

2012 Colorado Alternate Assessment (CoAlt)

**Operational
Technical Report**

Submitted

October 30, 2012



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

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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 2011–12 Colorado Alternate Assessment (CoAlt) Operational Technical Report documents the processes and procedures implemented in support of the 2011–12 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 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 2012 (CDE, 2012b), 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 which 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 2011–12 CoAlt occurred from February 2, 2012, through March 23, 2012. 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 2011–12 administration, as few as 480 (grade 9 Writing) and as many as 659 (grade 3 Writing) students participated in the CoAlt administration, compared to the 2010–11 administration where between 490 (grade 10 Writing and Science) and 665 (grade 5 Reading) students participated.

Within the context of the 2011–12 administration, teachers/test examiners were asked to voluntarily and confidentially respond to an online survey regarding the response modes for students assessed with the CoAlt. The results of this survey indicate that the majority of students utilize verbal responses; between 53% (grade 3) and 75% (grade 7) of students utilize verbal responses in relation to assessment, and between 65% (grade 3) and 83% (grades 7 and 8) of students utilize verbal responses in relation to daily classroom interactions.

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 2011–12 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, with, in general, a slight decrease for each content area across all grades since the 2009–10 administration. Across all grade levels the average change in *Developing* and *Novice* combined was –0.24% for Reading, –0.43% for Writing, –0.08% for Mathematics, and –1.10% for Science. The greatest increase was in Mathematics grade 7 with a 5.19% increase across the two administrations. The greatest decrease was in Mathematics grade 3 with a –5.96% 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 2011–12 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, 2011b).

The 2011–12 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 2010–11 CoAlt. The testing window opened February 2, 2012, for all grade levels and closed March 23, 2012.

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:

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 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.

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 2011–12 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/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

¹ Across all grade levels and content areas, no items were suppressed from scoring for the 2011–12 CoAlt administration.

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.

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.

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.

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 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/cdesped/download/pdf/EligibilityCriteriaWorksheet_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 480 (grade 9 Writing) and as many as 659 (grade 3 Writing) students participated in the 2011–12 CoAlt administration. As can be seen in Figure 1, the total number of participating students is highest for Reading, Writing, and Mathematics in grade 3 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% (grade 10 Writing) to 64% (grade 3 Writing). Additionally the majority of students are of White ethnicity, with the percentage of White students ranging from 50% (grade 3 Mathematics) to 55% (grade 8 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 81% (grade 4 Reading) to a high of 87% (grade 8 Writing). Nearly all students (99% across all content areas and grade levels), indicate ELL status for Bilingual students as “No.” The majority of students, ranging from 82% (grade 4 Reading) to 88% (grade 8 Reading), 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 43% (grade 7 Writing) to 48% (grade 6 Mathematics). A small percentage of students are eligible for a Reduced Price Lunch, ranging from 7% (grade 10 Reading) to 11% (grade 7 Reading). The percentage of students not eligible for either program ranges from a low of 42% (grade 3 Writing) to a high of 48% (grade 10 Science).

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. Most of the students fall into the “Multiple Disabilities” and “Limited Intellectual Capacity” categories, followed by “Autism,” “Physical Disabilities,” and “Specific Learning 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% (grade 4 Mathematics) and 90% (grade 8 Reading) of students provided no expanded accommodations. For those students requiring additional expanded accommodations, the typical expanded accommodation varies by content area. Across all grades and content areas, the most common expanded

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.

accommodation used for a grade level was always less than 6%. In Writing, most students using an expanded accommodation used Assistive Technology. In the other content areas there was more variation in the expanded accommodations used.

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.asp>. 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.

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, 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.

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 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/assessment/documents/coalt/CoAltLOIProtocol.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, results 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 (as 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 91.95% (grade 9 Writing) and 95.67% (grade 5 Reading) 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. Typically, across content areas, the most common reason for invalidation was "Parental Refusal." The percentage of students with this

invalidation code range from a low of 0.60% (grade 4 Reading) to a high of 2.49% (grade 7 Reading, Writing, and Mathematics).

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. 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

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.

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 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, delineated by Schmeiser and Welch in Brennan (2006, p. 338): 1) if the p -value was less than 0.30, 2) if the point biserial value was less than 0.20, 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 greater than that for the key, and if the p -value for the item was greater than 0.90. 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).

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

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. 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 0.44 (grade 10 Mathematics) to 0.72 (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 0.38 (grade 10 Mathematics) to 0.69 (grade 8 Science), with a mean of 0.52. 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 (Tables 33 and 37), the p -values of Reading items range from 0.23 (grade 6) to 0.89 (grade 6). There are a total of 16 Reading items with p -values below 0.30, including three items with a p -value below 0.25. The grade 6 item with a 0.23 p -value measures students' ability to identify author's purpose for writing. The grade 3 item with a 0.24 p -value measures students' ability to distinguish between fact and opinion. The grade 5 item with a 0.24 p -value measures students' ability to understand that words are made up of letter patterns represented by different sounds. The mean p -value by grade-level ranges from a low of 0.50 (grade 10) to a high of 0.62 (grade 6). The mean p -value across all Reading items is 0.55.

The p -values of Writing items range from 0.19⁹ (grade 4) to 0.86 (grade 8). There are a total of 18 Writing items with p -values below 0.30, including six items with p -values below 0.25. The grade 4 item with a 0.19 p -value measures students' ability to identify parts of speech. The grade 5 item with a 0.22 p -value measures students' ability to proofread to correct errors in grammar, punctuation, and spelling. The grade 5 item with a 0.23 p -value measures students' ability to identify parts of speech. The grade 7 item with a 0.23 p -value measures students' ability to use upper and lower case letters in creating a product. The grade 10 item with a 0.19 p -value measures students' ability to use upper and lower case letters in creating a product. The grade 10 item with a 0.22 p -value measures students' ability to employ standard English usage. The mean p -value, by grade level, ranges from a low of 0.49 (grade 4) to a high of 0.60 (grade 6). The mean p -value across all Writing items is 0.54.

⁹ There are two values of 0.19; however, the grade 4 value of 0.185 is lower.

The p -values of Mathematics items range from 0.07 (grade 10) to 0.86¹⁰ (grade 6). There are a total of 22 Mathematics items with p -values below 0.30, including 10 items with p -values below 0.25. The grade 4 item with a 0.10 p -value measures students' ability to use data to solve a problem. The grade 7 item with a 0.14 p -value measures students' ability to calculate perimeter. There are two items at grade 9 with p -values of 0.21: the first item measures students' ability to interpret data on a graph or table and the second item demonstrates a students' understanding of addition by finding a correct answer. There are six items at grade 10 with p -values below 0.25: the item with a 0.07 p -value measures students' ability to calculate perimeter; the item with a 0.16 p -value measures students' ability to convert dimensions from inches to feet; the item with a 0.17 p -value measures students' ability to add simple fractions; the item with a 0.19 p -value measures students' ability to extend a growing numeric pattern by supplying the next element; the item with a 0.22 p -value measures students' ability to determine if two lines are congruent; and the item with a 0.23 p -value measures students' ability to understand characteristics of a graph. The mean p -value by grade-level ranges from a low of 0.44 (grade 10) to a high of 0.61 (grade 4). The mean p -value across all Mathematics items is 0.54.

The p -values of Science items range from 0.24 (grade 10) to 0.87¹¹ (grade 8). There are a total of three Science items with p -values below 0.30, one of which is below 0.25. The grade 10 item with a 0.24 p -value measures students' ability to make observations associated with energy. The mean p -value by grade level is 0.58 (grade 10), 0.64 (grade 5), and 0.72 (grade 8), with a mean p -value across all Science items of 0.65.

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 0.21¹² (grade 6) to 0.88 (grade 6). There are a total of 20 items with p -values below 0.30, including 10 items with p -values below 0.25. The mean p -value across all Reading items is 0.52. The p -values of Writing items range from 0.17¹³ (grade 10) to 0.84 (grade 8). There are a total of 28 items with p -values below 0.30, including 11 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 0.05 (grade 10) to 0.85 (grade 6). There are a total of 42 items with p -values below 0.30, including 17 items with p -values below 0.25. The mean p -value across all Mathematics items is 0.48. The p -values for Science items range from 0.22 (grade 10) to 0.86¹⁴ (grade 8). There are a total of four items with p -values below 0.30, one of which has a p -value below 0.25. The mean p -value across all Science items is 0.62.

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 Science it is 0.03, for Writing it is 0.04, and for Mathematics it is 0.06. 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.

¹⁰ There are three values of 0.86; however, the grade 6 value of 0.861 is higher.

¹¹ There are two values of 0.87 in grade 8; however, the item number 27 value of 0.870 is higher.

¹² There are two values of 0.21; however, the grade 6 value of 0.214 is lower.

¹³ There are two values of 0.17; however, the grade 10 value of 0.167 is lower.

¹⁴ There are two values of 0.87 in grade 8; however, the item number 1 value of 0.863 is higher.

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, 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 480 (grade 9 Writing). 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 0.0457. Thus the critical value for the correlation would be 0.0914. There is one item in the CoAlt assessment with a point biserial value less than 0.0914. This item appears in Mathematics at grade 10 and has a point biserial value of 0.07; this item also has a *p*-value of 0.19 and historically has had low statistical values. The item measures students' ability to find and supply a missing element in a repeating pattern. 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 0.16 (grade 6) to 0.74 (grade 3) with a mean across all items of 0.55; Writing 0.14¹⁵ (grade 10) to 0.88 (grade 7) with a mean across all items of 0.57; Mathematics 0.07 (grade 10) to 0.83 (grade 4) with a mean across all items of 0.59; and Science 0.24 (grade 8) to 0.76¹⁶ (grade 10) with a mean across all items of 0.61.

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: two in Writing (grades 8 and 10), and

¹⁵ There are two values of 0.14; however, the grade 10 value of 0.139 is lower.

¹⁶ There are two values of 0.76; however, the grade 10 value of 0.757 is higher.

two in Mathematics (both in grade 10). The grade 8 Writing item has a point biserial value of 0.14 and a p -value of 0.29 and the item measures students' ability to identify parts of speech. The grade 10 Writing item has a point biserial value of 0.14 and a p -value of 0.19, and the item measures students' ability to use upper and lower case letters in creating product. One grade 10 Mathematics item has a point biserial value of 0.07 and a p -value of 0.19, and the item measures students' ability to extend a growing numeric pattern by supplying the next element. The other grade 10 Mathematics item has a point biserial value of 0.13 and a p -value of 0.16, and the item measures students' ability to convert dimensions from inches to feet. 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 0.20 (grade 5) to 0.75 (grade 5) with a mean of 0.55; Writing 0.15 (grade 7) to 0.87 (grade 7) with a mean of 0.57; Mathematics 0.10 (grade 10) to 0.81 (grade 4) with a mean of 0.58; and Science 0.23 (grade 8) to 0.79 (grade 5) with a mean of 0.61.

When not including level of independence, there was only one item across all grade levels and content areas with a point biserial value lower than the critical cut-off of 0.15. The item is in grade 10 Mathematics, and has a point biserial value of 0.10 and a p -value of 0.17. Again, this item has 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 -0.001 , for Mathematics the mean difference is 0.005 , and for Science the mean difference is -0.004 .

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 and 7, while “demonstrate understanding of beginning principles of phonics” is the least difficult for grades 6 and 8–10. The most difficult critical concept for

grades 3, 4, and 8 is “identify elements of literature,” while for grades 5–7 and 10 it is “demonstrate knowledge that various texts have different purposes.” The most difficult critical concepts for grade 9 are “make connections to reading passages” and “demonstrate knowledge that various texts have different purposes”, respectively. The range of mean p -values is 0.36 (grade 7 Expanded Benchmark 3.1) to 0.76 (grade 6 Expanded Benchmark 1.3).

For Writing, the least difficult critical concept for all grades, except grade 4 is “demonstrate an understanding that writing communicates a message.” For grade 4 the least difficult critical concept is “use systematic conventions to make a written product understandable by others.” The most difficult critical concept in Writing also varies by grade level. For grades 3–8 the most difficult critical concept is “apply elements of writing through appropriate word usage.” For grade 9 it is “edit a written product using legible handwriting/word processor for publication.” For grade 10 it is “use systematic conventions to make written product understandable by others.” The range of mean p -values is 0.36 (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 grade 4 it is “displays and analyzes data,” for grades 5, 7, 8, and 10 it is “identifies, describes, and creates patterns to solve problems,” and for grade 9 it is “uses calculation strategies to compute problems.” The range of mean p -values is 0.31 (grade 10 Expanded Benchmark 2) to 0.70¹⁷ (grade 4 Expanded Benchmark 1).

In Science, the least difficult critical concept for grades 8 and 10 is “analyzes data and communicates results of scientific investigations,” and for grade 5 the least difficult critical concept is “interacts with the weather and Earth systems.” The most difficult critical concept in Science also varies by grade. For grades 8 and 10 it is “demonstrates an understanding of the fundamental properties of matter and energy,” and for grade 5 it is “analyzes data and communicates results of scientific investigations.” 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 0.38 (grade 10 Expanded Benchmark 3) to 0.78 (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 0.66¹⁸ (grade 3 Expanded Benchmark 1.2). In Writing, the average values range from 0.42 (grade 9 Expanded Benchmark 2.3) to 0.74 (grade 9 Expanded Benchmark 1.1). In Mathematics, the average values range from 0.30 (grade 10 Expanded Benchmark 2) to 0.71 (grade 8 Expanded Benchmark 3). Finally, in Science, the average values range from 0.40 (grade 10 Expanded Benchmark 3) to 0.69 (grade 8 Expanded Benchmark 1).

¹⁷ There are two values of 0.70; however the grade 4 Expanded Benchmark 1 value of 0.704 is higher.

¹⁸ There are two values of 0.66, however the grade 3 Expanded Benchmark 1.2 value of 0.660 is higher.

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 Reading in grade 6 where on average, Males have a higher score than Females by 5.28%. 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 grades 3, 4 and 10, while Black/African American students somewhat outperform other races/ethnicities at grades 5–8, and Hispanic/Latino students somewhat outperform other races/ethnicities at grade 9. In Writing, illustrated in Figure 12, White students somewhat outperform other races/ethnicities at grade 3 and 4, while students identified with Two or More Races somewhat outperform other races/ethnicities at grade 6. In Mathematics, illustrated in Figure 13, White students slightly outperform other races/ethnicities at grade 4, Black/African American students have the highest performance at grades 3 5, 7, and 8, Hispanic students slightly outperform other races/ethnicities at grades 9 and 10, and students identified with Two or More Races somewhat outperform other races/ethnicities at grade 6.. In Science, illustrated in Figure 14, Black/African American students slightly outperform other race/ethnicities in grade 5, White students slightly outperform other race/ethnicities in grade 8, and Hispanic/Latino students slightly outperform other race/ethnicities in grade 10.

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 2012 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 6 and Science grade 8 (higher than 50%). Pass rates range from 24% to 42% in Reading, 26% to 45% in Writing, 22% to 53% in Mathematics, and 33% to 55% 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 (two items in Writing, one in grade 8 and one in grade 10; and two items in Mathematics, both in grade 10).

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 2011–12 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 0.91 (grade 10) to 0.94 (grade 5); Writing 0.92 (grade 10) to 0.94 (grade 7); Mathematics 0.92 (grade 10) to 0.95¹⁹ (grade 5); and Science 0.92 (grade 10) to 0.94²⁰ (grade 8). 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 0.91.

¹⁹ There are five values of 0.95; however, the grade 5 value of 0.953 is highest.

²⁰ There are two values of 0.94; however, the grade 8 value of 0.944 is highest.

The lowest total score reliability by race/ethnicity is for the Hispanic/Latino subgroup in grade 10 Reading with a value of 0.89. Tables 10–13 illustrate that the lowest total score reliability by Language Proficiency status is 0.83 for Reading grade 10 “NEP,” the lowest total score reliability by ELL program—Bilingual status is 0.91 for Reading grade 10 “No,” and the lowest total score reliability by ELL program—English as a Second Language status is 0.84 for Reading grade 7 “Yes.” As seen in Tables 14–17, the range for total score reliability by Free/Reduced Price Lunch status is 0.89 for Reading grade 10 “Reduced Lunch Eligible” to 0.96²¹ for Mathematics grade 4 “Reduced Lunch Eligible.”

Tables 18–21 illustrate that the lowest total score reliability by Primary Disability is 0.37 for Science grade 8 “Specific Learning Disability” with a sample size of 17. This group of students had a mean score of 94.41 out of 99 possible points and the standard deviation for the group is just 2.96. Given the extremely homogenous sample, the reliability statistic was rendered ineffectual. For those subgroups with sufficient sample sizes for reporting (greater than 15), fewer than 8% had reliabilities less than 0.80, with sample sizes ranging from 17 to a maximum of 34, thus those reliability estimates should be interpreted with caution due to the small sample sizes. Less than 3% of subgroups had reliability values of less than 0.70. The highest total score reliability by Primary Disability was 0.96²² for Mathematics grade 4 “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 0.73 for Writing grade 4 “Eye Gaze” with a sample size of 17. The highest total score reliability value is 0.96²³ for Science grade 5 “Eye Gaze.”

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 6.59 (grade 6, 105 total possible points) to 7.31 (grade 10, 102 total possible points); for Writing from 7.27 (grade 6, 105 total possible points) to 7.82 (grade 10, 108 total possible points); for Mathematics from 8.01 (grade 3, 126 total possible points) to 9.98 (grade 5, 171 total possible points); and for Science from 5.99 (grade 8, 99 total possible points) to 7.43 (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 9.98 (grade 5 Mathematics) reflects approximately three MC items or two CR items, or some combination thereof.

²¹ There are three values of 0.96; however, the grade 4 Mathematics value of 0.962 is highest.

²² There are five values of 0.96; however, the grade 4 Science value of 0.958 is highest.

²³ There are three values of 0.96; however, the grade 5 Mathematics value of 0.9559 for Eye Gaze is higher.

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 0.68²⁴ (grade 6). For Writing the average PC is 0.62 across all grades and ranges from 0.57 (grade 8) to 0.69 (grade 3). For Mathematics the average PC is 0.66 across all grades and ranges from 0.63 (grade 7) to 0.70 (grade 5). For Science the average PC is 0.60 across all grades and ranges from 0.59 (grade 5) to 0.61 (grade 10). Probability of misclassification (PM) is 1 minus PC.

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 0.23 across all grades and ranges from 0.22²⁵ (grade 10) to 0.26 (grade 6). For Writing the average Chance is 0.23 across all grades and ranges from 0.21²⁶ (grade 8) to 0.26 (grade 3). For Mathematics the average Chance is 0.23 across all grades and ranges from 0.21 (grade 7) to 0.27 (grade 4). For Science the average Chance is 0.22 across all grades and ranges from 0.21²⁷ (grade 5) to 0.23 (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 3). For Writing the average kappa is 0.50 across all grades and ranges from 0.45 (grade 8) to 0.58 (grade 3). For Mathematics the average kappa is 0.56 across all grades and ranges from 0.53²⁸ (grade 7) to 0.58 (grade 6). For Science, the average kappa is 0.49 across all grades and ranges from 0.48 (grade 8) to 0.5 (grade 10). Landis and Koch (1977, p. 165) suggest the following as guidelines for interpretations of kappa:

²⁴ There are two values of 0.67; however, the grade 6 value of 0.6827 is higher.

²⁵ There are two values of 0.22; however, the grade 10 value of 0.218 is lower.

²⁶ There are two values of 0.21; however, the grade 8 value of 0.209 is lower.

²⁷ There are two values of 0.21; however, the grade 5 value of 0.205 is lower.

²⁸ There are two values of 0.53; however, the grade 7 value of 0.534 is lower.

<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 0.76 (grade 6). For Writing the average PA is 0.72 across all grades and ranges from 0.64 (grade 8) to 0.78 (grade 3). For Mathematics the average PA is 0.76 across all grades and ranges from 0.73 (grade 7) to 0.79 (grade 4). For Science the average PA is 0.69 across all grades and ranges from 0.65 (grade 5) to 0.71 (grade 8). 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, 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, 79% of items were responded to independently (Level 4 according to the Level of Independence Protocol). In Writing this value is 86%, in Mathematics it is 87%, and in Science it is 85%.

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 the board. 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 0.34%, maximum 0.91%) are on average higher than error due to no response provided to the item with level of independence coded as 2–4 (average 0.13%, maximum 0.29%). These types of errors have been reduced from the 2010–11 CoAlt administration; an indication that continued administrator training has been effective.

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 23 students (grades 3 and 5) earned the minimum possible score. In Writing, there are 6 grade levels with no students achieving the maximum possible score, and there were 4 grade levels (grades 3, 5, 8, and 9) in which 20 or more students earned the minimum possible score. In Mathematics, there are 6 grade levels in which no students earned the maximum possible score and the minimum score was earned by 25 students in grade 5. Science is different in that there were no grades in which zero students scored the maximum possible score. In grade 5 there are 6 students earning the maximum possible score, for grade 8 there are 29 students earning the maximum possible score, and at grade 10 there are 2 students achieving the maximum possible score. In both grades 8 and 10 there are 16 students earning the minimum possible score and in grade 5 there are 23 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

A matched data set of examiner-provided ratings via a Contrasting Groups Survey to each student’s earned performance level was created to evaluate the relationship between examiner judgments regarding the proficiency of their students, as defined by the state-generated PLDs and collected through the survey, and the earned proficiency level as a result of the final student score. The purpose of these analyses is to provide not only reliability evidence between final scores and examiner judgment, but additionally to continue the collection of criteria-related validity evidence to demonstrate how well the CoAlt represents, in examiners’ views, the performance of their students. It should be noted that these data are based only on valid cases where no missing data are considered, and that examiner participation in the online survey was voluntary.

The survey was conducted via a secure website, such that examiners would register for the survey and provide input regarding their students. The survey captured a host of information including perceived proficiency level, response mode utilized by the student during assessment, response mode utilized by the student during daily classroom interactions, and other demographic information in order to ensure the highest possible degree of record matching.

Agreement rates and rater reliabilities are found in Table 76. Percent of perfect/exact agreement and kappa rates are lower than anticipated, averaging 47% and 0.32, respectively. Differences tend to be within a single rating (adjacent) where examiners estimated their students to be one

level higher or lower than what students actually earned. If the agreement percentage is combined to include ratings that were one level higher or lower than the obtained rating, then average percent for agreement rises to 90%. There were some discrepant ratings defined as being plus or minus two or more levels in contrast. On average, the percentage of discrepant ratings was low at 10%. As test examiners become more familiar with the performance levels and are able to reflect on the performance levels students received based on their CoAlt score, it is hypothesized that with continued teacher training on the PLDs and content standards, these rates of agreement and kappa indices will improve over time.

Table 77 provides survey data from the examiners in relation to the response mode utilized by the students within the context of the CoAlt assessment activities. The survey question stated, "Please indicate the primary method of response a student used during the CoAlt assessment." The examiner had to choose from one of the following options: Communication Device, Eye Gaze, Picture Symbols, Pointing/Gesturing, Sign Language, Verbal Response, Student Does Not Have a Response Mode, and Other. The question was asked of the examiner in an overall fashion, not by content area. Across grade levels there was an average of 109 matchable responses, where student assessment results could be matched with the survey information provided by teachers. Teachers reported that most students used a Verbal Response mode, with an average of 66% of students utilizing this mode of response within the context of the assessment. The next most common response mode was Pointing/Gesturing with an average of 26% of students. The remaining options each had an average of fewer than 3% of the students.

Table 78 describes survey data regarding student response modes within daily classroom interactions. The survey question stated, "Please indicate the student's primary means of communicating their needs and wants within daily school interactions." The examiner had to choose from one of the following options: Body Language, Communication Device, Eye Gaze/Picture Symbols, Pointing/Gesturing, Sign Language, Verbal Response, Utterances (crying, grunting, etc.), Student Does Not Have a Response Mode, and Other. Again the question was asked of the examiner in an overall fashion, not by content area. Teachers reported that most students use Verbal Responses within classroom interactions with an average of 78%, followed by Pointing/Gesturing with an average of 10%. The remaining options each had an average of 4% or less.

Tables 79–82 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 achieved a proficiency rating of *Novice* with an average level of independence less than 3.5, with the exception of Mathematics grade 10²⁹. All students with an average level of independence of 1.0–1.4 achieved a proficiency level of *Inconclusive*, with the exception of Mathematics grade 4³⁰. 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

²⁹ For Mathematics grade 10, 2.44% of students, respectively, with an average level of independence ranging from 3.0 to 3.4 achieved an *Novice* rating.

³⁰ For Mathematics grade 4, 95.24% of students, respectively, with an average level of independence ranging from 1.0 to 1.4 achieved an *Inconclusive* rating.

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 five years, 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12, while Mathematics comparisons examine differences for six years, 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12. Throughout this section, differences are calculated as the most recent year compared to the prior year. As such, differences are calculated as 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 2012 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 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). 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 87 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 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 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 a increase of 5.24% for “Multiple Disabilities” in grade 7.

The *p*-values for 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12 are illustrated in Table 91. The mean *p*-values remain quite stable across administrations with the smallest difference from 2007–08 to 2008–09 of –0.004³¹ 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; and for 2010–11 to 2011–12 the smallest difference is at grade 9, 0.003. 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, and for 2010–11 to 2011–12 the largest difference of –0.036, is at grade 5. Equally the range of *p*-values remained stable. 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); 0.87³² in grade 5 (2010–11); and 0.89 in grade 6 (2011–12). 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 0.23³³ in 2010–11.

Table 95 illustrates the point biserial statistics for 2007–08, 2008–09, 2009–10, and 2010–11 and provides results of the differences. The mean point biserials remain quite stable across administrations with grade 8 illustrating a difference of just –0.001³⁴ 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; and 0.001 for grade 8 from 2010–11 to 2011–12. 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; and from 2010–11 to 2011–12 the largest difference was –0.029 for grade 7. Equally, the range of point biserial values remained stable. 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

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

³² There are two values of 0.87; however, the 0.874 grade 5 value is higher.

³³ There are two values of 0.23; however, the 0.228 grade 6 value is lower.

³⁴ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

0.75 in grade 5; and in 2010–11 the highest observed point biserial was 0.73³⁵ in grade 6; and in 2011–12 the highest observed point biserial was 0.74 in grade 3. 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, and in 2010–11 it was 0.14. But in 2011–12 it was 0.16 in grade 3.

Another important trait to examine longitudinally is the impact data and differences over time, presented in Table 99. 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. 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. 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. 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. 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 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. Finally, 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.

Writing

Figure 21 illustrates the number of students participating in the CSAPA/CoAlt Writing assessment in 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12. It is illustrated that between 2008 and

³⁵ There are three values of 0.73; however, the 0.729 grade 6 value is highest.

2012, there has been a variety of increasing and decreasing trends in the number of students across all grades.

Table 84 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). 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 88 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.

The primary disability classifications have also remained quite stable by grade level as detailed in Table 88 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; and finally 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. 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; finally the largest difference from 2010–11 to 2011–12 was a 5.24% increase for students classified with “Multiple Disabilities” in grade 7.

The *p*-values for 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12 are illustrated in Table 92, 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 -0.003^{36} 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; and the smallest difference from 2010–11 to 2011–12 of 0.006 at grade 9. 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; and the largest difference observed between 2010–11 and 2011–12 was -0.040 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; and in 2011–12 the highest observed p -value was 0.86 in grade 8. 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 ; and in 2010–11 the lowest observed p -value was 0.15 in grade 10. However, in 2011–12, the lowest observed p -value is 0.186 , observed in grade 4.³⁷

Table 96 illustrates the point biserial statistics for 2007–08, 2008–09, 2009–10, 2010–11 and 2011–12 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 0.0002^{38} 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 difference between the mean point biserials for 2010–11 to 2011–12 is -0.004 and occurred in grade 4. 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, and from 2010–11 to 2011–12 the largest difference was 0.037 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 0.87^{39} in grade 6; and in 2011–12 the highest observed point biserial was 0.88 in grade 7. 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 0.12^{40} in grade 7; and in 2011–12 the lowest observed point biserial was 0.14^{41} in grade 10.

Another important trait to examine over time is the impact data which is presented in Table 100. 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, and from 2010–11 to 2011–12 the largest decrease in *Inconclusive* students was -4.61% for grade 8. 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, and from 2010–11 to 2011–12 the greatest increase in *Inconclusive* students, of 4.02% , occurred at grade 7. 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 2010–11 the largest decrease in *Exploring* students was -5.08% for grade 8, and from 2010–11 to 2011–12 the largest decrease in *Exploring* students was -2.92% for

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

³⁷ There are two values of 0.186 ; 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.

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, and from 2010–11 to 2011–12 the greatest increase in *Exploring* students was for grade 5 with a 4.81% increase. 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, and from 2010–11 to 2011–12 the greatest decrease in *Emerging* students, of –5.48%, was observed for grade 7. 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, and from 2010–11 to 2011–12 there was a 4.07% increase in *Emerging* students for grade 10. 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, and from 2010–11 to 2011–12 the greatest decrease in *Developing* students of –3.55% was for grade 5 students. 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 and from 2010–11 to 2011–12 there was a 3.06% increase in *Developing* students at grade 10. 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, and from 2010–11 to 2011–12 the greatest decrease in *Novice* students, of –2.42%, occurred at grade 10. 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, and from 2010–11 to 2011–12 the largest increase in *Novice* students, of 2.20%, was for grade 8. 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.

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, and 2011–12. It is shown that between 2008 and 2012 there has been a variety of increasing and decreasing trends in the number of students across all grades.

Table 85 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. 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 89 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 primary disability classifications have also remained quite stable as detailed in Table 89, 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; and 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. 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.” and for 2010–11 to 2011–12 the greatest difference was 5.71% for students in grade 7 classified with “Multiple Disabilities.”

The p -values for 2006–07, 2007–08, 2008–09, 2009–10, and 2010–11 are illustrated in Table 93 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;

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

and the smallest 2009–10 to 2010–11 difference of 0.001 at grade 4. 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, and from 2009–10 to 2010–11 the greatest difference was -0.035 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 and in 2011–12 the highest observed p -value was 0.86 at grade 6. 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); and 0.07 (2011–12).

Table 97 illustrates the point biserial statistics for 2006–07, 2007–08, 2008–09, 2009–10, and 2010–11 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^{43} 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, and from 2010–11 to 2011–12 the smallest difference in point biserials was 0.0001 for grade 3. 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. Equally, the range of point biserial 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; and in 2011–12 the highest observed point biserial was 0.83 in grade 4. The lowest observed point biserial across all 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.

The impact data for 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12, as well as the differences are presented in Table 101. 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, and from 2010–11 to 2011–12 the largest decrease was -2.35% for grade 8. 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, and from 2010–11 to 2011–12 the largest increase was 3.58% for grade 7. 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; and from 2010–11 to 2011–12 the largest decrease was -2.37% for grade 4. 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; and from 2010–11 to 2011–12 the largest increase was 4.07% for grade 3. 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

⁴³ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

to 2010–11 the largest decrease was –2.14% for grade 7; and from 2010–11 to 2011–12 the largest decrease was –5.56% for grade 8. 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; and from 2010–11 to 2011–12 the largest increase in students at the *Emerging* level was for grade 3 with a 2.41% 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; and from 2010–11 to 2011–12 the largest decrease was –6.37% for grade 3. 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%; and from 2010–11 to 2011–12 the largest increase in *Developing* was for grade 8 with 3.53%. 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. 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; and from 2010–11 to 2011–12 the largest increase in *Novice* was 4.12% for grade 6. 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; and from 2010–11 to 2011–12 the largest decrease was –5.96% for grade 3. 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; and 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. 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, and 2011–12. It is illustrated that between 2008 and 2012 there has been a variety of increasing and decreasing trends in the number of students across all grades.

Table 86 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), and the differences for 2010–11 to 2011–12 ranged from –2.96 points (grade 5) to 0.33 points (grade 10). 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 90 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 8⁴⁴, while the smallest difference was observed at grade 5 with a 1.38% increase in Female students.

The primary disability classifications have also remained quite stable as detailed in Table 90 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 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%⁴⁵ 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 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, and from 2010–11 to 2011–12 the largest difference was a 3.67% increase for students with “Autism” in grade 8.

The *p*-values are illustrated in Table 94 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 0.010,⁴⁶ 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. Equally the range of *p*-values remained stable. The highest observed *p*-value each year, until this year, was in grade 5 with values of 0.88 (2007–08); 0.89 (2008–09); 0.87 (2009–10); and 0.88 (2010–11). 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); and 0.24 (2010–11).

Table 98 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 0.001,⁴⁷ 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). Finally, 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. 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; and in 2011–12 the highest point biserial

⁴⁴ Both Males and Females in grade 8 had identical differences of 2.71% between 2010–11 and 2011–12.

⁴⁵ There are two values of 0.02%; however, the 0.021% grade 8 value is lower.

⁴⁶ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

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

was 0.76 in grade 10.⁴⁸ The lowest observed point biserial from 2007–08 through 2009–10 was 0.17 in grade 8, in 2010–11 and 2011–12 the lowest observed point biserial remained at grade 8, but with a value of 0.16 and 0.24, respectively.

The impact data for Science is presented in Table 102. 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%), and 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%). 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%), finally 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%). 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, and finally, 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. 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%) and 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%). 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%). 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%), and 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%). In general, the impact data are relatively stable across administrations.

Conclusion

The 2011-12 CoAlt Operational Technical Report documents the processes and procedures implemented to support the 2011-12 spring CoAlt administration by CTB and the CDE. The Technical Report shows how the applied processes and procedures, as well as the results,

⁴⁸ There are two values of 0.76; however, the 0.7567 grade 10 value is higher.

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 2011-12 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 2012 CoAlt were the same as those used in the spring 2008, spring 2009, spring 2010, and spring 2011 CSAPA 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 480 students (grade 9 Writing) to a maximum of 659 students (grade 3 Writing).
 - Majority Male students, 59% (grade 10 Writing) to 64% (grade 3 Writing)
 - Majority White students, 50% (grade 3 Mathematics) to 55% (grade 8 Mathematics)
 - Majority ELL classification of Not Applicable, 81% (grade 4 Reading) to 87% (grade 8 Writing)
 - Free/Reduced Price Lunch Program eligibility is largely divided between not eligible and Free Lunch eligible.
 - Free lunch eligibility ranges from 43% (grade 7 Writing) to 48% (grade 6 Mathematics)
 - Not eligible ranges from 42% (grade 3 Writing) to 48% (grade 10 Science)
 - 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 2, 2012, through March 23, 2012.
- 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 without revision, within the context of the 2011-12 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 = 0.07 in grade 10 Mathematics
 - p -value maximum = 0.89 in grade 6 Reading
 - Point biserial minimum = 0.07 in grade 10 Mathematics
 - Point biserial maximum = 0.88 in grade 7 Writing
 - Not including level of independence
 - P -value minimum = 0.05 in grade 10 Mathematics
 - P -value maximum = 0.88 in grade 6 Reading
 - Point biserial minimum = 0.10 in grade 10 Mathematics
 - Point biserial maximum = 0.87 in grade 7 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 = 0.78.
 - 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 = 0.31.
- 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 50.62 (grade 10, 102 possible points) to 65.35 (grade 6, 105 possible points)
 - Standard deviations range from 24.03 (grade 7, 105 possible points) to 27.92 (grade 5, 105 possible points)

- Writing total group
 - Means range from 53.11 (grade 3, 105 possible points) to 65.05 (grade 6, 105 possible points)
 - Standard deviations range from 27.45 (grade 10, 108 possible points) to 30.49 (grade 7, 108 possible points)
- Mathematics total group
 - Means range from 70.45 (grade 9, 144 possible points) to 96.31 (grade 5, 171 possible points)
 - Standard deviations range from 35.56 (grade 7, 156 possible points) to 46.92 (grade 5, 171 possible points)
- Science total group
 - Means range from 59.16 (grade 10, 102 possible points) to 72.19 (grade 8, 99 possible points)
 - Standard deviations range from 25.37 (grade 8, 99 possible points) to 26.96 (grade 10, 102 possible points)
- The percentage of students at each performance level was analyzed. The range for each performance level was
 - *Inconclusive*: 7.68% (grade 4 Mathematics) to 19.79% (grade 3 Reading)
 - *Exploring*: 16.01% (grade 6 Mathematics) to 31.07% (grade 10 Reading)
 - *Emerging*: 16.97% (grade 8 Science) to 38.10% (grade 10 Mathematics)
 - *Developing*: 15.37% (grade 10 Science) to 34.92% (grade 5 Mathematics)
 - *Novice*: 2.58% (grade 3 Writing) to 35.77% (grade 8 Science)
 - *Developing and Novice Combined*: 21.86% (grade 10 Mathematics) to 54.56% (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 2011-12 CoAlt was estimated in four ways
 - Point biserial correlation—item specific reliability
 - Including level of independence ranges: 0.07 (grade 10 Mathematics) to 0.88 (grade 7 Writing)
 - Not including level of independence ranges: 0.10 (grade 10 Mathematics) to 0.87 (grade 7 Writing)
 - Internal consistency using Cronbach's alpha—total test reliability ranges
 - Reading: 0.91 (grade 10) to 0.94 (grade 5)
 - Writing: 0.92 (grade 10) to 0.94 (grade 7)
 - Mathematics: 0.92 (grade 10) to 0.95 (grade 5)
 - Science: 0.92 (grade 10) to 0.94 (grade 5)
 - Standard error of measurement (SEM)—total test reliability ranges
 - Reading: 6.59 (grade 6, 105 possible points) to 7.31 (grade 10, 102 possible points)
 - Writing: 7.27 (grade 6, 105 possible points) to 7.82 (grade 10, 108 possible points)
 - Mathematics: 8.01 (grade 3, 126 possible points) to 9.98 (grade 5, 171 possible points)
 - Science: 5.99 (grade 8, 99 possible points) to 7.43 (grade 10, 102 possible points)

- Classification consistency and accuracy—total test reliability
 - Probability of a correct classification ranges from 0.57 (grade 8 Writing) to 0.70 (grade 5 Mathematics).
 - Probability of accuracy ranges from 0.64 (grade 8 Writing) to 0.79 (grade 4 Mathematics).
 - Kappa ranges from 0.45 (grade 8 Writing) to 0.60 (grade 5 Mathematics).
- 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: 4.58% (Mathematics) to 6.20% (Reading)
 - Level 2 ranges: 2.49% (Mathematics) to 5.30% (Reading)
 - Level 3 ranges: 5.70% (Mathematics) to 9.94% (Reading)
 - Level 4 ranges: 78.54% (Reading) to 87.21% (Mathematics)
- 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 very high, 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 9 Mathematics) to 0.91% (grade 3 Reading)
 - Indicating Levels 2–4 for Level of Independence but not providing a response ranges: 0.02% (grade 8 Science) to 0.29% (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 8 Science (29 students obtained the maximum possible score)
 - The most students obtained the floor in grade 5 Writing (29 students obtained the minimum possible score)
- Matched data comparing teacher responses to the online survey regarding teacher's perceived level of student performance and student's actual scored performance level using weighted kappa ranges from 0.73 in grade 6 Mathematics to 0.93 in grade 8 Mathematics.
- Response modes analysis (based on mean reported)
 - Assessment activities
 - Most common (on average): Verbal Response
 - Least common (on average): Sign Language
 - Classroom interactions
 - Most common (on average): Verbal Response
 - Least common (on average): Sign Language

- 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, with the exception of grade 6 Mathematics with 2.13% and grade 10 Mathematics with 2.44% of students with an average Level of Independence from 3.0 to 3.4 scoring at *Novice*.
 - 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, with the single exception of grade 4 Mathematics with 4.76% of students with scores at the performance level *Exploring*.

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, and 2011-12 assessment years.
 - Mathematics examined 2006–07, 2007–08, 2008–09, 2009–10, 2010–11, and 2011-12.
- 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
 - 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 2010-22 to 2011-12:
 - increased at grades 3, 4, 6, 8, and 10
 - decreased at grades 5, 7, and 9

- 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 2010–11 to 2011–12:
 - increased at grades 8 and 10
 - decreased at grade 5
- 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
 - 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%
- 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.
- 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.
- 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.

- 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.
- 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
 - 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

- 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
- 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
 - 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 grade 10 Mathematics to 0.65 grade 4 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
- 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
 - *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
 - *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
- *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
- *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
- *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

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Tables 1–102

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	657	100%	56.59	26.37	2	23	0.93	6.83
		Female	235	35.77%	57.65	26.36	1	7	0.93	6.83
		Male	421	64.08%	55.98	26.42	1	16	0.93	6.83
		American Indian/Alaska Native	7	1.07%	-	-	-	-	-	-
		Asian	24	3.65%	52.67	27.39	0	0	0.94	6.82
		Black/ African American	38	5.78%	57.89	22.94	0	1	0.91	6.92
		Hispanic/ Latino	233	35.46%	53.45	25.89	0	14	0.93	6.94
		White	329	50.08%	58.87	26.71	2	7	0.94	6.78
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
	Two or More Races	24	3.65%	50.63	29.33	0	1	0.95	6.47	
	4	Total	631	100%	57.73	26.26	3	12	0.93	6.86
		Female	227	35.97%	56.80	26.42	0	4	0.93	6.89
		Male	402	63.71%	58.22	26.24	3	8	0.93	6.84
		American Indian/Alaska Native	7	1.11%	-	-	-	-	-	-
		Asian	14	2.22%	-	-	-	-	-	-
		Black/ African American	38	6.02%	55.68	26.96	0	1	0.93	6.89
		Hispanic/ Latino	229	36.29%	54.97	24.74	0	3	0.92	7.06
		White	316	50.08%	60.57	26.99	3	6	0.94	6.69
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
Two or More Races		24	3.80%	55.58	27.54	0	0	0.94	6.85	

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	619	100%	58.70	27.92	2	22	0.94	6.83
		Female	233	37.64%	60.04	27.68	1	11	0.94	6.80
		Male	383	61.87%	57.92	28.12	1	11	0.94	6.84
		American Indian/Alaska Native	8	1.29%	-	-	-	-	-	-
		Asian	11	1.78%	-	-	-	-	-	-
		Black/ African American	41	6.62%	61.41	24.88	1	1	0.92	7.06
		Hispanic/ Latino	201	32.47%	58.25	26.69	0	8	0.93	6.89
		White	333	53.80%	58.60	29.31	1	12	0.95	6.73
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
	Two or More Races	21	3.39%	59.00	29.53	0	1	0.95	6.63	
	6	Total	621	100%	65.35	25.71	4	11	0.93	6.59
		Female	227	36.55%	68.93	24.09	2	4	0.93	6.56
		Male	392	63.12%	63.39	26.25	2	6	0.94	6.61
		American Indian/Alaska Native	6	0.97%	-	-	-	-	-	-
		Asian	11	1.77%	-	-	-	-	-	-
		Black/ African American	40	6.44%	66.70	26.07	0	1	0.94	6.44
		Hispanic/ Latino	230	37.04%	63.51	24.19	1	3	0.92	6.77
		White	311	50.08%	66.10	26.38	2	6	0.94	6.51
		Native Hawaiian/ Other Pacific Islander	2	0.32%	-	-	-	-	-	-
Two or More Races		19	3.06%	81.00	23.20	0	0	0.93	5.92	

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	531	100%	57.51	24.34	1	8	0.92	6.98
		Female	197	37.10%	58.25	26.09	1	2	0.93	6.90
		Male	334	62.90%	57.07	23.28	0	6	0.91	7.02
		American Indian/Alaska Native	7	1.32%	-	-	-	-	-	-
		Asian	8	1.51%	-	-	-	-	-	-
		Black/ African American	42	7.91%	59.48	23.87	0	1	0.91	6.98
		Hispanic/ Latino	173	32.58%	56.69	23.97	1	3	0.91	7.08
		White	287	54.05%	58.16	24.43	0	4	0.92	6.91
		Native Hawaiian/ Other Pacific Islander	2	0.38%	-	-	-	-	-	-
	Two or More Races	12	2.26%	-	-	-	-	-	-	
	8	Total	552	100%	56.62	26.07	0	13	0.92	7.15
		Female	211	38.22%	58.61	24.14	0	3	0.91	7.34
		Male	341	61.78%	55.39	27.15	0	10	0.93	7.03
		American Indian/Alaska Native	5	0.91%	-	-	-	-	-	-
		Asian	12	2.17%	-	-	-	-	-	-
		Black/ African American	42	7.61%	60.07	25.99	0	1	0.93	7.10
		Hispanic/ Latino	180	32.61%	54.17	26.49	0	6	0.93	7.17
		White	301	54.53%	57.41	25.92	0	6	0.92	7.15
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		12	2.17%	-	-	-	-	-	-	

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	488	100%	53.98	26.71	2	16	0.93	6.91
		Female	186	38.11%	51.80	26.65	1	6	0.93	6.94
		Male	301	61.68%	55.39	26.71	1	10	0.93	6.89
		American Indian/Alaska Native	7	1.43%	-	-	-	-	-	-
		Asian	20	4.10%	46.45	25.94	0	0	0.93	6.89
		Black/ African American	33	6.76%	53.24	28.85	0	1	0.94	6.87
		Hispanic/ Latino	167	34.22%	54.80	26.01	1	5	0.93	6.96
		White	250	51.23%	53.91	27.02	1	9	0.94	6.87
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	10	2.05%	-	-	-	-	-	-	
	10	Total	515	100%	50.62	24.03	0	15	0.91	7.31
		Female	212	41.17%	50.45	24.45	0	9	0.91	7.31
		Male	302	58.64%	50.69	23.78	0	6	0.91	7.31
		American Indian/Alaska Native	8	1.55%	-	-	-	-	-	-
		Asian	15	2.91%	-	-	-	-	-	-
		Black/ African American	43	8.35%	50.86	25.60	0	2	0.92	7.36
		Hispanic/ Latino	158	30.68%	49.75	22.30	0	3	0.89	7.45
		White	274	53.20%	51.42	25.31	0	9	0.92	7.18
		Native Hawaiian/ Other Pacific Islander	1	0.19%	-	-	-	-	-	-
Two or More Races		15	2.91%	-	-	-	-	-	-	

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	659	100%	53.11	28.47	0	24	0.93	7.60
		Female	235	35.66%	54.06	29.14	0	9	0.93	7.57
		Male	423	64.19%	52.60	28.15	0	15	0.93	7.63
		American Indian/Alaska Native	7	1.06%	-	-	-	-	-	-
		Asian	24	3.64%	51.58	31.87	0	0	0.94	7.59
		Black/ African American	38	5.77%	53.82	25.69	0	1	0.91	7.82
		Hispanic/ Latino	235	35.66%	49.31	28.41	0	15	0.93	7.68
		White	329	49.92%	56.00	28.23	0	6	0.93	7.54
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
	Two or More Races	24	3.64%	47.25	32.43	0	2	0.95	7.21	
	4	Total	628	100%	57.81	28.88	0	13	0.93	7.70
		Female	227	36.15%	57.04	29.92	0	6	0.93	7.74
		Male	399	63.54%	58.17	28.33	0	7	0.93	7.68
		American Indian/Alaska Native	7	1.11%	-	-	-	-	-	-
		Asian	14	2.23%	-	-	-	-	-	-
		Black/ African American	38	6.05%	53.68	30.15	0	1	0.93	7.79
		Hispanic/ Latino	227	36.15%	55.85	28.30	0	5	0.92	7.83
		White	315	50.16%	60.43	28.55	0	5	0.93	7.61
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
Two or More Races		24	3.82%	53.63	31.10	0	0	0.94	7.67	

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	616	100%	59.09	28.96	0	29	0.93	7.53
		Female	233	37.82%	60.85	29.16	0	13	0.93	7.47
		Male	380	61.69%	57.99	28.87	0	16	0.93	7.56
		American Indian/Alaska Native	8	1.30%	-	-	-	-	-	-
		Asian	11	1.79%	-	-	-	-	-	-
		Black/ African American	41	6.66%	63.71	27.75	0	1	0.93	7.24
		Hispanic/ Latino	199	32.31%	59.85	27.54	0	8	0.92	7.61
		White	332	53.90%	58.14	30.28	0	18	0.94	7.49
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
	Two or More Races	21	3.41%	58.00	27.69	0	2	0.93	7.33	
	6	Total	621	100%	65.05	28.19	0	16	0.93	7.27
		Female	226	36.39%	68.38	26.14	0	4	0.93	7.15
		Male	393	63.29%	63.22	29.02	0	11	0.94	7.34
		American Indian/Alaska Native	6	0.97%	-	-	-	-	-	-
		Asian	10	1.61%	-	-	-	-	-	-
		Black/ African American	40	6.44%	68.30	28.37	0	1	0.94	7.01
		Hispanic/ Latino	227	36.55%	64.72	27.54	0	4	0.93	7.40
		White	315	50.72%	64.20	28.69	0	9	0.94	7.28
Native Hawaiian/ Other Pacific Islander		2	0.32%	-	-	-	-	-	-	
Two or More Races	19	3.06%	82.11	22.21	0	0	0.93	5.68		

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	523	100%	63.88	30.49	1	14	0.94	7.42
		Female	192	36.71%	62.68	32.75	1	6	0.95	7.41
		Male	331	63.29%	64.57	29.12	0	8	0.94	7.40
		American Indian/Alaska Native	6	1.15%	-	-	-	-	-	-
		Asian	7	1.34%	-	-	-	-	-	-
		Black/ African American	41	7.84%	68.78	29.66	0	1	0.94	7.23
		Hispanic/ Latino	171	32.70%	63.58	29.67	0	6	0.94	7.38
		White	284	54.30%	63.43	31.11	1	6	0.94	7.42
		Native Hawaiian/ Other Pacific Islander	2	0.38%	-	-	-	-	-	-
	Two or More Races	12	2.29%	-	-	-	-	-	-	
	8	Total	549	100%	62.67	28.26	0	20	0.93	7.50
		Female	210	38.25%	64.94	26.86	0	5	0.92	7.44
		Male	339	61.75%	61.26	29.04	0	15	0.93	7.53
		American Indian/Alaska Native	5	0.91%	-	-	-	-	-	-
		Asian	12	2.19%	-	-	-	-	-	-
		Black/ African American	41	7.47%	66.29	28.60	0	1	0.94	7.26
		Hispanic/ Latino	179	32.60%	59.52	29.41	0	10	0.93	7.55
		White	300	54.64%	63.60	27.91	0	9	0.93	7.50
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		12	2.19%	-	-	-	-	-	-	

