability	6	1.29%	-	-	-	-	-	-
		Speech/Language Disability	3	0.64%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.72%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-		

Table 19
Writing Descriptive Statistics by Primary Disability

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
					Mean	SD					
WR	3	Autism	116	17.39%	50.04	27.51	0	1	0.92	7.80	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	2	0.30%	-	-	-	-	-	-	
		Hearing Disability	2	0.30%	-	-	-	-	-	-	
		Limited Intellectual Capacity	170	25.49%	66.60	21.62	0	2	0.88	7.35	
		Multiple Disabilities	244	36.58%	41.49	27.78	0	13	0.92	7.73	
		Physical Disability	79	11.84%	55.27	27.53	0	4	0.93	7.52	
		Specific Learning Disability	24	3.60%	82.92	10.58	0	0	0.69	5.91	
		Speech/Language Disability	20	3.00%	72.70	21.45	0	0	0.89	7.18	
		Traumatic Brain Injury	9	1.35%	-	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	1	0.15%	-	-	-	-	-	-	-		

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
					Mean	SD					
WR	4	Autism	145	21.20%	54.54	28.57	1	5	0.93	7.79	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	4	0.58%	-	-	-	-	-	-	
		Hearing Disability	2	0.29%	-	-	-	-	-	-	
		Limited Intellectual Capacity	188	27.49%	67.93	23.25	1	0	0.90	7.37	
		Multiple Disabilities	228	33.33%	40.93	27.16	0	16	0.91	8.03	
		Physical Disability	69	10.09%	52.22	26.79	0	3	0.91	7.92	
		Specific Learning Disability	22	3.22%	87.23	13.19	0	0	0.80	5.83	
		Speech/Language Disability	18	2.63%	79.78	18.73	0	0	0.89	6.32	
		Traumatic Brain Injury	7	1.02%	-	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-	-		

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	5	Autism	109	16.44%	64.98	26.81	0	1	0.92	7.43
		Deaf-Blind	1	0.15%	-	-	-	-	-	-
		Emotional Disability	3	0.45%	-	-	-	-	-	-
		Hearing Disability	1	0.15%	-	-	-	-	-	-
		Limited Intellectual Capacity	204	30.77%	73.20	19.56	0	0	0.87	6.97
		Multiple Disabilities	219	33.03%	48.42	29.91	0	12	0.93	7.67
		Physical Disability	73	11.01%	65.42	28.16	0	2	0.93	7.34
		Specific Learning Disability	32	4.83%	84.19	10.49	0	0	0.70	5.72
		Speech/Language Disability	8	1.21%	-	-	-	-	-	-
		Traumatic Brain Injury	12	1.81%	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-		

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	6	Autism	105	16.25%	55.37	28.31	0	2	0.93	7.73
		Deaf-Blind	1	0.15%	-	-	-	-	-	-
		Emotional Disability	6	0.93%	-	-	-	-	-	-
		Hearing Disability	2	0.31%	-	-	-	-	-	-
		Limited Intellectual Capacity	218	33.75%	76.00	20.82	1	0	0.89	6.82
		Multiple Disabilities	220	34.06%	51.48	31.10	1	13	0.94	7.71
		Physical Disability	50	7.74%	65.32	28.14	1	0	0.93	7.55
		Specific Learning Disability	25	3.87%	86.88	7.39	0	0	0.43	5.60
		Speech/Language Disability	10	1.55%	-	-	-	-	-	-
		Traumatic Brain Injury	5	0.77%	-	-	-	-	-	-
		Visual Disability	4	0.62%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-		

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	7	Autism	94	15.36%	58.84	26.90	0	0	0.92	7.82
		Deaf-Blind	1	0.16%	-	-	-	-	-	-
		Emotional Disability	3	0.49%	-	-	-	-	-	-
		Hearing Disability	2	0.33%	-	-	-	-	-	-
		Limited Intellectual Capacity	214	34.97%	76.43	21.94	0	2	0.90	6.76
		Multiple Disabilities	206	33.66%	52.67	31.00	0	16	0.94	7.79
		Physical Disability	64	10.46%	75.19	28.10	0	3	0.94	6.80
		Specific Learning Disability	14	2.29%	-	-	-	-	-	-
		Speech/Language Disability	3	0.49%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.31%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	3	0.49%	-	-	-	-	-	-

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	8	Autism	71	14.09%	59.69	26.13	0	1	0.91	7.80
		Deaf-Blind	1	0.20%	-	-	-	-	-	-
		Emotional Disability	4	0.79%	-	-	-	-	-	-
		Hearing Disability	0	0%	-	-	-	-	-	-
		Limited Intellectual Capacity	170	33.73%	75.69	19.20	0	0	0.88	6.72
		Multiple Disabilities	197	39.09%	50.45	29.56	0	11	0.93	8.01
		Physical Disability	38	7.54%	73.21	26.09	0	0	0.93	6.96
		Specific Learning Disability	15	2.98%	-	-	-	-	-	-
		Speech/Language Disability	3	0.60%	-	-	-	-	-	-
		Traumatic Brain Injury	4	0.79%	-	-	-	-	-	-
		Visual Disability	1	0.20%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	9	Autism	85	15.37%	58.14	29.79	2	4	0.94	7.46
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.54%	-	-	-	-	-	-
		Hearing Disability	1	0.18%	-	-	-	-	-	-
		Limited Intellectual Capacity	199	35.99%	70.01	21.99	0	1	0.90	7.11
		Multiple Disabilities	202	36.53%	45.95	29.45	0	20	0.93	7.77
		Physical Disability	30	5.42%	69.53	29.48	0	2	0.95	6.72
		Specific Learning Disability	23	4.16%	86.09	6.80	0	0	0.24	5.93
		Speech/Language Disability	1	0.18%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.27%	-	-	-	-	-	-
		Visual Disability	1	0.18%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	1	0.18%	-	-	-	-	-	-		

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	10	Autism	57	12.21%	59.49	29.79	0	1	0.93	7.72
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	1.07%	-	-	-	-	-	-
		Hearing Disability	7	1.50%	-	-	-	-	-	-
		Limited Intellectual Capacity	155	33.19%	73.04	19.17	0	1	0.86	7.13
		Multiple Disabilities	191	40.90%	48.16	29.01	0	17	0.92	8.06
		Physical Disability	33	7.07%	66.48	29.00	0	0	0.94	7.29
		Specific Learning Disability	6	1.28%	-	-	-	-	-	-
		Speech/Language Disability	4	0.86%	-	-	-	-	-	-
		Traumatic Brain Injury	9	1.93%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 20
Mathematics Descriptive Statistics by Primary Disability

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	3	Autism	110	16.69%	67.12	32.60	0	0	0.93	8.42
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	2	0.30%	-	-	-	-	-	-
		Hearing Disability	2	0.30%	-	-	-	-	-	-
		Limited Intellectual Capacity	170	25.80%	96.69	25.09	1	1	0.92	7.20
		Multiple Disabilities	243	36.87%	64.65	36.81	0	12	0.95	8.32
		Physical Disability	78	11.84%	80.26	34.28	0	4	0.95	7.95
		Specific Learning Disability	25	3.79%	109.20	9.52	0	0	0.54	6.44
		Speech/Language Disability	19	2.88%	104.68	22.74	0	0	0.92	6.39
		Traumatic Brain Injury	9	1.37%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	1	0.15%	-	-	-	-	-	-		

Table 20
Mathematics Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	4	Autism	145	21.42%	72.62	34.76	2	4	0.94	8.40
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	4	0.59%	-	-	-	-	-	-
		Hearing Disability	2	0.30%	-	-	-	-	-	-
		Limited Intellectual Capacity	185	27.33%	95.09	25.92	2	0	0.91	7.84
		Multiple Disabilities	223	32.94%	62.14	37.78	1	13	0.95	8.66
		Physical Disability	70	10.34%	77.04	35.93	0	2	0.95	8.32
		Specific Learning Disability	22	3.25%	114.05	9.26	0	0	0.59	5.90
		Speech/Language Disability	18	2.66%	104.78	24.04	0	0	0.91	7.10
		Traumatic Brain Injury	7	1.03%	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 20
Mathematics Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	5	Autism	110	16.54%	99.55	44.36	1	2	0.95	10.05
		Deaf-Blind	1	0.15%	-	-	-	-	-	-
		Emotional Disability	3	0.45%	-	-	-	-	-	-
		Hearing Disability	1	0.15%	-	-	-	-	-	-
		Limited Intellectual Capacity	203	30.53%	119.09	32.86	0	0	0.91	9.97
		Multiple Disabilities	218	32.78%	78.53	50.52	0	11	0.96	9.93
		Physical Disability	76	11.43%	108.41	44.78	0	2	0.95	9.76
		Specific Learning Disability	30	4.51%	139.73	18.08	1	0	0.75	9.00
		Speech/Language Disability	9	1.35%	-	-	-	-	-	-
		Traumatic Brain Injury	13	1.95%	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 20
Mathematics Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	6	Autism	104	16.17%	66.16	36.78	0	2	0.94	9.00
		Deaf-Blind	1	0.16%	-	-	-	-	-	-
		Emotional Disability	6	0.93%	-	-	-	-	-	-
		Hearing Disability	2	0.31%	-	-	-	-	-	-
		Limited Intellectual Capacity	220	34.21%	98.94	27.19	1	0	0.91	8.37
		Multiple Disabilities	219	34.06%	67.46	37.96	0	13	0.94	8.98
		Physical Disability	49	7.62%	81.65	35.20	1	0	0.94	8.79
		Specific Learning Disability	24	3.73%	112.54	10.83	1	0	0.48	7.82
		Speech/Language Disability	10	1.56%	-	-	-	-	-	-
		Traumatic Brain Injury	4	0.62%	-	-	-	-	-	-
		Visual Disability	4	0.62%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 20
Mathematics Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	7	Autism	94	15.51%	66.70	32.40	0	0	0.92	9.00
		Deaf-Blind	1	0.17%	-	-	-	-	-	-
		Emotional Disability	3	0.50%	-	-	-	-	-	-
		Hearing Disability	2	0.33%	-	-	-	-	-	-
		Limited Intellectual Capacity	214	35.31%	89.00	27.00	0	1	0.91	8.32
		Multiple Disabilities	198	32.67%	62.56	35.15	0	8	0.94	8.82
		Physical Disability	64	10.56%	85.48	33.01	0	2	0.94	8.21
		Specific Learning Disability	15	2.48%	-	-	-	-	-	-
		Speech/Language Disability	3	0.50%	-	-	-	-	-	-
		Traumatic Brain Injury	9	1.49%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	3	0.50%	-	-	-	-	-	-

Table 20
Mathematics Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	8	Autism	72	14.34%	79.32	33.84	0	1	0.92	9.54
		Deaf-Blind	1	0.20%	-	-	-	-	-	-
		Emotional Disability	4	0.80%	-	-	-	-	-	-
		Hearing Disability	0	0%	-	-	-	-	-	-
		Limited Intellectual Capacity	171	34.06%	100.78	27.86	0	0	0.90	8.72
		Multiple Disabilities	196	39.04%	66.81	39.54	0	9	0.95	9.23
		Physical Disability	36	7.17%	91.06	33.68	0	0	0.92	9.42
		Specific Learning Disability	15	2.99%	-	-	-	-	-	-
		Speech/Language Disability	3	0.60%	-	-	-	-	-	-
		Traumatic Brain Injury	3	0.60%	-	-	-	-	-	-
		Visual Disability	1	0.20%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 20
Mathematics Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	9	Autism	85	15.12%	69.04	35.31	1	2	0.93	9.35
		Deaf-Blind	1	0.18%	-	-	-	-	-	-
		Emotional Disability	3	0.53%	-	-	-	-	-	-
		Hearing Disability	1	0.18%	-	-	-	-	-	-
		Limited Intellectual Capacity	200	35.59%	82.34	30.54	0	1	0.91	9.31
		Multiple Disabilities	205	36.48%	53.69	34.77	0	22	0.93	9.29
		Physical Disability	31	5.52%	78.32	33.80	0	2	0.92	9.49
		Specific Learning Disability	23	4.09%	101.65	16.82	0	0	0.73	8.79
		Speech/Language Disability	3	0.53%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.42%	-	-	-	-	-	-
		Visual Disability	1	0.18%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	1	0.18%	-	-	-	-	-	-

Table 20
Mathematics Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	10	Autism	55	11.70%	69.22	42.12	0	1	0.95	9.55
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	1.06%	-	-	-	-	-	-
		Hearing Disability	6	1.28%	-	-	-	-	-	-
		Limited Intellectual Capacity	155	32.98%	90.07	29.19	0	0	0.89	9.50
		Multiple Disabilities	190	40.43%	60.27	36.41	0	13	0.93	9.69
		Physical Disability	35	7.45%	79.83	34.79	0	0	0.92	9.83
		Specific Learning Disability	9	1.91%	-	-	-	-	-	-
		Speech/Language Disability	6	1.28%	-	-	-	-	-	-
		Traumatic Brain Injury	9	1.91%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-		

Table 21
Science Descriptive Statistics by Primary Disability

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	5	Autism	108	16.44%	61.64	21.89	2	1	0.91	6.51
		Deaf-Blind	1	0.15%	-	-	-	-	-	-
		Emotional Disability	3	0.46%	-	-	-	-	-	-
		Hearing Disability	1	0.15%	-	-	-	-	-	-
		Limited Intellectual Capacity	200	30.44%	75.58	16.14	3	0	0.87	5.77
		Multiple Disabilities	221	33.64%	54.16	27.41	1	8	0.94	6.46
		Physical Disability	72	10.96%	69.26	23.27	4	0	0.93	5.94
		Specific Learning Disability	30	4.57%	84.87	9.29	4	0	0.72	4.87
		Speech/Language Disability	9	1.37%	-	-	-	-	-	-
		Traumatic Brain Injury	11	1.67%	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-		

Table 21
Science Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	8	Autism	71	14.20%	65.06	21.22	0	1	0.90	6.79
		Deaf-Blind	1	0.20%	-	-	-	-	-	-
		Emotional Disability	4	0.80%	-	-	-	-	-	-
		Hearing Disability	0	0%	-	-	-	-	-	-
		Limited Intellectual Capacity	171	34.20%	83.12	15.82	9	0	0.89	5.15
		Multiple Disabilities	197	39.40%	60.42	27.29	3	9	0.94	6.65
		Physical Disability	36	7.20%	81.44	17.07	0	0	0.90	5.41
		Specific Learning Disability	14	2.80%	-	-	-	-	-	-
		Speech/Language Disability	2	0.40%	-	-	-	-	-	-
		Traumatic Brain Injury	3	0.60%	-	-	-	-	-	-
		Visual Disability	1	0.20%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	0	0%	-	-	-	-	-	-

Table 21
Science Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	10	Autism	56	12.02%	53.34	27.36	0	0	0.92	7.65
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	1.07%	-	-	-	-	-	-
		Hearing Disability	7	1.50%	-	-	-	-	-	-
		Limited Intellectual Capacity	154	33.05%	73.27	19.40	2	0	0.87	6.99
		Multiple Disabilities	191	40.99%	49.31	27.84	0	11	0.93	7.47
		Physical Disability	34	7.30%	70.03	26.77	2	0	0.93	6.86
		Specific Learning Disability	5	1.07%	-	-	-	-	-	-
		Speech/Language Disability	5	1.07%	-	-	-	-	-	-
		Traumatic Brain Injury	9	1.93%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-		

Table 22
Reading Descriptive Statistics by Expanded Accommodation

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	3	None	568	84.52%	60.09	23.80	0	11	0.92	6.91
		Assistive Technology	22	3.27%	40.41	24.50	0	1	0.93	6.60
		Braille	3	0.45%	-	-	-	-	-	-
		Eye Gaze	22	3.27%	20.55	16.21	0	3	0.89	5.36
		Modified Picture Symbols	27	4.02%	37.74	21.58	0	1	0.89	7.10
		Objects	19	2.83%	27.95	25.47	0	1	0.95	5.54
		Sign Language	11	1.64%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	24	3.57%	37.50	29.02	0	1	0.95	6.64	
	4	None	587	86.58%	58.31	25.40	2	17	0.93	6.92
		Assistive Technology	27	3.98%	35.74	23.42	0	1	0.91	6.84
		Braille	3	0.44%	-	-	-	-	-	-
		Eye Gaze	16	2.36%	13.06	12.64	0	3	0.84	5.06
		Modified Picture Symbols	19	2.80%	29.42	16.89	0	0	0.84	6.81
		Objects	16	2.36%	28.50	25.70	0	1	0.95	5.93
		Sign Language	7	1.03%	-	-	-	-	-	-
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	15	2.21%	-	-	-	-	-	-		

Table 22
Reading Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	5	None	592	88.49%	64.85	25.23	2	7	0.93	6.84
		Assistive Technology	23	3.44%	38.13	23.22	0	0	0.91	7.13
		Braille	3	0.45%	-	-	-	-	-	-
		Eye Gaze	21	3.14%	20.52	18.17	0	2	0.89	5.92
		Modified Picture Symbols	15	2.24%	-	-	-	-	-	-
		Objects	11	1.64%	-	-	-	-	-	-
		Sign Language	13	1.94%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	17	2.54%	25.12	19.53	0	1	0.89	6.54	
	6	None	580	89.64%	67.51	24.62	6	8	0.93	6.56
		Assistive Technology	19	2.94%	33.95	22.43	0	2	0.91	6.56
		Braille	2	0.31%	-	-	-	-	-	-
		Eye Gaze	14	2.16%	-	-	-	-	-	-
		Modified Picture Symbols	21	3.25%	40.19	16.67	0	0	0.81	7.33
		Objects	10	1.55%	-	-	-	-	-	-
		Sign Language	7	1.08%	-	-	-	-	-	-
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	17	2.63%	42.41	26.86	0	1	0.93	6.94		

Table 22
Reading Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	7	None	546	88.78%	60.09	22.43	0	14	0.90	6.99
		Assistive Technology	18	2.93%	34.39	14.96	0	0	0.81	6.54
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	6	0.98%	-	-	-	-	-	-
		Modified Picture Symbols	14	2.28%	-	-	-	-	-	-
		Objects	12	1.95%	-	-	-	-	-	-
		Sign Language	4	0.65%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	14	2.28%	-	-	-	-	-	-	
	8	None	447	88.34%	58.65	24.44	1	9	0.91	7.22
		Assistive Technology	19	3.75%	27.05	11.24	0	1	0.61	7.01
		Braille	2	0.40%	-	-	-	-	-	-
		Eye Gaze	10	1.98%	-	-	-	-	-	-
		Modified Picture Symbols	7	1.38%	-	-	-	-	-	-
		Objects	5	0.99%	-	-	-	-	-	-
		Sign Language	8	1.58%	-	-	-	-	-	-
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	12	2.37%	-	-	-	-	-	-		

Table 22
Reading Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	9	None	497	90.69%	56.54	25.74	1	18	0.93	6.88
		Assistive Technology	14	2.55%	-	-	-	-	-	-
		Braille	2	0.36%	-	-	-	-	-	-
		Eye Gaze	12	2.19%	-	-	-	-	-	-
		Modified Picture Symbols	5	0.91%	-	-	-	-	-	-
		Objects	6	1.09%	-	-	-	-	-	-
		Sign Language	3	0.55%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	11	2.01%	-	-	-	-	-	-	
	10	None	417	89.48%	52.83	23.96	4	11	0.91	7.29
		Assistive Technology	12	2.58%	-	-	-	-	-	-
		Braille	1	0.21%	-	-	-	-	-	-
		Eye Gaze	12	2.58%	-	-	-	-	-	-
		Modified Picture Symbols	7	1.50%	-	-	-	-	-	-
		Objects	5	1.07%	-	-	-	-	-	-
		Sign Language	11	2.36%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
Other		8	1.72%	-	-	-	-	-	-	

Table 23
Writing Descriptive Statistics by Expanded Accommodation

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	3	None	564	84.56%	57.51	26.75	0	15	0.92	7.67
		Assistive Technology	25	3.75%	27.80	23.89	0	1	0.91	7.15
		Braille	3	0.45%	-	-	-	-	-	-
		Eye Gaze	19	2.85%	11.79	12.27	0	3	0.85	4.72
		Modified Picture Symbols	25	3.75%	30.08	23.40	0	1	0.89	7.58
		Objects	18	2.70%	23.00	27.65	0	2	0.95	5.96
		Sign Language	11	1.65%	-	-	-	-	-	-
		Translation Into Native Language	1	0.15%	-	-	-	-	-	-
		Other	23	3.45%	30.30	25.96	0	1	0.92	7.37
	4	None	587	85.82%	58.22	27.94	2	18	0.92	7.78
		Assistive Technology	35	5.12%	36.49	23.82	0	2	0.88	8.09
		Braille	3	0.44%	-	-	-	-	-	-
		Eye Gaze	16	2.34%	10.56	9.58	0	2	0.78	4.49
		Modified Picture Symbols	17	2.49%	29.65	19.87	0	1	0.83	8.11
		Objects	15	2.19%	-	-	-	-	-	-
		Sign Language	7	1.02%	-	-	-	-	-	-
Translation Into Native Language	1	0.15%	-	-	-	-	-	-		
Other	17	2.49%	26.88	22.41	0	0	0.89	7.46		

Table 23
Writing Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	5	None	584	88.08%	66.40	26.20	0	9	0.92	7.26
		Assistive Technology	31	4.68%	36.29	25.50	0	1	0.91	7.71
		Braille	3	0.45%	-	-	-	-	-	-
		Eye Gaze	19	2.87%	13.16	13.46	0	5	0.86	4.95
		Modified Picture Symbols	13	1.96%	-	-	-	-	-	-
		Objects	10	1.51%	-	-	-	-	-	-
		Sign Language	13	1.96%	-	-	-	-	-	-
		Translation Into Native Language	2	0.30%	-	-	-	-	-	-
		Other	18	2.71%	25.39	17.09	0	0	0.82	7.21
	6	None	574	88.85%	67.16	27.12	3	10	0.93	7.31
		Assistive Technology	30	4.64%	40.13	28.37	0	2	0.93	7.77
		Braille	2	0.31%	-	-	-	-	-	-
		Eye Gaze	12	1.86%	-	-	-	-	-	-
		Modified Picture Symbols	17	2.63%	28.76	14.18	0	0	0.72	7.52
		Objects	9	1.39%	-	-	-	-	-	-
		Sign Language	6	0.93%	-	-	-	-	-	-
		Translation Into Native Language	3	0.46%	-	-	-	-	-	-
Other	17	2.63%	28.06	26.68	0	1	0.93	6.93		

Table 23
Writing Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	7	None	539	88.07%	68.29	27.53	0	16	0.93	7.31
		Assistive Technology	26	4.25%	44.62	25.53	0	0	0.91	7.86
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	6	0.98%	-	-	-	-	-	-
		Modified Picture Symbols	14	2.29%	-	-	-	-	-	-
		Objects	11	1.80%	-	-	-	-	-	-
		Sign Language	4	0.65%	-	-	-	-	-	-
		Translation Into Native Language	4	0.65%	-	-	-	-	-	-
		Other	15	2.45%	-	-	-	-	-	-
	8	None	440	87.30%	65.85	26.56	0	10	0.92	7.46
		Assistive Technology	26	5.16%	30.50	21.77	0	1	0.87	7.91
		Braille	2	0.40%	-	-	-	-	-	-
		Eye Gaze	10	1.98%	-	-	-	-	-	-
		Modified Picture Symbols	5	0.99%	-	-	-	-	-	-
		Objects	4	0.79%	-	-	-	-	-	-
		Sign Language	8	1.59%	-	-	-	-	-	-
Translation Into Native Language	1	0.20%	-	-	-	-	-	-		
Other	12	2.38%	-	-	-	-	-	-		

Table 23
Writing Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
WR	9	None	491	88.79%	62.68	27.87	2	20	0.93	7.38
		Assistive Technology	21	3.80%	34.71	23.83	0	1	0.88	8.10
		Braille	2	0.36%	-	-	-	-	-	-
		Eye Gaze	11	1.99%	-	-	-	-	-	-
		Modified Picture Symbols	4	0.72%	-	-	-	-	-	-
		Objects	5	0.90%	-	-	-	-	-	-
		Sign Language	5	0.90%	-	-	-	-	-	-
		Translation Into Native Language	3	0.54%	-	-	-	-	-	-
	Other	12	2.17%	-	-	-	-	-	-	
	10	None	412	88.22%	63.00	27.06	0	16	0.92	7.64
		Assistive Technology	16	3.43%	43.19	30.67	0	1	0.93	8.20
		Braille	1	0.21%	-	-	-	-	-	-
		Eye Gaze	12	2.57%	-	-	-	-	-	-
		Modified Picture Symbols	6	1.28%	-	-	-	-	-	-
		Objects	5	1.07%	-	-	-	-	-	-
		Sign Language	11	2.36%	-	-	-	-	-	-
Translation Into Native Language		1	0.21%	-	-	-	-	-	-	
Other	8	1.71%	-	-	-	-	-	-		

Table 24
Mathematics Descriptive Statistics by Expanded Accommodation

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	3	None	541	82.09%	83.54	33.13	1	10	0.94	7.87
		Assistive Technology	26	3.95%	45.35	29.72	0	0	0.93	8.13
		Braille	2	0.30%	-	-	-	-	-	-
		Eye Gaze	21	3.19%	23.19	22.43	0	5	0.92	6.53
		Modified Picture Symbols	21	3.19%	49.57	32.05	0	1	0.92	8.82
		Objects	30	4.55%	47.63	37.04	0	3	0.96	7.61
		Sign Language	11	1.67%	-	-	-	-	-	-
		Translation Into Native Language	1	0.15%	-	-	-	-	-	-
		Other	22	3.34%	49.82	37.00	0	0	0.95	8.45
	4	None	574	84.79%	82.70	34.56	5	14	0.94	8.21
		Assistive Technology	33	4.87%	48.91	29.31	0	1	0.91	8.94
		Braille	3	0.44%	-	-	-	-	-	-
		Eye Gaze	16	2.36%	13.25	14.90	0	2	0.86	5.49
		Modified Picture Symbols	15	2.22%	-	-	-	-	-	-
		Objects	28	4.14%	52.29	39.45	0	2	0.96	7.81
		Sign Language	7	1.03%	-	-	-	-	-	-
		Translation Into Native Language	1	0.15%	-	-	-	-	-	-
Other	17	2.51%	37.82	29.96	0	0	0.92	8.22		

Table 24
Mathematics Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	5	None	579	87.07%	107.92	43.29	2	10	0.95	9.98
		Assistive Technology	28	4.21%	54.46	45.00	0	1	0.96	9.30
		Braille	3	0.45%	-	-	-	-	-	-
		Eye Gaze	18	2.71%	26.11	34.74	0	3	0.96	7.32
		Modified Picture Symbols	9	1.35%	-	-	-	-	-	-
		Objects	23	3.46%	66.04	55.57	0	1	0.97	8.86
		Sign Language	14	2.11%	-	-	-	-	-	-
		Translation Into Native Language	2	0.30%	-	-	-	-	-	-
	Other	18	2.71%	36.11	31.09	0	2	0.92	9.03	
	6	None	557	86.63%	86.49	34.52	3	8	0.94	8.78
		Assistive Technology	25	3.89%	43.32	33.31	0	1	0.94	8.33
		Braille	2	0.31%	-	-	-	-	-	-
		Eye Gaze	12	1.87%	-	-	-	-	-	-
		Modified Picture Symbols	15	2.33%	-	-	-	-	-	-
		Objects	30	4.67%	58.00	39.54	0	3	0.95	8.45
		Sign Language	6	0.93%	-	-	-	-	-	-
Translation Into Native Language		4	0.62%	-	-	-	-	-	-	
Other	16	2.49%	42.38	35.18	0	0	0.94	8.34		

Table 24
Mathematics Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	7	None	523	86.30%	79.63	32.17	0	7	0.93	8.65
		Assistive Technology	26	4.29%	46.00	26.79	0	1	0.89	8.75
		Braille	1	0.17%	-	-	-	-	-	-
		Eye Gaze	6	0.99%	-	-	-	-	-	-
		Modified Picture Symbols	8	1.32%	-	-	-	-	-	-
		Objects	23	3.80%	53.00	41.77	0	1	0.96	7.99
		Sign Language	5	0.83%	-	-	-	-	-	-
		Translation Into Native Language	4	0.66%	-	-	-	-	-	-
		Other	15	2.48%	-	-	-	-	-	-
	8	None	420	83.67%	87.60	35.83	0	7	0.94	9.13
		Assistive Technology	31	6.18%	52.65	42.47	0	1	0.96	8.60
		Braille	2	0.40%	-	-	-	-	-	-
		Eye Gaze	10	1.99%	-	-	-	-	-	-
		Modified Picture Symbols	5	1.00%	-	-	-	-	-	-
		Objects	18	3.59%	59.33	45.24	0	2	0.96	8.78
		Sign Language	8	1.59%	-	-	-	-	-	-
Translation Into Native Language	1	0.20%	-	-	-	-	-	-		
Other	13	2.59%	-	-	-	-	-	-		

Table 24
Mathematics Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	9	None	489	87.01%	73.71	34.94	1	18	0.93	9.39
		Assistive Technology	18	3.20%	37.94	29.11	0	1	0.91	8.67
		Braille	2	0.36%	-	-	-	-	-	-
		Eye Gaze	11	1.96%	-	-	-	-	-	-
		Modified Picture Symbols	4	0.71%	-	-	-	-	-	-
		Objects	17	3.02%	44.59	37.58	0	4	0.94	8.94
		Sign Language	3	0.53%	-	-	-	-	-	-
		Translation Into Native Language	3	0.53%	-	-	-	-	-	-
		Other	12	2.14%	-	-	-	-	-	-
	10	None	409	87.02%	78.10	35.75	0	11	0.93	9.71
		Assistive Technology	13	2.77%	-	-	-	-	-	-
		Braille	1	0.21%	-	-	-	-	-	-
		Eye Gaze	11	2.34%	-	-	-	-	-	-
		Modified Picture Symbols	5	1.06%	-	-	-	-	-	-
		Objects	11	2.34%	-	-	-	-	-	-
		Sign Language	11	2.34%	-	-	-	-	-	-
		Translation Into Native Language	1	0.21%	-	-	-	-	-	-
Other	13	2.77%	-	-	-	-	-	-		

Table 25
Science Descriptive Statistics by Expanded Accommodation

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	5	None	577	87.82%	68.75	22.28	14	7	0.93	6.02
		Assistive Technology	23	3.50%	40.83	26.44	0	0	0.93	6.90
		Braille	3	0.46%	-	-	-	-	-	-
		Eye Gaze	20	3.04%	23.25	22.41	0	1	0.93	6.00
		Modified Picture Symbols	11	1.67%	-	-	-	-	-	-
		Objects	10	1.52%	-	-	-	-	-	-
		Sign Language	12	1.83%	-	-	-	-	-	-
		Translation Into Native Language	2	0.30%	-	-	-	-	-	-
		Other	16	2.44%	34.69	19.24	0	0	0.87	6.98
	8	None	437	87.40%	73.58	22.92	12	9	0.93	5.98
		Assistive Technology	18	3.60%	31.44	18.55	0	1	0.84	7.32
		Braille	2	0.40%	-	-	-	-	-	-
		Eye Gaze	10	2.00%	-	-	-	-	-	-
		Modified Picture Symbols	6	1.20%	-	-	-	-	-	-
		Objects	7	1.40%	-	-	-	-	-	-
		Sign Language	8	1.60%	-	-	-	-	-	-
		Translation Into Native Language	1	0.20%	-	-	-	-	-	-
Other	11	2.20%	-	-	-	-	-	-		

Table 25
Science Descriptive Statistics by Expanded Accommodation (continued)

Content	Grade	Expanded Accommodation	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
SC	10	None	411	88.20%	62.54	26.57	3	8	0.92	7.32
		Assistive Technology	12	2.58%	-	-	-	-	-	-
		Braille	1	0.21%	-	-	-	-	-	-
		Eye Gaze	12	2.58%	-	-	-	-	-	-
		Modified Picture Symbols	6	1.29%	-	-	-	-	-	-
		Objects	5	1.07%	-	-	-	-	-	-
		Sign Language	11	2.36%	-	-	-	-	-	-
		Translation Into Native Language	1	0.21%	-	-	-	-	-	-
		Other	8	1.72%	-	-	-	-	-	-

Table 26
Scoring Rubric for Multiple-Choice Item Types

Total Score	Content Score	Level of Independence
3	Correct	Level 4: INDEPENDENT - Performs task without assistance
2	Correct	Level 3: PARTIAL - Partial physical, verbal, or gestural prompt
1	Correct	Level 2: LIMITED - Full physical prompt
		Further coded:
0	Incorrect or No Response	4 – Independent and incorrect
		3 – Partial and incorrect
		2 – Limited and incorrect

Table 27
Scoring Rubric for Constructed-Response Item Types

Total Score	Content Score	Level of Independence
6	Correct	Level 4: INDEPENDENT - Performs task without assistance
5	Partially Correct/Some Error	Level 4: INDEPENDENT - Performs task without assistance
4	Correct	Level 3: PARTIAL - Partial physical, verbal, or gestural prompt
3	Partially Correct/Some Error	Level 3: PARTIAL - Partial physical, verbal, or gestural prompt
2	Correct	Level 2: LIMITED - Full physical prompt
1	Partially Correct/Some Error	Level 2: LIMITED - Full physical prompt
0	Incorrect or No response	Further coded: 4 – Independent and incorrect 3 – Partial and incorrect 2 – Limited and incorrect

Table 28
Summary of Invalidations

Content	Grade	Total % Invalid	Source of Invalid		Total % Valid
			15%	Bubble	
RD	3	3.59%	2.01%	1.58%	96.41%
	4	4.24%	2.82%	1.41%	95.76%
	5	4.15%	3.15%	1.00%	95.85%
	6	6.10%	4.06%	2.03%	93.90%
	7	6.53%	4.41%	2.13%	93.47%
	8	8.17%	5.81%	2.36%	91.83%
	9	7.43%	4.22%	3.21%	92.57%
	10	7.36%	4.97%	2.39%	92.64%
WR	3	4.30%	2.30%	2.01%	95.70%
	4	3.39%	2.54%	0.85%	96.61%
	5	5.01%	3.44%	1.58%	94.99%
	6	6.24%	4.21%	2.03%	93.76%
	7	6.99%	4.56%	2.43%	93.01%
	8	8.53%	5.99%	2.54%	91.47%
	9	6.59%	4.05%	2.53%	93.41%
	10	7.16%	4.97%	2.19%	92.84%
MA	3	5.45%	2.73%	2.73%	94.55%
	4	4.38%	2.54%	1.84%	95.62%
	5	4.73%	3.44%	1.29%	95.27%
	6	6.68%	3.63%	3.05%	93.32%
	7	7.90%	3.95%	3.95%	92.10%
	8	8.89%	5.81%	3.09%	91.11%
	9	5.07%	2.87%	2.20%	94.93%
	10	6.56%	3.98%	2.58%	93.44%
SC	5	5.87%	4.15%	1.72%	94.13%
	8	9.26%	6.53%	2.72%	90.74%
	10	7.36%	4.57%	2.78%	92.64%

Table 29
Breakdown of Invalidations Due to Test Examiners Marking Bubbles on Answer Document

		Invalidation Bubbles Available on Answer Document															
Content	Grade	Student Tested All Activities		Parental Refusal		Test Not Completed		Student Withdrew Before Completion		Misadministration		Taking TCAP Assessment		District Ed. Services		Missing	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
RD	3	683	97.99%	6	0.86%	1	0.14%	0	0%	0	0%	4	0.57%	3	0.43%	0	0%
	4	688	97.18%	5	0.71%	6	0.85%	1	0%	1	0.14%	3	0.42%	4	0.56%	0	0%
	5	676	96.85%	4	0.57%	7	1.00%	0	0.00%	0	0%	6	0.86%	5	0.72%	0	0%
	6	661	95.94%	8	1.16%	7	1.02%	1	0.15%	2	0.29%	8	1.16%	2	0.29%	0	0%
	7	625	94.98%	4	0.61%	9	1.37%	1	0.15%	2	0.30%	9	1.37%	4	0.61%	4	0.61%
	8	518	94.01%	13	2.36%	7	1.27%	1	0.18%	0	0%	7	1.27%	4	0.73%	1	0.18%
	9	564	95.27%	5	0.84%	3	0.51%	0	0%	2	0.34%	11	1.86%	4	0.68%	3	0.51%
	10	477	94.83%	6	1.19%	6	1.19%	1	0.20%	0	0%	9	1.79%	3	0.60%	1	0.20%
WR	3	681	97.70%	6	0.86%	1	0.14%	0	0%	0	0%	5	0.72%	4	0.57%	0	0%
	4	690	97.46%	5	0.71%	6	0.85%	1	0.14%	0	0%	2	0.28%	4	0.56%	0	0%
	5	674	96.56%	4	0.57%	9	1.29%	0	0%	0	0%	6	0.86%	5	0.72%	0	0%
	6	660	95.79%	8	1.16%	7	1.02%	1	0.15%	2	0.29%	9	1.31%	2	0.29%	0	0%
	7	624	94.83%	5	0.76%	9	1.37%	1	0.15%	1	0.15%	10	1.52%	4	0.61%	4	0.61%
	8	517	93.83%	13	2.36%	8	1.45%	1	0.18%	0	0%	7	1.27%	4	0.73%	1	0.18%
	9	565	95.44%	5	0.84%	2	0.34%	0	0%	2	0.34%	11	1.86%	4	0.68%	3	0.51%
	10	477	94.83%	6	1.19%	6	1.19%	1	0.20%	0	0%	9	1.79%	3	0.60%	1	0.20%

Table 29
Breakdown of Invalidations Due to Test Examiners Marking Bubbles on Answer Document (continued)

		Invalidation Bubbles Available on Answer Document															
Content	Grade	Student Tested All Activities		Parental Refusal		Test Not Completed		Student Withdrew Before Completion		Misadministration		Taking TCAP Assessment		District Ed. Services		Missing	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
MA	3	678	97.27%	6	0.86%	2	0.29%	0	0%	0	0%	7	1.00%	4	0.57%	0	0%
	4	690	97.46%	5	0.71%	5	0.71%	1	0.14%	0	0%	3	0.42%	4	0.56%	0	0%
	5	674	96.56%	4	0.57%	9	1.29%	0	0%	0	0%	6	0.86%	5	0.72%	0	0%
	6	664	96.37%	8	1.16%	8	1.16%	1	0.15%	2	0.29%	4	0.58%	2	0.29%	0	0%
	7	628	95.44%	5	0.76%	9	1.37%	1	0.15%	0	0%	7	1.06%	4	0.61%	4	0.61%
	8	518	94.01%	13	2.36%	8	1.45%	1	0.18%	0	0%	6	1.09%	4	0.73%	1	0.18%
	9	571	96.45%	5	0.84%	2	0.34%	0	0%	2	0.34%	4	0.68%	4	0.68%	4	0.68%
	10	482	95.83%	6	1.19%	7	1.39%	1	0.20%	0	0%	3	0.60%	3	0.60%	1	0.20%
SC	5	669	95.85%	4	0.57%	9	1.29%	0	0%	0	0%	11	1.58%	5	0.72%	0	0%
	8	514	93.28%	13	2.36%	8	1.45%	1	0.18%	0	0%	10	1.81%	4	0.73%	1	0.18%
	10	479	95.23%	5	0.99%	7	1.39%	1	0.20%	0	0%	7	1.39%	3	0.60%	1	0.20%

Table 30
Writing Frequency Distributions of CR (6-Point) Items

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
WR	3	5	21.77%	0.15%	0.60%	0.75%	1.65%	5.41%	69.67%
		10	46.10%	1.05%	0.75%	1.80%	1.95%	15.02%	33.33%
		15	25.83%	0.15%	0.90%	0.30%	3.00%	8.71%	61.11%
		20	47.45%	1.95%	0.60%	4.80%	0.90%	34.23%	10.06%
		24	49.25%	0.90%	0.15%	3.30%	0.15%	36.19%	10.06%
		29	30.18%	0.30%	0.15%	1.35%	1.35%	16.07%	50.60%
	4	5	19.01%	-	0.73%	0.44%	2.63%	4.53%	72.66%
		10	44.59%	0.88%	0.88%	1.61%	2.19%	11.84%	38.01%
		15	23.54%	0.15%	0.73%	1.17%	1.46%	7.16%	65.79%
		20	42.11%	2.05%	0.44%	3.95%	1.17%	33.77%	16.52%
		25	46.93%	1.46%	0.15%	3.80%	0.73%	29.97%	16.96%
		30	26.75%	0.58%	0.29%	0.58%	1.17%	13.01%	57.60%
	5	5	14.93%	0.30%	-	0.60%	2.41%	4.07%	77.68%
		10	34.99%	0.75%	0.45%	1.96%	2.56%	11.46%	47.81%
		15	17.95%	-	0.75%	1.21%	1.66%	3.77%	74.66%
		20	34.39%	0.75%	-	4.22%	1.36%	36.50%	22.78%
		24	34.09%	0.45%	-	4.07%	0.45%	37.56%	23.38%
		29	21.87%	-	0.15%	1.51%	0.91%	12.52%	63.05%
	6	5	15.41%	0.15%	0.31%	0.46%	1.08%	2.62%	79.97%
		10	33.28%	0.92%	1.39%	0.92%	1.39%	6.16%	55.93%
		15	19.26%	0.15%	1.08%	0.77%	1.08%	9.55%	68.11%
		20	33.90%	1.39%	0.77%	2.93%	0.46%	35.59%	24.96%
		24	31.74%	1.54%	0.46%	3.85%	0.77%	37.60%	24.04%
		29	22.50%	0.15%	0.31%	0.46%	0.77%	9.55%	66.26%

Table 30
Writing Frequency Distributions of CR (6-Point) Items (continued)

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
WR	7	5	12.40%	0.65%	0.33%	0.16%	1.47%	3.10%	81.89%
		10	27.90%	0.98%	1.31%	1.47%	2.45%	11.09%	54.81%
		15	15.50%	0.33%	0.65%	0.49%	1.63%	4.08%	77.33%
		20	29.85%	1.47%	0.65%	3.59%	0.49%	35.07%	28.87%
		25	29.53%	0.82%	0.82%	3.43%	1.31%	38.17%	25.94%
		30	24.63%	0.16%	1.14%	0.16%	1.63%	7.18%	65.09%
	8	5	14.43%	-	0.40%	-	1.38%	2.96%	80.83%
		10	33.00%	0.79%	0.59%	1.38%	1.78%	11.46%	50.99%
		15	15.22%	0.20%	0.40%	0.59%	0.79%	4.55%	78.26%
		20	26.29%	1.58%	0.59%	2.17%	1.58%	31.62%	36.17%
		25	28.26%	0.99%	0.59%	2.17%	0.59%	34.59%	32.81%
		30	24.11%	0.40%	1.38%	0.59%	2.77%	9.49%	61.27%
	9	5	16.33%	0.73%	0.54%	0.36%	2.00%	3.99%	76.04%
		10	28.68%	0.54%	0.54%	1.27%	2.00%	12.16%	54.81%
		15	17.42%	0.36%	0.91%	0.18%	0.91%	3.81%	76.41%
		20	29.40%	0.73%	0.36%	5.08%	0.91%	34.85%	28.68%
		24	32.12%	1.81%	0.73%	5.63%	2.00%	32.49%	25.23%
		29	25.95%	0.54%	1.45%	0.54%	2.90%	7.80%	60.80%
	10	5	16.67%	0.43%	0.21%	1.28%	1.07%	5.56%	74.79%
		10	29.27%	1.07%	0.85%	1.07%	1.92%	6.84%	58.97%
		15	20.94%	-	0.21%	0.85%	2.35%	5.13%	70.51%
		20	27.14%	1.50%	0.21%	1.50%	1.07%	35.90%	32.69%
		25	30.34%	1.92%	0.43%	4.06%	1.50%	36.11%	25.64%
		30	25.86%	0.21%	1.28%	1.07%	3.42%	11.75%	56.41%

Table 31
Mathematics Frequency Distributions of CR (6-Point) Items

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
	3	2	17.12%	0.76%	2.73%	3.03%	2.42%	10.00%	63.94%
		4	34.85%	0.61%	1.67%	4.70%	5.76%	17.42%	35.00%
		5	20.61%	0.61%	1.06%	1.52%	1.97%	8.49%	65.76%
		9	26.21%	2.27%	1.36%	2.27%	0.76%	11.36%	55.76%
		12	38.79%	1.82%	3.18%	5.45%	4.09%	31.21%	15.46%
		13	29.09%	0.91%	2.27%	1.97%	5.91%	6.97%	52.88%
		17	31.06%	0.76%	3.03%	2.88%	4.24%	6.67%	51.36%
		23	10.30%	2.27%	1.67%	0.91%	7.42%	3.49%	73.94%
		24	36.21%	1.52%	1.82%	4.24%	1.36%	39.09%	15.76%
		26	28.79%	2.42%	3.48%	8.03%	2.12%	44.09%	11.06%
MA	4	2	16.05%	1.03%	1.03%	2.95%	3.54%	14.14%	61.27%
		3	19.00%	0.59%	0.88%	0.88%	1.33%	7.36%	69.96%
		4	28.87%	1.47%	1.03%	3.83%	4.27%	18.41%	42.12%
		9	29.16%	1.18%	1.03%	2.80%	2.36%	17.97%	45.51%
		12	36.67%	2.06%	1.62%	5.15%	3.54%	19.88%	31.08%
		16	44.77%	0.88%	3.98%	1.03%	5.60%	3.98%	39.76%
		18	11.64%	1.33%	1.47%	1.33%	3.09%	4.27%	76.88%
		19	27.39%	0.44%	3.24%	1.47%	8.54%	3.98%	54.93%
		20	39.18%	1.91%	3.39%	4.12%	6.92%	12.67%	31.81%
		26	31.96%	1.77%	1.77%	7.81%	3.39%	30.04%	23.27%
		28	59.06%	0.44%	2.50%	2.65%	2.06%	12.37%	20.91%

Table 31
Mathematics Frequency Distributions of CR (6-Point) Items (continued)

Content	Grade	Item Number	% of Students Obtaining Score Level								
			0	1	2	3	4	5	6		
MA	5	3	30.63%	0.30%	1.65%	3.15%	2.85%	20.72%	40.69%		
		4	19.22%	1.20%	0.90%	2.25%	2.85%	15.77%	57.81%		
		5	31.83%	1.05%	2.70%	2.70%	8.11%	15.32%	38.29%		
		6	47.15%	0.45%	2.10%	4.05%	2.55%	17.12%	26.58%		
		9	16.22%	0.45%	0.90%	2.10%	1.50%	10.06%	68.77%		
		12	23.42%	1.05%	1.65%	1.95%	3.45%	8.56%	59.91%		
		13	31.83%	1.35%	0.60%	2.70%	1.80%	11.86%	49.85%		
		17	48.80%	1.05%	0.75%	3.45%	1.35%	27.33%	17.27%		
		18	56.76%	0.30%	0.75%	1.50%	1.95%	9.91%	28.83%		
		22	10.21%	1.35%	0.45%	2.10%	2.40%	6.46%	77.03%		
		23	16.52%	1.05%	1.05%	4.20%	3.90%	11.26%	62.01%		
		25	33.03%	2.70%	1.95%	3.75%	5.41%	8.41%	44.75%		
		26	31.38%	1.35%	1.80%	5.71%	5.26%	28.23%	26.28%		
		27	42.04%	2.25%	3.15%	5.41%	3.75%	19.37%	24.02%		
		28	66.67%	0.45%	1.65%	2.10%	3.00%	8.11%	18.02%		
		29	39.04%	2.40%	3.45%	4.20%	6.91%	13.81%	30.18%		
		31	18.47%	-	1.05%	0.75%	3.00%	5.11%	71.62%		
			6	1	22.41%	1.55%	2.47%	4.79%	4.17%	24.42%	40.19%
				2	19.47%	1.55%	1.55%	3.40%	2.63%	15.92%	55.49%
				3	15.77%	1.24%	1.39%	1.85%	2.63%	10.51%	66.62%
4	32.92%			0.77%	2.78%	2.47%	8.96%	11.59%	40.50%		
6	24.73%			2.01%	1.39%	3.09%	4.33%	11.75%	52.71%		
12	26.12%			2.63%	1.39%	8.96%	2.63%	32.46%	25.81%		
15	27.05%			1.70%	2.63%	2.32%	6.65%	10.20%	49.46%		
19	16.23%			2.01%	1.39%	4.02%	6.80%	7.42%	62.13%		
20	48.53%			1.24%	3.25%	2.63%	6.03%	7.73%	30.60%		
29	26.12%			0.62%	3.55%	4.48%	3.25%	22.57%	39.41%		
30	60.90%			0.46%	1.55%	2.63%	2.47%	16.23%	15.77%		
31	33.08%			1.08%	1.70%	4.33%	5.72%	11.13%	42.97%		

Table 31
Mathematics Frequency Distributions of CR (6-Point) Items (continued)

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
MA	7	1	21.46%	1.14%	1.30%	7.15%	3.25%	40.16%	25.53%
		2	17.07%	1.46%	1.46%	2.93%	1.79%	17.56%	57.72%
		3	12.52%	1.30%	1.14%	1.46%	1.63%	11.87%	70.08%
		4	24.55%	1.63%	3.41%	2.60%	7.97%	13.17%	46.67%
		6	21.79%	0.49%	1.46%	2.28%	4.23%	11.38%	58.37%
		16	41.95%	1.14%	3.58%	1.95%	2.76%	8.94%	39.68%
		17	13.98%	1.79%	2.28%	2.76%	7.15%	4.55%	67.48%
		20	37.40%	1.63%	2.44%	4.39%	9.11%	15.94%	29.11%
		26	28.46%	0.98%	1.95%	4.23%	2.11%	32.68%	29.59%
		27	24.23%	0.49%	2.11%	4.72%	4.07%	22.93%	41.46%
	29	50.57%	1.14%	1.63%	1.46%	4.23%	6.99%	33.98%	
	8	1	22.49%	1.38%	1.58%	6.11%	2.37%	41.03%	25.05%
		2	17.75%	0.99%	1.18%	3.35%	2.37%	19.72%	54.64%
		3	29.19%	0.99%	2.76%	1.38%	11.64%	10.85%	43.20%
		4	45.56%	0.20%	2.76%	0.79%	5.52%	4.54%	40.63%
		6	18.54%	0.79%	0.79%	3.16%	2.76%	27.42%	46.55%
		7	28.60%	0.79%	3.75%	2.37%	10.26%	7.89%	46.35%
		18	33.53%	1.97%	2.76%	2.96%	3.95%	5.13%	49.70%
		21	17.55%	3.55%	1.38%	3.94%	7.10%	6.71%	59.76%
		29	28.60%	0.59%	1.18%	5.92%	2.56%	33.73%	27.42%
30		21.70%	1.78%	3.55%	5.72%	5.52%	32.15%	29.59%	
		31	47.34%	0.79%	2.17%	2.96%	4.73%	9.86%	32.15%

Table 31
Mathematics Frequency Distributions of CR (6-Point) Items (continued)

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
MA	9	1	26.07%	1.61%	1.79%	2.14%	5.00%	20.36%	43.04%
		2	20.18%	1.96%	1.25%	3.39%	3.57%	16.96%	52.68%
		3	31.79%	0.89%	2.50%	4.64%	5.18%	10.00%	45.00%
		5	17.50%	0.89%	1.96%	3.93%	0.71%	26.25%	48.75%
		6	43.21%	1.43%	3.04%	4.29%	10.71%	10.18%	27.14%
		13	38.04%	2.50%	1.61%	3.75%	5.18%	15.71%	33.21%
		15	35.36%	2.32%	1.96%	3.75%	5.00%	6.43%	45.18%
		25	37.14%	2.68%	1.61%	2.68%	3.93%	18.57%	33.39%
		28	32.32%	0.18%	1.25%	3.39%	3.93%	24.64%	34.29%
	29	50.54%	1.07%	1.43%	3.21%	4.46%	8.93%	30.36%	
	10	1	26.48%	0.42%	2.12%	3.39%	3.39%	20.55%	43.64%
		2	22.88%	1.69%	0.85%	2.12%	2.12%	21.61%	48.73%
		3	36.02%	0.42%	1.69%	1.48%	7.63%	8.26%	44.49%
		4	37.50%	0.21%	3.39%	1.91%	9.53%	8.05%	39.41%
		6	17.59%	1.27%	1.48%	2.97%	2.97%	23.94%	49.79%
		15	20.98%	1.91%	2.12%	4.45%	7.84%	9.96%	52.75%
		19	46.40%	3.60%	2.33%	2.12%	3.60%	12.08%	29.87%
		24	13.56%	1.69%	1.69%	1.06%	3.39%	3.39%	75.21%
		28	35.59%	1.06%	1.27%	3.18%	2.54%	28.81%	27.54%
29		36.02%	1.27%	0.85%	4.66%	1.27%	39.62%	16.31%	
	30	50.21%	1.48%	0.21%	4.87%	2.97%	21.61%	18.64%	
	36	50.00%	1.91%	4.03%	4.45%	6.99%	11.86%	20.76%	

Table 32
Science Frequency Distributions of CR (6-Point) Items

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
SC	5	12	8.06%	0.91%	1.52%	2.28%	5.93%	10.64%	70.67%
		19	11.40%	0.91%	1.06%	3.19%	3.80%	17.17%	62.46%
	8	21	9.15%	1.19%	1.59%	4.77%	4.57%	19.09%	59.64%
		23	10.74%	0.60%	0.60%	2.78%	3.38%	12.92%	68.99%
	10	29	14.12%	0.99%	1.79%	3.58%	4.57%	24.45%	50.50%
		10	37.85%	-	2.80%	0.86%	4.30%	3.87%	50.32%
		21	21.51%	1.51%	0.86%	1.72%	4.09%	21.08%	49.25%
		27	38.71%	-	1.72%	0.65%	3.01%	2.37%	53.55%
		28	50.54%	-	1.29%	0.22%	3.87%	3.87%	40.22%

Table 33
Reading Item Level Statistics With and Without Level of Independence

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	3	0.67	0.63	1	0.64	0.64
		2	3	0.54	0.52	1	0.50	0.53
		3	3	0.33	0.45	1	0.30	0.43
		4	3	0.24	0.24	1	0.23	0.27
		5	3	0.25	0.24	1	0.22	0.27
		6	3	0.52	0.47	1	0.49	0.50
		7	3	0.63	0.55	1	0.57	0.54
		8	3	0.68	0.52	1	0.65	0.56
		9	3	0.41	0.27	1	0.37	0.31
		10	3	0.29	0.45	1	0.27	0.45
		11	3	0.68	0.48	1	0.65	0.51
		12	3	0.73	0.63	1	0.70	0.64
		13	3	0.82	0.68	1	0.78	0.69
		14	3	0.85	0.64	1	0.84	0.64
		15	3	0.73	0.69	1	0.69	0.70
		16	3	0.73	0.68	1	0.70	0.69
		17	3	0.77	0.67	1	0.75	0.68
RD	3	18	3	0.34	0.38	1	0.30	0.39
		19	3	0.77	0.65	1	0.74	0.68
		20	3	0.25	0.25	1	0.23	0.25
		21	3	0.69	0.64	1	0.65	0.65
		22	3	0.75	0.72	1	0.73	0.72
		23	3	0.62	0.64	1	0.59	0.67
		24	3	0.75	0.66	1	0.73	0.66
		25	3	0.42	0.59	1	0.39	0.59
		26	3	0.59	0.65	1	0.56	0.63
		27	3	0.51	0.55	1	0.50	0.56
		28	3	0.49	0.54	1	0.46	0.55
		29	3	0.53	0.62	1	0.50	0.63
		30	3	0.38	0.48	1	0.36	0.49
		31	3	0.55	0.61	1	0.52	0.63
		32	3	0.35	0.43	1	0.32	0.46
		33	3	0.33	0.49	1	0.30	0.48
		34	3	0.36	0.31	1	0.33	0.32
		35	3	0.48	0.62	1	0.46	0.62

Table 33
Reading Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	3	0.57	0.62	1	0.52	0.61
		2	3	0.26	0.40	1	0.24	0.43
		3	3	0.23	0.32	1	0.21	0.31
		4	3	0.47	0.60	1	0.44	0.61
		5	3	0.42	0.56	1	0.40	0.57
		6	3	0.57	0.65	1	0.53	0.66
		7	3	0.62	0.55	1	0.59	0.56
		8	3	0.57	0.61	1	0.54	0.63
		9	3	0.51	0.60	1	0.49	0.61
		10	3	0.39	0.47	1	0.36	0.49
		11	3	0.81	0.67	1	0.80	0.68
		12	3	0.83	0.63	1	0.81	0.64
		13	3	0.79	0.57	1	0.78	0.58
		14	3	0.68	0.71	1	0.64	0.72
		15	3	0.69	0.59	1	0.66	0.60
		16	3	0.75	0.70	1	0.73	0.70
		17	3	0.75	0.64	1	0.73	0.64
RD	4	18	3	0.81	0.67	1	0.79	0.67
		19	3	0.31	0.37	1	0.29	0.38
		20	3	0.37	0.38	1	0.34	0.38
		21	3	0.55	0.61	1	0.53	0.62
		22	3	0.34	0.30	1	0.31	0.27
		23	3	0.70	0.67	1	0.68	0.67
		24	3	0.69	0.66	1	0.67	0.67
		25	3	0.57	0.62	1	0.54	0.63
		26	3	0.52	0.59	1	0.50	0.59
		27	3	0.38	0.46	1	0.36	0.47
		28	3	0.34	0.53	1	0.32	0.54
		29	3	0.28	0.47	1	0.26	0.48
		30	3	0.42	0.43	1	0.40	0.44
		31	3	0.50	0.57	1	0.48	0.58
		32	3	0.43	0.44	1	0.41	0.46
		33	3	0.56	0.53	1	0.53	0.54
		34	3	0.44	0.54	1	0.41	0.56
		35	3	0.39	0.58	1	0.37	0.59

Table 33
Reading Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	3	0.71	0.64	1	0.68	0.66
		2	3	0.79	0.61	1	0.76	0.64
		3	3	0.39	0.47	1	0.37	0.47
		4	3	0.56	0.60	1	0.53	0.61
		5	3	0.46	0.47	1	0.44	0.48
		6	3	0.46	0.54	1	0.44	0.54
		7	3	0.42	0.44	1	0.40	0.44
		8	3	0.51	0.43	1	0.48	0.46
		9	3	0.53	0.59	1	0.50	0.60
		10	3	0.54	0.35	1	0.52	0.37
		11	3	0.78	0.70	1	0.76	0.69
		12	3	0.89	0.64	1	0.87	0.65
		13	3	0.87	0.61	1	0.85	0.62
		14	3	0.76	0.59	1	0.73	0.61
		15	3	0.76	0.64	1	0.72	0.64
		16	3	0.86	0.65	1	0.84	0.66
		17	3	0.44	0.45	1	0.41	0.46
RD	5	18	3	0.26	0.19	1	0.24	0.23
		19	3	0.52	0.54	1	0.49	0.54
		20	3	0.50	0.61	1	0.48	0.60
		21	3	0.74	0.72	1	0.73	0.72
		22	3	0.57	0.60	1	0.55	0.60
		23	3	0.62	0.63	1	0.59	0.65
		24	3	0.40	0.24	1	0.37	0.25
		25	3	0.72	0.64	1	0.70	0.65
		26	3	0.49	0.53	1	0.46	0.53
		27	3	0.42	0.51	1	0.40	0.51
		28	3	0.63	0.60	1	0.59	0.63
		29	3	0.64	0.69	1	0.62	0.69
		30	3	0.64	0.69	1	0.61	0.69
		31	3	0.68	0.70	1	0.66	0.71
		32	3	0.44	0.46	1	0.42	0.46
		33	3	0.53	0.67	1	0.51	0.67
		34	3	0.51	0.46	1	0.49	0.46
		35	3	0.71	0.74	1	0.69	0.73

Table 33
Reading Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	3	0.26	0.42	1	0.24	0.41
		2	3	0.79	0.61	1	0.76	0.65
		3	3	0.46	0.50	1	0.43	0.52
		4	3	0.77	0.57	1	0.74	0.60
		5	3	0.64	0.62	1	0.61	0.64
		6	3	0.34	0.48	1	0.32	0.49
		7	3	0.41	0.22	1	0.39	0.25
		8	3	0.23	0.29	1	0.22	0.31
		9	3	0.74	0.67	1	0.71	0.69
		10	3	0.38	0.43	1	0.36	0.43
		11	3	0.87	0.69	1	0.85	0.70
		12	3	0.85	0.68	1	0.82	0.70
		13	3	0.84	0.68	1	0.83	0.70
		14	3	0.72	0.54	1	0.68	0.54
		15	3	0.77	0.56	1	0.75	0.57
		16	3	0.79	0.69	1	0.77	0.71
		17	3	0.80	0.67	1	0.78	0.68
RD	6	18	3	0.60	0.63	1	0.58	0.67
		19	3	0.52	0.55	1	0.50	0.57
		20	3	0.66	0.66	1	0.64	0.69
		21	3	0.69	0.64	1	0.66	0.68
		22	3	0.76	0.60	1	0.74	0.63
		23	3	0.50	0.49	1	0.48	0.51
		24	3	0.56	0.56	1	0.54	0.57
		25	3	0.44	0.48	1	0.43	0.48
		26	3	0.52	0.58	1	0.49	0.60
		27	3	0.42	0.54	1	0.40	0.55
		28	3	0.57	0.63	1	0.56	0.62
		29	3	0.83	0.64	1	0.82	0.67
		30	3	0.70	0.67	1	0.67	0.70
		31	3	0.73	0.63	1	0.71	0.66
		32	3	0.51	0.57	1	0.49	0.58
		33	3	0.67	0.69	1	0.65	0.71
		34	3	0.43	0.41	1	0.41	0.42
		35	3	0.82	0.58	1	0.80	0.61

Table 33
Reading Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	3	0.65	0.61	1	0.62	0.64
		2	3	0.36	0.35	1	0.34	0.37
		3	3	0.46	0.43	1	0.43	0.47
		4	3	0.53	0.56	1	0.51	0.58
		5	3	0.34	0.28	1	0.29	0.27
		6	3	0.47	0.39	1	0.44	0.41
		7	3	0.45	0.44	1	0.43	0.45
		8	3	0.38	0.48	1	0.35	0.48
		9	3	0.23	0.35	1	0.21	0.35
		10	3	0.29	0.19	1	0.26	0.22
		11	3	0.26	0.28	1	0.25	0.29
		12	3	0.65	0.65	1	0.63	0.65
		13	3	0.87	0.67	1	0.86	0.68
		14	3	0.68	0.60	1	0.66	0.61
		15	3	0.85	0.63	1	0.84	0.65
		16	3	0.86	0.65	1	0.85	0.67
		17	3	0.82	0.68	1	0.81	0.68
RD	7	18	3	0.84	0.68	1	0.82	0.69
		19	3	0.59	0.54	1	0.56	0.57
		20	3	0.64	0.62	1	0.61	0.65
		21	3	0.85	0.66	1	0.83	0.67
		22	3	0.70	0.68	1	0.68	0.68
		23	3	0.47	0.42	1	0.45	0.41
		24	3	0.81	0.59	1	0.78	0.62
		25	3	0.46	0.61	1	0.45	0.62
		26	3	0.30	0.25	1	0.28	0.27
		27	3	0.46	0.51	1	0.44	0.50
		28	3	0.57	0.65	1	0.56	0.65
		29	3	0.37	0.47	1	0.34	0.47
		30	3	0.64	0.62	1	0.62	0.64
		31	3	0.41	0.22	1	0.39	0.24
		32	3	0.25	0.39	1	0.24	0.40
		33	3	0.62	0.37	1	0.60	0.40
		34	3	0.74	0.67	1	0.72	0.70
		35	3	0.50	0.54	1	0.49	0.56

Table 33
Reading Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
RD	8	1	3	0.33	0.41	1	0.31	0.39
		2	3	0.49	0.48	1	0.47	0.48
		3	3	0.32	0.37	1	0.29	0.36
		4	3	0.33	0.32	1	0.31	0.32
		5	3	0.45	0.51	1	0.43	0.50
		6	3	0.38	0.31	1	0.36	0.30
		7	3	0.41	0.45	1	0.38	0.45
		8	3	0.52	0.55	1	0.50	0.56
		9	3	0.41	0.52	1	0.39	0.53
		10	3	0.38	0.41	1	0.36	0.41
		11	3	0.74	0.64	1	0.72	0.63
		12	3	0.87	0.58	1	0.86	0.59
		13	3	0.55	0.47	1	0.53	0.47
		14	3	0.85	0.60	1	0.84	0.60
		15	3	0.77	0.67	1	0.75	0.68
		16	3	0.72	0.66	1	0.70	0.65
		17	3	0.73	0.67	1	0.72	0.66
		18	3	0.77	0.61	1	0.75	0.62
		19	3	0.43	0.52	1	0.41	0.52
		20	3	0.75	0.61	1	0.75	0.62
		21	3	0.38	0.27	1	0.37	0.27
		22	3	0.48	0.52	1	0.46	0.53
		23	3	0.58	0.60	1	0.55	0.62
		24	3	0.58	0.60	1	0.57	0.60
		25	3	0.60	0.57	1	0.58	0.57
		26	3	0.53	0.52	1	0.51	0.52
		27	3	0.46	0.50	1	0.45	0.52
		28	3	0.56	0.50	1	0.54	0.51
		29	3	0.43	0.55	1	0.42	0.55
		30	3	0.55	0.45	1	0.53	0.45
		31	3	0.32	0.36	1	0.31	0.36
		32	3	0.48	0.51	1	0.46	0.51
		33	3	0.49	0.46	1	0.48	0.49
		34	3	0.55	0.57	1	0.54	0.57
		35	3	0.69	0.63	1	0.66	0.65

Table 33
Reading Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
RD	9	1	3	0.39	0.49	1	0.37	0.50
		2	3	0.46	0.57	1	0.45	0.57
		3	3	0.48	0.64	1	0.46	0.63
		4	3	0.45	0.60	1	0.42	0.61
		5	3	0.45	0.54	1	0.43	0.55
		6	3	0.46	0.60	1	0.44	0.61
		7	3	0.46	0.37	1	0.43	0.40
		8	3	0.47	0.53	1	0.45	0.54
		9	3	0.27	0.47	1	0.25	0.48
		10	3	0.54	0.33	1	0.51	0.33
		11	3	0.70	0.63	1	0.68	0.64
		12	3	0.62	0.61	1	0.60	0.61
		13	3	0.83	0.61	1	0.82	0.61
		14	3	0.84	0.61	1	0.81	0.61
		15	3	0.71	0.64	1	0.69	0.64
		16	3	0.69	0.67	1	0.67	0.67
		17	3	0.76	0.65	1	0.74	0.66
		18	3	0.73	0.67	1	0.71	0.66
		19	3	0.76	0.59	1	0.73	0.58
		20	3	0.49	0.54	1	0.47	0.55
		21	3	0.35	0.46	1	0.33	0.44
		22	3	0.66	0.70	1	0.64	0.71
		23	3	0.67	0.65	1	0.65	0.66
		24	3	0.43	0.58	1	0.39	0.57
		25	3	0.51	0.66	1	0.49	0.67
		26	3	0.55	0.65	1	0.53	0.67
		27	3	0.39	0.43	1	0.37	0.43
		28	3	0.55	0.50	1	0.53	0.52
		29	3	0.30	0.34	1	0.28	0.34
		30	3	0.57	0.74	1	0.55	0.74
		31	3	0.53	0.60	1	0.51	0.60
		32	3	0.28	0.42	1	0.27	0.41
		33	3	0.45	0.61	1	0.43	0.60
		34	3	0.40	0.48	1	0.38	0.46

Table 33
Reading Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
RD	10	1	3	0.51	0.60	1	0.49	0.61
		2	3	0.41	0.37	1	0.38	0.39
		3	3	0.27	0.43	1	0.25	0.44
		4	3	0.37	0.35	1	0.34	0.36
		5	3	0.39	0.46	1	0.37	0.49
		6	3	0.50	0.44	1	0.48	0.44
		7	3	0.33	0.37	1	0.29	0.37
		8	3	0.61	0.53	1	0.60	0.53
		9	3	0.37	0.40	1	0.34	0.40
		10	3	0.66	0.52	1	0.64	0.53
		11	3	0.69	0.47	1	0.68	0.46
		12	3	0.50	0.43	1	0.48	0.44
		13	3	0.70	0.62	1	0.69	0.64
		14	3	0.46	0.38	1	0.44	0.39
		15	3	0.74	0.61	1	0.72	0.61
		16	3	0.56	0.56	1	0.54	0.57
		17	3	0.31	0.37	1	0.28	0.38
		18	3	0.51	0.51	1	0.49	0.52
		19	3	0.54	0.52	1	0.52	0.53
		20	3	0.47	0.41	1	0.43	0.40
		21	3	0.44	0.52	1	0.41	0.51
		22	3	0.46	0.50	1	0.45	0.51
		23	3	0.66	0.64	1	0.63	0.66
		24	3	0.42	0.42	1	0.40	0.40
		25	3	0.55	0.61	1	0.52	0.61
		26	3	0.27	0.33	1	0.25	0.34
		27	3	0.35	0.45	1	0.33	0.47
		28	3	0.48	0.61	1	0.46	0.61
		29	3	0.64	0.64	1	0.62	0.66
		30	3	0.73	0.65	1	0.72	0.66
		31	3	0.52	0.57	1	0.50	0.59
		32	3	0.58	0.65	1	0.57	0.63
		33	3	0.59	0.70	1	0.58	0.70
		34	3	0.37	0.54	1	0.36	0.55