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	480	100%	58.86	29.09	1	25	0.93	7.53
		Female	184	38.33%	56.54	29.55	0	10	0.93	7.64
		Male	296	61.67%	60.29	28.76	1	15	0.93	7.46
		American Indian/Alaska Native	7	1.46%	-	-	-	-	-	-
		Asian	18	3.75%	45.06	31.33	0	2	0.94	7.57
		Black/ African American	32	6.67%	53.94	31.59	0	2	0.94	7.46
		Hispanic/ Latino	165	34.38%	60.19	29.07	0	10	0.93	7.55
		White	249	51.88%	59.55	28.61	1	10	0.93	7.51
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	9	1.88%	-	-	-	-	-	-	
	10	Total	514	100%	60.09	27.45	0	18	0.92	7.82
		Female	212	41.25%	59.23	28.87	0	8	0.93	7.84
		Male	301	58.56%	60.67	26.48	0	10	0.91	7.81
		American Indian/Alaska Native	8	1.56%	-	-	-	-	-	-
		Asian	15	2.92%	-	-	-	-	-	-
		Black/ African American	42	8.17%	56.33	30.17	0	1	0.93	8.05
		Hispanic/ Latino	160	31.13%	60.53	26.76	0	5	0.92	7.78
		White	272	52.92%	60.16	28.11	0	11	0.92	7.77
		Native Hawaiian/ Other Pacific Islander	1	0.19%	-	-	-	-	-	-
Two or More Races		15	2.92%	-	-	-	-	-	-	

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	648	100%	75.91	35.63	0	18	0.95	8.01
		Female	236	36.42%	76.07	36.35	0	7	0.95	8.04
		Male	411	63.43%	75.84	35.30	0	11	0.95	8.00
		American Indian/Alaska Native	7	1.08%	-	-	-	-	-	-
		Asian	24	3.70%	65.71	36.68	0	1	0.96	7.74
		Black/ African American	37	5.71%	79.97	32.29	0	1	0.94	7.80
		Hispanic/ Latino	233	35.96%	74.11	36.70	0	9	0.95	8.03
		White	322	49.69%	77.56	35.20	0	6	0.95	8.06
		Native Hawaiian/ Other Pacific Islander	1	0.15%	-	-	-	-	-	-
	Two or More Races	23	3.55%	69.04	36.66	0	1	0.95	7.87	
	4	Total	625	100%	79.26	36.48	1	16	0.95	8.22
		Female	228	36.48%	77.46	37.10	0	5	0.95	8.27
		Male	395	63.20%	80.24	36.20	1	11	0.95	8.20
		American Indian/Alaska Native	7	1.12%	-	-	-	-	-	-
		Asian	14	2.24%	-	-	-	-	-	-
		Black/ African American	39	6.24%	72.46	38.83	0	2	0.95	8.37
		Hispanic/ Latino	222	35.52%	78.98	35.67	0	7	0.94	8.40
		White	315	50.40%	80.89	36.08	1	5	0.95	8.13
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
Two or More Races		25	4.00%	78.92	39.06	0	0	0.96	7.83	

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	610	100%	96.31	46.92	0	25	0.95	9.98
		Female	231	37.87%	95.71	46.70	0	12	0.95	10.04
		Male	376	61.64%	96.66	47.25	0	13	0.96	9.94
		American Indian/Alaska Native	8	1.31%	-	-	-	-	-	-
		Asian	11	1.80%	-	-	-	-	-	-
		Black/ African American	40	6.56%	106.25	42.51	0	1	0.94	10.03
		Hispanic/ Latino	195	31.97%	97.99	44.90	0	9	0.95	10.01
		White	332	54.43%	94.55	49.19	0	13	0.96	9.88
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
	Two or More Races	20	3.28%	82.25	42.73	0	2	0.94	10.24	
	6	Total	631	100%	84.20	37.89	0	15	0.95	8.58
		Female	230	36.45%	87.07	36.11	0	6	0.94	8.55
		Male	399	63.23%	82.69	38.68	0	8	0.95	8.60
		American Indian/Alaska Native	6	0.95%	-	-	-	-	-	-
		Asian	11	1.74%	-	-	-	-	-	-
		Black/ African American	43	6.81%	84.44	39.19	0	1	0.95	8.43
		Hispanic/ Latino	229	36.29%	85.05	36.51	0	4	0.94	8.64
		White	319	50.55%	82.76	38.66	0	8	0.95	8.60
		Native Hawaiian/ Other Pacific Islander	2	0.32%	-	-	-	-	-	-
Two or More Races		19	3.01%	105.89	31.04	0	1	0.94	7.59	

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	519	100%	74.03	35.56	0	9	0.94	8.71
		Female	192	36.99%	71.28	35.40	0	2	0.94	8.82
		Male	327	63.01%	75.65	35.60	0	7	0.94	8.64
		American Indian/Alaska Native	5	0.96%	-	-	-	-	-	-
		Asian	7	1.35%	-	-	-	-	-	-
		Black/ African American	40	7.71%	81.90	35.68	0	1	0.95	8.26
		Hispanic/ Latino	170	32.76%	72.01	32.96	0	2	0.93	8.88
		White	283	54.53%	74.36	36.70	0	6	0.94	8.65
		Native Hawaiian/ Other Pacific Islander	2	0.39%	-	-	-	-	-	-
	Two or More Races	12	2.31%	-	-	-	-	-	-	
	8	Total	546	100%	84.53	39.31	0	13	0.95	9.16
		Female	210	38.46%	86.34	36.50	0	2	0.93	9.35
		Male	336	61.54%	83.39	40.98	0	11	0.95	9.04
		American Indian/Alaska Native	3	0.55%	-	-	-	-	-	-
		Asian	12	2.20%	-	-	-	-	-	-
		Black/ African American	41	7.51%	86.93	38.12	0	0	0.94	9.09
		Hispanic/ Latino	178	32.60%	81.07	40.87	0	8	0.95	9.19
		White	299	54.76%	85.82	38.59	0	5	0.94	9.17
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		13	2.38%	-	-	-	-	-	-	

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	491	100%	70.45	36.19	1	19	0.93	9.32
		Female	189	38.49%	65.98	35.14	0	8	0.93	9.41
		Male	302	61.51%	73.24	36.62	1	11	0.94	9.27
		American Indian/Alaska Native	7	1.43%	-	-	-	-	-	-
		Asian	20	4.07%	56.40	35.49	0	2	0.93	9.09
		Black/ African American	33	6.72%	69.79	40.58	0	1	0.95	9.14
		Hispanic/ Latino	169	34.42%	71.01	36.38	0	8	0.93	9.32
		White	253	51.53%	70.78	35.59	1	7	0.93	9.38
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
	Two or More Races	9	1.83%	-	-	-	-	-	-	
	10	Total	517	100%	73.35	35.56	0	18	0.92	9.80
		Female	213	41.20%	70.54	36.19	0	10	0.93	9.89
		Male	303	58.61%	75.27	35.09	0	8	0.92	9.73
		American Indian/Alaska Native	8	1.55%	-	-	-	-	-	-
		Asian	15	2.90%	-	-	-	-	-	-
		Black/ African American	42	8.12%	68.43	38.53	0	1	0.94	9.81
		Hispanic/ Latino	161	31.14%	75.83	34.12	0	4	0.92	9.86
		White	274	53.00%	73.25	36.86	0	12	0.93	9.72
		Native Hawaiian/ Other Pacific Islander	1	0.19%	-	-	-	-	-	-
Two or More Races		15	2.90%	-	-	-	-	-	-	

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	612	100%	62.66	25.97	6	23	0.94	6.25
		Female	230	37.58%	62.21	25.46	1	12	0.94	6.30
		Male	379	61.93%	62.94	26.39	5	11	0.94	6.21
		American Indian/Alaska Native	8	1.31%	-	-	-	-	-	-
		Asian	11	1.80%	-	-	-	-	-	-
		Black/ African American	41	6.70%	65.15	25.12	0	1	0.94	6.26
		Hispanic/ Latino	195	31.86%	62.99	24.84	3	7	0.94	6.30
		White	333	54.41%	62.41	27.13	2	14	0.95	6.17
		Native Hawaiian/ Other Pacific Islander	1	0.16%	-	-	-	-	-	-
	Two or More Races	20	3.27%	58.40	26.83	1	1	0.94	6.56	
	8	Total	548	100%	72.19	25.37	29	16	0.94	5.99
		Female	207	37.77%	73.50	23.14	12	3	0.93	6.06
		Male	341	62.23%	71.39	26.63	17	13	0.95	5.94
		American Indian/Alaska Native	5	0.91%	-	-	-	-	-	-
		Asian	12	2.19%	-	-	-	-	-	-
		Black/ African American	41	7.48%	73.49	24.86	3	1	0.94	5.87
		Hispanic/ Latino	179	32.66%	69.18	26.48	5	8	0.94	6.22
		White	299	54.56%	73.77	25.10	20	7	0.95	5.84
		Native Hawaiian/ Other Pacific Islander	0	0%	-	-	-	-	-	-
Two or More Races		12	2.19%	-	-	-	-	-	-	

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	514	100%	59.16	26.96	2	16	0.92	7.43
		Female	211	41.05%	56.26	27.32	0	9	0.92	7.50
		Male	302	58.75%	61.18	26.60	2	7	0.92	7.37
		American Indian/Alaska Native	8	1.56%	-	-	-	-	-	-
		Asian	15	2.92%	-	-	-	-	-	-
		Black/ African American	41	7.98%	54.05	27.65	0	1	0.92	7.67
		Hispanic/ Latino	158	30.74%	59.92	26.39	0	4	0.92	7.49
		White	275	53.50%	59.82	27.74	2	10	0.93	7.32
		Native Hawaiian/ Other Pacific Islander	1	0.19%	-	-	-	-	-	-
		Two or More Races	15	2.92%	-	-	-	-	-	-

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	554	84.32%	57.25	27.05	2	21	0.94	6.77	
			NEP	94	14.31%	52.90	22.28	0	2	0.90	7.18	
			LEP	2	0.30%	-	-	-	-	-	-	-
			FEP	6	0.91%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	652	99.24%	56.66	26.44	2	23	0.93	6.83	
			Yes	2	0.30%	-	-	-	-	-	-	-
			Monitored Y1	1	0.15%	-	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	558	84.93%	57.15	27.00	2	21	0.94	6.77	
			Yes	85	12.94%	54.04	22.88	0	2	0.90	7.15	
			Monitored Y1	1	0.15%	-	-	-	-	-	-	-
			Monitored Y2	2	0.30%	-	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-	-
			Choice	9	1.37%	-	-	-	-	-	-	-
			Choice	9	1.37%	-	-	-	-	-	-	-

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	513	81.30%	58.50	26.45	3	11	0.93	6.80	
			NEP	94	14.90%	55.00	26.34	0	1	0.93	7.05	
			LEP	7	1.11%	-	-	-	-	-	-	-
			FEP	15	2.38%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	622	98.57%	57.91	26.33	3	12	0.93	6.85	
			Yes	2	0.32%	-	-	-	-	-	-	-
			Monitored Y1	1	0.16%	-	-	-	-	-	-	-
			Monitored Y2	3	0.48%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	518	82.09%	58.34	26.41	3	11	0.93	6.82	
			Yes	91	14.42%	56.53	25.82	0	1	0.93	7.05	
			Monitored Y1	3	0.48%	-	-	-	-	-	-	-
			Monitored Y2	3	0.48%	-	-	-	-	-	-	-
			Exited Y3+	5	0.79%	-	-	-	-	-	-	-
			Choice	8	1.27%	-	-	-	-	-	-	-

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	525	84.81%	59.68	28.08	2	17	0.94	6.81	
			NEP	78	12.60%	51.81	26.11	0	5	0.93	7.02	
			LEP	8	1.29%	-	-	-	-	-	-	-
			FEP	6	0.97%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	612	98.87%	58.68	27.94	2	22	0.94	6.83	
			Yes	2	0.32%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.16%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	526	84.98%	59.52	28.04	2	17	0.94	6.81	
			Yes	74	11.95%	52.99	26.77	0	5	0.93	6.95	
			Monitored Y1	2	0.32%	-	-	-	-	-	-	-
			Monitored Y2	2	0.32%	-	-	-	-	-	-	-
			Exited Y3+	1	0.16%	-	-	-	-	-	-	-
			Choice	10	1.62%	-	-	-	-	-	-	-

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	526	84.70%	65.79	26.11	4	9	0.94	6.53	
			NEP	79	12.72%	62.86	22.52	0	1	0.90	6.97	
			LEP	10	1.61%	-	-	-	-	-	-	-
			FEP	4	0.64%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	612	98.55%	65.45	25.64	4	10	0.93	6.59	
			Yes	5	0.81%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	2	0.32%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	533	85.83%	65.77	26.07	4	9	0.94	6.53	
			Yes	74	11.92%	63.01	22.84	0	1	0.91	6.97	
			Monitored Y1	2	0.32%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	10	1.61%	-	-	-	-	-	-	-

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	455	85.69%	57.43	25.01	1	8	0.92	6.93
			NEP	57	10.73%	56.82	19.66	0	0	0.86	7.43
			LEP	10	1.88%	-	-	-	-	-	-
			FEP	9	1.69%	-	-	-	-	-	-
		ELL Program - Bilingual	No	527	99.25%	57.51	24.36	1	8	0.92	6.98
			Yes	1	0.19%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	455	85.69%	57.36	25.06	1	8	0.92	6.93
			Yes	54	10.17%	59.72	18.57	0	0	0.84	7.35
			Monitored Y1	2	0.38%	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-
			Exited Y3+	4	0.75%	-	-	-	-	-	-
			Choice	13	2.45%	-	-	-	-	-	-

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	8	Language Proficiency	Not Applicable	480	86.96%	56.65	26.40	0	13	0.93	7.12	
			NEP	55	9.96%	56.25	24.08	0	0	0.91	7.25	
			LEP	6	1.09%	-	-	-	-	-	-	-
			FEP	11	1.99%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	544	98.55%	56.81	26.09	0	13	0.93	7.14	
			Yes	5	0.91%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	3	0.54%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			ELL Program - ESL	No	488	88.41%	56.43	26.37	0	13	0.93	7.13
		Yes		47	8.51%	56.74	23.88	0	0	0.91	7.24	
		Monitored Y1		1	0.18%	-	-	-	-	-	-	-
		Monitored Y2		3	0.54%	-	-	-	-	-	-	-
		Exited Y3+		4	0.72%	-	-	-	-	-	-	-
		Choice		9	1.63%	-	-	-	-	-	-	-

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	420	86.07%	54.20	26.77	2	11	0.93	6.90	
			NEP	49	10.04%	51.61	25.90	0	3	0.93	6.87	
			LEP	6	1.23%	-	-	-	-	-	-	-
			FEP	12	2.46%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	484	99.18%	54.12	26.68	2	15	0.93	6.91	
			Yes	0	0%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	3	0.61%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	423	86.68%	54.07	26.81	2	12	0.93	6.90	
			Yes	49	10.04%	52.80	26.10	0	3	0.93	6.91	
			Monitored Y1	4	0.82%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	5	1.02%	-	-	-	-	-	-	-
			Choice	6	1.23%	-	-	-	-	-	-	-

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	443	86.02%	51.28	24.42	0	14	0.91	7.28	
			NEP	53	10.29%	42.85	18.28	0	1	0.83	7.63	
			LEP	10	1.94%	-	-	-	-	-	-	-
			FEP	9	1.75%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	511	99.22%	50.65	23.95	0	15	0.91	7.32	
			Yes	1	0.19%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	443	86.02%	51.18	24.47	0	14	0.91	7.27	
			Yes	54	10.49%	46.81	20.26	0	1	0.86	7.67	
			Monitored Y1	4	0.78%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	3	0.58%	-	-	-	-	-	-	-
			Choice	8	1.55%	-	-	-	-	-	-	-
			Choice	8	1.55%	-	-	-	-	-	-	-

Table 11
Writing 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					
WR	3	Language Proficiency	Not Applicable	556	84.37%	53.77	28.90	0	21	0.93	7.54	
			NEP	94	14.26%	49.93	26.16	0	3	0.91	7.95	
			LEP	2	0.30%	-	-	-	-	-	-	-
			FEP	6	0.91%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	654	99.24%	53.23	28.53	0	24	0.93	7.59	
			Yes	2	0.30%	-	-	-	-	-	-	-
			Monitored Y1	1	0.15%	-	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			No	560	84.98%	53.64	28.86	0	21	0.93	7.55	
			Yes	85	12.90%	51.79	26.17	0	3	0.91	7.86	
		ELL Program - ESL	Monitored Y1	1	0.15%	-	-	-	-	-	-	-
			Monitored Y2	2	0.30%	-	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-	-
			Choice	9	1.37%	-	-	-	-	-	-	-

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	512	81.53%	58.13	29.02	0	11	0.93	7.68
			NEP	92	14.65%	57.12	29.44	0	2	0.93	7.71
			LEP	7	1.11%	-	-	-	-	-	-
			FEP	15	2.39%	-	-	-	-	-	-
		ELL Program - Bilingual	No	619	98.57%	57.94	28.95	0	13	0.93	7.70
			Yes	2	0.32%	-	-	-	-	-	-
			Monitored Y1	1	0.16%	-	-	-	-	-	-
			Monitored Y2	3	0.48%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	517	82.32%	58.03	28.95	0	11	0.93	7.69
			Yes	89	14.17%	58.74	28.79	0	1	0.93	7.72
			Monitored Y1	3	0.48%	-	-	-	-	-	-
			Monitored Y2	3	0.48%	-	-	-	-	-	-
			Exited Y3+	5	0.80%	-	-	-	-	-	-
			Choice	8	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	5	Language Proficiency	Not Applicable	524	85.06%	59.69	29.25	0	24	0.93	7.47
			NEP	77	12.50%	54.29	27.05	0	5	0.91	7.91
			LEP	7	1.14%	-	-	-	-	-	-
			FEP	6	0.97%	-	-	-	-	-	-
		ELL Program - Bilingual	No	609	98.86%	59.05	29.00	0	29	0.93	7.53
			Yes	2	0.32%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	1	0.16%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	525	85.23%	59.55	29.23	0	24	0.93	7.48
			Yes	73	11.85%	55.92	26.74	0	5	0.91	7.85
			Monitored Y1	2	0.32%	-	-	-	-	-	-
			Monitored Y2	2	0.32%	-	-	-	-	-	-
			Exited Y3+	1	0.16%	-	-	-	-	-	-
			Choice	9	1.46%	-	-	-	-	-	-

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	527	84.86%	64.97	28.68	0	14	0.94	7.24	
			NEP	79	12.72%	64.56	25.48	0	1	0.91	7.54	
			LEP	9	1.45%	-	-	-	-	-	-	-
			FEP	4	0.64%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	613	98.71%	65.03	28.17	0	15	0.93	7.28	
			Yes	4	0.64%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	2	0.32%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	533	85.83%	65.05	28.58	0	14	0.94	7.24	
			Yes	74	11.92%	64.61	25.11	0	1	0.91	7.54	
			Monitored Y1	2	0.32%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	10	1.61%	-	-	-	-	-	-	-

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	447	85.47%	63.07	31.13	1	14	0.94	7.43	
			NEP	57	10.90%	67.68	26.49	0	0	0.92	7.36	
			LEP	10	1.91%	-	-	-	-	-	-	-
			FEP	9	1.72%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	519	99.24%	63.89	30.50	1	14	0.94	7.42	
			Yes	1	0.19%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			ELL Program - ESL	No	447	85.47%	62.99	31.24	1	14	0.94	7.43
		Yes		54	10.33%	69.52	23.92	0	0	0.91	7.25	
		Monitored Y1		2	0.38%	-	-	-	-	-	-	-
		Monitored Y2		1	0.19%	-	-	-	-	-	-	-
		Exited Y3+		4	0.76%	-	-	-	-	-	-	-
		Choice		13	2.49%	-	-	-	-	-	-	-

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	478	87.07%	62.23	28.47	0	18	0.93	7.51	
			NEP	54	9.84%	66.98	26.59	0	2	0.92	7.32	
			LEP	6	1.09%	-	-	-	-	-	-	-
			FEP	11	2.00%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	542	98.72%	62.87	28.24	0	20	0.93	7.48	
			Yes	4	0.73%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	3	0.55%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			ELL Program - ESL	No	485	88.34%	62.01	28.49	0	18	0.93	7.53
		Yes		47	8.56%	66.96	25.40	0	2	0.92	7.21	
		Monitored Y1		1	0.18%	-	-	-	-	-	-	-
		Monitored Y2		3	0.55%	-	-	-	-	-	-	-
		Exited Y3+		4	0.73%	-	-	-	-	-	-	-
		Choice		9	1.64%	-	-	-	-	-	-	-

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	416	86.67%	59.07	29.11	1	20	0.93	7.52	
			NEP	47	9.79%	56.74	28.65	0	3	0.93	7.58	
			LEP	6	1.25%	-	-	-	-	-	-	-
			FEP	11	2.29%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	477	99.38%	59.03	29.02	1	24	0.93	7.52	
			Yes	0	0%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	3	0.63%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	419	87.29%	58.87	29.19	1	21	0.93	7.53	
			Yes	47	9.79%	58.06	28.39	0	3	0.93	7.52	
			Monitored Y1	4	0.83%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	4	0.83%	-	-	-	-	-	-	-
			Choice	6	1.25%	-	-	-	-	-	-	-

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	441	85.80%	60.65	27.69	0	17	0.92	7.78	
			NEP	54	10.51%	52.93	23.05	0	1	0.87	8.38	
			LEP	10	1.95%	-	-	-	-	-	-	-
			FEP	9	1.75%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	510	99.22%	60.14	27.26	0	18	0.92	7.83	
			Yes	1	0.19%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	441	85.80%	60.66	27.81	0	17	0.92	7.78	
			Yes	55	10.70%	57.25	23.81	0	1	0.88	8.22	
			Monitored Y1	4	0.78%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	3	0.58%	-	-	-	-	-	-	-
			Choice	8	1.56%	-	-	-	-	-	-	-

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	545	84.10%	76.01	36.35	0	16	0.95	7.95	
			NEP	94	14.51%	75.79	31.81	0	2	0.93	8.35	
			LEP	2	0.31%	-	-	-	-	-	-	-
			FEP	6	0.93%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	643	99.23%	76.07	35.70	0	18	0.95	8.01	
			Yes	2	0.31%	-	-	-	-	-	-	-
			Monitored Y1	1	0.15%	-	-	-	-	-	-	-
			Monitored Y2	1	0.15%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			ELL Program - ESL	No	549	84.72%	75.83	36.29	0	16	0.95	7.96
				Yes	85	13.12%	78.41	30.75	0	2	0.93	8.29
		Monitored Y1		1	0.15%	-	-	-	-	-	-	-
		Monitored Y2		2	0.31%	-	-	-	-	-	-	-
		Exited Y3+		1	0.15%	-	-	-	-	-	-	-
		Choice		9	1.39%	-	-	-	-	-	-	-

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	4	Language Proficiency	Not Applicable	510	81.60%	79.55	36.70	1	11	0.95	8.18	
			NEP	91	14.56%	77.76	37.74	0	5	0.95	8.27	
			LEP	7	1.12%	-	-	-	-	-	-	-
			FEP	15	2.40%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	616	98.56%	79.29	36.65	1	16	0.95	8.22	
			Yes	2	0.32%	-	-	-	-	-	-	-
			Monitored Y1	1	0.16%	-	-	-	-	-	-	-
			Monitored Y2	3	0.48%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	515	82.40%	79.53	36.60	1	11	0.95	8.19	
			Yes	89	14.24%	80.17	36.54	0	4	0.95	8.25	
			Monitored Y1	3	0.48%	-	-	-	-	-	-	-
			Monitored Y2	3	0.48%	-	-	-	-	-	-	-
			Exited Y3+	5	0.80%	-	-	-	-	-	-	-
			Choice	7	1.12%	-	-	-	-	-	-	-

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	520	85.25%	97.52	47.14	0	20	0.96	9.95	
			NEP	74	12.13%	86.61	44.87	0	5	0.95	10.20	
			LEP	8	1.31%	-	-	-	-	-	-	-
			FEP	6	0.98%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	603	98.85%	96.13	46.96	0	25	0.95	9.98	
			Yes	2	0.33%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.16%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	521	85.41%	97.41	47.15	0	20	0.96	9.95	
			Yes	70	11.48%	89.07	44.05	0	5	0.95	10.21	
			Monitored Y1	2	0.33%	-	-	-	-	-	-	-
			Monitored Y2	2	0.33%	-	-	-	-	-	-	-
			Exited Y3+	1	0.16%	-	-	-	-	-	-	-
			Choice	10	1.64%	-	-	-	-	-	-	-

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	537	85.10%	83.66	38.55	0	13	0.95	8.56
			NEP	79	12.52%	88.51	33.20	0	1	0.93	8.66
			LEP	9	1.43%	-	-	-	-	-	-
			FEP	4	0.63%	-	-	-	-	-	-
		ELL Program - Bilingual	No	622	98.57%	84.17	37.85	0	14	0.95	8.59
			Yes	5	0.79%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	2	0.32%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	544	86.21%	83.83	38.48	0	13	0.95	8.55
			Yes	73	11.57%	87.15	33.53	0	1	0.93	8.81
			Monitored Y1	2	0.32%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	10	1.58%	-	-	-	-	-	-

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	444	85.55%	73.44	36.33	0	9	0.94	8.68	
			NEP	56	10.79%	75.13	30.62	0	0	0.92	8.92	
			LEP	10	1.93%	-	-	-	-	-	-	-
			FEP	9	1.73%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	515	99.23%	74.14	35.59	0	9	0.94	8.70	
			Yes	1	0.19%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			ELL Program - ESL	No	444	85.55%	73.26	36.44	0	9	0.94	8.69
		Yes		53	10.21%	80.62	28.26	0	0	0.90	8.73	
		Monitored Y1		2	0.39%	-	-	-	-	-	-	-
		Monitored Y2		1	0.19%	-	-	-	-	-	-	-
		Exited Y3+		4	0.77%	-	-	-	-	-	-	-
		Choice		13	2.50%	-	-	-	-	-	-	-

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	474	86.81%	83.51	39.52	0	11	0.95	9.17	
			NEP	55	10.07%	92.75	37.72	0	2	0.94	8.98	
			LEP	6	1.10%	-	-	-	-	-	-	-
			FEP	11	2.01%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	538	98.53%	84.66	39.29	0	13	0.95	9.16	
			Yes	5	0.92%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	3	0.55%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	482	88.28%	83.38	39.53	0	11	0.95	9.18	
			Yes	47	8.61%	91.87	37.14	0	2	0.94	9.03	
			Monitored Y1	1	0.18%	-	-	-	-	-	-	-
			Monitored Y2	3	0.55%	-	-	-	-	-	-	-
			Exited Y3+	4	0.73%	-	-	-	-	-	-	-
			Choice	9	1.65%	-	-	-	-	-	-	-

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	424	86.35%	70.45	35.75	1	15	0.93	9.36
			NEP	49	9.98%	68.65	39.10	0	3	0.95	9.07
			LEP	6	1.22%	-	-	-	-	-	-
			FEP	12	2.44%	-	-	-	-	-	-
		ELL Program - Bilingual	No	488	99.39%	70.64	36.11	1	19	0.93	9.33
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	3	0.61%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	427	86.97%	70.23	35.84	1	15	0.93	9.35
			Yes	49	9.98%	71.33	39.64	0	3	0.95	8.98
			Monitored Y1	4	0.81%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	5	1.02%	-	-	-	-	-	-
			Choice	6	1.22%	-	-	-	-	-	-

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	444	85.88%	73.36	35.80	0	17	0.93	9.78
			NEP	54	10.44%	68.93	31.41	0	1	0.90	9.94
			LEP	10	1.93%	-	-	-	-	-	-
			FEP	9	1.74%	-	-	-	-	-	-
		ELL Program - Bilingual	No	513	99.23%	73.31	35.34	0	18	0.92	9.80
			Yes	1	0.19%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0.00%	-	-	-	-	-	-
		ELL Program - ESL	No	444	85.88%	73.30	35.90	0	17	0.93	9.78
			Yes	55	10.64%	75.56	32.67	0	1	0.91	9.89
			Monitored Y1	4	0.77%	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-
			Exited Y3+	3	0.58%	-	-	-	-	-	-
			Choice	8	1.55%	-	-	-	-	-	-

Table 13
Science 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					
SC	5	Language Proficiency	Not Applicable	523	85.46%	63.36	26.20	5	19	0.94	6.21	
			NEP	74	12.09%	57.16	24.53	1	4	0.93	6.56	
			LEP	8	1.31%	-	-	-	-	-	-	-
			FEP	5	0.82%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	605	98.86%	62.60	26.07	6	23	0.94	6.25	
			Yes	2	0.33%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.16%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	524	85.62%	63.30	26.16	5	19	0.94	6.22	
			Yes	70	11.44%	58.01	24.06	0	4	0.93	6.50	
			Monitored Y1	1	0.16%	-	-	-	-	-	-	-
			Monitored Y2	2	0.33%	-	-	-	-	-	-	-
			Exited Y3+	1	0.16%	-	-	-	-	-	-	-
			Choice	10	1.63%	-	-	-	-	-	-	-

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	476	86.86%	71.88	25.75	25	15	0.95	5.98
			NEP	55	10.04%	75.25	23.14	3	1	0.94	5.88
			LEP	6	1.09%	-	-	-	-	-	-
			FEP	11	2.01%	-	-	-	-	-	-
		ELL Program - Bilingual	No	540	98.54%	72.29	25.37	29	16	0.94	5.97
			Yes	5	0.91%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	3	0.55%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
			No	484	88.32%	71.78	25.74	25	15	0.95	6.00
			Yes	47	8.58%	75.72	22.91	2	1	0.94	5.72
		ELL Program - ESL	Monitored Y1	1	0.18%	-	-	-	-	-	-
			Monitored Y2	3	0.55%	-	-	-	-	-	-
			Exited Y3+	4	0.73%	-	-	-	-	-	-
			Choice	9	1.64%	-	-	-	-	-	-

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	442	85.99%	59.55	27.14	2	15	0.93	7.39	
			NEP	53	10.31%	53.36	25.00	0	1	0.90	7.74	
			LEP	10	1.95%	-	-	-	-	-	-	-
			FEP	9	1.75%	-	-	-	-	-	-	-
		ELL Program - Bilingual	No	510	99.22%	59.14	26.88	2	16	0.92	7.44	
			Yes	1	0.19%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	442	85.99%	59.51	27.26	2	15	0.93	7.39	
			Yes	54	10.51%	56.98	26.08	0	1	0.91	7.62	
			Monitored Y1	4	0.78%	-	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-	-
			Exited Y3+	3	0.58%	-	-	-	-	-	-	-
			Choice	8	1.56%	-	-	-	-	-	-	-

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	314	47.79%	58.42	24.48	0	6	0.92	6.89
		Reduced Lunch Eligible	58	8.83%	52.29	27.55	1	5	0.94	6.94
		Not Eligible	281	42.77%	55.50	27.99	1	11	0.94	6.76
	4	Free Lunch Eligible	295	46.75%	59.82	24.24	0	3	0.92	7.00
		Reduced Lunch Eligible	51	8.08%	54.31	31.00	1	1	0.95	6.61
		Not Eligible	278	44.06%	56.19	27.35	2	8	0.94	6.73
	5	Free Lunch Eligible	288	46.53%	60.37	27.50	2	11	0.94	6.81
		Reduced Lunch Eligible	49	7.92%	54.16	24.91	0	0	0.92	7.20
		Not Eligible	278	44.91%	57.71	28.86	0	11	0.94	6.79
	6	Free Lunch Eligible	299	48.15%	68.02	23.46	1	2	0.92	6.67
		Reduced Lunch Eligible	50	8.05%	64.94	24.85	0	1	0.93	6.65
		Not Eligible	267	43.00%	62.69	27.75	3	7	0.95	6.49
	7	Free Lunch Eligible	228	42.94%	59.71	22.72	0	1	0.90	7.10
		Reduced Lunch Eligible	58	10.92%	61.60	23.68	1	0	0.91	7.00
		Not Eligible	242	45.57%	54.27	25.65	0	7	0.93	6.89
	8	Free Lunch Eligible	252	45.65%	59.27	25.90	0	6	0.92	7.10
		Reduced Lunch Eligible	45	8.15%	50.82	30.09	0	2	0.95	6.93
		Not Eligible	252	45.65%	55.21	25.33	0	5	0.92	7.23
	9	Free Lunch Eligible	221	45.29%	58.01	26.21	1	6	0.93	6.84
		Reduced Lunch Eligible	46	9.43%	47.50	27.58	0	2	0.94	6.96
		Not Eligible	219	44.88%	51.36	26.63	1	8	0.93	6.94
	10	Free Lunch Eligible	234	45.44%	52.46	23.07	0	3	0.90	7.40
		Reduced Lunch Eligible	35	6.80%	51.03	22.82	0	0	0.89	7.44
		Not Eligible	243	47.18%	48.71	25.03	0	12	0.92	7.19

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	318	48.25%	54.71	27.10	0	7	0.92	7.68
		Reduced Lunch Eligible	58	8.80%	49.38	28.91	0	4	0.93	7.59
		Not Eligible	279	42.34%	52.11	29.81	0	12	0.94	7.52
	4	Free Lunch Eligible	294	46.82%	59.57	27.24	0	5	0.92	7.72
		Reduced Lunch Eligible	49	7.80%	51.57	33.28	0	0	0.95	7.56
		Not Eligible	278	44.27%	56.88	29.79	0	8	0.93	7.68
	5	Free Lunch Eligible	287	46.59%	61.71	27.67	0	12	0.93	7.40
		Reduced Lunch Eligible	49	7.95%	53.90	28.20	0	0	0.92	7.75
		Not Eligible	276	44.81%	57.12	30.24	0	17	0.94	7.60
	6	Free Lunch Eligible	296	47.67%	68.79	25.69	0	3	0.92	7.19
		Reduced Lunch Eligible	50	8.05%	63.84	27.05	0	1	0.93	7.12
		Not Eligible	270	43.48%	61.20	30.32	0	11	0.94	7.36
	7	Free Lunch Eligible	224	42.83%	67.42	28.63	1	4	0.94	7.27
		Reduced Lunch Eligible	56	10.71%	67.39	28.65	0	1	0.93	7.40
		Not Eligible	240	45.89%	59.73	32.22	0	9	0.95	7.53
	8	Free Lunch Eligible	251	45.72%	65.24	27.51	0	9	0.93	7.29
		Reduced Lunch Eligible	45	8.20%	53.80	31.75	0	4	0.94	7.74
		Not Eligible	250	45.54%	61.93	28.11	0	7	0.93	7.61
	9	Free Lunch Eligible	219	45.63%	61.70	28.09	0	12	0.93	7.41
		Reduced Lunch Eligible	46	9.58%	51.70	30.55	0	2	0.94	7.63
		Not Eligible	214	44.58%	57.46	29.62	1	11	0.93	7.60
	10	Free Lunch Eligible	234	45.53%	62.78	25.77	0	5	0.91	7.80
		Reduced Lunch Eligible	35	6.81%	59.66	26.17	0	0	0.91	7.99
		Not Eligible	242	47.08%	57.50	28.94	0	13	0.93	7.82

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	312	48.15%	80.08	33.63	0	5	0.94	7.97
		Reduced Lunch Eligible	58	8.95%	70.91	36.18	0	2	0.95	8.40
		Not Eligible	275	42.44%	72.12	37.39	0	11	0.95	7.97
	4	Free Lunch Eligible	291	46.56%	83.34	34.88	0	8	0.95	8.17
		Reduced Lunch Eligible	49	7.84%	73.73	41.18	0	1	0.96	8.04
		Not Eligible	278	44.48%	75.68	37.18	1	7	0.95	8.30
	5	Free Lunch Eligible	284	46.56%	101.44	44.95	0	10	0.95	9.96
		Reduced Lunch Eligible	47	7.70%	93.28	42.68	0	1	0.94	10.33
		Not Eligible	275	45.08%	91.29	49.26	0	14	0.96	9.91
	6	Free Lunch Eligible	305	48.34%	90.52	34.52	0	3	0.94	8.51
		Reduced Lunch Eligible	50	7.92%	87.98	35.47	0	2	0.94	8.38
		Not Eligible	271	42.95%	76.63	40.49	0	9	0.95	8.65
	7	Free Lunch Eligible	223	42.97%	77.68	33.17	0	1	0.93	8.72
		Reduced Lunch Eligible	56	10.79%	77.38	34.81	0	0	0.94	8.54
		Not Eligible	237	45.66%	69.90	37.67	0	8	0.95	8.72
	8	Free Lunch Eligible	250	45.79%	90.68	38.17	0	7	0.94	8.96
		Reduced Lunch Eligible	45	8.24%	68.78	40.98	0	3	0.95	9.31
		Not Eligible	248	45.42%	81.55	39.16	0	3	0.94	9.30
	9	Free Lunch Eligible	225	45.82%	75.63	35.40	0	9	0.93	9.22
		Reduced Lunch Eligible	46	9.37%	63.20	38.53	0	1	0.94	9.25
		Not Eligible	219	44.60%	66.66	36.01	1	9	0.93	9.41
	10	Free Lunch Eligible	234	45.26%	76.90	34.50	0	6	0.92	9.81
		Reduced Lunch Eligible	37	7.16%	71.41	34.67	0	0	0.92	10.08
		Not Eligible	243	47.00%	70.09	36.43	0	12	0.93	9.73

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	282	46.08%	65.07	25.07	4	8	0.94	6.20
		Reduced Lunch Eligible	49	8.01%	59.49	24.08	0	0	0.93	6.48
		Not Eligible	277	45.26%	60.67	27.13	2	15	0.95	6.28
	8	Free Lunch Eligible	251	45.80%	75.24	24.17	17	7	0.94	5.81
		Reduced Lunch Eligible	45	8.21%	65.67	30.33	2	2	0.96	6.06
		Not Eligible	249	45.44%	70.48	25.33	10	7	0.94	6.13
	10	Free Lunch Eligible	231	44.94%	61.64	25.96	0	5	0.92	7.45
		Reduced Lunch Eligible	35	6.81%	62.71	26.99	0	0	0.92	7.55
		Not Eligible	245	47.67%	56.20	27.74	2	11	0.93	7.37

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	135	20.55%	57.00	24.54	0	2	0.92	6.91
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	4	0.61%	-	-	-	-	-	-
		Hearing Disability	3	0.46%	-	-	-	-	-	-
		Limited Intellectual Capacity	167	25.42%	67.84	20.56	0	0	0.89	6.80
		Multiple Disabilities	207	31.51%	43.35	26.41	1	17	0.93	6.87
		Physical Disability	82	12.48%	54.27	26.81	1	3	0.94	6.75
		Specific Learning Disability	26	3.96%	72.27	19.43	0	0	0.88	6.68
		Speech/Language Disability	26	3.96%	76.62	17.38	0	0	0.86	6.51
		Traumatic Brain Injury	5	0.76%	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-
		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	108	17.12%	55.94	24.33	1	2	0.92	6.81
		Deaf-Blind	2	0.32%	-	-	-	-	-	-
		Emotional Disability	0	0%	-	-	-	-	-	-
		Hearing Disability	1	0.16%	-	-	-	-	-	-
		Limited Intellectual Capacity	166	26.31%	64.83	19.42	0	0	0.87	7.07
		Multiple Disabilities	205	32.49%	45.40	27.70	0	8	0.94	6.79
		Physical Disability	92	14.58%	63.37	26.19	1	1	0.93	6.73
		Specific Learning Disability	34	5.39%	80.15	13.42	0	0	0.77	6.43
		Speech/Language Disability	13	2.06%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.11%	-	-	-	-	-	-
		Visual Disability	1	0.16%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.32%	-	-	-	-	-	-		

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	103	16.64%	48.80	27.65	0	3	0.94	6.91
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.48%	-	-	-	-	-	-
		Hearing Disability	2	0.32%	-	-	-	-	-	-
		Limited Intellectual Capacity	189	30.53%	71.68	20.64	1	1	0.89	6.79
		Multiple Disabilities	203	32.79%	46.45	28.76	0	17	0.94	6.81
		Physical Disability	69	11.15%	59.68	26.65	0	1	0.93	6.92
		Specific Learning Disability	31	5.01%	80.45	18.26	1	0	0.88	6.27
		Speech/Language Disability	10	1.62%	-	-	-	-	-	-
		Traumatic Brain Injury	4	0.65%	-	-	-	-	-	-
		Visual Disability	3	0.48%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.32%	-	-	-	-	-	-		

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	86	13.85%	54.28	24.40	0	1	0.93	6.66
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.48%	-	-	-	-	-	-
		Hearing Disability	2	0.32%	-	-	-	-	-	-
		Limited Intellectual Capacity	205	33.01%	74.15	22.18	2	1	0.92	6.39
		Multiple Disabilities	202	32.53%	55.24	25.80	0	8	0.93	6.90
		Physical Disability	86	13.85%	73.27	23.24	1	0	0.92	6.38
		Specific Learning Disability	22	3.54%	84.95	11.85	1	0	0.75	5.88
		Speech/Language Disability	6	0.97%	-	-	-	-	-	-
		Traumatic Brain Injury	6	0.97%	-	-	-	-	-	-
		Visual Disability	1	0.16%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	2	0.32%	-	-	-	-	-	-

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	86	16.20%	51.12	24.02	0	3	0.92	6.93
		Deaf-Blind	1	0.19%	-	-	-	-	-	-
		Emotional Disability	4	0.75%	-	-	-	-	-	-
		Hearing Disability	0	0%	-	-	-	-	-	-
		Limited Intellectual Capacity	167	31.45%	67.77	18.44	0	0	0.86	6.87
		Multiple Disabilities	197	37.10%	46.08	24.12	0	4	0.91	7.10
		Physical Disability	40	7.53%	67.43	19.43	0	0	0.87	7.00
		Specific Learning Disability	25	4.71%	79.40	14.84	1	0	0.81	6.40
		Speech/Language Disability	4	0.75%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.32%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		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	8	Autism	83	15.04%	54.13	26.01	0	0	0.92	7.14
		Deaf-Blind	2	0.36%	-	-	-	-	-	-
		Emotional Disability	3	0.54%	-	-	-	-	-	-
		Hearing Disability	2	0.36%	-	-	-	-	-	-
		Limited Intellectual Capacity	201	36.41%	64.82	21.12	0	1	0.88	7.22
		Multiple Disabilities	187	33.88%	43.82	25.73	0	10	0.92	7.12
		Physical Disability	43	7.79%	65.12	25.93	0	2	0.93	7.07
		Specific Learning Disability	19	3.44%	84.42	15.85	0	0	0.85	6.07
		Speech/Language Disability	3	0.54%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.27%	-	-	-	-	-	-
		Visual Disability	2	0.36%	-	-	-	-	-	-
		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	57	11.68%	48.40	28.86	0	2	0.95	6.65
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	4	0.82%	-	-	-	-	-	-
		Hearing Disability	6	1.23%	-	-	-	-	-	-
		Limited Intellectual Capacity	174	35.66%	63.52	21.76	1	1	0.90	7.03
		Multiple Disabilities	180	36.89%	42.03	26.01	1	13	0.93	6.89
		Physical Disability	39	7.99%	60.92	24.87	0	0	0.92	6.90
		Specific Learning Disability	13	2.66%	-	-	-	-	-	-
		Speech/Language Disability	5	1.02%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.43%	-	-	-	-	-	-
		Visual Disability	2	0.41%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	1	0.20%	-	-	-	-	-	-

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	58	11.26%	49.14	21.87	0	0	0.89	7.30
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	0.97%	-	-	-	-	-	-
		Hearing Disability	1	0.19%	-	-	-	-	-	-
		Limited Intellectual Capacity	172	33.40%	59.98	19.62	0	0	0.86	7.44
		Multiple Disabilities	224	43.50%	39.46	22.78	0	14	0.90	7.27
		Physical Disability	28	5.44%	60.36	24.23	0	1	0.91	7.13
		Specific Learning Disability	14	2.72%	-	-	-	-	-	-
		Speech/Language Disability	5	0.97%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.36%	-	-	-	-	-	-
		Visual Disability	1	0.19%	-	-	-	-	-	-
		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	139	21.09%	54.11	27.15	0	3	0.92	7.63	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	4	0.61%	-	-	-	-	-	-	
		Hearing Disability	3	0.46%	-	-	-	-	-	-	
		Limited Intellectual Capacity	167	25.34%	65.70	22.54	0	0	0.89	7.41	
		Multiple Disabilities	204	30.96%	38.47	27.98	0	17	0.93	7.48	
		Physical Disability	83	12.59%	49.65	28.13	0	3	0.93	7.56	
		Specific Learning Disability	26	3.95%	71.92	19.77	0	0	0.87	7.16	
		Speech/Language Disability	26	3.95%	72.38	21.83	0	0	0.90	6.91	
		Traumatic Brain Injury	5	0.76%	-	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-	-
		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	109	17.36%	57.13	28.51	0	2	0.93	7.74
		Deaf-Blind	2	0.32%	-	-	-	-	-	-
		Emotional Disability	0	0%	-	-	-	-	-	-
		Hearing Disability	1	0.16%	-	-	-	-	-	-
		Limited Intellectual Capacity	166	26.43%	65.82	22.21	0	0	0.88	7.65
		Multiple Disabilities	203	32.32%	43.77	29.98	0	10	0.94	7.61
		Physical Disability	91	14.49%	62.92	27.50	0	0	0.92	7.69
		Specific Learning Disability	33	5.25%	83.79	12.14	0	0	0.76	6.00
		Speech/Language Disability	13	2.07%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.11%	-	-	-	-	-	-
		Visual Disability	1	0.16%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.32%	-	-	-	-	-	-		

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	102	16.56%	48.26	28.68	0	5	0.93	7.71
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.49%	-	-	-	-	-	-
		Hearing Disability	2	0.32%	-	-	-	-	-	-
		Limited Intellectual Capacity	188	30.52%	74.15	19.21	0	1	0.87	6.84
		Multiple Disabilities	205	33.28%	45.36	30.53	0	22	0.94	7.63
		Physical Disability	67	10.88%	59.31	26.30	0	1	0.91	7.93
		Specific Learning Disability	30	4.87%	81.33	13.67	0	0	0.80	6.08
		Speech/Language Disability	10	1.62%	-	-	-	-	-	-
		Traumatic Brain Injury	4	0.65%	-	-	-	-	-	-
		Visual Disability	3	0.49%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	2	0.32%	-	-	-	-	-	-

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	86	13.85%	54.27	26.99	0	0	0.92	7.77
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.48%	-	-	-	-	-	-
		Hearing Disability	2	0.32%	-	-	-	-	-	-
		Limited Intellectual Capacity	204	32.85%	74.75	23.34	0	2	0.92	6.69
		Multiple Disabilities	204	32.85%	53.40	29.94	0	12	0.93	7.79
		Physical Disability	85	13.69%	73.89	23.82	0	1	0.92	6.76
		Specific Learning Disability	22	3.54%	82.95	10.44	0	0	0.69	5.82
		Speech/Language Disability	6	0.97%	-	-	-	-	-	-
		Traumatic Brain Injury	6	0.97%	-	-	-	-	-	-
		Visual Disability	1	0.16%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.32%	-	-	-	-	-	-		

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	84	16.06%	57.83	31.19	0	3	0.94	7.45
		Deaf-Blind	1	0.19%	-	-	-	-	-	-
		Emotional Disability	4	0.76%	-	-	-	-	-	-
		Hearing Disability	0	0%	-	-	-	-	-	-
		Limited Intellectual Capacity	165	31.55%	78.15	21.56	0	0	0.90	6.65
		Multiple Disabilities	194	37.09%	48.70	31.34	1	10	0.94	7.78
		Physical Disability	39	7.46%	74.46	23.19	0	0	0.90	7.23
		Specific Learning Disability	25	4.78%	90.80	10.06	0	0	0.75	5.07
		Speech/Language Disability	4	0.76%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.34%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		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	8	Autism	82	14.94%	59.66	29.23	0	0	0.93	7.71
		Deaf-Blind	2	0.36%	-	-	-	-	-	-
		Emotional Disability	3	0.55%	-	-	-	-	-	-
		Hearing Disability	2	0.36%	-	-	-	-	-	-
		Limited Intellectual Capacity	201	36.61%	73.45	20.98	0	1	0.89	6.95
		Multiple Disabilities	186	33.88%	47.29	28.93	0	16	0.93	7.89
		Physical Disability	42	7.65%	71.48	26.99	0	2	0.93	6.90
		Specific Learning Disability	19	3.46%	83.53	8.58	0	0	0.57	5.60
		Speech/Language Disability	3	0.55%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.28%	-	-	-	-	-	-
		Visual Disability	2	0.36%	-	-	-	-	-	-
		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	57	11.88%	52.96	32.05	0	3	0.95	7.50
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.63%	-	-	-	-	-	-
		Hearing Disability	6	1.25%	-	-	-	-	-	-
		Limited Intellectual Capacity	171	35.63%	70.16	20.94	0	1	0.88	7.20
		Multiple Disabilities	178	37.08%	46.21	30.25	1	21	0.94	7.70
		Physical Disability	38	7.92%	64.03	28.45	0	0	0.93	7.41
		Specific Learning Disability	13	2.71%	-	-	-	-	-	-
		Speech/Language Disability	5	1.04%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.46%	-	-	-	-	-	-
		Visual Disability	2	0.42%	-	-	-	-	-	-
		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	10	Autism	58	11.28%	58.95	25.65	0	0	0.90	7.97
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	4	0.78%	-	-	-	-	-	-
		Hearing Disability	1	0.19%	-	-	-	-	-	-
		Limited Intellectual Capacity	172	33.46%	72.13	19.24	0	0	0.86	7.26
		Multiple Disabilities	224	43.58%	46.54	28.40	0	17	0.92	8.13
		Physical Disability	28	5.45%	70.79	23.66	0	1	0.91	7.16
		Specific Learning Disability	14	2.72%	-	-	-	-	-	-
		Speech/Language Disability	5	0.97%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.36%	-	-	-	-	-	-
		Visual Disability	1	0.19%	-	-	-	-	-	-
		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	131	20.22%	73.06	31.73	0	0	0.93	8.24	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	4	0.62%	-	-	-	-	-	-	
		Hearing Disability	3	0.46%	-	-	-	-	-	-	
		Limited Intellectual Capacity	168	25.93%	93.32	26.37	0	0	0.92	7.42	
		Multiple Disabilities	206	31.79%	59.27	37.07	0	15	0.95	8.28	
		Physical Disability	81	12.50%	70.56	38.38	0	3	0.96	8.02	
		Specific Learning Disability	25	3.86%	99.76	22.24	0	0	0.90	7.03	
		Speech/Language Disability	24	3.70%	101.00	20.28	0	0	0.89	6.66	
		Traumatic Brain Injury	5	0.77%	-	-	-	-	-	-	-
		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	110	17.60%	73.15	35.44	0	3	0.94	8.40
		Deaf-Blind	2	0.32%	-	-	-	-	-	-
		Emotional Disability	0	0%	-	-	-	-	-	-
		Hearing Disability	1	0.16%	-	-	-	-	-	-
		Limited Intellectual Capacity	166	26.56%	94.54	22.65	0	0	0.87	8.19
		Multiple Disabilities	201	32.16%	60.39	40.15	0	12	0.96	8.21
		Physical Disability	92	14.72%	85.49	33.00	0	1	0.94	8.09
		Specific Learning Disability	30	4.80%	112.07	11.82	0	0	0.71	6.38
		Speech/Language Disability	13	2.08%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.12%	-	-	-	-	-	-
		Visual Disability	1	0.16%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.32%	-	-	-	-	-	-		