Table 34
Writing Item Level Statistics With and Without Level of Independence

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	3	1	3	0.27	0.29	1	0.23	0.27
		2	3	0.58	0.63	1	0.54	0.64
		3	3	0.72	0.68	1	0.70	0.68
		4	3	0.69	0.70	1	0.67	0.70
		5	6	0.76	0.77	2	0.72	0.77
		6	3	0.51	0.60	1	0.48	0.62
		7	3	0.51	0.60	1	0.48	0.62
		8	3	0.74	0.64	1	0.72	0.64
		9	3	0.80	0.59	1	0.78	0.60
		10	6	0.48	0.81	2	0.41	0.79
		11	3	0.69	0.69	1	0.67	0.69
		12	3	0.54	0.63	1	0.52	0.64
		13	3	0.42	0.51	1	0.38	0.53
		14	3	0.50	0.43	1	0.47	0.43
		15	6	0.71	0.78	2	0.65	0.78
		16	3	0.45	0.59	1	0.43	0.59
		17	3	0.35	0.38	1	0.32	0.38
		18	3	0.48	0.48	1	0.45	0.50
		19	3	0.29	0.24	1	0.27	0.24
		20	6	0.42	0.81	2	0.27	0.74
		21	3	0.26	0.27	1	0.24	0.29
		22	3	0.39	0.57	1	0.36	0.57
		23	3	0.45	0.46	1	0.42	0.48
		24	6	0.42	0.82	2	0.28	0.76
		25	3	0.32	0.30	1	0.30	0.33
		26	3	0.29	0.31	1	0.27	0.34
		27	3	0.47	0.52	1	0.44	0.54
		28	3	0.32	0.27	1	0.29	0.28
		29	6	0.66	0.80	2	0.59	0.78

Table 34
Writing Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	4	1	3	0.33	0.37	1	0.29	0.37
		2	3	0.38	0.53	1	0.34	0.56
		3	3	0.68	0.65	1	0.63	0.65
		4	3	0.58	0.61	1	0.56	0.62
		5	6	0.79	0.71	2	0.75	0.71
		6	3	0.29	0.21	1	0.27	0.25
		7	3	0.48	0.58	1	0.45	0.60
		8	3	0.66	0.62	1	0.64	0.63
		9	3	0.62	0.65	1	0.59	0.67
		10	6	0.51	0.84	2	0.44	0.83
		11	3	0.72	0.71	1	0.69	0.71
		12	3	0.69	0.68	1	0.66	0.69
		13	3	0.25	0.41	1	0.23	0.43
		14	3	0.53	0.64	1	0.50	0.66
		15	6	0.74	0.74	2	0.69	0.75
		16	3	0.51	0.47	1	0.49	0.48
		17	3	0.27	0.43	1	0.25	0.43
		18	3	0.50	0.48	1	0.48	0.49
		19	3	0.33	0.25	1	0.30	0.25
		20	6	0.48	0.83	2	0.33	0.79
		21	3	0.20	0.15	1	0.18	0.17
		22	3	0.50	0.52	1	0.48	0.53
		23	3	0.46	0.57	1	0.43	0.59
		24	3	0.47	0.55	1	0.44	0.56
		25	6	0.45	0.83	2	0.32	0.79
		26	3	0.40	0.46	1	0.38	0.48
		27	3	0.40	0.34	1	0.38	0.35
		28	3	0.54	0.59	1	0.51	0.58
		29	3	0.34	0.40	1	0.31	0.42
		30	6	0.70	0.76	2	0.64	0.75

Table 34
Writing Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	5	1	3	0.47	0.47	1	0.43	0.47
		2	3	0.77	0.64	1	0.74	0.63
		3	3	0.75	0.71	1	0.73	0.68
		4	3	0.76	0.71	1	0.75	0.69
		5	6	0.83	0.75	2	0.80	0.74
		6	3	0.34	0.35	1	0.32	0.39
		7	3	0.52	0.55	1	0.49	0.55
		8	3	0.78	0.62	1	0.75	0.63
		9	3	0.74	0.56	1	0.70	0.57
		10	6	0.60	0.84	2	0.54	0.79
		11	3	0.76	0.65	1	0.74	0.65
		12	3	0.77	0.69	1	0.75	0.68
		13	3	0.33	0.33	1	0.31	0.34
		14	3	0.65	0.58	1	0.62	0.58
		15	6	0.80	0.78	2	0.77	0.77
		16	3	0.61	0.55	1	0.59	0.56
		17	3	0.52	0.54	1	0.50	0.56
		18	3	0.56	0.54	1	0.54	0.55
		19	3	0.28	0.21	1	0.25	0.23
		20	6	0.56	0.84	2	0.41	0.78
		21	3	0.38	0.44	1	0.37	0.44
		22	3	0.63	0.58	1	0.60	0.57
		23	3	0.25	0.27	1	0.23	0.30
		24	6	0.57	0.83	2	0.42	0.78
		25	3	0.44	0.44	1	0.42	0.47
		26	3	0.49	0.35	1	0.47	0.36
		27	3	0.48	0.53	1	0.46	0.55
		28	3	0.53	0.47	1	0.50	0.47
		29	6	0.75	0.83	2	0.69	0.81

Table 34
Writing Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	6	1	3	0.69	0.59	1	0.64	0.60
		2	3	0.70	0.63	1	0.67	0.64
		3	3	0.72	0.71	1	0.68	0.70
		4	3	0.73	0.70	1	0.71	0.71
		5	6	0.83	0.73	2	0.81	0.74
		6	3	0.73	0.71	1	0.71	0.72
		7	3	0.50	0.41	1	0.48	0.44
		8	3	0.71	0.70	1	0.69	0.72
		9	3	0.64	0.60	1	0.62	0.63
		10	6	0.63	0.85	2	0.59	0.85
		11	3	0.72	0.68	1	0.69	0.70
		12	3	0.76	0.68	1	0.74	0.70
		13	3	0.53	0.46	1	0.51	0.48
		14	3	0.52	0.45	1	0.49	0.48
		15	6	0.78	0.79	2	0.73	0.80
		16	3	0.69	0.72	1	0.67	0.73
		17	3	0.46	0.47	1	0.45	0.50
		18	3	0.47	0.48	1	0.44	0.51
		19	3	0.36	0.20	1	0.33	0.23
		20	6	0.57	0.85	2	0.43	0.81
		21	3	0.41	0.42	1	0.39	0.45
		22	3	0.52	0.51	1	0.50	0.53
		23	3	0.38	0.37	1	0.36	0.39
		24	6	0.58	0.84	2	0.43	0.79
		25	3	0.45	0.46	1	0.43	0.47
		26	3	0.36	0.26	1	0.35	0.30
		27	3	0.41	0.45	1	0.37	0.47
		28	3	0.47	0.45	1	0.46	0.48
		29	6	0.75	0.80	2	0.71	0.78

Table 34
Writing Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	7	1	3	0.78	0.64	1	0.76	0.65
		2	3	0.50	0.65	1	0.48	0.67
		3	3	0.73	0.73	1	0.69	0.71
		4	3	0.78	0.65	1	0.76	0.66
		5	6	0.86	0.73	2	0.83	0.73
		6	3	0.56	0.56	1	0.53	0.56
		7	3	0.57	0.63	1	0.55	0.63
		8	3	0.70	0.70	1	0.67	0.72
		9	3	0.67	0.65	1	0.64	0.65
		10	6	0.67	0.84	2	0.60	0.82
		11	3	0.79	0.71	1	0.77	0.73
		12	3	0.32	0.35	1	0.30	0.39
		13	3	0.45	0.44	1	0.42	0.46
		14	3	0.73	0.67	1	0.71	0.69
		15	6	0.82	0.78	2	0.79	0.78
		16	3	0.52	0.51	1	0.47	0.52
		17	3	0.40	0.43	1	0.38	0.47
		18	3	0.67	0.68	1	0.64	0.69
		19	3	0.31	0.25	1	0.28	0.24
		20	6	0.61	0.85	2	0.46	0.79
		21	3	0.38	0.31	1	0.35	0.33
		22	3	0.44	0.35	1	0.43	0.38
		23	3	0.59	0.55	1	0.58	0.56
		24	3	0.44	0.43	1	0.42	0.45
		25	6	0.61	0.83	2	0.45	0.77
		26	3	0.23	0.17	1	0.21	0.18
		27	3	0.65	0.57	1	0.63	0.59
		28	3	0.51	0.56	1	0.49	0.57
		29	3	0.50	0.46	1	0.48	0.47
		30	6	0.73	0.81	2	0.69	0.81

Table 34
Writing Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	8	1	3	0.73	0.72	1	0.70	0.70
		2	3	0.74	0.74	1	0.72	0.73
		3	3	0.76	0.72	1	0.74	0.71
		4	3	0.78	0.68	1	0.76	0.69
		5	6	0.84	0.71	2	0.82	0.69
		6	3	0.61	0.70	1	0.60	0.71
		7	3	0.75	0.65	1	0.74	0.67
		8	3	0.70	0.72	1	0.67	0.71
		9	3	0.61	0.67	1	0.58	0.67
		10	6	0.63	0.83	2	0.57	0.82
		11	3	0.41	0.32	1	0.39	0.35
		12	3	0.38	0.30	1	0.37	0.30
		13	3	0.27	0.20	1	0.25	0.23
		14	3	0.74	0.70	1	0.73	0.70
		15	6	0.83	0.76	2	0.81	0.76
		16	3	0.35	0.36	1	0.34	0.36
		17	3	0.40	0.39	1	0.38	0.39
		18	3	0.34	0.34	1	0.32	0.36
		19	3	0.30	0.18	1	0.27	0.17
		20	6	0.65	0.87	2	0.52	0.81
		21	3	0.33	0.35	1	0.31	0.33
		22	3	0.32	0.33	1	0.31	0.33
		23	3	0.46	0.51	1	0.44	0.52
		24	3	0.61	0.64	1	0.59	0.65
		25	6	0.64	0.85	2	0.50	0.82
		26	3	0.45	0.37	1	0.43	0.39
		27	3	0.30	0.22	1	0.29	0.23
		28	3	0.62	0.57	1	0.59	0.59
		29	3	0.49	0.51	1	0.47	0.53
		30	6	0.72	0.82	2	0.66	0.82

Table 34
Writing Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	9	1	3	0.72	0.70	1	0.70	0.70
		2	3	0.74	0.62	1	0.72	0.63
		3	3	0.75	0.74	1	0.74	0.72
		4	3	0.78	0.67	1	0.76	0.67
		5	6	0.81	0.79	2	0.78	0.77
		6	3	0.56	0.49	1	0.55	0.49
		7	3	0.51	0.64	1	0.50	0.65
		8	3	0.36	0.51	1	0.34	0.52
		9	3	0.43	0.41	1	0.41	0.40
		10	6	0.67	0.86	2	0.61	0.86
		11	3	0.71	0.67	1	0.69	0.65
		12	3	0.70	0.71	1	0.69	0.71
		13	3	0.42	0.48	1	0.40	0.48
		14	3	0.49	0.59	1	0.47	0.60
		15	6	0.81	0.76	2	0.78	0.74
		16	3	0.38	0.41	1	0.36	0.41
		17	3	0.35	0.42	1	0.33	0.43
		18	3	0.54	0.65	1	0.52	0.66
		19	3	0.35	0.22	1	0.33	0.23
		20	6	0.61	0.86	2	0.46	0.80
		21	3	0.43	0.55	1	0.42	0.57
		22	3	0.40	0.43	1	0.38	0.46
		23	3	0.57	0.58	1	0.56	0.61
		24	6	0.57	0.83	2	0.41	0.76
		25	3	0.30	0.32	1	0.28	0.34
		26	3	0.29	0.27	1	0.28	0.30
		27	3	0.50	0.55	1	0.49	0.57
		28	3	0.42	0.41	1	0.40	0.43
		29	6	0.70	0.82	2	0.65	0.81

Table 34
Writing Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	10	1	3	0.72	0.72	1	0.69	0.70
		2	3	0.53	0.60	1	0.51	0.62
		3	3	0.75	0.72	1	0.73	0.69
		4	3	0.78	0.70	1	0.75	0.70
		5	6	0.81	0.79	2	0.78	0.79
		6	3	0.63	0.59	1	0.61	0.58
		7	3	0.61	0.56	1	0.59	0.57
		8	3	0.50	0.57	1	0.46	0.58
		9	3	0.47	0.50	1	0.44	0.51
		10	6	0.67	0.85	2	0.62	0.85
		11	3	0.52	0.52	1	0.50	0.52
		12	3	0.25	0.27	1	0.23	0.27
		13	3	0.24	0.28	1	0.22	0.28
		14	3	0.46	0.44	1	0.43	0.45
		15	6	0.77	0.74	2	0.73	0.72
		16	3	0.37	0.36	1	0.34	0.38
		17	3	0.58	0.56	1	0.56	0.55
		18	3	0.47	0.46	1	0.45	0.47
		19	3	0.45	0.44	1	0.42	0.43
		20	6	0.64	0.85	2	0.51	0.83
		21	3	0.27	0.18	1	0.25	0.19
		22	3	0.45	0.31	1	0.43	0.33
		23	3	0.53	0.55	1	0.51	0.57
		24	3	0.48	0.49	1	0.46	0.52
		25	6	0.59	0.83	2	0.44	0.76
		26	3	0.50	0.51	1	0.48	0.53
		27	3	0.18	0.17	1	0.16	0.18
		28	3	0.62	0.60	1	0.60	0.61
		29	3	0.45	0.36	1	0.43	0.35
		30	6	0.70	0.83	2	0.63	0.82

Table 35
Mathematics Item Level Statistics With and Without Level of Independence

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	3	1	3	0.85	0.69	1	0.82	0.65
		2	6	0.76	0.78	2	0.69	0.77
		3	3	0.65	0.69	1	0.59	0.70
		4	6	0.56	0.68	2	0.44	0.65
		5	6	0.75	0.79	2	0.70	0.80
		6	3	0.69	0.75	1	0.64	0.74
		7	3	0.79	0.66	1	0.77	0.65
		8	3	0.46	0.51	1	0.43	0.54
		9	6	0.68	0.70	2	0.61	0.72
		10	3	0.63	0.66	1	0.58	0.68
		11	3	0.55	0.55	1	0.52	0.58
		12	6	0.48	0.60	2	0.31	0.54
		13	6	0.65	0.82	2	0.56	0.78
		14	3	0.48	0.50	1	0.44	0.52
		15	3	0.66	0.72	1	0.60	0.70
		16	3	0.38	0.56	1	0.33	0.56
		17	6	0.62	0.82	2	0.55	0.80
		18	3	0.85	0.70	1	0.82	0.69
		19	3	0.78	0.60	1	0.76	0.60
		20	3	0.67	0.67	1	0.64	0.65
		21	3	0.73	0.71	1	0.69	0.72
		22	3	0.35	0.35	1	0.27	0.33
		23	6	0.83	0.66	2	0.76	0.60
		24	6	0.52	0.65	2	0.35	0.61
		25	3	0.48	0.40	1	0.44	0.43
		26	6	0.55	0.55	2	0.33	0.51
		27	3	0.46	0.54	1	0.44	0.54
		28	3	0.65	0.71	1	0.61	0.72
		29	3	0.56	0.75	1	0.53	0.74
		30	3	0.41	0.45	1	0.36	0.45
		31	3	0.58	0.70	1	0.52	0.68
		32	3	0.66	0.63	1	0.60	0.63

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	4	1	3	0.86	0.68	1	0.84	0.65
		2	6	0.77	0.77	2	0.68	0.78
		3	6	0.78	0.79	2	0.74	0.79
		4	6	0.63	0.72	2	0.51	0.67
		5	3	0.56	0.59	1	0.51	0.62
		6	3	0.69	0.68	1	0.66	0.68
		7	3	0.77	0.67	1	0.75	0.68
		8	3	0.52	0.56	1	0.49	0.59
		9	6	0.64	0.65	2	0.54	0.65
		10	3	0.67	0.70	1	0.64	0.70
		11	3	0.53	0.47	1	0.51	0.49
		12	6	0.53	0.62	2	0.41	0.59
		13	3	0.66	0.63	1	0.63	0.63
		14	3	0.58	0.50	1	0.56	0.53
		15	3	0.68	0.73	1	0.66	0.73
		16	6	0.49	0.59	2	0.42	0.58
		17	3	0.75	0.64	1	0.72	0.62
		18	6	0.84	0.69	2	0.79	0.68
		19	6	0.66	0.70	2	0.57	0.66
		20	6	0.50	0.74	2	0.38	0.68
		21	3	0.62	0.66	1	0.57	0.67
		22	3	0.72	0.75	1	0.68	0.74
		23	3	0.10	0.26	1	0.07	0.26
		24	3	0.68	0.57	1	0.65	0.58
		25	3	0.65	0.67	1	0.61	0.67
		26	6	0.55	0.66	2	0.38	0.63
		27	3	0.46	0.56	1	0.43	0.56
		28	6	0.35	0.62	2	0.27	0.59
		29	3	0.61	0.73	1	0.58	0.72
		30	3	0.55	0.67	1	0.52	0.69
		31	3	0.56	0.70	1	0.52	0.69
		32	3	0.32	0.55	1	0.28	0.54

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	3	0.82	0.73	1	0.80	0.71
		2	3	0.73	0.73	1	0.71	0.72
		3	6	0.62	0.71	2	0.51	0.70
		4	6	0.74	0.74	2	0.66	0.75
		5	6	0.59	0.70	2	0.46	0.64
		6	6	0.45	0.56	2	0.35	0.58
		7	3	0.80	0.67	1	0.78	0.66
		8	3	0.57	0.76	1	0.55	0.74
		9	6	0.80	0.78	2	0.74	0.77
		10	3	0.56	0.56	1	0.54	0.58
		11	3	0.40	0.38	1	0.35	0.38
		12	6	0.71	0.77	2	0.64	0.76
		13	6	0.63	0.61	2	0.56	0.61
		14	3	0.57	0.58	1	0.54	0.57
		15	3	0.63	0.63	1	0.60	0.64
		16	3	0.35	0.37	1	0.30	0.36
		17	6	0.43	0.54	2	0.31	0.54
MA	5	18	6	0.39	0.56	2	0.34	0.57
		19	3	0.69	0.74	1	0.66	0.74
		20	3	0.51	0.56	1	0.47	0.57
		21	3	0.63	0.53	1	0.61	0.53
		22	6	0.85	0.74	2	0.80	0.72
		23	6	0.77	0.80	2	0.68	0.78
		24	3	0.39	0.60	1	0.33	0.56
		25	6	0.58	0.77	2	0.49	0.74
		26	6	0.57	0.68	2	0.40	0.61
		27	6	0.47	0.56	2	0.34	0.54
		28	6	0.28	0.51	2	0.22	0.48
		29	6	0.50	0.57	2	0.37	0.57
		30	3	0.57	0.45	1	0.54	0.47
		31	6	0.79	0.59	2	0.74	0.58
		32	3	0.70	0.75	1	0.68	0.74
		33	3	0.62	0.60	1	0.61	0.61
		34	3	0.63	0.74	1	0.61	0.74
		35	3	0.53	0.60	1	0.51	0.62

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	5	36	3	0.65	0.48	1	0.63	0.46
		37	3	0.81	0.71	1	0.79	0.70
		38	3	0.65	0.70	1	0.61	0.69
		39	3	0.37	0.36	1	0.34	0.39
		40	3	0.43	0.64	1	0.40	0.64

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	6	0.67	0.72	2	0.52	0.70
		2	6	0.73	0.70	2	0.63	0.72
		3	6	0.79	0.77	2	0.72	0.79
		4	6	0.58	0.70	2	0.46	0.67
		5	3	0.57	0.60	1	0.54	0.62
		6	6	0.68	0.75	2	0.59	0.75
		7	3	0.51	0.55	1	0.45	0.58
		8	3	0.80	0.61	1	0.77	0.64
		9	3	0.64	0.64	1	0.61	0.67
		10	3	0.48	0.52	1	0.46	0.57
		11	3	0.46	0.50	1	0.40	0.51
		12	6	0.60	0.67	2	0.42	0.63
		13	3	0.45	0.43	1	0.42	0.46
		14	3	0.62	0.59	1	0.57	0.61
		15	6	0.65	0.68	2	0.55	0.70
		16	3	0.55	0.60	1	0.51	0.63
MA	6	17	3	0.33	0.56	1	0.28	0.55
		18	3	0.49	0.42	1	0.46	0.44
		19	6	0.76	0.71	2	0.66	0.70
		20	6	0.44	0.71	2	0.34	0.65
		21	3	0.85	0.62	1	0.83	0.60
		22	3	0.31	0.19	1	0.29	0.21
		23	3	0.57	0.42	1	0.55	0.46
		24	3	0.80	0.63	1	0.78	0.64
		25	3	0.75	0.72	1	0.73	0.72
		26	3	0.32	0.18	1	0.30	0.22
		27	3	0.68	0.60	1	0.65	0.62
		28	3	0.54	0.50	1	0.51	0.52
		29	6	0.64	0.75	2	0.51	0.74
		30	6	0.33	0.56	2	0.24	0.53
		31	6	0.59	0.69	2	0.49	0.65
		32	3	0.79	0.70	1	0.77	0.70
		33	3	0.57	0.67	1	0.53	0.70
		34	3	0.30	0.56	1	0.25	0.56

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	7	1	6	0.65	0.68	2	0.46	0.61
		2	6	0.76	0.68	2	0.67	0.72
		3	6	0.82	0.74	2	0.76	0.78
		4	6	0.66	0.73	2	0.53	0.69
		5	3	0.50	0.55	1	0.44	0.56
		6	6	0.72	0.75	2	0.64	0.74
		7	3	0.49	0.56	1	0.47	0.58
		8	3	0.36	0.34	1	0.33	0.40
		9	3	0.57	0.53	1	0.54	0.56
		10	3	0.51	0.54	1	0.49	0.56
		11	3	0.30	0.27	1	0.26	0.28
		12	3	0.41	0.50	1	0.38	0.53
		13	3	0.58	0.63	1	0.56	0.66
		14	3	0.30	0.30	1	0.28	0.32
		15	3	0.54	0.52	1	0.51	0.54
		16	6	0.51	0.72	2	0.44	0.73
		17	6	0.79	0.69	2	0.70	0.68
		18	3	0.75	0.71	1	0.71	0.71
		19	3	0.42	0.55	1	0.38	0.55
		20	6	0.52	0.65	2	0.37	0.57
		21	3	0.59	0.48	1	0.58	0.50
		22	3	0.78	0.61	1	0.76	0.61
		23	3	0.69	0.64	1	0.66	0.65
		24	3	0.35	0.33	1	0.33	0.36
		25	3	0.62	0.59	1	0.59	0.61
		26	6	0.61	0.66	2	0.46	0.62
		27	6	0.66	0.69	2	0.53	0.67
		28	3	0.59	0.55	1	0.56	0.55
		29	6	0.44	0.68	2	0.37	0.66
		30	3	0.14	0.39	1	0.09	0.33
		31	3	0.53	0.62	1	0.50	0.62
		32	3	0.44	0.48	1	0.41	0.50
		33	3	0.49	0.51	1	0.47	0.52

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	6	0.65	0.69	2	0.46	0.65
		2	6	0.75	0.72	2	0.64	0.72
		3	6	0.62	0.70	2	0.49	0.65
		4	6	0.49	0.67	2	0.43	0.65
		5	3	0.46	0.32	1	0.42	0.33
		6	6	0.73	0.71	2	0.60	0.73
		7	6	0.62	0.71	2	0.50	0.65
		8	3	0.64	0.52	1	0.62	0.49
		9	3	0.40	0.34	1	0.37	0.34
		10	3	0.53	0.57	1	0.50	0.58
		11	3	0.39	0.37	1	0.38	0.38
		12	3	0.52	0.31	1	0.47	0.32
		13	3	0.32	0.35	1	0.30	0.36
		14	3	0.35	0.34	1	0.33	0.37
		15	3	0.50	0.73	1	0.46	0.72
		16	3	0.55	0.69	1	0.48	0.68
		17	3	0.66	0.54	1	0.57	0.49
MA	8	18	6	0.59	0.81	2	0.52	0.79
		19	3	0.51	0.65	1	0.46	0.66
		20	3	0.66	0.79	1	0.61	0.77
		21	6	0.73	0.75	2	0.63	0.71
		22	3	0.82	0.59	1	0.80	0.56
		23	3	0.84	0.56	1	0.82	0.52
		24	3	0.57	0.59	1	0.55	0.58
		25	3	0.47	0.68	1	0.43	0.67
		26	3	0.79	0.60	1	0.76	0.60
		27	3	0.55	0.58	1	0.53	0.57
		28	3	0.58	0.53	1	0.51	0.54
		29	6	0.61	0.68	2	0.44	0.62
		30	6	0.64	0.65	2	0.46	0.53
		31	6	0.46	0.71	2	0.37	0.69
		32	3	0.21	0.46	1	0.15	0.39
		33	3	0.23	0.03	1	0.21	0.01
		34	3	0.38	0.34	1	0.36	0.33
		35	3	0.68	0.65	1	0.65	0.63

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	8	36	3	0.60	0.66	1	0.57	0.65
		37	3	0.33	0.28	1	0.31	0.28
		38	3	0.48	0.52	1	0.46	0.53

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	6	0.65	0.71	2	0.53	0.72
		2	6	0.72	0.69	2	0.61	0.73
		3	6	0.60	0.68	2	0.50	0.68
		4	3	0.46	0.40	1	0.42	0.44
		5	6	0.74	0.74	2	0.62	0.80
		6	6	0.46	0.61	2	0.32	0.56
		7	3	0.64	0.60	1	0.62	0.60
		8	3	0.54	0.57	1	0.52	0.59
		9	3	0.46	0.52	1	0.44	0.51
		10	3	0.48	0.33	1	0.44	0.33
		11	3	0.35	0.38	1	0.34	0.40
		12	3	0.31	0.39	1	0.29	0.40
		13	6	0.53	0.77	2	0.41	0.73
		14	3	0.33	0.62	1	0.30	0.61
		15	6	0.57	0.80	2	0.48	0.80
		16	3	0.49	0.47	1	0.43	0.42
		17	3	0.34	0.56	1	0.28	0.56
MA	9	18	3	0.20	0.19	1	0.17	0.19
		19	3	0.33	0.59	1	0.29	0.58
		20	3	0.76	0.54	1	0.72	0.53
		21	3	0.28	0.22	1	0.26	0.21
		22	3	0.41	0.41	1	0.37	0.39
		23	3	0.64	0.61	1	0.62	0.59
		24	3	0.67	0.53	1	0.64	0.54
		25	6	0.54	0.59	2	0.43	0.59
		26	3	0.67	0.63	1	0.64	0.60
		27	3	0.51	0.66	1	0.46	0.64
		28	6	0.60	0.69	2	0.47	0.66
		29	6	0.43	0.72	2	0.35	0.67
		30	3	0.24	0.56	1	0.18	0.50
		31	3	0.25	0.29	1	0.22	0.26
		32	3	0.23	0.29	1	0.20	0.30
		33	3	0.37	0.40	1	0.34	0.41
		34	3	0.48	0.58	1	0.46	0.58
		35	3	0.24	0.18	1	0.22	0.18

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
			3	0.40	0.40	1	0.38	0.40
MA	9		3	0.55	0.56	1	0.52	0.55
			3	0.36	0.42	1	0.32	0.43

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
		1	6	0.66	0.72	2	0.54	0.72
		2	6	0.70	0.72	2	0.60	0.73
		3	6	0.58	0.71	2	0.49	0.69
		4	6	0.55	0.66	2	0.44	0.63
		5	3	0.29	0.46	1	0.24	0.46
		6	6	0.74	0.68	2	0.62	0.71
		7	3	0.69	0.62	1	0.67	0.60
		8	3	0.47	0.52	1	0.45	0.55
		9	3	0.42	0.40	1	0.40	0.42
		10	3	0.29	0.31	1	0.27	0.33
		11	3	0.21	0.13	1	0.19	0.14
		12	3	0.25	0.30	1	0.24	0.30
		13	3	0.34	0.28	1	0.31	0.27
		14	3	0.28	0.35	1	0.25	0.34
		15	6	0.70	0.75	2	0.58	0.69
		16	3	0.69	0.69	1	0.62	0.65
		17	3	0.68	0.64	1	0.66	0.65
MA	10	18	3	0.23	0.42	1	0.19	0.40
		19	6	0.45	0.71	2	0.36	0.71
		20	3	0.37	0.41	1	0.31	0.39
		21	3	0.27	0.49	1	0.24	0.49
		22	3	0.37	0.30	1	0.35	0.33
		23	3	0.61	0.59	1	0.60	0.59
		24	6	0.82	0.74	2	0.77	0.70
		25	3	0.25	0.42	1	0.22	0.39
		26	3	0.58	0.64	1	0.55	0.66
		27	3	0.63	0.61	1	0.61	0.61
		28	6	0.55	0.62	2	0.42	0.63
		29	6	0.53	0.64	2	0.36	0.59
		30	6	0.41	0.74	2	0.30	0.70
		31	3	0.09	0.33	1	0.07	0.35
		32	3	0.29	0.24	1	0.26	0.20
		33	3	0.18	0.10	1	0.16	0.12
		34	3	0.17	0.26	1	0.15	0.25
		35	3	0.34	0.52	1	0.32	0.54

Table 35
Mathematics Item Level Statistics With and Without Level of Independence
(continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	10	36	6	0.39	0.56	2	0.27	0.53
		37	3	0.49	0.51	1	0.46	0.53
		38	3	0.51	0.56	1	0.49	0.58
		39	3	0.53	0.58	1	0.50	0.58
		40	3	0.30	0.37	1	0.27	0.38

Table 36
Science Item Level Statistics With and Without Level of Independence

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
SC	5	1	3	0.88	0.63	1	0.86	0.62
		2	3	0.85	0.70	1	0.82	0.69
		3	3	0.73	0.60	1	0.70	0.62
		4	3	0.86	0.67	1	0.84	0.68
		5	3	0.75	0.69	1	0.72	0.71
		6	3	0.47	0.46	1	0.44	0.48
		7	3	0.78	0.67	1	0.76	0.68
		8	3	0.43	0.35	1	0.41	0.35
		9	3	0.66	0.51	1	0.64	0.53
		10	3	0.52	0.58	1	0.49	0.59
		11	3	0.43	0.47	1	0.41	0.46
		12	6	0.85	0.74	2	0.76	0.77
		13	3	0.74	0.53	1	0.72	0.54
		14	3	0.40	0.39	1	0.38	0.40
		15	3	0.70	0.67	1	0.68	0.69
		16	3	0.50	0.61	1	0.48	0.62
		17	3	0.71	0.70	1	0.68	0.70
		18	3	0.70	0.68	1	0.67	0.68
		19	6	0.81	0.76	2	0.71	0.81
		20	3	0.87	0.65	1	0.85	0.65
		21	3	0.82	0.72	1	0.79	0.74
		22	3	0.59	0.55	1	0.56	0.55
		23	3	0.62	0.64	1	0.59	0.64
		24	3	0.49	0.55	1	0.47	0.55
		25	3	0.76	0.63	1	0.73	0.65
		26	3	0.66	0.63	1	0.63	0.62
		27	3	0.62	0.66	1	0.60	0.66
		28	3	0.67	0.52	1	0.64	0.52
		29	3	0.69	0.63	1	0.67	0.64
		30	3	0.67	0.64	1	0.65	0.66

Table 36
Science Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
SC	8	1	3	0.88	0.65	1	0.86	0.64
		2	3	0.73	0.67	1	0.70	0.69
		3	3	0.28	0.11	1	0.26	0.11
		4	3	0.80	0.74	1	0.78	0.74
		5	3	0.83	0.71	1	0.81	0.69
		6	3	0.79	0.62	1	0.77	0.63
		7	3	0.71	0.57	1	0.68	0.59
		8	3	0.49	0.54	1	0.47	0.54
		9	3	0.52	0.44	1	0.50	0.48
		10	3	0.67	0.68	1	0.61	0.63
		11	3	0.57	0.53	1	0.55	0.56
		12	3	0.61	0.54	1	0.59	0.54
		13	3	0.72	0.54	1	0.68	0.56
		14	3	0.73	0.56	1	0.72	0.58
		15	3	0.60	0.53	1	0.57	0.54
		16	3	0.81	0.71	1	0.78	0.71
		17	3	0.72	0.68	1	0.70	0.69
		18	3	0.73	0.56	1	0.70	0.57
		19	3	0.76	0.68	1	0.73	0.70
		20	3	0.85	0.69	1	0.84	0.66
		21	6	0.82	0.75	2	0.69	0.76
		22	3	0.66	0.54	1	0.63	0.56
		23	6	0.84	0.76	2	0.75	0.74
		24	3	0.64	0.59	1	0.59	0.60
		25	3	0.67	0.69	1	0.65	0.68
		26	3	0.76	0.72	1	0.74	0.73
		27	3	0.87	0.71	1	0.86	0.69
		28	3	0.84	0.69	1	0.83	0.67
		29	6	0.76	0.55	2	0.63	0.59
		30	3	0.66	0.67	1	0.62	0.68

Table 36
Science Item Level Statistics With and Without Level of Independence (continued)

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
SC	10	1	3	0.41	0.28	1	0.39	0.29
		2	3	0.76	0.67	1	0.74	0.70
		3	3	0.67	0.61	1	0.64	0.64
		4	3	0.66	0.50	1	0.64	0.51
		5	3	0.83	0.63	1	0.81	0.63
		6	3	0.79	0.68	1	0.77	0.70
		7	3	0.83	0.63	1	0.82	0.64
		8	3	0.74	0.52	1	0.71	0.52
		9	3	0.26	0.38	1	0.24	0.37
		10	6	0.58	0.73	2	0.52	0.73
		11	3	0.61	0.65	1	0.58	0.66
		12	3	0.42	0.46	1	0.39	0.47
		13	3	0.37	0.44	1	0.34	0.44
		14	3	0.35	0.40	1	0.32	0.40
		15	3	0.77	0.56	1	0.74	0.58
		16	3	0.27	0.31	1	0.24	0.30
		17	3	0.66	0.61	1	0.63	0.61
		18	3	0.72	0.69	1	0.69	0.70
		19	3	0.65	0.68	1	0.63	0.69
		20	3	0.40	0.50	1	0.37	0.49
		21	6	0.71	0.66	2	0.60	0.69
		22	3	0.63	0.56	1	0.60	0.56
		23	3	0.39	0.55	1	0.37	0.55
		24	3	0.66	0.59	1	0.64	0.60
		25	3	0.58	0.60	1	0.56	0.61
		26	3	0.55	0.57	1	0.52	0.57
		27	6	0.58	0.79	2	0.55	0.78
		28	6	0.47	0.74	2	0.42	0.73
		29	3	0.79	0.67	1	0.77	0.69
		30	3	0.76	0.65	1	0.74	0.67

Table 37
Summary of *P*-values and Point-Biserial by Grade and Content Area Including Level of Independence

Content	Grade	<i>P</i> -value			Point-Biserial		
		High	Mean	Low	High	Mean	Low
RD	3	0.85	0.54	0.24	0.72	0.53	0.24
	4	0.83	0.53	0.23	0.71	0.55	0.30
	5	0.89	0.59	0.26	0.74	0.56	0.19
	6	0.87	0.62	0.23	0.69	0.57	0.22
	7	0.87	0.55	0.23	0.68	0.51	0.19
	8	0.87	0.54	0.32	0.67	0.51	0.27
	9	0.84	0.54	0.27	0.74	0.56	0.33
	10	0.74	0.50	0.27	0.70	0.51	0.33
WR	3	0.80	0.50	0.26	0.82	0.56	0.24
	4	0.79	0.49	0.20	0.84	0.55	0.15
	5	0.83	0.58	0.25	0.84	0.57	0.21
	6	0.83	0.59	0.36	0.85	0.59	0.20
	7	0.86	0.58	0.23	0.85	0.58	0.17
	8	0.84	0.56	0.27	0.87	0.56	0.18
	9	0.81	0.55	0.29	0.86	0.58	0.22
	10	0.81	0.53	0.18	0.85	0.54	0.17
MA	3	0.85	0.62	0.35	0.82	0.64	0.35
	4	0.86	0.60	0.10	0.79	0.64	0.26
	5	0.85	0.59	0.28	0.80	0.63	0.36
	6	0.85	0.58	0.30	0.77	0.59	0.18
	7	0.82	0.55	0.14	0.75	0.57	0.27
	8	0.84	0.55	0.21	0.81	0.56	0.03
	9	0.76	0.47	0.20	0.80	0.52	0.18
	10	0.82	0.45	0.09	0.75	0.51	0.10
SC	5	0.88	0.67	0.40	0.76	0.61	0.35
	8	0.88	0.71	0.28	0.76	0.61	0.11
	10	0.83	0.60	0.26	0.79	0.58	0.28

Table 38
Summary of *P*-values and Point-Biserial by Grade and Content Area Without Including Level of Independence

Content	Grade	<i>P</i> -value			Point-Biserial		
		High	Mean	Low	High	Mean	Low
RD	3	0.84	0.52	0.22	0.72	0.54	0.25
	4	0.81	0.50	0.21	0.72	0.56	0.27
	5	0.87	0.57	0.24	0.73	0.57	0.23
	6	0.85	0.60	0.22	0.71	0.59	0.25
	7	0.86	0.53	0.21	0.70	0.52	0.22
	8	0.86	0.52	0.29	0.68	0.52	0.27
	9	0.82	0.51	0.25	0.74	0.57	0.33
	10	0.72	0.48	0.25	0.70	0.51	0.34
WR	3	0.78	0.46	0.23	0.79	0.56	0.24
	4	0.75	0.46	0.18	0.83	0.56	0.17
	5	0.80	0.55	0.23	0.81	0.57	0.23
	6	0.81	0.55	0.33	0.85	0.60	0.23
	7	0.83	0.55	0.21	0.82	0.59	0.18
	8	0.82	0.53	0.25	0.82	0.56	0.17
	9	0.78	0.52	0.28	0.86	0.58	0.23
	10	0.78	0.50	0.16	0.85	0.54	0.18
MA	3	0.82	0.55	0.27	0.80	0.63	0.33
	4	0.84	0.55	0.07	0.79	0.64	0.26
	5	0.80	0.54	0.22	0.78	0.62	0.36
	6	0.83	0.52	0.24	0.79	0.60	0.21
	7	0.76	0.49	0.09	0.78	0.58	0.28
	8	0.82	0.49	0.15	0.79	0.55	0.01
	9	0.72	0.42	0.17	0.80	0.52	0.18
	10	0.77	0.39	0.07	0.73	0.50	0.12
SC	5	0.86	0.65	0.38	0.81	0.62	0.35
	8	0.86	0.68	0.26	0.76	0.62	0.11
	10	0.82	0.57	0.24	0.78	0.58	0.29

Table 39
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	3	1.2	Demonstrate understanding of symbolic representation	0.85	0.71	0.42	0.17	0.69	0.65	0.59	0.04
		1.4	Use a variety of strategies to make meaning of text	0.75	0.69	0.62	0.06	0.72	0.64	0.55	0.06
		3.2	Understand informational text	0.68	0.60	0.41	0.12	0.63	0.48	0.27	0.13
		1.3	Demonstrate understanding of beginning principles of phonics	0.77	0.57	0.25	0.25	0.68	0.53	0.25	0.20
		2.1	Make connections to reading passages	0.59	0.47	0.25	0.13	0.65	0.49	0.24	0.15
		3.1	Demonstrate knowledge that various texts have different purposes	0.55	0.39	0.24	0.14	0.62	0.47	0.24	0.16
		2.2	Identify elements of literature (character, plot, setting)	0.48	0.38	0.33	0.06	0.62	0.46	0.31	0.11
	4	1.2	Demonstrate understanding of symbolic representation	0.83	0.71	0.57	0.10	0.71	0.63	0.57	0.06
		1.3	Demonstrate understanding of beginning principles of phonics	0.81	0.69	0.31	0.21	0.70	0.61	0.37	0.13
		1.4	Use a variety of strategies to make meaning of text	0.70	0.53	0.23	0.20	0.67	0.56	0.32	0.14
		2.1	Make connections to reading passages	0.57	0.50	0.42	0.07	0.62	0.55	0.44	0.07
		3.2	Understand informational text	0.62	0.46	0.26	0.14	0.61	0.51	0.38	0.11
		3.1	Demonstrate knowledge that various texts have different purposes	0.55	0.44	0.34	0.09	0.61	0.51	0.30	0.13
		2.2	Identify elements of literature (character, plot, setting)	0.52	0.39	0.28	0.09	0.59	0.50	0.43	0.06

Table 39
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	5	1.2	Demonstrate understanding of symbolic representation	0.89	0.74	0.57	0.14	0.64	0.62	0.59	0.02
		1.4	Use a variety of strategies to make meaning of text	0.78	0.64	0.46	0.15	0.72	0.61	0.47	0.11
		2.1	Make connections to reading passages	0.79	0.58	0.39	0.17	0.70	0.59	0.47	0.10
		3.2	Understand informational text	0.71	0.57	0.51	0.08	0.64	0.52	0.35	0.13
		1.3	Demonstrate understanding of beginning principles of phonics	0.86	0.56	0.26	0.24	0.65	0.51	0.19	0.19
		2.2	Identify elements of literature (character, plot, setting)	0.64	0.53	0.44	0.10	0.69	0.56	0.46	0.09
		3.1	Demonstrate knowledge that various texts have different purposes	0.71	0.51	0.40	0.12	0.74	0.51	0.24	0.20
	6	1.3	Demonstrate understanding of beginning principles of phonics	0.87	0.74	0.43	0.18	0.69	0.60	0.41	0.13
		1.2	Demonstrate understanding of symbolic representation	0.77	0.70	0.60	0.07	0.66	0.62	0.56	0.04
		1.4	Use a variety of strategies to make meaning of text	0.82	0.69	0.51	0.16	0.69	0.61	0.55	0.06
		2.1	Make connections to reading passages	0.74	0.63	0.52	0.09	0.69	0.63	0.56	0.06
		3.2	Understand informational text	0.79	0.56	0.38	0.20	0.61	0.47	0.22	0.15
		2.2	Identify elements of literature (character, plot, setting)	0.70	0.52	0.42	0.11	0.67	0.56	0.48	0.08
		3.1	Demonstrate knowledge that various texts have different purposes	0.83	0.48	0.23	0.28	0.64	0.49	0.29	0.15

Table 39
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	7	1.3	Demonstrate understanding of beginning principles of phonics	0.87	0.75	0.47	0.17	0.67	0.60	0.42	0.10
		1.2	Demonstrate understanding of symbolic representation	0.85	0.73	0.64	0.10	0.68	0.64	0.59	0.03
		1.4	Use a variety of strategies to make meaning of text	0.84	0.63	0.37	0.20	0.68	0.58	0.47	0.09
		3.2	Understand informational text	0.65	0.49	0.36	0.11	0.61	0.47	0.35	0.11
		2.1	Make connections to reading passages	0.74	0.47	0.23	0.21	0.67	0.48	0.28	0.17
		2.2	Identify elements of literature (character, plot, setting)	0.57	0.45	0.30	0.10	0.65	0.49	0.25	0.16
		3.1	Demonstrate knowledge that various texts have different purposes	0.62	0.37	0.25	0.16	0.39	0.29	0.19	0.09
	8	1.3	Demonstrate understanding of beginning principles of phonics	0.87	0.71	0.53	0.16	0.64	0.56	0.47	0.07
		1.2	Demonstrate understanding of symbolic representation	0.77	0.66	0.43	0.14	0.67	0.60	0.52	0.06
		1.4	Use a variety of strategies to make meaning of text	0.77	0.52	0.32	0.21	0.67	0.53	0.37	0.14
		3.1	Demonstrate knowledge that various texts have different purposes	0.69	0.50	0.38	0.11	0.63	0.49	0.27	0.13
		3.2	Understand informational text	0.58	0.49	0.33	0.12	0.60	0.50	0.31	0.13
		2.1	Make connections to reading passages	0.55	0.48	0.33	0.09	0.55	0.45	0.32	0.08
		2.2	Identify elements of literature (character, plot, setting)	0.56	0.43	0.32	0.09	0.55	0.47	0.36	0.07

Table 39
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	9	1.3	Demonstrate understanding of beginning principles of phonics	0.69	0.56	0.37	0.13	0.61	0.49	0.40	0.08
		1.2	Demonstrate understanding of symbolic representation	0.74	0.54	0.31	0.18	0.64	0.52	0.37	0.12
		2.2	Identify elements of literature (character, plot, setting)	0.73	0.51	0.27	0.20	0.65	0.55	0.33	0.15
		3.2	Understand informational text	0.61	0.51	0.44	0.07	0.60	0.52	0.44	0.06
		1.4	Use a variety of strategies to make meaning of text	0.70	0.50	0.37	0.14	0.62	0.49	0.35	0.15
		2.1	Make connections to reading passages	0.59	0.48	0.37	0.09	0.70	0.56	0.46	0.09
		3.1	Demonstrate knowledge that various texts have different purposes	0.54	0.40	0.27	0.11	0.52	0.42	0.37	0.06
	10	1.3	Demonstrate understanding of beginning principles of phonics	0.69	0.56	0.37	0.13	0.61	0.49	0.40	0.08
		1.2	Demonstrate understanding of symbolic representation	0.74	0.54	0.31	0.18	0.64	0.52	0.37	0.12
		2.2	Identify elements of literature (character, plot, setting)	0.73	0.51	0.27	0.20	0.65	0.55	0.33	0.15
		3.2	Understand informational text	0.61	0.51	0.44	0.07	0.60	0.52	0.44	0.06
		1.4	Use a variety of strategies to make meaning of text	0.70	0.50	0.37	0.14	0.62	0.49	0.35	0.15
		2.1	Make connections to reading passages	0.59	0.48	0.37	0.09	0.70	0.56	0.46	0.09
		3.1	Demonstrate knowledge that various texts have different purposes	0.54	0.40	0.27	0.11	0.52	0.42	0.37	0.06

Table 40
Writing Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value)

Content	Expanded Grade Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial				
			High	Mean	Low	SD	High	Mean	Low	SD	
WR	3	1.2	Organize writing to create a draft document	0.80	0.61	0.48	0.15	0.81	0.65	0.59	0.09
		1.1	Demonstrate an understanding that writing communicates a message	0.76	0.60	0.27	0.20	0.77	0.62	0.29	0.19
		2.1	Use systematic conventions to make written product understandable by others	0.71	0.55	0.42	0.12	0.78	0.60	0.43	0.13
		2.3	Edit a written product using legible handwriting/word processor for publication	0.66	0.41	0.29	0.13	0.80	0.46	0.27	0.19
		2.2	Apply elements of writing through appropriate word usage	0.48	0.37	0.26	0.09	0.82	0.50	0.24	0.26
	4	2.1	Use systematic conventions to make written product understandable by others	0.74	0.57	0.25	0.19	0.74	0.61	0.41	0.14
		1.1	Demonstrate an understanding that writing communicates a message	0.79	0.55	0.33	0.19	0.71	0.57	0.37	0.13
		1.2	Organize writing to create a draft document	0.66	0.51	0.29	0.14	0.84	0.58	0.21	0.23
		2.3	Edit a written product using legible handwriting/word processor for publication	0.70	0.47	0.34	0.12	0.76	0.52	0.34	0.14
		2.2	Apply elements of writing through appropriate word usage	0.50	0.39	0.20	0.12	0.83	0.50	0.15	0.26
	5	1.1	Demonstrate an understanding that writing communicates a message	0.83	0.72	0.47	0.14	0.75	0.66	0.47	0.11
		2.1	Use systematic conventions to make written product understandable by others	0.80	0.65	0.33	0.17	0.78	0.60	0.33	0.15
		1.2	Organize writing to create a draft document	0.78	0.60	0.34	0.18	0.84	0.58	0.35	0.17
		2.3	Edit a written product using legible handwriting/word processor for publication	0.75	0.51	0.25	0.15	0.83	0.50	0.27	0.18
		2.2	Apply elements of writing through appropriate word usage	0.57	0.48	0.28	0.12	0.84	0.57	0.21	0.24

Table 40
Writing Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
WR	6	1.1	Demonstrate an understanding that writing communicates a message	0.83	0.74	0.69	0.06	0.73	0.67	0.59	0.06
		2.1	Use systematic conventions to make written product understandable by others	0.78	0.67	0.52	0.11	0.79	0.63	0.45	0.14
		1.2	Organize writing to create a draft document	0.73	0.64	0.50	0.09	0.85	0.66	0.41	0.16
		2.3	Edit a written product using legible handwriting/word processor for publication	0.75	0.48	0.36	0.13	0.80	0.47	0.26	0.16
		2.2	Apply elements of writing through appropriate word usage	0.58	0.48	0.36	0.09	0.85	0.55	0.20	0.26
	7	1.1	Demonstrate an understanding that writing communicates a message	0.86	0.73	0.50	0.12	0.81	0.70	0.64	0.07
		1.2	Organize writing to create a draft document	0.70	0.63	0.56	0.06	0.84	0.68	0.56	0.10
		2.1	Use systematic conventions to make written product understandable by others	0.82	0.61	0.32	0.21	0.78	0.58	0.35	0.17
		2.2	Apply elements of writing through appropriate word usage	0.67	0.49	0.31	0.14	0.85	0.53	0.25	0.25
		2.3	Edit a written product using legible handwriting/word processor for publication	0.65	0.49	0.23	0.15	0.57	0.45	0.17	0.15
8	1.1	Demonstrate an understanding that writing communicates a message	0.84	0.76	0.72	0.04	0.82	0.73	0.68	0.05	
	1.2	Organize writing to create a draft document	0.75	0.66	0.61	0.06	0.83	0.71	0.65	0.07	
	2.1	Use systematic conventions to make written product understandable by others	0.83	0.50	0.27	0.23	0.76	0.44	0.20	0.23	
	2.3	Edit a written product using legible handwriting/word processor for publication	0.62	0.49	0.30	0.12	0.64	0.47	0.22	0.15	
	2.2	Apply elements of writing through appropriate word usage	0.65	0.43	0.30	0.15	0.87	0.47	0.18	0.27	

Table 40
Writing Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
WR	9	1.1	Demonstrate an understanding that writing communicates a message	0.81	0.75	0.70	0.04	0.82	0.72	0.62	0.07
		2.1	Use systematic conventions to make written product understandable by others	0.81	0.58	0.38	0.18	0.76	0.60	0.41	0.14
		1.2	Organize writing to create a draft document	0.67	0.51	0.36	0.12	0.86	0.58	0.41	0.17
		2.2	Apply elements of writing through appropriate word usage	0.61	0.48	0.35	0.11	0.86	0.59	0.22	0.24
		2.3	Edit a written product using legible handwriting/word processor for publication	0.57	0.41	0.29	0.11	0.58	0.43	0.27	0.12
	10	1.1	Demonstrate an understanding that writing communicates a message	0.81	0.71	0.53	0.10	0.83	0.73	0.60	0.08
		1.2	Organize writing to create a draft document	0.67	0.57	0.47	0.09	0.85	0.61	0.50	0.14
		2.2	Apply elements of writing through appropriate word usage	0.64	0.49	0.27	0.13	0.85	0.52	0.18	0.25
		2.3	Edit a written product using legible handwriting/word processor for publication	0.62	0.46	0.18	0.15	0.60	0.45	0.17	0.16
		2.1	Use systematic conventions to make written product understandable by others	0.77	0.43	0.24	0.20	0.74	0.44	0.27	0.18

Table 41
Mathematics Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
MA	3	4	Identifies, sorts, and matches geometric shapes	0.85	0.70	0.35	0.18	0.71	0.61	0.35	0.14
		1	Counts, represents quantities, reads and writes numbers	0.85	0.69	0.46	0.13	0.79	0.69	0.51	0.09
		2	Identifies, describes, and creates patterns to solve problems	0.68	0.58	0.48	0.09	0.70	0.63	0.55	0.07
		3	Displays and analyzes data	0.66	0.56	0.38	0.12	0.82	0.69	0.50	0.15
		6	Uses calculation strategies to compute problems	0.66	0.55	0.41	0.11	0.75	0.63	0.45	0.13
		5	Applies a variety of measurement skills	0.65	0.53	0.46	0.07	0.71	0.57	0.40	0.12
	4	1	Counts, represents quantities, reads and writes numbers	0.86	0.70	0.52	0.12	0.79	0.68	0.56	0.08
		4	Identifies, sorts, and matches geometric shapes	0.84	0.67	0.49	0.12	0.73	0.63	0.50	0.08
		2	Identifies, describes, and creates patterns to solve problems	0.67	0.59	0.53	0.07	0.70	0.61	0.47	0.10
		5	Applies a variety of measurement skills	0.68	0.54	0.35	0.14	0.67	0.61	0.56	0.05
		3	Displays and analyzes data	0.72	0.52	0.10	0.25	0.75	0.62	0.26	0.21
		6	Uses calculation strategies to compute problems	0.61	0.51	0.32	0.13	0.73	0.66	0.55	0.08
	5	4	Identifies, sorts, and matches geometric shapes	0.85	0.67	0.50	0.13	0.75	0.61	0.45	0.12
		1	Counts, represents quantities, reads and writes numbers	0.82	0.65	0.40	0.14	0.78	0.67	0.38	0.12
		3	Displays and analyzes data	0.77	0.59	0.39	0.15	0.80	0.69	0.56	0.11
		6	Uses calculation strategies to compute problems	0.81	0.56	0.37	0.20	0.71	0.60	0.36	0.16
		5	Applies a variety of measurement skills	0.65	0.54	0.28	0.13	0.74	0.60	0.48	0.09
		2	Identifies, describes, and creates patterns to solve problems	0.63	0.50	0.35	0.12	0.63	0.55	0.37	0.09

Table 41
Mathematics Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
MA	6	1	Counts, represents quantities, reads and writes numbers	0.80	0.67	0.51	0.11	0.77	0.67	0.55	0.08
		4	Identifies, sorts, and matches geometric shapes	0.85	0.66	0.31	0.22	0.72	0.52	0.19	0.21
		3	Displays and analyzes data	0.76	0.56	0.33	0.15	0.71	0.64	0.56	0.06
		6	Uses calculation strategies to compute problems	0.79	0.54	0.30	0.20	0.70	0.59	0.42	0.13
		2	Identifies, describes, and creates patterns to solve problems	0.64	0.53	0.45	0.09	0.67	0.55	0.43	0.10
		5	Applies a variety of measurement skills	0.68	0.52	0.32	0.16	0.75	0.54	0.18	0.20
	7	1	Counts, represents quantities, reads and writes numbers	0.82	0.66	0.49	0.13	0.75	0.67	0.55	0.08
		4	Identifies, sorts, and matches geometric shapes	0.78	0.60	0.35	0.18	0.64	0.52	0.33	0.14
		3	Displays and analyzes data	0.79	0.60	0.42	0.16	0.72	0.66	0.55	0.07
		5	Applies a variety of measurement skills	0.66	0.51	0.14	0.20	0.69	0.59	0.39	0.12
		2	Identifies, describes, and creates patterns to solve problems	0.58	0.46	0.30	0.12	0.63	0.47	0.27	0.14
		6	Uses calculation strategies to compute problems	0.53	0.46	0.36	0.07	0.62	0.49	0.34	0.11
	8	4	Identifies, sorts, and matches geometric shapes	0.84	0.70	0.47	0.17	0.68	0.60	0.56	0.05
		1	Counts, represents quantities, reads and writes numbers	0.75	0.62	0.46	0.10	0.72	0.63	0.32	0.14
		3	Displays and analyzes data	0.73	0.62	0.51	0.08	0.81	0.71	0.54	0.10
		6	Uses calculation strategies to compute problems	0.68	0.50	0.33	0.14	0.66	0.49	0.28	0.17
		5	Applies a variety of measurement skills	0.64	0.46	0.21	0.17	0.71	0.50	0.03	0.23
		2	Identifies, describes, and creates patterns to solve problems	0.53	0.43	0.32	0.09	0.73	0.45	0.31	0.17

Table 41
Mathematics Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
MA	9	1	Counts, represents quantities, reads and writes numbers	0.74	0.61	0.46	0.11	0.74	0.63	0.40	0.11
		4	Identifies, sorts, and matches geometric shapes	0.76	0.55	0.28	0.20	0.61	0.46	0.22	0.15
		5	Applies a variety of measurement skills	0.67	0.43	0.23	0.17	0.72	0.55	0.29	0.17
		2	Identifies, describes, and creates patterns to solve problems	0.54	0.41	0.31	0.09	0.62	0.47	0.33	0.12
		3	Displays and analyzes data	0.57	0.41	0.20	0.14	0.80	0.57	0.19	0.22
		6	Uses calculation strategies to compute problems	0.55	0.40	0.24	0.11	0.58	0.42	0.18	0.14
	10	1	Counts, represents quantities, reads and writes numbers	0.74	0.57	0.29	0.16	0.72	0.64	0.46	0.09
		3	Displays and analyzes data	0.70	0.52	0.23	0.20	0.75	0.60	0.41	0.15
		4	Identifies, sorts, and matches geometric shapes	0.82	0.46	0.25	0.25	0.74	0.51	0.30	0.17
		5	Applies a variety of measurement skills	0.63	0.41	0.09	0.20	0.74	0.49	0.10	0.23
		6	Uses calculation strategies to compute problems	0.53	0.39	0.17	0.14	0.58	0.47	0.26	0.13
		2	Identifies, describes, and creates patterns to solve problems	0.47	0.32	0.21	0.09	0.52	0.33	0.13	0.12

Table 42
Science Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point-Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
SC	5	5	Interacts with the weather and Earth systems	0.88	0.72	0.43	0.15	0.74	0.62	0.46	0.09
		4	Interacts with living things	0.87	0.67	0.49	0.15	0.76	0.64	0.55	0.07
		1	Makes observations, collects and organizes data	0.71	0.67	0.62	0.03	0.70	0.63	0.52	0.07
		3	Demonstrates an understanding of the fundamental properties of matter and energy	0.85	0.63	0.40	0.18	0.70	0.52	0.35	0.14
		2	Analyzes data and communicates results of scientific investigations	0.52	0.52	0.52	-	0.58	0.58	0.58	-
	8	2	Analyzes data and communicates results of scientific investigations	0.87	0.77	0.67	0.09	0.71	0.67	0.56	0.07
		1	Makes observations, collects and organizes data	0.84	0.76	0.72	0.06	0.76	0.67	0.54	0.09
		4	Interacts with living things	0.84	0.73	0.64	0.09	0.75	0.63	0.54	0.09
		5	Interacts with the weather and Earth systems	0.88	0.69	0.28	0.19	0.74	0.57	0.11	0.20
		3	Demonstrates an understanding of the fundamental properties of matter and energy	0.85	0.65	0.49	0.12	0.69	0.58	0.44	0.09
	10	2	Analyzes data and communicates results of scientific investigations	0.79	0.69	0.58	0.11	0.73	0.69	0.66	0.04
		1	Makes observations, collects and organizes data	0.77	0.67	0.58	0.08	0.65	0.61	0.56	0.04
		5	Interacts with the weather and Earth systems	0.83	0.67	0.41	0.17	0.68	0.56	0.28	0.14
		4	Interacts with living things	0.72	0.55	0.39	0.12	0.79	0.63	0.50	0.10
		3	Demonstrates an understanding of the fundamental properties of matter and energy	0.74	0.40	0.26	0.20	0.52	0.41	0.31	0.07

Table 43
Reading Grade 3 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	2.38%	2.38%
		1	2	18	0.30%	2.68%
		2	1	19	0.15%	2.83%
		3	3	22	0.45%	3.27%
		4	1	23	0.15%	3.42%
		5	0	23	0%	3.42%
		6	3	26	0.45%	3.87%
		7	2	28	0.30%	4.17%
		8	1	29	0.15%	4.32%
		9	3	32	0.45%	4.76%
		10	0	32	0.00%	4.76%
		11	5	37	0.74%	5.51%
		12	5	42	0.74%	6.25%
		13	1	43	0.15%	6.40%
		14	4	47	0.60%	6.99%
		15	5	52	0.74%	7.74%
RD	3	16	1	53	0.15%	7.89%
		17	1	54	0.15%	8.04%
		18	3	57	0.45%	8.48%
		19	0	57	0%	8.48%
		20	7	64	1.04%	9.52%
		21	5	69	0.74%	10.27%
		22	5	74	0.74%	11.01%
		23	3	77	0.45%	11.46%
		24	4	81	0.60%	12.05%
		25	2	83	0.30%	12.35%
		26	5	88	0.74%	13.10%
		27	7	95	1.04%	14.14%
		28	4	99	0.60%	14.73%
		29	7	106	1.04%	15.77%
		30	14	120	2.08%	17.86%
		31	5	125	0.74%	18.60%
		32	4	129	0.60%	19.20%
		33	5	134	0.74%	19.94%

Table 43
Reading Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	137	0.45%	20.39%
		35	6	143	0.89%	21.28%
		36	4	147	0.60%	21.88%
		37	4	151	0.60%	22.47%
		38	5	156	0.74%	23.21%
		39	9	165	1.34%	24.55%
		40	2	167	0.30%	24.85%
		41	4	171	0.60%	25.45%
		42	12	183	1.79%	27.23%
		43	6	189	0.89%	28.13%
		44	6	195	0.89%	29.02%
		45	17	212	2.53%	31.55%
		46	5	217	0.74%	32.29%
		47	3	220	0.45%	32.74%
		48	16	236	2.38%	35.12%
		49	3	239	0.45%	35.57%
RD	3	50	7	246	1.04%	36.61%
		51	17	263	2.53%	39.14%
		52	2	265	0.30%	39.43%
		53	10	275	1.49%	40.92%
		54	19	294	2.83%	43.75%
		55	1	295	0.15%	43.90%
		56	3	298	0.45%	44.35%
		57	24	322	3.57%	47.92%
		58	4	326	0.60%	48.51%
		59	8	334	1.19%	49.70%
		60	15	349	2.23%	51.93%
		61	3	352	0.45%	52.38%
		62	6	358	0.89%	53.27%
		63	17	375	2.53%	55.80%
		64	5	380	0.74%	56.55%
		65	6	386	0.89%	57.44%
		66	18	404	2.68%	60.12%
		67	2	406	0.30%	60.42%

Table 43
Reading Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	411	0.74%	61.16%
		69	23	434	3.42%	64.58%
		70	5	439	0.74%	65.33%
		71	5	444	0.74%	66.07%
		72	29	473	4.32%	70.39%
		73	1	474	0.15%	70.54%
		74	7	481	1.04%	71.58%
		75	19	500	2.83%	74.40%
		76	1	501	0.15%	74.55%
		77	4	505	0.60%	75.15%
		78	25	530	3.72%	78.87%
		79	2	532	0.30%	79.17%
		80	5	537	0.74%	79.91%
		81	15	552	2.23%	82.14%
		82	3	555	0.45%	82.59%
		83	3	558	0.45%	83.04%
RD	3	84	13	571	1.93%	84.97%
		85	5	576	0.74%	85.71%
		86	4	580	0.60%	86.31%
		87	20	600	2.98%	89.29%
		88	2	602	0.30%	89.58%
		89	8	610	1.19%	90.77%
		90	18	628	2.68%	93.45%
		91	3	631	0.45%	93.90%
		92	3	634	0.45%	94.35%
		93	13	647	1.93%	96.28%
		94	2	649	0.30%	96.58%
		95	2	651	0.30%	96.88%
		96	8	659	1.19%	98.07%
		97	2	661	0.30%	98.36%
		98	2	663	0.30%	98.66%
		99	0	663	0%	98.66%
		100	1	664	0.15%	98.81%
		101	3	667	0.45%	99.26%

Table 43
Reading Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	672	0.74%	100%
RD	3	103	0	672	0%	100%
		104	0	672	0%	100%
		105	0	672	0%	100%

Table 44
Reading Grade 4 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	22	22	3.24%	3.24%
		1	0	22	0%	3.24%
		2	2	24	0.29%	3.54%
		3	3	27	0.44%	3.98%
		4	1	28	0.15%	4.13%
		5	1	29	0.15%	4.28%
		6	4	33	0.59%	4.87%
		7	1	34	0.15%	5.01%
		8	1	35	0.15%	5.16%
		9	6	41	0.88%	6.05%
		10	1	42	0.15%	6.19%
		11	1	43	0.15%	6.34%
		12	4	47	0.59%	6.93%
		13	3	50	0.44%	7.37%
		14	4	54	0.59%	7.96%
		15	7	61	1.03%	9.00%
RD	4	16	0	61	0%	9.00%
		17	3	64	0.44%	9.44%
		18	6	70	0.88%	10.32%
		19	2	72	0.29%	10.62%
		20	5	77	0.74%	11.36%
		21	5	82	0.74%	12.09%
		22	2	84	0.29%	12.39%
		23	3	87	0.44%	12.83%
		24	6	93	0.88%	13.72%
		25	2	95	0.29%	14.01%
		26	4	99	0.59%	14.60%
		27	16	115	2.36%	16.96%
		28	4	119	0.59%	17.55%
		29	2	121	0.29%	17.85%
		30	16	137	2.36%	20.21%
		31	4	141	0.59%	20.80%
		32	3	144	0.44%	21.24%
		33	11	155	1.62%	22.86%

Table 44
Reading Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	160	0.74%	23.60%
		35	3	163	0.44%	24.04%
		36	10	173	1.47%	25.52%
		37	3	176	0.44%	25.96%
		38	5	181	0.74%	26.70%
		39	14	195	2.06%	28.76%
		40	6	201	0.88%	29.65%
		41	1	202	0.15%	29.79%
		42	21	223	3.10%	32.89%
		43	4	227	0.59%	33.48%
		44	6	233	0.88%	34.37%
		45	9	242	1.33%	35.69%
		46	2	244	0.29%	35.99%
		47	1	245	0.15%	36.14%
		48	17	262	2.51%	38.64%
		49	3	265	0.44%	39.09%
RD	4	50	5	270	0.74%	39.82%
		51	16	286	2.36%	42.18%
		52	4	290	0.59%	42.77%
		53	2	292	0.29%	43.07%
		54	17	309	2.51%	45.58%
		55	8	317	1.18%	46.76%
		56	8	325	1.18%	47.94%
		57	15	340	2.21%	50.15%
		58	6	346	0.88%	51.03%
		59	9	355	1.33%	52.36%
		60	16	371	2.36%	54.72%
		61	3	374	0.44%	55.16%
		62	6	380	0.88%	56.05%
		63	28	408	4.13%	60.18%
		64	3	411	0.44%	60.62%
		65	5	416	0.74%	61.36%
		66	15	431	2.21%	63.57%
		67	1	432	0.15%	63.72%

Table 44
Reading Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	8	440	1.18%	64.90%
		69	12	452	1.77%	66.67%
		70	1	453	0.15%	66.81%
		71	9	462	1.33%	68.14%
		72	21	483	3.10%	71.24%
		73	1	484	0.15%	71.39%
		74	7	491	1.03%	72.42%
		75	12	503	1.77%	74.19%
		76	2	505	0.29%	74.48%
		77	4	509	0.59%	75.07%
		78	18	527	2.65%	77.73%
		79	3	530	0.44%	78.17%
		80	5	535	0.74%	78.91%
		81	20	555	2.95%	81.86%
		82	2	557	0.29%	82.15%
		83	5	562	0.74%	82.89%
RD	4	84	16	578	2.36%	85.25%
		85	2	580	0.29%	85.55%
		86	0	580	0%	85.55%
		87	21	601	3.10%	88.64%
		88	3	604	0.44%	89.09%
		89	2	606	0.29%	89.38%
		90	12	618	1.77%	91.15%
		91	1	619	0.15%	91.30%
		92	6	625	0.88%	92.18%
		93	8	633	1.18%	93.36%
		94	1	634	0.15%	93.51%
		95	3	637	0.44%	93.95%
		96	19	656	2.80%	96.76%
		97	1	657	0.15%	96.90%
		98	2	659	0.29%	97.20%
		99	4	663	0.59%	97.79%
		100	0	663	0%	97.79%
		101	1	664	0.15%	97.94%

Table 44
Reading Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	8	672	1.18%	99.12%
RD	4	103	1	673	0.15%	99.26%
		104	3	676	0.44%	99.71%
		105	2	678	0.29%	100%

Table 45
Reading Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	10	10	1.49%	1.49%
		1	3	13	0.45%	1.94%
		2	2	15	0.30%	2.24%
		3	3	18	0.45%	2.69%
		4	3	21	0.45%	3.14%
		5	1	22	0.15%	3.29%
		6	2	24	0.30%	3.59%
		7	0	24	0%	3.59%
		8	2	26	0.30%	3.89%
		9	1	27	0.15%	4.04%
		10	3	30	0.45%	4.48%
		11	3	33	0.45%	4.93%
		12	2	35	0.30%	5.23%
		13	1	36	0.15%	5.38%
		14	1	37	0.15%	5.53%
		15	7	44	1.05%	6.58%
		16	0	44	0%	6.58%
RD	5	17	3	47	0.45%	7.03%
		18	2	49	0.30%	7.32%
		19	4	53	0.60%	7.92%
		20	1	54	0.15%	8.07%
		21	4	58	0.60%	8.67%
		22	3	61	0.45%	9.12%
		23	5	66	0.75%	9.87%
		24	5	71	0.75%	10.61%
		25	4	75	0.60%	11.21%
		26	4	79	0.60%	11.81%
		27	3	82	0.45%	12.26%
		28	5	87	0.75%	13.00%
		29	1	88	0.15%	13.15%
		30	8	96	1.20%	14.35%
		31	4	100	0.60%	14.95%
		32	4	104	0.60%	15.55%
		33	6	110	0.90%	16.44%

Table 45
Reading Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	112	0.30%	16.74%
		35	4	116	0.60%	17.34%
		36	14	130	2.09%	19.43%
		37	2	132	0.30%	19.73%
		38	4	136	0.60%	20.33%
		39	15	151	2.24%	22.57%
		40	3	154	0.45%	23.02%
		41	1	155	0.15%	23.17%
		42	13	168	1.94%	25.11%
		43	2	170	0.30%	25.41%
		44	4	174	0.60%	26.01%
		45	14	188	2.09%	28.10%
		46	3	191	0.45%	28.55%
		47	2	193	0.30%	28.85%
		48	15	208	2.24%	31.09%
		49	5	213	0.75%	31.84%
RD	5	50	5	218	0.75%	32.59%
		51	13	231	1.94%	34.53%
		52	3	234	0.45%	34.98%
		53	1	235	0.15%	35.13%
		54	19	254	2.84%	37.97%
		55	4	258	0.60%	38.57%
		56	3	261	0.45%	39.01%
		57	10	271	1.49%	40.51%
		58	1	272	0.15%	40.66%
		59	5	277	0.75%	41.41%
		60	20	297	2.99%	44.39%
		61	1	298	0.15%	44.54%
		62	7	305	1.05%	45.59%
		63	11	316	1.64%	47.23%
		64	5	321	0.75%	47.98%
		65	0	321	0%	47.98%
		66	12	333	1.79%	49.78%
		67	3	336	0.45%	50.22%

Table 45
Reading Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	0	336	0%	50.22%
		69	21	357	3.14%	53.36%
		70	0	357	0%	53.36%
		71	4	361	0.60%	53.96%
		72	30	391	4.48%	58.45%
		73	5	396	0.75%	59.19%
		74	4	400	0.60%	59.79%
		75	21	421	3.14%	62.93%
		76	4	425	0.60%	63.53%
		77	3	428	0.45%	63.98%
		78	15	443	2.24%	66.22%
		79	2	445	0.30%	66.52%
		80	8	453	1.20%	67.71%
		81	25	478	3.74%	71.45%
		82	5	483	0.75%	72.20%
		83	5	488	0.75%	72.94%
RD	5	84	19	507	2.84%	75.78%
		85	4	511	0.60%	76.38%
		86	3	514	0.45%	76.83%
		87	34	548	5.08%	81.91%
		88	4	552	0.60%	82.51%
		89	5	557	0.75%	83.26%
		90	23	580	3.44%	86.70%
		91	0	580	0%	86.70%
		92	4	584	0.60%	87.29%
		93	21	605	3.14%	90.43%
		94	3	608	0.45%	90.88%
		95	2	610	0.30%	91.18%
		96	26	636	3.89%	95.07%
		97	1	637	0.15%	95.22%
		98	2	639	0.30%	95.52%
		99	17	656	2.54%	98.06%
		100	0	656	0%	98.06%
		101	1	657	0.15%	98.21%

Table 45
Reading Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	9	666	1.35%	99.55%
RD	5	103	0	666	0%	99.55%
		104	1	667	0.15%	99.70%
		105	2	669	0.30%	100%

Table 46
Reading Grade 6 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	12	12	1.85%	1.85%
		1	1	13	0.15%	2.01%
		2	1	14	0.15%	2.16%
		3	2	16	0.31%	2.47%
		4	1	17	0.15%	2.63%
		5	2	19	0.31%	2.94%
		6	0	19	0%	2.94%
		7	1	20	0.15%	3.09%
		8	2	22	0.31%	3.40%
		9	4	26	0.62%	4.02%
		10	1	27	0.15%	4.17%
		11	2	29	0.31%	4.48%
		12	1	30	0.15%	4.64%
		13	1	31	0.15%	4.79%
		14	0	31	0%	4.79%
		15	2	33	0.31%	5.10%
RD	6	16	2	35	0.31%	5.41%
		17	1	36	0.15%	5.56%
		18	4	40	0.62%	6.18%
		19	5	45	0.77%	6.96%
		20	0	45	0%	6.96%
		21	2	47	0.31%	7.26%
		22	1	48	0.15%	7.42%
		23	1	49	0.15%	7.57%
		24	7	56	1.08%	8.66%
		25	3	59	0.46%	9.12%
		26	2	61	0.31%	9.43%
		27	4	65	0.62%	10.05%
		28	1	66	0.15%	10.20%
		29	4	70	0.62%	10.82%
		30	8	78	1.24%	12.06%
		31	2	80	0.31%	12.36%
		32	2	82	0.31%	12.67%
		33	9	91	1.39%	14.06%

Table 46
Reading Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	92	0.15%	14.22%
		35	2	94	0.31%	14.53%
		36	14	108	2.16%	16.69%
		37	1	109	0.15%	16.85%
		38	1	110	0.15%	17.00%
		39	6	116	0.93%	17.93%
		40	2	118	0.31%	18.24%
		41	3	121	0.46%	18.70%
		42	5	126	0.77%	19.47%
		43	0	126	0.00%	19.47%
		44	8	134	1.24%	20.71%
		45	16	150	2.47%	23.18%
		46	1	151	0.15%	23.34%
		47	4	155	0.62%	23.96%
		48	14	169	2.16%	26.12%
		49	1	170	0.15%	26.28%
RD	6	50	2	172	0.31%	26.58%
		51	16	188	2.47%	29.06%
		52	3	191	0.46%	29.52%
		53	4	195	0.62%	30.14%
		54	16	211	2.47%	32.61%
		55	3	214	0.46%	33.08%
		56	4	218	0.62%	33.69%
		57	20	238	3.09%	36.79%
		58	2	240	0.31%	37.09%
		59	5	245	0.77%	37.87%
		60	15	260	2.32%	40.19%
		61	1	261	0.15%	40.34%
		62	2	263	0.31%	40.65%
		63	15	278	2.32%	42.97%
		64	2	280	0.31%	43.28%
		65	2	282	0.31%	43.59%
		66	15	297	2.32%	45.90%
		67	3	300	0.46%	46.37%

Table 46
Reading Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	4	304	0.62%	46.99%
		69	23	327	3.55%	50.54%
		70	3	330	0.46%	51.00%
		71	3	333	0.46%	51.47%
		72	19	352	2.94%	54.40%
		73	2	354	0.31%	54.71%
		74	3	357	0.46%	55.18%
		75	18	375	2.78%	57.96%
		76	1	376	0.15%	58.11%
		77	2	378	0.31%	58.42%
		78	28	406	4.33%	62.75%
		79	0	406	0.00%	62.75%
		80	7	413	1.08%	63.83%
		81	29	442	4.48%	68.32%
		82	3	445	0.46%	68.78%
		83	3	448	0.46%	69.24%
RD	6	84	32	480	4.95%	74.19%
		85	4	484	0.62%	74.81%
		86	2	486	0.31%	75.12%
		87	32	518	4.95%	80.06%
		88	4	522	0.62%	80.68%
		89	4	526	0.62%	81.30%
		90	21	547	3.25%	84.54%
		91	1	548	0.15%	84.70%
		92	8	556	1.24%	85.94%
		93	25	581	3.86%	89.80%
		94	1	582	0.15%	89.95%
		95	3	585	0.46%	90.42%
		96	17	602	2.63%	93.04%
		97	3	605	0.46%	93.51%
		98	0	605	0%	93.51%
		99	24	629	3.71%	97.22%
		100	1	630	0.15%	97.37%
		101	0	630	0%	97.37%

Table 46
Reading Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	10	640	1.55%	98.92%
RD	6	103	0	640	0%	98.92%
		104	1	641	0.15%	99.07%
		105	6	647	0.93%	100%

Table 47
Reading Grade 7 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	18	18	2.93%	2.93%
		1	0	18	0%	2.93%
		2	1	19	0.16%	3.09%
		3	3	22	0.49%	3.58%
		4	1	23	0.16%	3.74%
		5	0	23	0%	3.74%
		6	1	24	0.16%	3.90%
		7	4	28	0.65%	4.55%
		8	3	31	0.49%	5.04%
		9	1	32	0.16%	5.20%
		10	0	32	0%	5.20%
		11	3	35	0.49%	5.69%
		12	3	38	0.49%	6.18%
		13	1	39	0.16%	6.34%
		14	1	40	0.16%	6.50%
		15	2	42	0.33%	6.83%
RD	7	16	0	42	0%	6.83%
		17	0	42	0%	6.83%
		18	2	44	0.33%	7.15%
		19	0	44	0%	7.15%
		20	1	45	0.16%	7.32%
		21	3	48	0.49%	7.80%
		22	0	48	0%	7.80%
		23	2	50	0.33%	8.13%
		24	3	53	0.49%	8.62%
		25	0	53	0%	8.62%
		26	4	57	0.65%	9.27%
		27	5	62	0.81%	10.08%
		28	2	64	0.33%	10.41%
		29	0	64	0%	10.41%
		30	4	68	0.65%	11.06%
		31	0	68	0%	11.06%
		32	5	73	0.81%	11.87%
		33	14	87	2.28%	14.15%

Table 47
Reading Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	88	0.16%	14.31%
		35	0	88	0%	14.31%
		36	20	108	3.25%	17.56%
		37	3	111	0.49%	18.05%
		38	8	119	1.30%	19.35%
		39	15	134	2.44%	21.79%
		40	4	138	0.65%	22.44%
		41	6	144	0.98%	23.41%
		42	18	162	2.93%	26.34%
		43	2	164	0.33%	26.67%
		44	3	167	0.49%	27.15%
		45	17	184	2.76%	29.92%
		46	3	187	0.49%	30.41%
		47	7	194	1.14%	31.54%
		48	21	215	3.41%	34.96%
		49	3	218	0.49%	35.45%
RD	7	50	0	218	0%	35.45%
		51	11	229	1.79%	37.24%
		52	3	232	0.49%	37.72%
		53	4	236	0.65%	38.37%
		54	12	248	1.95%	40.33%
		55	2	250	0.33%	40.65%
		56	3	253	0.49%	41.14%
		57	21	274	3.41%	44.55%
		58	1	275	0.16%	44.72%
		59	5	280	0.81%	45.53%
		60	18	298	2.93%	48.46%
		61	1	299	0.16%	48.62%
		62	9	308	1.46%	50.08%
		63	25	333	4.07%	54.15%
		64	4	337	0.65%	54.80%
		65	3	340	0.49%	55.28%
		66	21	361	3.41%	58.70%
		67	2	363	0.33%	59.02%

Table 47
Reading Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	0	363	0%	59.02%
		69	27	390	4.39%	63.41%
		70	1	391	0.16%	63.58%
		71	5	396	0.81%	64.39%
		72	22	418	3.58%	67.97%
		73	4	422	0.65%	68.62%
		74	6	428	0.98%	69.59%
		75	30	458	4.88%	74.47%
		76	1	459	0.16%	74.63%
		77	8	467	1.30%	75.93%
		78	28	495	4.55%	80.49%
		79	2	497	0.33%	80.81%
		80	6	503	0.98%	81.79%
		81	21	524	3.41%	85.20%
		82	2	526	0.33%	85.53%
		83	2	528	0.33%	85.85%
RD	7	84	21	549	3.41%	89.27%
		85	0	549	0%	89.27%
		86	6	555	0.98%	90.24%
		87	20	575	3.25%	93.50%
		88	5	580	0.81%	94.31%
		89	4	584	0.65%	94.96%
		90	9	593	1.46%	96.42%
		91	1	594	0.16%	96.59%
		92	4	598	0.65%	97.24%
		93	5	603	0.81%	98.05%
		94	1	604	0.16%	98.21%
		95	3	607	0.49%	98.70%
		96	3	610	0.49%	99.19%
		97	0	610	0%	99.19%
		98	0	610	0%	99.19%
		99	2	612	0.33%	99.51%
		100	1	613	0.16%	99.67%
		101	0	613	0%	99.67%

Table 47
Reading Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	1	614	0.16%	99.84%
RD	7	103	1	615	0.16%	100%
		104	0	615	0%	100%
		105	0	615	0%	100%

Table 48
Reading Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	11	11	2.17%	2.17%
		1	1	12	0.20%	2.37%
		2	2	14	0.40%	2.77%
		3	1	15	0.20%	2.96%
		4	1	16	0.20%	3.16%
		5	0	16	0%	3.16%
		6	2	18	0.40%	3.56%
		7	1	19	0.20%	3.75%
		8	1	20	0.20%	3.95%
		9	2	22	0.40%	4.35%
		10	0	22	0%	4.35%
		11	0	22	0%	4.35%
		12	2	24	0.40%	4.74%
		13	3	27	0.59%	5.34%
		14	1	28	0.20%	5.53%
		15	2	30	0.40%	5.93%
RD	8	16	2	32	0.40%	6.32%
		17	2	34	0.40%	6.72%
		18	4	38	0.79%	7.51%
		19	1	39	0.20%	7.71%
		20	1	40	0.20%	7.91%
		21	10	50	1.98%	9.88%
		22	2	52	0.40%	10.28%
		23	0	52	0%	10.28%
		24	9	61	1.78%	12.06%
		25	2	63	0.40%	12.45%
		26	0	63	0%	12.45%
		27	10	73	1.98%	14.43%
		28	1	74	0.20%	14.62%
		29	3	77	0.59%	15.22%
		30	10	87	1.98%	17.19%
		31	1	88	0.20%	17.39%
		32	5	93	0.99%	18.38%
		33	6	99	1.19%	19.57%

Table 48
Reading Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	104	0.99%	20.55%
		35	2	106	0.40%	20.95%
		36	15	121	2.96%	23.91%
		37	0	121	0%	23.91%
		38	3	124	0.59%	24.51%
		39	12	136	2.37%	26.88%
		40	0	136	0%	26.88%
		41	2	138	0.40%	27.27%
		42	9	147	1.78%	29.05%
		43	1	148	0.20%	29.25%
		44	4	152	0.79%	30.04%
		45	14	166	2.77%	32.81%
		46	2	168	0.40%	33.20%
		47	7	175	1.38%	34.58%
		48	13	188	2.57%	37.15%
		49	1	189	0.20%	37.35%
		50	1	190	0.20%	37.55%
RD	8	51	14	204	2.77%	40.32%
		52	3	207	0.59%	40.91%
		53	7	214	1.38%	42.29%
		54	18	232	3.56%	45.85%
		55	1	233	0.20%	46.05%
		56	3	236	0.59%	46.64%
		57	14	250	2.77%	49.41%
		58	0	250	0%	49.41%
		59	4	254	0.79%	50.20%
		60	18	272	3.56%	53.75%
		61	1	273	0.20%	53.95%
		62	1	274	0.20%	54.15%
		63	17	291	3.36%	57.51%
		64	1	292	0.20%	57.71%
		65	2	294	0.40%	58.10%
		66	13	307	2.57%	60.67%
		67	1	308	0.20%	60.87%

Table 48
Reading Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	2	310	0.40%	61.26%
		69	27	337	5.34%	66.60%
		70	1	338	0.20%	66.80%
		71	2	340	0.40%	67.19%
		72	16	356	3.16%	70.36%
		73	1	357	0.20%	70.55%
		74	2	359	0.40%	70.95%
		75	15	374	2.96%	73.91%
		76	1	375	0.20%	74.11%
		77	1	376	0.20%	74.31%
		78	14	390	2.77%	77.08%
		79	2	392	0.40%	77.47%
		80	4	396	0.79%	78.26%
		81	18	414	3.56%	81.82%
		82	3	417	0.59%	82.41%
		83	3	420	0.59%	83.00%
RD	8	84	12	432	2.37%	85.38%
		85	2	434	0.40%	85.77%
		86	2	436	0.40%	86.17%
		87	24	460	4.74%	90.91%
		88	3	463	0.59%	91.50%
		89	2	465	0.40%	91.90%
		90	13	478	2.57%	94.47%
		91	3	481	0.59%	95.06%
		92	2	483	0.40%	95.45%
		93	8	491	1.58%	97.04%
		94	0	491	0%	97.04%
		95	1	492	0.20%	97.23%
		96	3	495	0.59%	97.83%
		97	2	497	0.40%	98.22%
		98	0	497	0%	98.22%
		99	5	502	0.99%	99.21%
		100	0	502	0%	99.21%
		101	0	502	0%	99.21%

Table 48
Reading Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	2	504	0.40%	99.60%
RD	8	103	0	504	0%	99.60%
		104	1	505	0.20%	99.80%
		105	1	506	0.20%	100%

Table 49
Reading Grade 9 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	26	26	4.74%	4.74%
		1	3	29	0.55%	5.29%
		2	0	29	0%	5.29%
		3	3	32	0.55%	5.84%
		4	1	33	0.18%	6.02%
		5	1	34	0.18%	6.20%
		6	1	35	0.18%	6.39%
		7	1	36	0.18%	6.57%
		8	2	38	0.36%	6.93%
		9	0	38	0%	6.93%
		10	1	39	0.18%	7.12%
		11	1	40	0.18%	7.30%
		12	1	41	0.18%	7.48%
		13	1	42	0.18%	7.66%
		14	2	44	0.36%	8.03%
		15	3	47	0.55%	8.58%
RD	9	16	0	47	0%	8.58%
		17	0	47	0%	8.58%
		18	4	51	0.73%	9.31%
		19	5	56	0.91%	10.22%
		20	1	57	0.18%	10.40%
		21	11	68	2.01%	12.41%
		22	0	68	0%	12.41%
		23	2	70	0.36%	12.77%
		24	11	81	2.01%	14.78%
		25	2	83	0.36%	15.15%
		26	3	86	0.55%	15.69%
		27	10	96	1.82%	17.52%
		28	2	98	0.36%	17.88%
		29	4	102	0.73%	18.61%
		30	14	116	2.55%	21.17%
		31	2	118	0.36%	21.53%
		32	2	120	0.36%	21.90%
		33	11	131	2.01%	23.91%

Table 49
Reading Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	132	0.18%	24.09%
		35	1	133	0.18%	24.27%
		36	16	149	2.92%	27.19%
		37	0	149	0%	27.19%
		38	4	153	0.73%	27.92%
		39	17	170	3.10%	31.02%
		40	3	173	0.55%	31.57%
		41	1	174	0.18%	31.75%
		42	10	184	1.82%	33.58%
		43	3	187	0.55%	34.12%
		44	4	191	0.73%	34.85%
		45	9	200	1.64%	36.50%
		46	3	203	0.55%	37.04%
		47	3	206	0.55%	37.59%
		48	22	228	4.01%	41.61%
		49	3	231	0.55%	42.15%
RD	9	50	2	233	0.36%	42.52%
		51	12	245	2.19%	44.71%
		52	3	248	0.55%	45.26%
		53	5	253	0.91%	46.17%
		54	13	266	2.37%	48.54%
		55	0	266	0%	48.54%
		56	3	269	0.55%	49.09%
		57	16	285	2.92%	52.01%
		58	3	288	0.55%	52.55%
		59	3	291	0.55%	53.10%
		60	18	309	3.28%	56.39%
		61	0	309	0%	56.39%
		62	2	311	0.36%	56.75%
		63	17	328	3.10%	59.85%
		64	2	330	0.36%	60.22%
		65	2	332	0.36%	60.58%
		66	10	342	1.82%	62.41%
		67	5	347	0.91%	63.32%

Table 49
Reading Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	350	0.55%	63.87%
		69	15	365	2.74%	66.61%
		70	1	366	0.18%	66.79%
		71	7	373	1.28%	68.07%
		72	9	382	1.64%	69.71%
		73	1	383	0.18%	69.89%
		74	1	384	0.18%	70.07%
		75	25	409	4.56%	74.64%
		76	0	409	0%	74.64%
		77	2	411	0.36%	75.00%
		78	11	422	2.01%	77.01%
		79	1	423	0.18%	77.19%
		80	3	426	0.55%	77.74%
		81	17	443	3.10%	80.84%
		82	2	445	0.36%	81.20%
		83	2	447	0.36%	81.57%
		84	21	468	3.83%	85.40%
RD	9	85	1	469	0.18%	85.58%
		86	4	473	0.73%	86.31%
		87	19	492	3.47%	89.78%
		88	1	493	0.18%	89.96%
		89	3	496	0.55%	90.51%
		90	14	510	2.55%	93.07%
		91	1	511	0.18%	93.25%
		92	2	513	0.36%	93.61%
		93	17	530	3.10%	96.72%
		94	3	533	0.55%	97.26%
		95	2	535	0.36%	97.63%
		96	11	546	2.01%	99.64%
		97	1	547	0.18%	99.82%
		98	0	547	0%	99.82%
		99	0	547	0%	99.82%
		100	0	547	0%	99.82%
		101	0	547	0%	99.82%
		102	1	548	0.18%	100%

Table 50
Reading Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	13	13	2.79%	2.79%
		1	1	14	0.21%	3.00%
		2	3	17	0.64%	3.65%
		3	2	19	0.43%	4.08%
		4	0	19	0%	4.08%
		5	1	20	0.21%	4.29%
		6	2	22	0.43%	4.72%
		7	0	22	0%	4.72%
		8	2	24	0.43%	5.15%
		9	2	26	0.43%	5.58%
		10	1	27	0.21%	5.79%
		11	0	27	0%	5.79%
		12	3	30	0.64%	6.44%
		13	1	31	0.21%	6.65%
		14	0	31	0%	6.65%
		15	6	37	1.29%	7.94%
		16	0	37	0%	7.94%
RD	10	17	2	39	0.43%	8.37%
		18	8	47	1.72%	10.09%
		19	2	49	0.43%	10.52%
		20	1	50	0.21%	10.73%
		21	9	59	1.93%	12.66%
		22	2	61	0.43%	13.09%
		23	3	64	0.64%	13.73%
		24	7	71	1.50%	15.24%
		25	4	75	0.86%	16.09%
		26	2	77	0.43%	16.52%
		27	10	87	2.15%	18.67%
		28	1	88	0.21%	18.88%
		29	0	88	0%	18.88%
		30	17	105	3.65%	22.53%
		31	2	107	0.43%	22.96%
		32	5	112	1.07%	24.03%
		33	13	125	2.79%	26.82%

Table 50
Reading Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	128	0.64%	27.47%
		35	1	129	0.21%	27.68%
		36	18	147	3.86%	31.55%
		37	2	149	0.43%	31.97%
		38	2	151	0.43%	32.40%
		39	16	167	3.43%	35.84%
		40	1	168	0.21%	36.05%
		41	2	170	0.43%	36.48%
		42	7	177	1.50%	37.98%
		43	3	180	0.64%	38.63%
		44	5	185	1.07%	39.70%
		45	12	197	2.58%	42.27%
		46	1	198	0.21%	42.49%
		47	2	200	0.43%	42.92%
		48	15	215	3.22%	46.14%
		49	2	217	0.43%	46.57%
RD	10	50	4	221	0.86%	47.42%
		51	8	229	1.72%	49.14%
		52	1	230	0.21%	49.36%
		53	2	232	0.43%	49.79%
		54	13	245	2.79%	52.58%
		55	3	248	0.64%	53.22%
		56	6	254	1.29%	54.51%
		57	13	267	2.79%	57.30%
		58	1	268	0.21%	57.51%
		59	3	271	0.64%	58.15%
		60	19	290	4.08%	62.23%
		61	2	292	0.43%	62.66%
		62	3	295	0.64%	63.30%
		63	18	313	3.86%	67.17%
		64	0	313	0%	67.17%
		65	3	316	0.64%	67.81%
		66	15	331	3.22%	71.03%
		67	0	331	0%	71.03%

Table 50
Reading Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	334	0.64%	71.67%
		69	20	354	4.29%	75.97%
		70	0	354	0%	75.97%
		71	1	355	0.21%	76.18%
		72	9	364	1.93%	78.11%
		73	1	365	0.21%	78.33%
		74	1	366	0.21%	78.54%
		75	15	381	3.22%	81.76%
		76	0	381	0%	81.76%
		77	1	382	0.21%	81.97%
		78	13	395	2.79%	84.76%
		79	3	398	0.64%	85.41%
		80	2	400	0.43%	85.84%
		81	16	416	3.43%	89.27%
		82	1	417	0.21%	89.48%
		83	4	421	0.86%	90.34%
		84	12	433	2.58%	92.92%
RD	10	85	1	434	0.21%	93.13%
		86	7	441	1.50%	94.64%
		87	8	449	1.72%	96.35%
		88	0	449	0%	96.35%
		89	2	451	0.43%	96.78%
		90	2	453	0.43%	97.21%
		91	1	454	0.21%	97.42%
		92	1	455	0.21%	97.64%
		93	1	456	0.21%	97.85%
		94	0	456	0%	97.85%
		95	0	456	0%	97.85%
		96	4	460	0.86%	98.71%
		97	0	460	0%	98.71%
		98	2	462	0.43%	99.14%
		99	0	462	0%	99.14%
		100	0	462	0%	99.14%
		101	0	462	0%	99.14%
		102	4	466	0.86%	100%

Table 51
Writing Grade 3 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	21	21	3.15%	3.15%
		1	4	25	0.60%	3.75%
		2	5	30	0.75%	4.50%
		3	4	34	0.60%	5.10%
		4	1	35	0.15%	5.25%
		5	2	37	0.30%	5.55%
		6	4	41	0.60%	6.15%
		7	2	43	0.30%	6.45%
		8	2	45	0.30%	6.75%
		9	5	50	0.75%	7.50%
		10	3	53	0.45%	7.95%
		11	6	59	0.90%	8.85%
		12	12	71	1.80%	10.64%
		13	4	75	0.60%	11.24%
		14	2	77	0.30%	11.54%
		15	10	87	1.50%	13.04%
WR	3	16	5	92	0.75%	13.79%
		17	1	93	0.15%	13.94%
		18	7	100	1.05%	14.99%
		19	6	106	0.90%	15.89%
		20	5	111	0.75%	16.64%
		21	8	119	1.20%	17.84%
		22	6	125	0.90%	18.74%
		23	6	131	0.90%	19.64%
		24	10	141	1.50%	21.14%
		25	2	143	0.30%	21.44%
		26	3	146	0.45%	21.89%
		27	9	155	1.35%	23.24%
		28	3	158	0.45%	23.69%
		29	6	164	0.90%	24.59%
		30	7	171	1.05%	25.64%
		31	3	174	0.45%	26.09%
		32	8	182	1.20%	27.29%
		33	1	183	0.15%	27.44%

Table 51
Writing Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	184	0.15%	27.59%
		35	5	189	0.75%	28.34%
		36	9	198	1.35%	29.69%
		37	5	203	0.75%	30.43%
		38	7	210	1.05%	31.48%
		39	4	214	0.60%	32.08%
		40	8	222	1.20%	33.28%
		41	3	225	0.45%	33.73%
		42	8	233	1.20%	34.93%
		43	2	235	0.30%	35.23%
		44	10	245	1.50%	36.73%
		45	8	253	1.20%	37.93%
		46	4	257	0.60%	38.53%
		47	6	263	0.90%	39.43%
		48	6	269	0.90%	40.33%
		49	8	277	1.20%	41.53%
WR	3	50	13	290	1.95%	43.48%
		51	7	297	1.05%	44.53%
		52	1	298	0.15%	44.68%
		53	9	307	1.35%	46.03%
		54	6	313	0.90%	46.93%
		55	6	319	0.90%	47.83%
		56	6	325	0.90%	48.73%
		57	5	330	0.75%	49.48%
		58	3	333	0.45%	49.93%
		59	5	338	0.75%	50.67%
		60	12	350	1.80%	52.47%
		61	7	357	1.05%	53.52%
		62	7	364	1.05%	54.57%
		63	7	371	1.05%	55.62%
		64	3	374	0.45%	56.07%
		65	8	382	1.20%	57.27%
		66	15	397	2.25%	59.52%
		67	11	408	1.65%	61.17%

Table 51
Writing Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	6	414	0.90%	62.07%
		69	9	423	1.35%	63.42%
		70	10	433	1.50%	64.92%
		71	5	438	0.75%	65.67%
		72	6	444	0.90%	66.57%
		73	12	456	1.80%	68.37%
		74	8	464	1.20%	69.57%
		75	13	477	1.95%	71.51%
		76	16	493	2.40%	73.91%
		77	7	500	1.05%	74.96%
		78	5	505	0.75%	75.71%
		79	13	518	1.95%	77.66%
		80	7	525	1.05%	78.71%
		81	6	531	0.90%	79.61%
		82	11	542	1.65%	81.26%
		83	4	546	0.60%	81.86%
WR	3	84	11	557	1.65%	83.51%
		85	18	575	2.70%	86.21%
		86	5	580	0.75%	86.96%
		87	9	589	1.35%	88.31%
		88	10	599	1.50%	89.81%
		89	2	601	0.30%	90.10%
		90	17	618	2.55%	92.65%
		91	10	628	1.50%	94.15%
		92	3	631	0.45%	94.60%
		93	11	642	1.65%	96.25%
		94	4	646	0.60%	96.85%
		95	3	649	0.45%	97.30%
		96	5	654	0.75%	98.05%
		97	1	655	0.15%	98.20%
		98	5	660	0.75%	98.95%
		99	4	664	0.60%	99.55%
		100	2	666	0.30%	99.85%
		101	1	667	0.15%	100%

Table 51
Writing Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	0	667	0%	100%
WR	3	103	0	667	0%	100%
		104	0	667	0%	100%
		105	0	667	0%	100%

Table 52
Writing Grade 4 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	24	24	3.51%	3.51%
		1	3	27	0.44%	3.95%
		2	4	31	0.58%	4.53%
		3	4	35	0.58%	5.12%
		4	1	36	0.15%	5.26%
		5	1	37	0.15%	5.41%
		6	2	39	0.29%	5.70%
		7	2	41	0.29%	5.99%
		8	4	45	0.58%	6.58%
		9	7	52	1.02%	7.60%
		10	1	53	0.15%	7.75%
		11	1	54	0.15%	7.89%
		12	3	57	0.44%	8.33%
		13	4	61	0.58%	8.92%
		14	7	68	1.02%	9.94%
		15	4	72	0.58%	10.53%
WR	4	16	2	74	0.29%	10.82%
		17	3	77	0.44%	11.26%
		18	11	88	1.61%	12.87%
		19	5	93	0.73%	13.60%
		20	2	95	0.29%	13.89%
		21	10	105	1.46%	15.35%
		22	5	110	0.73%	16.08%
		23	6	116	0.88%	16.96%
		24	5	121	0.73%	17.69%
		25	6	127	0.88%	18.57%
		26	5	132	0.73%	19.30%
		27	10	142	1.46%	20.76%
		28	10	152	1.46%	22.22%
		29	4	156	0.58%	22.81%
		30	10	166	1.46%	24.27%
		31	6	172	0.88%	25.15%
		32	6	178	0.88%	26.02%
		33	7	185	1.02%	27.05%

Table 52
Writing Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	9	194	1.32%	28.36%
		35	9	203	1.32%	29.68%
		36	4	207	0.58%	30.26%
		37	3	210	0.44%	30.70%
		38	4	214	0.58%	31.29%
		39	13	227	1.90%	33.19%
		40	3	230	0.44%	33.63%
		41	8	238	1.17%	34.80%
		42	6	244	0.88%	35.67%
		43	3	247	0.44%	36.11%
		44	7	254	1.02%	37.13%
		45	8	262	1.17%	38.30%
		46	10	272	1.46%	39.77%
		47	12	284	1.75%	41.52%
		48	4	288	0.58%	42.11%
		49	3	291	0.44%	42.54%
WR	4	50	12	303	1.75%	44.30%
		51	7	310	1.02%	45.32%
		52	6	316	0.88%	46.20%
		53	3	319	0.44%	46.64%
		54	2	321	0.29%	46.93%
		55	8	329	1.17%	48.10%
		56	6	335	0.88%	48.98%
		57	6	341	0.88%	49.85%
		58	8	349	1.17%	51.02%
		59	8	357	1.17%	52.19%
		60	4	361	0.58%	52.78%
		61	3	364	0.44%	53.22%
		62	4	368	0.58%	53.80%
		63	4	372	0.58%	54.39%
		64	6	378	0.88%	55.26%
		65	5	383	0.73%	55.99%
		66	7	390	1.02%	57.02%
		67	9	399	1.32%	58.33%

Table 52
Writing Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	10	409	1.46%	59.80%
		69	11	420	1.61%	61.40%
		70	14	434	2.05%	63.45%
		71	6	440	0.88%	64.33%
		72	3	443	0.44%	64.77%
		73	16	459	2.34%	67.11%
		74	4	463	0.58%	67.69%
		75	6	469	0.88%	68.57%
		76	15	484	2.19%	70.76%
		77	2	486	0.29%	71.05%
		78	9	495	1.32%	72.37%
		79	9	504	1.32%	73.68%
		80	5	509	0.73%	74.42%
		81	11	520	1.61%	76.02%
		82	12	532	1.75%	77.78%
		83	15	547	2.19%	79.97%
WR	4	84	6	553	0.88%	80.85%
		85	14	567	2.05%	82.89%
		86	6	573	0.88%	83.77%
		87	12	585	1.75%	85.53%
		88	4	589	0.58%	86.11%
		89	9	598	1.32%	87.43%
		90	9	607	1.32%	88.74%
		91	8	615	1.17%	89.91%
		92	7	622	1.02%	90.94%
		93	8	630	1.17%	92.11%
		94	6	636	0.88%	92.98%
		95	5	641	0.73%	93.71%
		96	7	648	1.02%	94.74%
		97	5	653	0.73%	95.47%
		98	7	660	1.02%	96.49%
		99	8	668	1.17%	97.66%
		100	0	668	0%	97.66%
		101	2	670	0.29%	97.95%

Table 52
Writing Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	7	677	1.02%	98.98%
		103	0	677	0%	98.98%
		104	0	677	0%	98.98%
WR	4	105	3	680	0.44%	99.42%
		106	2	682	0.29%	99.71%
		107	0	682	0%	99.71%
		108	2	684	0.29%	100%

Table 53
Writing Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	2.41%	2.41%
		1	1	17	0.15%	2.56%
		2	3	20	0.45%	3.02%
		3	3	23	0.45%	3.47%
		4	2	25	0.30%	3.77%
		5	2	27	0.30%	4.07%
		6	5	32	0.75%	4.83%
		7	2	34	0.30%	5.13%
		8	4	38	0.60%	5.73%
		9	7	45	1.06%	6.79%
		10	2	47	0.30%	7.09%
		11	3	50	0.45%	7.54%
		12	3	53	0.45%	7.99%
		13	1	54	0.15%	8.14%
		14	4	58	0.60%	8.75%
		15	8	66	1.21%	9.95%
WR	5	16	0	66	0.00%	9.95%
		17	1	67	0.15%	10.11%
		18	1	68	0.15%	10.26%
		19	3	71	0.45%	10.71%
		20	4	75	0.60%	11.31%
		21	2	77	0.30%	11.61%
		22	4	81	0.60%	12.22%
		23	3	84	0.45%	12.67%
		24	3	87	0.45%	13.12%
		25	4	91	0.60%	13.73%
		26	2	93	0.30%	14.03%
		27	6	99	0.90%	14.93%
		28	3	102	0.45%	15.38%
		29	3	105	0.45%	15.84%
		30	2	107	0.30%	16.14%
		31	3	110	0.45%	16.59%
		32	4	114	0.60%	17.19%
		33	9	123	1.36%	18.55%

Table 53
Writing Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	128	0.75%	19.31%
		35	3	131	0.45%	19.76%
		36	7	138	1.06%	20.81%
		37	3	141	0.45%	21.27%
		38	4	145	0.60%	21.87%
		39	4	149	0.60%	22.47%
		40	2	151	0.30%	22.78%
		41	2	153	0.30%	23.08%
		42	5	158	0.75%	23.83%
		43	4	162	0.60%	24.43%
		44	6	168	0.90%	25.34%
		45	6	174	0.90%	26.24%
		46	7	181	1.06%	27.30%
		47	7	188	1.06%	28.36%
		48	6	194	0.90%	29.26%
		49	4	198	0.60%	29.86%
WR	5	50	4	202	0.60%	30.47%
		51	4	206	0.60%	31.07%
		52	8	214	1.21%	32.28%
		53	3	217	0.45%	32.73%
		54	2	219	0.30%	33.03%
		55	4	223	0.60%	33.63%
		56	2	225	0.30%	33.94%
		57	5	230	0.75%	34.69%
		58	5	235	0.75%	35.44%
		59	5	240	0.75%	36.20%
		60	8	248	1.21%	37.41%
		61	5	253	0.75%	38.16%
		62	3	256	0.45%	38.61%
		63	7	263	1.06%	39.67%
		64	8	271	1.21%	40.87%
		65	6	277	0.90%	41.78%
		66	7	284	1.06%	42.84%
		67	9	293	1.36%	44.19%

Table 53
Writing Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	1	294	0.15%	44.34%
		69	7	301	1.06%	45.40%
		70	8	309	1.21%	46.61%
		71	7	316	1.06%	47.66%
		72	9	325	1.36%	49.02%
		73	15	340	2.26%	51.28%
		74	6	346	0.90%	52.19%
		75	8	354	1.21%	53.39%
		76	21	375	3.17%	56.56%
		77	6	381	0.90%	57.47%
		78	13	394	1.96%	59.43%
		79	23	417	3.47%	62.90%
		80	11	428	1.66%	64.56%
		81	13	441	1.96%	66.52%
		82	16	457	2.41%	68.93%
		83	11	468	1.66%	70.59%
WR	5	84	12	480	1.81%	72.40%
		85	18	498	2.71%	75.11%
		86	17	515	2.56%	77.68%
		87	10	525	1.51%	79.19%
		88	15	540	2.26%	81.45%
		89	15	555	2.26%	83.71%
		90	19	574	2.87%	86.58%
		91	8	582	1.21%	87.78%
		92	8	590	1.21%	88.99%
		93	23	613	3.47%	92.46%
		94	4	617	0.60%	93.06%
		95	9	626	1.36%	94.42%
		96	13	639	1.96%	96.38%
		97	3	642	0.45%	96.83%
		98	5	647	0.75%	97.59%
		99	8	655	1.21%	98.79%
		100	0	655	0%	98.79%
		101	5	660	0.75%	99.55%

Table 53
Writing Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	3	663	0.45%	100%
WR	5	103	0	663	0%	100%
		104	0	663	0%	100%
		105	0	663	0%	100%

Table 54
Writing Grade 6 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	15	15	2.32%	2.32%
		1	3	18	0.46%	2.79%
		2	1	19	0.15%	2.94%
		3	1	20	0.15%	3.10%
		4	0	20	0%	3.10%
		5	2	22	0.31%	3.41%
		6	5	27	0.77%	4.18%
		7	2	29	0.31%	4.49%
		8	3	32	0.46%	4.95%
		9	3	35	0.46%	5.42%
		10	2	37	0.31%	5.73%
		11	2	39	0.31%	6.04%
		12	5	44	0.77%	6.81%
		13	2	46	0.31%	7.12%
		14	3	49	0.46%	7.59%
		15	8	57	1.24%	8.82%
WR	6	16	0	57	0.00%	8.82%
		17	4	61	0.62%	9.44%
		18	6	67	0.93%	10.37%
		19	1	68	0.15%	10.53%
		20	7	75	1.08%	11.61%
		21	3	78	0.46%	12.07%
		22	3	81	0.46%	12.54%
		23	5	86	0.77%	13.31%
		24	5	91	0.77%	14.09%
		25	1	92	0.15%	14.24%
		26	5	97	0.77%	15.02%
		27	3	100	0.46%	15.48%
		28	1	101	0.15%	15.63%
		29	5	106	0.77%	16.41%
		30	5	111	0.77%	17.18%
		31	6	117	0.93%	18.11%
		32	4	121	0.62%	18.73%
		33	3	124	0.46%	19.20%

Table 54
Writing Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	8	132	1.24%	20.43%
		35	4	136	0.62%	21.05%
		36	4	140	0.62%	21.67%
		37	6	146	0.93%	22.60%
		38	6	152	0.93%	23.53%
		39	1	153	0.15%	23.68%
		40	5	158	0.77%	24.46%
		41	8	166	1.24%	25.70%
		42	5	171	0.77%	26.47%
		43	4	175	0.62%	27.09%
		44	3	178	0.46%	27.55%
		45	3	181	0.46%	28.02%
		46	7	188	1.08%	29.10%
		47	2	190	0.31%	29.41%
		48	6	196	0.93%	30.34%
		49	5	201	0.77%	31.11%
WR	6	50	3	204	0.46%	31.58%
		51	6	210	0.93%	32.51%
		52	3	213	0.46%	32.97%
		53	2	215	0.31%	33.28%
		54	4	219	0.62%	33.90%
		55	0	219	0%	33.90%
		56	2	221	0.31%	34.21%
		57	2	223	0.31%	34.52%
		58	7	230	1.08%	35.60%
		59	3	233	0.46%	36.07%
		60	10	243	1.55%	37.62%
		61	2	245	0.31%	37.93%
		62	2	247	0.31%	38.24%
		63	5	252	0.77%	39.01%
		64	6	258	0.93%	39.94%
		65	5	263	0.77%	40.71%
		66	6	269	0.93%	41.64%
		67	12	281	1.86%	43.50%

Table 54
Writing Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	4	285	0.62%	44.12%
		69	4	289	0.62%	44.74%
		70	9	298	1.39%	46.13%
		71	7	305	1.08%	47.21%
		72	9	314	1.39%	48.61%
		73	9	323	1.39%	50.00%
		74	8	331	1.24%	51.24%
		75	9	340	1.39%	52.63%
		76	12	352	1.86%	54.49%
		77	10	362	1.55%	56.04%
		78	10	372	1.55%	57.59%
		79	15	387	2.32%	59.91%
		80	10	397	1.55%	61.46%
		81	11	408	1.70%	63.16%
		82	15	423	2.32%	65.48%
		83	11	434	1.70%	67.18%
WR	6	84	12	446	1.86%	69.04%
		85	17	463	2.63%	71.67%
		86	13	476	2.01%	73.68%
		87	13	489	2.01%	75.70%
		88	11	500	1.70%	77.40%
		89	13	513	2.01%	79.41%
		90	16	529	2.48%	81.89%
		91	9	538	1.39%	83.28%
		92	12	550	1.86%	85.14%
		93	14	564	2.17%	87.31%
		94	9	573	1.39%	88.70%
		95	13	586	2.01%	90.71%
		96	22	608	3.41%	94.12%
		97	6	614	0.93%	95.05%
		98	7	621	1.08%	96.13%
		99	13	634	2.01%	98.14%
		100	2	636	0.31%	98.45%
		101	2	638	0.31%	98.76%

Table 54
Writing Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	643	0.77%	99.54%
WR	6	103	0	643	0%	99.54%
		104	0	643	0%	99.54%
		105	3	646	0.46%	100%

Table 55
Writing Grade 7 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	22	22	3.59%	3.59%
		1	3	25	0.49%	4.08%
		2	0	25	0%	4.08%
		3	1	26	0.16%	4.25%
		4	2	28	0.33%	4.58%
		5	0	28	0%	4.58%
		6	2	30	0.33%	4.90%
		7	2	32	0.33%	5.23%
		8	1	33	0.16%	5.39%
		9	2	35	0.33%	5.72%
		10	2	37	0.33%	6.05%
		11	1	38	0.16%	6.21%
		12	4	42	0.65%	6.86%
		13	4	46	0.65%	7.52%
		14	2	48	0.33%	7.84%
		15	2	50	0.33%	8.17%
WR	7	16	0	50	0%	8.17%
		17	3	53	0.49%	8.66%
		18	7	60	1.14%	9.80%
		19	2	62	0.33%	10.13%
		20	3	65	0.49%	10.62%
		21	1	66	0.16%	10.78%
		22	4	70	0.65%	11.44%
		23	5	75	0.82%	12.25%
		24	1	76	0.16%	12.42%
		25	0	76	0%	12.42%
		26	5	81	0.82%	13.24%
		27	6	87	0.98%	14.22%
		28	1	88	0.16%	14.38%
		29	3	91	0.49%	14.87%
		30	5	96	0.82%	15.69%
		31	5	101	0.82%	16.50%
		32	6	107	0.98%	17.48%
		33	4	111	0.65%	18.14%

Table 55
Writing Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	4	115	0.65%	18.79%
		35	4	119	0.65%	19.44%
		36	5	124	0.82%	20.26%
		37	1	125	0.16%	20.42%
		38	4	129	0.65%	21.08%
		39	4	133	0.65%	21.73%
		40	5	138	0.82%	22.55%
		41	3	141	0.49%	23.04%
		42	3	144	0.49%	23.53%
		43	0	144	0%	23.53%
		44	7	151	1.14%	24.67%
		45	4	155	0.65%	25.33%
		46	3	158	0.49%	25.82%
		47	8	166	1.31%	27.12%
		48	4	170	0.65%	27.78%
		49	3	173	0.49%	28.27%
WR	7	50	6	179	0.98%	29.25%
		51	5	184	0.82%	30.07%
		52	5	189	0.82%	30.88%
		53	4	193	0.65%	31.54%
		54	6	199	0.98%	32.52%
		55	3	202	0.49%	33.01%
		56	3	205	0.49%	33.50%
		57	2	207	0.33%	33.82%
		58	3	210	0.49%	34.31%
		59	4	214	0.65%	34.97%
		60	5	219	0.82%	35.78%
		61	5	224	0.82%	36.60%
		62	4	228	0.65%	37.25%
		63	6	234	0.98%	38.24%
		64	5	239	0.82%	39.05%
		65	3	242	0.49%	39.54%
		66	3	245	0.49%	40.03%
		67	6	251	0.98%	41.01%

Table 55
Writing Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	256	0.82%	41.83%
		69	1	257	0.16%	41.99%
		70	17	274	2.78%	44.77%
		71	4	278	0.65%	45.42%
		72	8	286	1.31%	46.73%
		73	9	295	1.47%	48.20%
		74	5	300	0.82%	49.02%
		75	7	307	1.14%	50.16%
		76	10	317	1.63%	51.80%
		77	9	326	1.47%	53.27%
		78	12	338	1.96%	55.23%
		79	9	347	1.47%	56.70%
		80	13	360	2.12%	58.82%
		81	9	369	1.47%	60.29%
		82	11	380	1.80%	62.09%
		83	11	391	1.80%	63.89%
WR	7	84	13	404	2.12%	66.01%
		85	16	420	2.61%	68.63%
		86	12	432	1.96%	70.59%
		87	16	448	2.61%	73.20%
		88	9	457	1.47%	74.67%
		89	13	470	2.12%	76.80%
		90	15	485	2.45%	79.25%
		91	14	499	2.29%	81.54%
		92	11	510	1.80%	83.33%
		93	17	527	2.78%	86.11%
		94	7	534	1.14%	87.25%
		95	9	543	1.47%	88.73%
		96	15	558	2.45%	91.18%
		97	4	562	0.65%	91.83%
		98	10	572	1.63%	93.46%
		99	16	588	2.61%	96.08%
		100	4	592	0.65%	96.73%
		101	5	597	0.82%	97.55%

Table 55
Writing Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	602	0.82%	98.37%
		103	1	603	0.16%	98.53%
		104	3	606	0.49%	99.02%
WR	7	105	4	610	0.65%	99.67%
		106	0	610	0%	99.67%
		107	2	612	0.33%	100%
		108	0	612	0%	100%

Table 56
Writing Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	13	13	2.58%	2.58%
		1	0	13	0%	2.58%
		2	1	14	0.20%	2.78%
		3	4	18	0.79%	3.57%
		4	3	21	0.60%	4.17%
		5	1	22	0.20%	4.37%
		6	1	23	0.20%	4.56%
		7	2	25	0.40%	4.96%
		8	0	25	0.00%	4.96%
		9	1	26	0.20%	5.16%
		10	0	26	0%	5.16%
		11	3	29	0.60%	5.75%
		12	5	34	0.99%	6.75%
		13	2	36	0.40%	7.14%
		14	1	37	0.20%	7.34%
		15	3	40	0.60%	7.94%
WR	8	16	1	41	0.20%	8.13%
		17	1	42	0.20%	8.33%
		18	10	52	1.98%	10.32%
		19	1	53	0.20%	10.52%
		20	1	54	0.20%	10.71%
		21	5	59	0.99%	11.71%
		22	2	61	0.40%	12.10%
		23	5	66	0.99%	13.10%
		24	3	69	0.60%	13.69%
		25	2	71	0.40%	14.09%
		26	3	74	0.60%	14.68%
		27	2	76	0.40%	15.08%
		28	0	76	0%	15.08%
		29	4	80	0.79%	15.87%
		30	4	84	0.79%	16.67%
		31	1	85	0.20%	16.87%
		32	8	93	1.59%	18.45%
		33	6	99	1.19%	19.64%

Table 56
Writing Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	0	99	0%	19.64%
		35	4	103	0.79%	20.44%
		36	6	109	1.19%	21.63%
		37	1	110	0.20%	21.83%
		38	5	115	0.99%	22.82%
		39	1	116	0.20%	23.02%
		40	5	121	0.99%	24.01%
		41	5	126	0.99%	25.00%
		42	3	129	0.60%	25.60%
		43	3	132	0.60%	26.19%
		44	3	135	0.60%	26.79%
		45	2	137	0.40%	27.18%
		46	2	139	0.40%	27.58%
		47	1	140	0.20%	27.78%
		48	1	141	0.20%	27.98%
		49	3	144	0.60%	28.57%
WR	8	50	3	147	0.60%	29.17%
		51	4	151	0.79%	29.96%
		52	4	155	0.79%	30.75%
		53	3	158	0.60%	31.35%
		54	4	162	0.79%	32.14%
		55	6	168	1.19%	33.33%
		56	6	174	1.19%	34.52%
		57	5	179	0.99%	35.52%
		58	1	180	0.20%	35.71%
		59	4	184	0.79%	36.51%
		60	2	186	0.40%	36.90%
		61	3	189	0.60%	37.50%
		62	4	193	0.79%	38.29%
		63	3	196	0.60%	38.89%
		64	6	202	1.19%	40.08%
		65	4	206	0.79%	40.87%
		66	3	209	0.60%	41.47%
		67	11	220	2.18%	43.65%

Table 56
Writing Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	4	224	0.79%	44.44%
		69	5	229	0.99%	45.44%
		70	7	236	1.39%	46.83%
		71	2	238	0.40%	47.22%
		72	11	249	2.18%	49.40%
		73	8	257	1.59%	50.99%
		74	3	260	0.60%	51.59%
		75	8	268	1.59%	53.17%
		76	7	275	1.39%	54.56%
		77	15	290	2.98%	57.54%
		78	15	305	2.98%	60.52%
		79	3	308	0.60%	61.11%
		80	8	316	1.59%	62.70%
		81	14	330	2.78%	65.48%
		82	15	345	2.98%	68.45%
		83	7	352	1.39%	69.84%
WR	8	84	14	366	2.78%	72.62%
		85	8	374	1.59%	74.21%
		86	11	385	2.18%	76.39%
		87	22	407	4.37%	80.75%
		88	9	416	1.79%	82.54%
		89	10	426	1.98%	84.52%
		90	20	446	3.97%	88.49%
		91	2	448	0.40%	88.89%
		92	8	456	1.59%	90.48%
		93	7	463	1.39%	91.87%
		94	5	468	0.99%	92.86%
		95	10	478	1.98%	94.84%
		96	7	485	1.39%	96.23%
		97	1	486	0.20%	96.43%
		98	4	490	0.79%	97.22%
		99	4	494	0.79%	98.02%
		100	2	496	0.40%	98.41%
		101	1	497	0.20%	98.61%

Table 56
Writing Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	502	0.99%	99.60%
		103	0	502	0%	99.60%
		104	0	502	0%	99.60%
WR	8	105	2	504	0.40%	100%
		106	0	504	0%	100%
		107	0	504	0%	100%
		108	0	504	0%	100%

Table 57
Writing Grade 9 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	27	27	4.88%	4.88%
		1	0	27	0%	4.88%
		2	2	29	0.36%	5.24%
		3	1	30	0.18%	5.42%
		4	1	31	0.18%	5.61%
		5	1	32	0.18%	5.79%
		6	3	35	0.54%	6.33%
		7	1	36	0.18%	6.51%
		8	4	40	0.72%	7.23%
		9	5	45	0.90%	8.14%
		10	2	47	0.36%	8.50%
		11	3	50	0.54%	9.04%
		12	3	53	0.54%	9.58%
		13	0	53	0%	9.58%
		14	2	55	0.36%	9.95%
		15	2	57	0.36%	10.31%
WR	9	16	2	59	0.36%	10.67%
		17	4	63	0.72%	11.39%
		18	7	70	1.27%	12.66%
		19	2	72	0.36%	13.02%
		20	3	75	0.54%	13.56%
		21	6	81	1.08%	14.65%
		22	2	83	0.36%	15.01%
		23	2	85	0.36%	15.37%
		24	3	88	0.54%	15.91%
		25	1	89	0.18%	16.09%
		26	8	97	1.45%	17.54%
		27	6	103	1.08%	18.63%
		28	0	103	0%	18.63%
		29	2	105	0.36%	18.99%
		30	4	109	0.72%	19.71%
		31	3	112	0.54%	20.25%
		32	3	115	0.54%	20.80%
		33	7	122	1.27%	22.06%

Table 57
Writing Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	125	0.54%	22.60%
		35	4	129	0.72%	23.33%
		36	2	131	0.36%	23.69%
		37	1	132	0.18%	23.87%
		38	4	136	0.72%	24.59%
		39	4	140	0.72%	25.32%
		40	5	145	0.90%	26.22%
		41	3	148	0.54%	26.76%
		42	3	151	0.54%	27.31%
		43	3	154	0.54%	27.85%
		44	7	161	1.27%	29.11%
		45	3	164	0.54%	29.66%
		46	2	166	0.36%	30.02%
		47	4	170	0.72%	30.74%
		48	3	173	0.54%	31.28%
		49	6	179	1.08%	32.37%
WR	9	50	8	187	1.45%	33.82%
		51	1	188	0.18%	34.00%
		52	2	190	0.36%	34.36%
		53	3	193	0.54%	34.90%
		54	5	198	0.90%	35.80%
		55	4	202	0.72%	36.53%
		56	9	211	1.63%	38.16%
		57	3	214	0.54%	38.70%
		58	5	219	0.90%	39.60%
		59	5	224	0.90%	40.51%
		60	5	229	0.90%	41.41%
		61	10	239	1.81%	43.22%
		62	4	243	0.72%	43.94%
		63	2	245	0.36%	44.30%
		64	4	249	0.72%	45.03%
		65	5	254	0.90%	45.93%
		66	5	259	0.90%	46.84%
		67	11	270	1.99%	48.82%

Table 57
Writing Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	10	280	1.81%	50.63%
		69	4	284	0.72%	51.36%
		70	4	288	0.72%	52.08%
		71	8	296	1.45%	53.53%
		72	13	309	2.35%	55.88%
		73	12	321	2.17%	58.05%
		74	8	329	1.45%	59.49%
		75	8	337	1.45%	60.94%
		76	6	343	1.08%	62.03%
		77	11	354	1.99%	64.01%
		78	8	362	1.45%	65.46%
		79	6	368	1.08%	66.55%
		80	13	381	2.35%	68.90%
		81	13	394	2.35%	71.25%
		82	7	401	1.27%	72.51%
		83	12	413	2.17%	74.68%
WR	9	84	8	421	1.45%	76.13%
		85	6	427	1.08%	77.22%
		86	12	439	2.17%	79.39%
		87	12	451	2.17%	81.56%
		88	5	456	0.90%	82.46%
		89	11	467	1.99%	84.45%
		90	14	481	2.53%	86.98%
		91	13	494	2.35%	89.33%
		92	11	505	1.99%	91.32%
		93	12	517	2.17%	93.49%
		94	4	521	0.72%	94.21%
		95	5	526	0.90%	95.12%
		96	6	532	1.08%	96.20%
		97	3	535	0.54%	96.75%
		98	4	539	0.72%	97.47%
		99	11	550	1.99%	99.46%
		100	0	550	0%	99.46%
		101	0	550	0%	99.46%

Table 57
Writing Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	1	551	0.18%	99.64%
WR	9	103	0	551	0%	99.64%
		104	0	551	0%	99.64%
		105	2	553	0.36%	100%

Table 58
Writing Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	4.07%	4.07%
		1	0	19	0%	4.07%
		2	1	20	0.21%	4.28%
		3	3	23	0.64%	4.93%
		4	1	24	0.21%	5.14%
		5	1	25	0.21%	5.35%
		6	3	28	0.64%	6.00%
		7	1	29	0.21%	6.21%
		8	3	32	0.64%	6.85%
		9	2	34	0.43%	7.28%
		10	2	36	0.43%	7.71%
		11	2	38	0.43%	8.14%
		12	4	42	0.86%	8.99%
		13	1	43	0.21%	9.21%
		14	1	44	0.21%	9.42%
		15	4	48	0.86%	10.28%
WR	10	16	1	49	0.21%	10.49%
		17	0	49	0%	10.49%
		18	4	53	0.86%	11.35%
		19	3	56	0.64%	11.99%
		20	4	60	0.86%	12.85%
		21	4	64	0.86%	13.70%
		22	0	64	0%	13.70%
		23	2	66	0.43%	14.13%
		24	2	68	0.43%	14.56%
		25	4	72	0.86%	15.42%
		26	2	74	0.43%	15.85%
		27	2	76	0.43%	16.27%
		28	2	78	0.43%	16.70%
		29	4	82	0.86%	17.56%
		30	3	85	0.64%	18.20%
		31	5	90	1.07%	19.27%
		32	5	95	1.07%	20.34%
		33	4	99	0.86%	21.20%

Table 58
Writing Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	0	99	0%	21.20%
		35	2	101	0.43%	21.63%
		36	2	103	0.43%	22.06%
		37	1	104	0.21%	22.27%
		38	1	105	0.21%	22.48%
		39	6	111	1.28%	23.77%
		40	3	114	0.64%	24.41%
		41	3	117	0.64%	25.05%
		42	6	123	1.28%	26.34%
		43	2	125	0.43%	26.77%
		44	8	133	1.71%	28.48%
		45	1	134	0.21%	28.69%
		46	5	139	1.07%	29.76%
		47	2	141	0.43%	30.19%
		48	3	144	0.64%	30.84%
		49	3	147	0.64%	31.48%
WR	10	50	0	147	0%	31.48%
		51	3	150	0.64%	32.12%
		52	2	152	0.43%	32.55%
		53	4	156	0.86%	33.40%
		54	5	161	1.07%	34.48%
		55	4	165	0.86%	35.33%
		56	6	171	1.28%	36.62%
		57	4	175	0.86%	37.47%
		58	6	181	1.28%	38.76%
		59	1	182	0.21%	38.97%
		60	7	189	1.50%	40.47%
		61	5	194	1.07%	41.54%
		62	6	200	1.28%	42.83%
		63	4	204	0.86%	43.68%
		64	4	208	0.86%	44.54%
		65	5	213	1.07%	45.61%
		66	5	218	1.07%	46.68%
		67	7	225	1.50%	48.18%

Table 58
Writing Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	230	1.07%	49.25%
		69	4	234	0.86%	50.11%
		70	12	246	2.57%	52.68%
		71	7	253	1.50%	54.18%
		72	6	259	1.28%	55.46%
		73	8	267	1.71%	57.17%
		74	6	273	1.28%	58.46%
		75	4	277	0.86%	59.31%
		76	7	284	1.50%	60.81%
		77	11	295	2.36%	63.17%
		78	13	308	2.78%	65.95%
		79	11	319	2.36%	68.31%
		80	9	328	1.93%	70.24%
		81	12	340	2.57%	72.81%
		82	13	353	2.78%	75.59%
		83	13	366	2.78%	78.37%
WR	10	84	9	375	1.93%	80.30%
		85	5	380	1.07%	81.37%
		86	4	384	0.86%	82.23%
		87	9	393	1.93%	84.15%
		88	7	400	1.50%	85.65%
		89	7	407	1.50%	87.15%
		90	8	415	1.71%	88.87%
		91	6	421	1.28%	90.15%
		92	3	424	0.64%	90.79%
		93	10	434	2.14%	92.93%
		94	4	438	0.86%	93.79%
		95	6	444	1.28%	95.07%
		96	8	452	1.71%	96.79%
		97	2	454	0.43%	97.22%
		98	3	457	0.64%	97.86%
		99	2	459	0.43%	98.29%
		100	1	460	0.21%	98.50%
		101	1	461	0.21%	98.72%

Table 58
Writing Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	2	463	0.43%	99.14%
		103	0	463	0%	99.14%
		104	0	463	0%	99.14%
WR	10	105	3	466	0.64%	99.79%
		106	1	467	0.21%	100%
		107	0	467	0%	100%
		108	0	467	0%	100%

Table 59
Mathematics Grade 3 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	17	17	2.58%	2.58%
		1	4	21	0.61%	3.19%
		2	2	23	0.30%	3.49%
		3	4	27	0.61%	4.10%
		4	1	28	0.15%	4.25%
		5	0	28	0%	4.25%
		6	4	32	0.61%	4.86%
		7	0	32	0.00%	4.86%
		8	2	34	0.30%	5.16%
		9	4	38	0.61%	5.77%
		10	1	39	0.15%	5.92%
		11	2	41	0.30%	6.22%
		12	2	43	0.30%	6.53%
		13	3	46	0.46%	6.98%
		14	1	47	0.15%	7.13%
		15	2	49	0.30%	7.44%
MA	3	16	4	53	0.61%	8.04%
		17	0	53	0.00%	8.04%
		18	2	55	0.30%	8.35%
		19	2	57	0.30%	8.65%
		20	4	61	0.61%	9.26%
		21	3	64	0.46%	9.71%
		22	4	68	0.61%	10.32%
		23	2	70	0.30%	10.62%
		24	3	73	0.46%	11.08%
		25	4	77	0.61%	11.68%
		26	2	79	0.30%	11.99%
		27	3	82	0.46%	12.44%
		28	3	85	0.46%	12.90%
		29	3	88	0.46%	13.35%
		30	3	91	0.46%	13.81%
		31	4	95	0.61%	14.42%
		32	3	98	0.46%	14.87%
		33	4	102	0.61%	15.48%

Table 59
Mathematics Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	105	0.46%	15.93%
		35	4	109	0.61%	16.54%
		36	2	111	0.30%	16.84%
		37	5	116	0.76%	17.60%
		38	3	119	0.46%	18.06%
		39	0	119	0.00%	18.06%
		40	4	123	0.61%	18.66%
		41	4	127	0.61%	19.27%
		42	4	131	0.61%	19.88%
		43	3	134	0.46%	20.33%
		44	3	137	0.46%	20.79%
		45	6	143	0.91%	21.70%
		46	2	145	0.30%	22.00%
		47	6	151	0.91%	22.91%
		48	5	156	0.76%	23.67%
		49	6	162	0.91%	24.58%
MA	3	50	1	163	0.15%	24.73%
		51	4	167	0.61%	25.34%
		52	1	168	0.15%	25.49%
		53	2	170	0.30%	25.80%
		54	2	172	0.30%	26.10%
		55	4	176	0.61%	26.71%
		56	6	182	0.91%	27.62%
		57	4	186	0.61%	28.22%
		58	3	189	0.46%	28.68%
		59	5	194	0.76%	29.44%
		60	2	196	0.30%	29.74%
		61	6	202	0.91%	30.65%
		62	2	204	0.30%	30.96%
		63	4	208	0.61%	31.56%
		64	1	209	0.15%	31.71%
		65	3	212	0.46%	32.17%
		66	1	213	0.15%	32.32%
		67	5	218	0.76%	33.08%

Table 59
Mathematics Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	223	0.76%	33.84%
		69	2	225	0.30%	34.14%
		70	5	230	0.76%	34.90%
		71	1	231	0.15%	35.05%
		72	4	235	0.61%	35.66%
		73	4	239	0.61%	36.27%
		74	4	243	0.61%	36.87%
		75	5	248	0.76%	37.63%
		76	8	256	1.21%	38.85%
		77	4	260	0.61%	39.45%
		78	3	263	0.46%	39.91%
		79	4	267	0.61%	40.52%
		80	3	270	0.46%	40.97%
		81	7	277	1.06%	42.03%
		82	5	282	0.76%	42.79%
		83	7	289	1.06%	43.85%
MA	3	84	3	292	0.46%	44.31%
		85	4	296	0.61%	44.92%
		86	7	303	1.06%	45.98%
		87	6	309	0.91%	46.89%
		88	8	317	1.21%	48.10%
		89	3	320	0.46%	48.56%
		90	5	325	0.76%	49.32%
		91	8	333	1.21%	50.53%
		92	3	336	0.46%	50.99%
		93	3	339	0.46%	51.44%
		94	12	351	1.82%	53.26%
		95	9	360	1.37%	54.63%
		96	7	367	1.06%	55.69%
		97	9	376	1.37%	57.06%
		98	14	390	2.12%	59.18%
		99	10	400	1.52%	60.70%
		100	11	411	1.67%	62.37%
		101	9	420	1.37%	63.73%

Table 59
Mathematics Grade 3 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	10	430	1.52%	65.25%
		103	15	445	2.28%	67.53%
		104	13	458	1.97%	69.50%
		105	12	470	1.82%	71.32%
		106	14	484	2.12%	73.44%
		107	12	496	1.82%	75.27%
		108	9	505	1.37%	76.63%
		109	11	516	1.67%	78.30%
		110	14	530	2.12%	80.42%
		111	10	540	1.52%	81.94%
		112	15	555	2.28%	84.22%
		113	20	575	3.03%	87.25%
MA	3	114	12	587	1.82%	89.07%
		115	13	600	1.97%	91.05%
		116	9	609	1.37%	92.41%
		117	12	621	1.82%	94.23%
		118	5	626	0.76%	94.99%
		119	10	636	1.52%	96.51%
		120	3	639	0.46%	96.97%
		121	10	649	1.52%	98.48%
		122	1	650	0.15%	98.63%
		123	4	654	0.61%	99.24%
		124	1	655	0.15%	99.39%
		125	3	658	0.46%	99.85%
		126	1	659	0.15%	100%

Table 60
Mathematics Grade 4 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	2.81%	2.81%
		1	2	21	0.30%	3.10%
		2	4	25	0.59%	3.69%
		3	2	27	0.30%	3.99%
		4	1	28	0.15%	4.14%
		5	3	31	0.44%	4.58%
		6	3	34	0.44%	5.02%
		7	3	37	0.44%	5.47%
		8	2	39	0.30%	5.76%
		9	2	41	0.30%	6.06%
		10	3	44	0.44%	6.50%
		11	1	45	0.15%	6.65%
		12	3	48	0.44%	7.09%
		13	1	49	0.15%	7.24%
		14	5	54	0.74%	7.98%
		15	0	54	0%	7.98%
MA	4	16	2	56	0.30%	8.27%
		17	3	59	0.44%	8.71%
		18	4	63	0.59%	9.31%
		19	3	66	0.44%	9.75%
		20	1	67	0.15%	9.90%
		21	4	71	0.59%	10.49%
		22	3	74	0.44%	10.93%
		23	4	78	0.59%	11.52%
		24	3	81	0.44%	11.96%
		25	1	82	0.15%	12.11%
		26	2	84	0.30%	12.41%
		27	1	85	0.15%	12.56%
		28	4	89	0.59%	13.15%
		29	2	91	0.30%	13.44%
		30	6	97	0.89%	14.33%
		31	5	102	0.74%	15.07%
		32	3	105	0.44%	15.51%
		33	4	109	0.59%	16.10%

Table 60
Mathematics Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	112	0.44%	16.54%
		35	5	117	0.74%	17.28%
		36	2	119	0.30%	17.58%
		37	0	119	0%	17.58%
		38	2	121	0.30%	17.87%
		39	4	125	0.59%	18.46%
		40	2	127	0.30%	18.76%
		41	3	130	0.44%	19.20%
		42	2	132	0.30%	19.50%
		43	5	137	0.74%	20.24%
		44	3	140	0.44%	20.68%
		45	5	145	0.74%	21.42%
		46	2	147	0.30%	21.71%
		47	4	151	0.59%	22.30%
		48	4	155	0.59%	22.90%
		49	2	157	0.30%	23.19%
MA	4	50	5	162	0.74%	23.93%
		51	3	165	0.44%	24.37%
		52	8	173	1.18%	25.55%
		53	2	175	0.30%	25.85%
		54	3	178	0.44%	26.29%
		55	2	180	0.30%	26.59%
		56	6	186	0.89%	27.47%
		57	4	190	0.59%	28.06%
		58	3	193	0.44%	28.51%
		59	2	195	0.30%	28.80%
		60	4	199	0.59%	29.39%
		61	7	206	1.03%	30.43%
		62	6	212	0.89%	31.31%
		63	4	216	0.59%	31.91%
		64	5	221	0.74%	32.64%
		65	2	223	0.30%	32.94%
		66	5	228	0.74%	33.68%
		67	7	235	1.03%	34.71%