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	99	16.23%	79.54	46.91	0	3	0.96	9.94
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.49%	-	-	-	-	-	-
		Hearing Disability	2	0.33%	-	-	-	-	-	-
		Limited Intellectual Capacity	186	30.49%	121.11	32.56	0	1	0.91	9.78
		Multiple Disabilities	201	32.95%	73.62	47.67	0	20	0.96	9.90
		Physical Disability	71	11.64%	93.89	43.58	0	1	0.94	10.22
		Specific Learning Disability	30	4.92%	135.53	24.76	0	0	0.87	8.98
		Speech/Language Disability	9	1.48%	-	-	-	-	-	-
		Traumatic Brain Injury	4	0.66%	-	-	-	-	-	-
		Visual Disability	3	0.49%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.33%	-	-	-	-	-	-		

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	89	14.10%	66.07	36.07	0	0	0.94	9.02
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.48%	-	-	-	-	-	-
		Hearing Disability	2	0.32%	-	-	-	-	-	-
		Limited Intellectual Capacity	209	33.12%	97.46	29.51	0	1	0.92	8.25
		Multiple Disabilities	204	32.33%	68.63	40.41	0	12	0.95	8.79
		Physical Disability	85	13.47%	95.87	31.98	0	1	0.93	8.26
		Specific Learning Disability	24	3.80%	118.17	13.34	0	0	0.75	6.62
		Speech/Language Disability	6	0.95%	-	-	-	-	-	-
		Traumatic Brain Injury	6	0.95%	-	-	-	-	-	-
		Visual Disability	1	0.16%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	2	0.32%	-	-	-	-	-	-

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	81	15.61%	63.91	35.45	0	2	0.94	8.69
		Deaf-Blind	1	0.19%	-	-	-	-	-	-
		Emotional Disability	3	0.58%	-	-	-	-	-	-
		Hearing Disability	0	0%	-	-	-	-	-	-
		Limited Intellectual Capacity	166	31.98%	89.19	27.06	0	0	0.90	8.35
		Multiple Disabilities	194	37.38%	57.69	35.03	0	7	0.94	8.91
		Physical Disability	37	7.13%	83.51	31.30	0	0	0.92	8.72
		Specific Learning Disability	27	5.20%	112.74	11.08	0	0	0.61	6.91
		Speech/Language Disability	3	0.58%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.35%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		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	8	Autism	79	14.47%	76.43	41.71	0	0	0.95	9.15
		Deaf-Blind	3	0.55%	-	-	-	-	-	-
		Emotional Disability	2	0.37%	-	-	-	-	-	-
		Hearing Disability	2	0.37%	-	-	-	-	-	-
		Limited Intellectual Capacity	198	36.26%	97.66	31.65	0	1	0.92	8.99
		Multiple Disabilities	184	33.70%	66.09	39.19	0	10	0.94	9.26
		Physical Disability	46	8.42%	94.02	34.97	0	2	0.93	9.39
		Specific Learning Disability	19	3.48%	123.79	16.72	0	0	0.82	7.02
		Speech/Language Disability	3	0.55%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.47%	-	-	-	-	-	-
		Visual Disability	2	0.37%	-	-	-	-	-	-
		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	56	11.41%	61.05	40.45	1	3	0.95	8.95
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.61%	-	-	-	-	-	-
		Hearing Disability	6	1.22%	-	-	-	-	-	-
		Limited Intellectual Capacity	174	35.44%	83.42	28.77	0	1	0.90	9.26
		Multiple Disabilities	181	36.86%	53.98	33.88	0	15	0.92	9.29
		Physical Disability	41	8.35%	80.88	35.20	0	0	0.93	9.19
		Specific Learning Disability	14	2.85%	-	-	-	-	-	-
		Speech/Language Disability	7	1.43%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.43%	-	-	-	-	-	-
		Visual Disability	2	0.41%	-	-	-	-	-	-
		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	10	Autism	57	11.03%	71.72	36.79	0	1	0.93	9.67
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	0.97%	-	-	-	-	-	-
		Hearing Disability	1	0.19%	-	-	-	-	-	-
		Limited Intellectual Capacity	174	33.66%	89.33	27.16	0	0	0.88	9.49
		Multiple Disabilities	225	43.52%	55.57	33.53	0	17	0.92	9.75
		Physical Disability	29	5.61%	84.86	34.41	0	0	0.92	9.56
		Specific Learning Disability	13	2.51%	-	-	-	-	-	-
		Speech/Language Disability	5	0.97%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.35%	-	-	-	-	-	-
		Visual Disability	1	0.19%	-	-	-	-	-	-
		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	101	16.50%	51.00	25.39	1	4	0.93	6.77
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.49%	-	-	-	-	-	-
		Hearing Disability	2	0.33%	-	-	-	-	-	-
		Limited Intellectual Capacity	188	30.72%	75.33	18.11	5	1	0.90	5.75
		Multiple Disabilities	202	33.01%	51.50	27.33	0	16	0.94	6.53
		Physical Disability	69	11.27%	64.38	24.49	0	2	0.93	6.27
		Specific Learning Disability	29	4.74%	82.66	13.88	0	0	0.87	5.06
		Speech/Language Disability	9	1.47%	-	-	-	-	-	-
		Traumatic Brain Injury	4	0.65%	-	-	-	-	-	-
		Visual Disability	3	0.49%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.33%	-	-	-	-	-	-		

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	81	14.78%	65.95	25.18	5	0	0.93	6.62
		Deaf-Blind	2	0.36%	-	-	-	-	-	-
		Emotional Disability	3	0.55%	-	-	-	-	-	-
		Hearing Disability	2	0.36%	-	-	-	-	-	-
		Limited Intellectual Capacity	202	36.86%	80.77	16.56	13	1	0.89	5.60
		Multiple Disabilities	185	33.76%	61.59	28.87	7	13	0.95	6.45
		Physical Disability	43	7.85%	78.35	25.64	2	1	0.96	5.28
		Specific Learning Disability	17	3.10%	94.41	3.74	2	0	0.37	2.96
		Speech/Language Disability	3	0.55%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.46%	-	-	-	-	-	-
		Visual Disability	2	0.36%	-	-	-	-	-	-
		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	59	11.48%	53.29	26.98	1	0	0.92	7.48
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	0.97%	-	-	-	-	-	-
		Hearing Disability	1	0.19%	-	-	-	-	-	-
		Limited Intellectual Capacity	172	33.46%	70.26	20.51	0	0	0.88	7.16
		Multiple Disabilities	223	43.39%	47.67	27.16	0	16	0.92	7.51
		Physical Disability	28	5.45%	69.93	23.30	0	0	0.90	7.23
		Specific Learning Disability	13	2.53%	-	-	-	-	-	-
		Speech/Language Disability	5	0.97%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.36%	-	-	-	-	-	-
		Visual Disability	1	0.19%	-	-	-	-	-	-
		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	86.45%	59.40	25.33	2	20	0.93	6.84
		Assistive Technology	20	3.04%	35.00	21.60	0	0	0.90	6.92
		Braille	2	0.30%	-	-	-	-	-	-
		Eye Gaze	24	3.65%	22.92	19.52	0	2	0.91	5.81
		Modified Picture Symbols	24	3.65%	41.96	25.67	0	0	0.93	6.83
		Objects	15	2.28%	-	-	-	-	-	-
		Sign Language	12	1.83%	-	-	-	-	-	-
		Translation Into Native Language	0	0.00%	-	-	-	-	-	-
	Other	24	3.65%	34.21	23.83	0	0	0.92	6.87	
	4	None	549	87.00%	60.99	24.73	3	8	0.92	6.88
		Assistive Technology	16	2.54%	33.50	18.44	0	0	0.85	7.18
		Braille	3	0.48%	-	-	-	-	-	-
		Eye Gaze	17	2.69%	18.47	12.47	0	2	0.78	5.86
		Modified Picture Symbols	15	2.38%	-	-	-	-	-	-
		Objects	6	0.95%	-	-	-	-	-	-
		Sign Language	15	2.38%	-	-	-	-	-	-
Translation Into Native Language		0	0.00%	-	-	-	-	-	-	
Other	21	3.33%	31.76	18.48	0	1	0.85	7.06		

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	545	88.05%	61.17	27.21	2	16	0.94	6.81
		Assistive Technology	20	3.23%	41.65	23.06	0	1	0.90	7.35
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	20	3.23%	24.50	24.92	0	3	0.94	5.90
		Modified Picture Symbols	14	2.26%	-	-	-	-	-	-
		Objects	6	0.97%	-	-	-	-	-	-
		Sign Language	13	2.10%	-	-	-	-	-	-
		Translation Into Native Language	0	0.00%	-	-	-	-	-	-
	Other	18	2.91%	37.33	28.59	0	1	0.94	6.72	
	6	None	543	87.44%	67.25	24.84	4	8	0.93	6.55
		Assistive Technology	22	3.54%	46.23	24.55	0	1	0.92	6.96
		Braille	2	0.32%	-	-	-	-	-	-
		Eye Gaze	11	1.77%	-	-	-	-	-	-
		Modified Picture Symbols	29	4.67%	45.62	22.02	0	0	0.89	7.29
		Objects	13	2.09%	-	-	-	-	-	-
		Sign Language	6	0.97%	-	-	-	-	-	-
Translation Into Native Language		0	0.00%	-	-	-	-	-	-	
Other	8	1.29%	-	-	-	-	-	-		

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	468	88.14%	60.14	23.30	1	7	0.91	6.98
		Assistive Technology	19	3.58%	27.47	15.56	0	0	0.81	6.75
		Braille	1	0.19%	-	-	-	-	-	-
		Eye Gaze	10	1.88%	-	-	-	-	-	-
		Modified Picture Symbols	14	2.64%	-	-	-	-	-	-
		Objects	12	2.26%	-	-	-	-	-	-
		Sign Language	6	1.13%	-	-	-	-	-	-
		Translation Into Native Language	0	0.00%	-	-	-	-	-	-
		Other	5	0.94%	-	-	-	-	-	-
	8	None	495	89.67%	58.62	25.76	0	13	0.92	7.12
		Assistive Technology	14	2.54%	-	-	-	-	-	-
		Braille	2	0.36%	-	-	-	-	-	-
		Eye Gaze	4	0.72%	-	-	-	-	-	-
		Modified Picture Symbols	16	2.90%	43.44	20.47	0	0	0.85	7.98
		Objects	9	1.63%	-	-	-	-	-	-
		Sign Language	6	1.09%	-	-	-	-	-	
		Translation Into Native Language	0	0.00%	-	-	-	-	-	
		Other	8	1.45%	-	-	-	-	-	

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	423	86.68%	57.01	25.55	2	11	0.93	6.97
		Assistive Technology	14	2.87%	-	-	-	-	-	-
		Braille	0	0.00%	-	-	-	-	-	-
		Eye Gaze	11	2.25%	-	-	-	-	-	-
		Modified Picture Symbols	11	2.25%	-	-	-	-	-	-
		Objects	10	2.05%	-	-	-	-	-	-
		Sign Language	11	2.25%	-	-	-	-	-	-
		Translation Into Native Language	0	0.00%	-	-	-	-	-	-
		Other	9	1.84%	-	-	-	-	-	-
	10	None	458	88.93%	52.30	23.34	0	9	0.90	7.38
		Assistive Technology	15	2.91%	-	-	-	-	-	-
		Braille	2	0.39%	-	-	-	-	-	-
		Eye Gaze	14	2.72%	-	-	-	-	-	-
		Modified Picture Symbols	16	3.11%	35.00	23.52	0	2	0.91	7.12
		Objects	8	1.55%	-	-	-	-	-	-
		Sign Language	4	0.78%	-	-	-	-	-	-
		Translation Into Native Language	0	0.00%	-	-	-	-	-	-
Other	8	1.55%	-	-	-	-	-	-		

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	562	85.28%	56.41	27.39	0	21	0.92	7.56
		Assistive Technology	29	4.40%	31.52	24.09	0	0	0.91	7.25
		Braille	2	0.30%	-	-	-	-	-	-
		Eye Gaze	24	3.64%	16.79	17.60	0	2	0.90	5.70
		Modified Picture Symbols	20	3.03%	34.15	25.72	0	0	0.91	7.72
		Objects	14	2.12%	-	-	-	-	-	-
		Sign Language	12	1.82%	-	-	-	-	-	-
		Translation Into Native Language	0	0.00%	-	-	-	-	-	-
		Other	26	3.95%	28.00	24.63	0	0	0.91	7.25
	4	None	539	85.83%	61.35	27.28	0	7	0.92	7.61
		Assistive Technology	23	3.66%	37.30	26.10	0	0	0.91	7.95
		Braille	3	0.48%	-	-	-	-	-	-
		Eye Gaze	17	2.71%	12.82	9.55	0	3	0.73	5.00
		Modified Picture Symbols	15	2.39%	-	-	-	-	-	-
		Objects	6	0.96%	-	-	-	-	-	-
		Sign Language	15	2.39%	-	-	-	-	-	-
Translation Into Native Language	0	0%	-	-	-	-	-	-		
Other	20	3.18%	32.20	25.99	0	1	0.92	7.58		

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	536	87.01%	62.12	27.84	0	20	0.93	7.41
		Assistive Technology	25	4.06%	35.56	23.77	0	2	0.89	7.76
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	19	3.08%	14.11	17.44	0	5	0.91	5.24
		Modified Picture Symbols	15	2.44%	-	-	-	-	-	-
		Objects	5	0.81%	-	-	-	-	-	-
		Sign Language	14	2.27%	-	-	-	-	-	-
		Translation Into Native Language	1	0.16%	-	-	-	-	-	-
		Other	16	2.60%	29.44	25.82	0	1	0.92	7.35
	6	None	530	85.35%	67.89	26.90	0	12	0.93	7.13
		Assistive Technology	32	5.15%	49.78	24.23	0	2	0.89	8.00
		Braille	2	0.32%	-	-	-	-	-	-
		Eye Gaze	12	1.93%	-	-	-	-	-	-
		Modified Picture Symbols	26	4.19%	31.08	20.88	0	0	0.86	7.93
		Objects	9	1.45%	-	-	-	-	-	-
		Sign Language	7	1.13%	-	-	-	-	-	-
Translation Into Native Language	3	0.48%	-	-	-	-	-	-		
Other	14	2.25%	-	-	-	-	-	-		

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	458	87.57%	67.54	29.11	1	12	0.94	7.27
		Assistive Technology	23	4.40%	30.70	20.05	0	0	0.85	7.68
		Braille	1	0.19%	-	-	-	-	-	-
		Eye Gaze	10	1.91%	-	-	-	-	-	-
		Modified Picture Symbols	14	2.68%	-	-	-	-	-	-
		Objects	10	1.91%	-	-	-	-	-	-
		Sign Language	6	1.15%	-	-	-	-	-	-
		Translation Into Native Language	2	0.38%	-	-	-	-	-	-
		Other	7	1.34%	-	-	-	-	-	-
	8	None	484	88.16%	64.67	27.72	0	17	0.93	7.38
		Assistive Technology	17	3.10%	42.59	28.64	0	0	0.92	8.00
		Braille	2	0.36%	-	-	-	-	-	-
		Eye Gaze	5	0.91%	-	-	-	-	-	-
		Modified Picture Symbols	15	2.73%	-	-	-	-	-	-
		Objects	5	0.91%	-	-	-	-	-	-
		Sign Language	7	1.28%	-	-	-	-	-	-
Translation Into Native Language	1	0.18%	-	-	-	-	-	-		
Other	13	2.37%	-	-	-	-	-	-		

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	412	85.83%	62.75	26.99	1	14	0.92	7.44
		Assistive Technology	15	3.13%	-	-	-	-	-	-
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	11	2.29%	-	-	-	-	-	-
		Modified Picture Symbols	11	2.29%	-	-	-	-	-	-
		Objects	11	2.29%	-	-	-	-	-	-
		Sign Language	11	2.29%	-	-	-	-	-	-
		Translation Into Native Language	3	0.63%	-	-	-	-	-	-
		Other	10	2.08%	-	-	-	-	-	-
	10	None	452	87.94%	62.42	26.30	0	13	0.91	7.75
		Assistive Technology	20	3.89%	35.85	27.48	0	3	0.92	7.73
		Braille	2	0.39%	-	-	-	-	-	-
		Eye Gaze	13	2.53%	-	-	-	-	-	-
		Modified Picture Symbols	11	2.14%	-	-	-	-	-	-
		Objects	9	1.75%	-	-	-	-	-	-
		Sign Language	4	0.78%	-	-	-	-	-	-
		Translation Into Native Language	2	0.39%	-	-	-	-	-	-
Other	9	1.75%	-	-	-	-	-	-		

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	538	83.02%	80.76	33.50	0	13	0.94	7.92
		Assistive Technology	25	3.86%	41.88	30.52	0	1	0.93	7.95
		Braille	2	0.31%	-	-	-	-	-	-
		Eye Gaze	23	3.55%	23.43	19.29	0	2	0.88	6.73
		Modified Picture Symbols	19	2.93%	43.53	27.86	0	0	0.90	8.61
		Objects	30	4.63%	52.97	37.04	0	1	0.96	7.80
		Sign Language	13	2.01%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
		Other	27	4.17%	46.59	36.02	0	1	0.95	8.32
	4	None	515	82.40%	84.78	33.14	1	11	0.94	8.21
		Assistive Technology	20	3.20%	44.05	33.68	0	0	0.94	8.22
		Braille	3	0.48%	-	-	-	-	-	-
		Eye Gaze	17	2.72%	17.94	18.49	0	2	0.89	6.18
		Modified Picture Symbols	12	1.92%	-	-	-	-	-	-
		Objects	32	5.12%	51.19	37.13	0	2	0.96	7.85
		Sign Language	14	2.24%	-	-	-	-	-	-
Translation Into Native Language		1	0.16%	-	-	-	-	-	-	
Other	22	3.52%	40.82	31.79	0	1	0.93	8.24		

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	517	84.75%	102.85	44.57	0	16	0.95	9.95
		Assistive Technology	27	4.43%	56.48	33.87	0	1	0.91	10.17
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	19	3.11%	20.79	26.16	0	6	0.93	6.76
		Modified Picture Symbols	11	1.80%	-	-	-	-	-	-
		Objects	33	5.41%	58.15	36.13	0	3	0.92	9.93
		Sign Language	13	2.13%	-	-	-	-	-	-
		Translation Into Native Language	1	0.16%	-	-	-	-	-	-
	Other	17	2.79%	52.94	45.58	0	2	0.95	9.69	
	6	None	534	84.63%	87.91	36.18	0	11	0.94	8.53
		Assistive Technology	30	4.75%	63.40	38.31	0	1	0.95	8.77
		Braille	2	0.32%	-	-	-	-	-	-
		Eye Gaze	11	1.74%	-	-	-	-	-	-
		Modified Picture Symbols	26	4.12%	50.27	30.76	0	0	0.91	9.09
		Objects	29	4.60%	62.52	38.90	0	1	0.95	8.91
		Sign Language	6	0.95%	-	-	-	-	-	-
Translation Into Native Language		4	0.63%	-	-	-	-	-	-	
Other	10	1.58%	-	-	-	-	-	-		

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	445	85.74%	77.52	34.40	0	7	0.94	8.62
		Assistive Technology	21	4.05%	37.33	22.97	0	0	0.86	8.52
		Braille	1	0.19%	-	-	-	-	-	-
		Eye Gaze	10	1.93%	-	-	-	-	-	-
		Modified Picture Symbols	14	2.70%	-	-	-	-	-	-
		Objects	24	4.62%	50.63	38.83	0	1	0.95	8.63
		Sign Language	5	0.96%	-	-	-	-	-	-
		Translation Into Native Language	1	0.19%	-	-	-	-	-	-
		Other	6	1.16%	-	-	-	-	-	-
	8	None	477	87.36%	87.38	38.73	0	12	0.95	9.08
		Assistive Technology	20	3.66%	69.00	38.60	0	0	0.94	9.48
		Braille	2	0.37%	-	-	-	-	-	-
		Eye Gaze	4	0.73%	-	-	-	-	-	-
		Modified Picture Symbols	10	1.83%	-	-	-	-	-	-
		Objects	18	3.30%	55.39	39.74	0	0	0.95	9.10
		Sign Language	7	1.28%	-	-	-	-	-	-
		Translation Into Native Language	1	0.18%	-	-	-	-	-	-
Other	11	2.01%	-	-	-	-	-	-		

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	408	83.10%	75.16	34.74	1	10	0.93	9.30
		Assistive Technology	15	3.05%	-	-	-	-	-	-
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	11	2.24%	-	-	-	-	-	-
		Modified Picture Symbols	12	2.44%	-	-	-	-	-	-
		Objects	20	4.07%	51.60	36.95	0	4	0.94	8.75
		Sign Language	11	2.24%	-	-	-	-	-	-
		Translation Into Native Language	4	0.81%	-	-	-	-	-	-
		Other	10	2.04%	-	-	-	-	-	-
	10	None	449	86.85%	76.14	33.72	0	11	0.92	9.79
		Assistive Technology	20	3.87%	38.20	30.99	0	3	0.92	8.51
		Braille	2	0.39%	-	-	-	-	-	-
		Eye Gaze	15	2.90%	-	-	-	-	-	-
		Modified Picture Symbols	5	0.97%	-	-	-	-	-	-
		Objects	16	3.09%	67.06	39.28	0	1	0.94	9.97
		Sign Language	4	0.77%	-	-	-	-	-	-
		Translation Into Native Language	2	0.39%	-	-	-	-	-	-
Other	9	1.74%	-	-	-	-	-	-		

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	536	87.58%	65.20	24.89	6	17	0.94	6.18
		Assistive Technology	18	2.94%	41.33	21.72	0	1	0.90	7.01
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	20	3.27%	27.60	26.77	0	4	0.96	5.62
		Modified Picture Symbols	12	1.96%	-	-	-	-	-	-
		Objects	7	1.14%	-	-	-	-	-	-
		Sign Language	13	2.12%	-	-	-	-	-	-
		Translation Into Native Language	1	0.16%	-	-	-	-	-	-
		Other	18	2.94%	39.28	25.88	0	1	0.93	6.90
	8	None	489	89.23%	73.90	24.66	28	16	0.94	5.88
		Assistive Technology	11	2.01%	-	-	-	-	-	-
		Braille	2	0.36%	-	-	-	-	-	-
		Eye Gaze	3	0.55%	-	-	-	-	-	-
		Modified Picture Symbols	14	2.55%	-	-	-	-	-	-
		Objects	8	1.46%	-	-	-	-	-	-
		Sign Language	8	1.46%	-	-	-	-	-	-
Translation Into Native Language	1	0.18%	-	-	-	-	-	-		
Other	8	1.46%	-	-	-	-	-	-		

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	459	89.30%	60.77	25.78	1	9	0.92	7.47
		Assistive Technology	12	2.33%	-	-	-	-	-	-
		Braille	2	0.39%	-	-	-	-	-	-
		Eye Gaze	14	2.72%	-	-	-	-	-	-
		Modified Picture Symbols	6	1.17%	-	-	-	-	-	-
		Objects	11	2.14%	-	-	-	-	-	-
		Sign Language	4	0.78%	-	-	-	-	-	-
		Translation Into Native Language	1	0.19%	-	-	-	-	-	-
		Other	8	1.56%	-	-	-	-	-	-

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	5.06%	1.88%	3.18%	94.94%	
	4	5.26%	2.70%	2.55%	94.74%	
	5	4.33%	2.63%	1.70%	95.67%	
	6	6.48%	4.82%	1.66%	93.52%	
	7	5.68%	5.15%	0.53%	94.32%	
	8	6.60%	6.26%	0.34%	93.40%	
	9	6.51%	4.21%	2.30%	93.49%	
	10	5.68%	4.76%	0.92%	94.32%	
	WR	3	4.77%	2.02%	2.75%	95.23%
		4	5.71%	2.85%	2.85%	94.29%
5		4.79%	2.63%	2.16%	95.21%	
6		6.48%	4.97%	1.51%	93.52%	
7		7.10%	5.33%	1.78%	92.90%	
8		7.11%	6.09%	1.02%	92.89%	
9		8.05%	4.60%	3.45%	91.95%	
10		5.86%	4.76%	1.10%	94.14%	
MA		3	6.36%	3.18%	3.18%	93.64%
		4	6.16%	3.60%	2.55%	93.84%
	5	5.72%	3.09%	2.63%	94.28%	
	6	4.97%	3.77%	1.20%	95.03%	
	7	7.82%	6.04%	1.78%	92.18%	
	8	7.61%	6.09%	1.52%	92.39%	
	9	5.94%	3.83%	2.11%	94.06%	
	10	5.31%	3.85%	1.47%	94.69%	
	SC	5	5.41%	3.09%	2.32%	94.59%
		8	7.28%	5.92%	1.35%	92.72%
10		5.86%	4.03%	1.83%	94.14%	

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	677	97.83%	6	0.87%	3	0.43%	0	0%	0	0%	0	0%	4	0.58%	2	0.29%
	4	647	97.15%	4	0.60%	4	0.60%	0	0%	1	0.15%	5	0.75%	4	0.60%	1	0.15%
	5	628	97.06%	5	0.77%	3	0.46%	1	0.15%	1	0.15%	4	0.62%	3	0.46%	2	0.31%
	6	631	95.03%	8	1.20%	8	1.20%	1	0.15%	1	0.15%	10	1.51%	4	0.60%	1	0.15%
	7	532	94.49%	14	2.49%	3	0.53%	1	0.18%	1	0.18%	6	1.07%	4	0.71%	2	0.36%
	8	551	93.23%	10	1.69%	7	1.18%	1	0.17%	2	0.34%	11	1.86%	6	1.02%	3	0.51%
	9	496	95.02%	4	0.77%	5	0.96%	0	0%	0	0%	7	1.34%	6	1.15%	4	0.77%
	10	519	95.05%	7	1.28%	8	1.47%	2	0.37%	0	0%	7	1.28%	2	0.37%	1	0.18%
WR	3	676	97.69%	6	0.87%	4	0.58%	0	0%	0	0%	0	0%	4	0.58%	2	0.29%
	4	646	97.00%	4	0.60%	4	0.60%	0	0%	1	0.15%	6	0.90%	4	0.60%	1	0.15%
	5	628	97.06%	5	0.77%	3	0.46%	1	0.15%	1	0.15%	4	0.62%	3	0.46%	2	0.31%
	6	630	94.88%	8	1.20%	8	1.20%	1	0.15%	1	0.15%	11	1.66%	4	0.60%	1	0.15%
	7	531	94.32%	14	2.49%	4	0.71%	1	0.18%	1	0.18%	6	1.07%	4	0.71%	2	0.36%
	8	552	93.40%	10	1.69%	6	1.02%	1	0.17%	2	0.34%	11	1.86%	6	1.02%	3	0.51%
	9	494	94.64%	4	0.77%	6	1.15%	0	0%	0	0%	8	1.53%	6	1.15%	4	0.77%
	10	519	95.05%	7	1.28%	8	1.47%	2	0.37%	0	0%	7	1.28%	2	0.37%	1	0.18%

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	668	96.53%	6	0.87%	6	0.87%	0	0%	0	0%	6	0.87%	4	0.58%	2	0.29%
	4	641	96.25%	4	0.60%	3	0.45%	0	0%	0	0%	13	1.95%	4	0.60%	1	0.15%
	5	625	96.60%	5	0.77%	5	0.77%	1	0.15%	1	0.15%	5	0.77%	3	0.46%	2	0.31%
	6	638	96.08%	8	1.20%	8	1.20%	1	0.15%	1	0.15%	3	0.45%	4	0.60%	1	0.15%
	7	527	93.61%	14	2.49%	6	1.07%	1	0.18%	1	0.18%	8	1.42%	4	0.71%	2	0.36%
	8	552	93.40%	10	1.69%	9	1.52%	1	0.17%	3	0.51%	7	1.18%	6	1.02%	3	0.51%
	9	498	95.40%	4	0.77%	7	1.34%	0	0%	0	0%	3	0.57%	6	1.15%	4	0.77%
	10	524	95.97%	7	1.28%	8	1.47%	2	0.37%	0	0%	2	0.37%	2	0.37%	1	0.18%
SC	5	625	96.60%	5	0.77%	5	0.77%	1	0.15%	0	0%	6	0.93%	3	0.46%	2	0.31%
	8	553	93.57%	10	1.69%	7	1.18%	1	0.17%	1	0.17%	10	1.69%	6	1.02%	3	0.51%
	10	523	95.79%	7	1.28%	7	1.28%	2	0.37%	1	0.18%	3	0.55%	2	0.37%	1	0.18%

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	20.79%	-	0.91%	1.06%	4.10%	7.13%	66.01%
		10	46.89%	1.97%	0.91%	2.88%	2.58%	12.44%	32.32%
		15	26.71%	0.15%	0.15%	0.91%	2.43%	8.35%	61.31%
		20	49.92%	1.97%	0.46%	5.31%	0.76%	31.56%	10.02%
		24	50.53%	1.67%	0.76%	3.03%	0.76%	30.50%	12.75%
		29	31.11%	0.30%	0.30%	0.46%	1.82%	18.97%	47.04%
	4	5	18.57%	0.16%	0.95%	0.95%	3.49%	3.97%	71.91%
		10	40.64%	1.27%	1.27%	2.22%	4.44%	10.16%	40.00%
		15	21.91%	0.32%	0.79%	1.11%	3.33%	6.98%	65.56%
		20	43.33%	1.43%	0.32%	4.92%	1.59%	33.33%	15.08%
		25	41.11%	2.54%	0.32%	4.13%	1.27%	34.44%	16.19%
		30	23.65%	0.95%	0.48%	1.27%	1.43%	14.76%	57.46%
	5	5	18.15%	0.32%	0.81%	0.65%	1.62%	3.89%	74.55%
		10	39.38%	0.65%	1.46%	2.43%	2.27%	12.32%	41.49%
		15	23.50%	0.32%	0.49%	0.32%	1.46%	3.73%	70.18%
		20	37.60%	1.62%	0.32%	3.24%	-	35.98%	21.23%
		24	37.12%	1.30%	0.32%	3.40%	0.49%	34.36%	23.02%
		29	26.09%	-	0.16%	1.94%	0.65%	12.16%	59.00%
	6	5	13.51%	0.16%	0.48%	-	1.77%	3.06%	81.03%
		10	31.03%	0.16%	0.16%	2.09%	2.25%	8.20%	56.11%
		15	18.01%	-	0.48%	0.80%	1.29%	9.65%	69.78%
		20	30.06%	1.45%	0.16%	2.73%	1.13%	38.75%	25.72%
		24	29.26%	1.13%	0.32%	3.86%	1.45%	39.07%	24.92%
		29	18.65%	0.32%	-	1.13%	0.80%	11.09%	68.01%

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	15.80%	-	0.58%	0.96%	1.35%	3.47%	77.84%
		10	32.18%	0.58%	1.16%	1.93%	2.31%	8.29%	53.57%
		15	19.08%	0.19%	0.58%	0.39%	1.35%	4.43%	73.99%
		20	33.33%	0.96%	0.77%	4.82%	1.54%	31.79%	26.78%
		25	32.56%	0.77%	0.77%	4.05%	1.16%	32.95%	27.75%
		30	26.59%	0.19%	1.54%	0.58%	4.24%	4.62%	62.24%
	8	5	12.91%	0.18%	0.36%	0.55%	0.55%	3.27%	82.18%
		10	31.82%	0.73%	1.09%	3.09%	2.00%	10.73%	50.55%
		15	17.09%	-	0.55%	0.36%	0.55%	3.09%	78.36%
		20	26.91%	0.55%	1.09%	4.73%	1.64%	31.46%	33.64%
		25	28.18%	0.91%	0.55%	4.18%	1.27%	35.09%	29.82%
		30	24.91%	0.55%	0.18%	0.73%	3.82%	7.27%	62.55%
	9	5	19.38%	0.42%	0.42%	1.04%	2.08%	3.96%	72.71%
		10	31.04%	0.63%	1.67%	2.08%	3.54%	8.96%	52.08%
		15	20.00%	-	0.42%	0.42%	1.04%	3.54%	74.58%
		20	31.46%	0.83%	0.83%	2.92%	2.08%	30.63%	31.25%
		24	32.08%	2.08%	1.04%	4.17%	1.88%	35.00%	23.75%
		29	28.13%	0.21%	1.67%	1.46%	3.96%	7.50%	57.08%
	10	5	14.01%	0.97%	0.19%	1.56%	1.17%	4.28%	77.82%
		10	31.71%	1.17%	0.78%	1.95%	2.72%	7.00%	54.67%
		15	19.46%	0.19%	0.97%	0.97%	2.33%	4.86%	71.21%
		20	28.60%	1.17%	-	2.53%	1.36%	31.71%	34.63%
		25	28.99%	1.36%	0.19%	4.28%	1.75%	34.24%	29.18%
		30	27.24%	-	1.56%	1.17%	3.50%	12.45%	54.09%

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	18.98%	1.54%	2.31%	2.47%	4.94%	9.41%	60.34%
		4	34.72%	0.93%	1.85%	4.78%	6.17%	16.98%	34.57%
		5	21.91%	1.08%	1.23%	2.16%	1.54%	8.49%	63.58%
		9	23.61%	2.47%	2.01%	3.40%	2.78%	14.66%	51.08%
		12	39.04%	3.40%	3.09%	5.25%	4.17%	30.09%	14.97%
		13	32.25%	2.31%	2.01%	2.31%	5.56%	6.48%	49.07%
		17	35.03%	1.08%	1.39%	2.93%	4.94%	8.49%	46.14%
		23	10.96%	1.23%	1.85%	1.54%	6.33%	2.93%	75.15%
		24	36.73%	2.78%	0.93%	5.25%	1.54%	39.20%	13.58%
		26	28.70%	3.24%	4.17%	9.57%	2.01%	45.83%	6.48%
MA	4	2	17.38%	1.28%	1.75%	2.39%	4.15%	8.93%	64.12%
		3	18.98%	0.48%	1.28%	1.44%	2.39%	5.58%	69.86%
		4	26.16%	0.64%	2.55%	3.99%	4.79%	16.27%	45.61%
		9	31.26%	1.59%	1.12%	3.51%	2.55%	17.07%	42.90%
		12	39.39%	1.12%	2.87%	4.78%	4.79%	17.23%	29.83%
		16	42.74%	0.80%	3.67%	0.64%	6.54%	4.15%	41.47%
		18	11.80%	1.44%	1.59%	1.44%	6.38%	3.03%	74.32%
		19	24.08%	1.75%	3.03%	2.55%	8.13%	6.06%	54.39%
		20	35.73%	3.19%	3.83%	6.54%	5.74%	11.01%	33.97%
		26	31.74%	1.75%	2.71%	6.22%	3.51%	28.07%	26.00%
		28	56.78%	0.48%	1.91%	3.19%	2.71%	13.72%	21.21%

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	31.71%	0.33%	1.79%	4.72%	2.76%	26.18%	32.52%		
		4	22.44%	0.98%	1.46%	3.09%	2.60%	16.26%	53.17%		
		5	34.15%	0.65%	2.44%	3.09%	12.03%	13.66%	33.98%		
		6	50.41%	0.49%	1.79%	3.90%	3.09%	17.24%	23.09%		
		9	20.16%	0.49%	0.65%	2.44%	1.79%	9.59%	64.88%		
		12	26.83%	0.98%	1.79%	3.41%	5.04%	9.76%	52.20%		
		13	33.82%	0.98%	0.98%	2.11%	3.58%	13.66%	44.88%		
		17	52.03%	0.65%	1.79%	6.83%	1.79%	23.09%	13.82%		
		18	62.76%	1.14%	0.81%	2.44%	1.63%	10.08%	21.14%		
		22	11.71%	0.65%	0.33%	3.25%	3.09%	5.20%	75.77%		
		23	16.91%	1.95%	1.14%	3.90%	6.02%	14.15%	55.94%		
		25	36.59%	2.93%	3.25%	5.53%	5.85%	9.43%	36.42%		
		26	36.91%	1.95%	1.79%	5.04%	4.88%	25.85%	23.58%		
		27	39.35%	2.76%	4.55%	5.20%	5.20%	20.65%	22.28%		
		28	63.74%	0.33%	3.41%	1.79%	3.74%	10.89%	16.10%		
		29	40.33%	2.28%	3.09%	6.18%	6.02%	12.68%	29.43%		
		31	19.35%	0.16%	1.63%	0.98%	3.74%	6.02%	68.13%		
			6	1	23.14%	1.43%	1.58%	6.66%	5.39%	21.87%	39.94%
				2	17.91%	1.11%	0.95%	2.38%	2.85%	17.12%	57.69%
				3	13.00%	0.63%	0.95%	2.06%	2.06%	10.78%	70.52%
4	30.43%			0.79%	3.65%	1.58%	9.35%	10.78%	43.42%		
6	23.93%			0.79%	1.74%	2.06%	6.50%	12.36%	52.62%		
12	23.77%			2.06%	1.11%	7.13%	3.33%	36.93%	25.67%		
15	27.26%			1.43%	3.65%	2.69%	6.02%	6.66%	52.30%		
19	15.69%			2.06%	2.06%	3.49%	5.86%	7.13%	63.71%		
20	41.36%			1.74%	3.01%	2.85%	7.92%	6.97%	36.13%		
29	24.88%			1.74%	2.69%	3.65%	4.60%	19.18%	43.27%		
30	54.68%			1.11%	0.79%	2.38%	2.85%	21.55%	16.64%		
31	29.64%			2.38%	2.22%	3.80%	7.61%	9.83%	44.53%		

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	24.03%	1.36%	1.94%	5.04%	2.33%	38.18%	27.13%
		2	19.19%	1.55%	1.16%	4.26%	3.10%	13.95%	56.78%
		3	15.12%	0.19%	0.78%	2.71%	1.94%	7.95%	71.32%
		4	29.65%	0.97%	2.33%	1.74%	8.33%	11.05%	45.93%
		6	23.06%	0.97%	1.55%	2.52%	4.46%	10.27%	57.17%
		16	42.44%	2.13%	4.65%	1.55%	5.04%	6.40%	37.79%
		17	16.28%	2.52%	2.91%	2.52%	6.98%	4.85%	63.95%
		20	39.92%	1.55%	3.49%	3.49%	6.40%	14.73%	30.43%
		26	29.85%	0.58%	1.74%	4.26%	1.55%	29.65%	32.36%
		27	25.58%	0.97%	2.91%	3.49%	4.85%	23.64%	38.57%
	29	52.13%	0.97%	1.94%	2.13%	4.65%	8.14%	30.04%	
	8	1	25.68%	1.09%	1.46%	6.01%	1.64%	39.53%	24.59%
		2	19.67%	1.64%	0.91%	4.19%	1.28%	17.85%	54.46%
		3	30.06%	0.73%	2.91%	1.64%	7.29%	10.75%	46.63%
		4	43.17%	0.36%	2.73%	1.82%	7.10%	5.10%	39.71%
		6	17.67%	0.73%	0.73%	3.83%	1.64%	26.96%	48.45%
		7	32.42%	0.36%	1.46%	2.37%	9.11%	5.65%	48.63%
		18	34.24%	1.64%	2.37%	2.37%	6.01%	5.46%	47.91%
		21	18.22%	1.46%	3.10%	3.10%	7.10%	5.65%	61.38%
		29	29.87%	1.28%	1.64%	4.01%	1.82%	40.07%	21.31%
30		22.04%	1.28%	3.10%	7.29%	5.28%	29.69%	31.33%	
31	45.36%	0.55%	1.82%	2.55%	2.91%	10.57%	36.25%		

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	25.26%	0.61%	1.43%	3.67%	3.06%	21.39%	44.60%
		2	20.57%	1.83%	0.61%	4.68%	1.43%	18.33%	52.55%
		3	32.59%	0.41%	3.06%	3.46%	8.15%	9.37%	42.97%
		5	19.15%	1.02%	0.41%	3.46%	3.06%	28.51%	44.40%
		6	44.60%	1.63%	3.46%	5.09%	9.37%	11.00%	24.85%
		13	33.40%	4.48%	1.22%	5.50%	4.48%	16.90%	34.01%
		15	35.03%	2.44%	3.87%	3.46%	6.31%	7.74%	41.14%
		25	40.33%	1.43%	1.63%	3.06%	3.26%	18.13%	32.18%
		28	33.81%	0.81%	0.41%	2.85%	2.65%	23.01%	36.46%
	29	47.45%	1.02%	1.63%	2.44%	4.07%	14.05%	29.33%	
	10	1	26.50%	0.97%	1.55%	4.64%	3.48%	19.15%	43.71%
		2	21.86%	0.58%	1.16%	3.87%	1.35%	21.47%	49.71%
		3	33.27%	0.77%	2.13%	2.13%	7.16%	8.51%	46.04%
		4	39.65%	0.58%	3.48%	2.71%	10.45%	9.87%	33.27%
		6	18.18%	0.58%	0.97%	3.09%	3.87%	26.69%	46.62%
		15	23.79%	1.35%	2.90%	3.09%	6.96%	11.03%	50.87%
		19	49.13%	1.74%	2.32%	5.03%	5.22%	11.03%	25.53%
		24	13.93%	1.16%	2.13%	2.13%	7.93%	5.42%	67.31%
		28	35.40%	0.77%	1.16%	3.48%	4.26%	28.43%	26.50%
29		32.11%	0.97%	1.55%	4.45%	1.93%	42.17%	16.83%	
	30	53.77%	1.55%	0.39%	3.68%	3.68%	21.86%	15.09%	
	36	51.64%	0.97%	2.90%	3.48%	8.12%	12.77%	20.12%	

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	12.09%	0.82%	1.63%	2.94%	6.37%	7.84%	68.30%
		19	14.54%	1.14%	1.31%	3.92%	5.56%	17.48%	56.05%
	8	21	12.96%	1.46%	0.37%	3.83%	2.55%	18.43%	60.40%
		23	10.95%	0.73%	0.73%	2.37%	3.47%	13.69%	68.07%
		29	12.77%	1.09%	0.91%	2.74%	3.65%	20.80%	58.03%
	10	10	38.52%	0.39%	2.14%	0.19%	4.09%	4.86%	49.81%
		21	23.74%	0.58%	1.17%	2.33%	3.31%	19.65%	49.22%
		27	39.30%	-	1.56%	1.36%	5.45%	2.34%	50.00%
		28	50.97%	0.39%	1.17%	1.36%	3.89%	5.64%	36.58%

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
RD	3	1	3	0.69	0.65	1	0.65	0.66
		2	3	0.52	0.48	1	0.48	0.49
		3	3	0.32	0.46	1	0.28	0.47
		4	3	0.24	0.38	1	0.22	0.42
		5	3	0.26	0.31	1	0.23	0.33
		6	3	0.50	0.43	1	0.46	0.45
		7	3	0.60	0.55	1	0.56	0.54
		8	3	0.67	0.52	1	0.63	0.54
		9	3	0.41	0.33	1	0.38	0.35
		10	3	0.31	0.48	1	0.28	0.47
		11	3	0.66	0.49	1	0.62	0.49
		12	3	0.73	0.63	1	0.69	0.62
		13	3	0.80	0.69	1	0.78	0.69
		14	3	0.84	0.63	1	0.83	0.62
		15	3	0.68	0.74	1	0.64	0.74
		16	3	0.71	0.71	1	0.69	0.70
		17	3	0.76	0.69	1	0.74	0.70
		18	3	0.35	0.41	1	0.32	0.38
		19	3	0.74	0.66	1	0.72	0.65
		20	3	0.31	0.38	1	0.28	0.39
		21	3	0.68	0.64	1	0.63	0.64
		22	3	0.74	0.72	1	0.71	0.72
		23	3	0.60	0.66	1	0.57	0.66
		24	3	0.69	0.69	1	0.66	0.70
		25	3	0.45	0.61	1	0.41	0.61
		26	3	0.58	0.66	1	0.55	0.65
		27	3	0.51	0.58	1	0.48	0.58
		28	3	0.50	0.61	1	0.48	0.61
		29	3	0.54	0.64	1	0.51	0.63
		30	3	0.37	0.51	1	0.34	0.50
		31	3	0.57	0.58	1	0.55	0.57
		32	3	0.34	0.45	1	0.31	0.45
		33	3	0.35	0.50	1	0.32	0.50
		34	3	0.35	0.35	1	0.31	0.34
		35	3	0.49	0.64	1	0.47	0.64

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	4	1	3	0.58	0.56	1	0.53	0.54
		2	3	0.33	0.37	1	0.30	0.38
		3	3	0.25	0.32	1	0.21	0.32
		4	3	0.51	0.62	1	0.47	0.61
		5	3	0.43	0.58	1	0.41	0.58
		6	3	0.62	0.70	1	0.58	0.69
		7	3	0.65	0.54	1	0.62	0.56
		8	3	0.58	0.64	1	0.55	0.65
		9	3	0.53	0.52	1	0.50	0.54
		10	3	0.40	0.50	1	0.36	0.50
		11	3	0.82	0.69	1	0.81	0.70
		12	3	0.84	0.65	1	0.83	0.66
		13	3	0.80	0.55	1	0.79	0.58
		14	3	0.71	0.70	1	0.68	0.70
		15	3	0.69	0.58	1	0.66	0.59
		16	3	0.80	0.70	1	0.77	0.72
		17	3	0.77	0.64	1	0.76	0.66
		18	3	0.82	0.67	1	0.80	0.69
		19	3	0.29	0.31	1	0.27	0.32
		20	3	0.40	0.38	1	0.36	0.39
		21	3	0.60	0.65	1	0.58	0.65
		22	3	0.33	0.35	1	0.30	0.35
		23	3	0.72	0.67	1	0.70	0.68
		24	3	0.71	0.69	1	0.69	0.69
		25	3	0.62	0.58	1	0.58	0.58
		26	3	0.55	0.58	1	0.53	0.58
		27	3	0.40	0.51	1	0.38	0.50
		28	3	0.37	0.47	1	0.34	0.48
		29	3	0.29	0.47	1	0.27	0.48
		30	3	0.45	0.42	1	0.43	0.45
		31	3	0.51	0.56	1	0.49	0.58
		32	3	0.44	0.51	1	0.41	0.53
		33	3	0.58	0.56	1	0.54	0.55
		34	3	0.46	0.59	1	0.45	0.59
		35	3	0.38	0.55	1	0.36	0.55

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	5	1	3	0.63	0.65	1	0.61	0.67
		2	3	0.75	0.62	1	0.72	0.64
		3	3	0.35	0.49	1	0.33	0.49
		4	3	0.52	0.60	1	0.50	0.61
		5	3	0.45	0.52	1	0.42	0.54
		6	3	0.42	0.52	1	0.40	0.53
		7	3	0.38	0.42	1	0.36	0.42
		8	3	0.44	0.50	1	0.42	0.52
		9	3	0.46	0.58	1	0.44	0.58
		10	3	0.50	0.42	1	0.48	0.44
		11	3	0.77	0.69	1	0.75	0.69
		12	3	0.86	0.65	1	0.84	0.65
		13	3	0.83	0.64	1	0.82	0.65
		14	3	0.70	0.65	1	0.68	0.66
		15	3	0.72	0.61	1	0.68	0.61
		16	3	0.83	0.63	1	0.82	0.64
		17	3	0.44	0.46	1	0.42	0.45
		18	3	0.24	0.19	1	0.22	0.20
		19	3	0.47	0.62	1	0.45	0.63
		20	3	0.50	0.55	1	0.47	0.55
		21	3	0.70	0.72	1	0.68	0.73
		22	3	0.54	0.58	1	0.50	0.57
		23	3	0.59	0.62	1	0.56	0.62
		24	3	0.38	0.31	1	0.36	0.31
		25	3	0.67	0.69	1	0.65	0.70
		26	3	0.47	0.57	1	0.45	0.57
		27	3	0.37	0.54	1	0.36	0.55
		28	3	0.61	0.64	1	0.57	0.64
		29	3	0.60	0.70	1	0.58	0.72
		30	3	0.62	0.71	1	0.61	0.70
		31	3	0.68	0.71	1	0.65	0.73
		32	3	0.39	0.54	1	0.37	0.56
		33	3	0.52	0.68	1	0.50	0.68
		34	3	0.49	0.49	1	0.47	0.50
		35	3	0.68	0.73	1	0.66	0.75

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	0.41	1	0.23	0.40
		2	3	0.79	0.60	1	0.77	0.64
		3	3	0.46	0.53	1	0.43	0.55
		4	3	0.75	0.60	1	0.73	0.63
		5	3	0.60	0.56	1	0.58	0.58
		6	3	0.32	0.46	1	0.31	0.49
		7	3	0.45	0.16	1	0.40	0.21
		8	3	0.23	0.35	1	0.21	0.36
		9	3	0.76	0.62	1	0.74	0.66
		10	3	0.42	0.48	1	0.40	0.48
		11	3	0.89	0.65	1	0.88	0.67
		12	3	0.84	0.67	1	0.82	0.70
		13	3	0.88	0.65	1	0.86	0.67
		14	3	0.71	0.59	1	0.68	0.58
		15	3	0.77	0.46	1	0.75	0.48
		16	3	0.81	0.68	1	0.79	0.69
		17	3	0.81	0.66	1	0.79	0.67
RD	6	18	3	0.63	0.67	1	0.60	0.68
		19	3	0.52	0.60	1	0.49	0.59
		20	3	0.64	0.68	1	0.61	0.69
		21	3	0.71	0.69	1	0.67	0.69
		22	3	0.76	0.60	1	0.74	0.62
		23	3	0.51	0.53	1	0.49	0.54
		24	3	0.52	0.55	1	0.50	0.56
		25	3	0.44	0.49	1	0.43	0.50
		26	3	0.51	0.60	1	0.49	0.59
		27	3	0.46	0.54	1	0.45	0.56
		28	3	0.61	0.63	1	0.60	0.65
		29	3	0.84	0.61	1	0.82	0.64
		30	3	0.70	0.65	1	0.68	0.67
		31	3	0.75	0.61	1	0.73	0.62
		32	3	0.49	0.55	1	0.47	0.56
		33	3	0.65	0.65	1	0.63	0.66
		34	3	0.46	0.40	1	0.44	0.41
		35	3	0.81	0.54	1	0.79	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
		1	3	0.67	0.60	1	0.65	0.62
		2	3	0.37	0.35	1	0.36	0.37
		3	3	0.43	0.42	1	0.41	0.43
		4	3	0.54	0.54	1	0.53	0.56
		5	3	0.34	0.29	1	0.31	0.28
		6	3	0.46	0.47	1	0.42	0.46
		7	3	0.44	0.48	1	0.42	0.50
		8	3	0.41	0.51	1	0.39	0.53
		9	3	0.25	0.37	1	0.23	0.37
		10	3	0.26	0.22	1	0.24	0.25
		11	3	0.29	0.26	1	0.27	0.28
		12	3	0.65	0.65	1	0.63	0.66
		13	3	0.85	0.66	1	0.84	0.66
		14	3	0.62	0.63	1	0.60	0.63
		15	3	0.82	0.65	1	0.80	0.66
		16	3	0.84	0.62	1	0.83	0.63
		17	3	0.80	0.70	1	0.78	0.71
RD	7	18	3	0.80	0.70	1	0.78	0.71
		19	3	0.58	0.58	1	0.55	0.58
		20	3	0.65	0.67	1	0.62	0.67
		21	3	0.84	0.68	1	0.81	0.69
		22	3	0.70	0.71	1	0.68	0.73
		23	3	0.46	0.42	1	0.44	0.43
		24	3	0.81	0.58	1	0.77	0.62
		25	3	0.46	0.64	1	0.45	0.64
		26	3	0.35	0.40	1	0.34	0.40
		27	3	0.44	0.57	1	0.41	0.56
		28	3	0.57	0.64	1	0.55	0.66
		29	3	0.38	0.45	1	0.35	0.46
		30	3	0.64	0.59	1	0.62	0.62
		31	3	0.38	0.22	1	0.35	0.26
		32	3	0.26	0.40	1	0.25	0.39
		33	3	0.60	0.35	1	0.57	0.37
		34	3	0.72	0.69	1	0.70	0.70
		35	3	0.49	0.53	1	0.46	0.55