Table 60
Mathematics Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	1	236	0.15%	34.86%
		69	4	240	0.59%	35.45%
		70	3	243	0.44%	35.89%
		71	4	247	0.59%	36.48%
		72	7	254	1.03%	37.52%
		73	6	260	0.89%	38.40%
		74	6	266	0.89%	39.29%
		75	4	270	0.59%	39.88%
		76	7	277	1.03%	40.92%
		77	6	283	0.89%	41.80%
		78	4	287	0.59%	42.39%
		79	3	290	0.44%	42.84%
		80	5	295	0.74%	43.57%
		81	3	298	0.44%	44.02%
		82	3	301	0.44%	44.46%
		83	4	305	0.59%	45.05%
MA	4	84	3	308	0.44%	45.49%
		85	9	317	1.33%	46.82%
		86	6	323	0.89%	47.71%
		87	6	329	0.89%	48.60%
		88	6	335	0.89%	49.48%
		89	9	344	1.33%	50.81%
		90	8	352	1.18%	51.99%
		91	14	366	2.07%	54.06%
		92	10	376	1.48%	55.54%
		93	6	382	0.89%	56.43%
		94	8	390	1.18%	57.61%
		95	4	394	0.59%	58.20%
		96	7	401	1.03%	59.23%
		97	5	406	0.74%	59.97%
		98	10	416	1.48%	61.45%
		99	14	430	2.07%	63.52%
		100	6	436	0.89%	64.40%
		101	8	444	1.18%	65.58%

Table 60
Mathematics Grade 4 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	15	459	2.22%	67.80%
		103	7	466	1.03%	68.83%
		104	7	473	1.03%	69.87%
		105	6	479	0.89%	70.75%
		106	8	487	1.18%	71.94%
		107	10	497	1.48%	73.41%
		108	11	508	1.62%	75.04%
		109	8	516	1.18%	76.22%
		110	13	529	1.92%	78.14%
		111	11	540	1.62%	79.76%
		112	12	552	1.77%	81.54%
		113	13	565	1.92%	83.46%
		114	9	574	1.33%	84.79%
MA	4	115	8	582	1.18%	85.97%
		116	11	593	1.62%	87.59%
		117	6	599	0.89%	88.48%
		118	7	606	1.03%	89.51%
		119	10	616	1.48%	90.99%
		120	7	623	1.03%	92.02%
		121	11	634	1.62%	93.65%
		122	3	637	0.44%	94.09%
		123	6	643	0.89%	94.98%
		124	7	650	1.03%	96.01%
		125	7	657	1.03%	97.05%
		126	9	666	1.33%	98.38%
		127	1	667	0.15%	98.52%
		128	5	672	0.74%	99.26%
		129	5	677	0.74%	100%

Table 61
Mathematics Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	2.41%	2.41%
		1	1	17	0.15%	2.56%
		2	3	20	0.45%	3.01%
		3	4	24	0.60%	3.61%
		4	5	29	0.75%	4.36%
		5	3	32	0.45%	4.81%
		6	3	35	0.45%	5.26%
		7	2	37	0.30%	5.56%
		8	0	37	0%	5.56%
		9	2	39	0.30%	5.86%
		10	3	42	0.45%	6.32%
		11	0	42	0.00%	6.32%
		12	1	43	0.15%	6.47%
		13	0	43	0.00%	6.47%
		14	0	43	0.00%	6.47%
		15	1	44	0.15%	6.62%
MA	5	16	1	45	0.15%	6.77%
		17	2	47	0.30%	7.07%
		18	2	49	0.30%	7.37%
		19	2	51	0.30%	7.67%
		20	2	53	0.30%	7.97%
		21	4	57	0.60%	8.57%
		22	4	61	0.60%	9.17%
		23	4	65	0.60%	9.77%
		24	2	67	0.30%	10.08%
		25	3	70	0.45%	10.53%
		26	3	73	0.45%	10.98%
		27	1	74	0.15%	11.13%
		28	4	78	0.60%	11.73%
		29	2	80	0.30%	12.03%
		30	0	80	0%	12.03%
		31	2	82	0.30%	12.33%
		32	2	84	0.30%	12.63%
		33	1	85	0.15%	12.78%

Table 61
Mathematics Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	87	0.30%	13.08%
		35	1	88	0.15%	13.23%
		36	5	93	0.75%	13.98%
		37	2	95	0.30%	14.29%
		38	1	96	0.15%	14.44%
		39	1	97	0.15%	14.59%
		40	2	99	0.30%	14.89%
		41	3	102	0.45%	15.34%
		42	2	104	0.30%	15.64%
		43	0	104	0%	15.64%
		44	2	106	0.30%	15.94%
		45	2	108	0.30%	16.24%
		46	2	110	0.30%	16.54%
		47	3	113	0.45%	16.99%
		48	3	116	0.45%	17.44%
		49	1	117	0.15%	17.59%
MA	5	50	0	117	0%	17.59%
		51	2	119	0.30%	17.89%
		52	3	122	0.45%	18.35%
		53	2	124	0.30%	18.65%
		54	2	126	0.30%	18.95%
		55	3	129	0.45%	19.40%
		56	1	130	0.15%	19.55%
		57	3	133	0.45%	20.00%
		58	4	137	0.60%	20.60%
		59	3	140	0.45%	21.05%
		60	2	142	0.30%	21.35%
		61	0	142	0%	21.35%
		62	1	143	0.15%	21.50%
		63	5	148	0.75%	22.26%
		64	1	149	0.15%	22.41%
		65	1	150	0.15%	22.56%
		66	1	151	0.15%	22.71%
		67	1	152	0.15%	22.86%

Table 61
Mathematics Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	155	0.45%	23.31%
		69	3	158	0.45%	23.76%
		70	2	160	0.30%	24.06%
		71	4	164	0.60%	24.66%
		72	2	166	0.30%	24.96%
		73	4	170	0.60%	25.56%
		74	2	172	0.30%	25.86%
		75	1	173	0.15%	26.02%
		76	6	179	0.90%	26.92%
		77	6	185	0.90%	27.82%
		78	2	187	0.30%	28.12%
		79	1	188	0.15%	28.27%
		80	4	192	0.60%	28.87%
		81	3	195	0.45%	29.32%
		82	6	201	0.90%	30.23%
		83	1	202	0.15%	30.38%
MA	5	84	6	208	0.90%	31.28%
		85	0	208	0%	31.28%
		86	7	215	1.05%	32.33%
		87	3	218	0.45%	32.78%
		88	4	222	0.60%	33.38%
		89	2	224	0.30%	33.68%
		90	3	227	0.45%	34.14%
		91	2	229	0.30%	34.44%
		92	2	231	0.30%	34.74%
		93	2	233	0.30%	35.04%
		94	4	237	0.60%	35.64%
		95	3	240	0.45%	36.09%
		96	1	241	0.15%	36.24%
		97	0	241	0%	36.24%
		98	7	248	1.05%	37.29%
		99	3	251	0.45%	37.74%
		100	6	257	0.90%	38.65%
		101	6	263	0.90%	39.55%

Table 61
Mathematics Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	3	266	0.45%	40.00%
		103	1	267	0.15%	40.15%
		104	8	275	1.20%	41.35%
		105	5	280	0.75%	42.11%
		106	5	285	0.75%	42.86%
		107	7	292	1.05%	43.91%
		108	7	299	1.05%	44.96%
		109	2	301	0.30%	45.26%
		110	7	308	1.05%	46.32%
		111	5	313	0.75%	47.07%
		112	5	318	0.75%	47.82%
		113	2	320	0.30%	48.12%
		114	4	324	0.60%	48.72%
		115	9	333	1.35%	50.08%
		116	6	339	0.90%	50.98%
		117	6	345	0.90%	51.88%
MA	5	118	4	349	0.60%	52.48%
		119	5	354	0.75%	53.23%
		120	7	361	1.05%	54.29%
		121	10	371	1.50%	55.79%
		122	8	379	1.20%	56.99%
		123	4	383	0.60%	57.59%
		124	6	389	0.90%	58.50%
		125	11	400	1.65%	60.15%
		126	6	406	0.90%	61.05%
		127	5	411	0.75%	61.80%
		128	6	417	0.90%	62.71%
		129	9	426	1.35%	64.06%
		130	3	429	0.45%	64.51%
		131	9	438	1.35%	65.86%
		132	6	444	0.90%	66.77%
		133	6	450	0.90%	67.67%
		134	8	458	1.20%	68.87%
		135	8	466	1.20%	70.08%

Table 61
Mathematics Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	5	471	0.75%	70.83%
		137	10	481	1.50%	72.33%
		138	3	484	0.45%	72.78%
		139	10	494	1.50%	74.29%
		140	14	508	2.11%	76.39%
		141	10	518	1.50%	77.89%
		142	11	529	1.65%	79.55%
		143	9	538	1.35%	80.90%
		144	5	543	0.75%	81.65%
		145	3	546	0.45%	82.11%
		146	10	556	1.50%	83.61%
		147	7	563	1.05%	84.66%
		148	10	573	1.50%	86.17%
		149	4	577	0.60%	86.77%
		150	11	588	1.65%	88.42%
		151	6	594	0.90%	89.32%
MA	5	152	6	600	0.90%	90.23%
		153	5	605	0.75%	90.98%
		154	8	613	1.20%	92.18%
		155	6	619	0.90%	93.08%
		156	5	624	0.75%	93.83%
		157	5	629	0.75%	94.59%
		158	3	632	0.45%	95.04%
		159	2	634	0.30%	95.34%
		160	1	635	0.15%	95.49%
		161	4	639	0.60%	96.09%
		162	5	644	0.75%	96.84%
		163	5	649	0.75%	97.59%
		164	1	650	0.15%	97.74%
		165	5	655	0.75%	98.50%
		166	2	657	0.30%	98.80%
		167	2	659	0.30%	99.10%
		168	0	659	0%	99.10%
		169	1	660	0.15%	99.25%

Table 61
Mathematics Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
MA	5	170	3	663	0.45%	99.70%
		171	2	665	0.30%	100%

Table 62
Mathematics Grade 6 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	15	15	2.33%	2.33%
		1	0	15	0%	2.33%
		2	3	18	0.47%	2.80%
		3	5	23	0.78%	3.58%
		4	1	24	0.16%	3.73%
		5	0	24	0%	3.73%
		6	2	26	0.31%	4.04%
		7	3	29	0.47%	4.51%
		8	1	30	0.16%	4.67%
		9	2	32	0.31%	4.98%
		10	1	33	0.16%	5.13%
		11	0	33	0%	5.13%
		12	2	35	0.31%	5.44%
		13	3	38	0.47%	5.91%
		14	3	41	0.47%	6.38%
		15	1	42	0.16%	6.53%
MA	6	16	3	45	0.47%	7.00%
		17	3	48	0.47%	7.47%
		18	1	49	0.16%	7.62%
		19	0	49	0%	7.62%
		20	1	50	0.16%	7.78%
		21	4	54	0.62%	8.40%
		22	2	56	0.31%	8.71%
		23	3	59	0.47%	9.18%
		24	2	61	0.31%	9.49%
		25	4	65	0.62%	10.11%
		26	3	68	0.47%	10.58%
		27	6	74	0.93%	11.51%
		28	1	75	0.16%	11.66%
		29	3	78	0.47%	12.13%
		30	4	82	0.62%	12.75%
		31	0	82	0%	12.75%
		32	0	82	0%	12.75%
		33	6	88	0.93%	13.69%

Table 62
Mathematics Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	91	0.47%	14.15%
		35	3	94	0.47%	14.62%
		36	4	98	0.62%	15.24%
		37	0	98	0%	15.24%
		38	3	101	0.47%	15.71%
		39	5	106	0.78%	16.49%
		40	2	108	0.31%	16.80%
		41	2	110	0.31%	17.11%
		42	4	114	0.62%	17.73%
		43	0	114	0%	17.73%
		44	6	120	0.93%	18.66%
		45	0	120	0%	18.66%
		46	4	124	0.62%	19.28%
		47	8	132	1.24%	20.53%
		48	2	134	0.31%	20.84%
		49	4	138	0.62%	21.46%
MA	6	50	1	139	0.16%	21.62%
		51	7	146	1.09%	22.71%
		52	1	147	0.16%	22.86%
		53	2	149	0.31%	23.17%
		54	4	153	0.62%	23.79%
		55	5	158	0.78%	24.57%
		56	2	160	0.31%	24.88%
		57	4	164	0.62%	25.51%
		58	5	169	0.78%	26.28%
		59	3	172	0.47%	26.75%
		60	4	176	0.62%	27.37%
		61	2	178	0.31%	27.68%
		62	10	188	1.56%	29.24%
		63	6	194	0.93%	30.17%
		64	3	197	0.47%	30.64%
		65	3	200	0.47%	31.10%
		66	2	202	0.31%	31.42%
		67	2	204	0.31%	31.73%

Table 62
Mathematics Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	207	0.47%	32.19%
		69	6	213	0.93%	33.13%
		70	6	219	0.93%	34.06%
		71	4	223	0.62%	34.68%
		72	3	226	0.47%	35.15%
		73	3	229	0.47%	35.61%
		74	12	241	1.87%	37.48%
		75	5	246	0.78%	38.26%
		76	2	248	0.31%	38.57%
		77	5	253	0.78%	39.35%
		78	6	259	0.93%	40.28%
		79	1	260	0.16%	40.44%
		80	4	264	0.62%	41.06%
		81	4	268	0.62%	41.68%
		82	5	273	0.78%	42.46%
		83	6	279	0.93%	43.39%
MA	6	84	9	288	1.40%	44.79%
		85	2	290	0.31%	45.10%
		86	5	295	0.78%	45.88%
		87	3	298	0.47%	46.35%
		88	6	304	0.93%	47.28%
		89	5	309	0.78%	48.06%
		90	7	316	1.09%	49.14%
		91	5	321	0.78%	49.92%
		92	8	329	1.24%	51.17%
		93	10	339	1.56%	52.72%
		94	8	347	1.24%	53.97%
		95	5	352	0.78%	54.74%
		96	8	360	1.24%	55.99%
		97	6	366	0.93%	56.92%
		98	7	373	1.09%	58.01%
		99	7	380	1.09%	59.10%
		100	5	385	0.78%	59.88%
		101	8	393	1.24%	61.12%

Table 62
Mathematics Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	8	401	1.24%	62.36%
		103	9	410	1.40%	63.76%
		104	6	416	0.93%	64.70%
		105	4	420	0.62%	65.32%
		106	7	427	1.09%	66.41%
		107	8	435	1.24%	67.65%
		108	9	444	1.40%	69.05%
		109	9	453	1.40%	70.45%
		110	11	464	1.71%	72.16%
		111	14	478	2.18%	74.34%
		112	10	488	1.56%	75.89%
		113	9	497	1.40%	77.29%
		114	5	502	0.78%	78.07%
		115	6	508	0.93%	79.00%
		116	11	519	1.71%	80.72%
		117	6	525	0.93%	81.65%
MA	6	118	12	537	1.87%	83.51%
		119	10	547	1.56%	85.07%
		120	9	556	1.40%	86.47%
		121	5	561	0.78%	87.25%
		122	10	571	1.56%	88.80%
		123	10	581	1.56%	90.36%
		124	9	590	1.40%	91.76%
		125	2	592	0.31%	92.07%
		126	11	603	1.71%	93.78%
		127	6	609	0.93%	94.71%
		128	6	615	0.93%	95.65%
		129	8	623	1.24%	96.89%
		130	3	626	0.47%	97.36%
		131	2	628	0.31%	97.67%
		132	7	635	1.09%	98.76%
		133	0	635	0%	98.76%
		134	2	637	0.31%	99.07%
		135	2	639	0.31%	99.38%

Table 62
Mathematics Grade 6 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	0	639	0%	99.38%
MA	6	137	1	640	0.16%	99.53%
		138	3	643	0.47%	100%

Table 63
Mathematics Grade 7 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	11	11	1.82%	1.82%
		1	0	11	0%	1.82%
		2	3	14	0.50%	2.31%
		3	3	17	0.50%	2.81%
		4	2	19	0.33%	3.14%
		5	3	22	0.50%	3.63%
		6	2	24	0.33%	3.96%
		7	0	24	0%	3.96%
		8	4	28	0.66%	4.62%
		9	2	30	0.33%	4.95%
		10	2	32	0.33%	5.28%
		11	1	33	0.17%	5.45%
		12	1	34	0.17%	5.61%
		13	1	35	0.17%	5.78%
		14	3	38	0.50%	6.27%
		15	3	41	0.50%	6.77%
MA	7	16	5	46	0.83%	7.59%
		17	4	50	0.66%	8.25%
		18	3	53	0.50%	8.75%
		19	0	53	0%	8.75%
		20	1	54	0.17%	8.91%
		21	3	57	0.50%	9.41%
		22	2	59	0.33%	9.74%
		23	3	62	0.50%	10.23%
		24	3	65	0.50%	10.73%
		25	1	66	0.17%	10.89%
		26	2	68	0.33%	11.22%
		27	1	69	0.17%	11.39%
		28	3	72	0.50%	11.88%
		29	5	77	0.83%	12.71%
		30	1	78	0.17%	12.87%
		31	2	80	0.33%	13.20%
		32	3	83	0.50%	13.70%
		33	2	85	0.33%	14.03%

Table 63
Mathematics Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	88	0.50%	14.52%
		35	2	90	0.33%	14.85%
		36	3	93	0.50%	15.35%
		37	0	93	0%	15.35%
		38	2	95	0.33%	15.68%
		39	4	99	0.66%	16.34%
		40	5	104	0.83%	17.16%
		41	3	107	0.50%	17.66%
		42	3	110	0.50%	18.15%
		43	4	114	0.66%	18.81%
		44	2	116	0.33%	19.14%
		45	2	118	0.33%	19.47%
		46	5	123	0.83%	20.30%
		47	4	127	0.66%	20.96%
		48	4	131	0.66%	21.62%
		49	4	135	0.66%	22.28%
MA	7	50	2	137	0.33%	22.61%
		51	5	142	0.83%	23.43%
		52	4	146	0.66%	24.09%
		53	5	151	0.83%	24.92%
		54	4	155	0.66%	25.58%
		55	6	161	0.99%	26.57%
		56	5	166	0.83%	27.39%
		57	2	168	0.33%	27.72%
		58	9	177	1.49%	29.21%
		59	4	181	0.66%	29.87%
		60	6	187	0.99%	30.86%
		61	2	189	0.33%	31.19%
		62	8	197	1.32%	32.51%
		63	10	207	1.65%	34.16%
		64	4	211	0.66%	34.82%
		65	3	214	0.50%	35.31%
		66	4	218	0.66%	35.97%
		67	5	223	0.83%	36.80%

Table 63
Mathematics Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	4	227	0.66%	37.46%
		69	3	230	0.50%	37.95%
		70	6	236	0.99%	38.94%
		71	6	242	0.99%	39.93%
		72	5	247	0.83%	40.76%
		73	2	249	0.33%	41.09%
		74	5	254	0.83%	41.91%
		75	6	260	0.99%	42.90%
		76	4	264	0.66%	43.56%
		77	5	269	0.83%	44.39%
		78	4	273	0.66%	45.05%
		79	3	276	0.50%	45.54%
		80	5	281	0.83%	46.37%
		81	8	289	1.32%	47.69%
		82	7	296	1.16%	48.84%
		83	6	302	0.99%	49.83%
MA	7	84	13	315	2.15%	51.98%
		85	3	318	0.50%	52.48%
		86	6	324	0.99%	53.47%
		87	7	331	1.16%	54.62%
		88	6	337	0.99%	55.61%
		89	7	344	1.16%	56.77%
		90	10	354	1.65%	58.42%
		91	9	363	1.49%	59.90%
		92	4	367	0.66%	60.56%
		93	9	376	1.49%	62.05%
		94	2	378	0.33%	62.38%
		95	6	384	0.99%	63.37%
		96	5	389	0.83%	64.19%
		97	10	399	1.65%	65.84%
		98	8	407	1.32%	67.16%
		99	3	410	0.50%	67.66%
		100	13	423	2.15%	69.80%
		101	6	429	0.99%	70.79%

Table 63
Mathematics Grade 7 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	7	436	1.16%	71.95%
		103	10	446	1.65%	73.60%
		104	8	454	1.32%	74.92%
		105	10	464	1.65%	76.57%
		106	8	472	1.32%	77.89%
		107	11	483	1.82%	79.70%
		108	9	492	1.49%	81.19%
		109	6	498	0.99%	82.18%
		110	6	504	0.99%	83.17%
		111	11	515	1.82%	84.98%
		112	8	523	1.32%	86.30%
		113	9	532	1.49%	87.79%
		114	8	540	1.32%	89.11%
		115	6	546	0.99%	90.10%
		116	6	552	0.99%	91.09%
MA	7	117	8	560	1.32%	92.41%
		118	6	566	0.99%	93.40%
		119	4	570	0.66%	94.06%
		120	5	575	0.83%	94.88%
		121	3	578	0.50%	95.38%
		122	5	583	0.83%	96.20%
		123	6	589	0.99%	97.19%
		124	2	591	0.33%	97.52%
		125	4	595	0.66%	98.18%
		126	7	602	1.16%	99.34%
		127	2	604	0.33%	99.67%
		128	0	604	0%	99.67%
		129	1	605	0.17%	99.83%
		130	0	605	0%	99.83%
		131	1	606	0.17%	100%
		132	0	606	0%	100%

Table 64
Mathematics Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	11	11	2.19%	2.19%
		1	3	14	0.60%	2.79%
		2	0	14	0%	2.79%
		3	2	16	0.40%	3.19%
		4	1	17	0.20%	3.39%
		5	1	18	0.20%	3.59%
		6	1	19	0.20%	3.78%
		7	0	19	0%	3.78%
		8	1	20	0.20%	3.98%
		9	1	21	0.20%	4.18%
		10	2	23	0.40%	4.58%
		11	1	24	0.20%	4.78%
		12	2	26	0.40%	5.18%
		13	2	28	0.40%	5.58%
		14	0	28	0%	5.58%
		15	8	36	1.59%	7.17%
MA	8	16	0	36	0%	7.17%
		17	1	37	0.20%	7.37%
		18	1	38	0.20%	7.57%
		19	2	40	0.40%	7.97%
		20	1	41	0.20%	8.17%
		21	3	44	0.60%	8.76%
		22	0	44	0%	8.76%
		23	1	45	0.20%	8.96%
		24	2	47	0.40%	9.36%
		25	1	48	0.20%	9.56%
		26	3	51	0.60%	10.16%
		27	3	54	0.60%	10.76%
		28	1	55	0.20%	10.96%
		29	2	57	0.40%	11.35%
		30	4	61	0.80%	12.15%
		31	2	63	0.40%	12.55%
		32	1	64	0.20%	12.75%
		33	4	68	0.80%	13.55%

Table 64
Mathematics Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	0	68	0%	13.55%
		35	2	70	0.40%	13.94%
		36	3	73	0.60%	14.54%
		37	1	74	0.20%	14.74%
		38	0	74	0%	14.74%
		39	2	76	0.40%	15.14%
		40	3	79	0.60%	15.74%
		41	1	80	0.20%	15.94%
		42	4	84	0.80%	16.73%
		43	1	85	0.20%	16.93%
		44	1	86	0.20%	17.13%
		45	7	93	1.39%	18.53%
		46	3	96	0.60%	19.12%
		47	5	101	1.00%	20.12%
		48	3	104	0.60%	20.72%
		49	2	106	0.40%	21.12%
MA	8	50	1	107	0.20%	21.31%
		51	5	112	1.00%	22.31%
		52	3	115	0.60%	22.91%
		53	2	117	0.40%	23.31%
		54	2	119	0.40%	23.71%
		55	4	123	0.80%	24.50%
		56	3	126	0.60%	25.10%
		57	1	127	0.20%	25.30%
		58	3	130	0.60%	25.90%
		59	4	134	0.80%	26.69%
		60	3	137	0.60%	27.29%
		61	5	142	1.00%	28.29%
		62	3	145	0.60%	28.88%
		63	3	148	0.60%	29.48%
		64	1	149	0.20%	29.68%
		65	0	149	0%	29.68%
		66	5	154	1.00%	30.68%
		67	4	158	0.80%	31.47%

Table 64
Mathematics Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	1	159	0.20%	31.67%
		69	7	166	1.39%	33.07%
		70	2	168	0.40%	33.47%
		71	2	170	0.40%	33.86%
		72	4	174	0.80%	34.66%
		73	4	178	0.80%	35.46%
		74	2	180	0.40%	35.86%
		75	3	183	0.60%	36.45%
		76	5	188	1.00%	37.45%
		77	3	191	0.60%	38.05%
		78	5	196	1.00%	39.04%
		79	3	199	0.60%	39.64%
		80	8	207	1.59%	41.24%
		81	1	208	0.20%	41.43%
		82	5	213	1.00%	42.43%
		83	3	216	0.60%	43.03%
MA	8	84	3	219	0.60%	43.63%
		85	2	221	0.40%	44.02%
		86	3	224	0.60%	44.62%
		87	6	230	1.20%	45.82%
		88	7	237	1.39%	47.21%
		89	5	242	1.00%	48.21%
		90	3	245	0.60%	48.80%
		91	3	248	0.60%	49.40%
		92	4	252	0.80%	50.20%
		93	3	255	0.60%	50.80%
		94	3	258	0.60%	51.39%
		95	6	264	1.20%	52.59%
		96	4	268	0.80%	53.39%
		97	5	273	1.00%	54.38%
		98	4	277	0.80%	55.18%
		99	6	283	1.20%	56.37%
		100	5	288	1.00%	57.37%
		101	4	292	0.80%	58.17%

Table 64
Mathematics Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	6	298	1.20%	59.36%
		103	5	303	1.00%	60.36%
		104	4	307	0.80%	61.16%
		105	8	315	1.59%	62.75%
		106	7	322	1.39%	64.14%
		107	8	330	1.59%	65.74%
		108	6	336	1.20%	66.93%
		109	8	344	1.59%	68.53%
		110	9	353	1.79%	70.32%
		111	3	356	0.60%	70.92%
		112	5	361	1.00%	71.91%
		113	6	367	1.20%	73.11%
		114	5	372	1.00%	74.10%
		115	4	376	0.80%	74.90%
		116	8	384	1.59%	76.49%
		117	5	389	1.00%	77.49%
MA	8	118	12	401	2.39%	79.88%
		119	9	410	1.79%	81.67%
		120	6	416	1.20%	82.87%
		121	3	419	0.60%	83.47%
		122	5	424	1.00%	84.46%
		123	4	428	0.80%	85.26%
		124	6	434	1.20%	86.45%
		125	5	439	1.00%	87.45%
		126	8	447	1.59%	89.04%
		127	5	452	1.00%	90.04%
		128	7	459	1.39%	91.43%
		129	3	462	0.60%	92.03%
		130	6	468	1.20%	93.23%
		131	3	471	0.60%	93.82%
		132	8	479	1.59%	95.42%
		133	3	482	0.60%	96.02%
		134	7	489	1.39%	97.41%
		135	1	490	0.20%	97.61%

Table 64
Mathematics Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	3	493	0.60%	98.21%
		137	1	494	0.20%	98.41%
		138	3	497	0.60%	99.00%
		139	2	499	0.40%	99.40%
		140	1	500	0.20%	99.60%
MA	8	141	2	502	0.40%	100%
		142	0	502	0%	100%
		143	0	502	0%	100%
		144	0	502	0%	100%
		145	0	502	0%	100%
		146	0	502	0%	100%
		147	0	502	0%	100%

Table 65
Mathematics Grade 9 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	27	27	4.80%	4.80%
		1	0	27	0%	4.80%
		2	1	28	0.18%	4.98%
		3	1	29	0.18%	5.16%
		4	2	31	0.36%	5.52%
		5	0	31	0%	5.52%
		6	5	36	0.89%	6.41%
		7	1	37	0.18%	6.58%
		8	2	39	0.36%	6.94%
		9	2	41	0.36%	7.30%
		10	1	42	0.18%	7.47%
		11	3	45	0.53%	8.01%
		12	4	49	0.71%	8.72%
		13	2	51	0.36%	9.07%
		14	0	51	0%	9.07%
		15	1	52	0.18%	9.25%
MA	9	16	1	53	0.18%	9.43%
		17	2	55	0.36%	9.79%
		18	1	56	0.18%	9.96%
		19	0	56	0%	9.96%
		20	2	58	0.36%	10.32%
		21	2	60	0.36%	10.68%
		22	0	60	0%	10.68%
		23	2	62	0.36%	11.03%
		24	6	68	1.07%	12.10%
		25	3	71	0.53%	12.63%
		26	0	71	0%	12.63%
		27	3	74	0.53%	13.17%
		28	2	76	0.36%	13.52%
		29	7	83	1.25%	14.77%
		30	1	84	0.18%	14.95%
		31	4	88	0.71%	15.66%
		32	4	92	0.71%	16.37%
		33	7	99	1.25%	17.62%

Table 65
Mathematics Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	104	0.89%	18.51%
		35	0	104	0%	18.51%
		36	2	106	0.36%	18.86%
		37	8	114	1.42%	20.28%
		38	3	117	0.53%	20.82%
		39	1	118	0.18%	21.00%
		40	7	125	1.25%	22.24%
		41	5	130	0.89%	23.13%
		42	3	133	0.53%	23.67%
		43	4	137	0.71%	24.38%
		44	5	142	0.89%	25.27%
		45	7	149	1.25%	26.51%
		46	5	154	0.89%	27.40%
		47	2	156	0.36%	27.76%
		48	4	160	0.71%	28.47%
		49	5	165	0.89%	29.36%
MA	9	50	6	171	1.07%	30.43%
		51	9	180	1.60%	32.03%
		52	5	185	0.89%	32.92%
		53	3	188	0.53%	33.45%
		54	6	194	1.07%	34.52%
		55	3	197	0.53%	35.05%
		56	3	200	0.53%	35.59%
		57	2	202	0.36%	35.94%
		58	3	205	0.53%	36.48%
		59	3	208	0.53%	37.01%
		60	7	215	1.25%	38.26%
		61	2	217	0.36%	38.61%
		62	4	221	0.71%	39.32%
		63	5	226	0.89%	40.21%
		64	1	227	0.18%	40.39%
		65	7	234	1.25%	41.64%
		66	5	239	0.89%	42.53%
		67	6	245	1.07%	43.59%

Table 65
Mathematics Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	8	253	1.42%	45.02%
		69	2	255	0.36%	45.37%
		70	4	259	0.71%	46.09%
		71	3	262	0.53%	46.62%
		72	3	265	0.53%	47.15%
		73	4	269	0.71%	47.86%
		74	5	274	0.89%	48.75%
		75	5	279	0.89%	49.64%
		76	7	286	1.25%	50.89%
		77	5	291	0.89%	51.78%
		78	7	298	1.25%	53.02%
		79	3	301	0.53%	53.56%
		80	5	306	0.89%	54.45%
		81	7	313	1.25%	55.69%
		82	3	316	0.53%	56.23%
		83	3	319	0.53%	56.76%
MA	9	84	6	325	1.07%	57.83%
		85	5	330	0.89%	58.72%
		86	7	337	1.25%	59.96%
		87	9	346	1.60%	61.57%
		88	4	350	0.71%	62.28%
		89	8	358	1.42%	63.70%
		90	6	364	1.07%	64.77%
		91	5	369	0.89%	65.66%
		92	8	377	1.42%	67.08%
		93	2	379	0.36%	67.44%
		94	6	385	1.07%	68.51%
		95	11	396	1.96%	70.46%
		96	6	402	1.07%	71.53%
		97	7	409	1.25%	72.78%
		98	4	413	0.71%	73.49%
		99	5	418	0.89%	74.38%
		100	5	423	0.89%	75.27%
		101	5	428	0.89%	76.16%

Table 65
Mathematics Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	7	435	1.25%	77.40%
		103	5	440	0.89%	78.29%
		104	7	447	1.25%	79.54%
		105	4	451	0.71%	80.25%
		106	7	458	1.25%	81.49%
		107	5	463	0.89%	82.38%
		108	7	470	1.25%	83.63%
		109	5	475	0.89%	84.52%
		110	4	479	0.71%	85.23%
		111	5	484	0.89%	86.12%
		112	2	486	0.36%	86.48%
		113	8	494	1.42%	87.90%
		114	2	496	0.36%	88.26%
		115	9	505	1.60%	89.86%
		116	3	508	0.53%	90.39%
		117	9	517	1.60%	91.99%
MA	9	118	4	521	0.71%	92.70%
		119	4	525	0.71%	93.42%
		120	4	529	0.71%	94.13%
		121	1	530	0.18%	94.31%
		122	5	535	0.89%	95.20%
		123	3	538	0.53%	95.73%
		124	3	541	0.53%	96.26%
		125	4	545	0.71%	96.98%
		126	3	548	0.53%	97.51%
		127	2	550	0.36%	97.86%
		128	5	555	0.89%	98.75%
		129	1	556	0.18%	98.93%
		130	1	557	0.18%	99.11%
		131	0	557	0.00%	99.11%
		132	2	559	0.36%	99.47%
		133	0	559	0%	99.47%
		134	0	559	0%	99.47%
		135	1	560	0.18%	99.64%

Table 65
Mathematics Grade 9 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	1	561	0.18%	99.82%
		137	0	561	0%	99.82%
		138	0	561	0%	99.82%
		139	0	561	0%	99.82%
MA	9	140	0	561	0%	99.82%
		141	0	561	0%	99.82%
		142	0	561	0%	99.82%
		143	0	561	0%	99.82%
		144	1	562	0.18%	100%

Table 66
Mathematics Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	14	14	2.98%	2.98%
		1	1	15	0.21%	3.19%
		2	1	16	0.21%	3.40%
		3	2	18	0.43%	3.83%
		4	1	19	0.21%	4.04%
		5	4	23	0.85%	4.89%
		6	1	24	0.21%	5.11%
		7	2	26	0.43%	5.53%
		8	1	27	0.21%	5.74%
		9	3	30	0.64%	6.38%
		10	2	32	0.43%	6.81%
		11	4	36	0.85%	7.66%
		12	2	38	0.43%	8.09%
		13	1	39	0.21%	8.30%
		14	2	41	0.43%	8.72%
		15	1	42	0.21%	8.94%
MA	10	16	1	43	0.21%	9.15%
		17	2	45	0.43%	9.57%
		18	3	48	0.64%	10.21%
		19	2	50	0.43%	10.64%
		20	3	53	0.64%	11.28%
		21	2	55	0.43%	11.70%
		22	0	55	0.00%	11.70%
		23	3	58	0.64%	12.34%
		24	1	59	0.21%	12.55%
		25	2	61	0.43%	12.98%
		26	1	62	0.21%	13.19%
		27	1	63	0.21%	13.40%
		28	5	68	1.06%	14.47%
		29	2	70	0.43%	14.89%
		30	4	74	0.85%	15.74%
		31	5	79	1.06%	16.81%
		32	1	80	0.21%	17.02%
		33	3	83	0.64%	17.66%

Table 66
Mathematics Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	85	0.43%	18.09%
		35	2	87	0.43%	18.51%
		36	1	88	0.21%	18.72%
		37	1	89	0.21%	18.94%
		38	1	90	0.21%	19.15%
		39	3	93	0.64%	19.79%
		40	2	95	0.43%	20.21%
		41	2	97	0.43%	20.64%
		42	1	98	0.21%	20.85%
		43	2	100	0.43%	21.28%
		44	3	103	0.64%	21.91%
		45	2	105	0.43%	22.34%
		46	1	106	0.21%	22.55%
		47	3	109	0.64%	23.19%
		48	4	113	0.85%	24.04%
		49	2	115	0.43%	24.47%
MA	10	50	1	116	0.21%	24.68%
		51	4	120	0.85%	25.53%
		52	2	122	0.43%	25.96%
		53	3	125	0.64%	26.60%
		54	3	128	0.64%	27.23%
		55	4	132	0.85%	28.09%
		56	9	141	1.91%	30.00%
		57	2	143	0.43%	30.43%
		58	2	145	0.43%	30.85%
		59	2	147	0.43%	31.28%
		60	5	152	1.06%	32.34%
		61	2	154	0.43%	32.77%
		62	7	161	1.49%	34.26%
		63	2	163	0.43%	34.68%
		64	2	165	0.43%	35.11%
		65	3	168	0.64%	35.74%
		66	6	174	1.28%	37.02%
		67	3	177	0.64%	37.66%

Table 66
Mathematics Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	2	179	0.43%	38.09%
		69	5	184	1.06%	39.15%
		70	2	186	0.43%	39.57%
		71	5	191	1.06%	40.64%
		72	9	200	1.91%	42.55%
		73	3	203	0.64%	43.19%
		74	6	209	1.28%	44.47%
		75	4	213	0.85%	45.32%
		76	5	218	1.06%	46.38%
		77	4	222	0.85%	47.23%
		78	8	230	1.70%	48.94%
		79	7	237	1.49%	50.43%
		80	6	243	1.28%	51.70%
		81	4	247	0.85%	52.55%
		82	8	255	1.70%	54.26%
		83	5	260	1.06%	55.32%
MA	10	84	4	264	0.85%	56.17%
		85	4	268	0.85%	57.02%
		86	4	272	0.85%	57.87%
		87	7	279	1.49%	59.36%
		88	3	282	0.64%	60.00%
		89	4	286	0.85%	60.85%
		90	4	290	0.85%	61.70%
		91	4	294	0.85%	62.55%
		92	6	300	1.28%	63.83%
		93	7	307	1.49%	65.32%
		94	3	310	0.64%	65.96%
		95	5	315	1.06%	67.02%
		96	4	319	0.85%	67.87%
		97	3	322	0.64%	68.51%
		98	4	326	0.85%	69.36%
		99	6	332	1.28%	70.64%
		100	6	338	1.28%	71.91%
		101	6	344	1.28%	73.19%

Table 66
Mathematics Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	349	1.06%	74.26%
		103	1	350	0.21%	74.47%
		104	7	357	1.49%	75.96%
		105	4	361	0.85%	76.81%
		106	6	367	1.28%	78.09%
		107	2	369	0.43%	78.51%
		108	6	375	1.28%	79.79%
		109	5	380	1.06%	80.85%
		110	6	386	1.28%	82.13%
		111	3	389	0.64%	82.77%
		112	5	394	1.06%	83.83%
		113	3	397	0.64%	84.47%
		114	3	400	0.64%	85.11%
		115	3	403	0.64%	85.74%
		116	2	405	0.43%	86.17%
		117	5	410	1.06%	87.23%
MA	10	118	2	412	0.43%	87.66%
		119	4	416	0.85%	88.51%
		120	3	419	0.64%	89.15%
		121	2	421	0.43%	89.57%
		122	1	422	0.21%	89.79%
		123	8	430	1.70%	91.49%
		124	3	433	0.64%	92.13%
		125	3	436	0.64%	92.77%
		126	4	440	0.85%	93.62%
		127	1	441	0.21%	93.83%
		128	3	444	0.64%	94.47%
		129	2	446	0.43%	94.89%
		130	1	447	0.21%	95.11%
		131	6	453	1.28%	96.38%
		132	4	457	0.85%	97.23%
		133	1	458	0.21%	97.45%
		134	1	459	0.21%	97.66%
		135	0	459	0%	97.66%

Table 66
Mathematics Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	0	459	0%	97.66%
		137	2	461	0.43%	98.09%
		138	2	463	0.43%	98.51%
		139	0	463	0%	98.51%
		140	1	464	0.21%	98.72%
		141	1	465	0.21%	98.94%
		142	0	465	0%	98.94%
		143	0	465	0%	98.94%
		144	2	467	0.43%	99.36%
		145	1	468	0.21%	99.57%
MA	10	146	1	469	0.21%	99.79%
		147	0	469	0%	99.79%
		148	0	469	0%	99.79%
		149	1	470	0.21%	100%
		150	0	470	0%	100%
		151	0	470	0%	100%
		152	0	470	0%	100%
		153	0	470	0%	100%
		154	0	470	0%	100%
		155	0	470	0%	100%
		156	0	470	0%	100%

Table 67
Science Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	9	9	1.37%	1.37%
		1	1	10	0.15%	1.52%
		2	0	10	0%	1.52%
		3	1	11	0.15%	1.67%
		4	0	11	0%	1.67%
		5	1	12	0.15%	1.83%
		6	3	15	0.46%	2.28%
		7	2	17	0.30%	2.59%
		8	2	19	0.30%	2.89%
		9	2	21	0.30%	3.20%
		10	0	21	0%	3.20%
		11	1	22	0.15%	3.35%
		12	3	25	0.46%	3.81%
		13	2	27	0.30%	4.11%
		14	3	30	0.46%	4.57%
		15	0	30	0.00%	4.57%
SC	5	16	2	32	0.30%	4.87%
		17	3	35	0.46%	5.33%
		18	4	39	0.61%	5.94%
		19	1	40	0.15%	6.09%
		20	5	45	0.76%	6.85%
		21	2	47	0.30%	7.15%
		22	1	48	0.15%	7.31%
		23	1	49	0.15%	7.46%
		24	4	53	0.61%	8.07%
		25	3	56	0.46%	8.52%
		26	2	58	0.30%	8.83%
		27	3	61	0.46%	9.28%
		28	1	62	0.15%	9.44%
		29	6	68	0.91%	10.35%
		30	3	71	0.46%	10.81%
		31	4	75	0.61%	11.42%
		32	4	79	0.61%	12.02%
		33	1	80	0.15%	12.18%

Table 67
Science Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	4	84	0.61%	12.79%
		35	6	90	0.91%	13.70%
		36	4	94	0.61%	14.31%
		37	6	100	0.91%	15.22%
		38	5	105	0.76%	15.98%
		39	4	109	0.61%	16.59%
		40	4	113	0.61%	17.20%
		41	6	119	0.91%	18.11%
		42	2	121	0.30%	18.42%
		43	6	127	0.91%	19.33%
		44	7	134	1.07%	20.40%
		45	2	136	0.30%	20.70%
		46	7	143	1.07%	21.77%
		47	6	149	0.91%	22.68%
		48	8	157	1.22%	23.90%
		49	4	161	0.61%	24.51%
SC	5	50	4	165	0.61%	25.11%
		51	10	175	1.52%	26.64%
		52	8	183	1.22%	27.85%
		53	4	187	0.61%	28.46%
		54	6	193	0.91%	29.38%
		55	7	200	1.07%	30.44%
		56	4	204	0.61%	31.05%
		57	7	211	1.07%	32.12%
		58	9	220	1.37%	33.49%
		59	7	227	1.07%	34.55%
		60	6	233	0.91%	35.46%
		61	3	236	0.46%	35.92%
		62	4	240	0.61%	36.53%
		63	11	251	1.67%	38.20%
		64	4	255	0.61%	38.81%
		65	7	262	1.07%	39.88%
		66	11	273	1.67%	41.55%
		67	5	278	0.76%	42.31%

Table 67
Science Grade 5 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	7	285	1.07%	43.38%
		69	17	302	2.59%	45.97%
		70	3	305	0.46%	46.42%
		71	8	313	1.22%	47.64%
		72	15	328	2.28%	49.92%
		73	2	330	0.30%	50.23%
		74	3	333	0.46%	50.68%
		75	17	350	2.59%	53.27%
		76	7	357	1.07%	54.34%
		77	4	361	0.61%	54.95%
		78	24	385	3.65%	58.60%
		79	6	391	0.91%	59.51%
		80	8	399	1.22%	60.73%
		81	32	431	4.87%	65.60%
SC	5	82	3	434	0.46%	66.06%
		83	10	444	1.52%	67.58%
		84	36	480	5.48%	73.06%
		85	2	482	0.30%	73.36%
		86	12	494	1.83%	75.19%
		87	48	542	7.31%	82.50%
		88	4	546	0.61%	83.11%
		89	12	558	1.83%	84.93%
		90	37	595	5.63%	90.56%
		91	4	599	0.61%	91.17%
		92	3	602	0.46%	91.63%
		93	32	634	4.87%	96.50%
		94	4	638	0.61%	97.11%
		95	3	641	0.46%	97.56%
		96	16	657	2.44%	100%

Table 68
Science Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	11	11	2.20%	2.20%
		1	0	11	0%	2.20%
		2	0	11	0%	2.20%
		3	0	11	0%	2.20%
		4	1	12	0.20%	2.40%
		5	0	12	0%	2.40%
		6	2	14	0.40%	2.80%
		7	2	16	0.40%	3.20%
		8	0	16	0%	3.20%
		9	1	17	0.20%	3.40%
		10	1	18	0.20%	3.60%
		11	2	20	0.40%	4.00%
		12	0	20	0%	4.00%
		13	0	20	0%	4.00%
		14	0	20	0%	4.00%
		15	0	20	0%	4.00%
SC	8	16	2	22	0.40%	4.40%
		17	1	23	0.20%	4.60%
		18	1	24	0.20%	4.80%
		19	2	26	0.40%	5.20%
		20	0	26	0%	5.20%
		21	2	28	0.40%	5.60%
		22	0	28	0%	5.60%
		23	2	30	0.40%	6.00%
		24	2	32	0.40%	6.40%
		25	1	33	0.20%	6.60%
		26	1	34	0.20%	6.80%
		27	3	37	0.60%	7.40%
		28	1	38	0.20%	7.60%
		29	4	42	0.80%	8.40%
		30	3	45	0.60%	9.00%
		31	0	45	0%	9.00%
		32	1	46	0.20%	9.20%
		33	2	48	0.40%	9.60%

Table 68
Science Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	49	0.20%	9.80%
		35	0	49	0%	9.80%
		36	1	50	0.20%	10.00%
		37	0	50	0%	10.00%
		38	2	52	0.40%	10.40%
		39	4	56	0.80%	11.20%
		40	2	58	0.40%	11.60%
		41	3	61	0.60%	12.20%
		42	4	65	0.80%	13.00%
		43	4	69	0.80%	13.80%
		44	5	74	1.00%	14.80%
		45	0	74	0%	14.80%
		46	4	78	0.80%	15.60%
		47	3	81	0.60%	16.20%
		48	5	86	1.00%	17.20%
		49	3	89	0.60%	17.80%
SC	8	50	2	91	0.40%	18.20%
		51	8	99	1.60%	19.80%
		52	4	103	0.80%	20.60%
		53	4	107	0.80%	21.40%
		54	2	109	0.40%	21.80%
		55	4	113	0.80%	22.60%
		56	4	117	0.80%	23.40%
		57	8	125	1.60%	25.00%
		58	5	130	1.00%	26.00%
		59	8	138	1.60%	27.60%
		60	2	140	0.40%	28.00%
		61	4	144	0.80%	28.80%
		62	5	149	1.00%	29.80%
		63	5	154	1.00%	30.80%
		64	3	157	0.60%	31.40%
		65	6	163	1.20%	32.60%
		66	5	168	1.00%	33.60%
		67	4	172	0.80%	34.40%

Table 68
Science Grade 8 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	177	1.00%	35.40%
		69	5	182	1.00%	36.40%
		70	4	186	0.80%	37.20%
		71	5	191	1.00%	38.20%
		72	3	194	0.60%	38.80%
		73	6	200	1.20%	40.00%
		74	8	208	1.60%	41.60%
		75	6	214	1.20%	42.80%
		76	6	220	1.20%	44.00%
		77	5	225	1.00%	45.00%
		78	11	236	2.20%	47.20%
		79	7	243	1.40%	48.60%
		80	9	252	1.80%	50.40%
		81	14	266	2.80%	53.20%
		82	10	276	2.00%	55.20%
SC	8	83	9	285	1.80%	57.00%
		84	17	302	3.40%	60.40%
		85	4	306	0.80%	61.20%
		86	14	320	2.80%	64.00%
		87	22	342	4.40%	68.40%
		88	4	346	0.80%	69.20%
		89	11	357	2.20%	71.40%
		90	27	384	5.40%	76.80%
		91	10	394	2.00%	78.80%
		92	11	405	2.20%	81.00%
		93	31	436	6.20%	87.20%
		94	5	441	1.00%	88.20%
		95	9	450	1.80%	90.00%
		96	29	479	5.80%	95.80%
		97	1	480	0.20%	96.00%
		98	7	487	1.40%	97.40%
		99	13	500	2.60%	100%

Table 69
Science Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	11	11	2.36%	2.36%
		1	1	12	0.21%	2.58%
		2	1	13	0.21%	2.79%
		3	1	14	0.21%	3.00%
		4	0	14	0%	3.00%
		5	0	14	0%	3.00%
		6	3	17	0.64%	3.65%
		7	2	19	0.43%	4.08%
		8	0	19	0%	4.08%
		9	1	20	0.21%	4.29%
		10	3	23	0.64%	4.94%
		11	0	23	0%	4.94%
		12	2	25	0.43%	5.36%
		13	2	27	0.43%	5.79%
		14	1	28	0.21%	6.01%
		15	3	31	0.64%	6.65%
SC	10	16	1	32	0.21%	6.87%
		17	2	34	0.43%	7.30%
		18	2	36	0.43%	7.73%
		19	1	37	0.21%	7.94%
		20	5	42	1.07%	9.01%
		21	3	45	0.64%	9.66%
		22	5	50	1.07%	10.73%
		23	6	56	1.29%	12.02%
		24	5	61	1.07%	13.09%
		25	5	66	1.07%	14.16%
		26	2	68	0.43%	14.59%
		27	4	72	0.86%	15.45%
		28	3	75	0.64%	16.09%
		29	5	80	1.07%	17.17%
		30	9	89	1.93%	19.10%
		31	2	91	0.43%	19.53%
		32	4	95	0.86%	20.39%
		33	2	97	0.43%	20.82%

Table 69
Science Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	99	0.43%	21.24%
		35	5	104	1.07%	22.32%
		36	3	107	0.64%	22.96%
		37	5	112	1.07%	24.03%
		38	4	116	0.86%	24.89%
		39	6	122	1.29%	26.18%
		40	0	122	0%	26.18%
		41	6	128	1.29%	27.47%
		42	6	134	1.29%	28.76%
		43	2	136	0.43%	29.18%
		44	4	140	0.86%	30.04%
		45	4	144	0.86%	30.90%
		46	0	144	0%	30.90%
		47	3	147	0.64%	31.55%
		48	4	151	0.86%	32.40%
		49	2	153	0.43%	32.83%
SC	10	50	2	155	0.43%	33.26%
		51	8	163	1.72%	34.98%
		52	3	166	0.64%	35.62%
		53	3	169	0.64%	36.27%
		54	7	176	1.50%	37.77%
		55	5	181	1.07%	38.84%
		56	5	186	1.07%	39.91%
		57	5	191	1.07%	40.99%
		58	4	195	0.86%	41.85%
		59	3	198	0.64%	42.49%
		60	6	204	1.29%	43.78%
		61	4	208	0.86%	44.64%
		62	6	214	1.29%	45.92%
		63	6	220	1.29%	47.21%
		64	2	222	0.43%	47.64%
		65	6	228	1.29%	48.93%
		66	5	233	1.07%	50.00%
		67	3	236	0.64%	50.64%

Table 69
Science Grade 10 Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	11	247	2.36%	53.00%
		69	5	252	1.07%	54.08%
		70	2	254	0.43%	54.51%
		71	6	260	1.29%	55.79%
		72	6	266	1.29%	57.08%
		73	1	267	0.21%	57.30%
		74	5	272	1.07%	58.37%
		75	13	285	2.79%	61.16%
		76	5	290	1.07%	62.23%
		77	10	300	2.15%	64.38%
		78	9	309	1.93%	66.31%
		79	2	311	0.43%	66.74%
		80	4	315	0.86%	67.60%
		81	21	336	4.51%	72.10%
		82	4	340	0.86%	72.96%
		83	8	348	1.72%	74.68%
		84	10	358	2.15%	76.82%
SC	10	85	2	360	0.43%	77.25%
		86	6	366	1.29%	78.54%
		87	23	389	4.94%	83.48%
		88	2	391	0.43%	83.91%
		89	6	397	1.29%	85.19%
		90	15	412	3.22%	88.41%
		91	3	415	0.64%	89.06%
		92	8	423	1.72%	90.77%
		93	12	435	2.58%	93.35%
		94	2	437	0.43%	93.78%
		95	5	442	1.07%	94.85%
		96	8	450	1.72%	96.57%
		97	1	451	0.21%	96.78%
		98	2	453	0.43%	97.21%
		99	7	460	1.50%	98.71%
		100	1	461	0.21%	98.93%
		101	1	462	0.21%	99.14%
		102	4	466	0.86%	100%

Table 70
Cut Scores and Percent of Students in Each Proficiency Level

Content	Grade	N	Cut Scores				Percent of Students in Each Proficiency Level					
			Exploring	Emerging	Developing	Novice	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	672	31	56	79	95	17.86%	26.04%	34.97%	17.71%	3.42%	21.13%
	4	678	32	53	76	93	20.80%	21.98%	31.42%	17.99%	7.82%	25.81%
	5	669	26	52	72	93	11.21%	23.32%	19.43%	33.33%	12.71%	46.04%
	6	647	25	53	78	97	8.66%	20.87%	28.90%	34.62%	6.96%	41.58%
	7	615	27	50	68	88	9.27%	26.18%	23.58%	34.47%	6.50%	40.98%
	8	506	29	53	70	91	14.62%	26.28%	25.69%	27.87%	5.53%	33.40%
	9	548	24	48	71	89	12.77%	24.82%	29.20%	23.18%	10.04%	33.21%
	10	466	23	43	64	80	13.09%	24.89%	29.18%	18.24%	14.59%	32.83%
WR	3	667	18	48	78	96	13.94%	25.49%	35.53%	22.34%	2.70%	25.04%
	4	684	19	46	78	94	12.87%	25.44%	32.75%	21.05%	7.89%	28.95%
	5	663	19	50	78	93	10.26%	19.61%	27.60%	31.52%	11.01%	42.53%
	6	646	18	51	78	93	9.44%	22.14%	24.46%	29.10%	14.86%	43.96%
	7	612	23	57	80	94	11.44%	22.06%	23.20%	29.41%	13.89%	43.30%
	8	504	27	62	80	90	14.68%	22.82%	23.61%	23.41%	15.48%	38.89%
	9	553	21	60	79	91	13.56%	26.94%	24.95%	21.52%	13.02%	34.54%
	10	467	21	56	81	93	12.85%	22.48%	34.90%	20.56%	9.21%	29.76%

Table 70
Cut Scores and Percent of Students in Each Proficiency Level (continued)

Content	Grade	N	Cut Scores				Percent of Students in Each Proficiency Level					
			Exploring	Emerging	Developing	Novice	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	659	19	63	93	108	8.35%	22.61%	20.03%	24.28%	24.73%	49.01%
	4	677	13	72	99	119	7.09%	29.39%	24.96%	28.06%	10.49%	38.55%
	5	665	41	82	115	150	14.89%	14.44%	19.40%	38.05%	13.23%	51.28%
	6	643	28	60	92	113	11.51%	15.24%	23.17%	25.97%	24.11%	50.08%
	7	606	29	61	89	110	11.88%	18.98%	24.75%	26.57%	17.82%	44.39%
	8	502	30	76	107	129	11.35%	25.10%	27.69%	27.29%	8.57%	35.86%
	9	562	29	63	97	116	13.52%	25.80%	32.21%	18.33%	10.14%	28.47%
	10	470	29	67	104	125	14.47%	22.55%	37.45%	17.66%	7.87%	25.53%
SC	5	657	33	60	76	87	12.02%	22.53%	18.72%	21.92%	24.81%	46.73%
	8	500	40	63	80	89	11.20%	18.60%	18.80%	20.60%	30.80%	51.40%
	10	466	28	54	78	87	15.45%	20.82%	28.11%	14.16%	21.46%	35.62%

Table 71
Total Group Statistics, Including Reliability

Content	Grade	Sample Size	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
			Mean	SD				
RD	3	672	57.07	25.07	0	16	0.92	6.90
	4	678	55.59	26.44	2	22	0.93	6.90
	5	669	62.15	26.51	2	10	0.93	6.86
	6	647	65.00	25.77	6	12	0.93	6.60
	7	615	58.17	23.33	0	18	0.91	6.98
	8	506	56.79	24.76	1	11	0.91	7.23
	9	548	54.67	26.49	1	26	0.93	6.87
	10	466	51.18	24.31	4	13	0.91	7.26
WR	3	667	53.88	28.20	0	21	0.93	7.71
	4	684	55.29	28.88	2	24	0.93	7.83
	5	663	63.24	27.94	0	16	0.93	7.39
	6	646	63.86	28.75	3	15	0.93	7.42
	7	612	65.47	28.93	0	22	0.93	7.39
	8	504	63.41	27.84	0	13	0.93	7.56
	9	553	60.21	28.86	2	27	0.93	7.44
	10	467	60.69	28.07	0	19	0.92	7.74
MA	3	659	78.53	35.39	1	17	0.95	7.99
	4	677	78.31	36.28	5	19	0.95	8.30
	5	665	102.19	46.65	2	16	0.95	9.96
	6	643	82.13	36.63	3	15	0.94	8.82
	7	606	76.40	33.90	0	11	0.93	8.68
	8	502	84.02	37.67	0	11	0.94	9.18
	9	562	71.00	35.77	1	27	0.93	9.41
	10	470	75.15	37.00	0	14	0.93	9.73
SC	5	657	65.89	24.35	16	9	0.94	6.11
	8	500	71.48	24.37	13	11	0.94	6.09
	10	466	60.68	27.17	4	11	0.93	7.36

Table 72
Classification Consistency and Accuracy

Content	Grade	Consistency				Accuracy		
		Prob of Correct Classification (PC)	Prob of Correct Classification By Chance (Chance)	Kappa	Prob of Misclassification (PM)	Prob of Accuracy (PA)	Prob of False Positive Error (FP)	Prob of False Negative Error (FN)
RD	3	0.67	0.25	0.56	0.33	0.77	0.12	0.11
	4	0.66	0.23	0.55	0.34	0.75	0.13	0.12
	5	0.65	0.24	0.54	0.35	0.74	0.15	0.11
	6	0.69	0.27	0.58	0.31	0.79	0.12	0.10
	7	0.65	0.26	0.52	0.35	0.75	0.14	0.11
	8	0.63	0.24	0.52	0.37	0.73	0.15	0.12
	9	0.65	0.23	0.55	0.35	0.74	0.14	0.12
	10	0.61	0.21	0.50	0.39	0.71	0.14	0.14
WR	3	0.68	0.26	0.57	0.32	0.78	0.11	0.11
	4	0.65	0.24	0.54	0.35	0.74	0.14	0.12
	5	0.62	0.25	0.50	0.38	0.73	0.16	0.11
	6	0.61	0.23	0.50	0.39	0.70	0.20	0.10
	7	0.60	0.22	0.48	0.40	0.70	0.20	0.10
	8	0.56	0.21	0.44	0.44	0.64	0.23	0.13
	9	0.60	0.22	0.48	0.40	0.70	0.18	0.12
	10	0.60	0.24	0.47	0.40	0.71	0.15	0.14
MA	3	0.63	0.21	0.53	0.37	0.73	0.12	0.15
	4	0.68	0.26	0.57	0.32	0.78	0.14	0.08
	5	0.68	0.26	0.56	0.32	0.77	0.16	0.07
	6	0.65	0.21	0.55	0.35	0.74	0.12	0.14
	7	0.62	0.21	0.51	0.38	0.72	0.13	0.16
	8	0.67	0.24	0.56	0.33	0.76	0.14	0.09
	9	0.63	0.22	0.53	0.37	0.72	0.16	0.12
	10	0.66	0.24	0.55	0.34	0.75	0.15	0.10
SC	5	0.60	0.21	0.49	0.40	0.70	0.15	0.15
	8	0.57	0.22	0.45	0.43	0.67	0.14	0.19
	10	0.62	0.21	0.51	0.38	0.71	0.13	0.16

Table 73
Level of Independence—Total Percentage by Level across All Items

Content	Total Items	Level of Independence			
		1	2	3	4
RD	166,906	4.27%	3.21%	5.32%	87.18%
WR	141,270	4.58%	3.28%	5.61%	86.51%
MA	170,320	5.71%	4.92%	9.04%	80.31%
SC	48,666	3.35%	2.61%	5.51%	88.51%

Table 74
Reliability of Levels of Independence

Content	Grade	Independent versus Not Independent	All Levels of Independence
RD	3	0.97	0.99
	4	0.98	0.99
	5	0.98	0.99
	6	0.98	0.99
	7	0.98	0.99
	8	0.98	0.99
	9	0.98	0.99
	10	0.98	0.99
WR	3	0.97	0.98
	4	0.97	0.99
	5	0.97	0.98
	6	0.97	0.99
	7	0.98	0.99
	8	0.97	0.98
	9	0.98	0.99
	10	0.98	0.99
MA	3	0.96	0.98
	4	0.97	0.98
	5	0.97	0.99
	6	0.97	0.98
	7	0.97	0.98
	8	0.96	0.98
	9	0.97	0.99
	10	0.97	0.99
SC	5	0.97	0.99
	8	0.97	0.99
	10	0.97	0.99

Table 75
Percentages of Test Administrator Coding Errors

Content	Grade	Level 1 and correct answer	Levels 2 - 4 and no response
RD	3	0.35%	0.14%
	4	0.15%	0.20%
	5	0.05%	0.02%
	6	0.53%	0.16%
	7	0.54%	0.19%
	8	0.63%	0.06%
	9	0.90%	0.30%
	10	0.28%	0.25%
WR	3	0.29%	0.14%
	4	0.07%	0.24%
	5	0.08%	0.18%
	6	0.37%	0.13%
	7	0.56%	0.25%
	8	0.64%	0.07%
	9	0.66%	0.21%
	10	0.25%	0.23%
MA	3	0.41%	0.29%
	4	0.07%	0.29%
	5	0.08%	0.09%
	6	0.43%	0.32%
	7	0.49%	0.38%
	8	0.51%	0.04%
	9	0.50%	0.28%
	10	0.23%	0.37%
SC	5	0.05%	0.02%
	8	0.99%	0.04%
	10	0.27%	0.25%

Table 76
Reading Average Level of Independence and Earned Proficiency Level

Content	Grade	Average Level of Independence	Percent of Students in Each Proficiency Level					
			Inconclusive	Exploring	Emerging	Developing	Novice	Developing and Novice
RD	3	3.5-4.0	8.13%	27.34%	40.14%	20.42%	3.98%	24.40%
		3.0-3.4	50.00%	37.50%	9.38%	3.13%	0%	3.13%
		2.5-2.9	73.33%	26.67%	0%	0%	0%	0%
		2.0-2.4	94.44%	5.56%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	4	3.5-4.0	11.95%	22.70%	35.49%	20.82%	9.04%	29.86%
		3.0-3.4	62.96%	25.93%	11.11%	0%	0%	0%
		2.5-2.9	57.14%	33.33%	9.52%	0%	0%	0%
		2.0-2.4	84.62%	15.38%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	5	3.5-4.0	4.06%	22.84%	21.49%	37.23%	14.38%	51.61%
		3.0-3.4	26.67%	53.33%	10.00%	10.00%	0%	10.00%
		2.5-2.9	78.57%	21.43%	0%	0%	0%	0%
		2.0-2.4	80.00%	20.00%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	6	3.5-4.0	2.59%	19.86%	31.43%	38.34%	7.77%	46.11%
		3.0-3.4	20.00%	50.00%	20.00%	10.00%	0%	10.00%
		2.5-2.9	41.67%	50.00%	8.33%	0%	0%	0%
		2.0-2.4	73.33%	26.67%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
7	3.5-4.0	2.37%	26.41%	25.50%	38.43%	7.29%	45.72%	
	3.0-3.4	35.29%	35.29%	23.53%	5.88%	0%	5.88%	
	2.5-2.9	57.14%	35.71%	7.14%	0%	0%	0%	
	2.0-2.4	42.86%	57.14%	0%	0%	0%	0%	
	1.5-1.9	88.89%	11.11%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	0%	
8	3.5-4.0	9.09%	27.06%	27.27%	30.52%	6.06%	36.58%	
	3.0-3.4	30.77%	53.85%	15.38%	0%	0%	0%	
	2.5-2.9	70.00%	10.00%	20.00%	0%	0%	0%	
	2.0-2.4	100%	0%	0%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	0%	

Table 76
Reading Average Level of Independence and Earned Proficiency Level
(continued)

Content	Grade	Average Level of Independence	Percent of Students in Each Proficiency Level					Developing and Novice
			Inconclusive	Exploring	Emerging	Developing	Novice	
RD	9	3.5-4.0	5.83%	24.58%	31.88%	26.25%	11.46%	37.71%
		3.0-3.4	20.83%	50.00%	25.00%	4.17%	0%	4.17%
		2.5-2.9	25.00%	62.50%	12.50%	0%	0%	0%
		2.0-2.4	87.50%	12.50%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	10	3.5-4.0	6.07%	25.24%	32.04%	20.15%	16.50%	36.65%
		3.0-3.4	33.33%	50.00%	5.56%	11.11%	0%	11.11%
		2.5-2.9	37.50%	25.00%	37.50%	0%	0%	0%
		2.0-2.4	88.89%	11.11%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%

Table 77
Writing Average Level of Independence and Earned Proficiency Level

Content	Grade	Average Level of Independence	Percent of Students in Each Proficiency Level					
			Inconclusive	Exploring	Emerging	Developing	Novice	Developing and Novice
WR	3	3.5-4.0	4.63%	24.91%	40.75%	26.51%	3.20%	29.71%
		3.0-3.4	39.47%	44.74%	15.79%	0%	0%	0%
		2.5-2.9	36.84%	52.63%	10.53%	0%	0%	0%
		2.0-2.4	87.50%	12.50%	0%	0%	0%	0%
		1.5-1.9	90.91%	9.09%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	4	3.5-4.0	4.52%	25.04%	36.35%	24.70%	9.39%	34.09%
		3.0-3.4	25.58%	39.53%	30.23%	4.65%	0%	4.65%
		2.5-2.9	50.00%	40.00%	10.00%	0%	0%	0%
		2.0-2.4	58.33%	41.67%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	5	3.5-4.0	3.36%	20.13%	29.53%	34.73%	12.25%	46.98%
		3.0-3.4	36.00%	28.00%	28.00%	8.00%	0%	8.00%
		2.5-2.9	81.82%	18.18%	0%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%	0%
		1.5-1.9	85.71%	14.29%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	6	3.5-4.0	3.20%	19.40%	27.05%	33.27%	17.08%	50.35%
		3.0-3.4	21.21%	60.61%	15.15%	3.03%	0%	3.03%
		2.5-2.9	46.67%	46.67%	7%	0%	0%	0%
		2.0-2.4	53.85%	46.15%	0%	0%	0%	0%
		1.5-1.9	83.33%	16.67%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
7	3.5-4.0	4.24%	20.99%	25.97%	33.15%	15.65%	48.80%	
	3.0-3.4	45.00%	50.00%	5.00%	0%	0%	0%	
	2.5-2.9	38.46%	61.54%	0%	0%	0%	0%	
	2.0-2.4	72.73%	27.27%	0%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	0%	
8	3.5-4.0	8.91%	23.04%	25.43%	25.65%	16.96%	42.61%	
	3.0-3.4	52.63%	42.11%	5.26%	0%	0%	0%	
	2.5-2.9	66.67%	16.67%	16.67%	0%	0%	0%	
	2.0-2.4	100%	0%	0%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	0%	

Table 77
Writing Average Level of Independence and Earned Proficiency Level (continued)

Content	Grade	Average Level of Independence	Percent of Students in Each Proficiency Level					
			Inconclusive	Exploring	Emerging	Developing	Novice	Developing and Novice
WR	9	3.5-4.0	5.57%	27.22%	28.04%	24.33%	14.85%	39.18%
		3.0-3.4	33.33%	54.17%	8.33%	4.17%	0%	4.17%
		2.5-2.9	42.86%	57.14%	0%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	10	3.5-4.0	4.90%	22.79%	39.22%	22.55%	10.54%	33.09%
		3.0-3.4	31.82%	40.91%	9.09%	18.18%	0%	18.18%
		2.5-2.9	75.00%	12.50%	12.50%	0%	0%	0%
		2.0-2.4	80.00%	20.00%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%

Table 78
Mathematics Average Level of Independence and Earned Proficiency Level

Content	Grade	Average Level of Independence	Percent of Students in Each Proficiency Level					
			Inconclusive	Exploring	Emerging	Developing	Novice	Developing and Novice
MA	3	3.5-4.0	1.15%	13.74%	23.47%	30.53%	31.11%	61.64%
		3.0-3.4	6.78%	77.97%	15.25%	0%	0%	0%
		2.5-2.9	13.79%	86.21%	0%	0%	0%	0%
		2.0-2.4	64.29%	35.71%	0%	0%	0%	0%
		1.5-1.9	90.91%	9.09%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	4	3.5-4.0	0.37%	21.65%	30.09%	34.86%	13.03%	47.89%
		3.0-3.4	1.96%	88.24%	9.80%	0%	0%	0%
		2.5-2.9	10.34%	89.66%	0%	0%	0%	0%
		2.0-2.4	50.00%	50.00%	0%	0%	0%	0%
		1.5-1.9	88.89%	11.11%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	5	3.5-4.0	4.16%	12.12%	22.42%	45.39%	15.91%	61.30%
		3.0-3.4	37.78%	46.67%	11.11%	4.44%	0%	4.44%
		2.5-2.9	66.67%	33.33%	0%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	6	3.5-4.0	2.30%	11.11%	25.10%	31.80%	29.69%	61.49%
		3.0-3.4	13.04%	47.83%	36.96%	2.17%	0%	2.17%
		2.5-2.9	40.00%	56.67%	3.33%	0%	0%	0%
		2.0-2.4	92.86%	7.14%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
7	3.5-4.0	3.51%	16.96%	27.49%	30.99%	21.05%	52.04%	
	3.0-3.4	22.22%	50.00%	22.22%	5.56%	0%	5.56%	
	2.5-2.9	55.00%	40.00%	5.00%	0%	0%	0%	
	2.0-2.4	77.78%	22.22%	0%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	0%	
8	3.5-4.0	3.58%	23.15%	30.55%	32.46%	10.26%	42.72%	
	3.0-3.4	17.50%	52.50%	27.50%	2.50%	0%	2.50%	
	2.5-2.9	58.82%	41.18%	0%	0%	0%	0%	
	2.0-2.4	83.33%	16.67%	0%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	0%	

Table 78
Mathematics Average Level of Independence and Earned Proficiency Level
(continued)

Content	Grade	Average Level of Independence	Percent of Students in Each Proficiency Level					Developing and Novice
			Inconclusive	Exploring	Emerging	Developing	Novice	
MA	9	3.5-4.0	3.52%	24.45%	37.00%	22.47%	12.56%	35.03%
		3.0-3.4	25.93%	48.15%	24.07%	1.85%	0%	1.85%
		2.5-2.9	46.15%	53.85%	0%	0%	0%	0%
		2.0-2.4	83.33%	16.67%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	10	3.5-4.0	3.89%	22.02%	43.01%	21.50%	9.59%	31.09%
		3.0-3.4	29.03%	51.61%	19.35%	0%	0%	0%
		2.5-2.9	52.63%	26.32%	21.05%	0%	0%	0%
		2.0-2.4	100%	0.00%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%

Table 79
Science Average Level of Independence and Earned Proficiency Level

Content	Grade	Average Level of Independence	Percent of Students in Each Proficiency Level					
			Inconclusive	Exploring	Emerging	Developing	Novice	Developing and Novice
	5	3.5-4.0	4.85%	23.58%	20.23%	24.08%	27.26%	51.34%
		3.0-3.4	57.89%	31.58%	10.53%	0%	0%	0%
		2.5-2.9	100%	0%	0%	0%	0%	0%
		2.0-2.4	90.91%	9.09%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
SC	8	3.5-4.0	5.86%	18.22%	20.17%	22.34%	33.41%	55.75%
		3.0-3.4	36.36%	54.55%	9.09%	0%	0%	0%
		2.5-2.9	72.73%	27.27%	0%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%
	10	3.5-4.0	8.89%	21.63%	29.81%	15.63%	24.04%	39.67%
		3.0-3.4	43.75%	18.75%	31.25%	6.25%	0%	6.25%
		2.5-2.9	44.44%	33.33%	22.22%	0%	0%	0%
		2.0-2.4	85.71%	14.29%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%	0%

Table 80
Reading Longitudinal Total Group Means and Standard Deviations

Content	Grade	2013 Raw Score		2012 Raw Score		2011 Raw Score		2010 Raw Score		2009 Raw Score		2008 Raw Score	
		Mean	SD										
RD	3	57.07	25.07	56.59	26.37	58.83	25.41	58.92	25.97	60.54	26.14	61.69	25.59
	4	55.59	26.44	57.73	26.26	58.76	26.29	59.55	25.60	60.72	26.58	61.14	25.52
	5	62.15	26.51	58.70	27.92	62.59	26.96	61.85	27.76	63.22	27.18	61.51	27.30
	6	65.00	25.77	65.35	25.71	64.66	27.01	64.60	26.74	64.54	26.59	63.25	28.20
	7	58.17	23.33	57.51	24.34	58.17	22.72	56.25	24.50	56.28	24.86	55.20	25.07
	8	56.79	24.76	56.62	26.07	53.72	26.06	54.60	27.09	54.03	26.31	56.31	26.35
	9	54.67	26.49	53.98	26.71	53.68	26.51	54.29	27.29	54.39	27.07	55.39	26.70
	10	51.18	24.31	50.62	24.03	49.32	24.48	49.87	24.74	52.53	24.85	48.80	24.97

Content	Grade	Difference 2013- 2012 Raw Score		Difference 2012- 2011 Raw Score		Difference 2011- 2010 Raw Score		Difference 2010- 2009 Raw Score		Difference 2009- 2008 Raw Score	
		Mean	SD								
RD	3	0.49	-1.31	-2.25	0.96	-0.09	-0.56	-1.62	-0.16	-1.14	0.55
	4	-2.14	0.18	-1.03	-0.03	-0.80	0.69	-1.17	-0.98	-0.42	1.06
	5	3.45	-1.41	-3.89	0.96	0.74	-0.80	-1.37	0.58	1.71	-0.12
	6	-0.35	0.06	0.70	-1.30	0.06	0.27	0.06	0.15	1.29	-1.61
	7	0.66	-1.01	-0.66	1.62	1.93	-1.78	-0.04	-0.36	1.08	-0.21
	8	0.17	-1	2.90	0	-0.88	-1.03	0.57	0.78	-2.28	-0.04
	9	0.70	-0.21	0.30	0.20	-0.61	-0.79	-0.10	0.23	-1.00	0.37
	10	0.56	0.28	1.30	-0.45	-0.55	-0.26	-2.67	-0.12	3.73	-0.12

Table 81
Writing Longitudinal Total Group Means and Standard Deviations

Content	Grade	2013		2012		2011		2010		2009		2008	
		Raw Score											
		Mean	SD										
WR	3	53.88	28.20	53.11	28.47	55.56	28.67	57.11	28.44	58.34	27.93	60.05	27.69
	4	55.29	28.88	57.81	28.88	57.11	29.04	60.78	27.82	61.13	28.85	61.92	27.87
	5	63.24	27.94	59.09	28.96	63.52	27.43	63.27	29.23	64.20	27.91	63.05	28.11
	6	63.86	28.75	65.05	28.19	63.46	29.28	65.27	28.18	64.44	28.51	62.65	29.81
	7	65.47	28.93	63.88	30.49	65.17	28.40	63.67	30.16	64.58	29.31	61.57	31.16
	8	63.41	27.84	62.67	28.26	60.59	29.51	60.40	29.56	59.63	29.38	61.87	28.34
	9	60.21	28.86	58.86	29.09	58.25	28.52	58.26	29.68	60.19	27.87	60.50	28.04
	10	60.69	28.07	60.09	27.45	58.76	28.49	60.23	27.54	62.23	27.60	58.15	27.71

Content	Grade	Difference 2013-2012		Difference 2012-2011		Difference 2011-2010		Difference 2010-2009		Difference 2009-2008	
		Raw Score									
		Mean	SD								
WR	3	0.77	-0.27	-2.45	-0.19	-1.55	0.23	-1.23	0.51	-1.71	0.24
	4	-2.52	0.00	0.70	-0.16	-3.67	1.22	-0.35	-1.03	-0.79	0.97
	5	4.15	-1.01	-4.44	1.53	0.25	-1.80	-0.93	1.33	1.15	-0.20
	6	-1.19	0.55	1.58	-1.08	-1.81	1.10	0.83	-0.34	1.78	-1.30
	7	1.59	-1.55	-1.30	2.09	1.50	-1.76	-0.91	0.84	3.01	-1.84
	8	0.74	-0.42	2.08	-1.25	0.19	-0.04	0.76	0.18	-2.24	1.04
	9	1.35	-0.24	0.60	0.57	-0.01	-1.16	-1.93	1.81	-0.30	-0.17
	10	0.60	0.62	1.33	-1.04	-1.47	0.96	-2.00	-0.06	4.08	-0.11

Table 82
Mathematics Longitudinal Total Group Means and Standard Deviations

Content	Grade	2013		2012		2011		2010		2009		2008		2007	
		Raw Score													
		Mean	SD												
MA	3	78.53	35.39	75.91	35.63	78.47	35.22	80.27	34.65	81.33	34.79	82.14	33.75	84.24	31.56
	4	78.31	36.28	79.26	36.48	79.03	36.37	83.16	34.66	82.98	35.91	84.97	34.87	85.88	35.50
	5	102.19	46.65	96.31	46.92	101.52	45.57	100.69	46.51	104.89	45.69	100.95	45.42	102.30	42.79
	6	82.13	36.63	84.20	37.89	81.64	37.47	83.66	37.12	81.96	36.76	79.99	40.58	79.28	38.15
	7	76.40	33.90	74.03	35.56	76.31	33.46	73.06	34.76	73.16	35.38	72.11	37.24	75.18	33.78
	8	84.02	37.67	84.53	39.31	82.15	39.69	80.52	39.55	78.28	39.66	82.94	39.03	79.29	37.54
	9	71.00	35.77	70.45	36.19	69.34	35.87	69.52	36.46	71.98	35.41	71.80	35.54	68.76	35.54
	10	75.15	37.00	73.35	35.56	71.42	35.03	75.12	36.21	76.23	36.83	72.23	35.80	69.47	37.11

Content	Grade	Difference 2013-2012		Difference 2012-2011		Difference 2011-2010		Difference 2010-2009		Difference 2009-2008		Difference 2008-2007	
		Raw Score											
		Mean	SD										
MA	3	2.62	-0.24	-2.56	0.42	-1.81	0.56	-1.05	-0.14	-0.81	1.04	-2.10	2.19
	4	-0.95	-0.20	0.23	0.11	-4.13	1.71	0.18	-1.25	-1.98	1.04	-0.92	-0.63
	5	5.88	-0.26	-5.20	1.35	0.83	-0.94	-4.20	0.81	3.94	0.28	-1.35	2.63
	6	-2.07	-1.26	2.56	0.42	-2.02	0.35	1.70	0.36	1.97	-3.82	0.70	2.43
	7	2.36	-1.66	-2.28	2.10	3.26	-1.30	-0.10	-0.63	1.05	-1.86	-3.08	3.46
	8	-0.51	-1.64	2.38	-0.38	1.63	0.14	2.24	-0.11	-4.66	0.63	3.65	1.49
	9	0.56	-0.42	1.10	0.32	-0.17	-0.59	-2.47	1.05	0.18	-0.13	3.05	0.00
	10	1.80	1.44	1.92	0.53	-3.70	-1.18	-1.11	-0.62	4.00	1.03	2.76	-1.32

Table 83
Science Longitudinal Total Group Means and Standard Deviations

Content	Grade	2013 Raw Score		2012 Raw Score		2011 Raw Score		2010 Raw Score		2009 Raw Score		2008 Raw Score	
		Mean	SD	Mean	SD								
SC	5	65.89	24.35	62.66	25.97	65.62	24.97	65.37	25.93	67.69	24.27	66.42	25.02
	8	71.48	24.37	72.19	25.37	70.31	26.83	70.46	27.11	69.94	26.23	71.26	25.75
	10	60.68	27.17	59.16	26.96	58.82	26.39	59.50	27.10	62.34	26.75	59.15	26.55
Content	Grade	Difference 2013-2012 Raw Score		Difference 2012-2011 Raw Score		Difference 2011-2010 Raw Score		Difference 2010-2009 Raw Score		Difference 2009-2008 Raw Score			
		Mean	SD	Mean	SD								
SC	5	3.23	-1.62	-2.96	1.00	0.25	-0.97	-2.32	1.66	1.26	-0.75		
	8	-0.71	-1.00	1.88	-1.47	-0.15	-0.28	0.52	0.89	-1.32	0.48		
	10	1.53	0.21	0.33	0.56	-0.68	-0.71	-2.84	0.36	3.19	0.19		

Table 84
Reading Longitudinal Subgroup Participation

			Grade 3					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
RD	Gender	Female	34.52%	35.77%	36.19%	35.06%	32.95%	34.58%
		Male	65.18%	64.08%	63.65%	64.94%	66.62%	65.42%
	Primary Disability	Autism	17.26%	20.55%	18.25%	16.27%	14.16%	12.77%
		Deaf-Blind	0%	0%	0.16%	0%	0.29%	0%
		Emotional Disability	0.30%	0.61%	0.78%	2.07%	0.87%	1.56%
		Hearing Disability	0.30%	0.46%	0%	1.48%	0.87%	2.18%
		Limited Intellectual Capacity	25.60%	25.42%	24.18%	23.52%	27.17%	21.18%
		Multiple Disabilities	36.46%	31.51%	26.83%	28.40%	23.84%	24.14%
		Physical Disability	12.05%	12.48%	17.16%	12.57%	13.73%	12.62%
		Specific Learning Disability	3.57%	3.96%	6.24%	7.40%	10.26%	15.11%
		Speech/Language Disability	2.98%	3.96%	4.68%	6.66%	7.66%	9.50%
		Traumatic Brain Injury	1.34%	0.76%	1.56%	0.89%	1.01%	0.62%
		Visual Disability	0%	0.15%	0.16%	0.74%	0.15%	0.31%
		Ethnicity	American Indian/Alaska Native	0.74%	1.07%	1.25%	-	-
	Asian		1.93%	3.65%	2.18%	-	-	-
	Black/ African American		7.44%	5.78%	6.08%	-	-	-
	Hispanic/ Latino		38.10%	35.46%	37.13%	-	-	-
	White		46.28%	50.08%	49.45%	-	-	-
	Native Hawaiian/ Other Pacific Islander		0.30%	0.15%	0%	-	-	-
	Two or More Races		4.91%	3.65%	3.90%	-	-	-

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 3				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	Gender	Female	-1.25%	-0.42%	1.13%	2.11%	-1.63%
		Male	1.10%	0.43%	-1.29%	-1.68%	1.20%
	Primary Disability	Autism	-3.29%	2.30%	1.98%	2.11%	1.39%
		Deaf-Blind	0.00%	-0.16%	0.16%	-0.29%	0.29%
		Emotional Disability	-0.31%	-0.17%	-1.29%	1.20%	-0.69%
		Hearing Disability	-0.16%	0.46%	-1.48%	0.61%	-1.31%
		Limited Intellectual Capacity	0.18%	1.24%	0.66%	-3.65%	5.98%
		Multiple Disabilities	4.95%	4.68%	-1.57%	4.56%	-0.30%
		Physical Disability	-0.43%	-4.68%	4.59%	-1.15%	1.11%
		Specific Learning Disability	-0.39%	-2.28%	-1.16%	-2.86%	-4.85%
		Speech/Language Disability	-0.98%	-0.72%	-1.98%	-1.00%	-1.84%
		Traumatic Brain Injury	0.58%	-0.80%	0.67%	-0.12%	0.39%
	Visual Disability	-0.15%	-0.01%	-0.58%	0.60%	-0.17%	
	Ethnicity	American Indian/Alaska Native	-0.33%	-0.18%	-	-	-
		Asian	-1.72%	1.47%	-	-	-
		Black/ African American	1.66%	-0.30%	-	-	-
		Hispanic/ Latino	2.64%	-1.67%	-	-	-
		White	-3.80%	0.63%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0.15%	0.15%	-	-	-
Two or More Races		1.26%	-0.25%	-	-	-	

Table 84
Reading Longitudinal Subgroup Participation (continued)

			Grade 4					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
	Gender	Female	36.73%	35.97%	35.32%	34.10%	36.80%	37.76%
		Male	63.27%	63.71%	64.36%	65.90%	62.89%	61.77%
RD	Primary Disability	Autism	21.09%	17.12%	16.61%	15.14%	12.42%	10.11%
		Deaf-Blind	0%	0.32%	0%	0.15%	0%	0.16%
		Emotional Disability	0.59%	0%	2.42%	0.15%	1.40%	2.37%
		Hearing Disability	0.29%	0.16%	0.32%	1.38%	1.40%	1.26%
		Limited Intellectual Capacity	27.43%	26.31%	26.61%	29.36%	23.45%	25.59%
		Multiple Disabilities	33.19%	32.49%	31.61%	25.84%	27.48%	28.91%
		Physical Disability	10.18%	14.58%	11.94%	13.61%	12.73%	11.37%
		Specific Learning Disability	3.39%	5.39%	6.94%	9.48%	13.20%	13.90%
		Speech/Language Disability	2.65%	2.06%	1.77%	3.67%	6.52%	4.58%
		Traumatic Brain Injury	1.03%	1.11%	1.13%	1.07%	0.93%	0.95%
		Visual Disability	0.15%	0.16%	0.48%	0.15%	0.31%	0.32%
	Ethnicity	American Indian/Alaska Native	1.33%	1.11%	1.45%	-	-	-
		Asian	3.69%	2.22%	2.58%	-	-	-
		Black/ African American	6.49%	6.02%	5.97%	-	-	-
		Hispanic/ Latino	37.02%	36.29%	35.00%	-	-	-
		White	48.23%	50.08%	51.77%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0.15%	0.16%	0.16%	-	-	-
		Two or More Races	3.10%	3.80%	2.90%	-	-	-

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	Gender	Female	0.76%	0.65%	1.23%	-2.70%	-0.96%
		Male	-0.44%	-0.64%	-1.55%	3.01%	1.12%
	Primary Disability	Autism	3.97%	0.51%	1.48%	2.72%	2.31%
		Deaf-Blind	-0.32%	0.32%	-0.15%	0.15%	-0.16%
		Emotional Disability	0.59%	-2.42%	2.27%	-1.25%	-0.97%
		Hearing Disability	0.13%	-0.16%	-1.05%	-0.02%	0.13%
		Limited Intellectual Capacity	1.12%	-0.30%	-2.75%	5.91%	-2.15%
		Multiple Disabilities	0.70%	0.88%	5.77%	-1.64%	-1.43%
		Physical Disability	-4.40%	2.65%	-1.67%	0.88%	1.36%
		Specific Learning Disability	-2.00%	-1.55%	-2.55%	-3.72%	-0.70%
		Speech/Language Disability	0.59%	0.29%	-1.90%	-2.85%	1.94%
		Traumatic Brain Injury	-0.08%	-0.02%	0.06%	0.14%	-0.02%
	Visual Disability	-0.01%	-0.32%	0.33%	-0.16%	-0.01%	
	Ethnicity	American Indian/Alaska Native	0.22%	-0.34%	-	-	-
Asian		1.47%	-0.36%	-	-	-	
Black/ African American		0.47%	0.05%	-	-	-	
Hispanic/ Latino		0.73%	1.29%	-	-	-	
White		-1.85%	-1.69%	-	-	-	
Native Hawaiian/ Other Pacific Islander		-0.01%	0%	-	-	-	
Two or More Races		-0.70%	0.90%	-	-	-	

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5					
			2013	2012	2011	2010	2009	2008
RD	Gender	Female	37.37%	37.64%	35.94%	39.10%	39.71%	38.95%
		Male	62.48%	61.87%	63.61%	60.58%	59.97%	61.05%
	Primary Disability	Autism	16.29%	16.64%	14.59%	12.28%	11.44%	8.07%
		Deaf-Blind	0.15%	0%	0.15%	0%	0.16%	0.35%
		Emotional Disability	0.45%	0.48%	0.60%	1.13%	2.12%	1.58%
		Hearing Disability	0.15%	0.32%	0.75%	1.62%	1.47%	1.75%
		Limited Intellectual Capacity	30.19%	30.53%	31.13%	26.33%	28.43%	31.75%
		Multiple Disabilities	33.48%	32.79%	30.38%	29.08%	28.27%	29.12%
		Physical Disability	11.06%	11.15%	11.88%	11.79%	10.62%	9.30%
		Specific Learning Disability	5.08%	5.01%	7.37%	11.15%	11.60%	12.63%
		Speech/Language Disability	1.20%	1.62%	1.96%	5.49%	3.76%	4.39%
		Traumatic Brain Injury	1.79%	0.65%	0.90%	0.65%	1.14%	1.05%
		Visual Disability	0.15%	0.48%	0%	0.16%	0.65%	0%
		Ethnicity	American Indian/Alaska Native	1.35%	1.29%	0.90%	-	-
	Asian		2.39%	1.78%	2.11%	-	-	-
	Black/ African American		5.68%	6.62%	7.97%	-	-	-
	Hispanic/ Latino		37.82%	32.47%	37.29%	-	-	-
	White		49.18%	53.80%	48.72%	-	-	-
	Native Hawaiian/ Other Pacific Islander		0%	0.16%	0.30%	-	-	-
	Two or More Races		3.59%	3.39%	2.26%	-	-	-

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	Gender	Female	-0.27%	1.70%	-3.16%	-0.61%	0.76%
		Male	0.61%	-1.74%	3.03%	0.61%	-1.09%
	Primary Disability	Autism	-0.35%	2.05%	2.31%	0.84%	3.37%
		Deaf-Blind	0.15%	-0.15%	0.15%	-0.16%	-0.19%
		Emotional Disability	-0.03%	-0.12%	-0.53%	-0.99%	0.55%
		Hearing Disability	-0.17%	-0.43%	-0.86%	0.15%	-0.28%
		Limited Intellectual Capacity	-0.34%	-0.60%	4.80%	-2.10%	-3.32%
		Multiple Disabilities	0.69%	2.41%	1.30%	0.81%	-0.86%
		Physical Disability	-0.09%	-0.73%	0.09%	1.17%	1.32%
		Specific Learning Disability	0.07%	-2.36%	-3.78%	-0.45%	-1.03%
		Speech/Language Disability	-0.42%	-0.34%	-3.54%	1.74%	-0.63%
		Traumatic Brain Injury	1.14%	-0.25%	0.26%	-0.50%	0.09%
	Visual Disability	-0.33%	0.48%	-0.16%	-0.49%	0.65%	
	Ethnicity	American Indian/Alaska Native	0.06%	0.39%	-	-	-
		Asian	0.61%	-0.33%	-	-	-
		Black/ African American	-0.94%	-1.35%	-	-	-
		Hispanic/ Latino	5.35%	-4.82%	-	-	-
		White	-4.62%	5.08%	-	-	-
		Native Hawaiian/ Other Pacific Islander	-0.16%	-0.14%	-	-	-
Two or More Races		0.20%	1.13%	-	-	-	

Table 84
Reading Longitudinal Subgroup Participation (continued)

			Grade 6					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
RD	Gender	Female	38.18%	36.55%	37.10%	38.97%	38.03%	40.36%
		Male	61.36%	63.12%	62.90%	61.03%	61.61%	58.92%
	Primary Disability	Autism	16.23%	13.85%	14.69%	13.97%	10.60%	9.19%
		Deaf-Blind	0.15%	0%	0%	0.35%	0.37%	0.18%
		Emotional Disability	0.93%	0.48%	1.32%	0.52%	1.28%	1.26%
		Hearing Disability	0.31%	0.32%	0.19%	1.21%	2.19%	1.26%
		Limited Intellectual Capacity	33.85%	33.01%	32.39%	30.69%	34.55%	27.39%
		Multiple Disabilities	33.85%	32.53%	32.02%	31.38%	29.43%	34.41%
		Physical Disability	7.88%	13.85%	10.92%	8.45%	6.95%	8.65%
		Specific Learning Disability	3.86%	3.54%	4.90%	9.48%	10.24%	13.15%
		Speech/Language Disability	1.55%	0.97%	2.45%	1.90%	2.38%	2.88%
		Traumatic Brain Injury	0.77%	0.97%	1.13%	1.38%	1.46%	0.90%
		Visual Disability	0.62%	0.16%	0%	0.69%	0.18%	0.18%
	Ethnicity	American Indian/Alaska Native	1.39%	0.97%	1.13%	-	-	-
		Asian	1.70%	1.77%	1.51%	-	-	-
		Black/ African American	7.57%	6.44%	7.91%	-	-	-
		Hispanic/ Latino	32.30%	37.04%	33.90%	-	-	-
		White	52.55%	50.08%	53.11%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0.15%	0.32%	0.38%	-	-	-
Two or More Races		3.71%	3.06%	2.07%	-	-	-	

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	Gender	Female	1.63%	-0.55%	-1.87%	0.94%	-2.33%
		Male	-1.76%	0.22%	1.87%	-0.58%	2.69%
	Primary Disability	Autism	2.38%	-0.84%	0.72%	3.36%	1.41%
		Deaf-Blind	0.15%	0%	-0.35%	-0.02%	0.19%
		Emotional Disability	0.45%	-0.84%	0.80%	-0.76%	0.02%
		Hearing Disability	-0.01%	0.13%	-1.02%	-0.99%	0.93%
		Limited Intellectual Capacity	0.84%	0.62%	1.70%	-3.86%	7.17%
		Multiple Disabilities	1.32%	0.51%	0.64%	1.95%	-4.98%
		Physical Disability	-5.97%	2.93%	2.48%	1.50%	-1.70%
		Specific Learning Disability	0.32%	-1.36%	-4.59%	-0.76%	-2.92%
		Speech/Language Disability	0.58%	-1.48%	0.55%	-0.48%	-0.51%
		Traumatic Brain Injury	-0.20%	-0.16%	-0.25%	-0.08%	0.56%
		Visual Disability	0.46%	0.16%	-0.69%	0.51%	0%
		Ethnicity	American Indian/Alaska Native	0.42%	-0.16%	-	-
	Asian		-0.07%	0.26%	-	-	-
	Black/ African American		1.13%	-1.47%	-	-	-
	Hispanic/ Latino		-4.74%	3.14%	-	-	-
	White		2.47%	-3.03%	-	-	-
	Native Hawaiian/ Other Pacific Islander		-0.17%	-0.06%	-	-	-
	Two or More Races		0.65%	0.99%	-	-	-

Table 84
Reading Longitudinal Subgroup Participation (continued)

			Grade 7						
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008	
RD	Gender	Female	37.72%	37.10%	38.94%	39.63%	39.29%	35.55%	
		Male	61.63%	62.90%	60.71%	60.19%	59.96%	64.45%	
	Primary Disability	Autism	15.12%	16.20%	14.69%	9.82%	10.53%	9.32%	
		Deaf-Blind	0.16%	0.19%	0.35%	0%	0.19%	0%	
		Emotional Disability	0.49%	0.75%	0.71%	0.56%	1.13%	1.14%	
		Hearing Disability	0.33%	0%	0.35%	2.22%	1.32%	1.33%	
		Limited Intellectual Capacity	34.63%	31.45%	34.51%	35.93%	30.26%	30.42%	
		Multiple Disabilities	33.66%	37.10%	31.86%	32.96%	36.09%	35.93%	
		Physical Disability	11.06%	7.53%	8.14%	8.15%	8.27%	9.13%	
		Specific Learning Disability	2.28%	4.71%	6.37%	7.59%	9.59%	10.08%	
		Speech/Language Disability	0.49%	0.75%	1.06%	1.30%	1.88%	0.95%	
		Traumatic Brain Injury	1.30%	1.32%	1.24%	1.30%	0.56%	1.71%	
		Visual Disability	0%	0%	0.53%	0.19%	0.19%	0%	
		Ethnicity	American Indian/Alaska Native	1.14%	1.32%	1.24%	-	-	-
			Asian	1.63%	1.51%	2.30%	-	-	-
Black/ African American	7.48%		7.91%	8.14%	-	-	-		
Hispanic/ Latino	37.07%		32.58%	33.81%	-	-	-		
White	49.27%		54.05%	51.68%	-	-	-		
Native Hawaiian/ Other Pacific Islander	0.33%		0.38%	0.18%	-	-	-		
Two or More Races	2.44%		2.26%	2.30%	-	-	-		

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	
RD	Gender	Female	0.62%	-1.84%	-0.69%	0.34%	3.74%	
		Male	-1.27%	2.19%	0.52%	0.22%	-4.49%	
	Primary Disability	Autism	-1.08%	1.51%	4.88%	-0.71%	1.21%	
		Deaf-Blind	-0.03%	-0.16%	0.35%	-0.19%	0.19%	
		Emotional Disability	-0.26%	0.04%	0.15%	-0.57%	-0.01%	
		Hearing Disability	0.33%	-0.35%	-1.87%	0.91%	-0.02%	
		Limited Intellectual Capacity	3.18%	-3.06%	-1.41%	5.66%	-0.16%	
		Multiple Disabilities	-3.44%	5.24%	-1.11%	-3.13%	0.16%	
		Physical Disability	3.53%	-0.61%	-0.01%	-0.12%	-0.85%	
		Specific Learning Disability	-2.43%	-1.66%	-1.22%	-1.99%	-0.49%	
		Speech/Language Disability	Speech/Language Disability	-0.26%	-0.31%	-0.23%	-0.58%	0.93%
			Traumatic Brain Injury	-0.02%	0.08%	-0.06%	0.73%	-1.15%
	Visual Disability		0.00%	-0.53%	0.35%	0%	0.19%	
	Ethnicity	American Indian/Alaska Native	-0.18%	0.08%	-	-	-	
		Asian	0.12%	-0.79%	-	-	-	
Black/ African American		-0.43%	-0.23%	-	-	-		
Hispanic/ Latino		4.49%	-1.23%	-	-	-		
White		-4.78%	2.37%	-	-	-		
Native Hawaiian/ Other Pacific Islander		-0.05%	0.20%	-	-	-		
Two or More Races		0.18%	-0.04%	-	-	-		

Table 84
Reading Longitudinal Subgroup Participation (continued)

			Grade 8					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
	Gender	Female	38.14%	38.22%	40.64%	39.72%	36.21%	38.93%
		Male	61.86%	61.78%	59.36%	59.88%	63.42%	61.07%
RD	Primary Disability	Autism	14.03%	15.04%	10.56%	10.08%	10.48%	9.09%
		Deaf-Blind	0.20%	0.36%	0.20%	0%	0.19%	0%
		Emotional Disability	0.79%	0.54%	0.20%	0.59%	0.92%	1.38%
		Hearing Disability	0%	0.36%	1.00%	1.38%	1.47%	1.38%
		Limited Intellectual Capacity	33.60%	36.41%	35.46%	32.21%	30.88%	33.60%
		Multiple Disabilities	39.33%	33.88%	36.85%	40.91%	37.32%	36.17%
		Physical Disability	7.51%	7.79%	8.37%	7.71%	8.27%	5.93%
		Specific Learning Disability	2.96%	3.44%	4.78%	4.55%	7.35%	9.09%
		Speech/Language Disability	0.59%	0.54%	0.60%	1.78%	1.84%	2.37%
		Traumatic Brain Injury	0.79%	1.27%	1.59%	0.59%	1.47%	0.40%
		Visual Disability	0.20%	0.36%	0.40%	0.20%	0%	0.59%
	Ethnicity	American Indian/Alaska Native	1.78%	0.91%	1.39%	-	-	-
		Asian	1.78%	2.17%	3.59%	-	-	-
		Black/ African American	7.31%	7.61%	7.17%	-	-	-
		Hispanic/ Latino	33.60%	32.61%	33.87%	-	-	-
		White	53.16%	54.53%	52.59%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0%	0%	0%	-	-	-
		Two or More Races	2.37%	2.17%	1.39%	-	-	-

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	Gender	Female	-0.08%	-2.42%	0.91%	3.51%	-2.72%
		Male	0.08%	2.42%	-0.52%	-3.54%	2.35%
	Primary Disability	Autism	-1.01%	4.48%	0.48%	-0.40%	1.39%
		Deaf-Blind	-0.16%	0.16%	0.20%	-0.19%	0.19%
		Emotional Disability	0.25%	0.34%	-0.39%	-0.33%	-0.46%
		Hearing Disability	-0.36%	-0.64%	-0.39%	-0.09%	0.09%
		Limited Intellectual Capacity	-2.81%	0.95%	3.25%	1.33%	-2.72%
		Multiple Disabilities	5.45%	-2.97%	-4.06%	3.59%	1.15%
		Physical Disability	-0.28%	-0.58%	0.66%	-0.56%	2.34%
		Specific Learning Disability	-0.48%	-1.34%	0.24%	-2.81%	-1.74%
		Speech/Language Disability	0.05%	-0.06%	-1.18%	-0.06%	-0.53%
		Traumatic Brain Injury	-0.48%	-0.32%	1.00%	-0.88%	1.08%
	Visual Disability	-0.16%	-0.04%	0.20%	0.20%	-0.59%	
	Ethnicity	American Indian/Alaska Native	0.87%	-0.48%	-	-	-
		Asian	-0.39%	-1.42%	-	-	-
Black/ African American		-0.30%	0.44%	-	-	-	
Hispanic/ Latino		0.99%	-1.26%	-	-	-	
White		-1.37%	1.94%	-	-	-	
Native Hawaiian/ Other Pacific Islander		0%	0%	-	-	-	
Two or More Races		0.20%	0.78%	-	-	-	

Table 84
Reading Longitudinal Subgroup Participation (continued)

			Grade 9					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
	Gender	Female	37.04%	38.11%	40.53%	36.25%	38.43%	40.64%
		Male	62.77%	61.68%	59.28%	63.57%	61.37%	59.36%
RD	Primary Disability	Autism	15.51%	11.68%	10.42%	9.67%	9.86%	7.95%
		Deaf-Blind	0%	0%	0%	0.19%	0%	0.18%
		Emotional Disability	0.55%	0.82%	0.38%	1.30%	0.60%	1.06%
		Hearing Disability	0.18%	1.23%	0.19%	1.30%	1.21%	0.88%
		Limited Intellectual Capacity	36.50%	35.66%	34.47%	34.57%	36.22%	37.46%
		Multiple Disabilities	35.95%	36.89%	41.86%	38.29%	35.41%	34.45%
		Physical Disability	5.47%	7.99%	5.87%	7.06%	7.04%	5.48%
		Specific Learning Disability	4.20%	2.66%	4.36%	5.39%	6.24%	10.07%
		Speech/Language Disability	0.18%	1.02%	0.95%	1.12%	2.01%	1.41%
		Traumatic Brain Injury	1.09%	1.43%	1.14%	0.93%	0.60%	0.71%
		Visual Disability	0.18%	0.41%	0.19%	0%	0.40%	0.35%
	Ethnicity	American Indian/Alaska Native	0.91%	1.43%	1.14%	-	-	-
		Asian	1.82%	4.10%	2.84%	-	-	-
		Black/ African American	6.93%	6.76%	8.90%	-	-	-
		Hispanic/ Latino	32.85%	34.22%	31.63%	-	-	-
		White	54.20%	51.23%	52.08%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0%	0%	0.19%	-	-	-
		Two or More Races	3.10%	2.05%	3.03%	-	-	-

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	Gender	Female	-1.07%	-2.42%	4.29%	-2.19%	-2.21%
		Male	1.09%	2.40%	-4.29%	2.20%	2.00%
	Primary Disability	Autism	3.83%	1.26%	0.75%	-0.19%	1.91%
		Deaf-Blind	0%	0%	-0.19%	0.19%	-0.18%
		Emotional Disability	-0.27%	0.44%	-0.92%	0.70%	-0.46%
		Hearing Disability	-1.05%	1.04%	-1.11%	0.09%	0.32%
		Limited Intellectual Capacity	0.84%	1.19%	-0.10%	-1.65%	-1.24%
		Multiple Disabilities	-0.94%	-4.97%	3.57%	2.88%	0.96%
		Physical Disability	-2.52%	2.12%	-1.19%	0.02%	1.57%
		Specific Learning Disability	1.54%	-1.70%	-1.03%	-0.85%	-3.83%
		Speech/Language Disability	-0.84%	0.07%	-0.17%	-0.90%	0.60%
		Traumatic Brain Injury	-0.34%	0.29%	0.21%	0.33%	-0.10%
	Visual Disability	-0.23%	0.22%	0.19%	-0.40%	0.05%	
	Ethnicity	American Indian/Alaska Native	-0.52%	0.29%	-	-	-
Asian		-2.28%	1.26%	-	-	-	
Black/ African American		0.17%	-2.14%	-	-	-	
Hispanic/ Latino		-1.37%	2.59%	-	-	-	
White		2.97%	-0.85%	-	-	-	
Native Hawaiian/ Other Pacific Islander		0%	-0.19%	-	-	-	
Two or More Races		1.05%	-0.98%	-	-	-	

Table 84
Reading Longitudinal Subgroup Participation (continued)

			Grade 10					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
	Gender	Female	39.48%	41.17%	38.70%	39.16%	39.78%	39.05%
		Male	60.52%	58.64%	61.30%	60.63%	60.04%	60.95%
RD	Primary Disability	Autism	12.23%	11.26%	10.59%	10.53%	8.44%	5.86%
		Deaf-Blind	0%	0%	0%	0%	0%	0.22%
		Emotional Disability	1.07%	0.97%	1.02%	0.63%	0.94%	1.30%
		Hearing Disability	1.50%	0.19%	0.41%	0.84%	1.13%	2.82%
		Limited Intellectual Capacity	33.26%	33.40%	35.44%	36.42%	38.09%	35.79%
		Multiple Disabilities	40.99%	43.50%	42.16%	39.16%	36.02%	38.40%
		Physical Disability	7.30%	5.44%	5.91%	5.26%	5.63%	8.68%
		Specific Learning Disability	1.29%	2.72%	3.26%	5.05%	6.57%	4.99%
		Speech/Language Disability	0.64%	0.97%	0.61%	1.05%	1.13%	0.87%
		Traumatic Brain Injury	1.72%	1.36%	0.61%	0.63%	1.31%	1.09%
		Visual Disability	0%	0.19%	0%	0.21%	0.56%	0%
	Ethnicity	American Indian/Alaska Native	1.29%	1.55%	2.24%	-	-	-
		Asian	3.22%	2.91%	1.63%	-	-	-
		Black/ African American	9.01%	8.35%	7.13%	-	-	-
		Hispanic/ Latino	34.55%	30.68%	31.77%	-	-	-
		White	49.57%	53.20%	55.40%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0.21%	0.19%	0%	-	-	-
		Two or More Races	2.15%	2.91%	1.63%	-	-	-

Table 84
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	
	Gender	Female	-1.69%	2.47%	-0.46%	-0.62%	0.73%	
		Male	1.88%	-2.66%	0.67%	0.59%	-0.92%	
	Primary Disability	Autism	0.97%	0.67%	0.06%	2.08%	2.59%	
		Deaf-Blind	0%	0%	0%	0%	-0.22%	
		Emotional Disability	0.10%	-0.05%	0.39%	-0.31%	-0.36%	
		Hearing Disability	1.31%	-0.22%	-0.44%	-0.28%	-1.69%	
		Limited Intellectual Capacity	-0.14%	-2.04%	-0.98%	-1.67%	2.29%	
		Multiple Disabilities	-2.51%	1.34%	3.00%	3.14%	-2.37%	
		Physical Disability	1.86%	-0.47%	0.64%	-0.37%	-3.05%	
		Specific Learning Disability	-1.43%	-0.54%	-1.79%	-1.51%	1.58%	
		RD	Speech/Language Disability	-0.33%	0.36%	-0.44%	-0.07%	0.26%
			Traumatic Brain Injury	0.36%	0.75%	-0.02%	-0.68%	0.23%
Visual Disability	-0.19%		0.19%	-0.21%	-0.35%	0.56%		
	Ethnicity	American Indian/Alaska Native	-0.26%	-0.69%	-	-	-	
		Asian	0.31%	1.28%	-	-	-	
		Black/ African American	0.66%	1.22%	-	-	-	
		Hispanic/ Latino	3.87%	-1.09%	-	-	-	
		White	-3.63%	-2.20%	-	-	-	
		Native Hawaiian/ Other Pacific Islander	0.02%	0.19%	-	-	-	
		Two or More Races	-0.76%	1.28%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation

			Grade 3					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
WR	Gender	Female	34.33%	35.66%	36.57%	35.29%	33.38%	34.81%
		Male	65.37%	64.19%	63.27%	64.71%	66.18%	65.19%
	Primary Disability	Autism	17.39%	21.09%	17.90%	16.44%	13.99%	12.66%
		Deaf-Blind	0%	0%	0.15%	0%	0.29%	0%
		Emotional Disability	0.30%	0.61%	0.93%	1.96%	0.73%	1.58%
		Hearing Disability	0.30%	0.46%	0%	1.51%	0.88%	2.22%
		Limited Intellectual Capacity	25.49%	25.34%	24.23%	23.68%	27.41%	21.20%
		Multiple Disabilities	36.58%	30.96%	27.01%	28.81%	24.05%	24.05%
		Physical Disability	11.84%	12.59%	17.28%	12.37%	13.85%	12.66%
		Specific Learning Disability	3.60%	3.95%	6.17%	7.09%	10.06%	15.35%
		Speech/Language Disability	3.00%	3.95%	4.63%	6.64%	7.58%	9.49%
		Traumatic Brain Injury	1.35%	0.76%	1.54%	0.75%	1.02%	0.63%
	Visual Disability	0%	0.15%	0.15%	0.75%	0.15%	0.16%	
	Ethnicity	American Indian/Alaska Native	0.75%	1.06%	1.24%	-	-	-
		Asian	1.95%	3.64%	2.16%	-	-	-
		Black/ African American	7.50%	5.77%	6.02%	-	-	-
		Hispanic/ Latino	37.78%	35.66%	37.35%	-	-	-
		White	46.48%	49.92%	49.23%	-	-	-
Pacific Islander		0.30%	0.15%	0%	-	-	-	
	Two or More Races	4.95%	3.64%	4.01%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 3				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	Gender	Female	-1.33%	-0.91%	1.28%	1.91%	-1.43%
		Male	1.18%	0.92%	-1.43%	-1.48%	0.99%
	Primary Disability	Autism	-3.70%	3.19%	1.46%	2.45%	1.34%
		Deaf-Blind	0.00%	-0.15%	0.15%	-0.29%	0.29%
		Emotional Disability	-0.31%	-0.32%	-1.04%	1.23%	-0.85%
		Hearing Disability	-0.16%	0.46%	-1.51%	0.63%	-1.34%
		Limited Intellectual Capacity	0.15%	1.11%	0.55%	-3.73%	6.20%
		Multiple Disabilities	5.62%	3.95%	-1.80%	4.76%	0%
		Physical Disability	-0.75%	-4.69%	4.92%	-1.48%	1.19%
		Specific Learning Disability	-0.35%	-2.22%	-0.92%	-2.97%	-5.29%
		Speech/Language Disability	-0.95%	-0.68%	-2.01%	-0.94%	-1.91%
		Traumatic Brain Injury	0.59%	-0.78%	0.79%	-0.27%	0.39%
	Visual Disability	-0.15%	0%	-0.60%	0.61%	-0.01%	
	Ethnicity	American Indian/Alaska Native	-0.31%	-0.18%	-	-	-
		Asian	-1.69%	1.48%	-	-	-
		Black/ African American	1.73%	-0.25%	-	-	-
		Hispanic/ Latino	2.12%	-1.69%	-	-	-
		White	-3.44%	0.69%	-	-	-
Pacific Islander		0.15%	0.15%	-	-	-	
Two or More Races		1.31%	-0.37%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4					
			2013	2012	2011	2010	2009	2008
WR	Gender	Female	36.70%	36.15%	35.34%	34.14%	36.99%	37.70%
		Male	63.30%	63.54%	64.33%	65.86%	62.70%	61.82%
	Primary Disability	Autism	21.20%	17.36%	16.94%	15.33%	12.38%	10.22%
		Deaf-Blind	0%	0.32%	0%	0.15%	0%	0.16%
		Emotional Disability	0.58%	0%	2.28%	0.15%	1.41%	2.24%
		Hearing Disability	0.29%	0.16%	0.33%	1.37%	1.41%	1.44%
		Limited Intellectual Capacity	27.49%	26.43%	26.55%	29.14%	23.67%	26.04%
		Multiple Disabilities	33.33%	32.32%	31.92%	26.10%	27.43%	28.75%
		Physical Disability	10.09%	14.49%	12.05%	13.35%	12.70%	11.02%
		Specific Learning Disability	3.22%	5.25%	6.68%	9.26%	13.01%	13.74%
		Speech/Language Disability	2.63%	2.07%	1.63%	3.95%	6.58%	4.63%
		Traumatic Brain Injury	1.02%	1.11%	0.98%	1.06%	0.94%	0.96%
	Visual Disability	0.15%	0.16%	0.49%	0.15%	0.31%	0.32%	
	Ethnicity	American Indian/Alaska Native	1.32%	1.11%	1.47%	-	-	-
		Asian	3.65%	2.23%	2.61%	-	-	-
		Black/ African American	6.43%	6.05%	6.19%	-	-	-
		Hispanic/ Latino	36.84%	36.15%	34.37%	-	-	-
		White	48.54%	50.16%	52.12%	-	-	-
		Pacific Islander	0.15%	0.16%	0.16%	-	-	-
	Two or More Races	3.07%	3.82%	2.93%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	Gender	Female	0.55%	0.81%	1.20%	-2.85%	-0.71%
		Male	-0.24%	-0.79%	-1.53%	3.16%	0.87%
	Primary Disability	Autism	3.84%	0.42%	1.61%	2.94%	2.16%
		Deaf-Blind	-0.32%	0.32%	-0.15%	0.15%	-0.16%
		Emotional Disability	0.58%	-2.28%	2.13%	-1.26%	-0.83%
		Hearing Disability	0.13%	-0.17%	-1.04%	-0.04%	-0.03%
		Limited Intellectual Capacity	1.06%	-0.12%	-2.59%	5.47%	-2.37%
		Multiple Disabilities	1.01%	0.40%	5.82%	-1.33%	-1.33%
		Physical Disability	-4.40%	2.44%	-1.30%	0.66%	1.67%
		Specific Learning Disability	-2.03%	-1.43%	-2.58%	-3.75%	-0.73%
		Speech/Language Disability	0.56%	0.44%	-2.32%	-2.64%	1.95%
		Traumatic Brain Injury	-0.09%	0.13%	-0.09%	0.12%	-0.02%
	Visual Disability	-0.01%	-0.33%	0.34%	-0.16%	-0.01%	
	Ethnicity	American Indian/Alaska Native	0.21%	-0.36%	-	-	-
		Asian	1.42%	-0.38%	-	-	-
		Black/ African American	0.38%	-0.14%	-	-	-
		Hispanic/ Latino	0.69%	1.79%	-	-	-
White		-1.62%	-1.96%	-	-	-	
Pacific Islander		-0.01%	0.00%	-	-	-	
	Two or More Races	-0.75%	0.89%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

			Grade 5					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
WR	Gender	Female	37.10%	37.82%	35.91%	39.12%	39.50%	38.91%
		Male	62.75%	61.69%	63.64%	60.56%	60.17%	61.09%
	Primary Disability	Autism	16.44%	16.56%	14.55%	12.77%	11.41%	8.10%
		Deaf-Blind	0.15%	0%	0.15%	0%	0.17%	0.35%
		Emotional Disability	0.45%	0.49%	0.61%	1.15%	2.15%	1.59%
		Hearing Disability	0.15%	0.32%	0.76%	1.64%	1.49%	1.76%
		Limited Intellectual Capacity	30.77%	30.52%	31.06%	26.35%	28.43%	31.87%
		Multiple Disabilities	33.03%	33.28%	30.61%	28.64%	28.43%	29.05%
		Physical Disability	11.01%	10.88%	11.82%	11.78%	10.91%	9.33%
		Specific Learning Disability	4.83%	4.87%	7.27%	10.97%	11.07%	12.50%
		Speech/Language Disability	1.21%	1.62%	1.97%	5.57%	3.80%	4.40%
		Traumatic Brain Injury	1.81%	0.65%	0.91%	0.66%	1.16%	1.06%
	Visual Disability	0.15%	0.49%	0%	0.16%	0.66%	0%	
	Ethnicity	American Indian/Alaska Native	1.36%	1.30%	0.91%	-	-	-
		Asian	2.41%	1.79%	1.97%	-	-	-
		Black/ African American	5.58%	6.66%	8.03%	-	-	-
		Hispanic/ Latino	37.86%	32.31%	37.12%	-	-	-
		White	49.17%	53.90%	48.94%	-	-	-
		Pacific Islander	0.00%	0.16%	0.30%	-	-	-
Two or More Races		3.62%	3.41%	2.27%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	Gender	Female	-0.72%	1.91%	-3.21%	-0.39%	0.60%
		Male	1.06%	-1.95%	3.08%	0.39%	-0.93%
	Primary Disability	Autism	-0.12%	2.02%	1.78%	1.36%	3.31%
		Deaf-Blind	0.15%	-0.15%	0.15%	-0.17%	-0.19%
		Emotional Disability	-0.04%	-0.12%	-0.54%	-1.00%	0.56%
		Hearing Disability	-0.17%	-0.44%	-0.88%	0.15%	-0.27%
		Limited Intellectual Capacity	0.25%	-0.54%	4.71%	-2.08%	-3.44%
		Multiple Disabilities	-0.25%	2.67%	1.96%	0.21%	-0.62%
		Physical Disability	0.13%	-0.94%	0.03%	0.87%	1.58%
		Specific Learning Disability	-0.04%	-2.40%	-3.69%	-0.11%	-1.43%
		Speech/Language Disability	-0.41%	-0.35%	-3.60%	1.76%	-0.60%
		Traumatic Brain Injury	1.16%	-0.26%	0.25%	-0.50%	0.10%
	Visual Disability	-0.34%	0.49%	-0.16%	-0.50%	0.66%	
	Ethnicity	American Indian/Alaska Native	0.06%	0.39%	-	-	-
		Asian	0.62%	-0.18%	-	-	-
		Black/ African American	-1.08%	-1.37%	-	-	-
		Hispanic/ Latino	5.55%	-4.81%	-	-	-
		White	-4.73%	4.96%	-	-	-
Pacific Islander		-0.16%	-0.14%	-	-	-	
	Two or More Races	0.21%	1.14%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

			Grade 6					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
WR	Gender	Female	37.93%	36.39%	36.96%	38.96%	38.43%	40.36%
		Male	61.61%	63.29%	63.04%	61.04%	61.20%	58.91%
	Primary Disability	Autism	16.25%	13.85%	14.82%	13.91%	10.75%	9.27%
		Deaf-Blind	0.15%	0%	0%	0.35%	0.36%	0.18%
		Emotional Disability	0.93%	0.48%	1.31%	0.52%	1.28%	1.27%
		Hearing Disability	0.31%	0.32%	0.19%	1.22%	2.37%	1.27%
		Limited Intellectual Capacity	33.75%	32.85%	32.27%	30.78%	34.43%	27.64%
		Multiple Disabilities	34.06%	32.85%	32.27%	31.30%	29.14%	34.55%
		Physical Disability	7.74%	13.69%	10.69%	8.35%	6.92%	8.36%
		Specific Learning Disability	3.87%	3.54%	4.88%	9.57%	10.20%	12.73%
		Speech/Language Disability	1.55%	0.97%	2.44%	1.91%	2.55%	2.91%
		Traumatic Brain Injury	0.77%	0.97%	1.13%	1.39%	1.46%	0.91%
	Visual Disability	0.62%	0.16%	0%	0.70%	0.18%	0.36%	
	Ethnicity	American Indian/Alaska Native	1.39%	0.97%	1.13%	-	-	-
		Asian	1.55%	1.61%	1.50%	-	-	-
		Black/ African American	7.59%	6.44%	7.69%	-	-	-
		Hispanic/ Latino	32.20%	36.55%	33.96%	-	-	-
White		52.94%	50.72%	53.28%	-	-	-	
Pacific Islander		0.15%	0.32%	0.38%	-	-	-	
	Two or More Races	3.56%	3.06%	2.06%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	Gender	Female	1.54%	-0.57%	-2.00%	0.52%	-1.93%
		Male	-1.68%	0.25%	2.00%	-0.16%	2.29%
	Primary Disability	Autism	2.40%	-0.97%	0.91%	3.17%	1.47%
		Deaf-Blind	0.15%	0%	-0.35%	-0.02%	0.18%
		Emotional Disability	0.45%	-0.83%	0.79%	-0.75%	0%
		Hearing Disability	-0.01%	0.13%	-1.03%	-1.15%	1.10%
		Limited Intellectual Capacity	0.90%	0.58%	1.49%	-3.64%	6.79%
		Multiple Disabilities	1.21%	0.58%	0.97%	2.16%	-5.40%
		Physical Disability	-5.95%	3.00%	2.35%	1.43%	-1.44%
		Specific Learning Disability	0.33%	-1.34%	-4.69%	-0.63%	-2.53%
		Speech/Language Disability	0.58%	-1.47%	0.53%	-0.64%	-0.36%
		Traumatic Brain Injury	-0.20%	-0.16%	-0.27%	-0.07%	0.55%
	Visual Disability	0.46%	0.16%	-0.70%	0.51%	-0.18%	
	Ethnicity	American Indian/Alaska Native	0.42%	-0.16%	-	-	-
		Asian	-0.06%	0.11%	-	-	-
		Black/ African American	1.15%	-1.25%	-	-	-
		Hispanic/ Latino	-4.35%	2.59%	-	-	-
		White	2.22%	-2.56%	-	-	-
		Pacific Islander	-0.17%	-0.06%	-	-	-
Two or More Races		0.50%	1.00%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

			Grade 7					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
WR	Gender	Female	37.25%	36.71%	38.43%	38.99%	39.02%	34.79%
		Male	62.09%	63.29%	61.21%	60.82%	60.23%	65.21%
	Primary Disability	Autism	15.36%	16.06%	14.95%	10.08%	10.51%	9.70%
		Deaf-Blind	0.16%	0.19%	0.36%	0%	0.19%	0%
		Emotional Disability	0.49%	0.76%	0.71%	0.56%	1.31%	1.14%
		Hearing Disability	0.33%	0%	0.36%	2.24%	1.31%	1.33%
		Limited Intellectual Capacity	34.97%	31.55%	34.34%	36.01%	30.02%	29.85%
		Multiple Disabilities	33.66%	37.09%	31.85%	32.84%	36.02%	35.93%
		Physical Disability	10.46%	7.46%	8.01%	7.84%	8.26%	9.13%
		Specific Learning Disability	2.29%	4.78%	6.41%	7.46%	9.57%	10.08%
		Speech/Language Disability	0.49%	0.76%	1.07%	1.49%	2.06%	0.95%
		Traumatic Brain Injury	1.31%	1.34%	1.25%	1.31%	0.56%	1.90%
	Visual Disability	0%	0%	0.53%	0.19%	0.19%	0%	
	Ethnicity	American Indian/Alaska Native	1.14%	1.15%	1.25%	-	-	-
		Asian	1.63%	1.34%	2.14%	-	-	-
		Black/ African American	7.52%	7.84%	8.19%	-	-	-
		Hispanic/ Latino	37.25%	32.70%	33.99%	-	-	-
White		49.02%	54.30%	51.60%	-	-	-	
Native Hawaiian/ Other Pacific Islander		0.33%	0.38%	0.18%	-	-	-	
Two or More Races		2.45%	2.29%	2.31%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	Gender	Female	0.54%	-1.72%	-0.56%	-0.03%	4.23%
		Male	-1.20%	2.08%	0.39%	0.60%	-4.98%
	Primary Disability	Autism	-0.70%	1.11%	4.87%	-0.43%	0.81%
		Deaf-Blind	-0.03%	-0.17%	0.36%	-0.19%	0.19%
		Emotional Disability	-0.27%	0.05%	0.15%	-0.75%	0.17%
		Hearing Disability	0.33%	-0.36%	-1.88%	0.93%	-0.02%
		Limited Intellectual Capacity	3.42%	-2.79%	-1.67%	5.99%	0.17%
		Multiple Disabilities	-3.43%	5.24%	-0.98%	-3.19%	0.09%
		Physical Disability	3.00%	-0.55%	0.17%	-0.42%	-0.87%
		Specific Learning Disability	-2.49%	-1.63%	-1.06%	-2.11%	-0.51%
		Speech/Language Disability	-0.27%	-0.31%	-0.43%	-0.57%	1.11%
		Traumatic Brain Injury	-0.03%	0.09%	-0.06%	0.74%	-1.34%
	Visual Disability	0%	-0.53%	0.35%	0%	0.19%	
	Ethnicity	American Indian/Alaska Native	-0.01%	-0.10%	-	-	-
		Asian	0.29%	-0.80%	-	-	-
Black/ African American		-0.32%	-0.35%	-	-	-	
Hispanic/ Latino		4.55%	-1.29%	-	-	-	
White		-5.28%	2.70%	-	-	-	
Native Hawaiian/ Other Pacific Islander		-0.05%	0.20%	-	-	-	
Two or More Races		0.16%	-0.02%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

			Grade 8					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
	Gender	Female	37.90%	38.25%	41.08%	40.00%	35.98%	39.28%
		Male	62.10%	61.75%	58.92%	59.80%	63.65%	60.72%
WR	Primary Disability	Autism	14.09%	14.94%	10.82%	10.10%	10.70%	9.22%
		Deaf-Blind	0.20%	0.36%	0.20%	0%	0%	0%
		Emotional Disability	0.79%	0.55%	0.20%	0.59%	0.92%	1.60%
		Hearing Disability	0%	0.36%	1.00%	1.39%	1.48%	1.40%
		Limited Intellectual Capacity	33.73%	36.61%	35.27%	32.08%	30.63%	33.27%
		Multiple Disabilities	39.09%	33.88%	36.87%	40.79%	37.27%	35.87%
		Physical Disability	7.54%	7.65%	8.22%	7.92%	8.30%	6.01%
		Specific Learning Disability	2.98%	3.46%	4.81%	4.55%	7.38%	9.62%
		Speech/Language Disability	0.60%	0.55%	0.60%	1.78%	1.85%	2.00%
		Traumatic Brain Injury	0.79%	1.28%	1.60%	0.59%	1.48%	0.40%
		Visual Disability	0.20%	0.36%	0.40%	0.20%	0%	0.60%
		WR	Ethnicity	American Indian/Alaska Native	1.79%	0.91%	1.40%	-
Asian	1.98%			2.19%	3.61%	-	-	-
Black/ African American	7.34%			7.47%	7.01%	-	-	-
Hispanic/ Latino	33.53%			32.60%	34.07%	-	-	-
White	52.98%			54.64%	52.51%	-	-	-
Native Hawaiian/ Other Pacific Islander	0%			0%	0%	-	-	-
Two or More Races	2.38%			2.19%	1.40%	-	-	-

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	Gender	Female	-0.35%	-2.83%	1.08%	4.02%	-3.30%
		Male	0.35%	2.83%	-0.88%	-3.85%	2.93%
WR	Primary Disability	Autism	-0.85%	4.12%	0.72%	-0.60%	1.48%
		Deaf-Blind	-0.16%	0.16%	0.20%	0%	0%
		Emotional Disability	0.24%	0.35%	-0.39%	-0.33%	-0.68%
		Hearing Disability	-0.36%	-0.64%	-0.38%	-0.09%	0.07%
		Limited Intellectual Capacity	-2.88%	1.34%	3.19%	1.45%	-2.64%
		Multiple Disabilities	5.21%	-2.99%	-3.92%	3.52%	1.40%
		Physical Disability	-0.11%	-0.57%	0.29%	-0.38%	2.29%
		Specific Learning Disability	-0.48%	-1.35%	0.26%	-2.83%	-2.24%
		Speech/Language Disability	0.05%	-0.05%	-1.18%	-0.06%	-0.16%
		Traumatic Brain Injury	-0.49%	-0.32%	1.01%	-0.88%	1.08%
	Ethnicity	Visual Disability	-0.16%	-0.04%	0.20%	0.20%	-0.60%
		American Indian/Alaska Native	0.88%	-0.49%	-	-	-
		Asian	-0.21%	-1.42%	-	-	-
		Black/ African American	-0.13%	0.46%	-	-	-
		Hispanic/ Latino	0.93%	-1.47%	-	-	-
		White	-1.66%	2.14%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0%	0%	-	-	-
		Two or More Races	0.19%	0.79%	-	-	-

Table 85
Writing Longitudinal Subgroup Participation (continued)

			Grade 9					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
	Gender	Female	37.07%	38.33%	40.42%	36.25%	38.15%	40.60%
		Male	62.75%	61.67%	59.20%	63.57%	61.65%	59.40%
WR	Primary Disability	Autism	15.37%	11.88%	10.63%	9.67%	10.04%	7.73%
		Deaf-Blind	0%	0%	0%	0.19%	0%	0.18%
		Emotional Disability	0.54%	0.63%	0.38%	1.30%	0.60%	1.05%
		Hearing Disability	0.18%	1.25%	0.19%	1.30%	1.21%	0.88%
		Limited Intellectual Capacity	35.99%	35.63%	34.54%	34.39%	36.35%	37.43%
		Multiple Disabilities	36.53%	37.08%	41.75%	38.85%	35.14%	34.80%
		Physical Disability	5.42%	7.92%	5.88%	6.88%	7.03%	5.62%
		Specific Learning Disability	4.16%	2.71%	4.18%	5.20%	6.23%	9.84%
		Speech/Language Disability	0.18%	1.04%	0.95%	1.12%	2.01%	1.41%
		Traumatic Brain Injury	1.27%	1.46%	1.14%	0.93%	0.60%	0.70%
		Visual Disability	0.18%	0.42%	0.19%	0%	0.40%	0.35%
	Ethnicity	American Indian/Alaska Native	0.90%	1.46%	1.14%	-	-	-
		Asian	1.81%	3.75%	2.85%	-	-	-
		Black/ African American	7.05%	6.67%	8.73%	-	-	-
		Hispanic/ Latino	32.73%	34.38%	31.50%	-	-	-
		White	54.25%	51.88%	52.37%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0%	0%	0.19%	-	-	-
		Two or More Races	3.07%	1.88%	2.85%	-	-	-

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	
	Gender	Female	-1.26%	-2.09%	4.17%	-1.91%	-2.45%	
		Male	1.08%	2.47%	-4.37%	1.92%	2.25%	
	Primary Disability	Autism	3.49%	1.25%	0.96%	-0.38%	2.31%	
		Deaf-Blind	0%	0%	-0.19%	0.19%	-0.18%	
		Emotional Disability	-0.09%	0.25%	-0.92%	0.70%	-0.45%	
		Hearing Disability	-1.07%	1.06%	-1.11%	0.10%	0.33%	
		Limited Intellectual Capacity	0.36%	1.10%	0.15%	-1.96%	-1.09%	
		Multiple Disabilities	-0.55%	-4.67%	2.90%	3.71%	0.34%	
		Physical Disability	-2.50%	2.04%	-1.00%	-0.15%	1.40%	
		Specific Learning Disability	1.45%	-1.47%	-1.03%	-1.02%	-3.62%	
		WR	Speech/Language Disability	-0.86%	0.09%	-0.17%	-0.89%	0.60%
			Traumatic Brain Injury	-0.19%	0.32%	0.21%	0.33%	-0.10%
Visual Disability	-0.24%		0.23%	0.19%	-0.40%	0.05%		
	Ethnicity	American Indian/Alaska Native	-0.56%	0.32%	-	-	-	
		Asian	-1.94%	0.90%	-	-	-	
		Black/ African American	0.38%	-2.06%	-	-	-	
		Hispanic/ Latino	-1.65%	2.88%	-	-	-	
		White	2.37%	-0.49%	-	-	-	
		Native Hawaiian/ Other Pacific Islander	0%	-0.19%	-	-	-	
		Two or More Races	1.19%	-0.97%	-	-	-	

Table 85
Writing Longitudinal Subgroup Participation (continued)

			Grade 10					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
	Gender	Female	40.04%	41.25%	38.16%	39.54%	39.96%	39.22%
		Male	59.74%	58.56%	61.84%	60.25%	59.85%	60.78%
WR	Primary Disability	Autism	12.21%	11.28%	10.61%	10.57%	8.26%	6.10%
		Deaf-Blind	0%	0%	0%	0%	0%	0.22%
		Emotional Disability	1.07%	0.78%	1.02%	0.63%	0.75%	1.31%
		Hearing Disability	1.50%	0.19%	0.41%	0.85%	1.13%	2.83%
		Limited Intellectual Capacity	33.19%	33.46%	35.31%	36.36%	38.09%	36.60%
		Multiple Disabilities	40.90%	43.58%	42.04%	38.90%	36.21%	37.69%
		Physical Disability	7.07%	5.45%	5.92%	5.29%	5.63%	8.28%
		Specific Learning Disability	1.28%	2.72%	3.47%	5.07%	6.57%	5.01%
		Speech/Language Disability	0.86%	0.97%	0.61%	1.27%	1.13%	0.87%
		Traumatic Brain Injury	1.93%	1.36%	0.61%	0.63%	1.50%	1.09%
		Visual Disability	0%	0.19%	0%	0.21%	0.56%	0%
	Ethnicity	American Indian/Alaska Native	1.28%	1.56%	2.25%	-	-	-
		Asian	3.43%	2.92%	1.63%	-	-	-
		Black/ African American	8.99%	8.17%	7.35%	-	-	-
		Hispanic/ Latino	34.48%	31.13%	31.43%	-	-	-
		White	49.46%	52.92%	55.51%	-	-	-
		Native Hawaiian/ Other Pacific Islander	0.21%	0.19%	0%	-	-	-
		Two or More Races	2.14%	2.92%	1.63%	-	-	-

Table 85
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10				
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	Gender	Female	-1.21%	3.09%	-1.37%	-0.43%	0.75%
		Male	1.18%	-3.28%	1.58%	0.40%	-0.93%
	Primary Disability	Autism	0.93%	0.67%	0.04%	2.32%	2.16%
		Deaf-Blind	0%	0%	0%	0%	-0.22%
		Emotional Disability	0.29%	-0.24%	0.39%	-0.12%	-0.56%
		Hearing Disability	1.31%	-0.22%	-0.44%	-0.28%	-1.71%
		Limited Intellectual Capacity	-0.27%	-1.85%	-1.06%	-1.72%	1.49%
		Multiple Disabilities	-2.68%	1.54%	3.14%	2.69%	-1.48%
		Physical Disability	1.62%	-0.47%	0.63%	-0.34%	-2.65%
		Specific Learning Disability	-1.44%	-0.75%	-1.61%	-1.49%	1.56%
		Speech/Language Disability	-0.11%	0.36%	-0.66%	0.14%	0.26%
		Traumatic Brain Injury	0.57%	0.75%	-0.02%	-0.87%	0.41%
	Visual Disability	-0.19%	0.19%	-0.21%	-0.35%	0.56%	
	Ethnicity	American Indian/Alaska Native	-0.28%	-0.69%	-	-	-
		Asian	0.51%	1.29%	-	-	-
Black/ African American		0.82%	0.82%	-	-	-	
Hispanic/ Latino		3.35%	-0.30%	-	-	-	
White		-3.46%	-2.59%	-	-	-	
Native Hawaiian/ Other Pacific Islander		0.02%	0.19%	-	-	-	
	Two or More Races	-0.78%	1.29%	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation

			Grade 3						
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	35.05%	36.42%	36.44%	35.54%	33.03%	35.52%	39.29%
		Male	64.64%	63.43%	63.41%	64.47%	66.52%	64.48%	60.71%
	Primary Disability	Autism	16.69%	20.22%	17.98%	16.82%	14.09%	12.24%	8.57%
		Deaf-Blind	0%	0%	0.16%	0.00%	0.30%	0%	0.37%
		Emotional Disability	0.30%	0.62%	0.95%	1.73%	0.61%	1.72%	2.24%
		Hearing Disability	0.30%	0.46%	0%	1.10%	0.61%	1.55%	0.75%
		Limited Intellectual Capacity	25.80%	25.93%	24.61%	24.37%	28.03%	22.76%	27.93%
		Multiple Disabilities	36.87%	31.79%	26.97%	29.09%	25.00%	26.21%	26.63%
		Physical Disability	11.84%	12.50%	17.51%	12.74%	14.55%	13.62%	12.10%
		Specific Learning Disability	3.79%	3.86%	5.52%	6.76%	8.33%	12.41%	12.10%
		Speech/Language Disability	2.88%	3.70%	4.57%	5.98%	7.42%	8.62%	8.19%
		Traumatic Brain Injury	1.37%	0.77%	1.58%	0.79%	1.06%	0.52%	0.56%
		Visual Disability	0%	0%	0.16%	0.63%	0%	0.35%	0.37%
		Ethnicity	American Indian/Alaska Nativ	0.76%	1.08%	1.26%	-	-	-
	Asian		1.82%	3.70%	2.21%	-	-	-	-
	Black/ African American		7.44%	5.71%	6.15%	-	-	-	-
	Hispanic/ Latino		38.39%	35.96%	37.07%	-	-	-	-
	White		46.13%	49.69%	49.37%	-	-	-	-
	Native Hawaiian/ Other Pacific		0.30%	0.15%	0%	-	-	-	-
Two or More Races	4.86%		3.55%	3.94%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 3					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	-1.37%	-0.01%	0.90%	2.51%	-2.49%	-3.78%
		Male	1.21%	0.02%	-1.06%	-2.05%	2.03%	3.78%
	Primary Disability	Autism	-3.53%	2.24%	1.16%	2.73%	1.85%	3.67%
		Deaf-Blind	0%	-0.16%	0.16%	-0.30%	0.30%	-0.37%
		Emotional Disability	-0.32%	-0.33%	-0.78%	1.12%	-1.12%	-0.52%
		Hearing Disability	-0.16%	0.46%	-1.10%	0.50%	-0.95%	0.80%
		Limited Intellectual Capacity	-0.13%	1.32%	0.23%	-3.66%	5.27%	-5.17%
		Multiple Disabilities	5.08%	4.82%	-2.12%	4.09%	-1.21%	-0.42%
		Physical Disability	-0.66%	-5.01%	4.77%	-1.81%	0.92%	1.52%
		Specific Learning Disability	-0.07%	-1.66%	-1.24%	-1.57%	-4.08%	0.31%
		Speech/Language Disability	-0.82%	-0.87%	-1.40%	-1.45%	-1.20%	0.43%
		Traumatic Brain Injury	0.60%	-0.81%	0.79%	-0.28%	0.54%	-0.04%
	Visual Disability	0%	-0.16%	-0.47%	0.63%	-0.35%	-0.03%	
	Ethnicity	American Indian/Alaska Nati	-0.32%	-0.18%	-	-	-	-
		Asian	-1.88%	1.49%	-	-	-	-
		Black/ African American	1.73%	-0.44%	-	-	-	-
		Hispanic/ Latino	2.43%	-1.11%	-	-	-	-
		White	-3.56%	0.32%	-	-	-	-
Native Hawaiian/ Other Pacifi		0.15%	0.15%	-	-	-	-	
Two or More Races		1.31%	-0.39%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4						
			2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	36.48%	36.48%	35.36%	35.17%	38.05%	38.16%	38.39%
		Male	63.52%	63.20%	64.47%	64.83%	61.79%	61.33%	61.02%
	Primary Disability	Autism	21.42%	17.60%	16.45%	14.98%	12.36%	11.07%	8.47%
		Deaf-Blind	0%	0.32%	0%	0.16%	0%	0.17%	0.20%
		Emotional Disability	0.59%	0%	1.97%	0.16%	1.30%	2.39%	1.38%
		Hearing Disability	0.30%	0.16%	0.33%	0.79%	0.65%	1.19%	1.97%
		Limited Intellectual Capacity	27.33%	26.56%	26.97%	30.28%	24.07%	27.09%	30.51%
		Multiple Disabilities	32.94%	32.16%	32.07%	26.81%	28.46%	30.66%	28.15%
		Physical Disability	10.34%	14.72%	12.34%	13.88%	13.17%	10.56%	11.22%
		Specific Learning Disability	3.25%	4.80%	6.41%	7.73%	12.20%	10.73%	10.83%
		Speech/Language Disability	2.66%	2.08%	1.81%	3.94%	6.34%	4.26%	5.32%
		Traumatic Brain Injury	1.03%	1.12%	0.99%	1.10%	0.98%	1.02%	1.18%
		Visual Disability	0.15%	0.16%	0.49%	0.16%	0.33%	0.34%	0.39%
		Ethnicity	American Indian/Alaska Nativ	1.33%	1.12%	1.48%	-	-	-
	Asian		3.69%	2.24%	2.63%	-	-	-	-
	Black/ African American		6.50%	6.24%	6.09%	-	-	-	-
	Hispanic/ Latino		36.63%	35.52%	34.21%	-	-	-	-
	White		48.60%	50.40%	52.47%	-	-	-	-
	Native Hawaiian/ Other Pacific		0.15%	0.16%	0.16%	-	-	-	-
		Two or More Races	3.10%	4.00%	2.80%	-	-	-	-