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	0.35	0.42	1	0.33	0.44
		2	3	0.51	0.56	1	0.49	0.58
		3	3	0.36	0.32	1	0.34	0.34
		4	3	0.37	0.43	1	0.36	0.43
		5	3	0.43	0.51	1	0.41	0.52
		6	3	0.37	0.37	1	0.35	0.37
		7	3	0.39	0.53	1	0.38	0.53
		8	3	0.50	0.58	1	0.49	0.59
		9	3	0.42	0.56	1	0.40	0.58
		10	3	0.38	0.48	1	0.36	0.48
		11	3	0.71	0.63	1	0.69	0.62
		12	3	0.86	0.60	1	0.85	0.62
		13	3	0.52	0.50	1	0.49	0.51
		14	3	0.84	0.61	1	0.82	0.61
		15	3	0.78	0.68	1	0.74	0.69
		16	3	0.70	0.69	1	0.68	0.69
		17	3	0.71	0.69	1	0.68	0.71
RD	8	18	3	0.76	0.62	1	0.74	0.63
		19	3	0.44	0.51	1	0.42	0.53
		20	3	0.76	0.61	1	0.74	0.63
		21	3	0.40	0.33	1	0.38	0.33
		22	3	0.49	0.62	1	0.48	0.61
		23	3	0.60	0.59	1	0.57	0.61
		24	3	0.60	0.60	1	0.58	0.61
		25	3	0.54	0.58	1	0.52	0.58
		26	3	0.54	0.48	1	0.51	0.50
		27	3	0.49	0.52	1	0.47	0.53
		28	3	0.51	0.51	1	0.49	0.52
		29	3	0.45	0.51	1	0.44	0.52
		30	3	0.53	0.47	1	0.52	0.49
		31	3	0.34	0.35	1	0.33	0.36
		32	3	0.48	0.57	1	0.46	0.58
		33	3	0.49	0.49	1	0.48	0.51
		34	3	0.58	0.60	1	0.55	0.61
		35	3	0.68	0.62	1	0.66	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
RD	9	1	3	0.35	0.40	1	0.33	0.40
		2	3	0.42	0.56	1	0.39	0.55
		3	3	0.46	0.59	1	0.44	0.60
		4	3	0.46	0.62	1	0.43	0.64
		5	3	0.48	0.53	1	0.46	0.54
		6	3	0.41	0.57	1	0.39	0.59
		7	3	0.47	0.43	1	0.43	0.46
		8	3	0.52	0.52	1	0.49	0.54
		9	3	0.30	0.40	1	0.28	0.41
		10	3	0.58	0.37	1	0.55	0.39
		11	3	0.67	0.64	1	0.63	0.65
		12	3	0.62	0.65	1	0.60	0.64
		13	3	0.80	0.63	1	0.78	0.63
		14	3	0.82	0.61	1	0.80	0.62
		15	3	0.69	0.65	1	0.67	0.67
		16	3	0.68	0.64	1	0.66	0.65
		17	3	0.74	0.64	1	0.72	0.66
		18	3	0.72	0.65	1	0.69	0.65
		19	3	0.73	0.65	1	0.71	0.65
		20	3	0.44	0.56	1	0.42	0.56
		21	3	0.39	0.49	1	0.37	0.49
		22	3	0.67	0.67	1	0.65	0.67
		23	3	0.66	0.63	1	0.63	0.64
		24	3	0.41	0.58	1	0.39	0.58
		25	3	0.51	0.64	1	0.49	0.65
		26	3	0.52	0.67	1	0.49	0.67
		27	3	0.38	0.42	1	0.37	0.44
		28	3	0.52	0.51	1	0.50	0.52
		29	3	0.32	0.37	1	0.30	0.39
		30	3	0.57	0.71	1	0.56	0.71
		31	3	0.52	0.64	1	0.51	0.63
		32	3	0.29	0.37	1	0.27	0.37
		33	3	0.45	0.61	1	0.43	0.61
		34	3	0.40	0.45	1	0.37	0.44

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	0.52	0.56	1	0.49	0.58
		2	3	0.42	0.40	1	0.41	0.41
		3	3	0.26	0.33	1	0.24	0.35
		4	3	0.38	0.35	1	0.35	0.40
		5	3	0.44	0.39	1	0.41	0.41
		6	3	0.50	0.47	1	0.47	0.50
		7	3	0.32	0.33	1	0.30	0.36
		8	3	0.61	0.61	1	0.59	0.62
		9	3	0.37	0.38	1	0.34	0.38
		10	3	0.60	0.44	1	0.56	0.46
		11	3	0.67	0.42	1	0.66	0.41
		12	3	0.46	0.52	1	0.43	0.52
		13	3	0.70	0.62	1	0.68	0.64
		14	3	0.46	0.34	1	0.43	0.36
		15	3	0.75	0.58	1	0.72	0.58
		16	3	0.49	0.55	1	0.46	0.57
		17	3	0.29	0.31	1	0.28	0.33
		18	3	0.53	0.56	1	0.52	0.57
		19	3	0.59	0.56	1	0.57	0.57
		20	3	0.48	0.43	1	0.45	0.45
		21	3	0.43	0.51	1	0.40	0.52
		22	3	0.42	0.54	1	0.40	0.54
		23	3	0.61	0.60	1	0.58	0.62
		24	3	0.43	0.43	1	0.40	0.43
		25	3	0.57	0.62	1	0.56	0.63
		26	3	0.26	0.28	1	0.24	0.30
		27	3	0.35	0.39	1	0.35	0.41
		28	3	0.52	0.61	1	0.49	0.63
		29	3	0.62	0.63	1	0.60	0.65
		30	3	0.74	0.61	1	0.72	0.63
		31	3	0.50	0.60	1	0.48	0.61
		32	3	0.58	0.63	1	0.55	0.63
		33	3	0.61	0.68	1	0.60	0.69
		34	3	0.39	0.58	1	0.38	0.58

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	0.28	1	0.23	0.29
		2	3	0.60	0.65	1	0.56	0.65
		3	3	0.73	0.67	1	0.71	0.67
		4	3	0.69	0.73	1	0.66	0.73
		5	6	0.76	0.75	2	0.70	0.75
		6	3	0.50	0.57	1	0.46	0.56
		7	3	0.48	0.62	1	0.44	0.62
		8	3	0.72	0.67	1	0.69	0.68
		9	3	0.79	0.57	1	0.75	0.57
		10	6	0.46	0.81	2	0.39	0.78
		11	3	0.68	0.72	1	0.65	0.71
		12	3	0.52	0.62	1	0.49	0.63
		13	3	0.40	0.57	1	0.36	0.58
		14	3	0.47	0.45	1	0.43	0.45
		15	6	0.70	0.77	2	0.65	0.76
		16	3	0.47	0.61	1	0.45	0.62
		17	3	0.35	0.37	1	0.31	0.36
		18	3	0.46	0.50	1	0.42	0.51
		19	3	0.30	0.25	1	0.27	0.23
		20	6	0.40	0.80	2	0.26	0.75
		21	3	0.25	0.34	1	0.23	0.37
		22	3	0.43	0.57	1	0.39	0.57
		23	3	0.52	0.52	1	0.49	0.53
		24	6	0.41	0.82	2	0.28	0.77
		25	3	0.29	0.38	1	0.27	0.41
		26	3	0.26	0.27	1	0.23	0.30
		27	3	0.44	0.54	1	0.41	0.54
		28	3	0.28	0.33	1	0.25	0.34
		29	6	0.65	0.79	2	0.57	0.76

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	0.35	0.35	1	0.30	0.33
		2	3	0.43	0.49	1	0.39	0.48
		3	3	0.67	0.70	1	0.64	0.68
		4	3	0.61	0.61	1	0.58	0.62
		5	6	0.78	0.74	2	0.74	0.74
		6	3	0.33	0.27	1	0.29	0.29
		7	3	0.54	0.60	1	0.50	0.60
		8	3	0.71	0.61	1	0.67	0.62
		9	3	0.66	0.66	1	0.64	0.68
		10	6	0.53	0.83	2	0.45	0.78
		11	3	0.75	0.75	1	0.71	0.74
		12	3	0.70	0.74	1	0.68	0.75
		13	3	0.27	0.37	1	0.24	0.38
		14	3	0.57	0.67	1	0.54	0.68
		15	6	0.74	0.78	2	0.69	0.77
		16	3	0.53	0.49	1	0.51	0.49
		17	3	0.31	0.39	1	0.28	0.40
		18	3	0.53	0.50	1	0.51	0.50
		19	3	0.32	0.23	1	0.28	0.24
		20	6	0.47	0.84	2	0.32	0.76
		21	3	0.19	0.21	1	0.17	0.22
		22	3	0.51	0.49	1	0.49	0.49
		23	3	0.55	0.61	1	0.52	0.62
		24	3	0.49	0.60	1	0.46	0.59
		25	6	0.48	0.82	2	0.33	0.76
		26	3	0.46	0.46	1	0.43	0.48
		27	3	0.38	0.31	1	0.36	0.35
		28	3	0.55	0.61	1	0.52	0.59
		29	3	0.34	0.38	1	0.31	0.40
		30	6	0.72	0.78	2	0.65	0.76

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	0.40	0.44	1	0.36	0.43
		2	3	0.70	0.65	1	0.68	0.65
		3	3	0.71	0.71	1	0.67	0.69
		4	3	0.69	0.74	1	0.68	0.72
		5	6	0.80	0.74	2	0.76	0.73
		6	3	0.31	0.34	1	0.30	0.35
		7	3	0.48	0.57	1	0.46	0.57
		8	3	0.74	0.64	1	0.72	0.64
		9	3	0.68	0.55	1	0.65	0.56
		10	6	0.55	0.86	2	0.48	0.82
		11	3	0.74	0.69	1	0.72	0.69
		12	3	0.74	0.71	1	0.71	0.71
		13	3	0.30	0.31	1	0.27	0.34
		14	3	0.61	0.62	1	0.60	0.62
		15	6	0.75	0.79	2	0.72	0.77
		16	3	0.59	0.55	1	0.57	0.56
		17	3	0.51	0.59	1	0.49	0.59
		18	3	0.53	0.55	1	0.50	0.53
		19	3	0.23	0.17	1	0.21	0.17
		20	6	0.53	0.85	2	0.39	0.81
		21	3	0.32	0.40	1	0.30	0.42
		22	3	0.62	0.63	1	0.59	0.64
		23	3	0.22	0.21	1	0.20	0.22
		24	6	0.54	0.85	2	0.40	0.81
		25	3	0.38	0.40	1	0.37	0.44
		26	3	0.44	0.40	1	0.42	0.42
		27	3	0.43	0.52	1	0.40	0.56
		28	3	0.53	0.48	1	0.52	0.49
		29	6	0.71	0.80	2	0.65	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	6	1	3	0.70	0.62	1	0.65	0.61
		2	3	0.71	0.60	1	0.66	0.61
		3	3	0.72	0.72	1	0.69	0.71
		4	3	0.76	0.68	1	0.74	0.69
		5	6	0.85	0.74	2	0.83	0.74
		6	3	0.74	0.68	1	0.71	0.69
		7	3	0.47	0.40	1	0.44	0.44
		8	3	0.73	0.70	1	0.70	0.72
		9	3	0.67	0.65	1	0.65	0.67
		10	6	0.66	0.85	2	0.60	0.83
		11	3	0.73	0.72	1	0.69	0.72
		12	3	0.79	0.68	1	0.76	0.69
		13	3	0.56	0.43	1	0.54	0.45
		14	3	0.50	0.44	1	0.48	0.46
		15	6	0.79	0.78	2	0.75	0.77
		16	3	0.73	0.70	1	0.71	0.70
		17	3	0.49	0.52	1	0.47	0.54
		18	3	0.48	0.47	1	0.46	0.50
		19	3	0.34	0.20	1	0.31	0.21
		20	6	0.60	0.85	2	0.45	0.78
		21	3	0.38	0.43	1	0.35	0.46
		22	3	0.48	0.49	1	0.45	0.51
		23	3	0.40	0.39	1	0.38	0.41
		24	6	0.61	0.82	2	0.44	0.75
		25	3	0.49	0.41	1	0.46	0.43
		26	3	0.36	0.27	1	0.34	0.28
		27	3	0.43	0.45	1	0.39	0.45
		28	3	0.45	0.51	1	0.42	0.52
		29	6	0.79	0.79	2	0.74	0.77

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	0.76	0.61	1	0.72	0.64
		2	3	0.51	0.63	1	0.49	0.65
		3	3	0.74	0.71	1	0.71	0.68
		4	3	0.76	0.65	1	0.73	0.66
		5	6	0.82	0.72	2	0.80	0.72
		6	3	0.54	0.60	1	0.52	0.60
		7	3	0.54	0.67	1	0.51	0.69
		8	3	0.67	0.74	1	0.64	0.75
		9	3	0.64	0.69	1	0.61	0.71
		10	6	0.64	0.88	2	0.58	0.87
		11	3	0.77	0.72	1	0.74	0.73
		12	3	0.33	0.38	1	0.32	0.41
		13	3	0.46	0.51	1	0.44	0.50
		14	3	0.72	0.70	1	0.70	0.70
		15	6	0.79	0.77	2	0.76	0.76
		16	3	0.51	0.56	1	0.48	0.58
		17	3	0.43	0.49	1	0.41	0.52
		18	3	0.68	0.67	1	0.66	0.68
		19	3	0.30	0.15	1	0.27	0.15
		20	6	0.57	0.86	2	0.43	0.79
		21	3	0.35	0.34	1	0.32	0.35
		22	3	0.43	0.37	1	0.41	0.39
		23	3	0.61	0.57	1	0.60	0.60
		24	3	0.44	0.49	1	0.43	0.50
		25	6	0.58	0.86	2	0.44	0.79
		26	3	0.23	0.25	1	0.22	0.28
		27	3	0.65	0.59	1	0.64	0.60
		28	3	0.49	0.54	1	0.46	0.53
		29	3	0.50	0.44	1	0.46	0.44
		30	6	0.70	0.84	2	0.65	0.83

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	0.71	0.72	1	0.69	0.72
		2	3	0.70	0.71	1	0.69	0.71
		3	3	0.77	0.71	1	0.74	0.69
		4	3	0.79	0.70	1	0.77	0.69
		5	6	0.86	0.70	2	0.84	0.70
		6	3	0.61	0.71	1	0.59	0.72
		7	3	0.79	0.61	1	0.76	0.61
		8	3	0.69	0.70	1	0.67	0.71
		9	3	0.62	0.69	1	0.60	0.72
		10	6	0.63	0.86	2	0.56	0.84
		11	3	0.39	0.31	1	0.37	0.34
		12	3	0.39	0.25	1	0.38	0.27
		13	3	0.27	0.27	1	0.25	0.27
		14	3	0.72	0.72	1	0.70	0.72
		15	6	0.82	0.75	2	0.80	0.74
		16	3	0.36	0.39	1	0.34	0.41
		17	3	0.42	0.47	1	0.41	0.49
		18	3	0.34	0.43	1	0.33	0.43
		19	3	0.29	0.14	1	0.26	0.17
		20	6	0.64	0.87	2	0.49	0.83
		21	3	0.33	0.27	1	0.31	0.31
		22	3	0.33	0.33	1	0.32	0.33
		23	3	0.44	0.47	1	0.42	0.48
		24	3	0.60	0.70	1	0.59	0.69
		25	6	0.62	0.85	2	0.47	0.79
		26	3	0.38	0.37	1	0.37	0.38
		27	3	0.29	0.32	1	0.28	0.33
		28	3	0.61	0.60	1	0.60	0.61
		29	3	0.44	0.53	1	0.43	0.54
		30	6	0.72	0.82	2	0.67	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	9	1	3	0.70	0.71	1	0.66	0.71
		2	3	0.71	0.65	1	0.68	0.66
		3	3	0.75	0.76	1	0.73	0.74
		4	3	0.78	0.71	1	0.76	0.70
		5	6	0.78	0.80	2	0.75	0.79
		6	3	0.56	0.45	1	0.55	0.44
		7	3	0.55	0.63	1	0.52	0.64
		8	3	0.38	0.51	1	0.36	0.51
		9	3	0.42	0.41	1	0.40	0.43
		10	6	0.64	0.86	2	0.57	0.84
		11	3	0.63	0.69	1	0.61	0.70
		12	3	0.67	0.72	1	0.65	0.72
		13	3	0.41	0.46	1	0.38	0.47
		14	3	0.49	0.58	1	0.47	0.60
		15	6	0.79	0.77	2	0.76	0.75
		16	3	0.36	0.41	1	0.35	0.40
		17	3	0.30	0.41	1	0.28	0.40
		18	3	0.51	0.61	1	0.49	0.62
		19	3	0.34	0.19	1	0.32	0.20
		20	6	0.60	0.85	2	0.47	0.79
		21	3	0.42	0.51	1	0.40	0.51
		22	3	0.44	0.39	1	0.42	0.40
		23	3	0.52	0.52	1	0.51	0.55
		24	6	0.57	0.83	2	0.41	0.76
		25	3	0.30	0.36	1	0.29	0.39
		26	3	0.27	0.25	1	0.26	0.28
		27	3	0.47	0.60	1	0.45	0.62
		28	3	0.45	0.41	1	0.44	0.42
		29	6	0.68	0.84	2	0.61	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	10	1	3	0.69	0.65	1	0.64	0.67
		2	3	0.53	0.64	1	0.50	0.65
		3	3	0.77	0.71	1	0.75	0.67
		4	3	0.77	0.69	1	0.75	0.68
		5	6	0.83	0.76	2	0.80	0.74
		6	3	0.60	0.59	1	0.57	0.61
		7	3	0.61	0.53	1	0.59	0.56
		8	3	0.47	0.56	1	0.44	0.55
		9	3	0.46	0.51	1	0.44	0.51
		10	6	0.64	0.83	2	0.58	0.82
		11	3	0.51	0.55	1	0.49	0.57
		12	3	0.25	0.27	1	0.23	0.28
		13	3	0.22	0.26	1	0.19	0.28
		14	3	0.48	0.42	1	0.46	0.44
		15	6	0.78	0.71	2	0.74	0.68
		16	3	0.37	0.34	1	0.35	0.34
		17	3	0.56	0.59	1	0.54	0.59
		18	3	0.51	0.35	1	0.49	0.37
		19	3	0.42	0.37	1	0.40	0.37
		20	6	0.63	0.83	2	0.50	0.81
		21	3	0.27	0.16	1	0.26	0.16
		22	3	0.47	0.30	1	0.44	0.32
		23	3	0.47	0.61	1	0.45	0.63
		24	3	0.50	0.46	1	0.47	0.47
		25	6	0.61	0.83	2	0.46	0.79
		26	3	0.50	0.50	1	0.48	0.51
		27	3	0.19	0.14	1	0.17	0.19
		28	3	0.64	0.61	1	0.61	0.61
		29	3	0.44	0.34	1	0.41	0.33
		30	6	0.68	0.78	2	0.60	0.77

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	0.84	0.65	1	0.81	0.64
		2	6	0.74	0.77	2	0.65	0.74
		3	3	0.62	0.68	1	0.56	0.68
		4	6	0.56	0.70	2	0.43	0.69
		5	6	0.73	0.77	2	0.68	0.77
		6	3	0.67	0.73	1	0.62	0.73
		7	3	0.77	0.68	1	0.74	0.68
		8	3	0.44	0.55	1	0.40	0.57
		9	6	0.68	0.65	2	0.58	0.66
		10	3	0.60	0.68	1	0.55	0.68
		11	3	0.51	0.56	1	0.47	0.59
		12	6	0.47	0.58	2	0.30	0.53
		13	6	0.60	0.81	2	0.52	0.78
		14	3	0.49	0.49	1	0.46	0.50
		15	3	0.63	0.72	1	0.57	0.71
		16	3	0.38	0.59	1	0.32	0.58
		17	6	0.59	0.82	2	0.50	0.78
		18	3	0.86	0.66	1	0.84	0.64
		19	3	0.73	0.62	1	0.70	0.63
		20	3	0.63	0.69	1	0.61	0.67
		21	3	0.71	0.69	1	0.67	0.70
		22	3	0.35	0.40	1	0.27	0.38
		23	6	0.83	0.68	2	0.77	0.62
		24	6	0.51	0.65	2	0.33	0.60
		25	3	0.43	0.40	1	0.38	0.42
		26	6	0.53	0.55	2	0.29	0.49
		27	3	0.45	0.56	1	0.42	0.55
		28	3	0.62	0.71	1	0.59	0.71
		29	3	0.53	0.73	1	0.50	0.73
		30	3	0.36	0.55	1	0.31	0.53
		31	3	0.53	0.70	1	0.47	0.69
		32	3	0.64	0.66	1	0.58	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
MA	4	1	3	0.86	0.69	1	0.82	0.67
		2	6	0.76	0.79	2	0.69	0.80
		3	6	0.77	0.83	2	0.73	0.81
		4	6	0.66	0.70	2	0.54	0.68
		5	3	0.55	0.58	1	0.50	0.58
		6	3	0.70	0.69	1	0.65	0.70
		7	3	0.79	0.66	1	0.77	0.66
		8	3	0.55	0.57	1	0.51	0.60
		9	6	0.61	0.65	2	0.51	0.64
		10	3	0.68	0.67	1	0.65	0.69
		11	3	0.51	0.52	1	0.48	0.53
		12	6	0.51	0.62	2	0.39	0.57
		13	3	0.70	0.67	1	0.67	0.65
		14	3	0.63	0.44	1	0.59	0.44
		15	3	0.69	0.76	1	0.66	0.78
		16	6	0.51	0.63	2	0.44	0.64
		17	3	0.76	0.63	1	0.73	0.63
		18	6	0.83	0.74	2	0.76	0.67
		19	6	0.67	0.73	2	0.57	0.69
		20	6	0.52	0.72	2	0.39	0.68
		21	3	0.63	0.67	1	0.57	0.69
		22	3	0.70	0.76	1	0.66	0.75
		23	3	0.10	0.17	1	0.06	0.18
		24	3	0.71	0.60	1	0.68	0.61
		25	3	0.62	0.69	1	0.58	0.72
		26	6	0.56	0.68	2	0.40	0.64
		27	3	0.49	0.57	1	0.46	0.57
		28	6	0.37	0.62	2	0.28	0.58
		29	3	0.62	0.74	1	0.59	0.73
		30	3	0.57	0.65	1	0.54	0.67
		31	3	0.59	0.69	1	0.55	0.69
		32	3	0.35	0.55	1	0.30	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
		1	3	0.83	0.70	1	0.81	0.66
		2	3	0.68	0.72	1	0.65	0.70
		3	6	0.59	0.71	2	0.46	0.69
		4	6	0.71	0.74	2	0.61	0.76
		5	6	0.56	0.72	2	0.41	0.64
		6	6	0.42	0.58	2	0.32	0.60
		7	3	0.79	0.61	1	0.77	0.61
		8	3	0.51	0.73	1	0.48	0.72
		9	6	0.76	0.77	2	0.70	0.76
		10	3	0.54	0.58	1	0.51	0.59
		11	3	0.36	0.36	1	0.30	0.33
		12	6	0.66	0.75	2	0.57	0.73
		13	6	0.60	0.62	2	0.52	0.60
		14	3	0.52	0.55	1	0.49	0.56
		15	3	0.58	0.67	1	0.54	0.67
		16	3	0.34	0.41	1	0.29	0.39
		17	6	0.38	0.46	2	0.25	0.44
MA	5	18	6	0.32	0.50	2	0.26	0.51
		19	3	0.64	0.71	1	0.60	0.72
		20	3	0.48	0.55	1	0.44	0.56
		21	3	0.60	0.51	1	0.58	0.52
		22	6	0.84	0.70	2	0.78	0.70
		23	6	0.74	0.79	2	0.63	0.76
		24	3	0.34	0.58	1	0.27	0.54
		25	6	0.53	0.76	2	0.41	0.72
		26	6	0.52	0.67	2	0.37	0.61
		27	6	0.48	0.60	2	0.33	0.58
		28	6	0.30	0.55	2	0.22	0.50
		29	6	0.49	0.61	2	0.36	0.60
		30	3	0.54	0.48	1	0.52	0.49
		31	6	0.77	0.62	2	0.71	0.63
		32	3	0.67	0.74	1	0.63	0.72
		33	3	0.56	0.62	1	0.54	0.64
		34	3	0.58	0.73	1	0.55	0.75
		35	3	0.47	0.61	1	0.45	0.61

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	0.62	0.52	1	0.59	0.53
		37	3	0.76	0.69	1	0.74	0.68
		38	3	0.57	0.71	1	0.53	0.69
		39	3	0.33	0.42	1	0.31	0.44
		40	3	0.37	0.61	1	0.33	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
		1	6	0.66	0.70	2	0.51	0.65
		2	6	0.76	0.70	2	0.66	0.71
		3	6	0.82	0.78	2	0.76	0.77
		4	6	0.61	0.75	2	0.49	0.74
		5	3	0.58	0.53	1	0.55	0.57
		6	6	0.69	0.77	2	0.59	0.73
		7	3	0.50	0.57	1	0.44	0.57
		8	3	0.82	0.62	1	0.80	0.63
		9	3	0.65	0.63	1	0.62	0.66
		10	3	0.52	0.49	1	0.50	0.53
		11	3	0.45	0.55	1	0.38	0.54
		12	6	0.63	0.70	2	0.44	0.63
		13	3	0.48	0.50	1	0.46	0.50
		14	3	0.63	0.56	1	0.57	0.56
		15	6	0.65	0.74	2	0.56	0.75
		16	3	0.55	0.62	1	0.50	0.62
MA	6	17	3	0.38	0.63	1	0.32	0.61
		18	3	0.49	0.50	1	0.46	0.50
		19	6	0.76	0.73	2	0.67	0.70
		20	6	0.50	0.77	2	0.40	0.72
		21	3	0.86	0.60	1	0.85	0.57
		22	3	0.32	0.19	1	0.28	0.21
		23	3	0.57	0.43	1	0.54	0.45
		24	3	0.80	0.67	1	0.78	0.65
		25	3	0.76	0.72	1	0.75	0.69
		26	3	0.34	0.23	1	0.31	0.24
		27	3	0.68	0.61	1	0.65	0.63
		28	3	0.56	0.53	1	0.53	0.54
		29	6	0.65	0.74	2	0.53	0.72
		30	6	0.38	0.64	2	0.27	0.60
		31	6	0.61	0.71	2	0.49	0.68
		32	3	0.77	0.75	1	0.74	0.75
		33	3	0.59	0.71	1	0.55	0.73
		34	3	0.33	0.59	1	0.28	0.58

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	0.64	0.70	2	0.46	0.63
		2	6	0.73	0.73	2	0.64	0.74
		3	6	0.81	0.76	2	0.75	0.77
		4	6	0.63	0.70	2	0.52	0.69
		5	3	0.54	0.53	1	0.49	0.50
		6	6	0.71	0.77	2	0.62	0.76
		7	3	0.44	0.52	1	0.41	0.53
		8	3	0.35	0.38	1	0.31	0.40
		9	3	0.59	0.57	1	0.55	0.60
		10	3	0.49	0.52	1	0.46	0.55
		11	3	0.31	0.27	1	0.28	0.30
		12	3	0.39	0.53	1	0.37	0.55
		13	3	0.57	0.67	1	0.55	0.69
		14	3	0.29	0.35	1	0.26	0.36
		15	3	0.51	0.48	1	0.47	0.50
		16	6	0.49	0.74	2	0.41	0.73
MA	7	17	6	0.75	0.77	2	0.67	0.74
		18	3	0.72	0.72	1	0.68	0.73
		19	3	0.38	0.54	1	0.33	0.53
		20	6	0.50	0.64	2	0.38	0.62
		21	3	0.60	0.51	1	0.58	0.54
		22	3	0.72	0.57	1	0.70	0.57
		23	3	0.68	0.65	1	0.66	0.66
		24	3	0.39	0.34	1	0.37	0.34
		25	3	0.62	0.61	1	0.59	0.62
		26	6	0.61	0.66	2	0.47	0.62
		27	6	0.64	0.73	2	0.50	0.69
		28	3	0.57	0.57	1	0.54	0.58
		29	6	0.42	0.70	2	0.34	0.68
		30	3	0.14	0.45	1	0.10	0.41
		31	3	0.56	0.66	1	0.53	0.66
		32	3	0.41	0.45	1	0.39	0.48
		33	3	0.48	0.53	1	0.46	0.55

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	0.62	0.60	2	0.44	0.61
		2	6	0.73	0.65	2	0.63	0.69
		3	6	0.62	0.70	2	0.52	0.73
		4	6	0.51	0.67	2	0.42	0.66
		5	3	0.47	0.39	1	0.44	0.43
		6	6	0.74	0.72	2	0.62	0.76
		7	6	0.61	0.73	2	0.51	0.68
		8	3	0.65	0.50	1	0.62	0.50
		9	3	0.39	0.41	1	0.36	0.42
		10	3	0.52	0.57	1	0.50	0.58
		11	3	0.40	0.34	1	0.39	0.33
		12	3	0.53	0.43	1	0.50	0.43
		13	3	0.37	0.43	1	0.35	0.44
		14	3	0.40	0.42	1	0.39	0.43
		15	3	0.52	0.73	1	0.48	0.72
		16	3	0.54	0.66	1	0.48	0.66
		17	3	0.64	0.58	1	0.56	0.55
MA	8	18	6	0.59	0.81	2	0.51	0.77
		19	3	0.56	0.69	1	0.52	0.67
		20	3	0.63	0.76	1	0.58	0.75
		21	6	0.74	0.79	2	0.64	0.76
		22	3	0.80	0.64	1	0.79	0.63
		23	3	0.81	0.48	1	0.79	0.47
		24	3	0.58	0.66	1	0.55	0.65
		25	3	0.52	0.73	1	0.47	0.71
		26	3	0.77	0.66	1	0.76	0.65
		27	3	0.57	0.56	1	0.55	0.57
		28	3	0.57	0.58	1	0.52	0.59
		29	6	0.59	0.65	2	0.41	0.63
		30	6	0.64	0.65	2	0.46	0.58
		31	6	0.49	0.73	2	0.42	0.72
		32	3	0.27	0.55	1	0.22	0.53
		33	3	0.25	0.18	1	0.23	0.19
		34	3	0.42	0.34	1	0.39	0.35
		35	3	0.66	0.67	1	0.64	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
MA	8	36	3	0.58	0.66	1	0.53	0.65
		37	3	0.32	0.31	1	0.30	0.33
		38	3	0.53	0.55	1	0.51	0.55

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	0.70	2	0.55	0.69
		2	6	0.72	0.67	2	0.62	0.69
		3	6	0.59	0.72	2	0.48	0.70
		4	3	0.43	0.40	1	0.38	0.44
		5	6	0.72	0.73	2	0.59	0.77
		6	6	0.44	0.66	2	0.30	0.61
		7	3	0.63	0.62	1	0.59	0.63
		8	3	0.53	0.62	1	0.49	0.62
		9	3	0.45	0.54	1	0.42	0.58
		10	3	0.46	0.36	1	0.42	0.38
		11	3	0.30	0.39	1	0.28	0.40
		12	3	0.30	0.41	1	0.29	0.42
		13	6	0.55	0.77	2	0.42	0.74
		14	3	0.33	0.66	1	0.30	0.63
		15	6	0.55	0.77	2	0.45	0.76
		16	3	0.48	0.43	1	0.39	0.38
		17	3	0.34	0.60	1	0.27	0.54
MA	9	18	3	0.21	0.28	1	0.17	0.28
		19	3	0.35	0.60	1	0.29	0.59
		20	3	0.76	0.52	1	0.70	0.50
		21	3	0.29	0.25	1	0.26	0.26
		22	3	0.38	0.38	1	0.34	0.37
		23	3	0.63	0.60	1	0.59	0.59
		24	3	0.63	0.52	1	0.61	0.51
		25	6	0.52	0.59	2	0.41	0.59
		26	3	0.65	0.56	1	0.62	0.56
		27	3	0.54	0.65	1	0.48	0.62
		28	6	0.59	0.65	2	0.48	0.66
		29	6	0.46	0.75	2	0.36	0.72
		30	3	0.25	0.62	1	0.18	0.56
		31	3	0.29	0.28	1	0.25	0.24
		32	3	0.25	0.32	1	0.22	0.32
		33	3	0.37	0.39	1	0.31	0.37
		34	3	0.44	0.59	1	0.43	0.61
		35	3	0.21	0.25	1	0.19	0.28

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	9	36	3	0.39	0.39	1	0.36	0.41
		37	3	0.51	0.56	1	0.49	0.57
		38	3	0.35	0.48	1	0.32	0.49

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	0.70	2	0.53	0.69
		2	6	0.71	0.62	2	0.60	0.66
		3	6	0.60	0.73	2	0.50	0.71
		4	6	0.51	0.62	2	0.38	0.62
		5	3	0.29	0.41	1	0.23	0.41
		6	6	0.73	0.71	2	0.60	0.73
		7	3	0.67	0.61	1	0.66	0.60
		8	3	0.47	0.47	1	0.44	0.49
		9	3	0.33	0.41	1	0.31	0.42
		10	3	0.30	0.35	1	0.27	0.38
		11	3	0.19	0.07	1	0.17	0.10
		12	3	0.25	0.31	1	0.23	0.34
		13	3	0.33	0.21	1	0.30	0.24
		14	3	0.28	0.28	1	0.25	0.28
		15	6	0.67	0.75	2	0.56	0.73
		16	3	0.66	0.68	1	0.60	0.67
		17	3	0.65	0.55	1	0.63	0.56
MA	10	18	3	0.23	0.33	1	0.19	0.32
		19	6	0.42	0.72	2	0.31	0.70
		20	3	0.39	0.39	1	0.34	0.37
		21	3	0.29	0.50	1	0.25	0.50
		22	3	0.39	0.33	1	0.37	0.34
		23	3	0.56	0.55	1	0.54	0.56
		24	6	0.79	0.69	2	0.70	0.65
		25	3	0.22	0.42	1	0.20	0.43
		26	3	0.57	0.61	1	0.54	0.62
		27	3	0.58	0.62	1	0.56	0.62
		28	6	0.56	0.64	2	0.41	0.65
		29	6	0.56	0.64	2	0.38	0.60
		30	6	0.38	0.68	2	0.26	0.64
		31	3	0.07	0.30	1	0.05	0.30
		32	3	0.28	0.15	1	0.25	0.17
		33	3	0.16	0.13	1	0.15	0.17
		34	3	0.17	0.19	1	0.14	0.20
		35	3	0.34	0.52	1	0.32	0.55

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	0.58	2	0.27	0.55
		37	3	0.45	0.50	1	0.43	0.51
		38	3	0.56	0.58	1	0.54	0.57
		39	3	0.52	0.51	1	0.50	0.53
		40	3	0.31	0.36	1	0.29	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	0.81	0.62	1	0.80	0.59
		2	3	0.84	0.69	1	0.81	0.67
		3	3	0.73	0.63	1	0.70	0.64
		4	3	0.83	0.72	1	0.81	0.71
		5	3	0.73	0.66	1	0.70	0.67
		6	3	0.49	0.51	1	0.46	0.53
		7	3	0.74	0.65	1	0.71	0.67
		8	3	0.37	0.29	1	0.36	0.31
		9	3	0.59	0.54	1	0.57	0.56
		10	3	0.48	0.60	1	0.46	0.60
		11	3	0.42	0.52	1	0.39	0.52
		12	6	0.81	0.74	2	0.72	0.73
		13	3	0.74	0.65	1	0.72	0.66
		14	3	0.39	0.43	1	0.37	0.44
		15	3	0.64	0.65	1	0.63	0.64
		16	3	0.50	0.60	1	0.47	0.61
		17	3	0.69	0.68	1	0.65	0.68
		18	3	0.67	0.66	1	0.65	0.68
		19	6	0.77	0.75	2	0.65	0.79
		20	3	0.85	0.71	1	0.83	0.71
		21	3	0.80	0.70	1	0.78	0.71
		22	3	0.60	0.54	1	0.57	0.56
		23	3	0.59	0.66	1	0.57	0.66
		24	3	0.45	0.51	1	0.41	0.52
		25	3	0.67	0.71	1	0.65	0.72
		26	3	0.62	0.64	1	0.60	0.64
		27	3	0.60	0.69	1	0.58	0.71
		28	3	0.63	0.50	1	0.59	0.51
		29	3	0.67	0.67	1	0.65	0.67
		30	3	0.60	0.63	1	0.58	0.64

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	0.87	0.67	1	0.86	0.63
		2	3	0.73	0.63	1	0.70	0.65
		3	3	0.30	0.24	1	0.28	0.23
		4	3	0.82	0.73	1	0.81	0.73
		5	3	0.82	0.68	1	0.80	0.67
		6	3	0.78	0.66	1	0.77	0.67
		7	3	0.71	0.62	1	0.69	0.62
		8	3	0.54	0.54	1	0.51	0.54
		9	3	0.51	0.49	1	0.49	0.51
		10	3	0.71	0.68	1	0.64	0.66
		11	3	0.59	0.55	1	0.56	0.57
		12	3	0.66	0.51	1	0.63	0.51
		13	3	0.68	0.56	1	0.64	0.56
		14	3	0.76	0.62	1	0.74	0.63
		15	3	0.62	0.54	1	0.58	0.52
		16	3	0.84	0.70	1	0.81	0.70
		17	3	0.74	0.69	1	0.72	0.71
		18	3	0.75	0.55	1	0.72	0.55
		19	3	0.79	0.71	1	0.78	0.70
		20	3	0.86	0.71	1	0.84	0.70
		21	6	0.80	0.73	2	0.70	0.78
		22	3	0.67	0.56	1	0.65	0.57
		23	6	0.83	0.76	2	0.75	0.76
		24	3	0.63	0.64	1	0.60	0.66
		25	3	0.67	0.70	1	0.64	0.72
		26	3	0.76	0.74	1	0.74	0.75
		27	3	0.87	0.70	1	0.86	0.67
		28	3	0.83	0.69	1	0.80	0.70
		29	6	0.80	0.65	2	0.68	0.64
		30	3	0.73	0.67	1	0.70	0.67

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
		1	3	0.43	0.26	1	0.41	0.26
		2	3	0.72	0.61	1	0.70	0.64
		3	3	0.67	0.67	1	0.65	0.67
		4	3	0.70	0.57	1	0.68	0.57
		5	3	0.83	0.66	1	0.81	0.64
		6	3	0.79	0.66	1	0.78	0.64
		7	3	0.85	0.63	1	0.84	0.61
		8	3	0.74	0.51	1	0.71	0.51
		9	3	0.24	0.36	1	0.22	0.38
		10	6	0.57	0.73	2	0.52	0.72
		11	3	0.60	0.63	1	0.57	0.64
		12	3	0.42	0.43	1	0.39	0.43
		13	3	0.36	0.44	1	0.33	0.43
		14	3	0.29	0.40	1	0.28	0.40
SC	10	15	3	0.75	0.52	1	0.71	0.55
		16	3	0.27	0.30	1	0.25	0.31
		17	3	0.65	0.62	1	0.63	0.62
		18	3	0.71	0.66	1	0.69	0.66
		19	3	0.62	0.71	1	0.60	0.73
		20	3	0.36	0.47	1	0.34	0.46
		21	6	0.69	0.67	2	0.59	0.69
		22	3	0.61	0.56	1	0.59	0.56
		23	3	0.37	0.55	1	0.35	0.57
		24	3	0.57	0.50	1	0.55	0.50
		25	3	0.57	0.63	1	0.54	0.63
		26	3	0.54	0.63	1	0.50	0.64
		27	6	0.57	0.76	2	0.51	0.76
		28	6	0.45	0.71	2	0.39	0.69
		29	3	0.76	0.61	1	0.74	0.62
		30	3	0.74	0.67	1	0.72	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	0.84	0.54	0.24	0.74	0.56	0.31
	4	0.84	0.55	0.25	0.70	0.55	0.31
	5	0.86	0.56	0.24	0.73	0.58	0.19
	6	0.89	0.62	0.23	0.69	0.56	0.16
	7	0.85	0.55	0.25	0.71	0.52	0.22
	8	0.86	0.54	0.34	0.69	0.53	0.32
	9	0.82	0.53	0.29	0.71	0.56	0.37
	10	0.75	0.50	0.26	0.68	0.50	0.28
WR	3	0.79	0.49	0.25	0.82	0.57	0.25
	4	0.78	0.52	0.19	0.84	0.56	0.21
	5	0.80	0.54	0.22	0.86	0.58	0.17
	6	0.85	0.60	0.34	0.85	0.59	0.20
	7	0.82	0.57	0.23	0.88	0.60	0.15
	8	0.86	0.55	0.27	0.87	0.57	0.14
	9	0.79	0.53	0.27	0.86	0.58	0.19
	10	0.83	0.53	0.19	0.83	0.53	0.14
MA	3	0.86	0.60	0.35	0.82	0.65	0.40
	4	0.86	0.61	0.10	0.83	0.65	0.17
	5	0.84	0.56	0.30	0.79	0.62	0.36
	6	0.86	0.60	0.32	0.78	0.62	0.19
	7	0.81	0.54	0.14	0.77	0.59	0.27
	8	0.81	0.56	0.25	0.81	0.58	0.18
	9	0.76	0.46	0.21	0.77	0.53	0.25
	10	0.79	0.44	0.07	0.75	0.49	0.07
SC	5	0.85	0.64	0.37	0.75	0.62	0.29
	8	0.87	0.72	0.30	0.76	0.63	0.24
	10	0.85	0.58	0.24	0.76	0.57	0.26

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	0.83	0.51	0.22	0.74	0.56	0.33
	4	0.83	0.52	0.21	0.72	0.56	0.32
	5	0.84	0.54	0.22	0.75	0.59	0.20
	6	0.88	0.60	0.21	0.70	0.58	0.21
	7	0.84	0.53	0.23	0.73	0.53	0.25
	8	0.85	0.52	0.33	0.71	0.54	0.33
	9	0.80	0.51	0.27	0.71	0.57	0.37
	10	0.72	0.47	0.24	0.69	0.51	0.30
WR	3	0.75	0.45	0.23	0.78	0.57	0.23
	4	0.74	0.47	0.17	0.78	0.56	0.22
	5	0.76	0.51	0.20	0.82	0.58	0.17
	6	0.83	0.56	0.31	0.83	0.59	0.21
	7	0.80	0.54	0.22	0.87	0.60	0.15
	8	0.84	0.52	0.25	0.84	0.57	0.17
	9	0.76	0.50	0.26	0.84	0.58	0.20
	10	0.80	0.49	0.17	0.82	0.53	0.16
MA	3	0.84	0.53	0.27	0.78	0.63	0.38
	4	0.82	0.55	0.06	0.81	0.64	0.18
	5	0.81	0.50	0.22	0.76	0.61	0.33
	6	0.85	0.54	0.27	0.77	0.61	0.21
	7	0.75	0.48	0.10	0.77	0.58	0.30
	8	0.79	0.50	0.22	0.77	0.58	0.19
	9	0.70	0.40	0.17	0.77	0.53	0.24
	10	0.70	0.38	0.05	0.73	0.49	0.10
SC	5	0.83	0.61	0.36	0.79	0.62	0.31
	8	0.86	0.69	0.28	0.78	0.63	0.23
	10	0.84	0.55	0.22	0.76	0.57	0.26

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	2.2	Identify elements of literature (character, plot, setting)	0.49	0.38	0.34	0.06	0.64	0.49	0.35	0.11
		3.1	Demonstrate knowledge that various texts have different purposes	0.57	0.39	0.24	0.15	0.64	0.51	0.38	0.10
		2.1	Make connections to reading passages	0.58	0.47	0.26	0.12	0.66	0.52	0.31	0.15
		1.3	Demonstrate understanding of beginning principles of phonics	0.76	0.57	0.31	0.22	0.71	0.57	0.38	0.16
		3.2	Understand informational text	0.69	0.59	0.41	0.12	0.65	0.49	0.33	0.12
		1.4	Use a variety of strategies to make meaning of text	0.74	0.66	0.60	0.06	0.72	0.65	0.55	0.07
		1.2	Demonstrate understanding of symbolic representation	0.84	0.70	0.45	0.16	0.74	0.66	0.61	0.05
	4	2.2	Identify elements of literature (character, plot, setting)	0.55	0.41	0.29	0.10	0.58	0.49	0.42	0.06
		3.1	Demonstrate knowledge that various texts have different purposes	0.60	0.45	0.33	0.11	0.65	0.51	0.35	0.11
		3.2	Understand informational text	0.65	0.49	0.33	0.13	0.64	0.51	0.37	0.13
		2.1	Make connections to reading passages	0.58	0.51	0.43	0.07	0.58	0.55	0.51	0.03
		1.4	Use a variety of strategies to make meaning of text	0.72	0.55	0.25	0.20	0.69	0.57	0.32	0.15
		1.3	Demonstrate understanding of beginning principles of phonics	0.82	0.70	0.29	0.23	0.70	0.60	0.31	0.17
		1.2	Demonstrate understanding of symbolic representation	0.84	0.73	0.62	0.09	0.70	0.63	0.55	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	5	3.1	Demonstrate knowledge that various texts have different purposes	0.68	0.49	0.38	0.12	0.73	0.52	0.31	0.18
		2.2	Identify elements of literature (character, plot, setting)	0.61	0.50	0.39	0.10	0.70	0.59	0.52	0.08
		3.2	Understand informational text	0.63	0.51	0.44	0.07	0.65	0.55	0.42	0.09
		1.3	Demonstrate understanding of beginning principles of phonics	0.83	0.55	0.24	0.23	0.63	0.49	0.19	0.18
		2.1	Make connections to reading passages	0.75	0.56	0.35	0.18	0.71	0.61	0.49	0.10
		1.4	Use a variety of strategies to make meaning of text	0.77	0.61	0.45	0.14	0.72	0.65	0.52	0.08
		1.2	Demonstrate understanding of symbolic representation	0.86	0.70	0.54	0.14	0.65	0.63	0.58	0.03
	6	3.1	Demonstrate knowledge that various texts have different purposes	0.84	0.48	0.23	0.29	0.61	0.49	0.35	0.12
		2.2	Identify elements of literature (character, plot, setting)	0.70	0.54	0.44	0.11	0.65	0.57	0.49	0.07
		3.2	Understand informational text	0.79	0.57	0.42	0.18	0.60	0.48	0.16	0.18
		2.1	Make connections to reading passages	0.76	0.61	0.51	0.10	0.65	0.60	0.55	0.04
		1.4	Use a variety of strategies to make meaning of text	0.81	0.69	0.49	0.17	0.68	0.61	0.54	0.06
		1.2	Demonstrate understanding of symbolic representation	0.77	0.70	0.63	0.07	0.69	0.62	0.46	0.10
		1.3	Demonstrate understanding of beginning principles of phonics	0.89	0.76	0.46	0.18	0.67	0.59	0.40	0.11

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	3.1	Demonstrate knowledge that various texts have different purposes	0.60	0.36	0.26	0.14	0.40	0.29	0.22	0.08
		2.2	Identify elements of literature (character, plot, setting)	0.57	0.45	0.35	0.08	0.64	0.53	0.40	0.12
		2.1	Make connections to reading passages	0.72	0.47	0.25	0.20	0.69	0.49	0.29	0.16
		3.2	Understand informational text	0.67	0.50	0.37	0.11	0.60	0.49	0.35	0.09
		1.4	Use a variety of strategies to make meaning of text	0.80	0.61	0.38	0.19	0.70	0.59	0.45	0.11
		1.3	Demonstrate understanding of beginning principles of phonics	0.85	0.72	0.46	0.17	0.66	0.59	0.42	0.10
		1.2	Demonstrate understanding of symbolic representation	0.84	0.73	0.65	0.09	0.71	0.66	0.58	0.05
	8	2.2	Identify elements of literature (character, plot, setting)	0.51	0.44	0.34	0.07	0.53	0.48	0.35	0.08
		2.1	Make connections to reading passages	0.53	0.48	0.37	0.06	0.58	0.51	0.43	0.06
		3.1	Demonstrate knowledge that various texts have different purposes	0.68	0.50	0.40	0.11	0.62	0.53	0.33	0.12
		3.2	Understand informational text	0.60	0.50	0.35	0.13	0.60	0.52	0.37	0.11
		1.4	Use a variety of strategies to make meaning of text	0.78	0.53	0.36	0.20	0.69	0.55	0.32	0.15
		1.2	Demonstrate understanding of symbolic representation	0.76	0.64	0.44	0.14	0.69	0.60	0.51	0.07
		1.3	Demonstrate understanding of beginning principles of phonics	0.86	0.69	0.52	0.16	0.63	0.56	0.48	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	2.1	Make connections to reading passages	0.52	0.43	0.35	0.06	0.59	0.50	0.40	0.09
		3.1	Demonstrate knowledge that various texts have different purposes	0.52	0.43	0.29	0.09	0.64	0.54	0.37	0.11
		2.2	Identify elements of literature (character, plot, setting)	0.57	0.48	0.32	0.10	0.71	0.58	0.37	0.14
		3.2	Understand informational text	0.66	0.52	0.41	0.10	0.63	0.51	0.37	0.11
		1.4	Use a variety of strategies to make meaning of text	0.74	0.57	0.30	0.19	0.65	0.59	0.40	0.11
		1.2	Demonstrate understanding of symbolic representation	0.73	0.63	0.40	0.16	0.67	0.60	0.45	0.10
		1.3	Demonstrate understanding of beginning principles of phonics	0.82	0.67	0.44	0.15	0.65	0.62	0.56	0.03
	10	3.1	Demonstrate knowledge that various texts have different purposes	0.59	0.42	0.26	0.13	0.56	0.41	0.33	0.10
		2.1	Make connections to reading passages	0.61	0.49	0.39	0.09	0.68	0.56	0.39	0.11
		3.2	Understand informational text	0.61	0.49	0.42	0.08	0.61	0.54	0.47	0.05
		2.2	Identify elements of literature (character, plot, setting)	0.74	0.51	0.26	0.20	0.63	0.51	0.28	0.16
		1.4	Use a variety of strategies to make meaning of text	0.70	0.51	0.38	0.14	0.62	0.48	0.34	0.16
		1.2	Demonstrate understanding of symbolic representation	0.75	0.51	0.29	0.18	0.60	0.49	0.31	0.12
		1.3	Demonstrate understanding of beginning principles of phonics	0.67	0.53	0.37	0.12	0.62	0.48	0.38	0.10