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	0%	1.12%	0.19%	-2.88%	-0.11%	-0.23%
		Male	0.32%	-1.27%	-0.35%	3.04%	0.46%	0.31%
	Primary Disability	Autism	3.82%	1.15%	1.46%	2.63%	1.29%	2.60%
		Deaf-Blind	-0.32%	0.32%	-0.16%	0.16%	-0.17%	-0.03%
		Emotional Disability	0.59%	-1.97%	1.82%	-1.14%	-1.08%	1.01%
		Hearing Disability	0.14%	-0.17%	-0.46%	0.14%	-0.54%	-0.78%
		Limited Intellectual Capacity	0.77%	-0.41%	-3.31%	6.22%	-3.02%	-3.42%
		Multiple Disabilities	0.78%	0.09%	5.26%	-1.64%	-2.21%	2.51%
		Physical Disability	-4.38%	2.38%	-1.54%	0.71%	2.61%	-0.66%
		Specific Learning Disability	-1.55%	-1.61%	-1.32%	-4.47%	1.46%	-0.10%
		Speech/Language Disability	0.58%	0.27%	-2.13%	-2.40%	2.08%	-1.06%
		Traumatic Brain Injury	-0.09%	0.13%	-0.12%	0.13%	-0.05%	-0.16%
	Visual Disability	-0.01%	-0.33%	0.34%	-0.17%	-0.02%	-0.05%	
	Ethnicity	American Indian/Alaska Nati	0.21%	-0.36%	-	-	-	-
		Asian	1.45%	-0.39%	-	-	-	-
		Black/ African American	0.26%	0.15%	-	-	-	-
		Hispanic/ Latino	1.11%	1.31%	-	-	-	-
		White	-1.80%	-2.07%	-	-	-	-
		Native Hawaiian/ Other Pacifi	-0.01%	0.00%	-	-	-	-
Two or More Races		-0.90%	1.20%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5						
			2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	37.74%	37.87%	36.03%	39.30%	39.46%	38.91%	40.51%
		Male	62.11%	61.64%	63.51%	60.37%	60.20%	61.09%	59.28%
	Primary Disability	Autism	16.54%	16.23%	14.75%	12.71%	11.91%	8.84%	9.07%
		Deaf-Blind	0.15%	0%	0.16%	0%	0.34%	0.19%	0.21%
		Emotional Disability	0.45%	0.49%	0.62%	1.17%	2.04%	1.50%	1.48%
		Hearing Disability	0.15%	0.33%	0.31%	0.67%	0.85%	1.32%	0.84%
		Limited Intellectual Capacity	30.53%	30.49%	32.30%	26.76%	29.25%	34.02%	31.86%
		Multiple Disabilities	32.78%	32.95%	30.28%	29.77%	29.42%	30.08%	31.65%
		Physical Disability	11.43%	11.64%	12.27%	11.71%	11.22%	9.21%	10.34%
		Specific Learning Disability	4.51%	4.92%	6.06%	10.70%	8.84%	9.59%	9.49%
		Speech/Language Disability	1.35%	1.48%	2.02%	5.35%	3.91%	4.32%	4.01%
		Traumatic Brain Injury	1.95%	0.66%	0.93%	0.67%	1.19%	0.94%	0.21%
	Visual Disability	0.15%	0.49%	0%	0.17%	0.68%	0%	0.21%	
	Ethnicity	American Indian/Alaska Nativ	1.35%	1.31%	1.48%	-	-	-	-
		Asian	2.41%	1.80%	2.63%	-	-	-	-
		Black/ African American	5.56%	6.56%	6.09%	-	-	-	-
		Hispanic/ Latino	37.74%	31.97%	34.21%	-	-	-	-
		White	49.17%	54.43%	52.47%	-	-	-	-
Native Hawaiian/ Other Pacific		0%	0.16%	0.16%	-	-	-	-	
	Two or More Races	3.76%	3.28%	2.80%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	-0.13%	1.85%	-3.27%	-0.16%	0.55%	-1.60%
		Male	0.47%	-1.87%	3.14%	0.16%	-0.89%	1.81%
	Primary Disability	Autism	0.31%	1.48%	2.04%	0.80%	3.07%	-0.24%
		Deaf-Blind	0.15%	-0.16%	0.16%	-0.34%	0.15%	-0.02%
		Emotional Disability	-0.04%	-0.13%	-0.55%	-0.87%	0.54%	0.02%
		Hearing Disability	-0.18%	0.02%	-0.36%	-0.18%	-0.47%	0.48%
		Limited Intellectual Capacity	0.04%	-1.81%	5.54%	-2.50%	-4.77%	2.16%
		Multiple Disabilities	-0.17%	2.67%	0.51%	0.34%	-0.65%	-1.58%
		Physical Disability	-0.21%	-0.63%	0.56%	0.48%	2.01%	-1.13%
		Specific Learning Disability	-0.41%	-1.14%	-4.65%	1.86%	-0.74%	0.10%
		Speech/Language Disability	-0.13%	-0.54%	-3.33%	1.44%	-0.41%	0.31%
		Traumatic Brain Injury	1.29%	-0.27%	0.26%	-0.52%	0.25%	0.73%
	Visual Disability	-0.34%	0.49%	-0.17%	-0.51%	0.68%	-0.21%	
	Ethnicity	American Indian/Alaska Nati	0.04%	-0.17%	-	-	-	-
		Asian	0.61%	-0.83%	-	-	-	-
		Black/ African American	-1.00%	0.47%	-	-	-	-
		Hispanic/ Latino	5.77%	-2.24%	-	-	-	-
White		-5.26%	1.96%	-	-	-	-	
Native Hawaiian/ Other Pacifi		-0.16%	0%	-	-	-	-	
	Two or More Races	0.48%	0.48%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6						
			2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	37.64%	36.45%	37.48%	39.55%	37.68%	40.83%	33.78%
		Male	61.90%	63.23%	62.52%	60.45%	61.96%	58.41%	66.02%
	Primary Disability	Autism	16.17%	14.10%	14.69%	14.34%	11.23%	9.07%	8.30%
		Deaf-Blind	0.16%	0%	0%	0.52%	0.36%	0.19%	0%
		Emotional Disability	0.93%	0.48%	1.13%	0.69%	1.27%	1.51%	1.35%
		Hearing Disability	0.31%	0.32%	0.19%	0.86%	1.81%	1.13%	1.54%
		Limited Intellectual Capacity	34.21%	33.12%	32.39%	30.57%	34.24%	28.36%	31.47%
		Multiple Disabilities	34.06%	32.33%	32.39%	30.92%	28.80%	35.35%	33.40%
		Physical Disability	7.62%	13.47%	10.55%	8.64%	7.07%	8.51%	10.43%
		Specific Learning Disability	3.73%	3.80%	5.09%	8.98%	10.51%	11.34%	9.07%
		Speech/Language Disability	1.56%	0.95%	2.45%	2.59%	2.72%	2.84%	2.90%
		Traumatic Brain Injury	0.62%	0.95%	1.13%	1.21%	1.45%	0.76%	0.97%
		Visual Disability	0.62%	0.16%	0%	0.69%	0.18%	0.38%	0.19%
		Ethnicity	American Indian/Alaska Nativ	1.24%	0.95%	1.48%	-	-	-
	Asian		1.71%	1.74%	2.63%	-	-	-	-
	Black/ African American		7.00%	6.81%	6.09%	-	-	-	-
	Hispanic/ Latino		32.50%	36.29%	34.21%	-	-	-	-
	White		53.19%	50.55%	52.47%	-	-	-	-
	Native Hawaiian/ Other Pacific		0.16%	0.32%	0.16%	-	-	-	-
		Two or More Races	3.58%	3.01%	2.80%	-	-	-	-

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	1.19%	-1.03%	-2.08%	1.87%	-3.15%	7.05%
		Male	-1.33%	0.71%	2.08%	-1.51%	3.55%	-7.61%
	Primary Disability	Autism	2.07%	-0.59%	0.35%	3.10%	2.16%	0.77%
		Deaf-Blind	0.16%	0%	-0.52%	0.16%	0.17%	0.19%
		Emotional Disability	0.45%	-0.65%	0.44%	-0.58%	-0.24%	0.16%
		Hearing Disability	-0.01%	0.13%	-0.68%	-0.95%	0.68%	-0.41%
		Limited Intellectual Capacity	1.09%	0.73%	1.82%	-3.67%	5.88%	-3.12%
		Multiple Disabilities	1.73%	-0.06%	1.48%	2.11%	-6.55%	1.95%
		Physical Disability	-5.85%	2.92%	1.91%	1.57%	-1.44%	-1.92%
		Specific Learning Disability	-0.07%	-1.29%	-3.90%	-1.53%	-0.84%	2.27%
		Speech/Language Disability	0.61%	-1.50%	-0.14%	-0.13%	-0.12%	-0.06%
		Traumatic Brain Injury	-0.33%	-0.18%	-0.08%	-0.24%	0.69%	-0.21%
	Visual Disability	0.46%	0.16%	-0.69%	0.51%	-0.20%	0.19%	
	Ethnicity	American Indian/Alaska Nati	-0.27%	-0.47%	-	-	-	-
		Asian	0.50%	1.28%	-	-	-	-
		Black/ African American	0.82%	0.65%	-	-	-	-
		Hispanic/ Latino	3.54%	-0.17%	-	-	-	-
		White	-3.43%	-2.76%	-	-	-	-
Native Hawaiian/ Other Pacifi		-0.19%	0.19%	-	-	-	-	
	Two or More Races	-0.77%	1.28%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7						
			2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	37.13%	36.99%	39.15%	38.75%	40.23%	35.65%	38.17%
		Male	62.38%	63.01%	60.50%	61.06%	59.01%	64.36%	61.41%
	Primary Disability	Autism	15.51%	15.61%	14.59%	10.40%	10.63%	8.86%	8.74%
		Deaf-Blind	0.17%	0.19%	0.53%	0%	0.19%	0%	0%
		Emotional Disability	0.50%	0.58%	0.53%	0.76%	1.52%	1.35%	0.85%
		Hearing Disability	0.33%	0.00%	0.36%	1.70%	0.95%	1.35%	1.07%
		Limited Intellectual Capacity	35.31%	31.98%	33.99%	36.11%	30.36%	30.44%	34.54%
		Multiple Disabilities	32.67%	37.38%	31.67%	32.89%	36.43%	36.42%	32.41%
		Physical Disability	10.56%	7.13%	8.54%	8.32%	8.16%	8.67%	7.25%
		Specific Learning Disability	2.48%	5.20%	6.58%	6.81%	8.16%	9.83%	11.94%
		Speech/Language Disability	0.50%	0.58%	1.25%	1.51%	2.66%	0.96%	1.71%
		Traumatic Brain Injury	1.49%	1.35%	1.25%	1.32%	0.76%	2.12%	0.64%
		Visual Disability	0%	0%	0.53%	0.19%	0.19%	0%	0.21%
		Ethnicity	American Indian/Alaska Nativ	1.16%	0.96%	0.71%	-	-	-
	Asian		1.82%	1.35%	2.31%	-	-	-	-
	Black/ African American		7.26%	7.71%	8.01%	-	-	-	-
	Hispanic/ Latino		36.96%	32.76%	33.81%	-	-	-	-
	White		49.50%	54.53%	52.14%	-	-	-	-
	Native Hawaiian/ Other Pacific		0.33%	0.39%	0.18%	-	-	-	-
		Two or More Races	2.48%	2.31%	2.49%	-	-	-	-

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	0.14%	-2.16%	0.39%	-1.48%	4.58%	-2.52%
		Male	-0.63%	2.51%	-0.56%	2.05%	-5.34%	2.95%
	Primary Disability	Autism	-0.10%	1.02%	4.19%	-0.23%	1.76%	0.12%
		Deaf-Blind	-0.02%	-0.34%	0.53%	-0.19%	0.19%	0%
		Emotional Disability	-0.08%	0.05%	-0.22%	-0.76%	0.17%	0.50%
		Hearing Disability	0.33%	-0.36%	-1.35%	0.75%	-0.40%	0.28%
		Limited Intellectual Capacity	3.33%	-2.01%	-2.12%	5.75%	-0.08%	-4.10%
		Multiple Disabilities	-4.71%	5.71%	-1.22%	-3.54%	0.02%	4.01%
		Physical Disability	3.43%	-1.41%	0.22%	0.16%	-0.51%	1.42%
		Specific Learning Disability	-2.72%	-1.38%	-0.22%	-1.35%	-1.67%	-2.11%
		Speech/Language Disability	-0.08%	-0.67%	-0.27%	-1.15%	1.69%	-0.75%
		Traumatic Brain Injury	0.14%	0.10%	-0.08%	0.56%	-1.36%	1.48%
	Visual Disability	0%	-0.53%	0.35%	0%	0.19%	-0.21%	
	Ethnicity	American Indian/Alaska Nati	0.20%	0.25%	-	-	-	-
		Asian	0.47%	-0.96%	-	-	-	-
		Black/ African American	-0.45%	-0.30%	-	-	-	-
		Hispanic/ Latino	4.20%	-1.05%	-	-	-	-
		White	-5.03%	2.40%	-	-	-	-
Native Hawaiian/ Other Pacifi		-0.06%	0.21%	-	-	-	-	
	Two or More Races	0.17%	-0.18%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8						
			2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	38.45%	38.46%	40.91%	40.08%	37.64%	39.53%	39.96%
		Male	61.55%	61.54%	59.09%	59.54%	62.18%	60.47%	59.67%
	Primary Disability	Autism	14.34%	14.47%	11.27%	10.31%	10.33%	9.20%	9.31%
		Deaf-Blind	0.20%	0.55%	0.20%	0%	0%	0%	0.18%
		Emotional Disability	0.80%	0.37%	0.40%	0.76%	1.11%	1.76%	0.73%
		Hearing Disability	0%	0.37%	0.99%	0.95%	1.48%	1.37%	0.73%
		Limited Intellectual Capacity	34.06%	36.26%	34.98%	32.25%	31.00%	33.46%	36.13%
		Multiple Disabilities	39.04%	33.70%	36.96%	39.70%	38.01%	35.81%	35.95%
		Physical Disability	7.17%	8.42%	8.10%	8.40%	8.30%	6.07%	5.66%
		Specific Learning Disability	2.99%	3.48%	4.55%	4.58%	6.83%	9.20%	6.02%
		Speech/Language Disability	0.60%	0.55%	0.59%	2.10%	1.66%	1.96%	2.19%
		Traumatic Brain Injury	0.60%	1.47%	1.58%	0.76%	1.29%	0.59%	1.64%
		Visual Disability	0.20%	0.37%	0.40%	0.19%	0%	0.59%	0.37%
	Ethnicity	American Indian/Alaska Native	1.79%	0.55%	1.38%	-	-	-	-
		Asian	1.99%	2.20%	3.76%	-	-	-	-
		Black/ African American	7.57%	7.51%	7.12%	-	-	-	-
		Hispanic/ Latino	33.07%	32.60%	33.20%	-	-	-	-
		White	53.39%	54.76%	53.16%	-	-	-	-
		Native Hawaiian/ Other Pacific	0%	0%	0%	-	-	-	-
Two or More Races		2.19%	2.38%	1.38%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	-0.01%	-2.45%	0.83%	2.44%	-1.89%	-0.43%
		Male	0.01%	2.45%	-0.45%	-2.64%	1.71%	0.80%
	Primary Disability	Autism	-0.13%	3.21%	0.96%	-0.03%	1.13%	-0.11%
		Deaf-Blind	-0.35%	0.35%	0.20%	0%	0%	-0.18%
		Emotional Disability	0.43%	-0.03%	-0.37%	-0.34%	-0.65%	1.03%
		Hearing Disability	-0.37%	-0.62%	0.03%	-0.52%	0.11%	0.64%
		Limited Intellectual Capacity	-2.20%	1.28%	2.73%	1.26%	-2.47%	-2.67%
		Multiple Disabilities	5.34%	-3.26%	-2.74%	1.69%	2.20%	-0.14%
		Physical Disability	-1.25%	0.32%	-0.29%	0.09%	2.24%	0.41%
		Specific Learning Disability	-0.49%	-1.07%	-0.04%	-2.25%	-2.37%	3.18%
		Speech/Language Disability	0.05%	-0.04%	-1.51%	0.44%	-0.30%	-0.23%
		Traumatic Brain Injury	-0.87%	-0.11%	0.82%	-0.53%	0.71%	-1.05%
	Visual Disability	-0.17%	-0.03%	0.20%	0.19%	-0.59%	0.22%	
	Ethnicity	American Indian/Alaska Nati	1.24%	-0.83%	-	-	-	-
		Asian	-0.21%	-1.56%	-	-	-	-
		Black/ African American	0.06%	0.40%	-	-	-	-
		Hispanic/ Latino	0.47%	-0.60%	-	-	-	-
White		-1.37%	1.60%	-	-	-	-	
Native Hawaiian/ Other Pacifi		0%	0%	-	-	-	-	
Two or More Races		-0.19%	1.00%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9						
			2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	37.01%	38.49%	40.79%	37.06%	39.21%	41.03%	39.50%
		Male	62.81%	61.51%	58.84%	62.75%	60.59%	58.97%	60.29%
	Primary Disability	Autism	15.12%	11.41%	10.90%	9.17%	10.10%	8.17%	6.30%
		Deaf-Blind	0.18%	0%	0%	0.18%	0%	0.18%	0.42%
		Emotional Disability	0.53%	0.61%	0.56%	1.65%	0.59%	1.07%	1.05%
		Hearing Disability	0.18%	1.22%	0.19%	1.65%	1.19%	0.53%	2.94%
		Limited Intellectual Capacity	35.59%	35.44%	34.02%	33.95%	35.84%	37.83%	38.66%
		Multiple Disabilities	36.48%	36.86%	41.17%	38.53%	34.06%	34.46%	34.45%
		Physical Disability	5.52%	8.35%	6.39%	6.79%	7.72%	5.51%	7.98%
		Specific Learning Disability	4.09%	2.85%	4.32%	5.87%	6.73%	9.59%	5.25%
		Speech/Language Disability	0.53%	1.43%	0.94%	0.92%	2.18%	1.60%	1.26%
		Traumatic Brain Injury	1.42%	1.43%	1.13%	1.10%	0.79%	0.71%	1.26%
		Visual Disability	0.18%	0.41%	0.19%	0%	0.40%	0.36%	0.21%
	Ethnicity	American Indian/Alaska Nativ	0.89%	1.43%	1.32%	-	-	-	-
		Asian	1.78%	4.07%	2.82%	-	-	-	-
		Black/ African American	6.94%	6.72%	8.65%	-	-	-	-
		Hispanic/ Latino	32.38%	34.42%	31.02%	-	-	-	-
		White	54.80%	51.53%	52.63%	-	-	-	-
		Native Hawaiian/ Other Pacific	0%	0%	0.19%	-	-	-	-
	Two or More Races	3.02%	1.83%	3.01%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	-1.48%	-2.30%	3.72%	-2.14%	-1.82%	1.53%
		Male	1.30%	2.67%	-3.92%	2.16%	1.62%	-1.32%
	Primary Disability	Autism	3.71%	0.51%	1.73%	-0.92%	1.93%	1.87%
		Deaf-Blind	0.18%	0%	-0.18%	0.18%	-0.18%	-0.24%
		Emotional Disability	-0.08%	0.05%	-1.09%	1.06%	-0.47%	0.02%
		Hearing Disability	-1.04%	1.03%	-1.46%	0.46%	0.66%	-2.41%
		Limited Intellectual Capacity	0.15%	1.42%	0.08%	-1.90%	-1.99%	-0.83%
		Multiple Disabilities	-0.38%	-4.31%	2.63%	4.47%	-0.40%	0.01%
		Physical Disability	-2.83%	1.96%	-0.40%	-0.93%	2.22%	-2.47%
		Specific Learning Disability	1.24%	-1.47%	-1.55%	-0.86%	-2.86%	4.34%
		Speech/Language Disability	-0.90%	0.49%	0.02%	-1.26%	0.58%	0.34%
		Traumatic Brain Injury	-0.01%	0.30%	0.03%	0.31%	0.08%	-0.55%
	Visual Disability	-0.23%	0.22%	0.19%	-0.40%	0.04%	0.15%	
	Ethnicity	American Indian/Alaska Nati	-0.54%	0.11%	-	-	-	-
		Asian	-2.29%	1.25%	-	-	-	-
		Black/ African American	0.22%	-1.93%	-	-	-	-
		Hispanic/ Latino	-2.04%	3.41%	-	-	-	-
		White	3.27%	-1.10%	-	-	-	-
		Native Hawaiian/ Other Pacifi	0%	-0.19%	-	-	-	-
	Two or More Races	1.19%	-1.18%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10						
			2013	2012	2011	2010	2009	2008	2007
MA	Gender	Female	40.21%	41.20%	38.79%	40.57%	40.30%	39.53%	36.91%
		Male	59.57%	58.61%	61.21%	59.23%	59.52%	60.48%	62.86%
	Primary Disability	Autism	11.70%	11.03%	10.10%	10.95%	8.87%	5.83%	6.04%
		Deaf-Blind	0%	0%	0%	0%	0%	0.22%	0%
		Emotional Disability	1.06%	0.97%	1.01%	0.61%	0.92%	1.30%	1.57%
		Hearing Disability	1.28%	0.19%	0.40%	0.81%	0.92%	3.02%	1.57%
		Limited Intellectual Capacity	32.98%	33.66%	35.35%	35.70%	37.89%	37.37%	33.33%
		Multiple Disabilities	40.43%	43.52%	41.82%	37.53%	35.86%	36.72%	41.61%
		Physical Disability	7.45%	5.61%	5.86%	6.29%	5.55%	8.21%	8.28%
		Specific Learning Disability	1.91%	2.51%	4.04%	5.68%	6.65%	4.97%	5.15%
		Speech/Language Disability	1.28%	0.97%	0.61%	1.22%	1.29%	1.30%	2.01%
		Traumatic Brain Injury	1.91%	1.35%	0.81%	0.81%	1.29%	1.08%	0.45%
	Visual Disability	0%	0.19%	0%	0.20%	0.56%	0%	0%	
	Ethnicity	American Indian/Alaska Nativ	1.28%	1.55%	2.02%	-	-	-	-
		Asian	3.40%	2.90%	1.62%	-	-	-	-
		Black/ African American	8.94%	8.12%	7.48%	-	-	-	-
		Hispanic/ Latino	34.68%	31.14%	31.31%	-	-	-	-
		White	49.57%	53.00%	55.76%	-	-	-	-
Native Hawaiian/ Other Pacific		0%	0.19%	0%	-	-	-	-	
	Two or More Races	2.13%	2.90%	1.62%	-	-	-	-	

Table 86
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	Gender	Female	-0.99%	2.41%	-1.78%	0.27%	0.77%	2.61%
		Male	0.96%	-2.60%	1.98%	-0.29%	-0.96%	-2.39%
	Primary Disability	Autism	0.67%	0.93%	-0.85%	2.08%	3.04%	-0.21%
		Deaf-Blind	0%	0%	0%	0%	-0.22%	0.22%
		Emotional Disability	0.09%	-0.04%	0.40%	-0.32%	-0.37%	-0.27%
		Hearing Disability	1.09%	-0.21%	-0.41%	-0.11%	-2.10%	1.45%
		Limited Intellectual Capacity	-0.68%	-1.69%	-0.35%	-2.19%	0.53%	4.04%
		Multiple Disabilities	-3.09%	1.70%	4.29%	1.67%	-0.86%	-4.89%
		Physical Disability	1.84%	-0.25%	-0.43%	0.74%	-2.66%	-0.07%
		Specific Learning Disability	-0.60%	-1.53%	-1.64%	-0.97%	1.69%	-0.18%
		Speech/Language Disability	0.31%	0.36%	-0.61%	-0.08%	0%	-0.71%
		Traumatic Brain Injury	0.56%	0.54%	0%	-0.48%	0.21%	0.63%
	Visual Disability	-0.19%	0.19%	-0.20%	-0.35%	0.56%	0%	
	Ethnicity	American Indian/Alaska Nati	-0.27%	-0.47%	-	-	-	-
		Asian	0.50%	1.28%	-	-	-	-
		Black/ African American	0.82%	0.65%	-	-	-	-
		Hispanic/ Latino	3.54%	-0.17%	-	-	-	-
White		-3.43%	-2.76%	-	-	-	-	
Native Hawaiian/ Other Pacifi		-0.19%	0.19%	-	-	-	-	
Two or More Races		-0.77%	1.28%	-	-	-	-	

Table 87
Science Longitudinal Subgroup Participation

			Grade 5					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
SC	Gender	Female	37.60%	37.58%	36.20%	38.87%	39.93%	39.17%
		Male	62.25%	61.93%	63.34%	60.80%	59.73%	60.83%
	Primary Disability	Autism	16.44%	16.50%	14.72%	12.63%	12.18%	8.66%
		Deaf-Blind	0.15%	0%	0.15%	0%	0.17%	0%
		Emotional Disability	0.46%	0.49%	0.61%	1.16%	2.20%	1.44%
		Hearing Disability	0.15%	0.33%	0.46%	1.33%	1.35%	1.63%
		Limited Intellectual Capacity	30.44%	30.72%	31.90%	26.41%	29.61%	33.03%
		Multiple Disabilities	33.64%	33.01%	30.22%	29.57%	28.77%	30.14%
		Physical Disability	10.96%	11.27%	11.81%	11.96%	11.34%	9.75%
		Specific Learning Disability	4.57%	4.74%	6.90%	10.30%	8.80%	10.29%
		Speech/Language Disability	1.37%	1.47%	1.99%	5.48%	3.72%	3.97%
		Traumatic Brain Injury	1.67%	0.65%	0.92%	0.66%	1.02%	1.08%
	Visual Disability	0.15%	0.49%	0%	0.17%	0.51%	0%	
	Ethnicity	American Indian/Alaska Nati	1.37%	1.31%	0.92%	-	-	-
		Asian	2.44%	1.80%	2.15%	-	-	-
		Black/ African American	5.63%	6.70%	8.13%	-	-	-
		Hispanic/ Latino	37.90%	31.86%	36.96%	-	-	-
		White	49.01%	54.41%	48.77%	-	-	-
		Native Hawaiian/ Other Pacifi	0%	0.16%	0.31%	-	-	-
	Two or More Races	3.65%	3.27%	2.30%	-	-	-	

Table 87
Science Longitudinal Subgroup Participation (continued)

		Grade 5				
		Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
Gender	Female	0.02%	1.38%	-2.67%	-1.06%	0.76%
	Male	0.32%	-1.41%	2.55%	1.07%	-1.10%
SC	Autism	-0.06%	1.78%	2.10%	0.44%	3.52%
	Deaf-Blind	0.15%	-0.15%	0.15%	-0.17%	0.17%
	Emotional Disability	-0.03%	-0.12%	-0.55%	-1.04%	0.76%
	Hearing Disability	-0.18%	-0.13%	-0.87%	-0.03%	-0.27%
	Limited Intellectual Capacity	-0.28%	-1.18%	5.49%	-3.20%	-3.42%
	Multiple Disabilities	0.63%	2.80%	0.65%	0.80%	-1.38%
	Physical Disability	-0.31%	-0.54%	-0.15%	0.62%	1.59%
	Specific Learning Disability	-0.17%	-2.16%	-3.40%	1.50%	-1.49%
	Speech/Language Disability	-0.10%	-0.52%	-3.49%	1.76%	-0.25%
	Traumatic Brain Injury	1.02%	-0.27%	0.26%	-0.35%	-0.07%
	Visual Disability	-0.34%	0.49%	-0.17%	-0.34%	0.51%
	Ethnicity	American Indian/Alaska Nati	0.06%	0.39%	-	-
Asian		0.64%	-0.35%	-	-	-
Black/ African American		-1.07%	-1.43%	-	-	-
Hispanic/ Latino		6.04%	-5.10%	-	-	-
White		-5.40%	5.64%	-	-	-
Native Hawaiian/ Other Pacifi		-0.16%	-0.15%	-	-	-
	Two or More Races	0.38%	0.97%	-	-	-

Table 87
Science Longitudinal Subgroup Participation (continued)

			Grade 8					
Content	Variable	Subgroup	2013	2012	2011	2010	2009	2008
SC	Gender	Female	38.40%	37.77%	40.48%	39.81%	38.17%	38.86%
		Male	61.60%	62.23%	59.52%	59.81%	61.65%	61.14%
	Primary Disability	Autism	14.20%	14.78%	11.11%	10.29%	10.46%	9.67%
		Deaf-Blind	0.20%	0.36%	0.20%	0%	0%	0%
		Emotional Disability	0.80%	0.55%	0.20%	0.97%	0.73%	1.58%
		Hearing Disability	0%	0.36%	0.99%	0.97%	1.28%	1.38%
		Limited Intellectual Capacity	34.20%	36.86%	35.12%	32.82%	31.38%	33.93%
		Multiple Disabilities	39.40%	33.76%	36.71%	40.39%	37.80%	36.49%
		Physical Disability	7.20%	7.85%	8.33%	7.96%	8.99%	5.52%
		Specific Learning Disability	2.80%	3.10%	4.76%	4.08%	6.24%	8.68%
		Speech/Language Disability	0.40%	0.55%	0.60%	1.55%	1.65%	1.78%
		Traumatic Brain Injury	0.60%	1.46%	1.59%	0.78%	1.47%	0.39%
		Visual Disability	0.20%	0.36%	0.40%	0.19%	0%	0.59%
		Ethnicity	American Indian/Alaska Nati	1.80%	0.91%	1.39%	-	-
	Asian		2.00%	2.19%	3.77%	-	-	-
	Black/ African American		7.40%	7.48%	7.14%	-	-	-
	Hispanic/ Latino		33.80%	32.66%	33.33%	-	-	-
	White		52.80%	54.56%	53.18%	-	-	-
	Native Hawaiian/ Other Pacifi		0%	0%	0%	-	-	-
Two or More Races	2.20%		2.19%	1.19%	-	-	-	

Table 87
Science Longitudinal Subgroup Participation (continued)

		Grade 8					
		Difference	Difference	Difference	Difference	Difference	
		2013-2012	2012-2011	2011-2010	2010-2009	2009-2008	
Gender	Female	0.63%	-2.71%	0.67%	1.64%	-0.69%	
	Male	-0.63%	2.71%	-0.28%	-1.85%	0.51%	
SC	Autism	-0.58%	3.67%	0.82%	-0.17%	0.79%	
	Deaf-Blind	-0.16%	0.16%	0.20%	0%	0%	
	Emotional Disability	0.25%	0.35%	-0.77%	0.24%	-0.84%	
	Hearing Disability	-0.36%	-0.63%	0.02%	-0.31%	-0.10%	
	Limited Intellectual Capacity	-2.66%	1.74%	2.30%	1.44%	-2.55%	
	Multiple Disabilities	5.64%	-2.95%	-3.68%	2.59%	1.31%	
	Physical Disability	-0.65%	-0.48%	0.37%	-1.03%	3.47%	
	Specific Learning Disability	-0.30%	-1.66%	0.68%	-2.16%	-2.44%	
	Speech/Language Disability	-0.15%	-0.05%	-0.96%	-0.10%	-0.12%	
	Traumatic Brain Injury	-0.86%	-0.13%	0.81%	-0.69%	1.07%	
	Visual Disability	-0.16%	-0.04%	0.20%	0.19%	-0.59%	
	Ethnicity	American Indian/Alaska Nati	0.89%	-0.48%	-	-	-
		Asian	-0.19%	-1.58%	-	-	-
Black/ African American		-0.08%	0.34%	-	-	-	
Hispanic/ Latino		1.14%	-0.67%	-	-	-	
White		-1.76%	1.39%	-	-	-	
Native Hawaiian/ Other Pacifi		0%	0%	-	-	-	
Two or More Races		0.01%	1.00%	-	-	-	

Table 87
Science Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10					
			2013	2012	2011	2010	2009	2008
SC	Gender	Female	39.48%	41.05%	38.98%	39.71%	40.26%	39.52%
		Male	60.30%	58.75%	61.02%	60.29%	59.56%	60.48%
	Primary Disability	Autism	12.02%	11.48%	10.61%	10.92%	9.19%	6.11%
		Deaf-Blind	0%	0%	0%	0%	0%	0.22%
		Emotional Disability	1.07%	0.97%	1.02%	0.63%	0.92%	1.31%
		Hearing Disability	1.50%	0.19%	0.41%	0.84%	1.10%	2.84%
		Limited Intellectual Capacity	33.05%	33.46%	35.10%	36.13%	38.24%	37.56%
		Multiple Disabilities	40.99%	43.39%	42.04%	39.29%	35.29%	36.68%
		Physical Disability	7.30%	5.45%	5.92%	5.25%	5.33%	8.52%
		Specific Learning Disability	1.07%	2.53%	3.47%	4.62%	6.80%	4.59%
		Speech/Language Disability	1.07%	0.97%	0.61%	1.26%	1.10%	1.09%
		Traumatic Brain Injury	1.93%	1.36%	0.82%	0.84%	1.29%	1.09%
	Visual Disability	0%	0.19%	0%	0.21%	0.55%	0%	
	Ethnicity	American Indian/Alaska Nati	1.29%	1.56%	2.25%	-	-	-
		Asian	3.22%	2.92%	1.63%	-	-	-
		Black/ African American	8.80%	7.98%	6.94%	-	-	-
		Hispanic/ Latino	34.76%	30.74%	31.43%	-	-	-
		White	49.57%	53.50%	55.92%	-	-	-
		Native Hawaiian/ Other Pacifi	0.21%	0.19%	0%	-	-	-
		Two or More Races	2.15%	2.92%	1.63%	-	-	-

Table 87
Science Longitudinal Subgroup Participation (continued)

		Grade 10					
		Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	
SC	Gender						
		Female	-1.57%	2.07%	-0.73%	-0.55%	0.74%
		Male	1.55%	-2.27%	0.73%	0.74%	-0.92%
		Autism	0.54%	0.87%	-0.31%	1.73%	3.08%
		Deaf-Blind	0%	0%	0%	0%	-0.22%
		Emotional Disability	0.10%	-0.05%	0.39%	-0.29%	-0.39%
		Hearing Disability	1.31%	-0.22%	-0.43%	-0.26%	-1.74%
		Limited Intellectual Capacity	-0.41%	-1.64%	-1.03%	-2.10%	0.68%
		Multiple Disabilities	-2.40%	1.35%	2.76%	3.99%	-1.39%
		Physical Disability	1.85%	-0.47%	0.67%	-0.08%	-3.18%
		Specific Learning Disability	-1.46%	-0.94%	-1.15%	-2.18%	2.22%
		Speech/Language Disability	0.10%	0.36%	-0.65%	0.16%	0.01%
		Traumatic Brain Injury	0.57%	0.54%	-0.02%	-0.45%	0.20%
		Visual Disability	-0.19%	0.19%	-0.21%	-0.34%	0.55%
		Ethnicity					
		American Indian/Alaska Nati	-0.27%	-0.69%	-	-	-
		Asian	0.30%	1.29%	-	-	-
		Black/ African American	0.82%	1.04%	-	-	-
		Hispanic/ Latino	4.02%	-0.69%	-	-	-
	White	-3.93%	-2.42%	-	-	-	
	Native Hawaiian/ Other Pacifi	0.02%	0.19%	-	-	-	
	Two or More Races	-0.77%	1.29%	-	-	-	

Table 88
Reading Longitudinal Summary of *P*-values

Content	Grade	High <i>P</i> -value										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.85	0.84	0.86	0.85	0.85	0.87	0.01	-0.02	0.02	0.00	-0.02
	4	0.83	0.84	0.86	0.86	0.86	0.88	-0.02	-0.02	0.00	0.00	-0.02
	5	0.89	0.86	0.87	0.86	0.89	0.87	0.03	-0.02	0.01	-0.03	0.02
	6	0.87	0.89	0.84	0.88	0.86	0.85	-0.02	0.05	-0.03	0.01	0.01
	7	0.87	0.85	0.87	0.84	0.85	0.85	0.02	-0.02	0.03	-0.01	0.00
	8	0.87	0.86	0.83	0.84	0.81	0.87	0.02	0.03	-0.01	0.03	-0.06
	9	0.84	0.82	0.82	0.83	0.80	0.85	0.02	0.00	-0.01	0.03	-0.05
	10	0.74	0.75	0.74	0.74	0.76	0.70	-0.01	0.01	0.01	-0.02	0.06

Content	Grade	Mean <i>P</i> -value										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.54	0.54	0.56	0.56	0.57	0.59	0.01	-0.02	0.00	-0.01	-0.02
	4	0.53	0.55	0.56	0.57	0.58	0.58	-0.02	-0.01	-0.01	-0.01	0.00
	5	0.59	0.56	0.60	0.59	0.60	0.59	0.03	-0.04	0.01	-0.01	0.01
	6	0.62	0.62	0.61	0.62	0.61	0.61	-0.01	0.01	-0.01	0.01	0.01
	7	0.55	0.55	0.55	0.54	0.53	0.53	0.01	-0.01	0.02	0.00	0.01
	8	0.54	0.54	0.51	0.52	0.51	0.54	0.00	0.03	-0.01	0.01	-0.02
	9	0.54	0.53	0.52	0.53	0.53	0.54	0.01	0.00	-0.01	0.00	-0.01
	10	0.50	0.50	0.48	0.49	0.51	0.48	0.00	0.01	-0.01	-0.03	0.04

Table 88
Reading Longitudinal Summary of *P*-values (continued)

Content	Grade	Low <i>P</i> -value										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.24	0.24	0.28	0.27	0.25	0.28	0.00	-0.04	0.01	0.02	-0.03
	4	0.23	0.25	0.27	0.24	0.26	0.27	-0.02	-0.02	0.03	-0.02	-0.01
	5	0.26	0.24	0.25	0.24	0.25	0.27	0.02	-0.01	0.01	-0.01	-0.02
	6	0.23	0.23	0.21	0.24	0.23	0.18	0.01	0.02	-0.03	0.01	0.04
	7	0.23	0.25	0.26	0.25	0.23	0.23	-0.01	-0.01	0.00	0.03	0.00
	8	0.32	0.34	0.30	0.30	0.29	0.33	-0.03	0.05	-0.01	0.01	-0.04
	9	0.27	0.29	0.26	0.28	0.28	0.27	-0.02	0.04	-0.03	0.00	0.01
	10	0.27	0.26	0.26	0.27	0.25	0.25	0.01	0.00	-0.01	0.02	0.00

Table 89
Writing Longitudinal Summary of *P*-values

Content	Grade	High <i>P</i> -value										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.80	0.79	0.79	0.81	0.81	0.83	0.01	0.00	-0.02	0.00	-0.02
	4	0.79	0.78	0.79	0.82	0.81	0.84	0.00	-0.01	-0.03	0.01	-0.03
	5	0.83	0.80	0.84	0.82	0.84	0.83	0.04	-0.04	0.01	-0.02	0.01
	6	0.83	0.85	0.82	0.86	0.82	0.83	-0.02	0.03	-0.04	0.03	-0.01
	7	0.86	0.82	0.85	0.83	0.85	0.81	0.03	-0.02	0.01	-0.02	0.03
	8	0.84	0.86	0.81	0.85	0.82	0.86	-0.01	0.05	-0.04	0.03	-0.04
	9	0.81	0.79	0.81	0.80	0.83	0.84	0.03	-0.02	0.01	-0.04	0.00
	10	0.81	0.83	0.80	0.82	0.84	0.82	-0.02	0.04	-0.03	-0.02	0.02

Content	Grade	Mean <i>P</i> -value										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.50	0.49	0.52	0.53	0.54	0.55	0.01	-0.02	-0.01	-0.01	-0.02
	4	0.49	0.52	0.51	0.54	0.54	0.55	-0.02	0.01	-0.03	-0.01	0.00
	5	0.58	0.54	0.58	0.58	0.59	0.58	0.04	-0.04	0.00	-0.01	0.01
	6	0.59	0.60	0.59	0.61	0.59	0.58	-0.01	0.01	-0.02	0.01	0.02
	7	0.58	0.57	0.58	0.57	0.57	0.55	0.01	-0.01	0.02	-0.01	0.02
	8	0.56	0.55	0.54	0.54	0.53	0.55	0.01	0.02	0.00	0.01	-0.02
	9	0.55	0.53	0.53	0.53	0.54	0.55	0.01	0.01	0.00	-0.01	0.00
	10	0.53	0.53	0.51	0.52	0.54	0.51	0.00	0.02	-0.01	-0.02	0.03

Table 89
Writing Longitudinal Summary of *P*-values (continued)

Content	Grade	Low <i>P</i> -value										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.26	0.25	0.25	0.24	0.26	0.30	0.01	0.00	0.01	-0.01	-0.04
	4	0.20	0.19	0.20	0.19	0.22	0.21	0.01	-0.02	0.02	-0.04	0.02
	5	0.25	0.22	0.23	0.25	0.23	0.25	0.04	-0.01	-0.02	0.02	-0.02
	6	0.36	0.34	0.36	0.37	0.32	0.33	0.02	-0.02	-0.01	0.05	-0.01
	7	0.23	0.23	0.21	0.22	0.24	0.21	-0.01	0.02	-0.01	-0.01	0.02
	8	0.27	0.27	0.27	0.27	0.25	0.25	0.00	0.00	0.00	0.02	0.00
	9	0.29	0.27	0.26	0.27	0.29	0.24	0.03	0.01	-0.01	-0.01	0.04
	10	0.18	0.19	0.15	0.16	0.19	0.17	-0.01	0.04	-0.01	-0.03	0.02

Table 90
Mathematics Longitudinal Summary of *P*-values

Content	Grade	High <i>P</i> -value						
		2013	2012	2011	2010	2009	2008	2007
MA	3	0.85	0.86	0.89	0.87	0.87	0.88	0.90
	4	0.86	0.86	0.87	0.89	0.89	0.91	0.90
	5	0.85	0.84	0.86	0.84	0.86	0.86	0.87
	6	0.85	0.86	0.84	0.83	0.81	0.79	0.79
	7	0.82	0.81	0.81	0.80	0.81	0.78	0.82
	8	0.84	0.81	0.80	0.81	0.80	0.81	0.81
	9	0.76	0.76	0.78	0.76	0.76	0.77	0.72
	10	0.82	0.79	0.79	0.83	0.82	0.83	0.81

Content	Grade	Mean <i>P</i> -value						
		2013	2012	2011	2010	2009	2008	2007
MA	3	0.02	0.60	0.62	0.63	0.64	0.65	0.67
	4	-0.01	0.61	0.61	0.64	0.64	0.66	0.63
	5	0.04	0.56	0.59	0.59	0.61	0.59	0.60
	6	-0.02	0.60	0.58	0.60	0.58	0.57	0.57
	7	0.01	0.54	0.55	0.53	0.53	0.53	0.55
	8	-0.01	0.56	0.54	0.53	0.52	0.55	0.52
	9	0.01	0.46	0.46	0.46	0.47	0.47	0.45
	10	0.01	0.44	0.42	0.45	0.45	0.44	0.41

Table 90
Mathematics Longitudinal Summary of *P*-values (continued)

Content	Grade	Low <i>P</i> -value						
		2013	2012	2011	2010	2009	2008	2007
MA	3	0.35	0.35	0.34	0.34	0.37	0.34	0.39
	4	0.10	0.10	0.13	0.12	0.16	0.14	0.16
	5	0.28	0.30	0.32	0.29	0.33	0.33	0.31
	6	0.30	0.32	0.30	0.27	0.27	0.30	0.26
	7	0.14	0.14	0.15	0.15	0.16	0.19	0.21
	8	0.21	0.25	0.25	0.22	0.23	0.23	0.23
	9	0.20	0.21	0.21	0.16	0.19	0.19	0.17
	10	0.09	0.07	0.06	0.08	0.09	0.07	0.08

	Grade	High <i>P</i> -value					
		Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	-0.01	-0.03	0.01	0.00	-0.01	-0.01
	4	0.00	-0.02	-0.02	0.01	-0.02	0.00
	5	0.01	-0.02	0.01	-0.02	0.00	-0.01
	6	-0.01	0.02	0.01	0.02	0.01	0.01
	7	0.02	0.00	0.01	-0.01	0.03	-0.04
	8	0.02	0.02	-0.01	0.00	-0.01	0.00
	9	0.00	-0.02	0.02	0.00	0.00	0.04
	10	0.03	0.00	-0.04	0.01	-0.01	0.02

Table 90
Mathematics Longitudinal Summary of *P*-values (continued)

		Mean <i>P</i> -value						
		Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007	
MA	3	-0.02	-0.02	-0.02	0.00	-0.01	-0.02	
	4	0.00	0.00	-0.03	0.00	-0.02	0.02	
	5	-0.03	-0.03	0.01	-0.02	0.02	-0.01	
	6	0.02	0.02	-0.01	0.02	0.00	0.01	
	7	-0.02	-0.02	0.03	0.00	0.00	-0.02	
	8	0.02	0.02	0.00	0.01	-0.03	0.03	
	9	0.01	0.01	0.00	-0.01	0.00	0.02	
	10	0.02	0.02	-0.02	-0.01	0.02	0.02	
			Low <i>P</i> -value					
			Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	0.00	0.01	0.00	-0.03	0.02	-0.05	
	4	0.00	-0.03	0.01	-0.05	0.02	-0.02	
	5	-0.01	-0.02	0.03	-0.03	0.00	0.02	
	6	-0.02	0.02	0.03	0.00	-0.03	0.04	
	7	0.00	-0.01	0.00	-0.01	-0.03	-0.02	
	8	-0.04	0.01	0.03	-0.01	-0.01	0.00	
	9	0.00	0.00	0.04	-0.02	0.00	0.02	
	10	0.02	0.00	-0.02	0.00	0.01	-0.01	

Table 91
Science Longitudinal Summary of *P*-values

		High <i>P</i> -value										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.88	0.85	0.88	0.87	0.89	0.88	0.02	-0.02	0.01	-0.02	0.02
SC	8	0.88	0.87	0.86	0.85	0.87	0.88	0.00	0.01	0.01	-0.01	-0.01
	10	0.83	0.85	0.84	0.86	0.88	0.86	-0.02	0.02	-0.02	-0.02	0.02

		Mean <i>P</i> -value										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.67	0.64	0.67	0.67	0.69	0.68	0.03	-0.03	0.01	-0.02	0.01
SC	8	0.71	0.72	0.70	0.70	0.70	0.71	-0.01	0.02	0.00	0.00	-0.02
	10	0.60	0.58	0.58	0.58	0.61	0.58	0.01	0.00	0.00	-0.03	0.03

		Low <i>P</i> -value										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.40	0.37	0.41	0.39	0.41	0.42	0.03	-0.03	0.02	-0.02	-0.01
SC	8	0.28	0.30	0.25	0.26	0.28	0.32	-0.02	0.05	-0.01	-0.02	-0.04
	10	0.26	0.24	0.24	0.26	0.27	0.26	0.02	0.00	-0.02	-0.02	0.01

Table 92
Reading Longitudinal Summary of Point-Biserials

		High Point-Biserial										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.72	0.74	0.73	0.73	0.73	0.72	-0.02	0.01	0.00	0.00	0.00
	4	0.71	0.70	0.72	0.71	0.72	0.68	0.01	-0.02	0.01	-0.01	0.04
	5	0.74	0.73	0.73	0.75	0.75	0.74	0.01	0.00	-0.02	0.00	0.01
	6	0.69	0.69	0.73	0.71	0.74	0.72	0.01	-0.04	0.02	-0.03	0.01
	7	0.68	0.71	0.68	0.72	0.71	0.71	-0.02	0.02	-0.03	0.01	0.00
	8	0.67	0.69	0.72	0.72	0.69	0.70	-0.02	-0.02	-0.01	0.03	-0.01
	9	0.74	0.71	0.72	0.72	0.71	0.74	0.03	-0.02	0.00	0.01	-0.03
	10	0.70	0.68	0.70	0.69	0.68	0.68	0.02	-0.02	0.01	0.01	-0.01

		Mean Point-Biserial										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.53	0.56	0.55	0.55	0.57	0.55	-0.02	0.01	-0.01	-0.01	0.02
	4	0.55	0.55	0.56	0.55	0.57	0.55	0.00	0.00	0.01	-0.02	0.02
	5	0.56	0.58	0.57	0.59	0.58	0.58	-0.02	0.00	-0.01	0.00	0.01
	6	0.57	0.56	0.59	0.57	0.59	0.60	0.00	-0.03	0.02	-0.01	-0.02
	7	0.51	0.52	0.49	0.52	0.53	0.53	-0.01	0.03	-0.03	-0.01	0.00
	8	0.51	0.53	0.53	0.55	0.54	0.54	-0.02	0.00	-0.02	0.01	0.00
	9	0.56	0.56	0.56	0.57	0.57	0.57	0.00	0.00	-0.02	0.00	0.00
	10	0.51	0.50	0.50	0.51	0.52	0.52	0.01	-0.01	-0.01	-0.01	0.00

Table 92
Reading Longitudinal Summary of Point-Biserials (continued)

Content	Grade	Low Point-Biserial										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.24	0.31	0.28	0.26	0.29	0.31	-0.08	0.03	0.02	-0.03	-0.02
	4	0.30	0.31	0.29	0.28	0.35	0.36	-0.01	0.01	0.01	-0.07	-0.01
	5	0.19	0.19	0.21	0.16	0.24	0.28	0.00	-0.02	0.04	-0.08	-0.04
	6	0.22	0.16	0.24	0.28	0.31	0.35	0.06	-0.08	-0.04	-0.04	-0.03
	7	0.19	0.22	0.14	0.16	0.20	0.24	-0.03	0.08	-0.02	-0.04	-0.04
	8	0.27	0.32	0.28	0.35	0.32	0.31	-0.05	0.03	-0.06	0.03	0.01
	9	0.33	0.37	0.35	0.40	0.37	0.37	-0.04	0.02	-0.05	0.03	0.00
	10	0.33	0.28	0.27	0.33	0.33	0.36	0.05	0.01	-0.06	0.00	-0.03

Table 93
Writing Longitudinal Summary of Point-Biserials

		High Point-Biserial										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.82	0.82	0.83	0.82	0.83	0.82	0.00	-0.01	0.01	-0.01	0.01
	4	0.84	0.84	0.84	0.82	0.84	0.82	0.01	-0.01	0.02	-0.02	0.01
	5	0.84	0.86	0.84	0.85	0.85	0.84	-0.01	0.02	-0.01	0.00	0.01
	6	0.85	0.85	0.87	0.85	0.83	0.85	0.00	-0.02	0.02	0.02	-0.02
	7	0.85	0.88	0.85	0.84	0.84	0.86	-0.03	0.02	0.01	0.00	-0.02
	8	0.87	0.87	0.87	0.87	0.88	0.85	0.00	0.00	-0.01	0.00	0.02
	9	0.86	0.86	0.85	0.87	0.84	0.85	-0.01	0.02	-0.02	0.03	-0.02
	10	0.85	0.83	0.85	0.86	0.85	0.84	0.02	-0.02	-0.01	0.01	0.01

		Mean Point-Biserial										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.56	0.57	0.58	0.58	0.58	0.58	-0.01	-0.01	0.00	0.00	0.00
	4	0.55	0.56	0.57	0.56	0.57	0.56	-0.01	0.00	0.01	-0.01	0.01
	5	0.57	0.58	0.57	0.60	0.58	0.58	0.00	0.01	-0.03	0.02	0.01
	6	0.59	0.59	0.60	0.58	0.59	0.61	0.00	-0.01	0.02	-0.01	-0.02
	7	0.58	0.60	0.56	0.60	0.59	0.61	-0.02	0.04	-0.03	0.00	-0.01
	8	0.56	0.57	0.58	0.58	0.58	0.56	-0.01	-0.02	0.00	0.00	0.01
	9	0.58	0.58	0.57	0.59	0.57	0.58	0.00	0.01	-0.02	0.02	-0.01
	10	0.54	0.53	0.54	0.54	0.55	0.54	0.01	-0.02	0.00	-0.01	0.01

Table 93
Writing Longitudinal Summary of Point-Biserials (continued)

Content	Grade	Low Point-Biserial										
		2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.24	0.25	0.21	0.23	0.25	0.24	-0.01	0.04	-0.02	-0.02	0.01
	4	0.15	0.21	0.16	0.12	0.21	0.21	-0.06	0.05	0.03	-0.08	0.00
	5	0.21	0.17	0.20	0.21	0.18	0.21	0.05	-0.04	-0.01	0.03	-0.02
	6	0.20	0.20	0.27	0.20	0.23	0.29	0.00	-0.07	0.07	-0.03	-0.06
	7	0.17	0.15	0.12	0.21	0.20	0.13	0.02	0.03	-0.09	0.00	0.08
	8	0.18	0.14	0.18	0.17	0.20	0.20	0.04	-0.04	0.01	-0.03	-0.01
	9	0.22	0.19	0.20	0.22	0.17	0.19	0.03	-0.01	-0.02	0.05	-0.02
	10	0.17	0.14	0.12	0.12	0.21	0.20	0.03	0.02	0.00	-0.09	0.01

Table 94
Mathematics Longitudinal Summary of Point-Biserials

Content	Grade	High Point-Biserial						
		2013	2012	2011	2010	2009	2008	2007
MA	3	0.82	0.82	0.82	0.82	0.83	0.81	0.80
	4	0.79	0.83	0.79	0.78	0.80	0.78	0.77
	5	0.80	0.79	0.80	0.79	0.81	0.78	0.77
	6	0.77	0.78	0.76	0.77	0.79	0.82	0.79
	7	0.75	0.77	0.73	0.76	0.77	0.78	0.74
	8	0.81	0.81	0.81	0.79	0.80	0.79	0.79
	9	0.80	0.77	0.77	0.79	0.76	0.80	0.81
	10	0.75	0.75	0.76	0.75	0.73	0.73	0.74

Content	Grade	Mean Point-Biserial						
		2013	2012	2011	2010	2009	2008	2007
MA	3	0.64	0.65	0.65	0.64	0.65	0.63	0.62
	4	0.64	0.65	0.65	0.63	0.65	0.64	0.63
	5	0.63	0.62	0.62	0.63	0.63	0.61	0.59
	6	0.59	0.62	0.61	0.60	0.60	0.64	0.61
	7	0.57	0.59	0.56	0.57	0.59	0.61	0.58
	8	0.56	0.58	0.59	0.58	0.58	0.58	0.56
	9	0.52	0.53	0.53	0.54	0.52	0.53	0.53
	10	0.51	0.49	0.48	0.50	0.52	0.49	0.52

Content	Grade	Low Point-Biserial						
		2013	2012	2011	2010	2009	2008	2007
MA	3	0.35	0.40	0.38	0.36	0.35	0.28	0.36
	4	0.26	0.17	0.26	0.20	0.29	0.25	0.25
	5	0.36	0.36	0.39	0.34	0.38	0.36	0.35
	6	0.18	0.19	0.18	0.15	0.18	0.27	0.25
	7	0.27	0.27	0.27	0.32	0.34	0.33	0.27
	8	0.03	0.18	0.13	0.21	0.14	0.10	0.16
	9	0.18	0.25	0.21	0.20	0.19	0.17	0.21
	10	0.10	0.07	0.03	0.09	0.14	0.09	0.12

Table 94 Mathematics Longitudinal Summary of Point-Biserials (continued)

		High Point-Biserial					
		Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	0.00	0.00	0.00	-0.01	0.02	0.01
	4	-0.04	0.04	0.01	-0.01	0.01	0.01
	5	0.01	-0.01	0.00	-0.02	0.03	0.01
	6	-0.01	0.02	-0.01	-0.02	-0.03	0.03
	7	-0.02	0.03	-0.02	-0.01	-0.01	0.04
	8	0.00	0.00	0.02	-0.01	0.01	-0.01
	9	0.04	-0.01	-0.02	0.03	-0.04	-0.01
	10	0.01	-0.01	0.02	0.02	-0.01	-0.01
		Mean Point-Biserial					
		Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	0.00	0.00	0.00	-0.01	0.02	0.02
	4	-0.01	0.00	0.01	-0.02	0.01	0.01
	5	0.00	0.01	-0.02	0.01	0.02	0.02
	6	-0.02	0.01	0.01	0.00	-0.04	0.03
	7	-0.01	0.02	-0.01	-0.02	-0.01	0.03
	8	-0.02	-0.01	0.01	0.00	0.01	0.01
	9	-0.01	0.01	-0.01	0.01	0.00	0.00
	10	0.02	0.00	-0.02	-0.02	0.03	-0.03
		Low Point-Biserial					
		Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	-0.05	0.02	0.02	0.01	0.07	-0.08
	4	0.09	-0.08	0.05	-0.08	0.03	0.00
	5	0.00	-0.03	0.05	-0.04	0.02	0.01
	6	-0.01	0.01	0.03	-0.03	-0.09	0.02
	7	0.00	0.01	-0.05	-0.02	0.00	0.06
	8	-0.15	0.05	-0.08	0.08	0.04	-0.06
	9	-0.07	0.04	0.01	0.01	0.02	-0.05
	10	0.03	0.04	-0.07	-0.04	0.05	-0.03

Table 95
Science Longitudinal Summary of Point-Biserials

		High Point-Biserial										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.76	0.75	0.76	0.76	0.77	0.79	0.01	-0.01	0.00	0.00	-0.02
SC	8	0.76	0.76	0.78	0.80	0.77	0.77	0.00	-0.02	-0.02	0.03	0.00
	10	0.79	0.76	0.76	0.78	0.76	0.75	0.03	0.00	-0.02	0.01	0.02

		Mean Point-Biserial										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.61	0.62	0.62	0.64	0.63	0.62	-0.01	0.00	-0.02	0.02	0.00
SC	8	0.61	0.63	0.66	0.66	0.64	0.64	-0.02	-0.03	-0.01	0.02	0.00
	10	0.58	0.57	0.56	0.58	0.58	0.57	0.01	0.01	-0.02	0.00	0.01

		Low Point-Biserial										
Content	Grade	2013	2012	2011	2010	2009	2008	Difference 2013-2012	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.35	0.29	0.33	0.43	0.34	0.42	0.06	-0.04	-0.10	0.09	-0.08
SC	8	0.11	0.24	0.16	0.17	0.17	0.17	-0.13	0.09	-0.02	0.01	0.00
	10	0.28	0.26	0.19	0.27	0.29	0.23	0.02	0.07	-0.08	-0.02	0.06

Table 96
Reading Longitudinal Summary of Impact Data

		2013					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	17.86%	26.04%	34.97%	17.71%	3.42%	21.13%
	4	20.80%	21.98%	31.42%	17.99%	7.82%	25.81%
	5	11.21%	23.32%	19.43%	33.33%	12.71%	46.04%
	6	8.66%	20.87%	28.90%	34.62%	6.96%	41.58%
	7	9.27%	26.18%	23.58%	34.47%	6.50%	40.98%
	8	14.62%	26.28%	25.69%	27.87%	5.53%	33.40%
	9	12.77%	24.82%	29.20%	23.18%	10.04%	33.21%
	10	13.09%	24.89%	29.18%	18.24%	14.59%	32.83%
		2012					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	19.79%	25.27%	31.05%	19.79%	4.11%	23.90%
	4	18.23%	21.39%	30.74%	21.71%	7.92%	29.64%
	5	13.09%	27.14%	19.06%	30.21%	10.50%	40.71%
	6	8.21%	22.71%	28.66%	33.49%	6.92%	40.42%
	7	11.49%	24.11%	22.22%	34.27%	7.91%	42.18%
	8	15.94%	27.17%	22.83%	25.72%	8.33%	34.06%
	9	14.14%	25.00%	28.28%	23.57%	9.02%	32.58%
	10	11.26%	31.07%	23.69%	19.42%	14.56%	33.98%
		2011					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	15.29%	24.03%	35.88%	19.66%	5.15%	24.81%
	4	16.45%	21.29%	31.77%	20.97%	9.52%	30.48%
	5	10.98%	22.26%	20.60%	32.48%	13.68%	46.17%
	6	10.17%	22.03%	25.80%	35.59%	6.40%	42.00%
	7	8.85%	24.96%	25.31%	34.87%	6.02%	40.89%
	8	17.33%	28.49%	23.31%	25.50%	5.38%	30.88%
	9	13.26%	28.79%	26.14%	22.16%	9.66%	31.82%
	10	13.03%	30.55%	24.03%	18.74%	13.65%	32.38%

Table 96
Reading Longitudinal Summary of Impact Data (continued)

		2010					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	15.53%	22.49%	36.98%	21.01%	3.99%	25.00%
	4	16.51%	19.27%	33.49%	21.71%	9.02%	30.73%
	5	13.09%	20.03%	21.97%	30.69%	14.22%	44.91%
	6	9.14%	20.86%	29.66%	33.97%	6.38%	40.34%
	7	12.78%	23.70%	24.07%	32.78%	6.67%	39.44%
	8	17.98%	28.66%	18.77%	26.09%	8.50%	34.59%
	9	14.50%	26.95%	25.09%	22.86%	10.59%	33.46%
	10	14.11%	25.89%	27.58%	20.00%	12.42%	32.42%
		2009					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	16.19%	19.08%	36.85%	21.39%	6.50%	27.89%
	4	16.61%	17.86%	31.68%	23.29%	10.56%	33.85%
	5	9.48%	23.53%	19.44%	32.19%	15.36%	47.55%
	6	10.97%	17.00%	33.64%	32.36%	6.03%	38.39%
	7	12.59%	25.38%	23.12%	30.83%	8.08%	38.91%
	8	18.38%	29.60%	22.06%	21.51%	8.46%	29.96%
	9	13.88%	25.15%	28.57%	20.12%	12.27%	32.39%
	10	11.63%	24.95%	25.89%	21.01%	16.51%	37.52%
		2008					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	13.24%	20.25%	37.85%	24.14%	4.52%	28.66%
	4	13.27%	19.43%	35.70%	21.64%	9.95%	31.60%
	5	12.46%	20.70%	23.33%	30.18%	13.33%	43.51%
	6	11.53%	20.90%	27.39%	32.79%	7.39%	40.18%
	7	13.69%	24.71%	25.86%	29.28%	6.46%	35.74%
	8	16.80%	26.09%	22.73%	25.89%	8.50%	34.39%
	9	13.96%	22.79%	28.27%	25.44%	9.54%	34.98%
	10	15.18%	28.42%	24.51%	18.22%	13.67%	31.89%

Table 96
Reading Longitudinal Summary of Impact Data (continued)

		Difference between 2013 and 2012					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	-1.93%	0.78%	3.92%	-2.08%	-0.69%	-2.77%
	4	2.57%	0.58%	0.67%	-3.72%	-0.11%	-3.82%
	5	-1.87%	-3.82%	0.37%	3.12%	2.20%	5.33%
	6	0.44%	-1.84%	0.24%	1.13%	0.03%	1.16%
	7	-2.22%	2.07%	1.36%	0.20%	-1.41%	-1.21%
	8	-1.32%	-0.89%	2.87%	2.14%	-2.80%	-0.66%
	9	-1.37%	-0.18%	0.92%	-0.39%	1.02%	0.63%
	10	1.83%	-6.18%	5.50%	-1.18%	0.03%	-1.15%
		Difference between 2012 and 2011					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	4.50%	1.24%	-4.83%	0.13%	-1.04%	-0.91%
	4	1.77%	0.10%	-1.03%	0.74%	-1.59%	-0.85%
	5	2.11%	4.88%	-1.54%	-2.27%	-3.18%	-5.45%
	6	-1.96%	0.67%	2.86%	-2.10%	0.52%	-1.58%
	7	2.64%	-0.85%	-3.09%	-0.59%	1.89%	1.30%
	8	-1.39%	-1.31%	-0.48%	0.23%	2.95%	3.18%
	9	0.88%	-3.79%	2.14%	1.41%	-0.64%	0.76%
	10	-1.77%	0.52%	-0.34%	0.68%	0.92%	1.60%
		Difference between 2011 and 2010					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	-0.24%	1.54%	-1.10%	-1.35%	1.15%	-0.20%
	4	-0.06%	2.02%	-1.71%	-0.74%	0.49%	-0.25%
	5	-2.11%	2.22%	-1.37%	1.79%	-0.53%	1.25%
	6	1.03%	1.17%	-3.85%	1.63%	0.02%	1.65%
	7	-3.93%	1.25%	1.24%	2.09%	-0.65%	1.44%
	8	-0.65%	-0.17%	4.53%	-0.59%	-3.12%	-3.71%
	9	-1.24%	1.84%	1.04%	-0.70%	-0.94%	-1.64%
	10	-1.07%	4.66%	-3.55%	-1.26%	1.22%	-0.04%

Table 96
Reading Longitudinal Summary of Impact Data (continued)

		Difference between 2010 and 2009					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	-0.65%	3.41%	0.13%	-0.38%	-2.51%	-2.89%
	4	-0.10%	1.41%	1.81%	-1.58%	-1.54%	-3.12%
	5	3.61%	-3.50%	2.53%	-1.49%	-1.14%	-2.64%
	6	-1.83%	3.86%	-3.98%	1.61%	0.35%	1.95%
	7	0.18%	-1.67%	0.95%	1.95%	-1.42%	0.53%
	8	-0.40%	-0.94%	-3.28%	4.58%	0.04%	4.62%
	9	0.61%	1.80%	-3.48%	2.74%	-1.68%	1.06%
	10	2.47%	0.94%	1.69%	-1.01%	-4.09%	-5.10%

		Difference between 2009 and 2008					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	2.95%	-1.17%	-1.00%	-2.76%	1.99%	-0.77%
	4	3.34%	-1.57%	-4.03%	1.65%	0.61%	2.26%
	5	-2.98%	2.83%	-3.89%	2.01%	2.03%	4.04%
	6	-0.56%	-3.90%	6.25%	-0.43%	-1.35%	-1.79%
	7	-1.09%	0.66%	-2.74%	1.55%	1.62%	3.17%
	8	1.58%	3.51%	-0.67%	-4.38%	-0.04%	-4.42%
	9	-0.07%	2.36%	0.30%	-5.32%	2.73%	-2.59%
	10	-3.55%	-3.46%	1.38%	2.79%	2.84%	5.64%

Table 97
Writing Longitudinal Summary of Impact Data

		2013					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	13.94%	25.49%	35.53%	22.34%	2.70%	25.04%
	4	12.87%	25.44%	32.75%	21.05%	7.89%	28.95%
	5	10.26%	19.61%	27.60%	31.52%	11.01%	42.53%
	6	9.44%	22.14%	24.46%	29.10%	14.86%	43.96%
	7	11.44%	22.06%	23.20%	29.41%	13.89%	43.30%
	8	14.68%	22.82%	23.61%	23.41%	15.48%	38.89%
	9	13.56%	26.94%	24.95%	21.52%	13.02%	34.54%
	10	12.85%	22.48%	34.90%	20.56%	9.21%	29.76%

		2012					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	16.24%	25.19%	32.47%	23.52%	2.58%	26.10%
	4	13.69%	20.86%	32.48%	26.11%	6.85%	32.96%
	5	12.50%	22.08%	28.73%	28.57%	8.12%	36.69%
	6	9.82%	17.87%	27.21%	31.08%	14.01%	45.09%
	7	14.34%	21.61%	21.03%	28.49%	14.53%	43.02%
	8	14.03%	25.68%	22.40%	21.86%	16.03%	37.89%
	9	15.21%	27.50%	24.17%	22.29%	10.83%	33.13%
	10	11.48%	26.26%	33.66%	20.82%	7.78%	28.60%