Table 40
Writing 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
WR	3	2.2	Apply elements of writing through appropriate word usage	0.46	0.36	0.25	0.08	0.82	0.51	0.25	0.24
		2.3	Edit a written product using legible handwriting/word processor for publication	0.65	0.41	0.26	0.14	0.79	0.49	0.27	0.18
		2.1	Use systematic conventions to make written product understandable by others	0.70	0.54	0.40	0.12	0.77	0.62	0.45	0.11
		1.2	Organize writing to create a draft document	0.79	0.59	0.46	0.15	0.81	0.65	0.57	0.10
		1.1	Demonstrate an understanding that writing communicates a message	0.76	0.61	0.27	0.20	0.75	0.61	0.28	0.19
	4	2.2	Apply elements of writing through appropriate word usage	0.53	0.40	0.19	0.13	0.84	0.50	0.21	0.25
		2.3	Edit a written product using legible handwriting/word processor for publication	0.72	0.50	0.34	0.13	0.78	0.53	0.31	0.16
		1.2	Organize writing to create a draft document	0.71	0.56	0.33	0.15	0.83	0.59	0.27	0.20
		1.1	Demonstrate an understanding that writing communicates a message	0.78	0.57	0.35	0.18	0.74	0.58	0.35	0.16
		2.1	Use systematic conventions to make written product understandable by others	0.75	0.59	0.27	0.18	0.78	0.63	0.37	0.17
	5	2.2	Apply elements of writing through appropriate word usage	0.54	0.44	0.23	0.13	0.85	0.57	0.17	0.27
		2.3	Edit a written product using legible handwriting/word processor for publication	0.71	0.48	0.22	0.16	0.80	0.49	0.21	0.19
		1.2	Organize writing to create a draft document	0.74	0.55	0.31	0.17	0.86	0.59	0.34	0.19
		2.1	Use systematic conventions to make written product understandable by others	0.75	0.62	0.30	0.17	0.79	0.61	0.31	0.17
		1.1	Demonstrate an understanding that writing communicates a message	0.80	0.66	0.40	0.15	0.74	0.66	0.44	0.13

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	2.2	Apply elements of writing through appropriate word usage	0.61	0.48	0.34	0.11	0.85	0.55	0.20	0.25
		2.3	Edit a written product using legible handwriting/word processor for publication	0.79	0.49	0.36	0.14	0.79	0.47	0.27	0.16
		1.2	Organize writing to create a draft document	0.74	0.65	0.47	0.11	0.85	0.65	0.40	0.16
		2.1	Use systematic conventions to make written product understandable by others	0.79	0.68	0.50	0.12	0.78	0.63	0.43	0.15
		1.1	Demonstrate an understanding that writing communicates a message	0.85	0.75	0.70	0.06	0.74	0.67	0.60	0.06
	7	2.2	Apply elements of writing through appropriate word usage	0.68	0.48	0.30	0.14	0.86	0.53	0.15	0.27
		2.3	Edit a written product using legible handwriting/word processor for publication	0.65	0.49	0.23	0.15	0.59	0.48	0.25	0.13
		2.1	Use systematic conventions to make written product understandable by others	0.79	0.60	0.33	0.19	0.77	0.61	0.38	0.15
		1.2	Organize writing to create a draft document	0.67	0.60	0.54	0.06	0.88	0.72	0.60	0.10
		1.1	Demonstrate an understanding that writing communicates a message	0.82	0.72	0.51	0.11	0.84	0.69	0.61	0.08
	8	2.2	Apply elements of writing through appropriate word usage	0.64	0.43	0.29	0.15	0.87	0.48	0.14	0.28
		2.3	Edit a written product using legible handwriting/word processor for publication	0.61	0.46	0.29	0.13	0.70	0.50	0.32	0.14
		2.1	Use systematic conventions to make written product understandable by others	0.82	0.49	0.27	0.22	0.75	0.45	0.25	0.23
		1.2	Organize writing to create a draft document	0.79	0.67	0.61	0.07	0.86	0.72	0.61	0.09
		1.1	Demonstrate an understanding that writing communicates a message	0.86	0.76	0.70	0.06	0.82	0.73	0.70	0.04

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	2.3	Edit a written product using legible handwriting/word processor for publication	0.52	0.41	0.27	0.10	0.60	0.42	0.25	0.12
		2.2	Apply elements of writing through appropriate word usage	0.60	0.46	0.30	0.12	0.85	0.57	0.19	0.25
		1.2	Organize writing to create a draft document	0.64	0.51	0.38	0.10	0.86	0.57	0.41	0.18
		2.1	Use systematic conventions to make written product understandable by others	0.79	0.56	0.36	0.16	0.77	0.60	0.41	0.15
		1.1	Demonstrate an understanding that writing communicates a message	0.78	0.73	0.68	0.04	0.84	0.74	0.65	0.07
	10	2.1	Use systematic conventions to make written product understandable by others	0.78	0.43	0.22	0.21	0.71	0.43	0.26	0.18
		2.3	Edit a written product using legible handwriting/word processor for publication	0.64	0.45	0.19	0.15	0.61	0.44	0.14	0.18
		2.2	Apply elements of writing through appropriate word usage	0.63	0.50	0.27	0.12	0.83	0.49	0.16	0.27
		1.2	Organize writing to create a draft document	0.64	0.56	0.46	0.08	0.83	0.60	0.51	0.13
		1.1	Demonstrate an understanding that writing communicates a message	0.83	0.71	0.53	0.11	0.78	0.70	0.64	0.06

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	5	Applies a variety of measurement skills	0.62	0.51	0.43	0.07	0.71	0.57	0.40	0.12
		6	Uses calculation strategies to compute problems	0.64	0.52	0.36	0.11	0.73	0.66	0.55	0.08
		3	Displays and analyzes data	0.63	0.54	0.38	0.10	0.82	0.68	0.49	0.14
		2	Identifies, describes, and creates patterns to solve problems	0.68	0.56	0.47	0.09	0.68	0.62	0.56	0.06
		1	Counts, represents quantities, reads and writes numbers	0.84	0.67	0.44	0.13	0.77	0.69	0.55	0.07
		4	Identifies, sorts, and matches geometric shapes	0.86	0.69	0.35	0.18	0.69	0.62	0.40	0.11
	4	3	Displays and analyzes data	0.70	0.52	0.10	0.25	0.76	0.61	0.17	0.25
		6	Uses calculation strategies to compute problems	0.62	0.53	0.35	0.12	0.74	0.66	0.55	0.08
		5	Applies a variety of measurement skills	0.71	0.55	0.37	0.13	0.69	0.63	0.57	0.05
		2	Identifies, describes, and creates patterns to solve problems	0.68	0.58	0.51	0.08	0.67	0.61	0.52	0.07
		4	Identifies, sorts, and matches geometric shapes	0.83	0.68	0.51	0.11	0.76	0.65	0.44	0.12
		1	Counts, represents quantities, reads and writes numbers	0.86	0.70	0.55	0.11	0.83	0.69	0.57	0.09
	5	2	Identifies, describes, and creates patterns to solve problems	0.60	0.46	0.32	0.12	0.67	0.54	0.41	0.10
		5	Applies a variety of measurement skills	0.62	0.50	0.30	0.11	0.73	0.62	0.52	0.07
		6	Uses calculation strategies to compute problems	0.76	0.51	0.33	0.20	0.71	0.61	0.42	0.13
		3	Displays and analyzes data	0.74	0.55	0.34	0.16	0.79	0.68	0.55	0.10
		1	Counts, represents quantities, reads and writes numbers	0.83	0.62	0.36	0.15	0.77	0.66	0.36	0.11
		4	Identifies, sorts, and matches geometric shapes	0.84	0.65	0.49	0.14	0.74	0.61	0.48	0.10

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	5	Applies a variety of measurement skills	0.68	0.54	0.34	0.14	0.74	0.58	0.23	0.19
		6	Uses calculation strategies to compute problems	0.77	0.54	0.33	0.18	0.75	0.64	0.50	0.12
		2	Identifies, describes, and creates patterns to solve problems	0.65	0.55	0.45	0.09	0.70	0.57	0.49	0.09
		3	Displays and analyzes data	0.76	0.58	0.38	0.13	0.77	0.67	0.56	0.08
		4	Identifies, sorts, and matches geometric shapes	0.86	0.66	0.32	0.22	0.72	0.52	0.19	0.21
		1	Counts, represents quantities, reads and writes numbers	0.82	0.68	0.50	0.12	0.78	0.68	0.53	0.09
	7	2	Identifies, describes, and creates patterns to solve problems	0.59	0.45	0.29	0.12	0.67	0.49	0.27	0.13
		6	Uses calculation strategies to compute problems	0.56	0.45	0.35	0.09	0.66	0.51	0.38	0.12
		5	Applies a variety of measurement skills	0.64	0.50	0.14	0.20	0.73	0.62	0.45	0.10
		3	Displays and analyzes data	0.75	0.57	0.38	0.16	0.77	0.68	0.54	0.09
		4	Identifies, sorts, and matches geometric shapes	0.72	0.60	0.39	0.15	0.65	0.52	0.34	0.13
		1	Counts, represents quantities, reads and writes numbers	0.81	0.64	0.44	0.12	0.77	0.67	0.52	0.10
	8	2	Identifies, describes, and creates patterns to solve problems	0.53	0.46	0.37	0.07	0.73	0.49	0.34	0.14
		5	Applies a variety of measurement skills	0.64	0.47	0.25	0.15	0.73	0.53	0.18	0.18
		6	Uses calculation strategies to compute problems	0.66	0.50	0.32	0.14	0.67	0.52	0.31	0.16
		3	Displays and analyzes data	0.74	0.62	0.54	0.07	0.81	0.71	0.58	0.09
		1	Counts, represents quantities, reads and writes numbers	0.74	0.62	0.47	0.09	0.73	0.62	0.39	0.12
		4	Identifies, sorts, and matches geometric shapes	0.81	0.70	0.52	0.14	0.73	0.63	0.48	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	9	6	Uses calculation strategies to compute problems	0.51	0.38	0.21	0.10	0.59	0.44	0.25	0.12
		2	Identifies, describes, and creates patterns to solve problems	0.53	0.40	0.30	0.10	0.66	0.50	0.36	0.13
		3	Displays and analyzes data	0.55	0.41	0.21	0.14	0.77	0.57	0.28	0.19
		5	Applies a variety of measurement skills	0.65	0.44	0.25	0.16	0.75	0.55	0.28	0.17
		4	Identifies, sorts, and matches geometric shapes	0.76	0.54	0.29	0.19	0.60	0.46	0.25	0.14
	1	Counts, represents quantities, reads and writes numbers	0.72	0.60	0.43	0.12	0.73	0.64	0.40	0.11	
	10	2	Identifies, describes, and creates patterns to solve problems	0.47	0.31	0.19	0.09	0.47	0.30	0.07	0.13
		6	Uses calculation strategies to compute problems	0.56	0.39	0.17	0.15	0.58	0.44	0.19	0.14
		5	Applies a variety of measurement skills	0.58	0.39	0.07	0.20	0.68	0.47	0.13	0.24
		4	Identifies, sorts, and matches geometric shapes	0.79	0.45	0.22	0.23	0.69	0.50	0.33	0.13
3		Displays and analyzes data	0.67	0.50	0.23	0.18	0.75	0.57	0.33	0.18	
1	Counts, represents quantities, reads and writes numbers	0.73	0.57	0.29	0.16	0.73	0.62	0.41	0.10		

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	2	Analyzes data and communicates results of scientific investigations	0.48	0.48	0.48	-	0.60	0.60	0.60	-
		3	Demonstrates an understanding of the fundamental properties of matter and energy	0.84	0.59	0.37	0.19	0.69	0.54	0.29	0.16
		1	Makes observations, collects and organizes data	0.69	0.64	0.60	0.04	0.69	0.63	0.50	0.08
		4	Interacts with living things	0.85	0.65	0.45	0.15	0.75	0.64	0.51	0.08
		5	Interacts with the weather and Earth systems	0.83	0.68	0.42	0.14	0.74	0.64	0.51	0.08
	8	3	Demonstrates an understanding of the fundamental properties of matter and energy	0.86	0.68	0.51	0.12	0.71	0.59	0.49	0.09
		5	Interacts with the weather and Earth systems	0.87	0.70	0.30	0.19	0.73	0.60	0.24	0.15
		4	Interacts with living things	0.83	0.74	0.63	0.08	0.73	0.66	0.56	0.06
		1	Makes observations, collects and organizes data	0.83	0.75	0.68	0.06	0.76	0.69	0.56	0.09
		2	Analyzes data and communicates results of scientific investigations	0.87	0.78	0.67	0.09	0.70	0.67	0.62	0.04
	10	3	Demonstrates an understanding of the fundamental properties of matter and energy	0.74	0.38	0.24	0.21	0.51	0.40	0.30	0.08
		4	Interacts with living things	0.71	0.53	0.36	0.13	0.76	0.63	0.47	0.10
		1	Makes observations, collects and organizes data	0.75	0.65	0.57	0.08	0.67	0.59	0.50	0.07
		5	Interacts with the weather and Earth systems	0.85	0.67	0.42	0.17	0.67	0.56	0.26	0.14
		2	Analyzes data and communicates results of scientific investigations	0.76	0.68	0.57	0.09	0.73	0.67	0.61	0.06

Table 43
Reading Grade 3 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	23	23	3.50%	3.50%
		1	0	23	0.00%	3.50%
		2	4	27	0.61%	4.11%
		3	3	30	0.46%	4.57%
		4	2	32	0.30%	4.87%
		5	1	33	0.15%	5.02%
		6	4	37	0.61%	5.63%
		7	0	37	0.00%	5.63%
		8	3	40	0.46%	6.09%
		9	2	42	0.30%	6.39%
		10	0	42	0.00%	6.39%
		11	2	44	0.30%	6.70%
		12	1	45	0.15%	6.85%
		13	4	49	0.61%	7.46%
		14	2	51	0.30%	7.76%
		15	3	54	0.46%	8.22%
RD	3	16	3	57	0.46%	8.68%
		17	1	58	0.15%	8.83%
		18	11	69	1.67%	10.50%
		19	2	71	0.30%	10.81%
		20	2	73	0.30%	11.11%
		21	5	78	0.76%	11.87%
		22	3	81	0.46%	12.33%
		23	3	84	0.46%	12.79%
		24	7	91	1.07%	13.85%
		25	3	94	0.46%	14.31%
		26	7	101	1.07%	15.37%
		27	3	104	0.46%	15.83%
		28	6	110	0.91%	16.74%
		29	8	118	1.22%	17.96%
		30	12	130	1.83%	19.79%
		31	1	131	0.15%	19.94%
		32	3	134	0.46%	20.40%
		33	10	144	1.52%	21.92%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	145	0.15%	22.07%
		35	6	151	0.91%	22.98%
		36	16	167	2.44%	25.42%
		37	1	168	0.15%	25.57%
		38	5	173	0.76%	26.33%
		39	4	177	0.61%	26.94%
		40	1	178	0.15%	27.09%
		41	3	181	0.46%	27.55%
		42	14	195	2.13%	29.68%
		43	3	198	0.46%	30.14%
		44	4	202	0.61%	30.75%
		45	12	214	1.83%	32.57%
		46	2	216	0.30%	32.88%
		47	5	221	0.76%	33.64%
		48	20	241	3.04%	36.68%
		49	2	243	0.30%	36.99%
RD	3	50	7	250	1.07%	38.05%
		51	12	262	1.83%	39.88%
		52	1	263	0.15%	40.03%
		53	3	266	0.46%	40.49%
		54	24	290	3.65%	44.14%
		55	6	296	0.91%	45.05%
		56	3	299	0.46%	45.51%
		57	9	308	1.37%	46.88%
		58	5	313	0.76%	47.64%
		59	11	324	1.67%	49.32%
		60	15	339	2.28%	51.60%
		61	4	343	0.61%	52.21%
		62	6	349	0.91%	53.12%
		63	11	360	1.67%	54.79%
		64	4	364	0.61%	55.40%
		65	6	370	0.91%	56.32%
		66	17	387	2.59%	58.90%
		67	3	390	0.46%	59.36%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	10	400	1.52%	60.88%
		69	26	426	3.96%	64.84%
		70	6	432	0.91%	65.75%
		71	6	438	0.91%	66.67%
		72	20	458	3.04%	69.71%
		73	1	459	0.15%	69.86%
		74	9	468	1.37%	71.23%
		75	12	480	1.83%	73.06%
		76	3	483	0.46%	73.52%
		77	5	488	0.76%	74.28%
		78	12	500	1.83%	76.10%
		79	3	503	0.46%	76.56%
		80	7	510	1.07%	77.63%
		81	19	529	2.89%	80.52%
		82	3	532	0.46%	80.97%
		83	2	534	0.30%	81.28%
RD	3	84	25	559	3.81%	85.08%
		85	1	560	0.15%	85.24%
		86	6	566	0.91%	86.15%
		87	14	580	2.13%	88.28%
		88	3	583	0.46%	88.74%
		89	4	587	0.61%	89.35%
		90	17	604	2.59%	91.93%
		91	2	606	0.30%	92.24%
		92	6	612	0.91%	93.15%
		93	15	627	2.28%	95.43%
		94	3	630	0.46%	95.89%
		95	3	633	0.46%	96.35%
		96	10	643	1.52%	97.87%
		97	1	644	0.15%	98.02%
		98	2	646	0.30%	98.33%
		99	1	647	0.15%	98.48%
		100	1	648	0.15%	98.63%
		101	1	649	0.15%	98.78%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	654	0.76%	99.54%
RD	3	103	1	655	0.15%	99.70%
		104	0	655	0.00%	100%
		105	2	657	0.30%	100%

Table 44
Reading Grade 4 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	12	12	1.90%	1.90%
		1	2	14	0.32%	2.22%
		2	3	17	0.48%	2.69%
		3	2	19	0.32%	3.01%
		4	4	23	0.63%	3.65%
		5	2	25	0.32%	3.96%
		6	2	27	0.32%	4.28%
		7	3	30	0.48%	4.75%
		8	2	32	0.32%	5.07%
		9	2	34	0.32%	5.39%
		10	0	34	0.00%	5.39%
		11	3	37	0.48%	5.86%
		12	3	40	0.48%	6.34%
		13	3	43	0.48%	6.81%
		14	1	44	0.16%	6.97%
		15	4	48	0.63%	7.61%
RD	4	16	2	50	0.32%	7.92%
		17	3	53	0.48%	8.40%
		18	4	57	0.63%	9.03%
		19	2	59	0.32%	9.35%
		20	3	62	0.48%	9.83%
		21	6	68	0.95%	10.78%
		22	4	72	0.63%	11.41%
		23	3	75	0.48%	11.89%
		24	7	82	1.11%	13.00%
		25	4	86	0.63%	13.63%
		26	4	90	0.63%	14.26%
		27	5	95	0.79%	15.06%
		28	3	98	0.48%	15.53%
		29	1	99	0.16%	15.69%
		30	12	111	1.90%	17.59%
		31	4	115	0.63%	18.23%
		32	5	120	0.79%	19.02%
		33	10	130	1.58%	20.60%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	132	0.32%	20.92%
		35	3	135	0.48%	21.39%
		36	3	138	0.48%	21.87%
		37	3	141	0.48%	22.35%
		38	8	149	1.27%	23.61%
		39	13	162	2.06%	25.67%
		40	6	168	0.95%	26.62%
		41	6	174	0.95%	27.58%
		42	12	186	1.90%	29.48%
		43	6	192	0.95%	30.43%
		44	3	195	0.48%	30.90%
		45	17	212	2.69%	33.60%
		46	1	213	0.16%	33.76%
		47	4	217	0.63%	34.39%
		48	9	226	1.43%	35.82%
		49	2	228	0.32%	36.13%
RD	4	50	5	233	0.79%	36.93%
		51	17	250	2.69%	39.62%
		52	0	250	0.00%	39.62%
		53	5	255	0.79%	40.41%
		54	18	273	2.85%	43.26%
		55	4	277	0.63%	43.90%
		56	5	282	0.79%	44.69%
		57	14	296	2.22%	46.91%
		58	1	297	0.16%	47.07%
		59	9	306	1.43%	48.49%
		60	18	324	2.85%	51.35%
		61	6	330	0.95%	52.30%
		62	7	337	1.11%	53.41%
		63	15	352	2.38%	55.78%
		64	2	354	0.32%	56.10%
		65	4	358	0.63%	56.74%
		66	16	374	2.54%	59.27%
		67	4	378	0.63%	59.90%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	383	0.79%	60.70%
		69	18	401	2.85%	63.55%
		70	1	402	0.16%	63.71%
		71	4	406	0.63%	64.34%
		72	16	422	2.54%	66.88%
		73	6	428	0.95%	67.83%
		74	1	429	0.16%	67.99%
		75	15	444	2.38%	70.36%
		76	3	447	0.48%	70.84%
		77	5	452	0.79%	71.63%
		78	15	467	2.38%	74.01%
		79	2	469	0.32%	74.33%
		80	7	476	1.11%	75.44%
		81	15	491	2.38%	77.81%
		82	3	494	0.48%	78.29%
		83	7	501	1.11%	79.40%
RD	4	84	18	519	2.85%	82.25%
		85	2	521	0.32%	82.57%
		86	3	524	0.48%	83.04%
		87	25	549	3.96%	87.00%
		88	4	553	0.63%	87.64%
		89	7	560	1.11%	88.75%
		90	9	569	1.43%	90.17%
		91	4	573	0.63%	90.81%
		92	8	581	1.27%	92.08%
		93	14	595	2.22%	94.29%
		94	1	596	0.16%	94.45%
		95	3	599	0.48%	94.93%
		96	10	609	1.58%	96.51%
		97	1	610	0.16%	96.67%
		98	3	613	0.48%	97.15%
		99	8	621	1.27%	98.42%
		100	0	621	0.00%	98.42%
		101	2	623	0.32%	98.73%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	628	0.79%	99.52%
RD	4	103	0	628	0.00%	99.52%
		104	0	628	0.00%	100%
		105	3	631	0.48%	100%

Table 45
Reading Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	22	22	3.55%	3.55%
		1	5	27	0.81%	4.36%
		2	0	27	0.00%	4.36%
		3	4	31	0.65%	5.01%
		4	0	31	0.00%	5.01%
		5	3	34	0.48%	5.49%
		6	2	36	0.32%	5.82%
		7	2	38	0.32%	6.14%
		8	3	41	0.48%	6.62%
		9	4	45	0.65%	7.27%
		10	1	46	0.16%	7.43%
		11	2	48	0.32%	7.75%
		12	1	49	0.16%	7.92%
		13	1	50	0.16%	8.08%
		14	1	51	0.16%	8.24%
		15	2	53	0.32%	8.56%
RD	5	16	2	55	0.32%	8.89%
		17	0	55	0.00%	8.89%
		18	5	60	0.81%	9.69%
		19	4	64	0.65%	10.34%
		20	3	67	0.48%	10.82%
		21	6	73	0.97%	11.79%
		22	1	74	0.16%	11.95%
		23	1	75	0.16%	12.12%
		24	4	79	0.65%	12.76%
		25	2	81	0.32%	13.09%
		26	4	85	0.65%	13.73%
		27	14	99	2.26%	15.99%
		28	3	102	0.48%	16.48%
		29	5	107	0.81%	17.29%
		30	7	114	1.13%	18.42%
		31	6	120	0.97%	19.39%
		32	1	121	0.16%	19.55%
		33	11	132	1.78%	21.32%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	135	0.48%	21.81%
		35	2	137	0.32%	22.13%
		36	8	145	1.29%	23.42%
		37	5	150	0.81%	24.23%
		38	3	153	0.48%	24.72%
		39	11	164	1.78%	26.49%
		40	4	168	0.65%	27.14%
		41	3	171	0.48%	27.63%
		42	17	188	2.75%	30.37%
		43	2	190	0.32%	30.69%
		44	3	193	0.48%	31.18%
		45	15	208	2.42%	33.60%
		46	5	213	0.81%	34.41%
		47	3	216	0.48%	34.89%
		48	16	232	2.58%	37.48%
		49	3	235	0.48%	37.96%
RD	5	50	7	242	1.13%	39.10%
		51	7	249	1.13%	40.23%
		52	7	256	1.13%	41.36%
		53	2	258	0.32%	41.68%
		54	8	266	1.29%	42.97%
		55	2	268	0.32%	43.30%
		56	1	269	0.16%	43.46%
		57	9	278	1.45%	44.91%
		58	2	280	0.32%	45.23%
		59	1	281	0.16%	45.40%
		60	15	296	2.42%	47.82%
		61	1	297	0.16%	47.98%
		62	3	300	0.48%	48.47%
		63	14	314	2.26%	50.73%
		64	2	316	0.32%	51.05%
		65	3	319	0.48%	51.53%
		66	16	335	2.58%	54.12%
		67	3	338	0.48%	54.60%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	6	344	0.97%	55.57%
		69	15	359	2.42%	58.00%
		70	2	361	0.32%	58.32%
		71	6	367	0.97%	59.29%
		72	18	385	2.91%	62.20%
		73	2	387	0.32%	62.52%
		74	8	395	1.29%	63.81%
		75	18	413	2.91%	66.72%
		76	1	414	0.16%	66.88%
		77	2	416	0.32%	67.21%
		78	23	439	3.72%	70.92%
		79	2	441	0.32%	71.24%
		80	1	442	0.16%	71.41%
		81	15	457	2.42%	73.83%
		82	2	459	0.32%	74.15%
		83	2	461	0.32%	74.47%
RD	5	84	27	488	4.36%	78.84%
		85	2	490	0.32%	79.16%
		86	5	495	0.81%	79.97%
		87	23	518	3.72%	83.68%
		88	6	524	0.97%	84.65%
		89	3	527	0.48%	85.14%
		90	20	547	3.23%	88.37%
		91	4	551	0.65%	89.01%
		92	3	554	0.48%	89.50%
		93	14	568	2.26%	91.76%
		94	2	570	0.32%	92.08%
		95	6	576	0.97%	93.05%
		96	18	594	2.91%	95.96%
		97	1	595	0.16%	96.12%
		98	1	596	0.16%	96.28%
		99	11	607	1.78%	98.06%
		100	0	607	0.00%	98.06%
		101	3	610	0.48%	98.55%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	7	617	1.13%	99.68%
RD	5	103	0	617	0.00%	99.68%
		104	0	617	0.00%	100%
		105	2	619	0.32%	100%

Table 46
Reading Grade 6 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	11	11	1.77%	1.77%
		1	0	11	0.00%	1.77%
		2	1	12	0.16%	1.93%
		3	1	13	0.16%	2.09%
		4	0	13	0.00%	2.09%
		5	0	13	0.00%	2.09%
		6	4	17	0.64%	2.74%
		7	0	17	0.00%	2.74%
		8	3	20	0.48%	3.22%
		9	3	23	0.48%	3.70%
		10	1	24	0.16%	3.86%
		11	2	26	0.32%	4.19%
		12	1	27	0.16%	4.35%
		13	1	28	0.16%	4.51%
		14	0	28	0.00%	4.51%
		15	2	30	0.32%	4.83%
RD	6	16	1	31	0.16%	4.99%
		17	0	31	0.00%	4.99%
		18	3	34	0.48%	5.48%
		19	1	35	0.16%	5.64%
		20	3	38	0.48%	6.12%
		21	6	44	0.97%	7.09%
		22	1	45	0.16%	7.25%
		23	0	45	0.00%	7.25%
		24	6	51	0.97%	8.21%
		25	3	54	0.48%	8.70%
		26	1	55	0.16%	8.86%
		27	7	62	1.13%	9.98%
		28	2	64	0.32%	10.31%
		29	4	68	0.64%	10.95%
		30	4	72	0.64%	11.59%
		31	1	73	0.16%	11.76%
		32	3	76	0.48%	12.24%
		33	5	81	0.81%	13.04%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	4	89	0.75%	16.76%
		35	3	92	0.57%	17.33%
		36	4	96	0.75%	18.08%
		37	1	97	0.19%	18.27%
		38	3	100	0.57%	18.83%
		39	8	108	1.51%	20.34%
		40	3	111	0.57%	20.90%
		41	0	111	0.00%	20.90%
		42	8	119	1.51%	22.41%
		43	4	123	0.75%	23.16%
		44	3	126	0.57%	23.73%
		45	16	142	3.01%	26.74%
		46	4	146	0.75%	27.50%
		47	3	149	0.57%	28.06%
		48	10	159	1.88%	29.94%
		49	0	159	0.00%	29.94%
RD	6	50	4	163	0.75%	30.70%
		51	5	168	0.94%	31.64%
		52	3	171	0.57%	32.20%
		53	3	174	0.57%	32.77%
		54	6	180	1.13%	33.90%
		55	3	183	0.57%	34.46%
		56	5	188	0.94%	35.41%
		57	6	194	1.13%	36.54%
		58	4	198	0.75%	37.29%
		59	2	200	0.38%	37.67%
		60	10	210	1.88%	39.55%
		61	3	213	0.57%	40.11%
		62	3	216	0.57%	40.68%
		63	13	229	2.45%	43.13%
		64	0	229	0.00%	43.13%
		65	5	234	0.94%	44.07%
		66	9	243	1.69%	45.76%
		67	2	245	0.38%	46.14%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	1	288	0.16%	46.38%
		69	22	310	3.54%	49.92%
		70	1	311	0.16%	50.08%
		71	4	315	0.64%	50.72%
		72	21	336	3.38%	54.11%
		73	1	337	0.16%	54.27%
		74	5	342	0.81%	55.07%
		75	21	363	3.38%	58.45%
		76	3	366	0.48%	58.94%
		77	4	370	0.64%	59.58%
		78	16	386	2.58%	62.16%
		79	5	391	0.81%	62.96%
		80	1	392	0.16%	63.12%
		81	24	416	3.86%	66.99%
		82	2	418	0.32%	67.31%
		83	5	423	0.81%	68.12%
RD	6	84	31	454	4.99%	73.11%
		85	3	457	0.48%	73.59%
		86	8	465	1.29%	74.88%
		87	24	489	3.86%	78.74%
		88	2	491	0.32%	79.07%
		89	5	496	0.81%	79.87%
		90	21	517	3.38%	83.25%
		91	3	520	0.48%	83.74%
		92	4	524	0.64%	84.38%
		93	24	548	3.86%	88.24%
		94	1	549	0.16%	88.41%
		95	6	555	0.97%	89.37%
		96	23	578	3.70%	93.08%
		97	0	578	0.00%	93.08%
		98	3	581	0.48%	93.56%
		99	21	602	3.38%	96.94%
		100	0	602	0.00%	96.94%
		101	3	605	0.48%	97.42%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	11	616	1.77%	99.19%
RD	6	103	0	616	0.00%	99.19%
		104	1	617	0.16%	99.36%
		105	4	621	0.64%	100%

Table 47
Reading Grade 7 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	8	8	1.51%	1.51%
		1	3	11	0.56%	2.07%
		2	4	15	0.75%	2.82%
		3	1	16	0.19%	3.01%
		4	2	18	0.38%	3.39%
		5	4	22	0.75%	4.14%
		6	4	26	0.75%	4.90%
		7	0	26	0.00%	4.90%
		8	2	28	0.38%	5.27%
		9	0	28	0.00%	5.27%
		10	0	28	0.00%	5.27%
		11	2	30	0.38%	5.65%
		12	0	30	0.00%	5.65%
		13	2	32	0.38%	6.03%
		14	3	35	0.56%	6.59%
		15	0	35	0.00%	6.59%
RD	7	16	1	36	0.19%	6.78%
		17	1	37	0.19%	6.97%
		18	1	38	0.19%	7.16%
		19	1	39	0.19%	7.34%
		20	1	40	0.19%	7.53%
		21	5	45	0.94%	8.47%
		22	5	50	0.94%	9.42%
		23	2	52	0.38%	9.79%
		24	5	57	0.94%	10.73%
		25	1	58	0.19%	10.92%
		26	3	61	0.56%	11.49%
		27	6	67	1.13%	12.62%
		28	2	69	0.38%	12.99%
		29	4	73	0.75%	13.75%
		30	10	83	1.88%	15.63%
		31	1	84	0.19%	15.82%
		32	2	86	0.38%	16.20%
		33	12	98	2.26%	18.46%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	99	0.19%	18.64%
		35	3	102	0.56%	19.21%
		36	7	109	1.32%	20.53%
		37	2	111	0.38%	20.90%
		38	5	116	0.94%	21.85%
		39	12	128	2.26%	24.11%
		40	3	131	0.56%	24.67%
		41	5	136	0.94%	25.61%
		42	12	148	2.26%	27.87%
		43	0	148	0.00%	27.87%
		44	5	153	0.94%	28.81%
		45	17	170	3.20%	32.02%
		46	3	173	0.56%	32.58%
		47	4	177	0.75%	33.33%
		48	11	188	2.07%	35.40%
		49	1	189	0.19%	35.59%
RD	7	50	5	194	0.94%	36.53%
		51	13	207	2.45%	38.98%
		52	4	211	0.75%	39.74%
		53	1	212	0.19%	39.92%
		54	12	224	2.26%	42.18%
		55	3	227	0.56%	42.75%
		56	4	231	0.75%	43.50%
		57	14	245	2.64%	46.14%
		58	1	246	0.19%	46.33%
		59	9	255	1.69%	48.02%
		60	20	275	3.77%	51.79%
		61	2	277	0.38%	52.17%
		62	1	278	0.19%	52.35%
		63	14	292	2.64%	54.99%
		64	0	292	0.00%	54.99%
		65	2	294	0.38%	55.37%
		66	13	307	2.45%	57.82%
		67	0	307	0.00%	57.82%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	2	309	0.38%	58.19%
		69	13	322	2.45%	60.64%
		70	4	326	0.75%	61.39%
		71	9	335	1.69%	63.09%
		72	25	360	4.71%	67.80%
		73	2	362	0.38%	68.17%
		74	6	368	1.13%	69.30%
		75	24	392	4.52%	73.82%
		76	1	393	0.19%	74.01%
		77	8	401	1.51%	75.52%
		78	18	419	3.39%	78.91%
		79	2	421	0.38%	79.28%
		80	3	424	0.56%	79.85%
		81	25	449	4.71%	84.56%
		82	1	450	0.19%	84.75%
		83	4	454	0.75%	85.50%
RD	7	84	19	473	3.58%	89.08%
		85	2	475	0.38%	89.45%
		86	3	478	0.56%	90.02%
		87	11	489	2.07%	92.09%
		88	3	492	0.56%	92.66%
		89	1	493	0.19%	92.84%
		90	10	503	1.88%	94.73%
		91	2	505	0.38%	95.10%
		92	3	508	0.56%	95.67%
		93	9	517	1.69%	97.36%
		94	1	518	0.19%	97.55%
		95	1	519	0.19%	97.74%
		96	5	524	0.94%	98.68%
		97	0	524	0.00%	98.68%
		98	0	524	0.00%	98.68%
		99	5	529	0.94%	99.62%
		100	0	529	0.00%	99.62%
		101	0	529	0.00%	99.62%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	1	530	0.19%	99.81%
RD	7	103	0	530	0.00%	99.81%
		104	0	530	0.00%	100%
		105	1	531	0.19%	100%

Table 48
Reading Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	13	13	2.36%	2.36%
		1	3	16	0.54%	2.90%
		2	2	18	0.36%	3.26%
		3	4	22	0.72%	3.99%
		4	1	23	0.18%	4.17%
		5	0	23	0.00%	4.17%
		6	2	25	0.36%	4.53%
		7	0	25	0.00%	4.53%
		8	2	27	0.36%	4.89%
		9	2	29	0.36%	5.25%
		10	0	29	0.00%	5.25%
		11	1	30	0.18%	5.43%
		12	2	32	0.36%	5.80%
		13	3	35	0.54%	6.34%
		14	1	36	0.18%	6.52%
		15	2	38	0.36%	6.88%
RD	8	16	2	40	0.36%	7.25%
		17	3	43	0.54%	7.79%
		18	5	48	0.91%	8.70%
		19	5	53	0.91%	9.60%
		20	1	54	0.18%	9.78%
		21	8	62	1.45%	11.23%
		22	2	64	0.36%	11.59%
		23	2	66	0.36%	11.96%
		24	6	72	1.09%	13.04%
		25	0	72	0.00%	13.04%
		26	2	74	0.36%	13.41%
		27	13	87	2.36%	15.76%
		28	1	88	0.18%	15.94%
		29	2	90	0.36%	16.30%
		30	14	104	2.54%	18.84%
		31	0	104	0.00%	18.84%
		32	1	105	0.18%	19.02%
		33	12	117	2.17%	21.20%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	119	0.36%	21.56%
		35	0	119	0.00%	21.56%
		36	15	134	2.72%	24.28%
		37	7	141	1.27%	25.54%
		38	4	145	0.72%	26.27%
		39	12	157	2.17%	28.44%
		40	4	161	0.72%	29.17%
		41	3	164	0.54%	29.71%
		42	5	169	0.91%	30.62%
		43	2	171	0.36%	30.98%
		44	4	175	0.72%	31.70%
		45	12	187	2.17%	33.88%
		46	1	188	0.18%	34.06%
		47	4	192	0.72%	34.78%
		48	19	211	3.44%	38.22%
		49	2	213	0.36%	38.59%
RD	8	50	4	217	0.72%	39.31%
		51	19	236	3.44%	42.75%
		52	2	238	0.36%	43.12%
		53	4	242	0.72%	43.84%
		54	19	261	3.44%	47.28%
		55	1	262	0.18%	47.46%
		56	1	263	0.18%	47.64%
		57	12	275	2.17%	49.82%
		58	1	276	0.18%	50.00%
		59	2	278	0.36%	50.36%
		60	11	289	1.99%	52.36%
		61	2	291	0.36%	52.72%
		62	7	298	1.27%	53.99%
		63	15	313	2.72%	56.70%
		64	2	315	0.36%	57.07%
		65	8	323	1.45%	58.51%
		66	16	339	2.90%	61.41%
		67	0	339	0.00%	61.41%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	344	0.91%	62.32%
		69	20	364	3.62%	65.94%
		70	0	364	0.00%	65.94%
		71	4	368	0.72%	66.67%
		72	16	384	2.90%	69.57%
		73	0	384	0.00%	69.57%
		74	4	388	0.72%	70.29%
		75	11	399	1.99%	72.28%
		76	2	401	0.36%	72.64%
		77	3	404	0.54%	73.19%
		78	20	424	3.62%	76.81%
		79	4	428	0.72%	77.54%
		80	0	428	0.00%	77.54%
		81	14	442	2.54%	80.07%
		82	1	443	0.18%	80.25%
		83	2	445	0.36%	80.62%
RD	8	84	17	462	3.08%	83.70%
		85	1	463	0.18%	83.88%
		86	2	465	0.36%	84.24%
		87	16	481	2.90%	87.14%
		88	3	484	0.54%	87.68%
		89	2	486	0.36%	88.04%
		90	20	506	3.62%	91.67%
		91	1	507	0.18%	91.85%
		92	5	512	0.91%	92.75%
		93	10	522	1.81%	94.57%
		94	0	522	0.00%	94.57%
		95	0	522	0.00%	94.57%
		96	13	535	2.36%	96.92%
		97	1	536	0.18%	97.10%
		98	0	536	0.00%	97.10%
		99	8	544	1.45%	98.55%
		100	1	545	0.18%	98.73%
		101	3	548	0.54%	99.28%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	4	552	0.72%	100%
RD	8	103	0	552	0.00%	100%
		104	0	552	0.00%	100%
		105	0	552	0.00%	100%

Table 49
Reading Grade 9 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	3.28%	3.28%
		1	1	17	0.20%	3.48%
		2	4	21	0.82%	4.30%
		3	3	24	0.61%	4.92%
		4	0	24	0.00%	4.92%
		5	0	24	0.00%	4.92%
		6	2	26	0.41%	5.33%
		7	3	29	0.61%	5.94%
		8	2	31	0.41%	6.35%
		9	2	33	0.41%	6.76%
		10	0	33	0.00%	6.76%
		11	0	33	0.00%	6.76%
		12	2	35	0.41%	7.17%
		13	2	37	0.41%	7.58%
		14	2	39	0.41%	7.99%
		15	6	45	1.23%	9.22%
RD	9	16	1	46	0.20%	9.43%
		17	2	48	0.41%	9.84%
		18	7	55	1.43%	11.27%
		19	0	55	0.00%	11.27%
		20	4	59	0.82%	12.09%
		21	6	65	1.23%	13.32%
		22	2	67	0.41%	13.73%
		23	2	69	0.41%	14.14%
		24	10	79	2.05%	16.19%
		25	1	80	0.20%	16.39%
		26	2	82	0.41%	16.80%
		27	15	97	3.07%	19.88%
		28	2	99	0.41%	20.29%
		29	2	101	0.41%	20.70%
		30	14	115	2.87%	23.57%
		31	0	115	0.00%	23.57%
		32	10	125	2.05%	25.61%
		33	7	132	1.43%	27.05%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	134	0.41%	27.46%
		35	4	138	0.82%	28.28%
		36	9	147	1.84%	30.12%
		37	0	147	0.00%	30.12%
		38	5	152	1.02%	31.15%
		39	10	162	2.05%	33.20%
		40	1	163	0.20%	33.40%
		41	1	164	0.20%	33.61%
		42	11	175	2.25%	35.86%
		43	4	179	0.82%	36.68%
		44	2	181	0.41%	37.09%
		45	7	188	1.43%	38.52%
		46	2	190	0.41%	38.93%
		47	1	191	0.20%	39.14%
		48	16	207	3.28%	42.42%
		49	1	208	0.20%	42.62%
RD	9	50	3	211	0.61%	43.24%
		51	5	216	1.02%	44.26%
		52	2	218	0.41%	44.67%
		53	7	225	1.43%	46.11%
		54	7	232	1.43%	47.54%
		55	5	237	1.02%	48.57%
		56	3	240	0.61%	49.18%
		57	15	255	3.07%	52.25%
		58	1	256	0.20%	52.46%
		59	2	258	0.41%	52.87%
		60	11	269	2.25%	55.12%
		61	1	270	0.20%	55.33%
		62	3	273	0.61%	55.94%
		63	15	288	3.07%	59.02%
		64	2	290	0.41%	59.43%
		65	5	295	1.02%	60.45%
		66	13	308	2.66%	63.11%
		67	2	310	0.41%	63.52%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	2	312	0.41%	63.93%
		69	17	329	3.48%	67.42%
		70	0	329	0.00%	67.42%
		71	3	332	0.61%	68.03%
		72	18	350	3.69%	71.72%
		73	0	350	0.00%	71.72%
		74	3	353	0.61%	72.34%
		75	13	366	2.66%	75.00%
		76	0	366	0.00%	75.00%
		77	3	369	0.61%	75.61%
		78	14	383	2.87%	78.48%
		79	0	383	0.00%	78.48%
		80	3	386	0.61%	79.10%
		81	17	403	3.48%	82.58%
		82	0	403	0.00%	82.58%
		83	1	404	0.20%	82.79%
		84	18	422	3.69%	86.48%
RD	9	85	0	422	0.00%	86.48%
		86	3	425	0.61%	87.09%
		87	19	444	3.89%	90.98%
		88	0	444	0.00%	90.98%
		89	5	449	1.02%	92.01%
		90	6	455	1.23%	93.24%
		91	1	456	0.20%	93.44%
		92	2	458	0.41%	93.85%
		93	9	467	1.84%	95.70%
		94	3	470	0.61%	96.31%
		95	1	471	0.20%	96.52%
		96	9	480	1.84%	98.36%
		97	1	481	0.20%	98.57%
		98	2	483	0.41%	98.98%
		99	3	486	0.61%	99.59%
		100	0	486	0.00%	99.59%
		101	0	486	0.00%	99.59%
		102	2	488	0.41%	100%

Table 50
Reading Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	15	15	2.91%	2.91%
		1	3	18	0.58%	3.50%
		2	1	19	0.19%	3.69%
		3	2	21	0.39%	4.08%
		4	1	22	0.19%	4.27%
		5	1	23	0.19%	4.47%
		6	0	23	0.00%	4.47%
		7	1	24	0.19%	4.66%
		8	2	26	0.39%	5.05%
		9	1	27	0.19%	5.24%
		10	0	27	0.00%	5.24%
		11	0	27	0.00%	5.24%
		12	2	29	0.39%	5.63%
		13	1	30	0.19%	5.83%
		14	4	34	0.78%	6.60%
		15	1	35	0.19%	6.80%
RD	10	16	1	36	0.19%	6.99%
		17	2	38	0.39%	7.38%
		18	7	45	1.36%	8.74%
		19	1	46	0.19%	8.93%
		20	2	48	0.39%	9.32%
		21	6	54	1.17%	10.49%
		22	4	58	0.78%	11.26%
		23	2	60	0.39%	11.65%
		24	11	71	2.14%	13.79%
		25	0	71	0.00%	13.79%
		26	6	77	1.17%	14.95%
		27	16	93	3.11%	18.06%
		28	4	97	0.78%	18.83%
		29	1	98	0.19%	19.03%
		30	17	115	3.30%	22.33%
		31	4	119	0.78%	23.11%
		32	7	126	1.36%	24.47%
		33	22	148	4.27%	28.74%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	149	0.19%	28.93%
		35	6	155	1.17%	30.10%
		36	14	169	2.72%	32.82%
		37	2	171	0.39%	33.20%
		38	3	174	0.58%	33.79%
		39	17	191	3.30%	37.09%
		40	3	194	0.58%	37.67%
		41	8	202	1.55%	39.22%
		42	16	218	3.11%	42.33%
		43	2	220	0.39%	42.72%
		44	2	222	0.39%	43.11%
		45	13	235	2.52%	45.63%
		46	2	237	0.39%	46.02%
		47	3	240	0.58%	46.60%
		48	17	257	3.30%	49.90%
		49	1	258	0.19%	50.10%
RD	10	50	4	262	0.78%	50.87%
		51	10	272	1.94%	52.82%
		52	1	273	0.19%	53.01%
		53	1	274	0.19%	53.20%
		54	11	285	2.14%	55.34%
		55	3	288	0.58%	55.92%
		56	3	291	0.58%	56.50%
		57	17	308	3.30%	59.81%
		58	4	312	0.78%	60.58%
		59	1	313	0.19%	60.78%
		60	10	323	1.94%	62.72%
		61	1	324	0.19%	62.91%
		62	1	325	0.19%	63.11%
		63	15	340	2.91%	66.02%
		64	1	341	0.19%	66.21%
		65	5	346	0.97%	67.18%
		66	16	362	3.11%	70.29%
		67	0	362	0.00%	70.29%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	365	0.58%	70.87%
		69	21	386	4.08%	74.95%
		70	2	388	0.39%	75.34%
		71	2	390	0.39%	75.73%
		72	12	402	2.33%	78.06%
		73	1	403	0.19%	78.25%
		74	4	407	0.78%	79.03%
		75	17	424	3.30%	82.33%
		76	2	426	0.39%	82.72%
		77	2	428	0.39%	83.11%
		78	12	440	2.33%	85.44%
		79	0	440	0.00%	85.44%
		80	2	442	0.39%	85.83%
		81	19	461	3.69%	89.51%
		82	0	461	0.00%	89.51%
		83	4	465	0.78%	90.29%
		84	14	479	2.72%	93.01%
RD	10	85	0	479	0.00%	93.01%
		86	2	481	0.39%	93.40%
		87	8	489	1.55%	94.95%
		88	1	490	0.19%	95.15%
		89	4	494	0.78%	95.92%
		90	7	501	1.36%	97.28%
		91	0	501	0.00%	97.28%
		92	2	503	0.39%	97.67%
		93	8	511	1.55%	99.22%
		94	0	511	0.00%	99.22%
		95	1	512	0.19%	99.42%
		96	2	514	0.39%	99.81%
		97	0	514	0.00%	99.81%
		98	0	514	0.00%	99.81%
		99	1	515	0.19%	100%
		100	0	515	0.00%	100%
		101	0	515	0.00%	100%
		102	0	515	0.00%	100%

Table 51
Writing Grade 3 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	24	24	3.64%	3.64%
		1	4	28	0.61%	4.25%
		2	4	32	0.61%	4.86%
		3	3	35	0.46%	5.31%
		4	0	35	0.00%	5.31%
		5	5	40	0.76%	6.07%
		6	4	44	0.61%	6.68%
		7	1	45	0.15%	6.83%
		8	9	54	1.37%	8.19%
		9	8	62	1.21%	9.41%
		10	2	64	0.30%	9.71%
		11	6	70	0.91%	10.62%
		12	4	74	0.61%	11.23%
		13	1	75	0.15%	11.38%
		14	10	85	1.52%	12.90%
		15	13	98	1.97%	14.87%
WR	3	16	6	104	0.91%	15.78%
		17	3	107	0.46%	16.24%
		18	9	116	1.37%	17.60%
		19	4	120	0.61%	18.21%
		20	2	122	0.30%	18.51%
		21	5	127	0.76%	19.27%
		22	0	127	0.00%	19.27%
		23	3	130	0.46%	19.73%
		24	8	138	1.21%	20.94%
		25	2	140	0.30%	21.24%
		26	2	142	0.30%	21.55%
		27	3	145	0.46%	22.00%
		28	5	150	0.76%	22.76%
		29	5	155	0.76%	23.52%
		30	9	164	1.37%	24.89%
		31	4	168	0.61%	25.49%
		32	7	175	1.06%	26.56%
		33	10	185	1.52%	28.07%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	4	189	0.61%	28.68%
		35	6	195	0.91%	29.59%
		36	9	204	1.37%	30.96%
		37	3	207	0.46%	31.41%
		38	5	212	0.76%	32.17%
		39	7	219	1.06%	33.23%
		40	6	225	0.91%	34.14%
		41	7	232	1.06%	35.20%
		42	7	239	1.06%	36.27%
		43	4	243	0.61%	36.87%
		44	5	248	0.76%	37.63%
		45	10	258	1.52%	39.15%
		46	8	266	1.21%	40.36%
		47	7	273	1.06%	41.43%
		48	4	277	0.61%	42.03%
		49	4	281	0.61%	42.64%
WR	3	50	6	287	0.91%	43.55%
		51	6	293	0.91%	44.46%
		52	3	296	0.46%	44.92%
		53	10	306	1.52%	46.43%
		54	8	314	1.21%	47.65%
		55	11	325	1.67%	49.32%
		56	9	334	1.37%	50.68%
		57	8	342	1.21%	51.90%
		58	6	348	0.91%	52.81%
		59	2	350	0.30%	53.11%
		60	9	359	1.37%	54.48%
		61	3	362	0.46%	54.93%
		62	7	369	1.06%	55.99%
		63	6	375	0.91%	56.90%
		64	14	389	2.12%	59.03%
		65	8	397	1.21%	60.24%
		66	7	404	1.06%	61.31%
		67	8	412	1.21%	62.52%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	7	419	1.06%	63.58%
		69	7	426	1.06%	64.64%
		70	7	433	1.06%	65.71%
		71	4	437	0.61%	66.31%
		72	7	444	1.06%	67.37%
		73	12	456	1.82%	69.20%
		74	6	462	0.91%	70.11%
		75	10	472	1.52%	71.62%
		76	11	483	1.67%	73.29%
		77	4	487	0.61%	73.90%
		78	6	493	0.91%	74.81%
		79	15	508	2.28%	77.09%
		80	8	516	1.21%	78.30%
		81	8	524	1.21%	79.51%
		82	12	536	1.82%	81.34%
		83	8	544	1.21%	82.55%
WR	3	84	13	557	1.97%	84.52%
		85	12	569	1.82%	86.34%
		86	7	576	1.06%	87.41%
		87	8	584	1.21%	88.62%
		88	10	594	1.52%	90.14%
		89	10	604	1.52%	91.65%
		90	5	609	0.76%	92.41%
		91	11	620	1.67%	94.08%
		92	5	625	0.76%	94.84%
		93	8	633	1.21%	96.05%
		94	5	638	0.76%	96.81%
		95	4	642	0.61%	97.42%
		96	6	648	0.91%	98.33%
		97	3	651	0.46%	98.79%
		98	2	653	0.30%	99.09%
		99	2	655	0.30%	99.39%
		100	1	656	0.15%	99.54%
		101	1	657	0.15%	99.70%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	1	658	0.15%	99.85%
WR	3	103	1	659	0.15%	100%
		104	0	659	0.00%	100%
		105	0	659	0.00%	100%

Table 52
Writing Grade 4 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	13	13	2.07%	2.07%
		1	1	14	0.16%	2.23%
		2	5	19	0.80%	3.03%
		3	8	27	1.27%	4.30%
		4	3	30	0.48%	4.78%
		5	1	31	0.16%	4.94%
		6	3	34	0.48%	5.41%
		7	2	36	0.32%	5.73%
		8	4	40	0.64%	6.37%
		9	4	44	0.64%	7.01%
		10	3	47	0.48%	7.48%
		11	5	52	0.80%	8.28%
		12	9	61	1.43%	9.71%
		13	4	65	0.64%	10.35%
		14	5	70	0.80%	11.15%
		15	7	77	1.11%	12.26%
WR	4	16	2	79	0.32%	12.58%
		17	3	82	0.48%	13.06%
		18	4	86	0.64%	13.69%
		19	4	90	0.64%	14.33%
		20	1	91	0.16%	14.49%
		21	9	100	1.43%	15.92%
		22	4	104	0.64%	16.56%
		23	3	107	0.48%	17.04%
		24	2	109	0.32%	17.36%
		25	5	114	0.80%	18.15%
		26	6	120	0.96%	19.11%
		27	5	125	0.80%	19.90%
		28	2	127	0.32%	20.22%
		29	5	132	0.80%	21.02%
		30	5	137	0.80%	21.82%
		31	4	141	0.64%	22.45%
		32	4	145	0.64%	23.09%
		33	6	151	0.96%	24.04%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	4	155	0.64%	24.68%
		35	7	162	1.11%	25.80%
		36	7	169	1.11%	26.91%
		37	9	178	1.43%	28.34%
		38	4	182	0.64%	28.98%
		39	7	189	1.11%	30.10%
		40	5	194	0.80%	30.89%
		41	4	198	0.64%	31.53%
		42	5	203	0.80%	32.32%
		43	5	208	0.80%	33.12%
		44	4	212	0.64%	33.76%
		45	5	217	0.80%	34.55%
		46	2	219	0.32%	34.87%
		47	7	226	1.11%	35.99%
		48	3	229	0.48%	36.46%
		49	5	234	0.80%	37.26%
WR	4	50	5	239	0.80%	38.06%
		51	4	243	0.64%	38.69%
		52	2	245	0.32%	39.01%
		53	4	249	0.64%	39.65%
		54	8	257	1.27%	40.92%
		55	3	260	0.48%	41.40%
		56	7	267	1.11%	42.52%
		57	7	274	1.11%	43.63%
		58	6	280	0.96%	44.59%
		59	2	282	0.32%	44.90%
		60	6	288	0.96%	45.86%
		61	7	295	1.11%	46.97%
		62	2	297	0.32%	47.29%
		63	6	303	0.96%	48.25%
		64	10	313	1.59%	49.84%
		65	4	317	0.64%	50.48%
		66	3	320	0.48%	50.96%
		67	10	330	1.59%	52.55%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	8	338	1.27%	53.82%
		69	10	348	1.59%	55.41%
		70	12	360	1.91%	57.32%
		71	6	366	0.96%	58.28%
		72	7	373	1.11%	59.39%
		73	6	379	0.96%	60.35%
		74	11	390	1.75%	62.10%
		75	10	400	1.59%	63.69%
		76	15	415	2.39%	66.08%
		77	6	421	0.96%	67.04%
		78	5	426	0.80%	67.83%
		79	9	435	1.43%	69.27%
		80	10	445	1.59%	70.86%
		81	9	454	1.43%	72.29%
		82	13	467	2.07%	74.36%
		83	12	479	1.91%	76.27%
WR	4	84	8	487	1.27%	77.55%
		85	14	501	2.23%	79.78%
		86	17	518	2.71%	82.48%
		87	19	537	3.03%	85.51%
		88	15	552	2.39%	87.90%
		89	5	557	0.80%	88.69%
		90	9	566	1.43%	90.13%
		91	9	575	1.43%	91.56%
		92	5	580	0.80%	92.36%
		93	5	585	0.80%	93.15%
		94	7	592	1.11%	94.27%
		95	3	595	0.48%	94.75%
		96	6	601	0.96%	95.70%
		97	5	606	0.80%	96.50%
		98	6	612	0.96%	97.45%
		99	4	616	0.64%	98.09%
		100	4	620	0.64%	98.73%
		101	2	622	0.32%	99.04%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	4	626	0.64%	99.68%
		103	1	627	0.16%	99.84%
		104	1	628	0.16%	100%
WR	4	105	0	628	0.00%	100%
		106	0	628	0.00%	100%
		107	0	628	0.00%	100%
		108	0	628	0.00%	100%

Table 53
Writing Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	29	29	4.71%	4.71%
		1	3	32	0.49%	5.19%
		2	2	34	0.32%	5.52%
		3	2	36	0.32%	5.84%
		4	1	37	0.16%	6.01%
		5	2	39	0.32%	6.33%
		6	5	44	0.81%	7.14%
		7	4	48	0.65%	7.79%
		8	1	49	0.16%	7.95%
		9	4	53	0.65%	8.60%
		10	1	54	0.16%	8.77%
		11	1	55	0.16%	8.93%
		12	4	59	0.65%	9.58%
		13	1	60	0.16%	9.74%
		14	1	61	0.16%	9.90%
		15	8	69	1.30%	11.20%
WR	5	16	3	72	0.49%	11.69%
		17	1	73	0.16%	11.85%
		18	4	77	0.65%	12.50%
		19	1	78	0.16%	12.66%
		20	4	82	0.65%	13.31%
		21	8	90	1.30%	14.61%
		22	1	91	0.16%	14.77%
		23	6	97	0.97%	15.75%
		24	4	101	0.65%	16.40%
		25	1	102	0.16%	16.56%
		26	6	108	0.97%	17.53%
		27	6	114	0.97%	18.51%
		28	1	115	0.16%	18.67%
		29	4	119	0.65%	19.32%
		30	5	124	0.81%	20.13%
		31	5	129	0.81%	20.94%
		32	8	137	1.30%	22.24%
		33	4	141	0.65%	22.89%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	146	0.81%	23.70%
		35	4	150	0.65%	24.35%
		36	7	157	1.14%	25.49%
		37	5	162	0.81%	26.30%
		38	3	165	0.49%	26.79%
		39	7	172	1.14%	27.92%
		40	3	175	0.49%	28.41%
		41	2	177	0.32%	28.73%
		42	1	178	0.16%	28.90%
		43	3	181	0.49%	29.38%
		44	2	183	0.32%	29.71%
		45	9	192	1.46%	31.17%
		46	6	198	0.97%	32.14%
		47	7	205	1.14%	33.28%
		48	3	208	0.49%	33.77%
		49	5	213	0.81%	34.58%
WR	5	50	7	220	1.14%	35.71%
		51	8	228	1.30%	37.01%
		52	5	233	0.81%	37.82%
		53	7	240	1.14%	38.96%
		54	4	244	0.65%	39.61%
		55	4	248	0.65%	40.26%
		56	6	254	0.97%	41.23%
		57	4	258	0.65%	41.88%
		58	3	261	0.49%	42.37%
		59	1	262	0.16%	42.53%
		60	5	267	0.81%	43.34%
		61	2	269	0.32%	43.67%
		62	7	276	1.14%	44.81%
		63	5	281	0.81%	45.62%
		64	7	288	1.14%	46.75%
		65	1	289	0.16%	46.92%
		66	6	295	0.97%	47.89%
		67	12	307	1.95%	49.84%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	310	0.49%	50.32%
		69	13	323	2.11%	52.44%
		70	7	330	1.14%	53.57%
		71	7	337	1.14%	54.71%
		72	8	345	1.30%	56.01%
		73	13	358	2.11%	58.12%
		74	4	362	0.65%	58.77%
		75	12	374	1.95%	60.71%
		76	8	382	1.30%	62.01%
		77	8	390	1.30%	63.31%
		78	10	400	1.62%	64.94%
		79	18	418	2.92%	67.86%
		80	9	427	1.46%	69.32%
		81	16	443	2.60%	71.92%
		82	17	460	2.76%	74.68%
		83	5	465	0.81%	75.49%
WR	5	84	16	481	2.60%	78.08%
		85	11	492	1.79%	79.87%
		86	6	498	0.97%	80.84%
		87	17	515	2.76%	83.60%
		88	15	530	2.44%	86.04%
		89	14	544	2.27%	88.31%
		90	11	555	1.79%	90.10%
		91	7	562	1.14%	91.23%
		92	4	566	0.65%	91.88%
		93	12	578	1.95%	93.83%
		94	3	581	0.49%	94.32%
		95	4	585	0.65%	94.97%
		96	12	597	1.95%	96.92%
		97	2	599	0.32%	97.24%
		98	6	605	0.97%	98.21%
		99	5	610	0.81%	99.03%
		100	0	610	0.00%	99.03%
		101	1	611	0.16%	99.19%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	616	0.81%	100%
WR	5	103	0	616	0.00%	100%
		104	0	616	0.00%	100%
		105	0	616	0.00%	100%

Table 54
Writing Grade 6 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	2.58%	2.58%
		1	0	16	0.00%	2.58%
		2	1	17	0.16%	2.74%
		3	4	21	0.64%	3.38%
		4	0	21	0.00%	3.38%
		5	2	23	0.32%	3.70%
		6	1	24	0.16%	3.86%
		7	2	26	0.32%	4.19%
		8	4	30	0.64%	4.83%
		9	6	36	0.97%	5.80%
		10	3	39	0.48%	6.28%
		11	3	42	0.48%	6.76%
		12	6	48	0.97%	7.73%
		13	2	50	0.32%	8.05%
		14	2	52	0.32%	8.37%
		15	4	56	0.64%	9.02%
WR	6	16	2	58	0.32%	9.34%
		17	3	61	0.48%	9.82%
		18	6	67	0.97%	10.79%
		19	2	69	0.32%	11.11%
		20	1	70	0.16%	11.27%
		21	4	74	0.64%	11.92%
		22	4	78	0.64%	12.56%
		23	0	78	0.00%	12.56%
		24	5	83	0.81%	13.37%
		25	3	86	0.48%	13.85%
		26	2	88	0.32%	14.17%
		27	1	89	0.16%	14.33%
		28	1	90	0.16%	14.49%
		29	2	92	0.32%	14.81%
		30	3	95	0.48%	15.30%
		31	6	101	0.97%	16.26%
		32	2	103	0.32%	16.59%
		33	3	106	0.48%	17.07%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	111	0.81%	17.87%
		35	2	113	0.32%	18.20%
		36	8	121	1.29%	19.48%
		37	4	125	0.64%	20.13%
		38	6	131	0.97%	21.10%
		39	3	134	0.48%	21.58%
		40	1	135	0.16%	21.74%
		41	5	140	0.81%	22.54%
		42	3	143	0.48%	23.03%
		43	3	146	0.48%	23.51%
		44	8	154	1.29%	24.80%
		45	2	156	0.32%	25.12%
		46	0	156	0.00%	25.12%
		47	7	163	1.13%	26.25%
		48	3	166	0.48%	26.73%
		49	4	170	0.64%	27.38%
WR	6	50	2	172	0.32%	27.70%
		51	3	175	0.48%	28.18%
		52	5	180	0.81%	28.99%
		53	4	184	0.64%	29.63%
		54	3	187	0.48%	30.11%
		55	3	190	0.48%	30.60%
		56	7	197	1.13%	31.72%
		57	6	203	0.97%	32.69%
		58	5	208	0.81%	33.49%
		59	6	214	0.97%	34.46%
		60	3	217	0.48%	34.94%
		61	3	220	0.48%	35.43%
		62	4	224	0.64%	36.07%
		63	9	233	1.45%	37.52%
		64	4	237	0.64%	38.16%
		65	4	241	0.64%	38.81%
		66	6	247	0.97%	39.77%
		67	7	254	1.13%	40.90%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	9	263	1.45%	42.35%
		69	7	270	1.13%	43.48%
		70	11	281	1.77%	45.25%
		71	5	286	0.81%	46.05%
		72	3	289	0.48%	46.54%
		73	6	295	0.97%	47.50%
		74	8	303	1.29%	48.79%
		75	14	317	2.25%	51.05%
		76	14	331	2.25%	53.30%
		77	10	341	1.61%	54.91%
		78	16	357	2.58%	57.49%
		79	11	368	1.77%	59.26%
		80	9	377	1.45%	60.71%
		81	10	387	1.61%	62.32%
		82	11	398	1.77%	64.09%
		83	8	406	1.29%	65.38%
WR	6	84	15	421	2.42%	67.79%
		85	15	436	2.42%	70.21%
		86	19	455	3.06%	73.27%
		87	15	470	2.42%	75.68%
		88	21	491	3.38%	79.07%
		89	9	500	1.45%	80.52%
		90	16	516	2.58%	83.09%
		91	9	525	1.45%	84.54%
		92	9	534	1.45%	85.99%
		93	14	548	2.25%	88.24%
		94	6	554	0.97%	89.21%
		95	18	572	2.90%	92.11%
		96	15	587	2.42%	94.52%
		97	7	594	1.13%	95.65%
		98	3	597	0.48%	96.14%
		99	11	608	1.77%	97.91%
		100	1	609	0.16%	98.07%
		101	4	613	0.64%	98.71%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	7	620	1.13%	99.84%
WR	6	103	0	620	0.00%	99.84%
		104	1	621	0.16%	100%
		105	0	621	0.00%	100%

Table 55
Writing Grade 7 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	14	14	2.68%	2.68%
		1	3	17	0.57%	3.25%
		2	2	19	0.38%	3.63%
		3	1	20	0.19%	3.82%
		4	3	23	0.57%	4.40%
		5	3	26	0.57%	4.97%
		6	4	30	0.76%	5.74%
		7	1	31	0.19%	5.93%
		8	2	33	0.38%	6.31%
		9	5	38	0.96%	7.27%
		10	2	40	0.38%	7.65%
		11	2	42	0.38%	8.03%
		12	0	42	0.00%	8.03%
		13	3	45	0.57%	8.60%
		14	2	47	0.38%	8.99%
		15	4	51	0.76%	9.75%
WR	7	16	1	52	0.19%	9.94%
		17	1	53	0.19%	10.13%
		18	7	60	1.34%	11.47%
		19	1	61	0.19%	11.66%
		20	7	68	1.34%	13.00%
		21	5	73	0.96%	13.96%
		22	2	75	0.38%	14.34%
		23	4	79	0.76%	15.11%
		24	5	84	0.96%	16.06%
		25	0	84	0.00%	16.06%
		26	3	87	0.57%	16.63%
		27	5	92	0.96%	17.59%
		28	2	94	0.38%	17.97%
		29	4	98	0.76%	18.74%
		30	0	98	0.00%	18.74%
		31	4	102	0.76%	19.50%
		32	5	107	0.96%	20.46%
		33	5	112	0.96%	21.41%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	117	0.96%	22.37%
		35	2	119	0.38%	22.75%
		36	4	123	0.76%	23.52%
		37	1	124	0.19%	23.71%
		38	5	129	0.96%	24.67%
		39	3	132	0.57%	25.24%
		40	2	134	0.38%	25.62%
		41	6	140	1.15%	26.77%
		42	5	145	0.96%	27.72%
		43	3	148	0.57%	28.30%
		44	2	150	0.38%	28.68%
		45	1	151	0.19%	28.87%
		46	3	154	0.57%	29.45%
		47	2	156	0.38%	29.83%
		48	5	161	0.96%	30.78%
		49	2	163	0.38%	31.17%
WR	7	50	4	167	0.76%	31.93%
		51	5	172	0.96%	32.89%
		52	6	178	1.15%	34.03%
		53	2	180	0.38%	34.42%
		54	3	183	0.57%	34.99%
		55	3	186	0.57%	35.56%
		56	2	188	0.38%	35.95%
		57	2	190	0.38%	36.33%
		58	4	194	0.76%	37.09%
		59	3	197	0.57%	37.67%
		60	4	201	0.76%	38.43%
		61	1	202	0.19%	38.62%
		62	6	208	1.15%	39.77%
		63	4	212	0.76%	40.54%
		64	3	215	0.57%	41.11%
		65	6	221	1.15%	42.26%
		66	3	224	0.57%	42.83%
		67	7	231	1.34%	44.17%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	2	233	0.38%	44.55%
		69	6	239	1.15%	45.70%
		70	4	243	0.76%	46.46%
		71	4	247	0.76%	47.23%
		72	9	256	1.72%	48.95%
		73	1	257	0.19%	49.14%
		74	6	263	1.15%	50.29%
		75	5	268	0.96%	51.24%
		76	7	275	1.34%	52.58%
		77	8	283	1.53%	54.11%
		78	6	289	1.15%	55.26%
		79	9	298	1.72%	56.98%
		80	5	303	0.96%	57.93%
		81	8	311	1.53%	59.46%
		82	9	320	1.72%	61.19%
		83	11	331	2.10%	63.29%
WR	7	84	9	340	1.72%	65.01%
		85	11	351	2.10%	67.11%
		86	14	365	2.68%	69.79%
		87	6	371	1.15%	70.94%
		88	14	385	2.68%	73.61%
		89	12	397	2.29%	75.91%
		90	13	410	2.49%	78.39%
		91	15	425	2.87%	81.26%
		92	15	440	2.87%	84.13%
		93	7	447	1.34%	85.47%
		94	5	452	0.96%	86.42%
		95	11	463	2.10%	88.53%
		96	13	476	2.49%	91.01%
		97	1	477	0.19%	91.20%
		98	8	485	1.53%	92.73%
		99	8	493	1.53%	94.26%
		100	4	497	0.76%	95.03%
		101	4	501	0.76%	95.79%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	7	508	1.34%	97.13%
		103	3	511	0.57%	97.71%
		104	2	513	0.38%	98.09%
WR	7	105	6	519	1.15%	99.24%
		106	2	521	0.38%	99.62%
		107	1	522	0.19%	99.81%
		108	1	523	0.19%	100%

Table 56
Writing Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	20	20	3.64%	3.64%
		1	1	21	0.18%	3.83%
		2	0	21	0.00%	3.83%
		3	4	25	0.73%	4.55%
		4	1	26	0.18%	4.74%
		5	1	27	0.18%	4.92%
		6	3	30	0.55%	5.46%
		7	1	31	0.18%	5.65%
		8	0	31	0.00%	5.65%
		9	1	32	0.18%	5.83%
		10	0	32	0.00%	5.83%
		11	1	33	0.18%	6.01%
		12	3	36	0.55%	6.56%
		13	2	38	0.36%	6.92%
		14	1	39	0.18%	7.10%
		15	11	50	2.00%	9.11%
WR	8	16	1	51	0.18%	9.29%
		17	2	53	0.36%	9.65%
		18	4	57	0.73%	10.38%
		19	2	59	0.36%	10.75%
		20	1	60	0.18%	10.93%
		21	4	64	0.73%	11.66%
		22	3	67	0.55%	12.20%
		23	2	69	0.36%	12.57%
		24	5	74	0.91%	13.48%
		25	1	75	0.18%	13.66%
		26	2	77	0.36%	14.03%
		27	4	81	0.73%	14.75%
		28	6	87	1.09%	15.85%
		29	8	95	1.46%	17.30%
		30	3	98	0.55%	17.85%
		31	1	99	0.18%	18.03%
		32	4	103	0.73%	18.76%
		33	9	112	1.64%	20.40%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	4	116	0.73%	21.13%
		35	3	119	0.55%	21.68%
		36	3	122	0.55%	22.22%
		37	4	126	0.73%	22.95%
		38	8	134	1.46%	24.41%
		39	3	137	0.55%	24.95%
		40	1	138	0.18%	25.14%
		41	4	142	0.73%	25.87%
		42	6	148	1.09%	26.96%
		43	2	150	0.36%	27.32%
		44	2	152	0.36%	27.69%
		45	3	155	0.55%	28.23%
		46	2	157	0.36%	28.60%
		47	3	160	0.55%	29.14%
		48	2	162	0.36%	29.51%
		49	2	164	0.36%	29.87%
WR	8	50	2	166	0.36%	30.24%
		51	4	170	0.73%	30.97%
		52	12	182	2.19%	33.15%
		53	4	186	0.73%	33.88%
		54	1	187	0.18%	34.06%
		55	5	192	0.91%	34.97%
		56	6	198	1.09%	36.07%
		57	5	203	0.91%	36.98%
		58	3	206	0.55%	37.52%
		59	4	210	0.73%	38.25%
		60	6	216	1.09%	39.34%
		61	2	218	0.36%	39.71%
		62	2	220	0.36%	40.07%
		63	8	228	1.46%	41.53%
		64	5	233	0.91%	42.44%
		65	1	234	0.18%	42.62%
		66	5	239	0.91%	43.53%
		67	1	240	0.18%	43.72%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	1	241	0.18%	43.90%
		69	4	245	0.73%	44.63%
		70	7	252	1.28%	45.90%
		71	5	257	0.91%	46.81%
		72	9	266	1.64%	48.45%
		73	10	276	1.82%	50.27%
		74	11	287	2.00%	52.28%
		75	5	292	0.91%	53.19%
		76	11	303	2.00%	55.19%
		77	11	314	2.00%	57.19%
		78	18	332	3.28%	60.47%
		79	9	341	1.64%	62.11%
		80	9	350	1.64%	63.75%
		81	18	368	3.28%	67.03%
		82	10	378	1.82%	68.85%
		83	10	388	1.82%	70.67%
WR	8	84	22	410	4.01%	74.68%
		85	7	417	1.28%	75.96%
		86	14	431	2.55%	78.51%
		87	15	446	2.73%	81.24%
		88	7	453	1.28%	82.51%
		89	8	461	1.46%	83.97%
		90	22	483	4.01%	87.98%
		91	2	485	0.36%	88.34%
		92	8	493	1.46%	89.80%
		93	9	502	1.64%	91.44%
		94	6	508	1.09%	92.53%
		95	8	516	1.46%	93.99%
		96	9	525	1.64%	95.63%
		97	2	527	0.36%	95.99%
		98	8	535	1.46%	97.45%
		99	8	543	1.46%	98.91%
		100	2	545	0.36%	99.27%
		101	1	546	0.18%	99.45%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	1	547	0.18%	99.64%
		103	0	547	0.00%	99.64%
		104	0	547	0.00%	99.64%
WR	8	105	2	549	0.36%	100%
		106	0	549	0.00%	100%
		107	0	549	0.00%	100%
		108	0	549	0.00%	100%

Table 57
Writing Grade 9 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	25	25	5.21%	5.21%
		1	1	26	0.21%	5.42%
		2	0	26	0.00%	5.42%
		3	2	28	0.42%	5.83%
		4	3	31	0.63%	6.46%
		5	1	32	0.21%	6.67%
		6	1	33	0.21%	6.88%
		7	3	36	0.63%	7.50%
		8	4	40	0.83%	8.33%
		9	3	43	0.63%	8.96%
		10	3	46	0.63%	9.58%
		11	1	47	0.21%	9.79%
		12	7	54	1.46%	11.25%
		13	0	54	0.00%	11.25%
		14	1	55	0.21%	11.46%
		15	6	61	1.25%	12.71%
WR	9	16	1	62	0.21%	12.92%
		17	1	63	0.21%	13.13%
		18	3	66	0.63%	13.75%
		19	2	68	0.42%	14.17%
		20	5	73	1.04%	15.21%
		21	6	79	1.25%	16.46%
		22	1	80	0.21%	16.67%
		23	1	81	0.21%	16.88%
		24	4	85	0.83%	17.71%
		25	5	90	1.04%	18.75%
		26	2	92	0.42%	19.17%
		27	1	93	0.21%	19.38%
		28	1	94	0.21%	19.58%
		29	1	95	0.21%	19.79%
		30	3	98	0.63%	20.42%
		31	2	100	0.42%	20.83%
		32	4	104	0.83%	21.67%
		33	4	108	0.83%	22.50%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	109	0.21%	22.71%
		35	8	117	1.67%	24.38%
		36	2	119	0.42%	24.79%
		37	1	120	0.21%	25.00%
		38	2	122	0.42%	25.42%
		39	2	124	0.42%	25.83%
		40	6	130	1.25%	27.08%
		41	4	134	0.83%	27.92%
		42	3	137	0.63%	28.54%
		43	3	140	0.63%	29.17%
		44	3	143	0.63%	29.79%
		45	1	144	0.21%	30.00%
		46	1	145	0.21%	30.21%
		47	3	148	0.63%	30.83%
		48	6	154	1.25%	32.08%
		49	6	160	1.25%	33.33%
WR	9	50	7	167	1.46%	34.79%
		51	2	169	0.42%	35.21%
		52	4	173	0.83%	36.04%
		53	4	177	0.83%	36.88%
		54	4	181	0.83%	37.71%
		55	3	184	0.63%	38.33%
		56	2	186	0.42%	38.75%
		57	6	192	1.25%	40.00%
		58	9	201	1.88%	41.88%
		59	4	205	0.83%	42.71%
		60	4	209	0.83%	43.54%
		61	3	212	0.63%	44.17%
		62	4	216	0.83%	45.00%
		63	7	223	1.46%	46.46%
		64	7	230	1.46%	47.92%
		65	6	236	1.25%	49.17%
		66	5	241	1.04%	50.21%
		67	7	248	1.46%	51.67%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	251	0.63%	52.29%
		69	6	257	1.25%	53.54%
		70	6	263	1.25%	54.79%
		71	4	267	0.83%	55.63%
		72	6	273	1.25%	56.88%
		73	8	281	1.67%	58.54%
		74	5	286	1.04%	59.58%
		75	8	294	1.67%	61.25%
		76	13	307	2.71%	63.96%
		77	5	312	1.04%	65.00%
		78	9	321	1.88%	66.88%
		79	9	330	1.88%	68.75%
		80	13	343	2.71%	71.46%
		81	7	350	1.46%	72.92%
		82	5	355	1.04%	73.96%
		83	6	361	1.25%	75.21%
WR	9	84	7	368	1.46%	76.67%
		85	12	380	2.50%	79.17%
		86	14	394	2.92%	82.08%
		87	11	405	2.29%	84.38%
		88	5	410	1.04%	85.42%
		89	6	416	1.25%	86.67%
		90	12	428	2.50%	89.17%
		91	8	436	1.67%	90.83%
		92	8	444	1.67%	92.50%
		93	14	458	2.92%	95.42%
		94	2	460	0.42%	95.83%
		95	2	462	0.42%	96.25%
		96	6	468	1.25%	97.50%
		97	0	468	0.00%	97.50%
		98	3	471	0.63%	98.13%
		99	5	476	1.04%	99.17%
		100	0	476	0.00%	99.17%
		101	1	477	0.21%	99.38%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	2	479	0.42%	99.79%
WR	9	103	0	479	0.00%	99.79%
		104	0	479	0.00%	99.79%
		105	1	480	0.21%	100%

Table 58
Writing Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	18	18	3.50%	3.50%
		1	2	20	0.39%	3.89%
		2	4	24	0.78%	4.67%
		3	1	25	0.19%	4.86%
		4	2	27	0.39%	5.25%
		5	1	28	0.19%	5.45%
		6	1	29	0.19%	5.64%
		7	0	29	0.00%	5.64%
		8	2	31	0.39%	6.03%
		9	5	36	0.97%	7.00%
		10	2	38	0.39%	7.39%
		11	1	39	0.19%	7.59%
		12	5	44	0.97%	8.56%
		13	1	45	0.19%	8.75%
		14	2	47	0.39%	9.14%
		15	2	49	0.39%	9.53%
WR	10	16	1	50	0.19%	9.73%
		17	0	50	0.00%	9.73%
		18	5	55	0.97%	10.70%
		19	4	59	0.78%	11.48%
		20	0	59	0.00%	11.48%
		21	3	62	0.58%	12.06%
		22	1	63	0.19%	12.26%
		23	6	69	1.17%	13.42%
		24	3	72	0.58%	14.01%
		25	3	75	0.58%	14.59%
		26	3	78	0.58%	15.18%
		27	1	79	0.19%	15.37%
		28	1	80	0.19%	15.56%
		29	4	84	0.78%	16.34%
		30	7	91	1.36%	17.70%
		31	0	91	0.00%	17.70%
		32	4	95	0.78%	18.48%
		33	5	100	0.97%	19.46%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	105	0.97%	20.43%
		35	4	109	0.78%	21.21%
		36	4	113	0.78%	21.98%
		37	0	113	0.00%	21.98%
		38	3	116	0.58%	22.57%
		39	2	118	0.39%	22.96%
		40	5	123	0.97%	23.93%
		41	7	130	1.36%	25.29%
		42	3	133	0.58%	25.88%
		43	5	138	0.97%	26.85%
		44	2	140	0.39%	27.24%
		45	4	144	0.78%	28.02%
		46	2	146	0.39%	28.40%
		47	5	151	0.97%	29.38%
		48	6	157	1.17%	30.54%
		49	5	162	0.97%	31.52%
WR	10	50	5	167	0.97%	32.49%
		51	4	171	0.78%	33.27%
		52	5	176	0.97%	34.24%
		53	6	182	1.17%	35.41%
		54	5	187	0.97%	36.38%
		55	7	194	1.36%	37.74%
		56	7	201	1.36%	39.11%
		57	5	206	0.97%	40.08%
		58	7	213	1.36%	41.44%
		59	7	220	1.36%	42.80%
		60	6	226	1.17%	43.97%
		61	6	232	1.17%	45.14%
		62	5	237	0.97%	46.11%
		63	3	240	0.58%	46.69%
		64	5	245	0.97%	47.67%
		65	2	247	0.39%	48.05%
		66	8	255	1.56%	49.61%
		67	11	266	2.14%	51.75%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	7	273	1.36%	53.11%
		69	3	276	0.58%	53.70%
		70	11	287	2.14%	55.84%
		71	8	295	1.56%	57.39%
		72	5	300	0.97%	58.37%
		73	10	310	1.95%	60.31%
		74	10	320	1.95%	62.26%
		75	5	325	0.97%	63.23%
		76	8	333	1.56%	64.79%
		77	10	343	1.95%	66.73%
		78	7	350	1.36%	68.09%
		79	7	357	1.36%	69.46%
		80	10	367	1.95%	71.40%
		81	12	379	2.33%	73.74%
		82	8	387	1.56%	75.29%
		83	6	393	1.17%	76.46%
WR	10	84	16	409	3.11%	79.57%
		85	4	413	0.78%	80.35%
		86	9	422	1.75%	82.10%
		87	15	437	2.92%	85.02%
		88	8	445	1.56%	86.58%
		89	6	451	1.17%	87.74%
		90	12	463	2.33%	90.08%
		91	5	468	0.97%	91.05%
		92	6	474	1.17%	92.22%
		93	11	485	2.14%	94.36%
		94	0	485	0.00%	94.36%
		95	7	492	1.36%	95.72%
		96	7	499	1.36%	97.08%
		97	0	499	0.00%	97.08%
		98	2	501	0.39%	97.47%
		99	1	502	0.19%	97.67%
		100	2	504	0.39%	98.05%
		101	2	506	0.39%	98.44%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	511	0.97%	99.42%
		103	0	511	0.00%	99.42%
		104	0	511	0.00%	99.42%
WR	10	105	2	513	0.39%	100%
		106	1	514	0.19%	100%
		107	0	514	0.00%	100%
		108	0	514	0.00%	100%

Table 59
Mathematics Grade 3 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	18	18	2.78%	2.78%
		1	2	20	0.31%	3.09%
		2	2	22	0.31%	3.40%
		3	4	26	0.62%	4.01%
		4	3	29	0.46%	4.48%
		5	0	29	0.00%	4.48%
		6	4	33	0.62%	5.09%
		7	2	35	0.31%	5.40%
		8	2	37	0.31%	5.71%
		9	4	41	0.62%	6.33%
		10	3	44	0.46%	6.79%
		11	0	44	0.00%	6.79%
		12	1	45	0.15%	6.94%
		13	0	45	0.00%	6.94%
		14	3	48	0.46%	7.41%
		15	5	53	0.77%	8.18%
MA	3	16	2	55	0.31%	8.49%
		17	5	60	0.77%	9.26%
		18	1	61	0.15%	9.41%
		19	6	67	0.93%	10.34%
		20	4	71	0.62%	10.96%
		21	3	74	0.46%	11.42%
		22	3	77	0.46%	11.88%
		23	2	79	0.31%	12.19%
		24	2	81	0.31%	12.50%
		25	1	82	0.15%	12.65%
		26	4	86	0.62%	13.27%
		27	0	86	0.00%	13.27%
		28	2	88	0.31%	13.58%
		29	4	92	0.62%	14.20%
		30	3	95	0.46%	14.66%
		31	5	100	0.77%	15.43%
		32	4	104	0.62%	16.05%
		33	4	108	0.62%	16.67%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	111	0.46%	17.13%
		35	3	114	0.46%	17.59%
		36	6	120	0.93%	18.52%
		37	3	123	0.46%	18.98%
		38	3	126	0.46%	19.44%
		39	7	133	1.08%	20.52%
		40	3	136	0.46%	20.99%
		41	4	140	0.62%	21.60%
		42	3	143	0.46%	22.07%
		43	3	146	0.46%	22.53%
		44	4	150	0.62%	23.15%
		45	3	153	0.46%	23.61%
		46	3	156	0.46%	24.07%
		47	3	159	0.46%	24.54%
		48	3	162	0.46%	25.00%
		49	1	163	0.15%	25.15%
MA	3	50	3	166	0.46%	25.62%
		51	2	168	0.31%	25.93%
		52	5	173	0.77%	26.70%
		53	3	176	0.46%	27.16%
		54	2	178	0.31%	27.47%
		55	6	184	0.93%	28.40%
		56	5	189	0.77%	29.17%
		57	3	192	0.46%	29.63%
		58	5	197	0.77%	30.40%
		59	3	200	0.46%	30.86%
		60	2	202	0.31%	31.17%
		61	3	205	0.46%	31.64%
		62	3	208	0.46%	32.10%
		63	2	210	0.31%	32.41%
		64	5	215	0.77%	33.18%
		65	4	219	0.62%	33.80%
		66	5	224	0.77%	34.57%
		67	10	234	1.54%	36.11%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	1	235	0.15%	36.27%
		69	4	239	0.62%	36.88%
		70	4	243	0.62%	37.50%
		71	8	251	1.23%	38.73%
		72	6	257	0.93%	39.66%
		73	3	260	0.46%	40.12%
		74	3	263	0.46%	40.59%
		75	5	268	0.77%	41.36%
		76	4	272	0.62%	41.98%
		77	8	280	1.23%	43.21%
		78	12	292	1.85%	45.06%
		79	3	295	0.46%	45.52%
		80	6	301	0.93%	46.45%
		81	3	304	0.46%	46.91%
		82	6	310	0.93%	47.84%
		83	1	311	0.15%	47.99%
MA	3	84	5	316	0.77%	48.77%
		85	6	322	0.93%	49.69%
		86	8	330	1.23%	50.93%
		87	5	335	0.77%	51.70%
		88	10	345	1.54%	53.24%
		89	13	358	2.01%	55.25%
		90	3	361	0.46%	55.71%
		91	11	372	1.70%	57.41%
		92	8	380	1.23%	58.64%
		93	5	385	0.77%	59.41%
		94	5	390	0.77%	60.19%
		95	3	393	0.46%	60.65%
		96	6	399	0.93%	61.57%
		97	8	407	1.23%	62.81%
		98	5	412	0.77%	63.58%
		99	9	421	1.39%	64.97%
		100	12	433	1.85%	66.82%
		101	5	438	0.77%	67.59%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	8	446	1.23%	68.83%
		103	11	457	1.70%	70.52%
		104	9	466	1.39%	71.91%
		105	11	477	1.70%	73.61%
		106	6	483	0.93%	74.54%
		107	8	491	1.23%	75.77%
		108	11	502	1.70%	77.47%
		109	14	516	2.16%	79.63%
		110	12	528	1.85%	81.48%
		111	12	540	1.85%	83.33%
		112	8	548	1.23%	84.57%
		113	18	566	2.78%	87.35%
MA	3	114	9	575	1.39%	88.73%
		115	9	584	1.39%	90.12%
		116	11	595	1.70%	91.82%
		117	11	606	1.70%	93.52%
		118	10	616	1.54%	95.06%
		119	10	626	1.54%	96.60%
		120	4	630	0.62%	97.22%
		121	6	636	0.93%	98.15%
		122	5	641	0.77%	98.92%
		123	4	645	0.62%	99.54%
		124	3	648	0.46%	100%
		125	0	648	0.00%	100%
		126	0	648	0.00%	100%

Table 60
Mathematics Grade 4 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	2.56%	2.56%
		1	1	17	0.16%	2.72%
		2	4	21	0.64%	3.36%
		3	4	25	0.64%	4.00%
		4	4	29	0.64%	4.64%
		5	2	31	0.32%	4.96%
		6	2	33	0.32%	5.28%
		7	3	36	0.48%	5.76%
		8	3	39	0.48%	6.24%
		9	1	40	0.16%	6.40%
		10	1	41	0.16%	6.56%
		11	2	43	0.32%	6.88%
		12	5	48	0.80%	7.68%
		13	5	53	0.80%	8.48%
		14	2	55	0.32%	8.80%
		15	3	58	0.48%	9.28%
MA	4	16	1	59	0.16%	9.44%
		17	2	61	0.32%	9.76%
		18	1	62	0.16%	9.92%
		19	2	64	0.32%	10.24%
		20	3	67	0.48%	10.72%
		21	5	72	0.80%	11.52%
		22	2	74	0.32%	11.84%
		23	3	77	0.48%	12.32%
		24	2	79	0.32%	12.64%
		25	4	83	0.64%	13.28%
		26	4	87	0.64%	13.92%
		27	3	90	0.48%	14.40%
		28	2	92	0.32%	14.72%
		29	0	92	0.00%	14.72%
		30	3	95	0.48%	15.20%
		31	2	97	0.32%	15.52%
		32	0	97	0.00%	15.52%
		33	4	101	0.64%	16.16%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	102	0.16%	16.32%
		35	4	106	0.64%	16.96%
		36	3	109	0.48%	17.44%
		37	2	111	0.32%	17.76%
		38	1	112	0.16%	17.92%
		39	4	116	0.64%	18.56%
		40	7	123	1.12%	19.68%
		41	0	123	0.00%	19.68%
		42	2	125	0.32%	20.00%
		43	2	127	0.32%	20.32%
		44	2	129	0.32%	20.64%
		45	2	131	0.32%	20.96%
		46	1	132	0.16%	21.12%
		47	2	134	0.32%	21.44%
		48	3	137	0.48%	21.92%
		49	4	141	0.64%	22.56%
MA	4	50	4	145	0.64%	23.20%
		51	2	147	0.32%	23.52%
		52	2	149	0.32%	23.84%
		53	4	153	0.64%	24.48%
		54	5	158	0.80%	25.28%
		55	1	159	0.16%	25.44%
		56	6	165	0.96%	26.40%
		57	1	166	0.16%	26.56%
		58	4	170	0.64%	27.20%
		59	4	174	0.64%	27.84%
		60	3	177	0.48%	28.32%
		61	2	179	0.32%	28.64%
		62	3	182	0.48%	29.12%
		63	1	183	0.16%	29.28%
		64	3	186	0.48%	29.76%
		65	4	190	0.64%	30.40%
		66	1	191	0.16%	30.56%
		67	3	194	0.48%	31.04%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	199	0.80%	31.84%
		69	2	201	0.32%	32.16%
		70	6	207	0.96%	33.12%
		71	3	210	0.48%	33.60%
		72	2	212	0.32%	33.92%
		73	3	215	0.48%	34.40%
		74	6	221	0.96%	35.36%
		75	6	227	0.96%	36.32%
		76	6	233	0.96%	37.28%
		77	3	236	0.48%	37.76%
		78	4	240	0.64%	38.40%
		79	4	244	0.64%	39.04%
		80	7	251	1.12%	40.16%
		81	4	255	0.64%	40.80%
		82	4	259	0.64%	41.44%
		83	6	265	0.96%	42.40%
MA	4	84	5	270	0.80%	43.20%
		85	7	277	1.12%	44.32%
		86	10	287	1.60%	45.92%
		87	2	289	0.32%	46.24%
		88	8	297	1.28%	47.52%
		89	9	306	1.44%	48.96%
		90	11	317	1.76%	50.72%
		91	6	323	0.96%	51.68%
		92	10	333	1.60%	53.28%
		93	9	342	1.44%	54.72%
		94	6	348	0.96%	55.68%
		95	9	357	1.44%	57.12%
		96	3	360	0.48%	57.60%
		97	10	370	1.60%	59.20%
		98	8	378	1.28%	60.48%
		99	8	386	1.28%	61.76%
		100	7	393	1.12%	62.88%
		101	9	402	1.44%	64.32%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	12	414	1.92%	66.24%
		103	13	427	2.08%	68.32%
		104	8	435	1.28%	70%
		105	6	441	0.96%	71%
		106	11	452	1.76%	72.32%
		107	7	459	1.12%	73.44%
		108	9	468	1.44%	74.88%
		109	7	475	1.12%	76.00%
		110	14	489	2.24%	78.24%
		111	9	498	1.44%	79.68%
		112	7	505	1.12%	80.80%
		113	10	515	1.60%	82%
		114	11	526	1.76%	84.16%
MA	4	115	10	536	1.60%	85.76%
		116	7	543	1.12%	86.88%
		117	13	556	2.08%	88.96%
		118	7	563	1.12%	90.08%
		119	7	570	1.12%	91.20%
		120	8	578	1.28%	92.48%
		121	6	584	0.96%	93.44%
		122	11	595	1.76%	95.20%
		123	6	601	0.96%	96.16%
		124	5	606	0.80%	96.96%
		125	8	614	1.28%	98.24%
		126	6	620	0.96%	99.20%
		127	1	621	0.16%	99.36%
		128	3	624	0.48%	99.84%
		129	1	625	0.16%	100%

Table 61
Mathematics Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	25	25	4.10%	4.10%
		1	2	27	0.33%	4.43%
		2	2	29	0.33%	4.75%
		3	2	31	0.33%	5.08%
		4	1	32	0.16%	5.25%
		5	4	36	0.66%	5.90%
		6	2	38	0.33%	6.23%
		7	2	40	0.33%	6.56%
		8	0	40	0.00%	6.56%
		9	3	43	0.49%	7.05%
		10	1	44	0.16%	7.21%
		11	1	45	0.16%	7.38%
		12	0	45	0.00%	7.38%
		13	1	46	0.16%	7.54%
		14	2	48	0.33%	7.87%
		15	2	50	0.33%	8.20%
MA	5	16	0	50	0.00%	8.20%
		17	3	53	0.49%	8.69%
		18	3	56	0.49%	9.18%
		19	3	59	0.49%	9.67%
		20	4	63	0.66%	10.33%
		21	3	66	0.49%	10.82%
		22	0	66	0.00%	10.82%
		23	1	67	0.16%	10.98%
		24	0	67	0.00%	10.98%
		25	0	67	0.00%	10.98%
		26	0	67	0.00%	10.98%
		27	2	69	0.33%	11.31%
		28	0	69	0.00%	11.31%
		29	4	73	0.66%	11.97%
		30	1	74	0.16%	12.13%
		31	1	75	0.16%	12.30%
		32	5	80	0.82%	13.11%
		33	2	82	0.33%	13.44%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	84	0.33%	13.77%
		35	1	85	0.16%	13.93%
		36	2	87	0.33%	14.26%
		37	4	91	0.66%	14.92%
		38	4	95	0.66%	15.57%
		39	4	99	0.66%	16.23%
		40	2	101	0.33%	16.56%
		41	3	104	0.49%	17.05%
		42	4	108	0.66%	17.70%
		43	1	109	0.16%	17.87%
		44	2	111	0.33%	18.20%
		45	1	112	0.16%	18.36%
		46	0	112	0.00%	18.36%
		47	4	116	0.66%	19.02%
		48	2	118	0.33%	19.34%
		49	4	122	0.66%	20.00%
MA	5	50	4	126	0.66%	20.66%
		51	2	128	0.33%	20.98%
		52	2	130	0.33%	21.31%
		53	1	131	0.16%	21.48%
		54	1	132	0.16%	21.64%
		55	4	136	0.66%	22.30%
		56	0	136	0.00%	22.30%
		57	1	137	0.16%	22.46%
		58	2	139	0.33%	22.79%
		59	3	142	0.49%	23.28%
		60	4	146	0.66%	23.93%
		61	1	147	0.16%	24.10%
		62	4	151	0.66%	24.75%
		63	3	154	0.49%	25.25%
		64	1	155	0.16%	25.41%
		65	3	158	0.49%	25.90%
		66	7	165	1.15%	27.05%
		67	1	166	0.16%	27.21%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	4	170	0.66%	27.87%
		69	2	172	0.33%	28.20%
		70	6	178	0.98%	29.18%
		71	4	182	0.66%	29.84%
		72	3	185	0.49%	30.33%
		73	3	188	0.49%	30.82%
		74	6	194	0.98%	31.80%
		75	1	195	0.16%	31.97%
		76	3	198	0.49%	32.46%
		77	2	200	0.33%	32.79%
		78	4	204	0.66%	33.44%
		79	2	206	0.33%	33.77%
		80	2	208	0.33%	34.10%
		81	1	209	0.16%	34.26%
		82	3	212	0.49%	34.75%
		83	2	214	0.33%	35.08%
MA	5	84	5	219	0.82%	35.90%
		85	5	224	0.82%	36.72%
		86	1	225	0.16%	36.89%
		87	3	228	0.49%	37.38%
		88	6	234	0.98%	38.36%
		89	4	238	0.66%	39.02%
		90	1	239	0.16%	39.18%
		91	5	244	0.82%	40.00%
		92	2	246	0.33%	40.33%
		93	5	251	0.82%	41.15%
		94	6	257	0.98%	42.13%
		95	4	261	0.66%	42.79%
		96	2	263	0.33%	43.11%
		97	3	266	0.49%	43.61%
		98	5	271	0.82%	44.43%
		99	5	276	0.82%	45.25%
		100	8	284	1.31%	46.56%
		101	4	288	0.66%	47.21%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	293	0.82%	48.03%
		103	3	296	0.49%	48.52%
		104	1	297	0.16%	48.69%
		105	5	302	0.82%	49.51%
		106	1	303	0.16%	49.67%
		107	3	306	0.49%	50.16%
		108	5	311	0.82%	50.98%
		109	1	312	0.16%	51.15%
		110	2	314	0.33%	51.48%
		111	4	318	0.66%	52.13%
		112	4	322	0.66%	52.79%
		113	5	327	0.82%	53.61%
		114	6	333	0.98%	54.59%
		115	8	341	1.31%	55.90%
		116	4	345	0.66%	56.56%
		117	0	345	0.00%	56.56%
MA	5	118	2	347	0.33%	56.89%
		119	6	353	0.98%	57.87%
		120	7	360	1.15%	59.02%
		121	3	363	0.49%	59.51%
		122	10	373	1.64%	61.15%
		123	8	381	1.31%	62.46%
		124	5	386	0.82%	63.28%
		125	9	395	1.48%	64.75%
		126	5	400	0.82%	65.57%
		127	8	408	1.31%	66.89%
		128	6	414	0.98%	67.87%
		129	6	420	0.98%	68.85%
		130	11	431	1.80%	70.66%
		131	4	435	0.66%	71.31%
		132	8	443	1.31%	72.62%
		133	7	450	1.15%	73.77%
		134	9	459	1.48%	75.25%
		135	4	463	0.66%	75.90%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	7	470	1.15%	77.05%
		137	5	475	0.82%	77.87%
		138	4	479	0.66%	78.52%
		139	6	485	0.98%	79.51%
		140	9	494	1.48%	80.98%
		141	5	499	0.82%	81.80%
		142	6	505	0.98%	82.79%
		143	11	516	1.80%	84.59%
		144	8	524	1.31%	85.90%
		145	8	532	1.31%	87.21%
		146	2	534	0.33%	87.54%
		147	3	537	0.49%	88.03%
		148	6	543	0.98%	89.02%
		149	3	546	0.49%	89.51%
		150	3	549	0.49%	90.00%
		151	6	555	0.98%	90.98%
MA	5	152	8	563	1.31%	92.30%
		153	7	570	1.15%	93.44%
		154	3	573	0.49%	93.93%
		155	6	579	0.98%	94.92%
		156	3	582	0.49%	95.41%
		157	3	585	0.49%	95.90%
		158	5	590	0.82%	96.72%
		159	3	593	0.49%	97.21%
		160	2	595	0.33%	97.54%
		161	5	600	0.82%	98.36%
		162	1	601	0.16%	98.52%
		163	2	603	0.33%	98.85%
		164	1	604	0.16%	99.02%
		165	2	606	0.33%	99.34%
		166	1	607	0.16%	99.51%
		167	0	607	0.00%	99.51%
		168	2	609	0.33%	99.84%
		169	0	609	0.00%	99.84%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
MA	5	170	1	610	0.16%	100%
		171	0	610	0.00%	100%