		2011					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	13.58%	23.77%	33.80%	25.46%	3.40%	28.86%
	4	13.52%	21.66%	34.04%	23.45%	7.33%	30.78%
	5	10.45%	17.27%	30.91%	32.12%	9.24%	41.36%
	6	10.51%	20.45%	25.70%	29.83%	13.51%	43.34%
	7	10.32%	22.42%	26.51%	26.87%	13.88%	40.75%
	8	18.64%	22.24%	23.45%	21.84%	13.83%	35.67%
	9	14.42%	29.41%	24.86%	22.58%	8.73%	31.31%
	10	13.27%	29.18%	29.59%	17.76%	10.20%	27.96%

Table 97
Writing Longitudinal Summary of Impact Data (continued)

		2010					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	12.97%	21.57%	35.44%	26.09%	3.92%	30.02%
	4	10.62%	18.51%	33.99%	29.29%	7.59%	36.87%
	5	11.13%	17.84%	27.99%	30.44%	12.60%	43.04%
	6	8.52%	20.52%	23.65%	32.52%	14.78%	47.30%
	7	12.69%	22.39%	25.19%	25.19%	14.55%	39.74%
	8	16.04%	27.33%	22.38%	18.61%	15.64%	34.26%
	9	15.80%	26.95%	26.39%	19.15%	11.71%	30.86%
	10	11.63%	25.37%	35.94%	20.30%	6.77%	27.06%
		2009					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	12.10%	19.39%	37.32%	27.70%	3.50%	31.20%
	4	12.38%	15.67%	35.74%	26.80%	9.40%	36.21%
	5	10.41%	16.36%	30.41%	32.23%	10.58%	42.81%
	6	10.75%	14.75%	29.14%	34.79%	10.56%	45.36%
	7	10.88%	23.83%	23.08%	28.33%	13.88%	42.21%
	8	18.45%	22.88%	24.91%	19.93%	13.84%	33.76%
	9	11.65%	26.31%	31.93%	19.08%	11.04%	30.12%
	10	12.38%	20.26%	37.52%	18.39%	11.44%	29.83%
		2008					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	10.92%	17.09%	37.03%	31.80%	3.16%	34.97%
	4	10.70%	15.81%	36.10%	29.23%	8.15%	37.38%
	5	11.62%	14.96%	33.27%	29.75%	10.39%	40.14%
	6	12.18%	19.09%	26.73%	28.55%	13.45%	42.00%
	7	15.21%	22.81%	21.67%	26.62%	13.69%	40.30%
	8	15.83%	23.05%	25.65%	21.84%	13.63%	35.47%
	9	13.01%	25.13%	29.53%	23.37%	8.96%	32.34%
	10	12.42%	27.02%	35.73%	18.08%	6.75%	24.84%

Table 97
Writing Longitudinal Summary of Impact Data (continued)

		Difference between 2013 and 2012					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	-2.29%	0.30%	3.06%	-1.18%	0.12%	-1.06%
	4	-0.83%	4.58%	0.26%	-5.06%	1.05%	-4.01%
	5	-2.24%	-2.47%	-1.13%	2.95%	2.89%	5.85%
	6	-0.38%	4.26%	-2.76%	-1.98%	0.85%	-1.13%
	7	-2.90%	0.45%	2.17%	0.92%	-0.64%	0.28%
	8	0.66%	-2.87%	1.21%	1.55%	-0.55%	1.00%
	9	-1.65%	-0.56%	0.79%	-0.77%	2.19%	1.41%
	10	1.37%	-3.78%	1.25%	-0.26%	1.43%	1.17%
		Difference between 2012 and 2011					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	2.66%	1.42%	-1.32%	-1.94%	-0.82%	-2.76%
	4	0.18%	-0.80%	-1.56%	2.66%	-0.48%	2.18%
	5	2.05%	4.81%	-2.18%	-3.55%	-1.13%	-4.68%
	6	-0.68%	-2.58%	1.51%	1.25%	0.50%	1.75%
	7	4.02%	-0.81%	-5.48%	1.62%	0.65%	2.27%
	8	-4.61%	3.44%	-1.04%	0.01%	2.20%	2.22%
	9	0.79%	-1.91%	-0.69%	-0.29%	2.10%	1.82%
	10	-1.79%	-2.92%	4.07%	3.06%	-2.42%	0.64%
		Difference between 2011 and 2010					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	0.61%	2.20%	-1.65%	-0.63%	-0.53%	-1.16%
	4	2.90%	3.15%	0.05%	-5.83%	-0.26%	-6.09%
	5	-0.67%	-0.57%	2.92%	1.68%	-3.36%	-1.68%
	6	1.98%	-0.07%	2.05%	-2.69%	-1.27%	-3.96%
	7	-2.37%	0.03%	1.33%	1.68%	-0.67%	1.01%
	8	2.60%	-5.08%	1.07%	3.23%	-1.82%	1.41%
	9	-1.38%	2.46%	-1.54%	3.44%	-2.98%	0.45%
	10	1.64%	3.81%	-6.35%	-2.54%	3.44%	0.90%

Table 97
Writing Longitudinal Summary of Impact Data (continued)

		Difference between 2010 and 2009					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	0.87%	2.18%	-1.87%	-1.60%	0.42%	-1.18%
	4	-1.76%	2.84%	-1.75%	2.48%	-1.82%	0.67%
	5	0.72%	1.48%	-2.43%	-1.79%	2.02%	0.23%
	6	-2.23%	5.77%	-5.49%	-2.27%	4.22%	1.95%
	7	1.80%	-1.44%	2.11%	-3.14%	0.67%	-2.48%
	8	-2.41%	4.45%	-2.53%	-1.31%	1.81%	0.49%
	9	4.15%	0.65%	-5.53%	0.07%	0.67%	0.73%
	10	-0.75%	5.11%	-1.58%	1.91%	-4.68%	-2.77%

		Difference between 2009 and 2008					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	1.18%	2.30%	0.29%	-4.11%	0.33%	-3.77%
	4	1.68%	-0.14%	-0.37%	-2.43%	1.26%	-1.17%
	5	-1.21%	1.40%	-2.86%	2.48%	0.19%	2.67%
	6	-1.44%	-4.34%	2.42%	6.25%	-2.89%	3.36%
	7	-4.33%	1.01%	1.40%	1.71%	0.20%	1.91%
	8	2.62%	-0.17%	-0.74%	-1.92%	0.21%	-1.71%
	9	-1.36%	1.17%	2.40%	-4.30%	2.08%	-2.22%
	10	-0.04%	-6.75%	1.79%	0.30%	4.69%	4.99%

Table 98
Mathematics Longitudinal Summary of Impact Data

		2013					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	8.35%	22.61%	20.03%	24.28%	24.73%	49.01%
	4	7.09%	29.39%	24.96%	28.06%	10.49%	38.55%
	5	14.89%	14.44%	19.40%	38.05%	13.23%	51.28%
	6	11.51%	15.24%	23.17%	25.97%	24.11%	50.08%
	7	11.88%	18.98%	24.75%	26.57%	17.82%	44.39%
	8	11.35%	25.10%	27.69%	27.29%	8.57%	35.86%
	9	13.52%	25.80%	32.21%	18.33%	10.14%	28.47%
	10	14.47%	22.55%	37.45%	17.66%	7.87%	25.53%
		2012					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	9.41%	22.69%	26.54%	17.13%	24.23%	41.36%
	4	7.68%	25.92%	26.88%	29.60%	9.92%	39.52%
	5	16.56%	17.70%	20.33%	34.92%	10.49%	45.41%
	6	11.73%	16.01%	19.65%	22.50%	30.11%	52.61%
	7	14.26%	20.23%	23.51%	22.74%	19.27%	42.00%
	8	12.27%	25.46%	22.89%	27.84%	11.54%	39.38%
	9	15.27%	25.87%	30.35%	18.74%	9.78%	28.51%
	10	12.96%	27.08%	38.10%	15.86%	6.00%	21.86%
		2011					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	9.94%	18.61%	24.13%	23.50%	23.82%	47.32%
	4	6.91%	28.29%	24.67%	30.26%	9.87%	40.13%
	5	14.75%	14.13%	19.88%	40.99%	10.25%	51.24%
	6	11.49%	16.38%	23.35%	22.79%	25.99%	48.78%
	7	10.68%	20.28%	25.27%	25.80%	17.97%	43.77%
	8	14.62%	22.73%	28.46%	24.31%	9.88%	34.19%
	9	15.60%	25.75%	31.39%	18.61%	8.65%	27.26%
	10	14.75%	27.88%	38.79%	14.34%	4.24%	18.59%

Table 98
Mathematics Longitudinal Summary of Impact Data (continued)

		2010					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	8.65%	17.92%	22.64%	26.26%	24.53%	50.79%
	4	5.52%	25.55%	23.19%	36.44%	9.31%	45.74%
	5	15.05%	15.38%	20.40%	38.80%	10.37%	49.16%
	6	10.71%	15.37%	20.73%	24.87%	28.32%	53.20%
	7	14.56%	18.71%	27.41%	23.82%	15.50%	39.32%
	8	12.79%	26.91%	28.24%	22.90%	9.16%	32.06%
	9	15.78%	26.06%	31.01%	15.78%	11.38%	27.16%
	10	13.18%	22.11%	38.95%	18.66%	7.10%	25.76%
		2009					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	8.33%	17.73%	22.58%	24.39%	26.97%	51.36%
	4	7.48%	21.95%	25.69%	32.36%	12.52%	44.88%
	5	12.07%	15.65%	17.01%	42.86%	12.42%	55.27%
	6	11.41%	14.49%	22.46%	28.80%	22.83%	51.63%
	7	13.66%	21.06%	24.29%	24.86%	16.13%	40.99%
	8	15.87%	26.38%	27.86%	21.77%	8.12%	29.89%
	9	13.86%	24.75%	31.49%	20.00%	9.90%	29.90%
	10	12.94%	25.14%	35.86%	18.30%	7.76%	26.06%
		2008					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	8.45%	15.17%	25.52%	24.66%	26.21%	50.86%
	4	6.30%	20.61%	25.89%	35.78%	11.41%	47.19%
	5	14.66%	12.22%	24.06%	37.97%	11.09%	49.06%
	6	15.88%	13.42%	20.79%	23.25%	26.65%	49.91%
	7	16.76%	18.88%	25.05%	20.23%	19.08%	39.31%
	8	12.13%	26.03%	24.66%	28.77%	8.41%	37.18%
	9	13.50%	26.82%	30.55%	17.76%	11.37%	29.13%
	10	14.47%	25.49%	38.44%	16.63%	4.97%	21.60%

Table 98
Mathematics Longitudinal Summary of Impact Data (continued)

		2007					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	5.59%	16.76%	24.21%	27.56%	25.88%	53.45%
	4	5.91%	22.24%	24.80%	29.53%	17.52%	47.05%
	5	12.03%	14.98%	22.78%	41.77%	8.44%	50.21%
	6	13.13%	15.83%	23.17%	26.83%	21.04%	47.88%
	7	10.66%	19.40%	27.72%	25.80%	16.42%	42.22%
	8	12.04%	29.01%	29.38%	23.18%	6.39%	29.56%
	9	14.92%	27.52%	32.14%	17.44%	7.98%	25.42%
	10	18.12%	25.50%	36.02%	16.11%	4.25%	20.36%
		Difference between 2013 and 2012					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	-1.07%	-0.08%	-6.51%	7.15%	0.51%	7.66%
	4	-0.59%	3.47%	-1.92%	-1.54%	0.57%	-0.97%
	5	-1.67%	-3.27%	-0.93%	3.13%	2.74%	5.87%
	6	-0.22%	-0.77%	3.52%	3.47%	-6.01%	-2.54%
	7	-2.38%	-1.25%	1.25%	3.83%	-1.45%	2.39%
	8	-0.92%	-0.36%	4.80%	-0.55%	-2.97%	-3.52%
	9	-1.75%	-0.06%	1.86%	-0.41%	0.37%	-0.04%
	10	1.51%	-4.53%	-0.66%	1.80%	1.88%	3.68%
		Difference between 2012 and 2011					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	-0.52%	4.07%	2.41%	-6.37%	0.41%	-5.96%
	4	0.77%	-2.37%	2.21%	-0.66%	0.05%	-0.61%
	5	1.81%	3.57%	0.45%	-6.08%	0.24%	-5.83%
	6	0.24%	-0.38%	-3.70%	-0.28%	4.12%	3.84%
	7	3.58%	-0.05%	-1.76%	-3.06%	1.30%	-1.77%
	8	-2.35%	2.73%	-5.56%	3.53%	1.66%	5.19%
	9	-0.33%	0.11%	-1.04%	0.13%	1.13%	1.26%
	10	-1.79%	-0.80%	-0.68%	1.52%	1.75%	3.27%

Table 98
Mathematics Longitudinal Summary of Impact Data (continued)

		Difference between 2011 and 2010					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	1.29%	0.69%	1.49%	-2.76%	-0.71%	-3.47%
	4	1.39%	2.74%	1.49%	-6.17%	0.56%	-5.61%
	5	-0.30%	-1.25%	-0.53%	2.20%	-0.12%	2.08%
	6	0.78%	1.01%	2.63%	-2.08%	-2.34%	-4.42%
	7	-3.88%	1.57%	-2.14%	1.98%	2.47%	4.45%
	8	1.84%	-4.18%	0.21%	1.41%	0.72%	2.13%
	9	-0.18%	-0.30%	0.38%	2.83%	-2.73%	0.10%
	10	1.56%	5.77%	-0.16%	-4.32%	-2.86%	-7.17%

		Difference between 2010 and 2009					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	0.31%	0.20%	0.07%	1.86%	-2.44%	-0.58%
	4	-1.96%	3.60%	-2.51%	4.08%	-3.21%	0.86%
	5	2.98%	-0.26%	3.39%	-4.06%	-2.05%	-6.11%
	6	-0.70%	0.88%	-1.74%	-3.93%	5.50%	1.56%
	7	0.89%	-2.35%	3.12%	-1.04%	-0.63%	-1.67%
	8	-3.08%	0.52%	0.38%	1.13%	1.04%	2.17%
	9	1.92%	1.30%	-0.48%	-4.22%	1.48%	-2.75%
	10	0.25%	-3.03%	3.09%	0.36%	-0.66%	-0.30%

		Difference between 2009 and 2008					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	-0.12%	2.55%	-2.94%	-0.26%	0.76%	0.50%
	4	1.18%	1.34%	-0.20%	-3.42%	1.11%	-2.31%
	5	-2.59%	3.43%	-7.05%	4.89%	1.32%	6.21%
	6	-4.47%	1.07%	1.67%	5.55%	-3.83%	1.72%
	7	-3.10%	2.18%	-0.76%	4.63%	-2.95%	1.68%
	8	3.73%	0.36%	3.20%	-7.00%	-0.30%	-7.29%
	9	0.36%	-2.07%	0.93%	2.24%	-1.47%	0.77%
	10	-1.53%	-0.35%	-2.59%	1.67%	2.80%	4.46%

Table 98
Mathematics Longitudinal Summary of Impact Data (continued)

		Difference between 2008 and 2007					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing &
MA	3	2.86%	-1.59%	1.31%	-2.91%	0.32%	-2.58%
	4	0.40%	-1.63%	1.09%	6.25%	-6.11%	0.14%
	5	2.64%	-2.76%	1.28%	-3.80%	2.65%	-1.15%
	6	2.75%	-2.41%	-2.37%	-3.58%	5.61%	2.03%
	7	6.10%	-0.52%	-2.67%	-5.57%	2.66%	-2.91%
	8	0.09%	-2.99%	-4.72%	5.59%	2.03%	7.62%
	9	-1.42%	-0.70%	-1.59%	0.33%	3.38%	3.71%
	10	-3.65%	-0.02%	2.43%	0.52%	0.72%	1.24%

Table 99
Science Longitudinal Summary of Impact Data

2013							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	12.02%	22.53%	18.72%	21.92%	24.81%	46.73%
SC	8	11.20%	18.60%	18.80%	20.60%	30.80%	51.40%
	10	15.45%	20.82%	28.11%	14.16%	21.46%	35.62%

2012							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	13.89%	26.63%	17.65%	20.10%	21.73%	41.83%
SC	8	11.86%	16.61%	16.97%	18.80%	35.77%	54.56%
	10	14.98%	25.10%	26.46%	15.37%	18.09%	33.46%

2011							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	12.73%	20.25%	20.71%	21.93%	24.39%	46.32%
SC	8	15.87%	12.90%	17.26%	24.60%	29.37%	53.97%
	10	14.90%	26.53%	25.71%	15.31%	17.55%	32.86%

2010							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	13.62%	19.27%	19.77%	23.42%	23.92%	47.34%
SC	8	14.56%	15.73%	17.86%	18.25%	33.59%	51.84%
	10	14.29%	25.21%	26.26%	17.44%	16.81%	34.24%

2009							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	9.98%	19.12%	23.18%	21.49%	26.23%	47.72%
SC	8	14.13%	17.43%	16.70%	21.28%	30.46%	51.74%
	10	12.68%	20.40%	29.96%	15.07%	21.88%	36.95%

Table 99
Science Longitudinal Summary of Impact Data (continued)

2008							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	12.09%	16.97%	24.91%	21.84%	24.19%	46.03%
SC	8	13.41%	16.57%	17.16%	19.72%	33.14%	52.86%
	10	14.63%	27.29%	24.02%	17.90%	16.16%	34.06%

Difference between 2013 and 2012							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	-1.86%	-4.11%	1.07%	1.82%	3.08%	4.90%
SC	8	-0.66%	1.99%	1.83%	1.80%	-4.97%	-3.16%
	10	0.47%	-4.28%	1.65%	-1.21%	3.37%	2.16%

Difference between 2012 and 2011							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	1.16%	6.39%	-3.06%	-1.83%	-2.65%	-4.49%
SC	8	-4.01%	3.71%	-0.29%	-5.81%	6.40%	0.59%
	10	0.08%	-1.43%	0.74%	0.06%	0.54%	0.61%

Difference between 2011 and 2010							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	-0.89%	0.98%	0.94%	-1.49%	0.47%	-1.02%
SC	8	1.31%	-2.83%	-0.60%	6.35%	-4.23%	2.12%
	10	0.61%	1.32%	-0.55%	-2.13%	0.74%	-1.39%

Difference between 2010 and 2009							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	3.64%	0.15%	-3.41%	1.93%	-2.31%	-0.37%
SC	8	0.43%	-1.70%	1.17%	-3.03%	3.13%	0.10%
	10	1.60%	4.81%	-3.70%	2.36%	-5.07%	-2.70%

Table 99
Science Longitudinal Summary of Impact Data (continued)

		Difference between 2009 and 2008					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	-2.11%	2.15%	-1.73%	-0.35%	2.04%	1.69%
SC	8	0.72%	0.86%	-0.46%	1.56%	-2.68%	-1.12%
	10	-1.95%	-6.89%	5.95%	-2.83%	5.72%	2.89%

Figures 1–31

Figure 1
Total Number of Students Participating in CoAlt 2012-13 by Grade and Content