Table 62
Mathematics Grade 6 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	15	15	2.38%	2.38%
		1	4	19	0.63%	3.01%
		2	3	22	0.48%	3.49%
		3	2	24	0.32%	3.80%
		4	0	24	0.00%	3.80%
		5	0	24	0.00%	3.80%
		6	1	25	0.16%	3.96%
		7	0	25	0.00%	3.96%
		8	1	26	0.16%	4.12%
		9	2	28	0.32%	4.44%
		10	2	30	0.32%	4.75%
		11	2	32	0.32%	5.07%
		12	1	33	0.16%	5.23%
		13	3	36	0.48%	5.71%
		14	3	39	0.48%	6.18%
		15	4	43	0.63%	6.81%
MA	6	16	5	48	0.79%	7.61%
		17	2	50	0.32%	7.92%
		18	3	53	0.48%	8.40%
		19	2	55	0.32%	8.72%
		20	4	59	0.63%	9.35%
		21	1	60	0.16%	9.51%
		22	6	66	0.95%	10.46%
		23	3	69	0.48%	10.94%
		24	1	70	0.16%	11.09%
		25	1	71	0.16%	11.25%
		26	1	72	0.16%	11.41%
		27	2	74	0.32%	11.73%
		28	4	78	0.63%	12.36%
		29	3	81	0.48%	12.84%
		30	2	83	0.32%	13.15%
		31	0	83	0.00%	13.15%
		32	1	84	0.16%	13.31%
		33	3	87	0.48%	13.79%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	92	0.79%	14.58%
		35	0	92	0.00%	14.58%
		36	1	93	0.16%	14.74%
		37	4	97	0.63%	15.37%
		38	2	99	0.32%	15.69%
		39	1	100	0.16%	15.85%
		40	0	100	0.00%	15.85%
		41	2	102	0.32%	16.16%
		42	3	105	0.48%	16.64%
		43	6	111	0.95%	17.59%
		44	1	112	0.16%	17.75%
		45	3	115	0.48%	18.23%
		46	3	118	0.48%	18.70%
		47	5	123	0.79%	19.49%
		48	5	128	0.79%	20.29%
		49	4	132	0.63%	20.92%
MA	6	50	0	132	0.00%	20.92%
		51	0	132	0.00%	20.92%
		52	6	138	0.95%	21.87%
		53	4	142	0.63%	22.50%
		54	7	149	1.11%	23.61%
		55	7	156	1.11%	24.72%
		56	4	160	0.63%	25.36%
		57	4	164	0.63%	25.99%
		58	6	170	0.95%	26.94%
		59	5	175	0.79%	27.73%
		60	2	177	0.32%	28.05%
		61	2	179	0.32%	28.37%
		62	2	181	0.32%	28.68%
		63	1	182	0.16%	28.84%
		64	3	185	0.48%	29.32%
		65	6	191	0.95%	30.27%
		66	3	194	0.48%	30.74%
		67	3	197	0.48%	31.22%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	1	198	0.16%	31.38%
		69	4	202	0.63%	32.01%
		70	4	206	0.63%	32.65%
		71	5	211	0.79%	33.44%
		72	3	214	0.48%	33.91%
		73	6	220	0.95%	34.87%
		74	6	226	0.95%	35.82%
		75	0	226	0.00%	35.82%
		76	2	228	0.32%	36.13%
		77	6	234	0.95%	37.08%
		78	2	236	0.32%	37.40%
		79	8	244	1.27%	38.67%
		80	4	248	0.63%	39.30%
		81	2	250	0.32%	39.62%
		82	3	253	0.48%	40.10%
		83	4	257	0.63%	40.73%
MA	6	84	4	261	0.63%	41.36%
		85	9	270	1.43%	42.79%
		86	3	273	0.48%	43.26%
		87	7	280	1.11%	44.37%
		88	3	283	0.48%	44.85%
		89	4	287	0.63%	45.48%
		90	6	293	0.95%	46.43%
		91	6	299	0.95%	47.39%
		92	3	302	0.48%	47.86%
		93	5	307	0.79%	48.65%
		94	10	317	1.58%	50.24%
		95	6	323	0.95%	51.19%
		96	5	328	0.79%	51.98%
		97	11	339	1.74%	53.72%
		98	4	343	0.63%	54.36%
		99	4	347	0.63%	54.99%
		100	4	351	0.63%	55.63%
		101	6	357	0.95%	56.58%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	362	0.79%	57.37%
		103	2	364	0.32%	57.69%
		104	9	373	1.43%	59.11%
		105	8	381	1.27%	60.38%
		106	6	387	0.95%	61.33%
		107	8	395	1.27%	62.60%
		108	7	402	1.11%	63.71%
		109	8	410	1.27%	64.98%
		110	15	425	2.38%	67.35%
		111	9	434	1.43%	68.78%
		112	7	441	1.11%	69.89%
		113	12	453	1.90%	71.79%
		114	4	457	0.63%	72.42%
		115	12	469	1.90%	74.33%
		116	14	483	2.22%	76.55%
		117	9	492	1.43%	77.97%
MA	6	118	12	504	1.90%	79.87%
		119	10	514	1.58%	81.46%
		120	7	521	1.11%	82.57%
		121	9	530	1.43%	83.99%
		122	9	539	1.43%	85.42%
		123	6	545	0.95%	86.37%
		124	10	555	1.58%	87.96%
		125	14	569	2.22%	90.17%
		126	10	579	1.58%	91.76%
		127	5	584	0.79%	92.55%
		128	12	596	1.90%	94.45%
		129	6	602	0.95%	95.40%
		130	3	605	0.48%	95.88%
		131	6	611	0.95%	96.83%
		132	3	614	0.48%	97.31%
		133	3	617	0.48%	97.78%
		134	4	621	0.63%	98.42%
		135	7	628	1.11%	99.52%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	3	631	0.48%	100%
MA	6	137	0	631	0.00%	100%
		138	0	631	0.00%	100%

Table 63
Mathematics Grade 7 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	9	9	1.73%	1.73%
		1	7	16	1.35%	3.08%
		2	1	17	0.19%	3.28%
		3	3	20	0.58%	3.85%
		4	1	21	0.19%	4.05%
		5	3	24	0.58%	4.62%
		6	2	26	0.39%	5.01%
		7	1	27	0.19%	5.20%
		8	5	32	0.96%	6.17%
		9	2	34	0.39%	6.55%
		10	1	35	0.19%	6.74%
		11	3	38	0.58%	7.32%
		12	2	40	0.39%	7.71%
		13	1	41	0.19%	7.90%
		14	3	44	0.58%	8.48%
		15	1	45	0.19%	8.67%
MA	7	16	2	47	0.39%	9.06%
		17	4	51	0.77%	9.83%
		18	3	54	0.58%	10.40%
		19	2	56	0.39%	10.79%
		20	0	56	0.00%	10.79%
		21	1	57	0.19%	10.98%
		22	2	59	0.39%	11.37%
		23	2	61	0.39%	11.75%
		24	2	63	0.39%	12.14%
		25	5	68	0.96%	13.10%
		26	0	68	0.00%	13.10%
		27	3	71	0.58%	13.68%
		28	3	74	0.58%	14.26%
		29	5	79	0.96%	15.22%
		30	1	80	0.19%	15.41%
		31	0	80	0.00%	15.41%
		32	2	82	0.39%	15.80%
		33	2	84	0.39%	16.18%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	86	0.39%	16.57%
		35	0	86	0.00%	16.57%
		36	5	91	0.96%	17.53%
		37	1	92	0.19%	17.73%
		38	2	94	0.39%	18.11%
		39	3	97	0.58%	18.69%
		40	2	99	0.39%	19.08%
		41	6	105	1.16%	20.23%
		42	6	111	1.16%	21.39%
		43	2	113	0.39%	21.77%
		44	5	118	0.96%	22.74%
		45	4	122	0.77%	23.51%
		46	3	125	0.58%	24.08%
		47	5	130	0.96%	25.05%
		48	5	135	0.96%	26.01%
		49	5	140	0.96%	26.97%
MA	7	50	7	147	1.35%	28.32%
		51	2	149	0.39%	28.71%
		52	3	152	0.58%	29.29%
		53	3	155	0.58%	29.87%
		54	3	158	0.58%	30.44%
		55	2	160	0.39%	30.83%
		56	7	167	1.35%	32.18%
		57	3	170	0.58%	32.76%
		58	6	176	1.16%	33.91%
		59	1	177	0.19%	34.10%
		60	2	179	0.39%	34.49%
		61	1	180	0.19%	34.68%
		62	1	181	0.19%	34.87%
		63	2	183	0.39%	35.26%
		64	6	189	1.16%	36.42%
		65	2	191	0.39%	36.80%
		66	4	195	0.77%	37.57%
		67	4	199	0.77%	38.34%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	204	0.96%	39.31%
		69	3	207	0.58%	39.88%
		70	6	213	1.16%	41.04%
		71	2	215	0.39%	41.43%
		72	4	219	0.77%	42.20%
		73	5	224	0.96%	43.16%
		74	8	232	1.54%	44.70%
		75	4	236	0.77%	45.47%
		76	5	241	0.96%	46.44%
		77	6	247	1.16%	47.59%
		78	4	251	0.77%	48.36%
		79	6	257	1.16%	49.52%
		80	2	259	0.39%	49.90%
		81	5	264	0.96%	50.87%
		82	0	264	0.00%	50.87%
		83	5	269	0.96%	51.83%
MA	7	84	3	272	0.58%	52.41%
		85	6	278	1.16%	53.56%
		86	5	283	0.96%	54.53%
		87	11	294	2.12%	56.65%
		88	7	301	1.35%	58.00%
		89	7	308	1.35%	59.34%
		90	5	313	0.96%	60.31%
		91	3	316	0.58%	60.89%
		92	7	323	1.35%	62.24%
		93	8	331	1.54%	63.78%
		94	6	337	1.16%	64.93%
		95	5	342	0.96%	65.90%
		96	11	353	2.12%	68.02%
		97	3	356	0.58%	68.59%
		98	5	361	0.96%	69.56%
		99	5	366	0.96%	70.52%
		100	5	371	0.96%	71.48%
		101	4	375	0.77%	72.25%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	7	382	1.35%	73.60%
		103	7	389	1.35%	74.95%
		104	6	395	1.16%	76.11%
		105	7	402	1.35%	77.46%
		106	6	408	1.16%	78.61%
		107	5	413	0.96%	79.58%
		108	0	413	0.00%	79.58%
		109	6	419	1.16%	80.73%
		110	4	423	0.77%	81.50%
		111	5	428	0.96%	82.47%
		112	11	439	2.12%	84.59%
		113	10	449	1.93%	86.51%
		114	9	458	1.73%	88.25%
		115	6	464	1.16%	89.40%
		116	10	474	1.93%	91.33%
MA	7	117	4	478	0.77%	92.10%
		118	5	483	0.96%	93.06%
		119	3	486	0.58%	93.64%
		120	3	489	0.58%	94.22%
		121	2	491	0.39%	94.61%
		122	3	494	0.58%	95.18%
		123	8	502	1.54%	96.72%
		124	2	504	0.39%	97.11%
		125	8	512	1.54%	98.65%
		126	2	514	0.39%	99.04%
		127	0	514	0.00%	99.04%
		128	1	515	0.19%	99.23%
		129	2	517	0.39%	99.61%
		130	0	517	0.00%	99.61%
		131	2	519	0.39%	100%
		132	0	519	0.00%	100%

Table 64
Mathematics Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	13	13	2.38%	2.38%
		1	0	13	0.00%	2.38%
		2	3	16	0.55%	2.93%
		3	3	19	0.55%	3.48%
		4	3	22	0.55%	4.03%
		5	2	24	0.37%	4.40%
		6	0	24	0.00%	4.40%
		7	2	26	0.37%	4.76%
		8	1	27	0.18%	4.95%
		9	1	28	0.18%	5.13%
		10	0	28	0.00%	5.13%
		11	1	29	0.18%	5.31%
		12	0	29	0.00%	5.31%
		13	2	31	0.37%	5.68%
		14	3	34	0.55%	6.23%
		15	0	34	0.00%	6.23%
MA	8	16	4	38	0.73%	6.96%
		17	4	42	0.73%	7.69%
		18	4	46	0.73%	8.42%
		19	3	49	0.55%	8.97%
		20	1	50	0.18%	9.16%
		21	2	52	0.37%	9.52%
		22	0	52	0.00%	9.52%
		23	1	53	0.18%	9.71%
		24	4	57	0.73%	10.44%
		25	3	60	0.55%	10.99%
		26	1	61	0.18%	11.17%
		27	2	63	0.37%	11.54%
		28	1	64	0.18%	11.72%
		29	3	67	0.55%	12.27%
		30	3	70	0.55%	12.82%
		31	4	74	0.73%	13.55%
		32	5	79	0.92%	14.47%
		33	1	80	0.18%	14.65%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	1	81	0.18%	14.84%
		35	2	83	0.37%	15.20%
		36	2	85	0.37%	15.57%
		37	4	89	0.73%	16.30%
		38	2	91	0.37%	16.67%
		39	2	93	0.37%	17.03%
		40	3	96	0.55%	17.58%
		41	4	100	0.73%	18.32%
		42	4	104	0.73%	19.05%
		43	1	105	0.18%	19.23%
		44	2	107	0.37%	19.60%
		45	0	107	0.00%	19.60%
		46	3	110	0.55%	20.15%
		47	5	115	0.92%	21.06%
		48	1	116	0.18%	21.25%
		49	2	118	0.37%	21.61%
MA	8	50	5	123	0.92%	22.53%
		51	2	125	0.37%	22.89%
		52	3	128	0.55%	23.44%
		53	4	132	0.73%	24.18%
		54	1	133	0.18%	24.36%
		55	0	133	0.00%	24.36%
		56	3	136	0.55%	24.91%
		57	3	139	0.55%	25.46%
		58	5	144	0.92%	26.37%
		59	2	146	0.37%	26.74%
		60	3	149	0.55%	27.29%
		61	4	153	0.73%	28.02%
		62	2	155	0.37%	28.39%
		63	2	157	0.37%	28.75%
		64	6	163	1.10%	29.85%
		65	6	169	1.10%	30.95%
		66	4	173	0.73%	31.68%
		67	4	177	0.73%	32.42%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	4	181	0.73%	33.15%
		69	6	187	1.10%	34.25%
		70	6	193	1.10%	35.35%
		71	2	195	0.37%	35.71%
		72	6	201	1.10%	36.81%
		73	2	203	0.37%	37.18%
		74	2	205	0.37%	37.55%
		75	1	206	0.18%	37.73%
		76	0	206	0.00%	37.73%
		77	6	212	1.10%	38.83%
		78	4	216	0.73%	39.56%
		79	3	219	0.55%	40.11%
		80	2	221	0.37%	40.48%
		81	7	228	1.28%	41.76%
		82	4	232	0.73%	42.49%
		83	1	233	0.18%	42.67%
MA	8	84	5	238	0.92%	43.59%
		85	4	242	0.73%	44.32%
		86	3	245	0.55%	44.87%
		87	4	249	0.73%	45.60%
		88	3	252	0.55%	46.15%
		89	1	253	0.18%	46.34%
		90	5	258	0.92%	47.25%
		91	3	261	0.55%	47.80%
		92	6	267	1.10%	48.90%
		93	2	269	0.37%	49.27%
		94	6	275	1.10%	50.37%
		95	4	279	0.73%	51.10%
		96	8	287	1.47%	52.56%
		97	8	295	1.47%	54.03%
		98	1	296	0.18%	54.21%
		99	1	297	0.18%	54.40%
		100	5	302	0.92%	55.31%
		101	9	311	1.65%	56.96%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	2	313	0.37%	57.33%
		103	1	314	0.18%	57.51%
		104	6	320	1.10%	58.61%
		105	5	325	0.92%	59.52%
		106	6	331	1.10%	60.62%
		107	4	335	0.73%	61.36%
		108	8	343	1.47%	62.82%
		109	9	352	1.65%	64.47%
		110	2	354	0.37%	64.84%
		111	5	359	0.92%	65.75%
		112	14	373	2.56%	68.32%
		113	9	382	1.65%	69.96%
		114	8	390	1.47%	71.43%
		115	8	398	1.47%	72.89%
		116	9	407	1.65%	74.54%
		117	8	415	1.47%	76.01%
MA	8	118	1	416	0.18%	76.19%
		119	6	422	1.10%	77.29%
		120	8	430	1.47%	78.75%
		121	13	443	2.38%	81.14%
		122	7	450	1.28%	82.42%
		123	7	457	1.28%	83.70%
		124	2	459	0.37%	84.07%
		125	7	466	1.28%	85.35%
		126	4	470	0.73%	86.08%
		127	9	479	1.65%	87.73%
		128	4	483	0.73%	88.46%
		129	7	490	1.28%	89.74%
		130	9	499	1.65%	91.39%
		131	9	508	1.65%	93.04%
		132	6	514	1.10%	94.14%
		133	5	519	0.92%	95.05%
		134	3	522	0.55%	95.60%
		135	4	526	0.73%	96.34%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	2	528	0.37%	96.70%
		137	5	533	0.92%	97.62%
		138	4	537	0.73%	98.35%
		139	3	540	0.55%	98.90%
		140	2	542	0.37%	99.27%
MA	8	141	0	542	0.00%	99.27%
		142	1	543	0.18%	99.45%
		143	0	543	0.00%	99.45%
		144	2	545	0.37%	99.82%
		145	0	545	0.00%	99.82%
		146	1	546	0.18%	100%
		147	0	546	0.00%	100%

Table 65
Mathematics Grade 9 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	3.87%	3.87%
		1	1	20	0.20%	4.07%
		2	2	22	0.41%	4.48%
		3	2	24	0.41%	4.89%
		4	2	26	0.41%	5.30%
		5	3	29	0.61%	5.91%
		6	2	31	0.41%	6.31%
		7	0	31	0.00%	6.31%
		8	3	34	0.61%	6.92%
		9	3	37	0.61%	7.54%
		10	2	39	0.41%	7.94%
		11	1	40	0.20%	8.15%
		12	1	41	0.20%	8.35%
		13	1	42	0.20%	8.55%
		14	2	44	0.41%	8.96%
		15	2	46	0.41%	9.37%
MA	9	16	1	47	0.20%	9.57%
		17	2	49	0.41%	9.98%
		18	1	50	0.20%	10.18%
		19	2	52	0.41%	10.59%
		20	3	55	0.61%	11.20%
		21	2	57	0.41%	11.61%
		22	4	61	0.81%	12.42%
		23	1	62	0.20%	12.63%
		24	2	64	0.41%	13.03%
		25	2	66	0.41%	13.44%
		26	2	68	0.41%	13.85%
		27	3	71	0.61%	14.46%
		28	4	75	0.81%	15.27%
		29	2	77	0.41%	15.68%
		30	2	79	0.41%	16.09%
		31	1	80	0.20%	16.29%
		32	1	81	0.20%	16.50%
		33	2	83	0.41%	16.90%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	3	86	0.61%	17.52%
		35	4	90	0.81%	18.33%
		36	4	94	0.81%	19.14%
		37	5	99	1.02%	20.16%
		38	4	103	0.81%	20.98%
		39	4	107	0.81%	21.79%
		40	1	108	0.20%	22.00%
		41	3	111	0.61%	22.61%
		42	9	120	1.83%	24.44%
		43	5	125	1.02%	25.46%
		44	3	128	0.61%	26.07%
		45	5	133	1.02%	27.09%
		46	3	136	0.61%	27.70%
		47	3	139	0.61%	28.31%
		48	2	141	0.41%	28.72%
		49	5	146	1.02%	29.74%
MA	9	50	3	149	0.61%	30.35%
		51	4	153	0.81%	31.16%
		52	1	154	0.20%	31.36%
		53	5	159	1.02%	32.38%
		54	7	166	1.43%	33.81%
		55	7	173	1.43%	35.23%
		56	3	176	0.61%	35.85%
		57	4	180	0.81%	36.66%
		58	7	187	1.43%	38.09%
		59	2	189	0.41%	38.49%
		60	3	192	0.61%	39.10%
		61	7	199	1.43%	40.53%
		62	3	202	0.61%	41.14%
		63	3	205	0.61%	41.75%
		64	2	207	0.41%	42.16%
		65	1	208	0.20%	42.36%
		66	5	213	1.02%	43.38%
		67	4	217	0.81%	44.20%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	10	227	2.04%	46.23%
		69	2	229	0.41%	46.64%
		70	3	232	0.61%	47.25%
		71	5	237	1.02%	48.27%
		72	7	244	1.43%	49.69%
		73	3	247	0.61%	50.31%
		74	5	252	1.02%	51.32%
		75	4	256	0.81%	52.14%
		76	1	257	0.20%	52.34%
		77	5	262	1.02%	53.36%
		78	6	268	1.22%	54.58%
		79	4	272	0.81%	55.40%
		80	5	277	1.02%	56.42%
		81	5	282	1.02%	57.43%
		82	8	290	1.63%	59.06%
		83	3	293	0.61%	59.67%
MA	9	84	6	299	1.22%	60.90%
		85	3	302	0.61%	61.51%
		86	6	308	1.22%	62.73%
		87	4	312	0.81%	63.54%
		88	5	317	1.02%	64.56%
		89	4	321	0.81%	65.38%
		90	7	328	1.43%	66.80%
		91	4	332	0.81%	67.62%
		92	3	335	0.61%	68.23%
		93	2	337	0.41%	68.64%
		94	2	339	0.41%	69.04%
		95	8	347	1.63%	70.67%
		96	4	351	0.81%	71.49%
		97	2	353	0.41%	71.89%
		98	5	358	1.02%	72.91%
		99	4	362	0.81%	73.73%
		100	8	370	1.63%	75.36%
		101	9	379	1.83%	77.19%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	5	384	1.02%	78.21%
		103	3	387	0.61%	78.82%
		104	5	392	1.02%	79.84%
		105	6	398	1.22%	81.06%
		106	4	402	0.81%	81.87%
		107	4	406	0.81%	82.69%
		108	3	409	0.61%	83.30%
		109	8	417	1.63%	84.93%
		110	6	423	1.22%	86.15%
		111	5	428	1.02%	87.17%
		112	2	430	0.41%	87.58%
		113	6	436	1.22%	88.80%
		114	4	440	0.81%	89.61%
		115	3	443	0.61%	90.22%
		116	0	443	0.00%	90.22%
		117	2	445	0.41%	90.63%
MA	9	118	2	447	0.41%	91.04%
		119	1	448	0.20%	91.24%
		120	6	454	1.22%	92.46%
		121	3	457	0.61%	93.08%
		122	3	460	0.61%	93.69%
		123	7	467	1.43%	95.11%
		124	2	469	0.41%	95.52%
		125	3	472	0.61%	96.13%
		126	1	473	0.20%	96.33%
		127	1	474	0.20%	96.54%
		128	2	476	0.41%	96.95%
		129	0	476	0.00%	96.95%
		130	2	478	0.41%	97.35%
		131	0	478	0.00%	97.35%
		132	2	480	0.41%	97.76%
		133	0	480	0.00%	97.76%
		134	0	480	0.00%	97.76%
		135	4	484	0.81%	98.57%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	1	485	0.20%	98.78%
		137	1	486	0.20%	98.98%
		138	2	488	0.41%	99.39%
		139	1	489	0.20%	99.59%
MA	9	140	0	489	0.00%	99.59%
		141	1	490	0.20%	99.80%
		142	0	490	0.00%	99.80%
		143	0	490	0.00%	99.80%
		144	1	491	0.20%	100%

Table 66
Mathematics Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	18	18	3.48%	3.48%
		1	1	19	0.19%	3.68%
		2	1	20	0.19%	3.87%
		3	1	21	0.19%	4.06%
		4	1	22	0.19%	4.26%
		5	2	24	0.39%	4.64%
		6	4	28	0.77%	5.42%
		7	0	28	0.00%	5.42%
		8	3	31	0.58%	6.00%
		9	3	34	0.58%	6.58%
		10	1	35	0.19%	6.77%
		11	3	38	0.58%	7.35%
		12	1	39	0.19%	7.54%
		13	0	39	0.00%	7.54%
		14	0	39	0.00%	7.54%
		15	1	40	0.19%	7.74%
MA	10	16	0	40	0.00%	7.74%
		17	0	40	0.00%	7.74%
		18	3	43	0.58%	8.32%
		19	3	46	0.58%	8.90%
		20	4	50	0.77%	9.67%
		21	4	54	0.77%	10.44%
		22	1	55	0.19%	10.64%
		23	5	60	0.97%	11.61%
		24	0	60	0.00%	11.61%
		25	2	62	0.39%	11.99%
		26	0	62	0.00%	11.99%
		27	2	64	0.39%	12.38%
		28	3	67	0.58%	12.96%
		29	1	68	0.19%	13.15%
		30	3	71	0.58%	13.73%
		31	2	73	0.39%	14.12%
		32	2	75	0.39%	14.51%
		33	6	81	1.16%	15.67%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	2	83	0.39%	16.05%
		35	2	85	0.39%	16.44%
		36	4	89	0.77%	17.21%
		37	4	93	0.77%	17.99%
		38	2	95	0.39%	18.38%
		39	3	98	0.58%	18.96%
		40	3	101	0.58%	19.54%
		41	2	103	0.39%	19.92%
		42	5	108	0.97%	20.89%
		43	2	110	0.39%	21.28%
		44	1	111	0.19%	21.47%
		45	3	114	0.58%	22.05%
		46	6	120	1.16%	23.21%
		47	0	120	0.00%	23.21%
		48	5	125	0.97%	24.18%
		49	9	134	1.74%	25.92%
MA	10	50	7	141	1.35%	27.27%
		51	4	145	0.77%	28.05%
		52	4	149	0.77%	28.82%
		53	3	152	0.58%	29.40%
		54	4	156	0.77%	30.17%
		55	2	158	0.39%	30.56%
		56	5	163	0.97%	31.53%
		57	3	166	0.58%	32.11%
		58	4	170	0.77%	32.88%
		59	6	176	1.16%	34.04%
		60	5	181	0.97%	35.01%
		61	4	185	0.77%	35.78%
		62	3	188	0.58%	36.36%
		63	4	192	0.77%	37.14%
		64	2	194	0.39%	37.52%
		65	6	200	1.16%	38.68%
		66	7	207	1.35%	40.04%
		67	4	211	0.77%	40.81%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	8	219	1.55%	42.36%
		69	7	226	1.35%	43.71%
		70	6	232	1.16%	44.87%
		71	7	239	1.35%	46.23%
		72	1	240	0.19%	46.42%
		73	3	243	0.58%	47.00%
		74	4	247	0.77%	47.78%
		75	7	254	1.35%	49.13%
		76	1	255	0.19%	49.32%
		77	7	262	1.35%	50.68%
		78	7	269	1.35%	52.03%
		79	10	279	1.93%	53.97%
		80	5	284	0.97%	54.93%
		81	3	287	0.58%	55.51%
		82	8	295	1.55%	57.06%
		83	3	298	0.58%	57.64%
MA	10	84	3	301	0.58%	58.22%
		85	5	306	0.97%	59.19%
		86	2	308	0.39%	59.57%
		87	4	312	0.77%	60.35%
		88	3	315	0.58%	60.93%
		89	3	318	0.58%	61.51%
		90	7	325	1.35%	62.86%
		91	9	334	1.74%	64.60%
		92	8	342	1.55%	66.15%
		93	4	346	0.77%	66.92%
		94	8	354	1.55%	68.47%
		95	4	358	0.77%	69.25%
		96	7	365	1.35%	70.60%
		97	7	372	1.35%	71.95%
		98	6	378	1.16%	73.11%
		99	5	383	0.97%	74.08%
		100	6	389	1.16%	75.24%
		101	3	392	0.58%	75.82%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		102	4	396	0.77%	76.60%
		103	8	404	1.55%	78.14%
		104	4	408	0.77%	78.92%
		105	2	410	0.39%	79.30%
		106	5	415	0.97%	80.27%
		107	3	418	0.58%	80.85%
		108	4	422	0.77%	81.62%
		109	7	429	1.35%	82.98%
		110	2	431	0.39%	83.37%
		111	6	437	1.16%	84.53%
		112	6	443	1.16%	85.69%
		113	3	446	0.58%	86.27%
		114	6	452	1.16%	87.43%
		115	1	453	0.19%	87.62%
		116	7	460	1.35%	88.97%
		117	4	464	0.77%	89.75%
MA	10	118	4	468	0.77%	90.52%
		119	6	474	1.16%	91.68%
		120	2	476	0.39%	92.07%
		121	3	479	0.58%	92.65%
		122	2	481	0.39%	93.04%
		123	5	486	0.97%	94.00%
		124	0	486	0.00%	94.00%
		125	5	491	0.97%	94.97%
		126	3	494	0.58%	95.55%
		127	0	494	0.00%	95.55%
		128	1	495	0.19%	95.74%
		129	3	498	0.58%	96.32%
		130	1	499	0.19%	96.52%
		131	1	500	0.19%	96.71%
		132	3	503	0.58%	97.29%
		133	0	503	0.00%	97.29%
		134	3	506	0.58%	97.87%
		135	4	510	0.77%	98.65%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		136	1	511	0.19%	98.84%
		137	0	511	0.00%	98.84%
		138	1	512	0.19%	99.03%
		139	0	512	0.00%	99.03%
		140	1	513	0.19%	99.23%
		141	1	514	0.19%	99.42%
		142	1	515	0.19%	99.61%
		143	1	516	0.19%	99.81%
		144	0	516	0.00%	99.81%
		145	0	516	0.00%	99.81%
MA	10	146	0	516	0.00%	99.81%
		147	1	517	0.19%	100%
		148	0	517	0.00%	100%
		149	0	517	0.00%	100%
		150	0	517	0.00%	100%
		151	0	517	0.00%	100%
		152	0	517	0.00%	100%
		153	0	517	0.00%	100%
		154	0	517	0.00%	100%
		155	0	517	0.00%	100%
		156	0	517	0.00%	100%

Table 67
Science Grade 5 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	23	23	3.76%	3.76%
		1	1	24	0.16%	3.92%
		2	1	25	0.16%	4.08%
		3	2	27	0.33%	4.41%
		4	1	28	0.16%	4.58%
		5	0	28	0.00%	4.58%
		6	1	29	0.16%	4.74%
		7	1	30	0.16%	4.90%
		8	1	31	0.16%	5.07%
		9	0	31	0.00%	5.07%
		10	3	34	0.49%	5.56%
		11	3	37	0.49%	6.05%
		12	4	41	0.65%	6.70%
		13	0	41	0.00%	6.70%
		14	1	42	0.16%	6.86%
		15	3	45	0.49%	7.35%
SC	5	16	1	46	0.16%	7.52%
		17	3	49	0.49%	8.01%
		18	4	53	0.65%	8.66%
		19	3	56	0.49%	9.15%
		20	3	59	0.49%	9.64%
		21	1	60	0.16%	9.80%
		22	0	60	0.00%	9.80%
		23	3	63	0.49%	10.29%
		24	3	66	0.49%	10.78%
		25	6	72	0.98%	11.76%
		26	1	73	0.16%	11.93%
		27	0	73	0.00%	11.93%
		28	2	75	0.33%	12.25%
		29	3	78	0.49%	12.75%
		30	3	81	0.49%	13.24%
		31	2	83	0.33%	13.56%
		32	2	85	0.33%	13.89%
		33	3	88	0.49%	14.38%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	8	96	1.31%	15.69%
		35	3	99	0.49%	16.18%
		36	4	103	0.65%	16.83%
		37	6	109	0.98%	17.81%
		38	4	113	0.65%	18.46%
		39	4	117	0.65%	19.12%
		40	1	118	0.16%	19.28%
		41	6	124	0.98%	20.26%
		42	3	127	0.49%	20.75%
		43	7	134	1.14%	21.90%
		44	5	139	0.82%	22.71%
		45	4	143	0.65%	23.37%
		46	3	146	0.49%	23.86%
		47	13	159	2.12%	25.98%
		48	5	164	0.82%	26.80%
		49	3	167	0.49%	27.29%
SC	5	50	12	179	1.96%	29.25%
		51	5	184	0.82%	30.07%
		52	7	191	1.14%	31.21%
		53	11	202	1.80%	33.01%
		54	12	214	1.96%	34.97%
		55	3	217	0.49%	35.46%
		56	9	226	1.47%	36.93%
		57	9	235	1.47%	38.40%
		58	5	240	0.82%	39.22%
		59	8	248	1.31%	40.52%
		60	3	251	0.49%	41.01%
		61	5	256	0.82%	41.83%
		62	9	265	1.47%	43.30%
		63	5	270	0.82%	44.12%
		64	7	277	1.14%	45.26%
		65	4	281	0.65%	45.92%
		66	13	294	2.12%	48.04%
		67	2	296	0.33%	48.37%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	4	300	0.65%	49.02%
		69	8	308	1.31%	50.33%
		70	2	310	0.33%	50.65%
		71	2	312	0.33%	50.98%
		72	21	333	3.43%	54.41%
		73	1	334	0.16%	54.58%
		74	8	342	1.31%	55.88%
		75	14	356	2.29%	58.17%
		76	2	358	0.33%	58.50%
		77	0	358	0.00%	58.50%
		78	33	391	5.39%	63.89%
		79	3	394	0.49%	64.38%
		80	5	399	0.82%	65.20%
		81	28	427	4.58%	69.77%
SC	5	82	3	430	0.49%	70.26%
		83	7	437	1.14%	71.41%
		84	30	467	4.90%	76.31%
		85	2	469	0.33%	76.63%
		86	10	479	1.63%	78.27%
		87	40	519	6.54%	84.80%
		88	2	521	0.33%	85.13%
		89	5	526	0.82%	85.95%
		90	36	562	5.88%	91.83%
		91	2	564	0.33%	92.16%
		92	8	572	1.31%	93.46%
		93	30	602	4.90%	98.37%
		94	4	606	0.65%	99.02%
		95	0	606	0.00%	99.02%
		96	6	612	0.98%	100%

Table 68
Science Grade 8 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	2.92%	2.92%
		1	0	16	0.00%	2.92%
		2	0	16	0.00%	2.92%
		3	1	17	0.18%	3.10%
		4	1	18	0.18%	3.28%
		5	0	18	0.00%	3.28%
		6	0	18	0.00%	3.28%
		7	0	18	0.00%	3.28%
		8	1	19	0.18%	3.47%
		9	0	19	0.00%	3.47%
		10	2	21	0.36%	3.83%
		11	0	21	0.00%	3.83%
		12	3	24	0.55%	4.38%
		13	1	25	0.18%	4.56%
		14	2	27	0.36%	4.93%
		15	1	28	0.18%	5.11%
SC	8	16	1	29	0.18%	5.29%
		17	0	29	0.00%	5.29%
		18	4	33	0.73%	6.02%
		19	2	35	0.36%	6.39%
		20	0	35	0.00%	6.39%
		21	1	36	0.18%	6.57%
		22	0	36	0.00%	6.57%
		23	0	36	0.00%	6.57%
		24	0	36	0.00%	6.57%
		25	3	39	0.55%	7.12%
		26	0	39	0.00%	7.12%
		27	1	40	0.18%	7.30%
		28	1	41	0.18%	7.48%
		29	1	42	0.18%	7.66%
		30	1	43	0.18%	7.85%
		31	1	44	0.18%	8.03%
		32	2	46	0.36%	8.39%
		33	3	49	0.55%	8.94%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	0	49	0.00%	8.94%
		35	0	49	0.00%	8.94%
		36	5	54	0.91%	9.85%
		37	5	59	0.91%	10.77%
		38	4	63	0.73%	11.50%
		39	2	65	0.36%	11.86%
		40	5	70	0.91%	12.77%
		41	2	72	0.36%	13.14%
		42	5	77	0.91%	14.05%
		43	6	83	1.09%	15.15%
		44	4	87	0.73%	15.88%
		45	5	92	0.91%	16.79%
		46	2	94	0.36%	17.15%
		47	1	95	0.18%	17.34%
		48	2	97	0.36%	17.70%
		49	7	104	1.28%	18.98%
SC	8	50	5	109	0.91%	19.89%
		51	6	115	1.09%	20.99%
		52	3	118	0.55%	21.53%
		53	3	121	0.55%	22.08%
		54	2	123	0.36%	22.45%
		55	2	125	0.36%	22.81%
		56	6	131	1.09%	23.91%
		57	2	133	0.36%	24.27%
		58	3	136	0.55%	24.82%
		59	1	137	0.18%	25.00%
		60	7	144	1.28%	26.28%
		61	4	148	0.73%	27.01%
		62	8	156	1.46%	28.47%
		63	6	162	1.09%	29.56%
		64	6	168	1.09%	30.66%
		65	6	174	1.09%	31.75%
		66	7	181	1.28%	33.03%
		67	1	182	0.18%	33.21%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	5	187	0.91%	34.12%
		69	7	194	1.28%	35.40%
		70	5	199	0.91%	36.31%
		71	7	206	1.28%	37.59%
		72	5	211	0.91%	38.50%
		73	7	218	1.28%	39.78%
		74	7	225	1.28%	41.06%
		75	6	231	1.09%	42.15%
		76	4	235	0.73%	42.88%
		77	6	241	1.09%	43.98%
		78	4	245	0.73%	44.71%
		79	4	249	0.73%	45.44%
		80	13	262	2.37%	47.81%
		81	12	274	2.19%	50.00%
		82	4	278	0.73%	50.73%
SC	8	83	6	284	1.09%	51.82%
		84	23	307	4.20%	56.02%
		85	3	310	0.55%	56.57%
		86	18	328	3.28%	59.85%
		87	18	346	3.28%	63.14%
		88	6	352	1.09%	64.23%
		89	15	367	2.74%	66.97%
		90	33	400	6.02%	72.99%
		91	9	409	1.64%	74.64%
		92	11	420	2.01%	76.64%
		93	38	458	6.93%	83.58%
		94	3	461	0.55%	84.12%
		95	8	469	1.46%	85.58%
		96	43	512	7.85%	93.43%
		97	2	514	0.36%	93.80%
		98	5	519	0.91%	94.71%
		99	29	548	5.29%	100%

Table 69
Science Grade 10 Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	3.11%	3.11%
		1	1	17	0.19%	3.31%
		2	1	18	0.19%	3.50%
		3	3	21	0.58%	4.09%
		4	1	22	0.19%	4.28%
		5	1	23	0.19%	4.47%
		6	2	25	0.39%	4.86%
		7	1	26	0.19%	5.06%
		8	0	26	0.00%	5.06%
		9	1	27	0.19%	5.25%
		10	0	27	0.00%	5.25%
		11	2	29	0.39%	5.64%
		12	2	31	0.39%	6.03%
		13	0	31	0.00%	6.03%
		14	1	32	0.19%	6.23%
		15	4	36	0.78%	7.00%
SC	10	16	3	39	0.58%	7.59%
		17	1	40	0.19%	7.78%
		18	7	47	1.36%	9.14%
		19	2	49	0.39%	9.53%
		20	2	51	0.39%	9.92%
		21	3	54	0.58%	10.51%
		22	3	57	0.58%	11.09%
		23	3	60	0.58%	11.67%
		24	7	67	1.36%	13.04%
		25	1	68	0.19%	13.23%
		26	3	71	0.58%	13.81%
		27	6	77	1.17%	14.98%
		28	1	78	0.19%	15.18%
		29	6	84	1.17%	16.34%
		30	5	89	0.97%	17.32%
		31	1	90	0.19%	17.51%
		32	3	93	0.58%	18.09%
		33	7	100	1.36%	19.46%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		34	5	105	0.97%	20.43%
		35	2	107	0.39%	20.82%
		36	10	117	1.95%	22.76%
		37	6	123	1.17%	23.93%
		38	6	129	1.17%	25.10%
		39	10	139	1.95%	27.04%
		40	3	142	0.58%	27.63%
		41	5	147	0.97%	28.60%
		42	9	156	1.75%	30.35%
		43	3	159	0.58%	30.93%
		44	7	166	1.36%	32.30%
		45	7	173	1.36%	33.66%
		46	1	174	0.19%	33.85%
		47	4	178	0.78%	34.63%
		48	7	185	1.36%	35.99%
		49	2	187	0.39%	36.38%
SC	10	50	5	192	0.97%	37.35%
		51	2	194	0.39%	37.74%
		52	4	198	0.78%	38.52%
		53	8	206	1.56%	40.08%
		54	4	210	0.78%	40.86%
		55	4	214	0.78%	41.63%
		56	7	221	1.36%	43.00%
		57	5	226	0.97%	43.97%
		58	2	228	0.39%	44.36%
		59	7	235	1.36%	45.72%
		60	9	244	1.75%	47.47%
		61	7	251	1.36%	48.83%
		62	2	253	0.39%	49.22%
		63	1	254	0.19%	49.42%
		64	4	258	0.78%	50.19%
		65	6	264	1.17%	51.36%
		66	11	275	2.14%	53.50%
		67	2	277	0.39%	53.89%

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

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		68	3	280	0.58%	54.47%
		69	8	288	1.56%	56.03%
		70	2	290	0.39%	56.42%
		71	1	291	0.19%	56.61%
		72	13	304	2.53%	59.14%
		73	4	308	0.78%	59.92%
		74	7	315	1.36%	61.28%
		75	16	331	3.11%	64.40%
		76	6	337	1.17%	65.56%
		77	5	342	0.97%	66.54%
		78	13	355	2.53%	69.07%
		79	3	358	0.58%	69.65%
		80	11	369	2.14%	71.79%
		81	15	384	2.92%	74.71%
		82	5	389	0.97%	75.68%
		83	9	398	1.75%	77.43%
		84	11	409	2.14%	79.57%
SC	10	85	5	414	0.97%	80.54%
		86	7	421	1.36%	81.91%
		87	14	435	2.72%	84.63%
		88	3	438	0.58%	85.21%
		89	6	444	1.17%	86.38%
		90	19	463	3.70%	90.08%
		91	1	464	0.19%	90.27%
		92	8	472	1.56%	91.83%
		93	15	487	2.92%	94.75%
		94	2	489	0.39%	95.14%
		95	2	491	0.39%	95.53%
		96	13	504	2.53%	98.05%
		97	0	504	0.00%	98.05%
		98	3	507	0.58%	98.64%
		99	3	510	0.58%	99.22%
		100	1	511	0.19%	99.42%
		101	1	512	0.19%	99.61%
		102	2	514	0.39%	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	657	31	56	79	95	19.79%	25.27%	31.05%	19.79%	4.11%	23.90%
	4	631	32	53	76	93	18.23%	21.39%	30.74%	21.71%	7.92%	29.64%
	5	619	26	52	72	93	13.09%	27.14%	19.06%	30.21%	10.50%	40.71%
	6	621	25	53	78	97	8.21%	22.71%	28.66%	33.49%	6.92%	40.42%
	7	531	27	50	68	88	11.49%	24.11%	22.22%	34.27%	7.91%	42.18%
	8	552	29	53	70	91	15.94%	27.17%	22.83%	25.72%	8.33%	34.06%
	9	488	24	48	71	89	14.14%	25.00%	28.28%	23.57%	9.02%	32.58%
	10	515	23	43	64	80	11.26%	31.07%	23.69%	19.42%	14.56%	33.98%
WR	3	659	18	48	78	96	16.24%	25.19%	32.47%	23.52%	2.58%	26.10%
	4	628	19	46	78	94	13.69%	20.86%	32.48%	26.11%	6.85%	32.96%
	5	616	19	50	78	93	12.50%	22.08%	28.73%	28.57%	8.12%	36.69%
	6	621	18	51	78	93	9.82%	17.87%	27.21%	31.08%	14.01%	45.09%
	7	523	23	57	80	94	14.34%	21.61%	21.03%	28.49%	14.53%	43.02%
	8	549	27	62	80	90	14.03%	25.68%	22.40%	21.86%	16.03%	37.89%
	9	480	21	60	79	91	15.21%	27.50%	24.17%	22.29%	10.83%	33.13%
	10	514	21	56	81	93	11.48%	26.26%	33.66%	20.82%	7.78%	28.60%

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	648	19	63	93	108	9.41%	22.69%	26.54%	17.13%	24.23%	41.36%
	4	625	13	72	99	119	7.68%	25.92%	26.88%	29.60%	9.92%	39.52%
	5	610	41	82	115	150	16.56%	17.70%	20.33%	34.92%	10.49%	45.41%
	6	631	28	60	92	113	11.73%	16.01%	19.65%	22.50%	30.11%	52.61%
	7	519	29	61	89	110	14.26%	20.23%	23.51%	22.74%	19.27%	42.00%
	8	546	30	76	107	129	12.27%	25.46%	22.89%	27.84%	11.54%	39.38%
	9	491	29	63	97	116	15.27%	25.87%	30.35%	18.74%	9.78%	28.51%
	10	517	29	67	104	125	12.96%	27.08%	38.10%	15.86%	6.00%	21.86%
SC	5	612	33	60	76	87	13.89%	26.63%	17.65%	20.10%	21.73%	41.83%
	8	548	40	63	80	89	11.86%	16.61%	16.97%	18.80%	35.77%	54.56%
	10	514	28	54	78	87	14.98%	25.10%	26.46%	15.37%	18.09%	33.46%

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	657	56.59	26.37	2	23	0.93	6.83
	4	631	57.73	26.26	3	12	0.93	6.86
	5	619	58.70	27.92	2	22	0.94	6.83
	6	621	65.35	25.71	4	11	0.93	6.59
	7	531	57.51	24.34	1	8	0.92	6.98
	8	552	56.62	26.07	0	13	0.92	7.15
	9	488	53.98	26.71	2	16	0.93	6.91
	10	515	50.62	24.03	0	15	0.91	7.31
WR	3	659	53.11	28.47	0	24	0.93	7.60
	4	628	57.81	28.88	0	13	0.93	7.70
	5	616	59.09	28.96	0	29	0.93	7.53
	6	621	65.05	28.19	0	16	0.93	7.27
	7	523	63.88	30.49	1	14	0.94	7.42
	8	549	62.67	28.26	0	20	0.93	7.50
	9	480	58.86	29.09	1	25	0.93	7.53
	10	514	60.09	27.45	0	18	0.92	7.82
MA	3	648	75.91	35.63	0	18	0.95	8.01
	4	625	79.26	36.48	1	16	0.95	8.22
	5	610	96.31	46.92	0	25	0.95	9.98
	6	631	84.20	37.89	0	15	0.95	8.58
	7	519	74.03	35.56	0	9	0.94	8.71
	8	546	84.53	39.31	0	13	0.95	9.16
	9	491	70.45	36.19	1	19	0.93	9.32
	10	517	73.35	35.56	0	18	0.92	9.80
SC	5	612	62.66	25.97	6	23	0.94	6.25
	8	548	72.19	25.37	29	16	0.94	5.99
	10	514	59.16	26.96	2	16	0.92	7.43

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	0.68	0.24	0.58	0.32	0.77	0.12	0.11
	4	0.65	0.23	0.54	0.35	0.74	0.14	0.12
	5	0.66	0.23	0.56	0.34	0.75	0.16	0.09
	6	0.68	0.26	0.57	0.32	0.78	0.13	0.10
	7	0.63	0.24	0.51	0.37	0.73	0.17	0.10
	8	0.63	0.22	0.53	0.37	0.73	0.14	0.13
	9	0.65	0.22	0.55	0.35	0.75	0.13	0.12
	10	0.61	0.22	0.50	0.39	0.71	0.14	0.14
WR	3	0.69	0.26	0.58	0.31	0.78	0.11	0.11
	4	0.65	0.25	0.53	0.35	0.75	0.15	0.11
	5	0.63	0.24	0.52	0.37	0.74	0.14	0.11
	6	0.61	0.24	0.49	0.39	0.72	0.18	0.10
	7	0.60	0.21	0.50	0.40	0.69	0.16	0.15
	8	0.57	0.21	0.45	0.43	0.64	0.23	0.13
	9	0.60	0.22	0.49	0.40	0.70	0.16	0.13
	10	0.61	0.25	0.48	0.39	0.71	0.15	0.14
MA	3	0.65	0.21	0.55	0.35	0.74	0.12	0.14
	4	0.69	0.27	0.58	0.31	0.79	0.13	0.09
	5	0.70	0.25	0.60	0.30	0.79	0.13	0.08
	6	0.67	0.22	0.58	0.33	0.76	0.10	0.13
	7	0.63	0.21	0.53	0.37	0.73	0.12	0.15
	8	0.66	0.23	0.56	0.34	0.75	0.17	0.09
	9	0.65	0.22	0.55	0.35	0.74	0.13	0.13
	10	0.66	0.25	0.55	0.34	0.76	0.14	0.10
SC	5	0.59	0.21	0.49	0.41	0.68	0.19	0.13
	8	0.60	0.23	0.48	0.40	0.70	0.12	0.18
	10	0.61	0.21	0.50	0.39	0.70	0.14	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	163660	6.20%	5.30%	9.94%	78.54%
WR	160411	4.78%	3.68%	5.77%	85.75%
MA	50208	4.58%	2.49%	5.70%	87.21%
SC	135214	5.09%	3.79%	6.27%	84.82%

Table 74
Reliability of Levels of Independence

Content	Grade	Independent versus Not Independent	All Levels of Independence
RD	3	0.98	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	0.99
	4	0.97	0.98
	5	0.97	0.99
	6	0.97	0.99
	7	0.97	0.99
	8	0.98	0.99
	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	0.97	0.99
	9	0.97	0.99
	10	0.97	0.99
SC	5	0.98	0.99
	8	0.97	0.99
	10	0.98	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	0.91%	0.03%
	4	0.57%	0.05%
	5	0.64%	0.09%
	6	0.15%	0.16%
	7	0.26%	0.14%
	8	0.12%	0.04%
	9	0.10%	0.06%
	10	0.20%	0.08%
WR	3	0.85%	0.10%
	4	0.41%	0.20%
	5	0.54%	0.08%
	6	0.15%	0.19%
	7	0.25%	0.27%
	8	0.12%	0.04%
	9	0.07%	0.28%
	10	0.16%	0.05%
MA	3	0.83%	0.16%
	4	0.40%	0.21%
	5	0.60%	0.16%
	6	0.16%	0.20%
	7	0.27%	0.29%
	8	0.19%	0.16%
	9	0.05%	0.11%
	10	0.17%	0.22%
SC	5	0.69%	0.08%
	8	0.25%	0.02%
	10	0.18%	0.09%

Table 76
Reliability of Test Examiner Rated Performance Level (via Test Examiner Surveys)
versus Earned Performance Level

Content	Grade	N Matched Records	Kappa	Weighted Kappa	Percent Perfect	Percent Adjacent	Percent Discrepant
RD	3	103	0.33	0.86	48.54%	43.69%	7.77%
	4	116	0.41	0.89	53.45%	37.93%	8.62%
	5	99	0.22	0.78	38.38%	47.47%	14.14%
	6	132	0.41	0.82	54.55%	38.64%	6.82%
	7	110	0.24	0.77	41.82%	45.45%	12.73%
	8	90	0.38	0.88	51.11%	38.89%	10.00%
	9	72	0.39	0.86	52.78%	34.72%	12.50%
	10	104	0.27	0.86	42.31%	48.08%	9.62%
WR	3	104	0.35	0.93	50.00%	48.08%	1.92%
	4	116	0.45	0.86	56.90%	33.62%	9.48%
	5	99	0.19	0.85	36.36%	49.49%	14.14%
	6	134	0.33	0.83	47.76%	41.79%	10.45%
	7	107	0.33	0.86	48.60%	42.99%	8.41%
	8	89	0.39	0.89	51.69%	38.20%	10.11%
	9	71	0.24	0.87	40.85%	49.30%	9.86%
	10	103	0.42	0.90	54.37%	36.89%	8.74%
MA	3	104	0.37	0.88	50.00%	39.42%	10.58%
	4	115	0.27	0.84	43.48%	49.57%	6.96%
	5	97	0.28	0.81	43.30%	42.27%	14.43%
	6	136	0.25	0.73	40.44%	42.65%	16.91%
	7	107	0.20	0.84	38.32%	52.34%	9.35%
	8	88	0.49	0.93	59.09%	32.95%	7.95%
	9	73	0.39	0.90	52.05%	39.73%	8.22%
	10	109	0.33	0.85	47.71%	42.20%	10.09%
SC	5	97	0.24	0.75	40.21%	42.27%	17.53%
	8	91	0.28	0.81	42.86%	41.76%	15.38%
	10	105	0.33	0.88	46.67%	45.71%	7.62%

Table 77
Response Mode Analysis—Assessment Activities

Grade	Total N	Response Mode															
		Communication Device		Eye Gaze		Picture Symbols		Pointing/ Gesturing		Sign Language		Verbal Response		Student Does Not Have a Response Mode		Other	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
3	110	1	0.91%	2	1.82%	1	0.91%	39	35.45%	0	0%	58	52.73%	5	4.55%	4	3.64%
4	121	2	1.65%	1	0.83%	0	0%	41	33.88%	0	0%	70	57.85%	3	2.48%	4	3.31%
5	102	1	0.98%	0	0%	0	0%	34	33.33%	0	0%	62	60.78%	2	1.96%	3	2.94%
6	141	4	2.84%	1	0.71%	0	0%	37	26.24%	0	0%	97	68.79%	1	0.71%	1	0.71%
7	112	3	2.68%	0	0.00%	0	0%	22	19.64%	0	0%	84	75.00%	2	1.79%	1	0.89%
8	95	0	0%	1	1.05%	0	0%	24	25.26%	0	0%	67	70.53%	2	2.11%	1	1.05%
9	77	1	1.30%	2	2.60%	2	2.60%	12	15.58%	0	0%	56	72.73%	3	3.90%	1	1.30%
10	110	0	0%	4	3.64%	1	0.91%	24	21.82%	0	0%	79	71.82%	2	1.82%	0	0%

Table 78
Response Mode Analysis—School Interactions

Grade	Response Mode																		
	Total N	Body Language		Communication Device		Eye Gaze/ Picture Symbols		Pointing/ Gesturing		Sign Language		Verbal Response		Utterances (crying, grunting, etc.)		Student Does Not Have a Response Mode		Other	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
3	110	3	2.73%	3	2.73%	1	0.91%	14	12.73%	3	2.73%	72	65.45%	11	10.00%	1	0.91%	2	1.82%
4	121	3	2.48%	5	4.13%	0	0%	16	13.22%	1	0.83%	87	71.90%	5	4.13%	3	2.48%	1	0.83%
5	102	1	0.98%	3	2.94%	2	1.96%	10	9.80%	0	0%	80	78.43%	3	2.94%	1	0.98%	2	1.96%
6	141	1	0.71%	8	5.67%	1	0.71%	12	8.51%	0	0%	111	78.72%	6	4.26%	1	0.71%	1	0.71%
7	112	0	0%	4	3.57%	1	0.89%	11	9.82%	0	0%	93	83.04%	3	2.68%	0	0%	0	0%
8	95	0	0%	1	1.05%	1	1.05%	6	6.32%	2	2.11%	79	83.16%	4	4.21%	1	1.05%	1	1.05%
9	77	0	0%	1	1.30%	3	3.90%	7	9.09%	0	0%	61	79.22%	3	3.90%	1	1.30%	1	1.30%
10	110	2	1.82%	2	1.82%	4	3.64%	8	7.27%	1	0.91%	91	82.73%	1	0.91%	1	0.91%	0	0%

Table 79
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
RD	3	3.5-4.0	9.32%	27.06%	35.28%	23.40%	4.94%
		3.0-3.4	42.86%	30.95%	21.43%	4.76%	0%
		2.5-2.9	68.18%	22.73%	9.09%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	4	3.5-4.0	7.78%	22.96%	34.81%	25.19%	9.26%
		3.0-3.4	60.61%	21.21%	15.15%	3.03%	0%
		2.5-2.9	71.43%	21.43%	7.14%	0%	0%
		2.0-2.4	92.86%	7.14%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	5	3.5-4.0	3.76%	27.26%	21.99%	34.77%	12.22%
		3.0-3.4	28.57%	60.71%	3.57%	7.14%	0%
		2.5-2.9	60.00%	40.00%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	6	3.5-4.0	2.51%	21.33%	31.36%	37.10%	7.71%
		3.0-3.4	17.65%	64.71%	11.76%	5.88%	0%
		2.5-2.9	46.15%	46.15%	7.69%	0%	0%
		2.0-2.4	63.64%	36.36%	0%	0%	0%
		1.5-1.9	85.71%	14.29%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
7	3.5-4.0	4.07%	23.34%	24.84%	38.76%	8.99%	
	3.0-3.4	27.78%	55.56%	11.11%	5.56%	0%	
	2.5-2.9	22.22%	77.78%	0%	0%	0%	
	2.0-2.4	71.43%	28.57%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	
8	3.5-4.0	8.48%	28.48%	25.05%	28.69%	9.29%	
	3.0-3.4	46.67%	40.00%	13.33%	0%	0%	
	2.5-2.9	57.14%	42.86%	0%	0%	0%	
	2.0-2.4	100%	0%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	

Table 79
Reading 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
RD	9	3.5-4.0	5.19%	26.18%	31.13%	27.12%	10.38%
		3.0-3.4	28.57%	47.62%	23.81%	0%	0%
		2.5-2.9	85.71%	0%	14.29%	0%	0%
		2.0-2.4	91.67%	8.33%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	10	3.5-4.0	3.53%	32.23%	26.05%	21.63%	16.56%
		3.0-3.4	30.00%	40.00%	20.00%	10.00%	0%
		2.5-2.9	63.64%	36.36%	0%	0%	0%
		2.0-2.4	75.00%	25.00%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%

Table 80
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
WR	3	3.5-4.0	5.85%	25.66%	36.60%	28.68%	3.21%
		3.0-3.4	26.42%	32.08%	35.85%	5.66%	0%
		2.5-2.9	60.87%	39.13%	0%	0%	0%
		2.0-2.4	61.54%	30.77%	7.69%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	4	3.5-4.0	4.33%	20.53%	36.35%	30.70%	8.10%
		3.0-3.4	35.29%	29.41%	32.35%	2.94%	0%
		2.5-2.9	63.16%	36.84%	0%	0%	0%
		2.0-2.4	75.00%	25.00%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	5	3.5-4.0	4.21%	21.41%	31.36%	33.46%	9.56%
		3.0-3.4	12.12%	45.45%	39.39%	3.03%	0%
		2.5-2.9	38.46%	61.54%	0%	0%	0%
		2.0-2.4	90.00%	10.00%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	6	3.5-4.0	3.50%	14.92%	30.02%	35.54%	16.02%
		3.0-3.4	23.08%	53.85%	23.08%	0%	0%
		2.5-2.9	50.00%	50.00%	0%	0%	0%
		2.0-2.4	50.00%	50.00%	0%	0%	0%
		1.5-1.9	66.67%	33.33%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
7	3.5-4.0	6.75%	21.57%	22.88%	32.24%	16.56%	
	3.0-3.4	37.50%	41.67%	16.67%	4.17%	0%	
	2.5-2.9	16.67%	66.67%	16.67%	0%	0%	
	2.0-2.4	100%	0%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	
8	3.5-4.0	7.63%	25.90%	24.70%	24.10%	17.67%	
	3.0-3.4	33.33%	66.67%	0%	0%	0%	
	2.5-2.9	60.00%	40.00%	0%	0%	0%	
	2.0-2.4	80.00%	20.00%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	

Table 80
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
WR	9	3.5-4.0	6.37%	27.94%	26.96%	25.98%	12.75%
		3.0-3.4	29.03%	48.39%	19.35%	3.23%	0%
		2.5-2.9	33.33%	66.67%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%
		1.5-1.9	66.67%	33.33%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	10	3.5-4.0	4.21%	25.50%	37.69%	23.73%	8.87%
		3.0-3.4	31.82%	59.09%	9.09%	0%	0%
		2.5-2.9	30.00%	60.00%	10.00%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%
		1.5-1.9	83.33%	16.67%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%

Table 81
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
MA	3	3.5-4.0	0.81%	15.01%	30.22%	22.11%	31.85%
		3.0-3.4	10.00%	51.67%	35.00%	3.33%	0%
		2.5-2.9	21.43%	73.81%	4.76%	0%	0%
		2.0-2.4	37.50%	62.50%	0%	0%	0%
		1.5-1.9	93.33%	6.67%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	4	3.5-4.0	0.80%	19.12%	31.08%	36.65%	12.35%
		3.0-3.4	2.27%	68.18%	27.27%	2.27%	0%
		2.5-2.9	13.64%	86.36%	0%	0%	0%
		2.0-2.4	38.10%	61.90%	0%	0%	0%
		1.5-1.9	80.00%	20.00%	0%	0%	0%
		1.0-1.4	95.24%	4.76%	0%	0%	0%
	5	3.5-4.0	4.94%	15.43%	22.84%	43.62%	13.17%
		3.0-3.4	20.45%	52.27%	25.00%	2.27%	0%
		2.5-2.9	60.00%	32.00%	8.00%	0%	0%
		2.0-2.4	88.89%	11.11%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	6	3.5-4.0	2.50%	12.28%	21.88%	27.06%	36.28%
		3.0-3.4	23.40%	53.19%	19.15%	2.13%	2.13%
		2.5-2.9	56.25%	37.50%	6.25%	0%	0%
		2.0-2.4	64.71%	35.29%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
7	3.5-4.0	3.76%	18.35%	27.06%	27.29%	23.53%	
	3.0-3.4	22.86%	51.43%	20.00%	5.71%	0%	
	2.5-2.9	56.25%	43.75%	0%	0%	0%	
	2.0-2.4	85.71%	14.29%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	
8	3.5-4.0	4.31%	23.49%	26.08%	32.54%	13.58%	
	3.0-3.4	9.68%	74.19%	12.90%	3.23%	0%	
	2.5-2.9	68.75%	31.25%	0%	0%	0%	
	2.0-2.4	71.43%	28.57%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	

Table 81
Mathematics 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
MA	9	3.5-4.0	4.06%	25.13%	35.53%	23.10%	12.18%
		3.0-3.4	32.50%	45.00%	20.00%	2.50%	0%
		2.5-2.9	47.37%	47.37%	5.26%	0%	0%
		2.0-2.4	87.50%	12.50%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	10	3.5-4.0	4.45%	25.53%	44.03%	18.97%	7.03%
		3.0-3.4	26.83%	48.78%	19.51%	2.44%	2.44%
		2.5-2.9	36.36%	54.55%	9.09%	0%	0%
		2.0-2.4	44.44%	55.56%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%

Table 82
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
SC	5	3.5-4.0	4.84%	27.75%	19.74%	22.91%	24.77%
		3.0-3.4	33.33%	57.14%	9.52%	0%	0%
		2.5-2.9	84.62%	15.38%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	8	3.5-4.0	5.65%	15.52%	18.55%	20.77%	39.52%
		3.0-3.4	36.36%	59.09%	4.55%	0%	0%
		2.5-2.9	66.67%	33.33%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	10	3.5-4.0	8.28%	25.05%	29.19%	17.21%	20.26%
		3.0-3.4	30.77%	53.85%	15.38%	0%	0%
		2.5-2.9	60.00%	40.00%	0%	0%	0%
		2.0-2.4	70.00%	30.00%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%

Table 83
Reading Longitudinal Total Group Means and Standard Deviations

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

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

Table 84
Writing Longitudinal Total Group Means and Standard Deviations

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

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

Table 85
Mathematics Longitudinal Total Group Means and Standard Deviations

		2012		2011		2010		2009		2008		2007	
		Raw Score		Raw Score		Raw Score		Raw Score		Raw Score		Raw Score	
Content	Grade	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
MA	3	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	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	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	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	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	84.53	39.31	82.15	39.69	80.52	39.55	78.28	39.66	82.94	39.03	79.29	37.54
	9	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	73.35	35.56	71.42	35.03	75.12	36.21	76.23	36.83	72.23	35.80	69.47	37.11

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

Table 86
Science Longitudinal Total Group Means and Standard Deviations

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

Table 87
Reading Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 3								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	35.77%	36.19%	35.06%	32.95%	34.58%	-0.42%	1.13%	2.11%	-1.63%
		Male	64.08%	63.65%	64.94%	66.62%	65.42%	0.43%	-1.29%	-1.68%	1.20%
	Primary Disability	Autism	20.55%	18.25%	16.27%	14.16%	12.77%	2.30%	1.98%	2.11%	1.39%
		Deaf-Blind	0%	0.16%	0%	0.29%	0%	-0.16%	0.16%	-0.29%	0.29%
		Emotional Disability	0.61%	0.78%	2.07%	0.87%	1.56%	-0.17%	-1.29%	1.20%	-0.69%
		Hearing Disability	0.46%	0%	1.48%	0.87%	2.18%	0.46%	-1.48%	0.61%	-1.31%
		Limited Intellectual Capacity	25.42%	24.18%	23.52%	27.17%	21.18%	1.24%	0.66%	-3.65%	5.98%
		Multiple Disabilities	31.51%	26.83%	28.40%	23.84%	24.14%	4.68%	-1.57%	4.56%	-0.30%
		Physical Disability	12.48%	17.16%	12.57%	13.73%	12.62%	-4.68%	4.59%	-1.15%	1.11%
		Specific Learning Disability	3.96%	6.24%	7.40%	10.26%	15.11%	-2.28%	-1.16%	-2.86%	-4.85%
		Speech/Language Disability	3.96%	4.68%	6.66%	7.66%	9.50%	-0.72%	-1.98%	-1.00%	-1.84%
		Traumatic Brain Injury	0.76%	1.56%	0.89%	1.01%	0.62%	-0.80%	0.67%	-0.12%	0.39%
		Visual Disability	0.15%	0.16%	0.74%	0.15%	0.31%	-0.01%	-0.58%	0.60%	-0.17%

Table 87
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	35.97%	35.32%	34.10%	36.80%	37.76%	0.65%	1.23%	-2.70%	-0.96%
		Male	63.71%	64.36%	65.90%	62.89%	61.77%	-0.64%	-1.55%	3.01%	1.12%
	Primary Disability	Autism	17.12%	16.61%	15.14%	12.42%	10.11%	0.51%	1.48%	2.72%	2.31%
		Deaf-Blind	0.32%	0%	0.15%	0%	0.16%	0.32%	-0.15%	0.15%	-0.16%
		Emotional Disability	0%	2.42%	0.15%	1.40%	2.37%	-2.42%	2.27%	-1.25%	-0.97%
		Hearing Disability	0.16%	0.32%	1.38%	1.40%	1.26%	-0.16%	-1.05%	-0.02%	0.13%
		Limited Intellectual Capacity	26.31%	26.61%	29.36%	23.45%	25.59%	-0.30%	-2.75%	5.91%	-2.15%
		Multiple Disabilities	32.49%	31.61%	25.84%	27.48%	28.91%	0.88%	5.77%	-1.64%	-1.43%
		Physical Disability	14.58%	11.94%	13.61%	12.73%	11.37%	2.65%	-1.67%	0.88%	1.36%
		Specific Learning Disability	5.39%	6.94%	9.48%	13.20%	13.90%	-1.55%	-2.55%	-3.72%	-0.70%
		Speech/Language Disability	2.06%	1.77%	3.67%	6.52%	4.58%	0.29%	-1.90%	-2.85%	1.94%
		Traumatic Brain Injury	1.11%	1.13%	1.07%	0.93%	0.95%	-0.02%	0.06%	0.14%	-0.02%
		Visual Disability	0.16%	0.48%	0.15%	0.31%	0.32%	-0.32%	0.33%	-0.16%	-0.01%

Table 87
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	37.64%	35.94%	39.10%	39.71%	38.95%	1.70%	-3.16%	-0.61%	0.76%
		Male	61.87%	63.61%	60.58%	59.97%	61.05%	-1.74%	3.03%	0.61%	-1.09%
	Primary Disability	Autism	16.64%	14.59%	12.28%	11.44%	8.07%	2.05%	2.31%	0.84%	3.37%
		Deaf-Blind	0%	0.15%	0%	0.16%	0.35%	-0.15%	0.15%	-0.16%	-0.19%
		Emotional Disability	0.48%	0.60%	1.13%	2.12%	1.58%	-0.12%	-0.53%	-0.99%	0.55%
		Hearing Disability	0.32%	0.75%	1.62%	1.47%	1.75%	-0.43%	-0.86%	0.15%	-0.28%
		Limited Intellectual Capacity	30.53%	31.13%	26.33%	28.43%	31.75%	-0.60%	4.80%	-2.10%	-3.32%
		Multiple Disabilities	32.79%	30.38%	29.08%	28.27%	29.12%	2.41%	1.30%	0.81%	-0.86%
		Physical Disability	11.15%	11.88%	11.79%	10.62%	9.30%	-0.73%	0.09%	1.17%	1.32%
		Specific Learning Disability	5.01%	7.37%	11.15%	11.60%	12.63%	-2.36%	-3.78%	-0.45%	-1.03%
		Speech/Language Disability	1.62%	1.96%	5.49%	3.76%	4.39%	-0.34%	-3.54%	1.74%	-0.63%
		Traumatic Brain Injury	0.65%	0.90%	0.65%	1.14%	1.05%	-0.25%	0.26%	-0.50%	0.09%
		Visual Disability	0.48%	0%	0.16%	0.65%	0%	0.48%	-0.16%	-0.49%	0.65%

Table 87
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	36.55%	37.10%	38.97%	38.03%	40.36%	-0.55%	-1.87%	0.94%	-2.33%
		Male	63.12%	62.90%	61.03%	61.61%	58.92%	0.22%	1.87%	-0.58%	2.69%
	Primary Disability	Autism	13.85%	14.69%	13.97%	10.60%	9.19%	-0.84%	0.72%	3.36%	1.41%
		Deaf-Blind	0%	0%	0.35%	0%	0.18%	0%	-0.35%	-0.02%	0.19%
		Emotional Disability	0.48%	1.32%	0.52%	1.28%	1.26%	-0.84%	0.80%	-0.76%	0.02%
		Hearing Disability	0.32%	0.19%	1.21%	2.19%	1.26%	0.13%	-1.02%	-0.99%	0.93%
		Limited Intellectual Capacity	33.01%	32.39%	30.69%	34.55%	27.39%	0.62%	1.70%	-3.86%	7.17%
		Multiple Disabilities	32.53%	32.02%	31.38%	29.43%	34.41%	0.51%	0.64%	1.95%	-4.98%
		Physical Disability	13.85%	10.92%	8.45%	6.95%	8.65%	2.93%	2.48%	1.50%	-1.70%
		Specific Learning Disability	3.54%	4.90%	9.48%	10.24%	13.15%	-1.36%	-4.59%	-0.76%	-2.92%
		Speech/Language Disability	0.97%	2.45%	1.90%	2.38%	2.88%	-1.48%	0.55%	-0.48%	-0.51%
		Traumatic Brain Injury	0.97%	1.13%	1.38%	1.46%	0.90%	-0.16%	-0.25%	-0.08%	0.56%
		Visual Disability	0.16%	0%	0.69%	0.18%	0.18%	0.16%	-0.69%	0.51%	0%

Table 87
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	37.10%	38.94%	39.63%	39.29%	35.55%	-1.84%	-0.69%	0.34%	3.74%
		Male	62.90%	60.71%	60.19%	59.96%	64.45%	2.19%	0.52%	0.22%	-4.49%
	Primary Disability	Autism	16.20%	14.69%	9.82%	10.53%	9.32%	1.51%	4.88%	-0.71%	1.21%
		Deaf-Blind	0.19%	0.35%	0%	0.19%	0%	-0.16%	0.35%	-0.19%	0.19%
		Emotional Disability	0.75%	0.71%	0.56%	1.13%	1.14%	0.04%	0.15%	-0.57%	-0.01%
		Hearing Disability	0%	0.35%	2.22%	1.32%	1.33%	-0.35%	-1.87%	0.91%	-0.02%
		Limited Intellectual Capacity	31.45%	34.51%	35.93%	30.26%	30.42%	-3.06%	-1.41%	5.66%	-0.16%
		Multiple Disabilities	37.10%	31.86%	32.96%	36.09%	35.93%	5.24%	-1.11%	-3.13%	0.16%
		Physical Disability	7.53%	8.14%	8.15%	8.27%	9.13%	-0.61%	-0.01%	-0.12%	-0.85%
		Specific Learning Disability	4.71%	6.37%	7.59%	9.59%	10.08%	-1.66%	-1.22%	-1.99%	-0.49%
		Speech/Language Disability	0.75%	1.06%	1.30%	1.88%	0.95%	-0.31%	-0.23%	-0.58%	0.93%
		Traumatic Brain Injury	1.32%	1.24%	1.30%	0.56%	1.71%	0.08%	-0.06%	0.73%	-1.15%
		Visual Disability	0%	0.53%	0.19%	0.19%	0%	-0.53%	0.35%	0%	0.19%

Table 87
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	38.22%	40.64%	39.72%	36.21%	38.93%	-2.42%	0.91%	3.51%	-2.72%
		Male	61.78%	59.36%	59.88%	63.42%	61.07%	2.42%	-0.52%	-3.54%	2.35%
	Primary Disability	Autism	15.04%	10.56%	10.08%	10.48%	9.09%	4.48%	0.48%	-0.40%	1.39%
		Deaf-Blind	0.36%	0%	0%	0%	0%	0.16%	0.20%	-0.19%	0.19%
		Emotional Disability	0.54%	0.20%	0.59%	0.92%	1.38%	0.34%	-0.39%	-0.33%	-0.46%
		Hearing Disability	0.36%	1.00%	1.38%	1.47%	1.38%	-0.64%	-0.39%	-0.09%	0.09%
		Limited Intellectual Capacity	36.41%	35.46%	32.21%	30.88%	33.60%	0.95%	3.25%	1.33%	-2.72%
		Multiple Disabilities	33.88%	36.85%	40.91%	37.32%	36.17%	-2.97%	-4.06%	3.59%	1.15%
		Physical Disability	7.79%	8.37%	7.71%	8.27%	5.93%	-0.58%	0.66%	-0.56%	2.34%
		Specific Learning Disability	3.44%	4.78%	4.55%	7.35%	9.09%	-1.34%	0.24%	-2.81%	-1.74%
		Speech/Language Disability	0.54%	0.60%	1.78%	1.84%	2.37%	-0.06%	-1.18%	-0.06%	-0.53%
		Traumatic Brain Injury	1.27%	1.59%	0.59%	1.47%	0.40%	-0.32%	1.00%	-0.88%	1.08%
		Visual Disability	0.36%	0.40%	0.20%	0%	0.59%	-0.04%	0.20%	0.20%	-0.59%

Table 87
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	38.11%	40.53%	36.25%	38.43%	40.64%	-2.42%	4.29%	-2.19%	-2.21%
		Male	61.68%	59.28%	63.57%	61.37%	59.36%	2.40%	-4.29%	2.20%	2.00%
	Primary Disability	Autism	11.68%	10.42%	9.67%	9.86%	7.95%	1.26%	0.75%	-0.19%	1.91%
		Deaf-Blind	0%	0%	0.19%	0%	0%	0%	-0.19%	0.19%	-0.18%
		Emotional Disability	0.82%	0.38%	1.30%	0.60%	1.06%	0.44%	-0.92%	0.70%	-0.46%
		Hearing Disability	1.23%	0.19%	1.30%	1.21%	0.88%	1.04%	-1.11%	0.09%	0.32%
		Limited Intellectual Capacity	35.66%	34.47%	34.57%	36.22%	37.46%	1.19%	-0.10%	-1.65%	-1.24%
		Multiple Disabilities	36.89%	41.86%	38.29%	35.41%	34.45%	-4.97%	3.57%	2.88%	0.96%
		Physical Disability	7.99%	5.87%	7.06%	7.04%	5.48%	2.12%	-1.19%	0.02%	1.57%
		Specific Learning Disability	2.66%	4.36%	5.39%	6.24%	10.07%	-1.70%	-1.03%	-0.85%	-3.83%
		Speech/Language Disability	1.02%	0.95%	1.12%	2.01%	1.41%	0.07%	-0.17%	-0.90%	0.60%
		Traumatic Brain Injury	1.43%	1.14%	0.93%	0.60%	0.71%	0.29%	0.21%	0.33%	-0.10%
		Visual Disability	0.41%	0.19%	0%	0.40%	0.35%	0.22%	0.19%	-0.40%	0.05%

Table 87
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
RD	Gender	Female	41.17%	38.70%	39.16%	39.78%	39.05%	2.47%	-0.46%	-0.62%	0.73%
		Male	58.64%	61.30%	60.63%	60.04%	60.95%	-2.66%	0.67%	0.59%	-0.92%
	Primary Disability	Autism	11.26%	10.59%	10.53%	8.44%	5.86%	0.67%	0.06%	2.08%	2.59%
		Deaf-Blind	0%	0%	0%	0%	0.22%	0%	0%	0%	-0.22%
		Emotional Disability	0.97%	1.02%	0.63%	0.94%	1.30%	-0.05%	0.39%	-0.31%	-0.36%
		Hearing Disability	0.19%	0.41%	0.84%	1.13%	2.82%	-0.22%	-0.44%	-0.28%	-1.69%
		Limited Intellectual Capacity	33.40%	35.44%	36.42%	38.09%	35.79%	-2.04%	-0.98%	-1.67%	2.29%
		Multiple Disabilities	43.50%	42.16%	39.16%	36.02%	38.40%	1.34%	3.00%	3.14%	-2.37%
		Physical Disability	5.44%	5.91%	5.26%	5.63%	8.68%	-0.47%	0.64%	-0.37%	-3.05%
		Specific Learning Disability	2.72%	3.26%	5.05%	6.57%	4.99%	-0.54%	-1.79%	-1.51%	1.58%
		Speech/Language Disability	0.97%	0.61%	1.05%	1.13%	0.87%	0.36%	-0.44%	-0.07%	0.26%
		Traumatic Brain Injury	1.36%	0.61%	0.63%	1.31%	1.09%	0.75%	-0.02%	-0.68%	0.23%
		Visual Disability	0.19%	0%	0.21%	0.56%	0%	0.19%	-0.21%	-0.35%	0.56%

Table 88
Writing Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 3								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	35.66%	36.57%	35.29%	33.38%	34.81%	-0.91%	1.28%	1.91%	-1.43%
		Male	64.19%	63.27%	64.71%	66.18%	65.19%	0.92%	-1.43%	-1.48%	0.99%
	Primary Disability	Autism	21.09%	17.90%	16.44%	13.99%	12.66%	3.19%	1.46%	2.45%	1.34%
		Deaf-Blind	0%	0.15%	0%	0.29%	0%	-0.15%	0.15%	-0.29%	0.29%
		Emotional Disability	0.61%	0.93%	1.96%	0.73%	1.58%	-0.32%	-1.04%	1.23%	-0.85%
		Hearing Disability	0.46%	0%	1.51%	0.88%	2.22%	0.46%	-1.51%	0.63%	-1.34%
		Limited Intellectual Capacity	25.34%	24.23%	23.68%	27.41%	21.20%	1.11%	0.55%	-3.73%	6.20%
		Multiple Disabilities	30.96%	27.01%	28.81%	24.05%	24.05%	3.95%	-1.80%	4.76%	0%
		Physical Disability	12.59%	17.28%	12.37%	13.85%	12.66%	-4.69%	4.92%	-1.48%	1.19%
		Specific Learning Disability	3.95%	6.17%	7.09%	10.06%	15.35%	-2.22%	-0.92%	-2.97%	-5.29%
		Speech/Language Disability	3.95%	4.63%	6.64%	7.58%	9.49%	-0.68%	-2.01%	-0.94%	-1.91%
		Traumatic Brain Injury	0.76%	1.54%	0.75%	1.02%	0.63%	-0.78%	0.79%	-0.27%	0.39%
		Visual Disability	0.15%	0.15%	0.75%	0.15%	0.16%	0%	-0.60%	0.61%	-0.01%

Table 88
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	36.15%	35.34%	34.14%	36.99%	37.70%	0.81%	1.20%	-2.85%	-0.71%
		Male	63.54%	64.33%	65.86%	62.70%	61.82%	-0.79%	-1.53%	3.16%	0.87%
	Primary Disability	Autism	17.36%	16.94%	15.33%	12.38%	10.22%	0.42%	1.61%	2.94%	2.16%
		Deaf-Blind	0.32%	0%	0.15%	0%	0.16%	0.32%	-0.15%	0.15%	-0.16%
		Emotional Disability	0%	2.28%	0.15%	1.41%	2.24%	-2.28%	2.13%	-1.26%	-0.83%
		Hearing Disability	0.16%	0.33%	1.37%	1.41%	1.44%	-0.17%	-1.04%	-0.04%	-0.03%
		Limited Intellectual Capacity	26.43%	26.55%	29.14%	23.67%	26.04%	-0.12%	-2.59%	5.47%	-2.37%
		Multiple Disabilities	32.32%	31.92%	26.10%	27.43%	28.75%	0.40%	5.82%	-1.33%	-1.33%
		Physical Disability	14.49%	12.05%	13.35%	12.70%	11.02%	2.44%	-1.30%	0.66%	1.67%
		Specific Learning Disability	5.25%	6.68%	9.26%	13.01%	13.74%	-1.43%	-2.58%	-3.75%	-0.73%
		Speech/Language Disability	2.07%	1.63%	3.95%	6.58%	4.63%	0.44%	-2.32%	-2.64%	1.95%
		Traumatic Brain Injury	1.11%	0.98%	1.06%	0.94%	0.96%	0.13%	-0.09%	0.12%	-0.02%
		Visual Disability	0.16%	0.49%	0.15%	0.31%	0.32%	-0.33%	0.34%	-0.16%	-0.01%

Table 88
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	37.82%	35.91%	39.12%	39.50%	38.91%	1.91%	-3.21%	-0.39%	0.60%
		Male	61.69%	63.64%	60.56%	60.17%	61.09%	-1.95%	3.08%	0.39%	-0.93%
	Primary Disability	Autism	16.56%	14.55%	12.77%	11.41%	8.10%	2.02%	1.78%	1.36%	3.31%
		Deaf-Blind	0%	0.15%	0%	0.17%	0.35%	-0.15%	0.15%	-0.17%	-0.19%
		Emotional Disability	0.49%	0.61%	1.15%	2.15%	1.59%	-0.12%	-0.54%	-1.00%	0.56%
		Hearing Disability	0.32%	0.76%	1.64%	1.49%	1.76%	-0.44%	-0.88%	0.15%	-0.27%
		Limited Intellectual Capacity	30.52%	31.06%	26.35%	28.43%	31.87%	-0.54%	4.71%	-2.08%	-3.44%
		Multiple Disabilities	33.28%	30.61%	28.64%	28.43%	29.05%	2.67%	1.96%	0.21%	-0.62%
		Physical Disability	10.88%	11.82%	11.78%	10.91%	9.33%	-0.94%	0.03%	0.87%	1.58%
		Specific Learning Disability	4.87%	7.27%	10.97%	11.07%	12.50%	-2.40%	-3.69%	-0.11%	-1.43%
		Speech/Language Disability	1.62%	1.97%	5.57%	3.80%	4.40%	-0.35%	-3.60%	1.76%	-0.60%
		Traumatic Brain Injury	0.65%	0.91%	0.66%	1.16%	1.06%	-0.26%	0.25%	-0.50%	0.10%
		Visual Disability	0.49%	0%	0.16%	0.66%	0%	0.49%	-0.16%	-0.50%	0.66%

Table 88
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	36.39%	36.96%	38.96%	38.43%	40.36%	-0.57%	-2.00%	0.52%	-1.93%
		Male	63.29%	63.04%	61.04%	61.20%	58.91%	0.25%	2.00%	-0.16%	2.29%
	Primary Disability	Autism	13.85%	14.82%	13.91%	10.75%	9.27%	-0.97%	0.91%	3.17%	1.47%
		Deaf-Blind	0%	0%	0.35%	0.36%	0.18%	0%	-0.35%	-0.02%	0.18%
		Emotional Disability	0.48%	1.31%	0.52%	1.28%	1.27%	-0.83%	0.79%	-0.75%	0%
		Hearing Disability	0.32%	0.19%	1.22%	2.37%	1.27%	0.13%	-1.03%	-1.15%	1.10%
		Limited Intellectual Capacity	32.85%	32.27%	30.78%	34.43%	27.64%	0.58%	1.49%	-3.64%	6.79%
		Multiple Disabilities	32.85%	32.27%	31.30%	29.14%	34.55%	0.58%	0.97%	2.16%	-5.40%
		Physical Disability	13.69%	10.69%	8.35%	6.92%	8.36%	3.00%	2.35%	1.43%	-1.44%
		Specific Learning Disability	3.54%	4.88%	9.57%	10.20%	12.73%	-1.34%	-4.69%	-0.63%	-2.53%
		Speech/Language Disability	0.97%	2.44%	1.91%	2.55%	2.91%	-1.47%	0.53%	-0.64%	-0.36%
		Traumatic Brain Injury	0.97%	1.13%	1.39%	1.46%	0.91%	-0.16%	-0.27%	-0.07%	0.55%
		Visual Disability	0.16%	0%	0.70%	0.18%	0.36%	0.16%	-0.70%	0.51%	-0.18%

Table 88
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	36.71%	38.43%	38.99%	39.02%	34.79%	-1.72%	-0.56%	-0.03%	4.23%
		Male	63.29%	61.21%	60.82%	60.23%	65.21%	2.08%	0.39%	0.60%	-4.98%
	Primary Disability	Autism	16.06%	14.95%	10.08%	10.51%	9.70%	1.11%	4.87%	-0.43%	0.81%
		Deaf-Blind	0.19%	0.36%	0%	0.19%	0%	-0.17%	0.36%	-0.19%	0.19%
		Emotional Disability	0.76%	0.71%	0.56%	1.31%	1.14%	0.05%	0.15%	-0.75%	0.17%
		Hearing Disability	0%	0.36%	2.24%	1.31%	1.33%	-0.36%	-1.88%	0.93%	-0.02%
		Limited Intellectual Capacity	31.55%	34.34%	36.01%	30.02%	29.85%	-2.79%	-1.67%	5.99%	0.17%
		Multiple Disabilities	37.09%	31.85%	32.84%	36.02%	35.93%	5.24%	-0.98%	-3.19%	0.09%
		Physical Disability	7.46%	8.01%	7.84%	8.26%	9.13%	-0.55%	0.17%	-0.42%	-0.87%
		Specific Learning Disability	4.78%	6.41%	7.46%	9.57%	10.08%	-1.63%	-1.06%	-2.11%	-0.51%
		Speech/Language Disability	0.76%	1.07%	1.49%	2.06%	0.95%	-0.31%	-0.43%	-0.57%	1.11%
		Traumatic Brain Injury	1.34%	1.25%	1.31%	0.56%	1.90%	0.09%	-0.06%	0.74%	-1.34%
		Visual Disability	0%	0.53%	0.19%	0.19%	0%	-0.53%	0.35%	0%	0.19%

Table 88
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	38.25%	41.08%	40.00%	35.98%	39.28%	-2.83%	1.08%	4.02%	-3.30%
		Male	61.75%	58.92%	59.80%	63.65%	60.72%	2.83%	-0.88%	-3.85%	2.93%
	Primary Disability	Autism	14.94%	10.82%	10.10%	10.70%	9.22%	4.12%	0.72%	-0.60%	1.48%
		Deaf-Blind	0.36%	0.20%	0%	0%	0%	0.16%	0.20%	0%	0%
		Emotional Disability	0.55%	0.20%	0.59%	0.92%	1.60%	0.35%	-0.39%	-0.33%	-0.68%
		Hearing Disability	0.36%	1.00%	1.39%	1.48%	1.40%	-0.64%	-0.38%	-0.09%	0.07%
		Limited Intellectual Capacity	36.61%	35.27%	32.08%	30.63%	33.27%	1.34%	3.19%	1.45%	-2.64%
		Multiple Disabilities	33.88%	36.87%	40.79%	37.27%	35.87%	-2.99%	-3.92%	3.52%	1.40%
		Physical Disability	7.65%	8.22%	7.92%	8.30%	6.01%	-0.57%	0.29%	-0.38%	2.29%
		Specific Learning Disability	3.46%	4.81%	4.55%	7.38%	9.62%	-1.35%	0.26%	-2.83%	-2.24%
		Speech/Language Disability	0.55%	0.60%	1.78%	1.85%	2.00%	-0.05%	-1.18%	-0.06%	-0.16%
		Traumatic Brain Injury	1.28%	1.60%	0.59%	1.48%	0.40%	-0.32%	1.01%	-0.88%	1.08%
		Visual Disability	0.36%	0.40%	0.20%	0%	0.60%	-0.04%	0.20%	0.20%	-0.60%

Table 88
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	38.33%	40.42%	36.25%	38.15%	40.60%	-2.09%	4.17%	-1.91%	-2.45%
		Male	61.67%	59.20%	63.57%	61.65%	59.40%	2.47%	-4.37%	1.92%	2.25%
	Primary Disability	Autism	11.88%	10.63%	9.67%	10.04%	7.73%	1.25%	0.96%	-0.38%	2.31%
		Deaf-Blind	0%	0%	0.19%	0%	0.18%	0%	-0.19%	0.19%	-0.18%
		Emotional Disability	0.63%	0.38%	1.30%	0.60%	1.05%	0.25%	-0.92%	0.70%	-0.45%
		Hearing Disability	1.25%	0.19%	1.30%	1.21%	0.88%	1.06%	-1.11%	0.10%	0.33%
		Limited Intellectual Capacity	35.63%	34.54%	34.39%	36.35%	37.43%	1.10%	0.15%	-1.96%	-1.09%
		Multiple Disabilities	37.08%	41.75%	38.85%	35.14%	34.80%	-4.67%	2.90%	3.71%	0.34%
		Physical Disability	7.92%	5.88%	6.88%	7.03%	5.62%	2.04%	-1.00%	-0.15%	1.40%
		Specific Learning Disability	2.71%	4.18%	5.20%	6.23%	9.84%	-1.47%	-1.03%	-1.02%	-3.62%
		Speech/Language Disability	1.04%	0.95%	1.12%	2.01%	1.41%	0.09%	-0.17%	-0.89%	0.60%
		Traumatic Brain Injury	1.46%	1.14%	0.93%	0.60%	0.70%	0.32%	0.21%	0.33%	-0.10%
		Visual Disability	0.42%	0.19%	0%	0.40%	0.35%	0.23%	0.19%	-0.40%	0.05%

Table 88
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
WR	Gender	Female	41.25%	38.16%	39.54%	39.96%	39.22%	3.09%	-1.37%	-0.43%	0.75%
		Male	58.56%	61.84%	60.25%	59.85%	60.78%	-3.28%	1.58%	0.40%	-0.93%
	Primary Disability	Autism	11.28%	10.61%	10.57%	8.26%	6.10%	0.67%	0.04%	2.32%	2.16%
		Deaf-Blind	0%	0%	0%	0%	0.22%	0%	0%	0%	-0.22%
		Emotional Disability	0.78%	1.02%	0.63%	0.75%	1.31%	-0.24%	0.39%	-0.12%	-0.56%
		Hearing Disability	0.19%	0.41%	0.85%	1.13%	2.83%	-0.22%	-0.44%	-0.28%	-1.71%
		Limited Intellectual Capacity	33.46%	35.31%	36.36%	38.09%	36.60%	-1.85%	-1.06%	-1.72%	1.49%
		Multiple Disabilities	43.58%	42.04%	38.90%	36.21%	37.69%	1.54%	3.14%	2.69%	-1.48%
		Physical Disability	5.45%	5.92%	5.29%	5.63%	8.28%	-0.47%	0.63%	-0.34%	-2.65%
		Specific Learning Disability	2.72%	3.47%	5.07%	6.57%	5.01%	-0.75%	-1.61%	-1.49%	1.56%
		Speech/Language Disability	0.97%	0.61%	1.27%	1.13%	0.87%	0.36%	-0.66%	0.14%	0.26%
		Traumatic Brain Injury	1.36%	0.61%	0.63%	1.50%	1.09%	0.75%	-0.02%	-0.87%	0.41%
		Visual Disability	0.19%	0%	0.21%	0.56%	0%	0.19%	-0.21%	-0.35%	0.56%

Table 89
Mathematics Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 3					
			2012	2011	2010	2009	2008	2007
MA	Gender	Female	36.42%	36.44%	35.54%	33.03%	35.52%	39.29%
		Male	63.43%	63.41%	64.47%	66.52%	64.48%	60.71%
	Primary Disability	Autism	20.22%	17.98%	16.82%	14.09%	12.24%	8.57%
		Deaf-Blind	0%	0.16%	0.00%	0.30%	0%	0.37%
		Emotional Disability	0.62%	0.95%	1.73%	0.61%	1.72%	2.24%
		Hearing Disability	0.46%	0%	1.10%	0.61%	1.55%	0.75%
		Limited Intellectual Capacity	25.93%	24.61%	24.37%	28.03%	22.76%	27.93%
		Multiple Disabilities	31.79%	26.97%	29.09%	25.00%	26.21%	26.63%
		Physical Disability	12.50%	17.51%	12.74%	14.55%	13.62%	12.10%
		Specific Learning Disability	3.86%	5.52%	6.76%	8.33%	12.41%	12.10%
		Speech/Language Disability	3.70%	4.57%	5.98%	7.42%	8.62%	8.19%
		Traumatic Brain Injury	0.77%	1.58%	0.79%	1.06%	0.52%	0.56%
		Visual Disability	0%	0.16%	0.63%	0%	0.35%	0.37%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

		Grade 3				
		Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
Gender	Female	-0.01%	0.90%	2.51%	-2.49%	-3.78%
	Male	0.02%	-1.06%	-2.05%	2.03%	3.78%
MA Primary Disability	Autism	2.24%	1.16%	2.73%	1.85%	3.67%
	Deaf-Blind	-0.16%	0.16%	-0.30%	0.30%	-0.37%
	Emotional Disability	-0.33%	-0.78%	1.12%	-1.12%	-0.52%
	Hearing Disability	0.46%	-1.10%	0.50%	-0.95%	0.80%
	Limited Intellectual Capacity	1.32%	0.23%	-3.66%	5.27%	-5.17%
	Multiple Disabilities	4.82%	-2.12%	4.09%	-1.21%	-0.42%
	Physical Disability	-5.01%	4.77%	-1.81%	0.92%	1.52%
	Specific Learning Disability	-1.66%	-1.24%	-1.57%	-4.08%	0.31%
	Speech/Language Disability	-0.87%	-1.40%	-1.45%	-1.20%	0.43%
	Traumatic Brain Injury	-0.81%	0.79%	-0.28%	0.54%	-0.04%
	Visual Disability	-0.16%	-0.47%	0.63%	-0.35%	-0.03%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4					
			2012	2011	2010	2009	2008	2007
MA	Gender	Female	36.48%	35.36%	35.17%	38.05%	38.16%	38.39%
		Male	63.20%	64.47%	64.83%	61.79%	61.33%	61.02%
	Primary Disability	Autism	17.60%	16.45%	14.98%	12.36%	11.07%	8.47%
		Deaf-Blind	0.32%	0%	0.16%	0%	0.17%	0.20%
		Emotional Disability	0%	1.97%	0.16%	1.30%	2.39%	1.38%
		Hearing Disability	0.16%	0.33%	0.79%	0.65%	1.19%	1.97%
		Limited Intellectual Capacity	26.56%	26.97%	30.28%	24.07%	27.09%	30.51%
		Multiple Disabilities	32.16%	32.07%	26.81%	28.46%	30.66%	28.15%
		Physical Disability	14.72%	12.34%	13.88%	13.17%	10.56%	11.22%
		Specific Learning Disability	4.80%	6.41%	7.73%	12.20%	10.73%	10.83%
		Speech/Language Disability	2.08%	1.81%	3.94%	6.34%	4.26%	5.32%
		Traumatic Brain Injury	1.12%	0.99%	1.10%	0.98%	1.02%	1.18%
		Visual Disability	0.16%	0.49%	0.16%	0.33%	0.34%	0.39%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 4				
			Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
MA	Gender	Female	1.12%	0.19%	-2.88%	-0.11%	-0.23%
		Male	-1.27%	-0.35%	3.04%	0.46%	0.31%
	Primary Disability	Autism	1.15%	1.46%	2.63%	1.29%	2.60%
		Deaf-Blind	0.32%	-0.16%	0.16%	-0.17%	-0.03%
		Emotional Disability	-1.97%	1.82%	-1.14%	-1.08%	1.01%
		Hearing Disability	-0.17%	-0.46%	0.14%	-0.54%	-0.78%
		Limited Intellectual Capacity	-0.41%	-3.31%	6.22%	-3.02%	-3.42%
		Multiple Disabilities	0.09%	5.26%	-1.64%	-2.21%	2.51%
		Physical Disability	2.38%	-1.54%	0.71%	2.61%	-0.66%
		Specific Learning Disability	-1.61%	-1.32%	-4.47%	1.46%	-0.10%
		Speech/Language Disability	0.27%	-2.13%	-2.40%	2.08%	-1.06%
		Traumatic Brain Injury	0.13%	-0.12%	0.13%	-0.05%	-0.16%
		Visual Disability	-0.33%	0.34%	-0.17%	-0.02%	-0.05%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5					
			2012	2011	2010	2009	2008	2007
MA	Gender	Female	37.87%	36.03%	39.30%	39.46%	38.91%	40.51%
		Male	61.64%	63.51%	60.37%	60.20%	61.09%	59.28%
	Primary Disability	Autism	16.23%	14.75%	12.71%	11.91%	8.84%	9.07%
		Deaf-Blind	0%	0.16%	0%	0.34%	0.19%	0.21%
		Emotional Disability	0.49%	0.62%	1.17%	2.04%	1.50%	1.48%
		Hearing Disability	0.33%	0.31%	0.67%	0.85%	1.32%	0.84%
		Limited Intellectual Capacity	30.49%	32.30%	26.76%	29.25%	34.02%	31.86%
		Multiple Disabilities	32.95%	30.28%	29.77%	29.42%	30.08%	31.65%
		Physical Disability	11.64%	12.27%	11.71%	11.22%	9.21%	10.34%
		Specific Learning Disability	4.92%	6.06%	10.70%	8.84%	9.59%	9.49%
		Speech/Language Disability	1.48%	2.02%	5.35%	3.91%	4.32%	4.01%
		Traumatic Brain Injury	0.66%	0.93%	0.67%	1.19%	0.94%	0.21%
		Visual Disability	0.49%	0%	0.17%	0.68%	0%	0.21%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

		Grade 5				
		Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
Gender	Female	1.85%	-3.27%	-0.16%	0.55%	-1.60%
	Male	-1.87%	3.14%	0.16%	-0.89%	1.81%
MA Primary Disability	Autism	1.48%	2.04%	0.80%	3.07%	-0.24%
	Deaf-Blind	-0.16%	0.16%	-0.34%	0.15%	-0.02%
	Emotional Disability	-0.13%	-0.55%	-0.87%	0.54%	0.02%
	Hearing Disability	0.02%	-0.36%	-0.18%	-0.47%	0.48%
	Limited Intellectual Capacity	-1.81%	5.54%	-2.50%	-4.77%	2.16%
	Multiple Disabilities	2.67%	0.51%	0.34%	-0.65%	-1.58%
	Physical Disability	-0.63%	0.56%	0.48%	2.01%	-1.13%
	Specific Learning Disability	-1.14%	-4.65%	1.86%	-0.74%	0.10%
	Speech/Language Disability	-0.54%	-3.33%	1.44%	-0.41%	0.31%
	Traumatic Brain Injury	-0.27%	0.26%	-0.52%	0.25%	0.73%
	Visual Disability	0.49%	-0.17%	-0.51%	0.68%	-0.21%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

			Grade 6					
Content	Variable	Subgroup	2012	2011	2010	2009	2008	2007
MA	Gender	Female	36.45%	37.48%	39.55%	37.68%	40.83%	33.78%
		Male	63.23%	62.52%	60.45%	61.96%	58.41%	66.02%
	Primary Disability	Autism	14.10%	14.69%	14.34%	11.23%	9.07%	8.30%
		Deaf-Blind	0%	0%	0.52%	0.36%	0.19%	0%
		Emotional Disability	0.48%	1.13%	0.69%	1.27%	1.51%	1.35%
		Hearing Disability	0.32%	0.19%	0.86%	1.81%	1.13%	1.54%
		Limited Intellectual Capacity	33.12%	32.39%	30.57%	34.24%	28.36%	31.47%
		Multiple Disabilities	32.33%	32.39%	30.92%	28.80%	35.35%	33.40%
		Physical Disability	13.47%	10.55%	8.64%	7.07%	8.51%	10.43