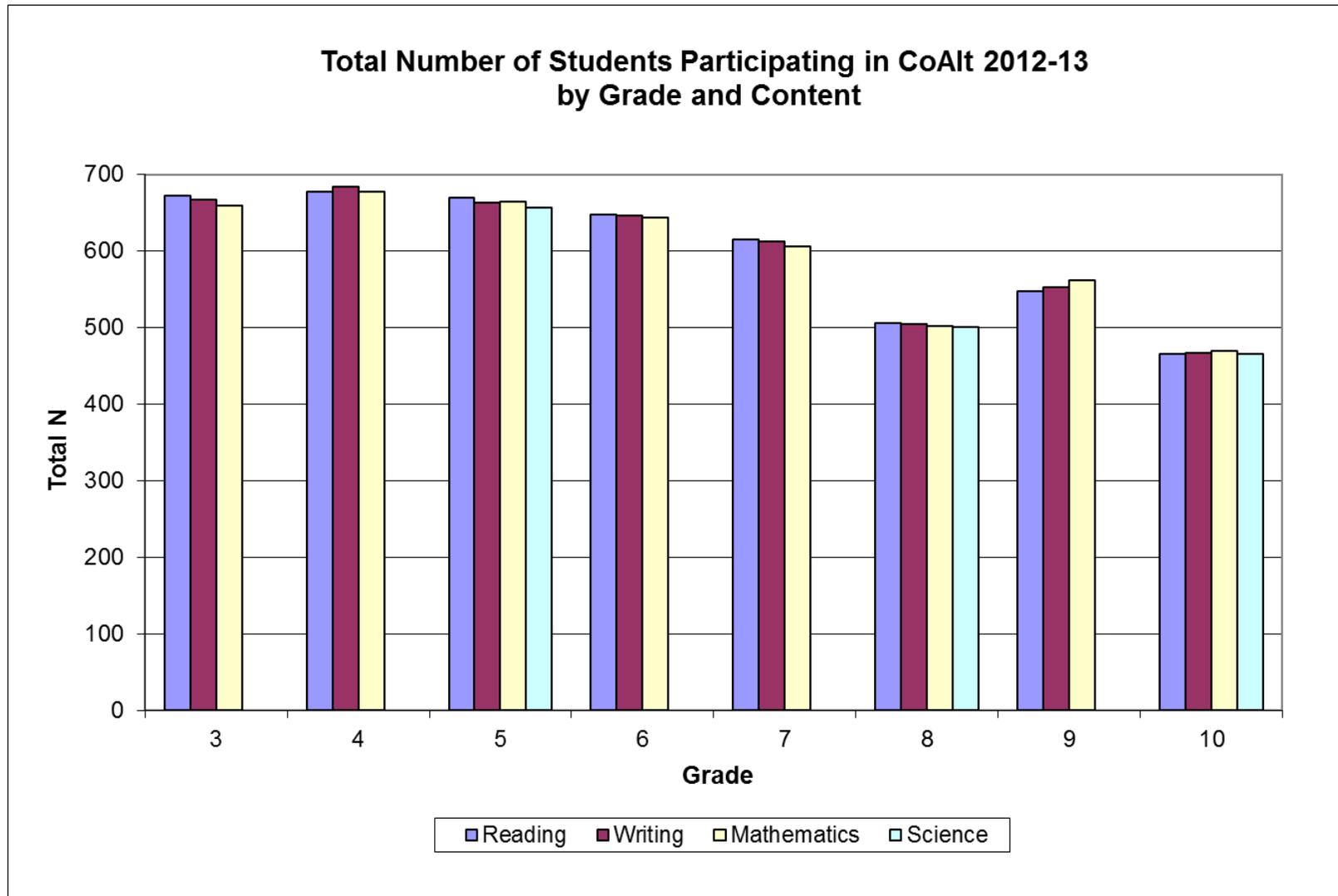


Figure 2
Percent of Participating Students by Coded Disability

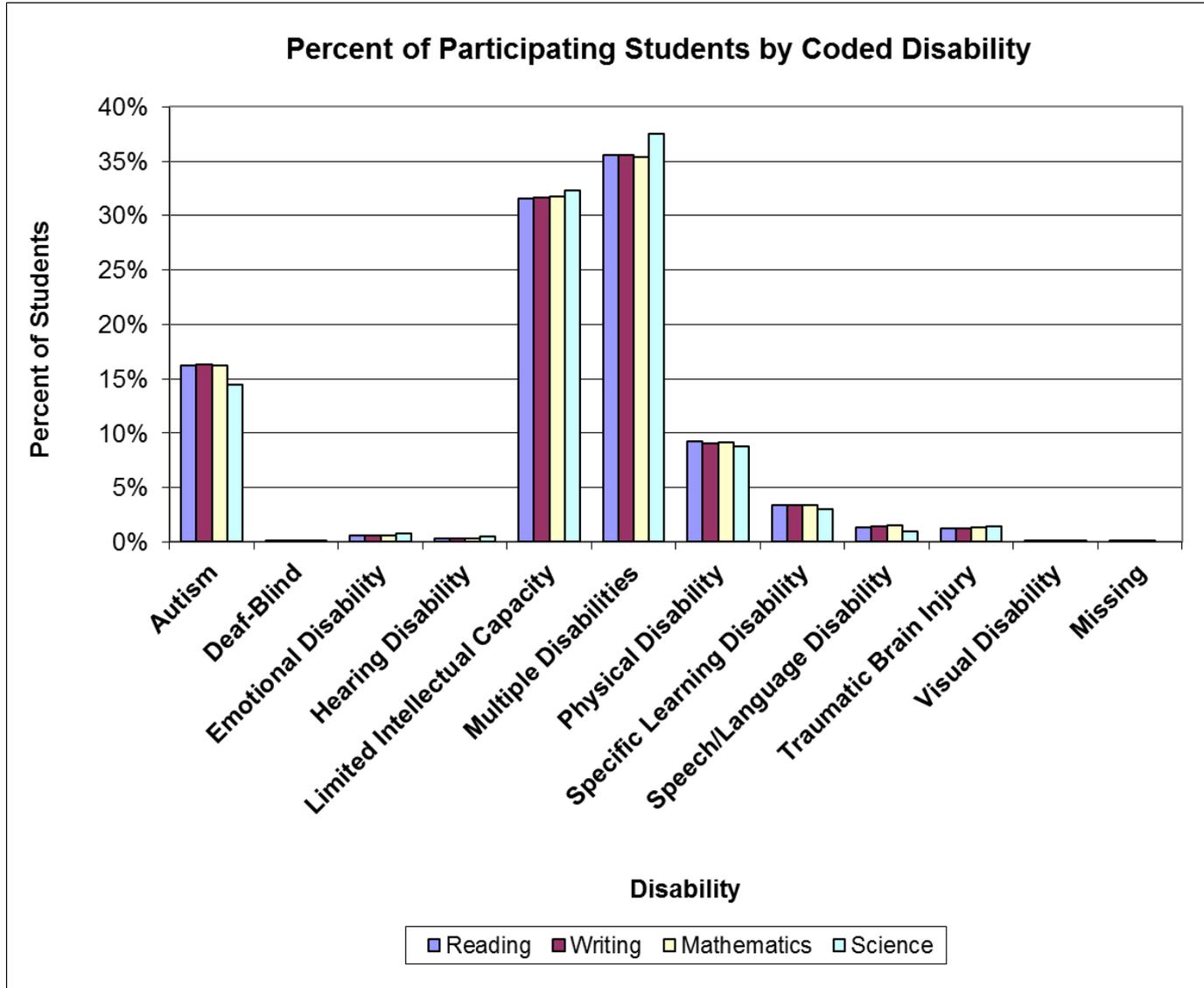


Figure 3
Reading Percent of Students Utilizing Expanded Accommodations

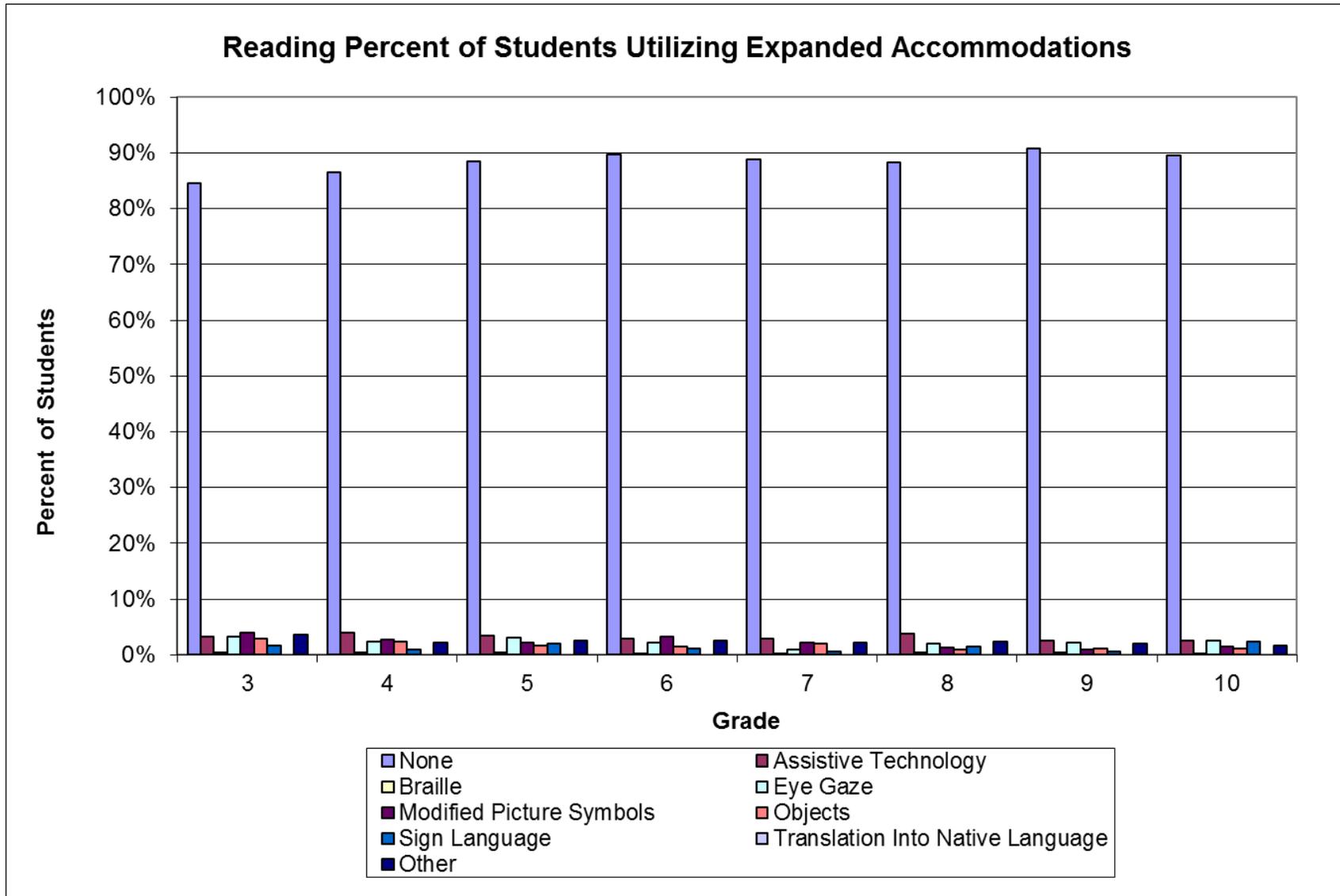


Figure 4
Writing Percent of Students Utilizing Expanded Accommodations

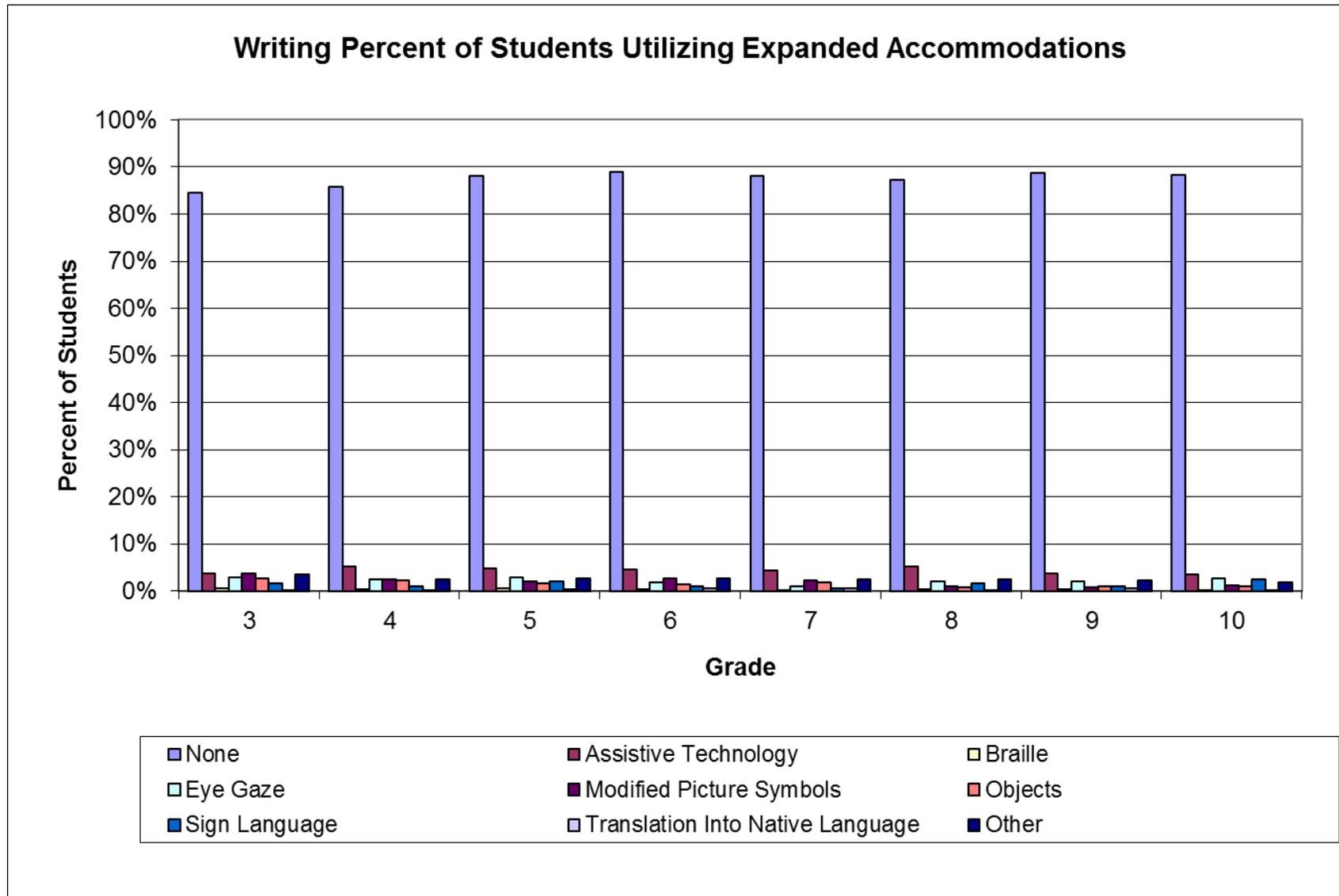


Figure 5
Mathematics Percent of Students Utilizing Expanded Accommodations

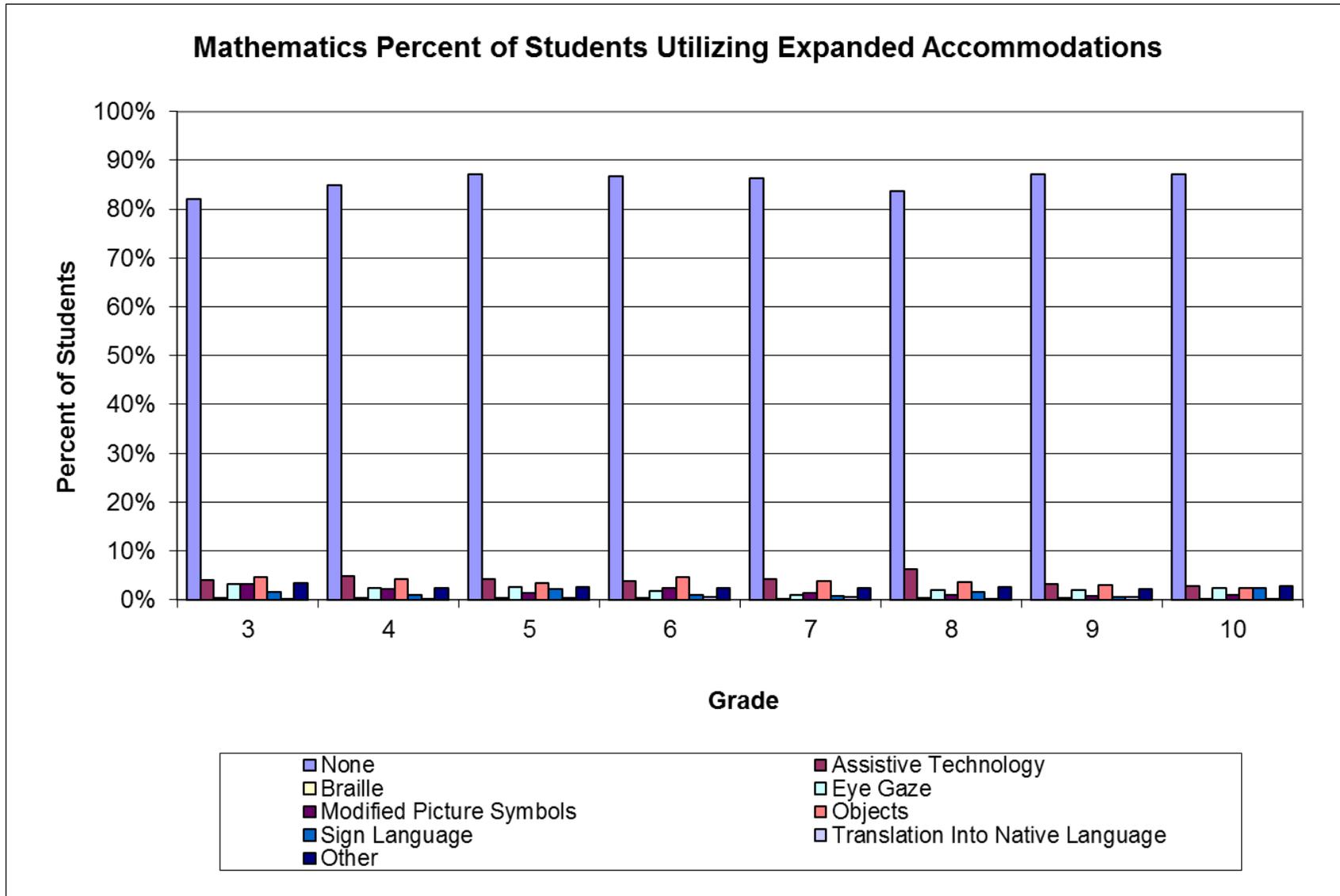


Figure 6
Science Percent of Students Utilizing Expanded Accommodations

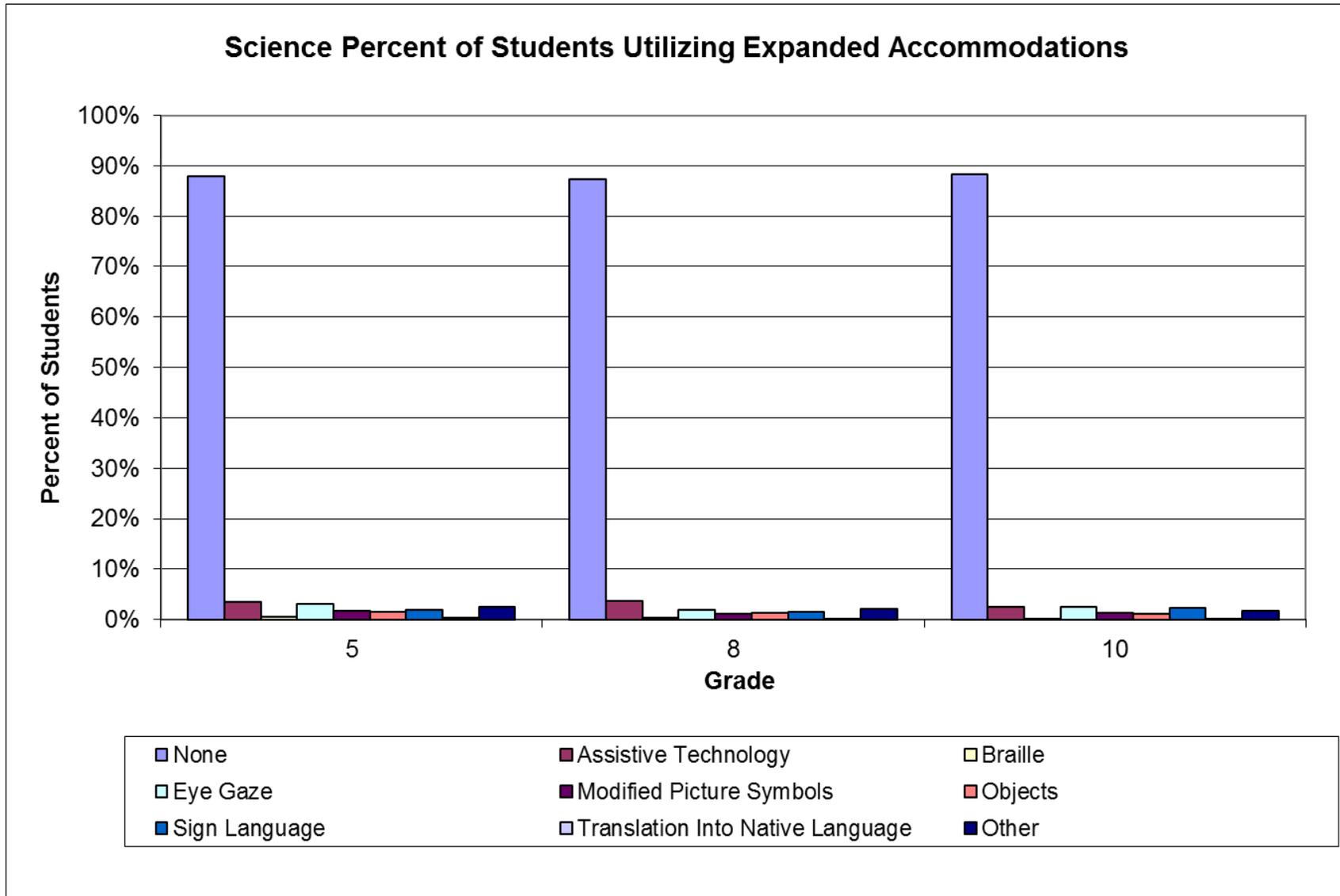


Figure 7
Reading Mean as Percent of Total Possible Score by Gender

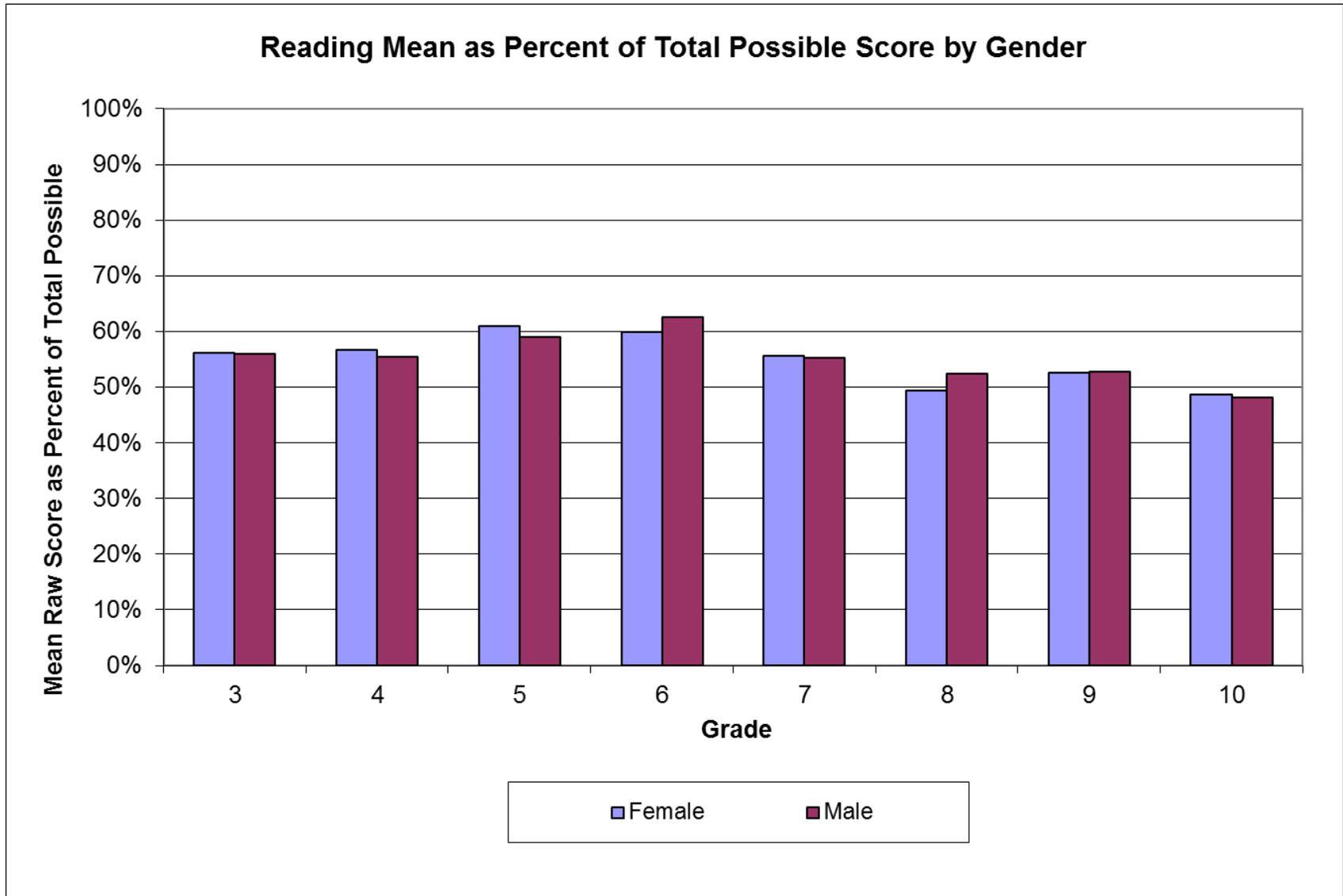


Figure 8
Writing Mean as Percent of Total Possible Score by Gender

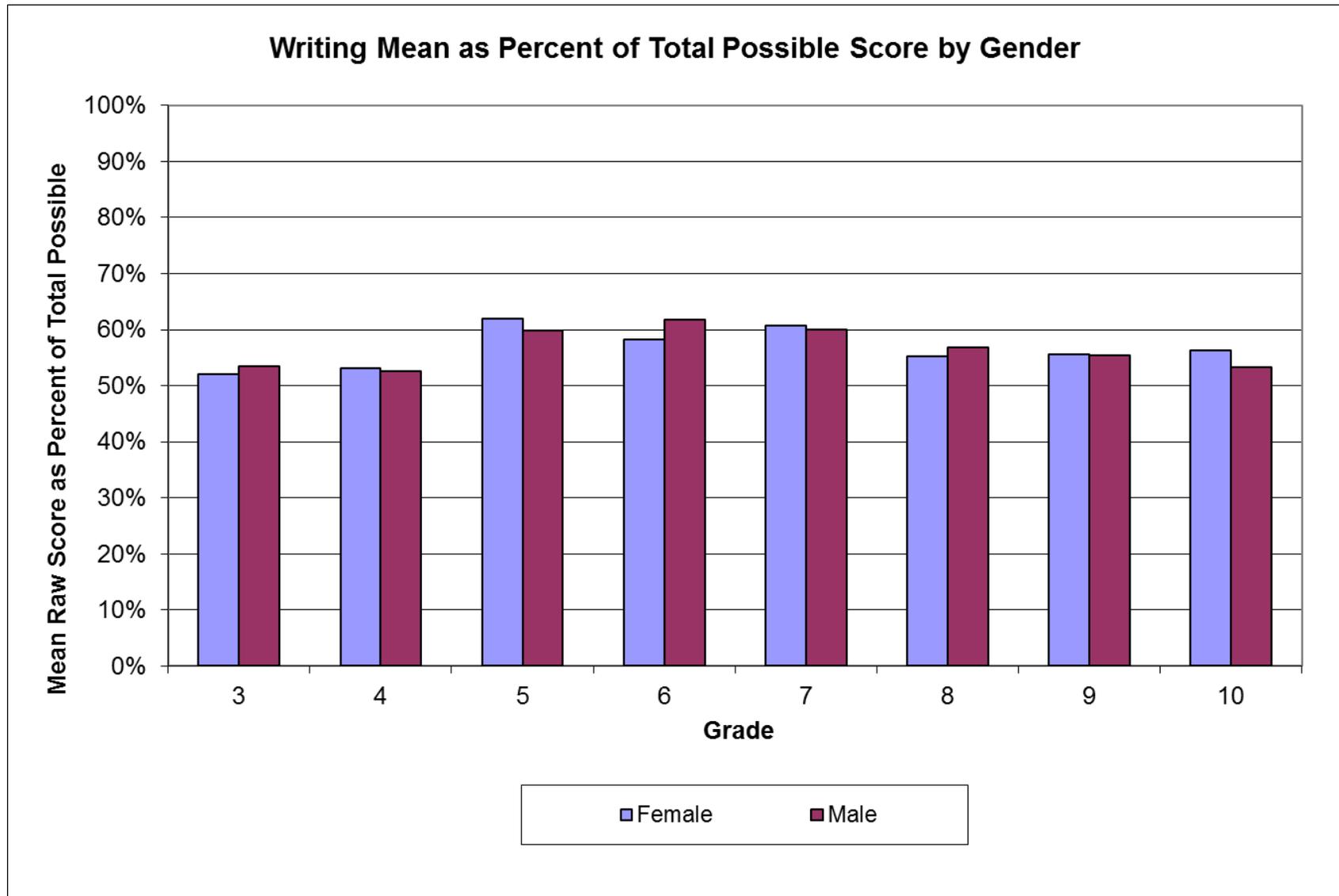


Figure 9
Mathematics Mean as Percent of Total Possible Score by Gender

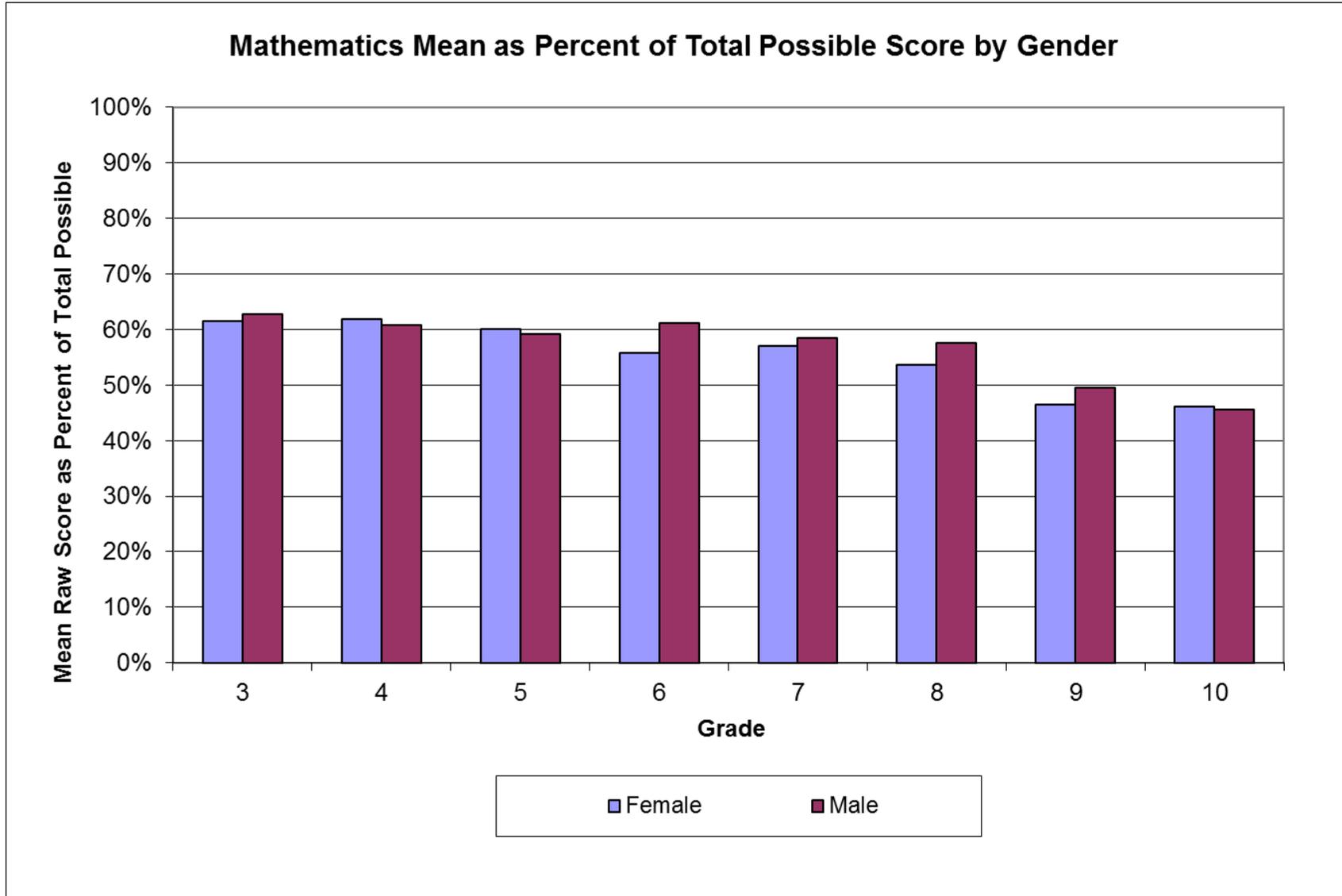


Figure 10
Science Mean as Percent of Total Possible Score by Gender

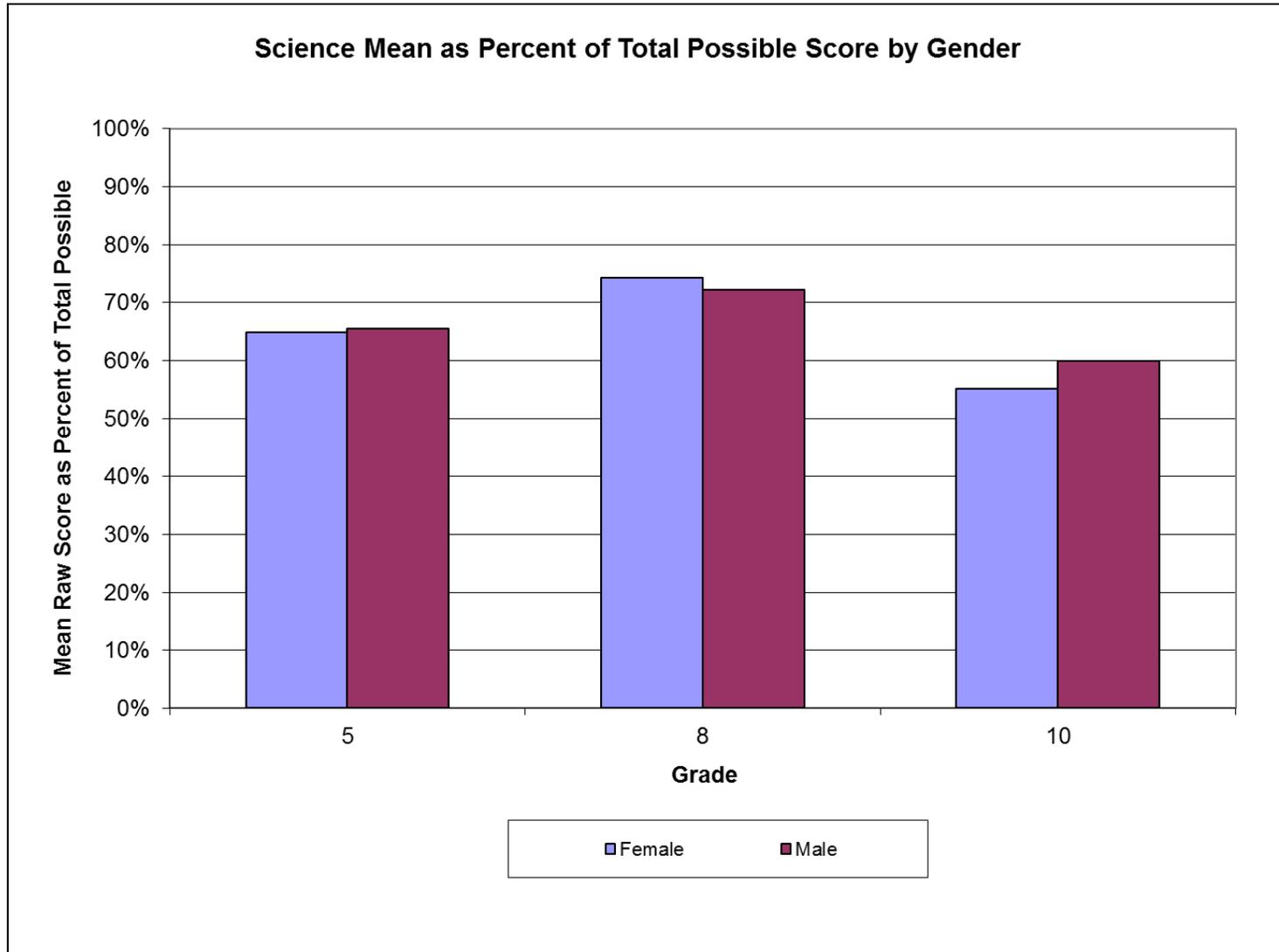


Figure 11
Reading Mean as Percent of Total Possible Score by Race/Ethnicity

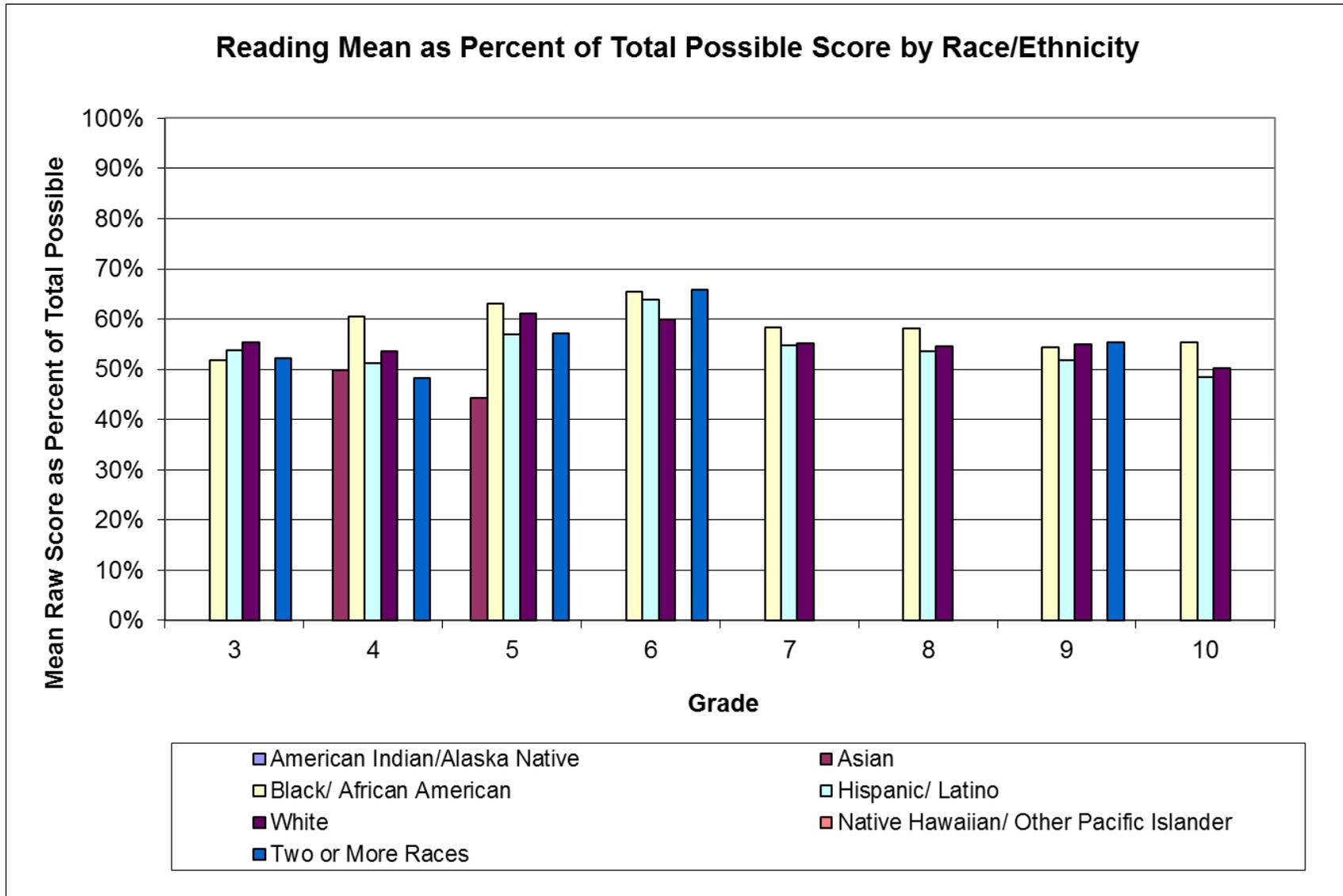


Figure 12
Writing Mean as Percent of Total Possible Score by Race/Ethnicity

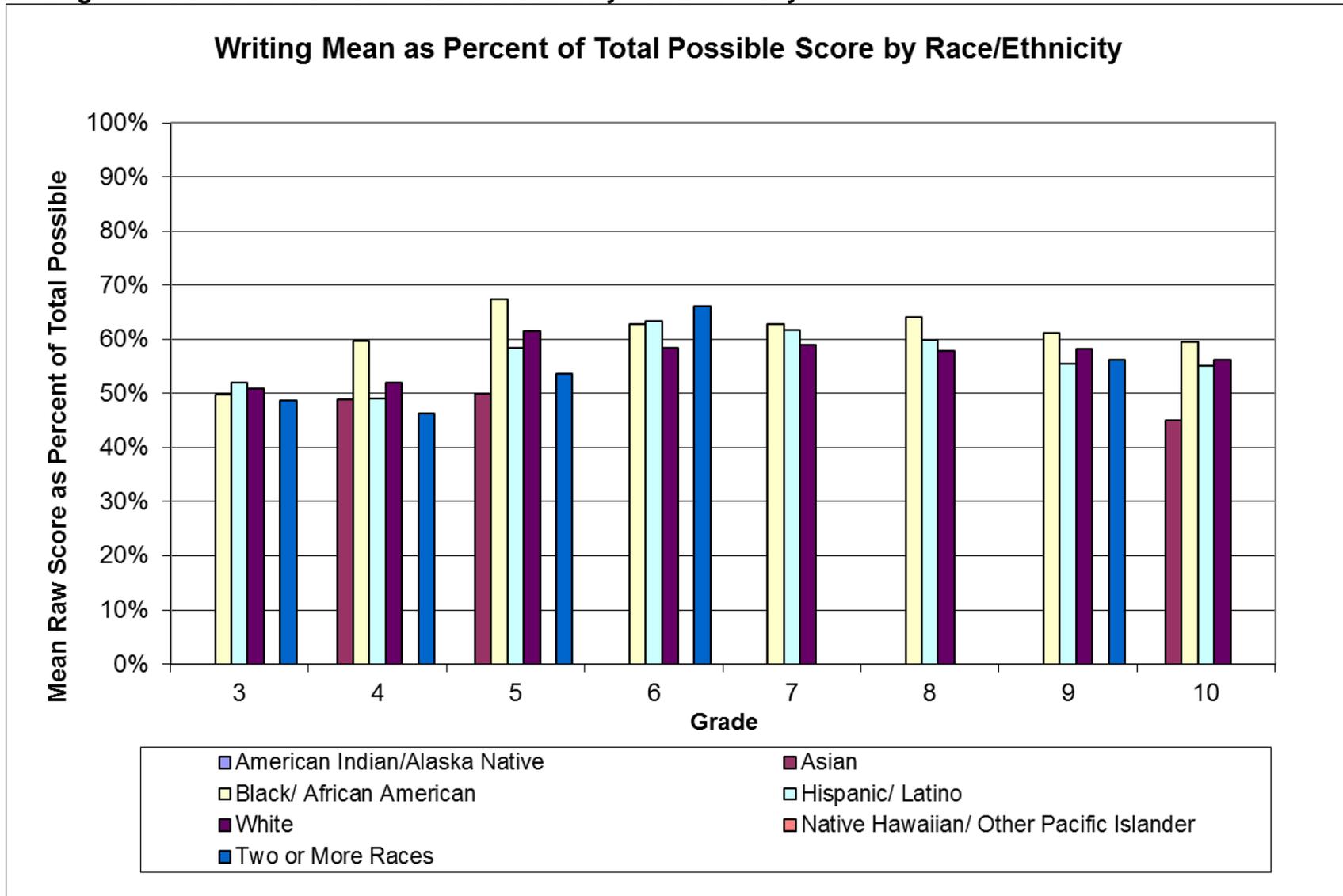


Figure 13
Mathematics Mean as Percent of Total Possible Score by Race/Ethnicity

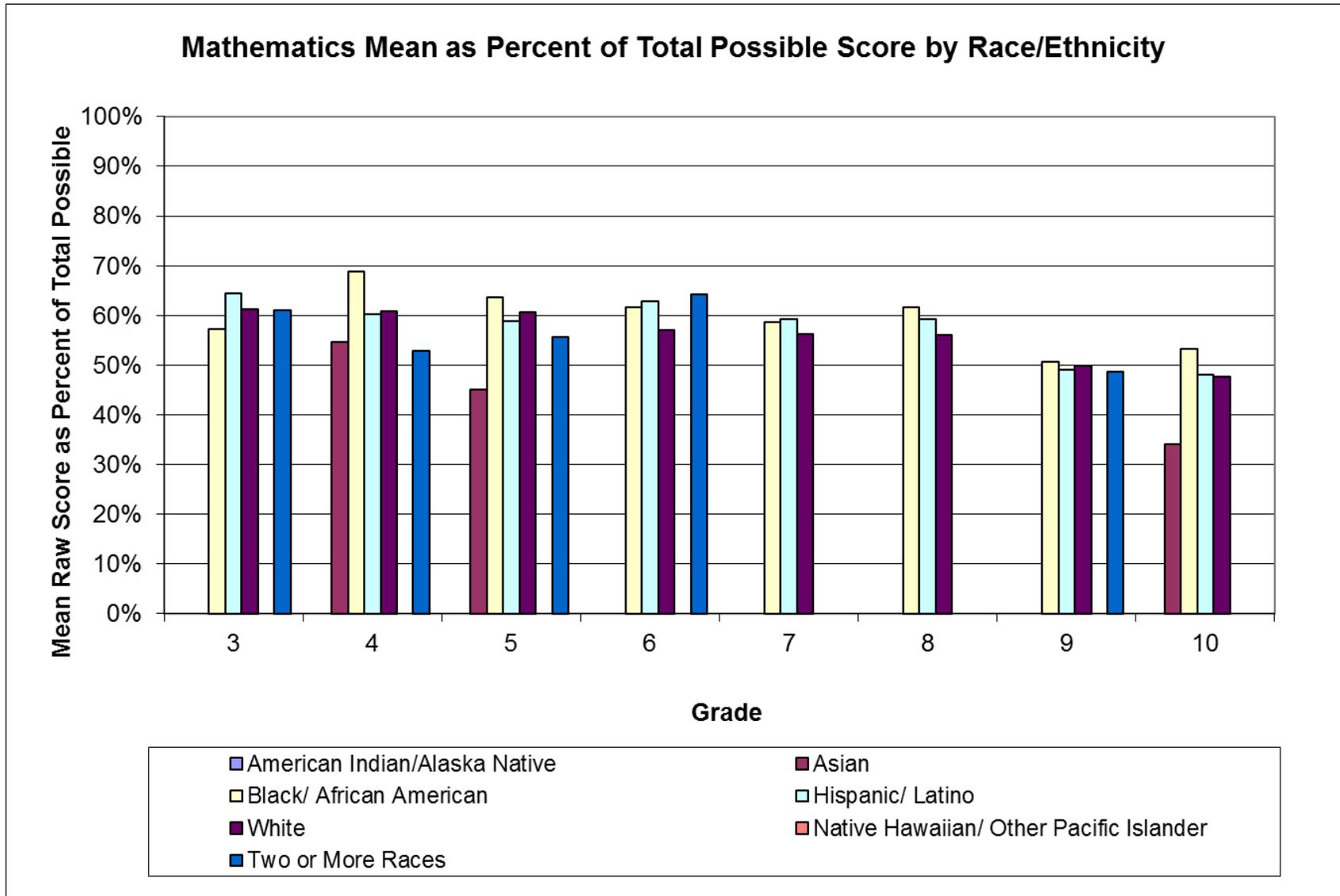


Figure 14
Science Mean as Percent of Total Possible Score by Race/Ethnicity

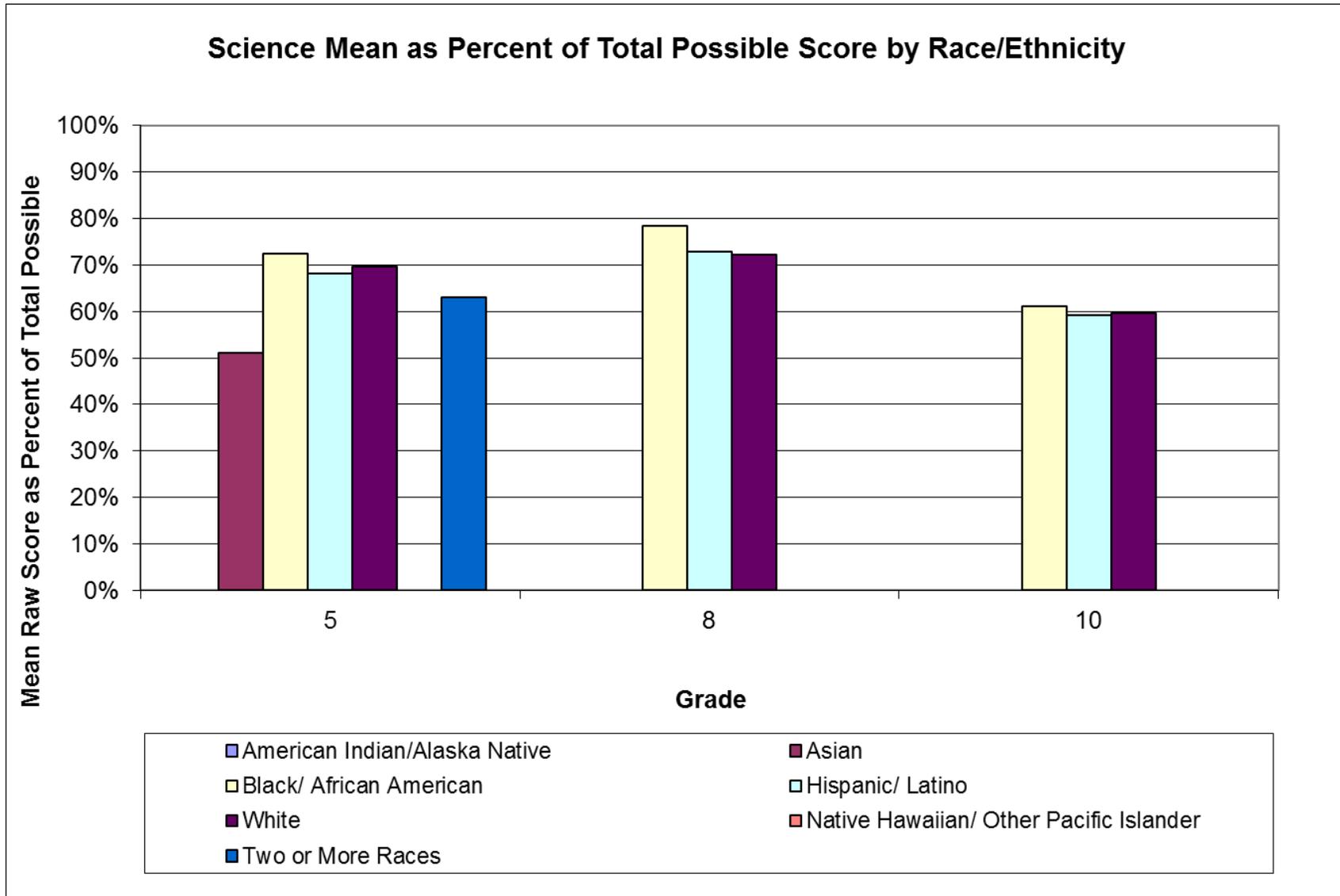


Figure 15
Reading Impact Data

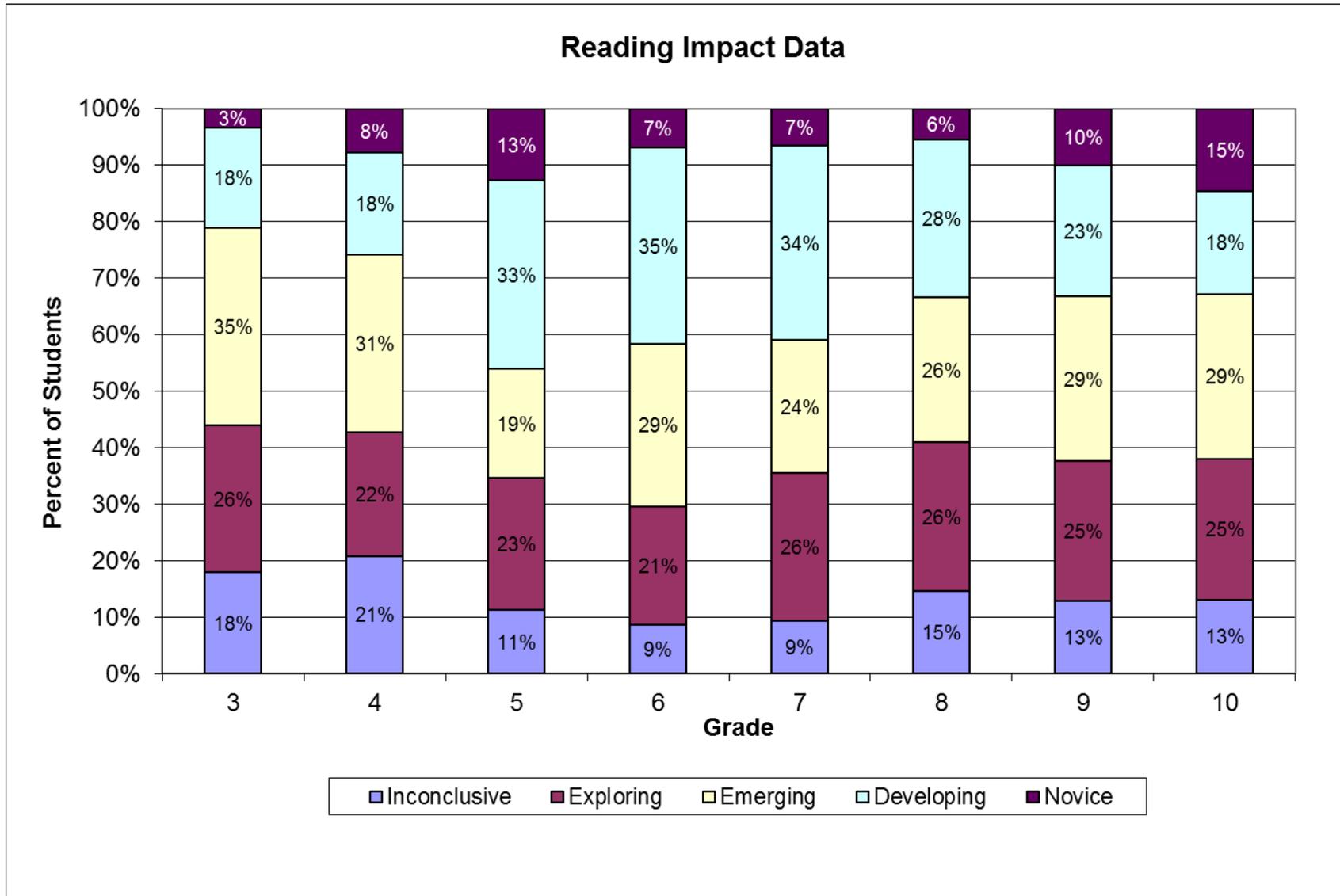


Figure 16
Writing Impact Data

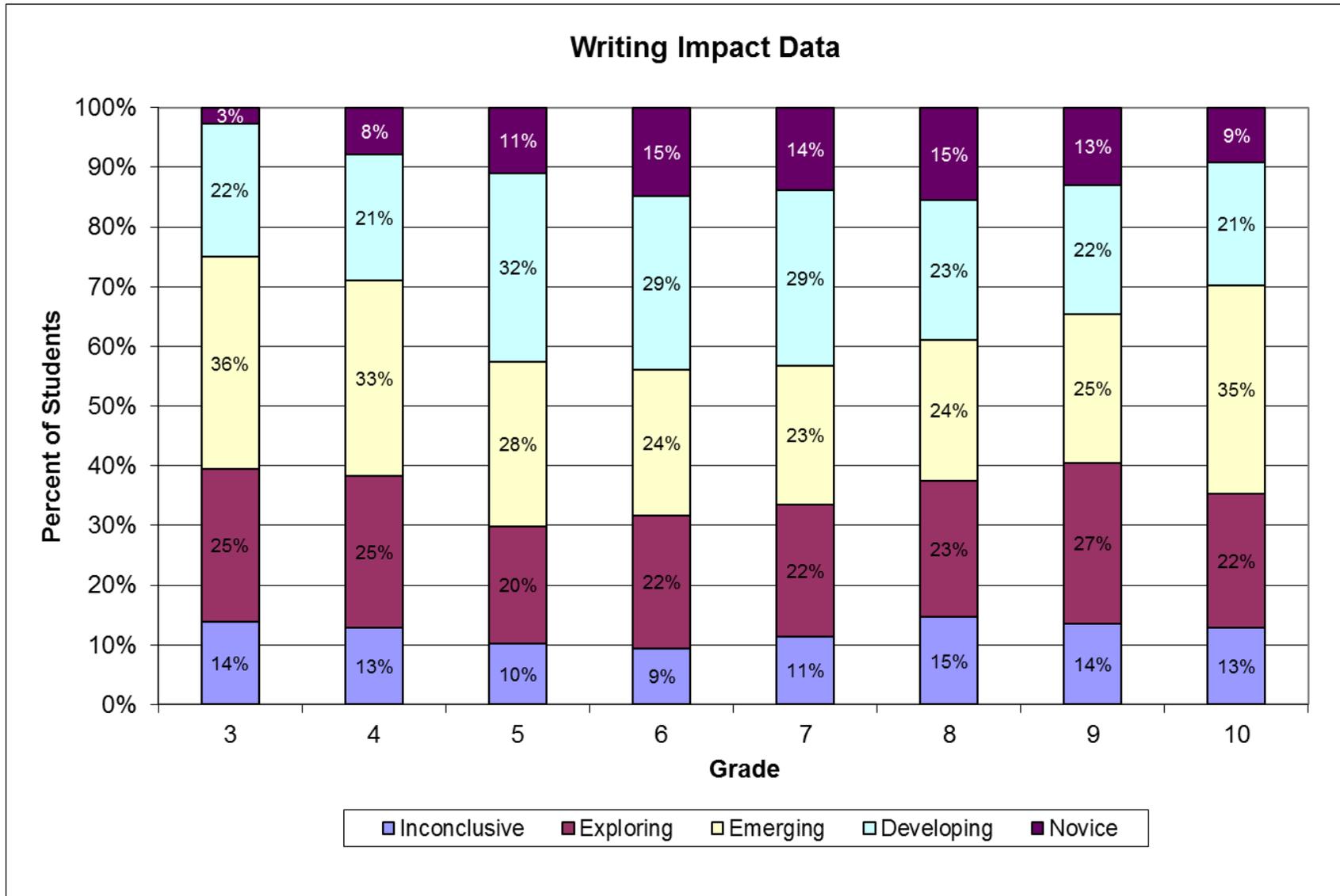


Figure 17
Mathematics Impact Data

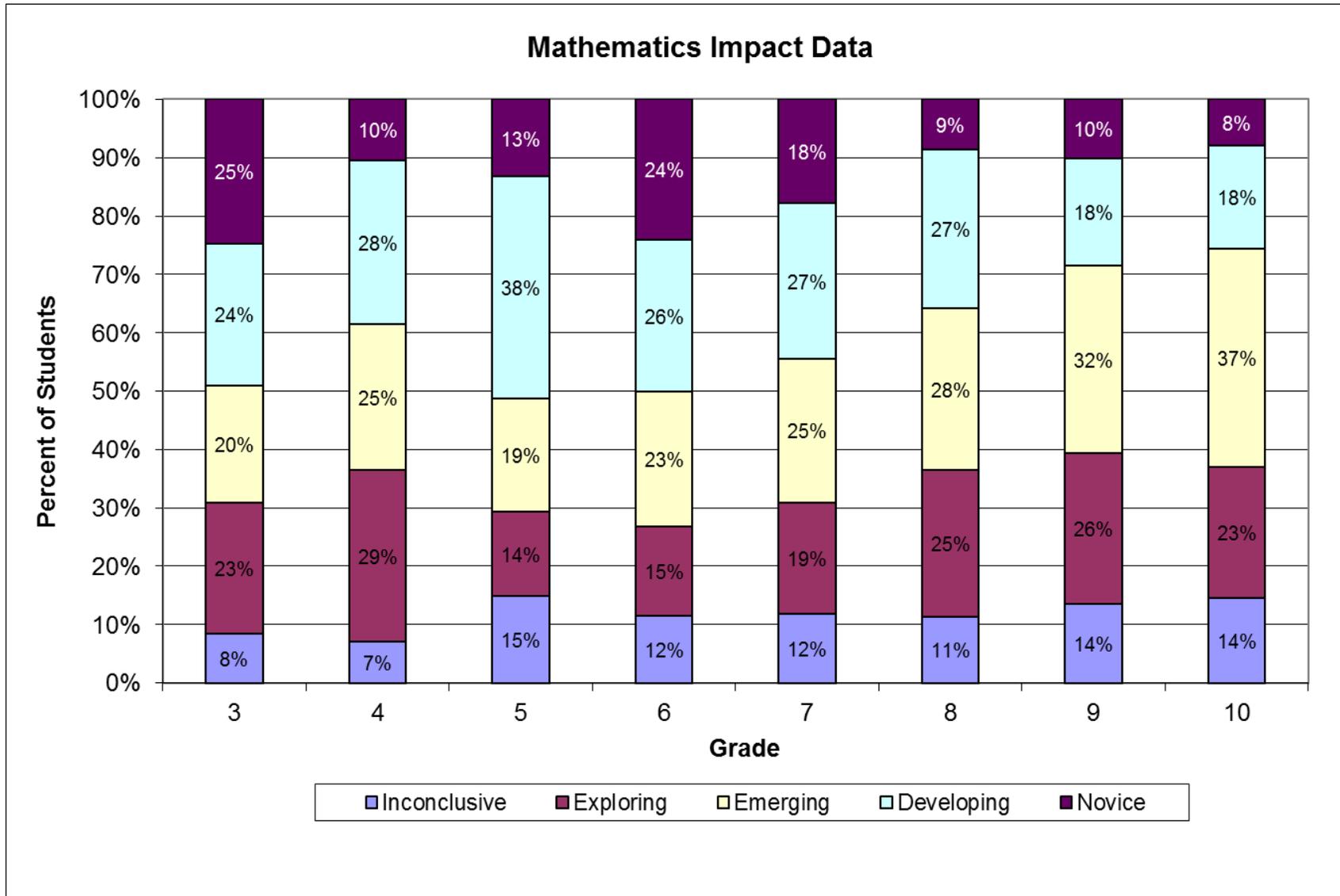


Figure 18
Science Impact Data

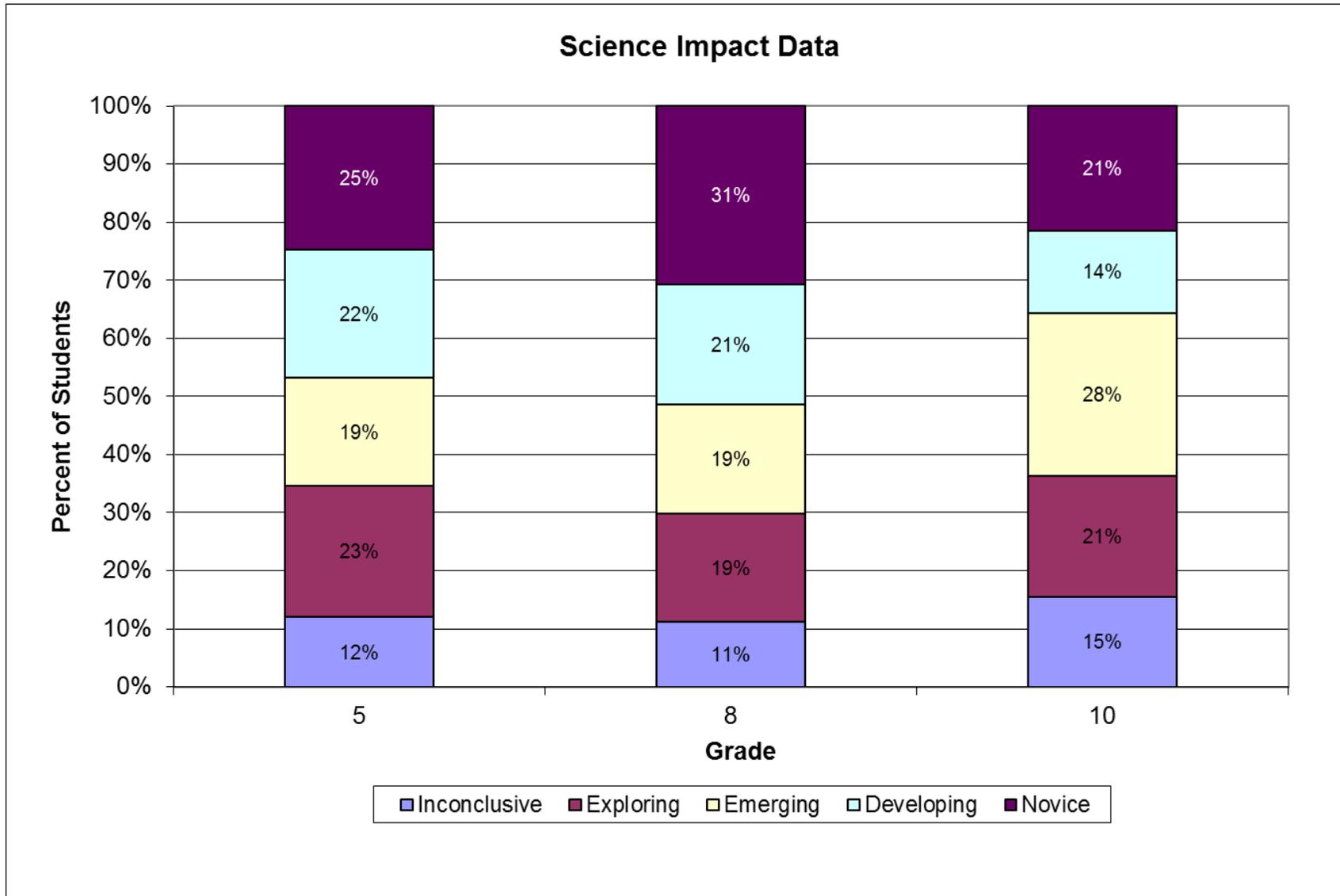


Figure 19
Impact Data—Developing and Novice Combined

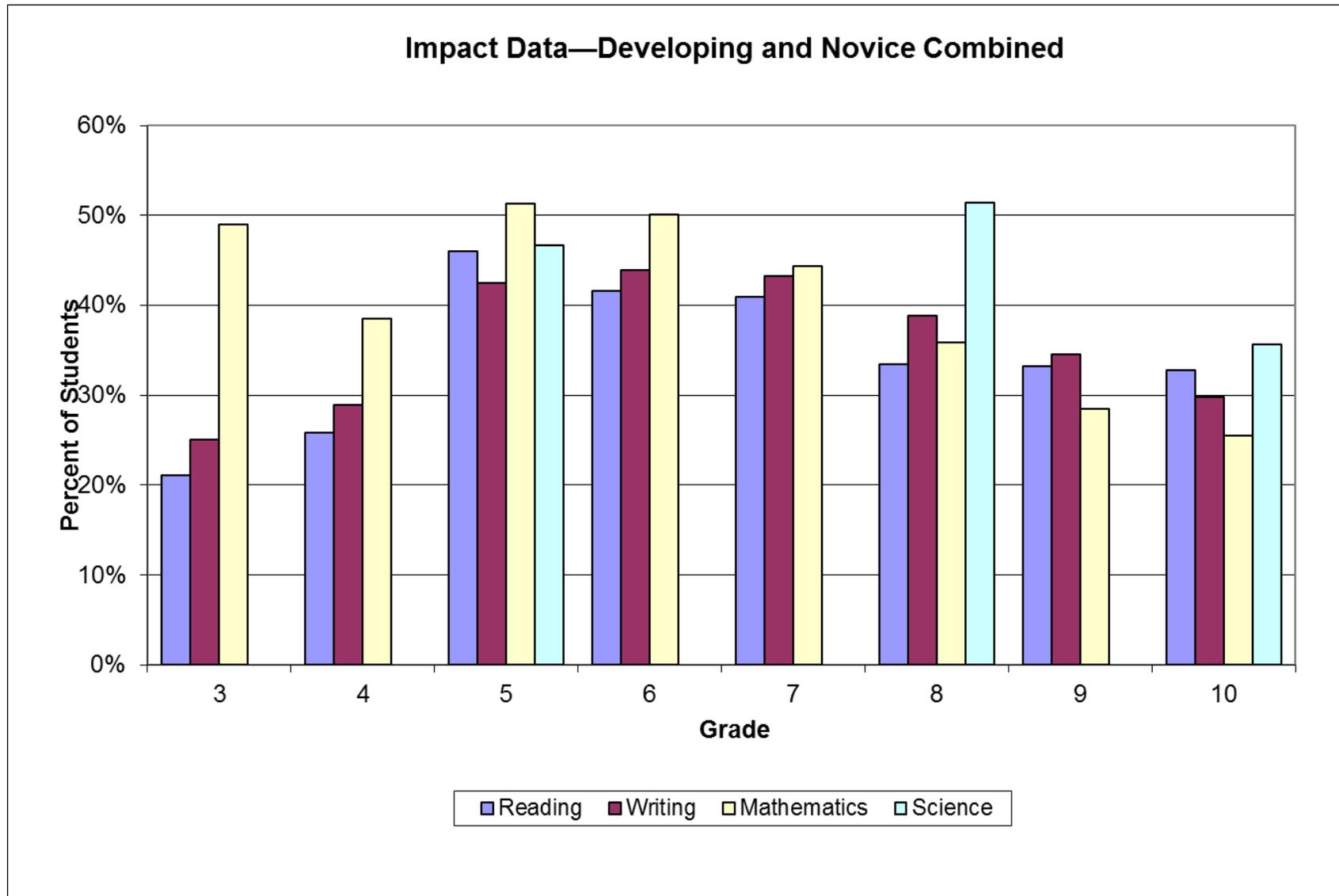


Figure 20

Total Number of Students Participating in CoAlt Reading 2008, 2009, 2010, 2011, 2012, and 2013

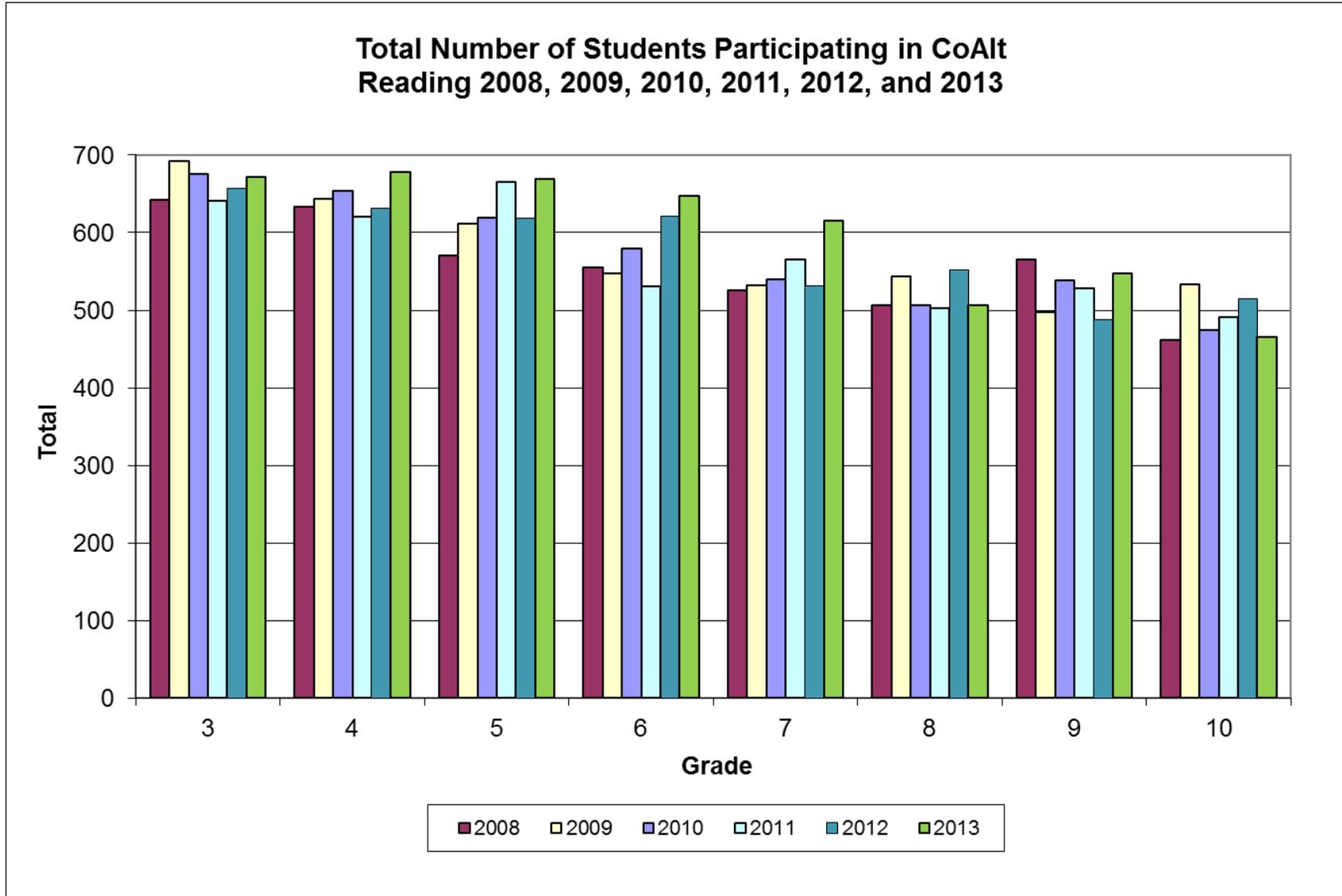


Figure 21

Total Number of Students Participating in CoAlt Writing 2008, 2009, 2010, 2011, 2012, and 2013

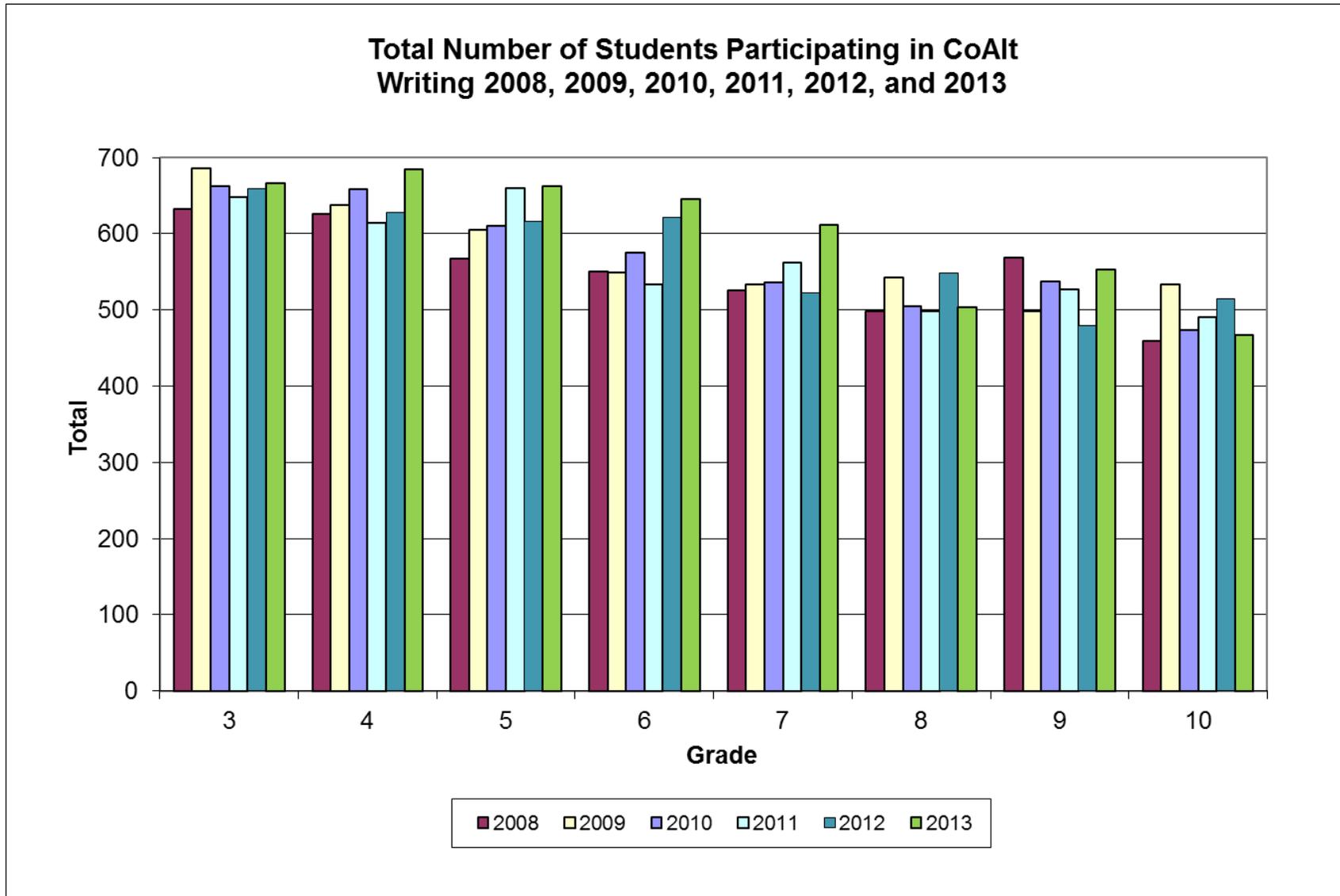


Figure 22

Total Number of Students Participating in CoAlt Mathematics 2007, 2008, 2009, 2010, 2011, 2012, and 2013

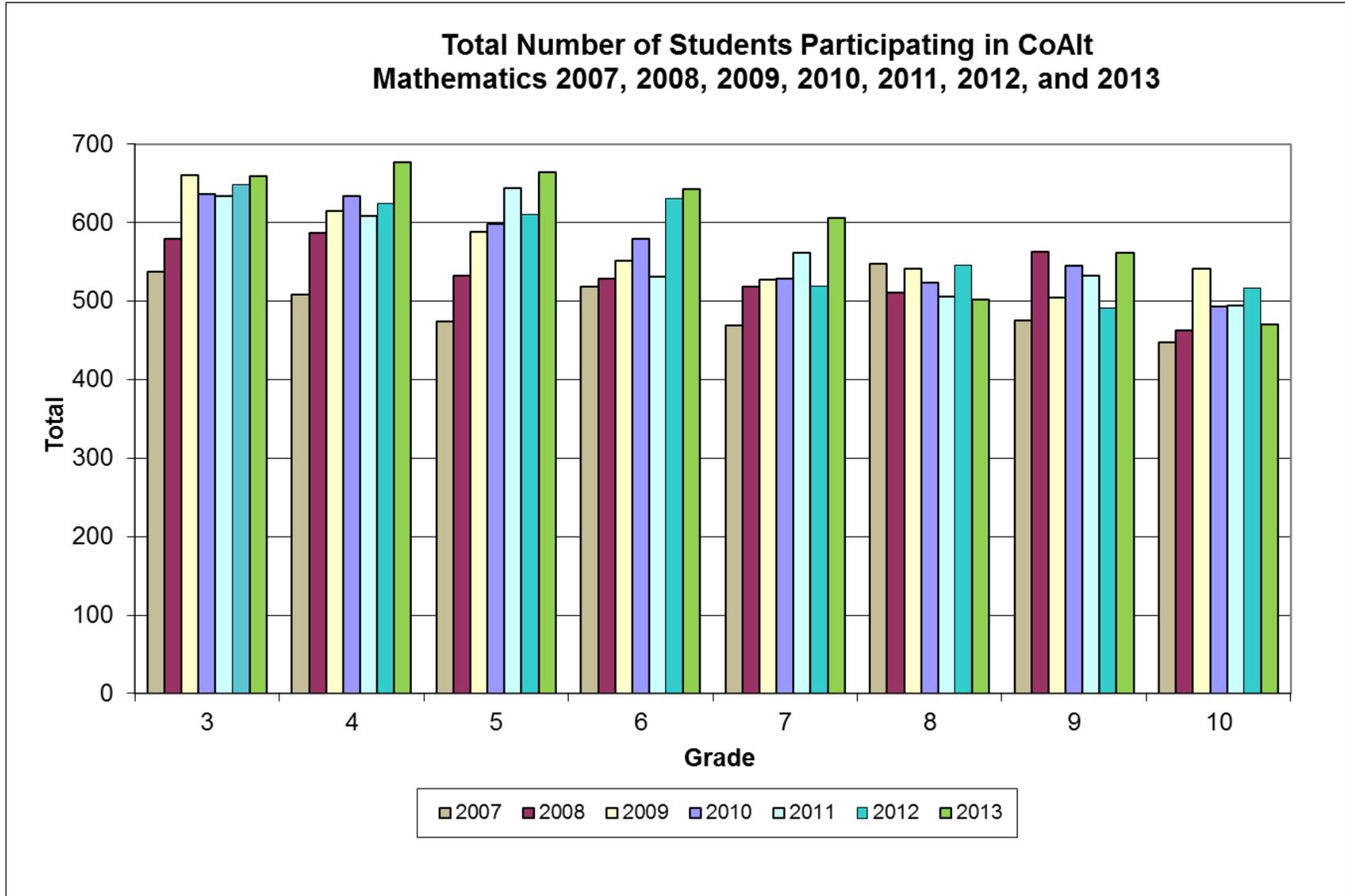


Figure 23

Total Number of Students Participating in CoAlt Science 2008, 2009, 2010, 2011, 2012, and 2013

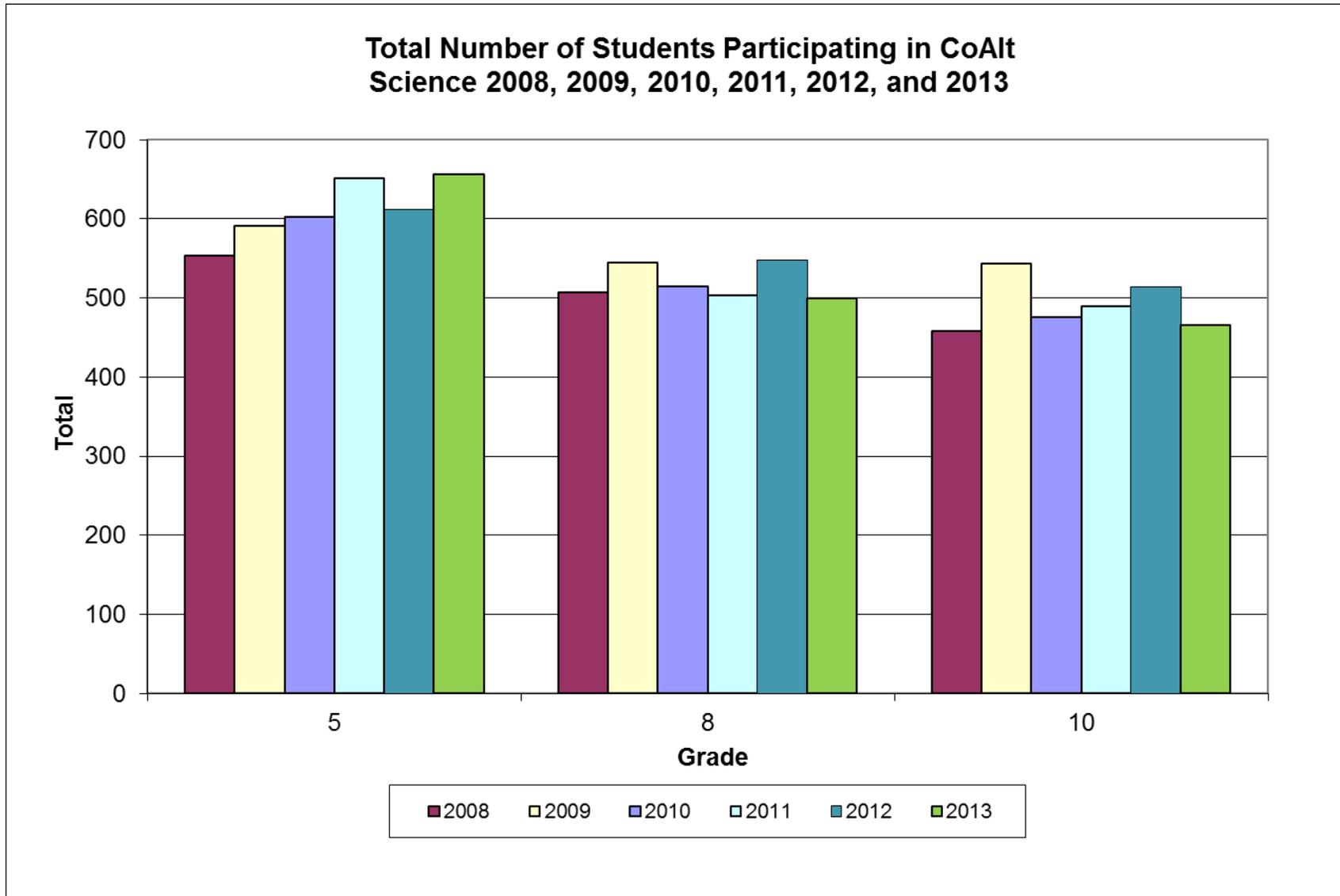


Figure 24
Mean Score as Percent of Total for Reading 2008, 2009, 2010, 2011, 2012, and 2013

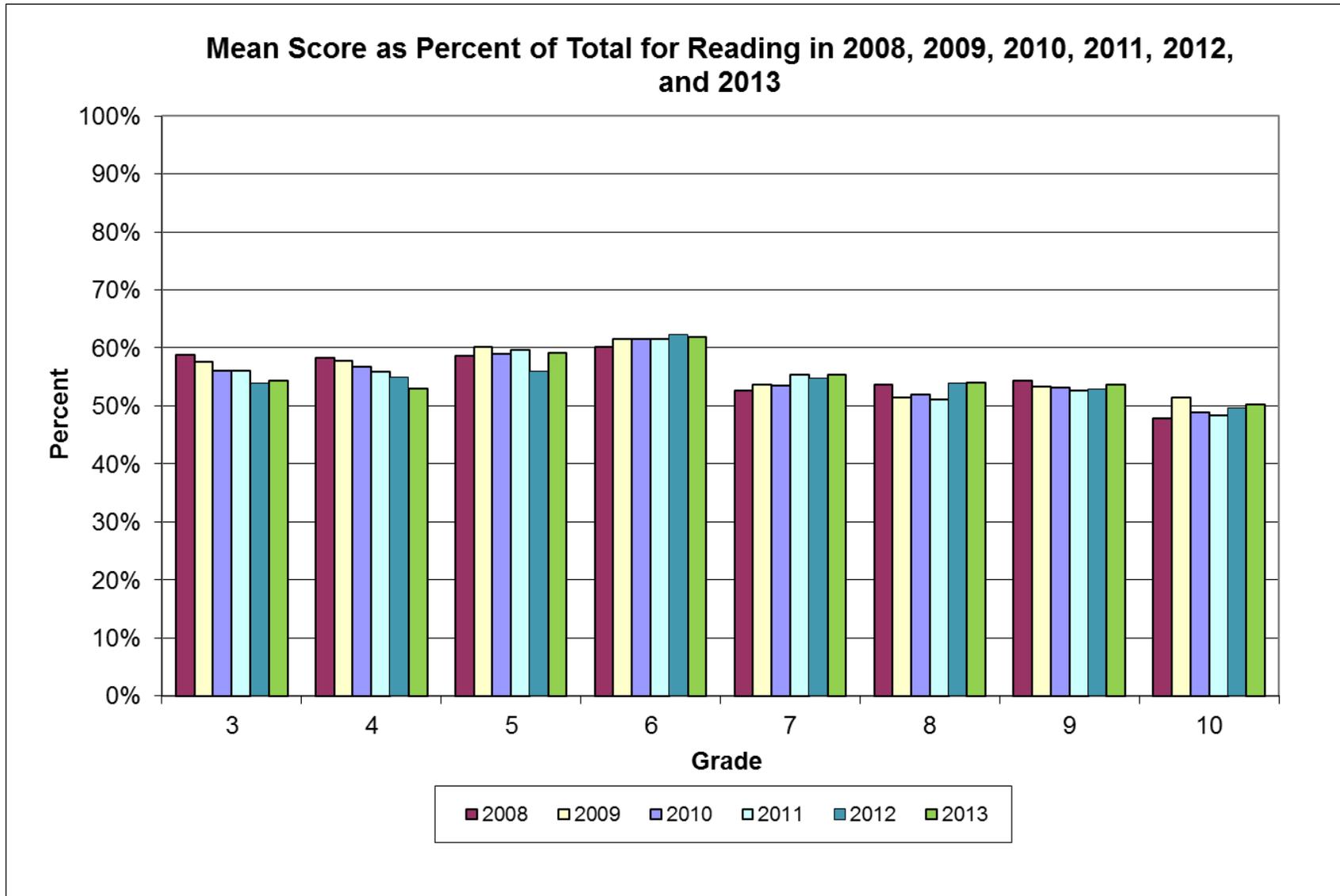


Figure 25
Mean Score as Percent of Total for Writing 2008, 2009, 2010, 2011, 2012, and 2013

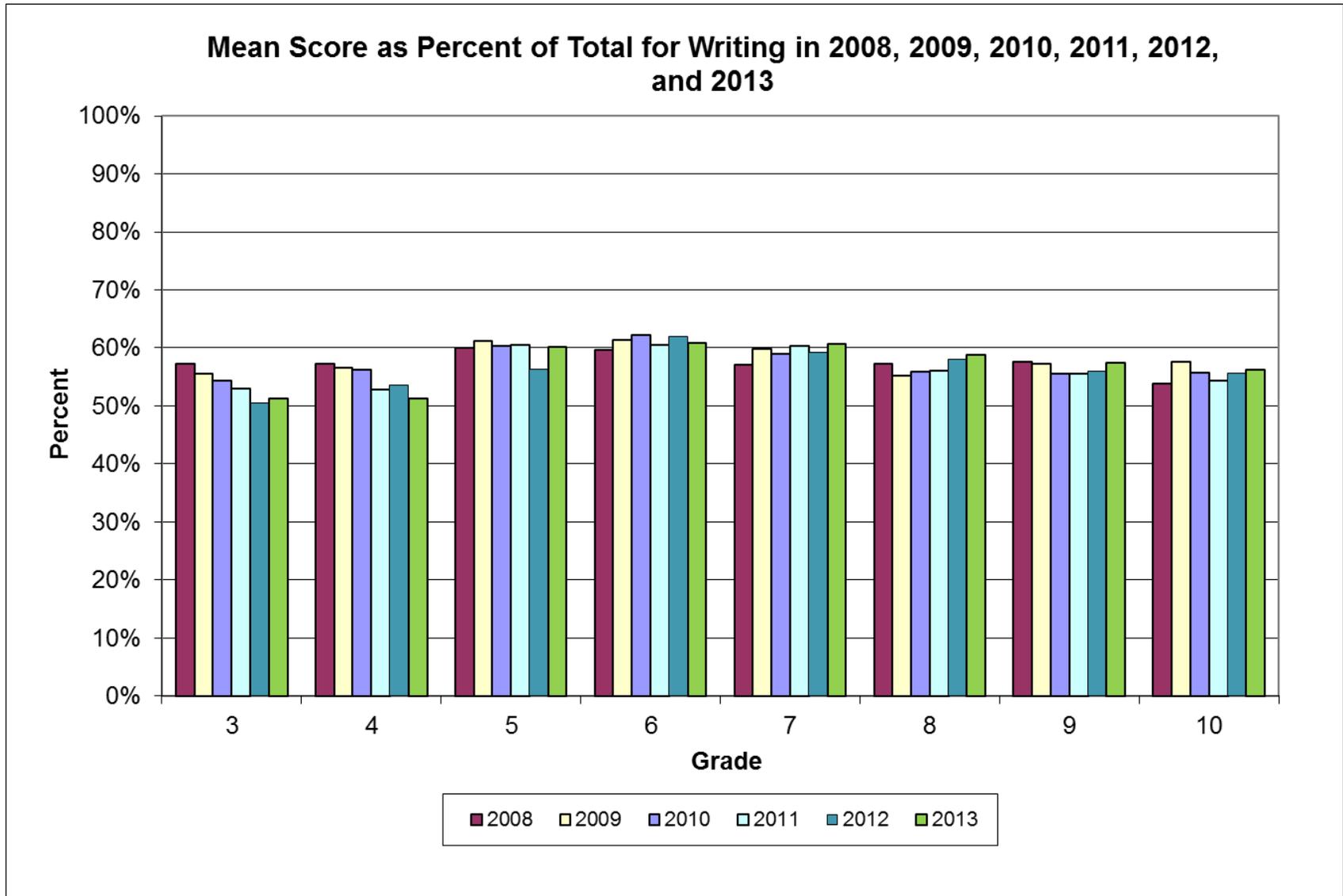


Figure 26

Mean Score as Percent of Total for Mathematics 2007, 2008, 2009, 2010, 2011, 2012, and 2013

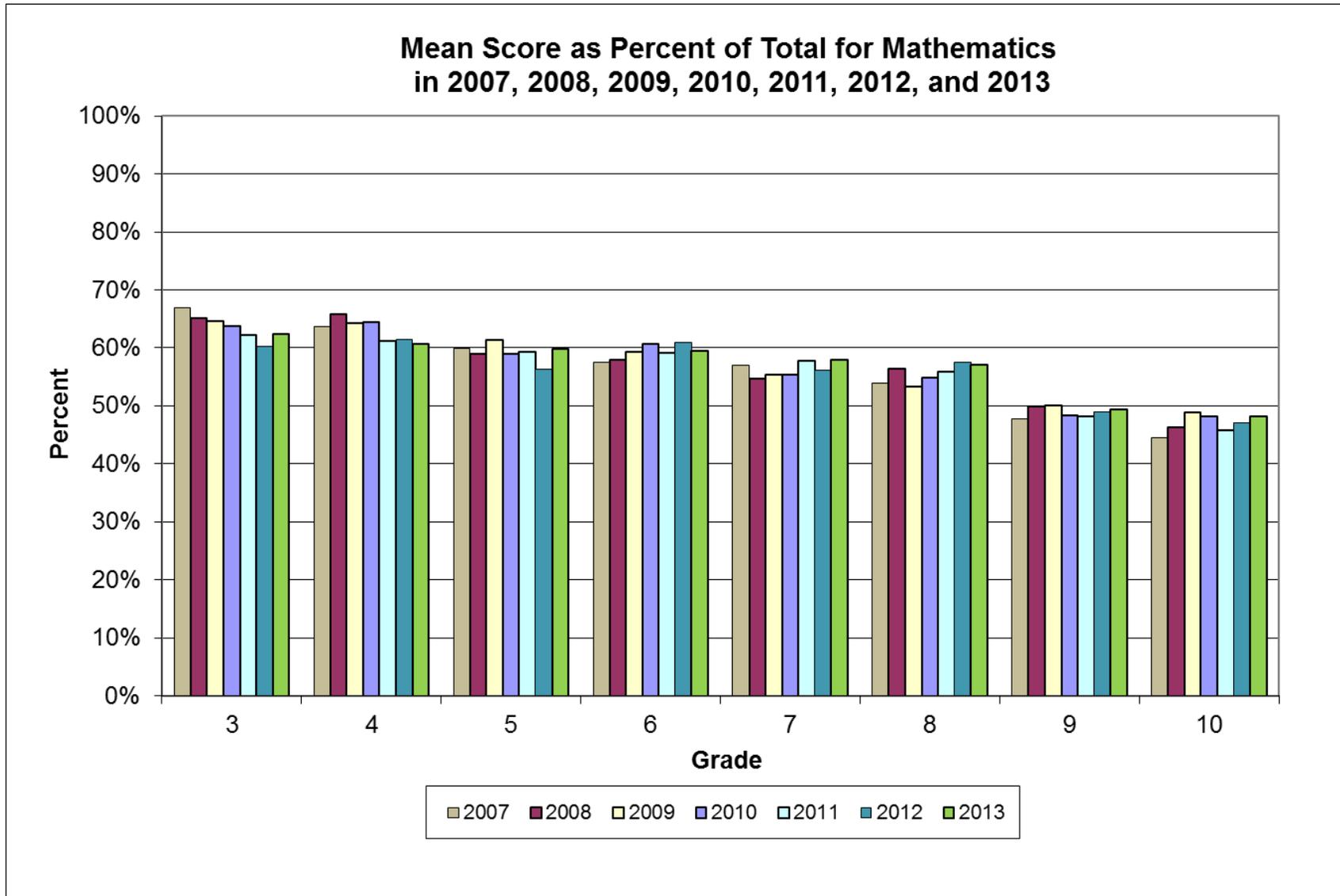


Figure 27

Mean Score as Percent of Total for Science 2008, 2009, 2010, 2011, 2012, and 2013

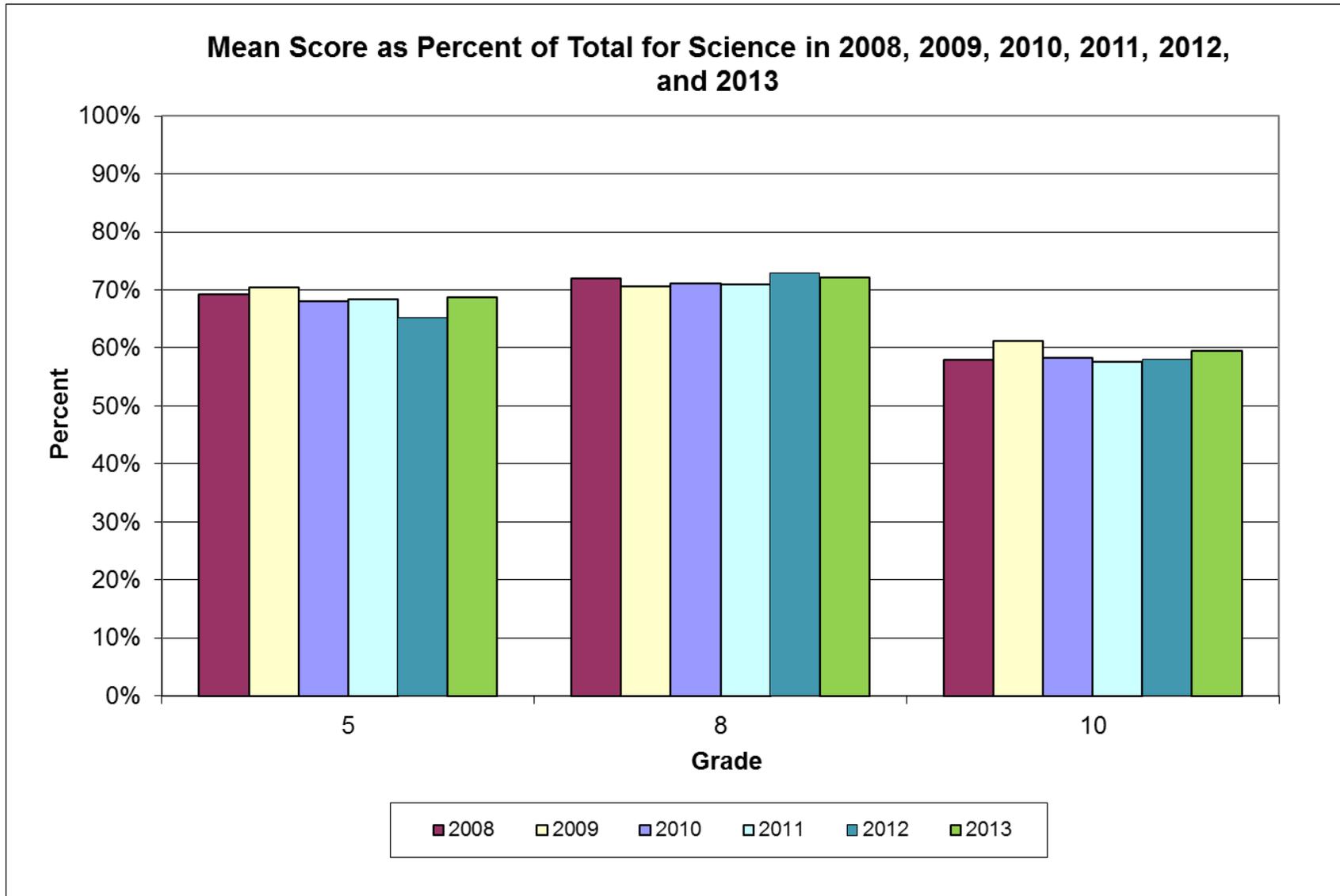


Figure 28
Percent of Participating Students by Coded Disability Longitudinally for Reading

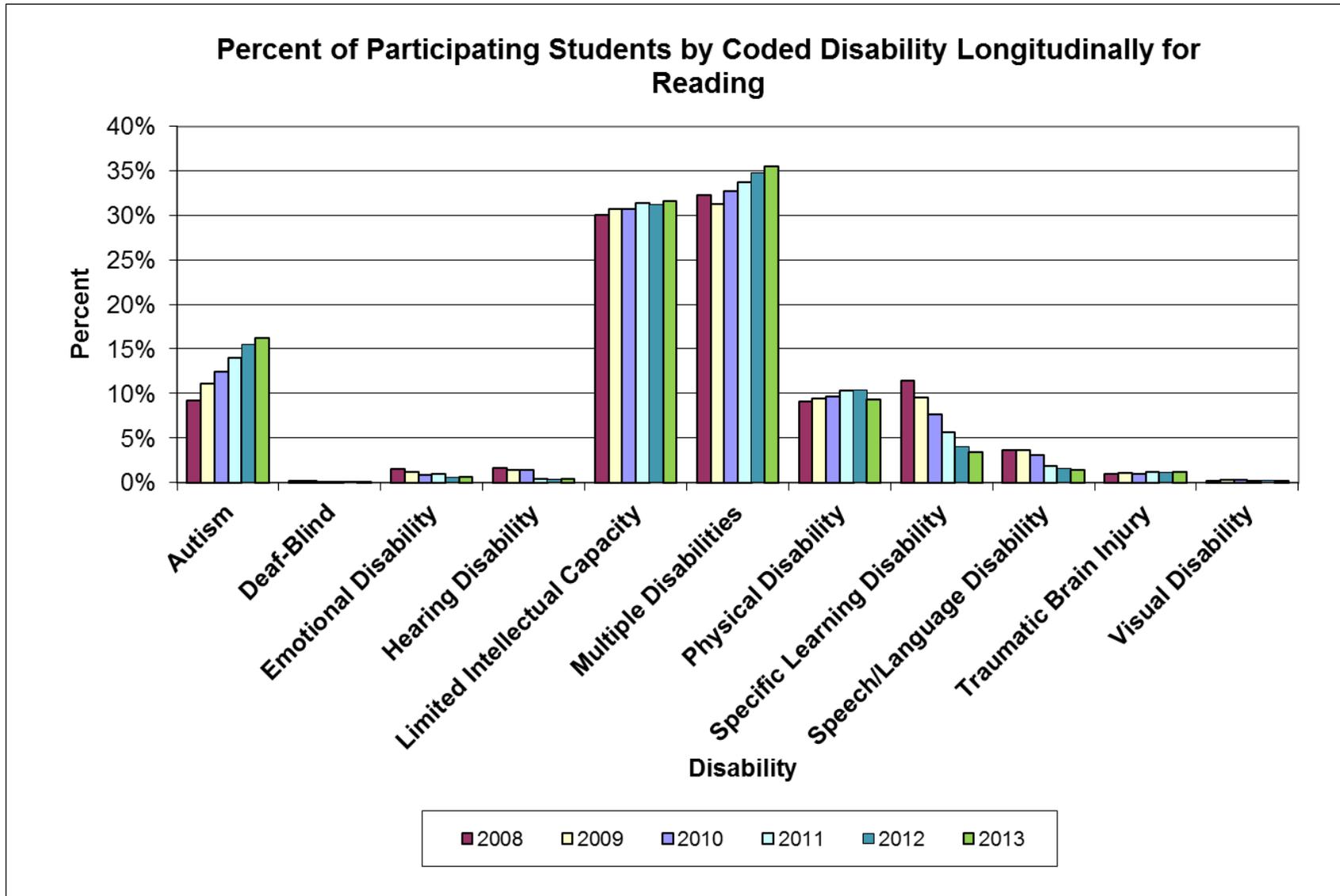


Figure 29
Percent of Participating Students by Coded Disability Longitudinally for Writing

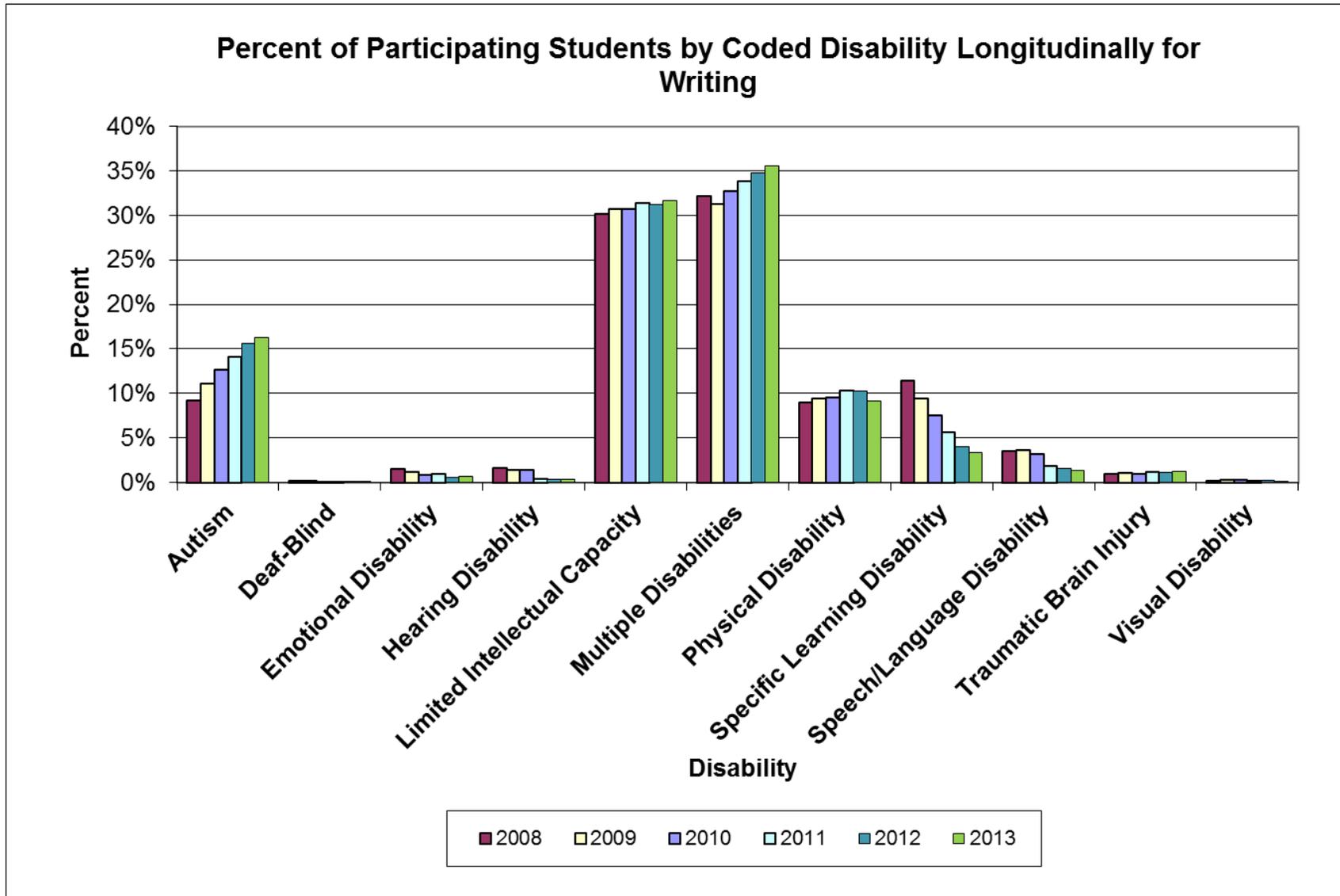


Figure 30
Percent of Participating Students by Coded Disability Longitudinally for Mathematics

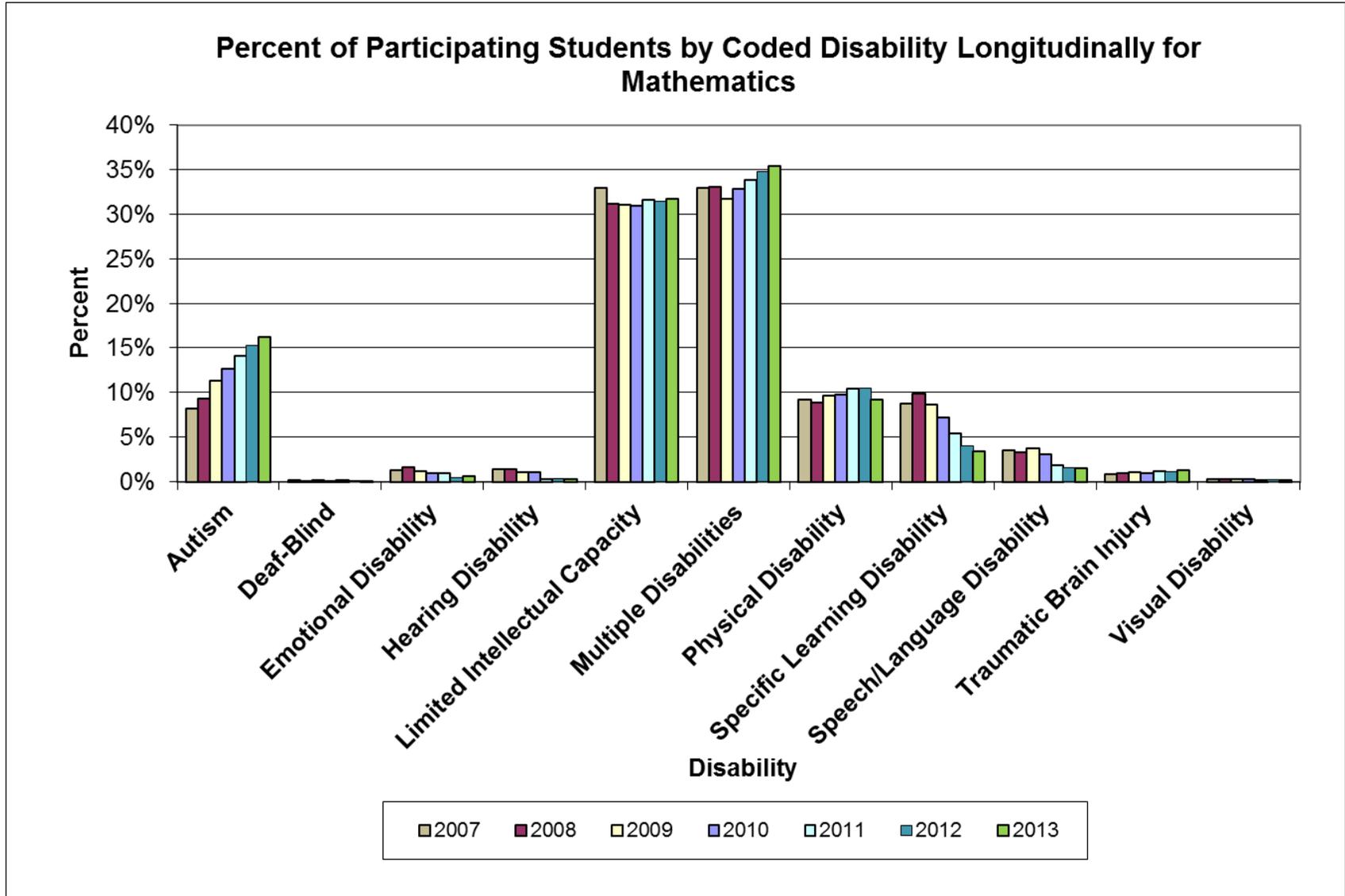
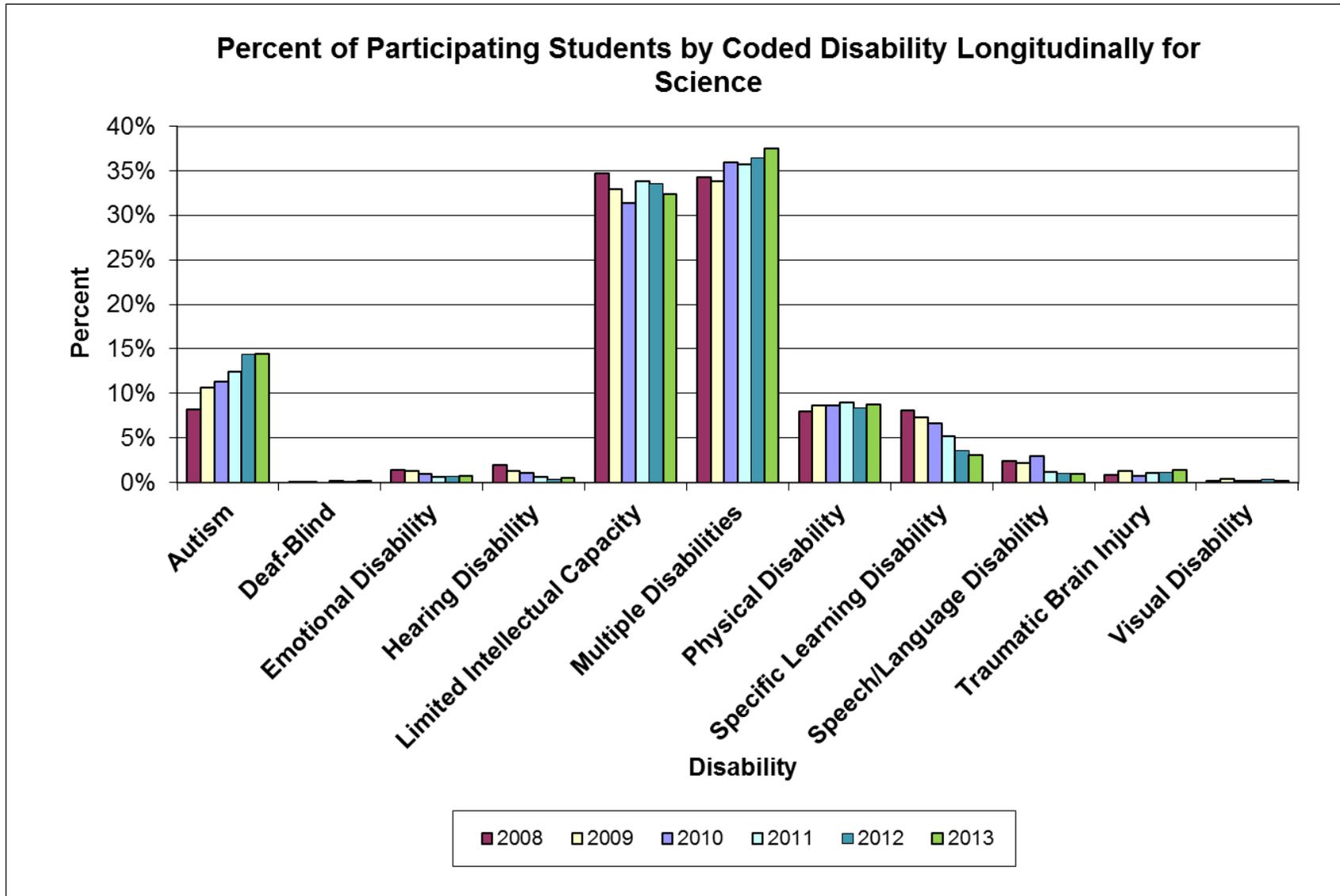


Figure 31
Percent of Participating Students by Coded Disability Longitudinally for Science



Appendix A: Location of Information for Peer Review Critical Elements

Peer Review Chapter 1

1. Overview, Part 1: Standards, and Part 8: Summary of Results—Reliability and Validity
2. Overview, Part 1: Standards, and Part 8: Summary of Results—Reliability and Validity
3. Part 1: Standards and Part 7: Analyses and Results
4. Overview, Part 1: Standards, and Part 8: Summary of Results—Reliability and Validity

Peer Review Chapter 2

1. Overview, Part 1: Standards, Part 2: Test Development, Part 6: Standard Setting, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
2. Overview, Part 1: Standards, Part 2: Test Development, Part 6: Standard Setting, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
3. Overview, Part 1: Standards, Part 6: Standard Setting, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, Part 9: Special Studies, and Part 10: Longitudinal Analyses
4. None
5. Part 1: Standards and Part 2: Test Development
6. Part 1: Standards, Part 2: Test Development, and Part 6: Standard Setting

Peer Review Chapter 3

1. None
2. None
3. None
4. Part 1: Standards, Part 2: Test Development, Part 3: Description of the Population, Part 4: Test Administration, Part 6: Standard Setting, and Part 8: Summary of Results—Reliability and Validity
5. None
6. Part 2: Test Development, Part 7: Analyses and Results, and Part 9: Special Studies
7. Overview, Part 1: Standards, Part 2: Test Development, Part 3: Description of the Population, Part 4: Test Administration, and Part 10: Longitudinal Analyses

Peer Review Chapter 5

1. Part 1: Standards, Part 2: Test Development, Part 6: Standard Setting, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, and Part 10: Longitudinal Analyses
2. Part 1: Standards, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
3. Part 1: Standards, Part 2: Test Development, and Part 8: Summary of Results—Reliability and Validity
4. Part 2: Test Development and Part 8: Summary of Results—Reliability and Validity

5. Part 2: Test Development, Part 8: Summary of Results—Reliability and Validity, and Part 9: Special Studies
6. Part 7: Analyses and Results and Part 8: Summary of Results—Reliability and Validity
7. Part 2: Test Development

Peer Review Chapter 6

1. Part 3: Description of the Population, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, and Part 10: Longitudinal Analyses
2. Overview, Part 3: Description of the Population, Part 4: Test Administration, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, and Part 10: Longitudinal Analyses
3. Part 3: Description of the Population, Part 4: Test Administration, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
4. Part 3: Description of the Population, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity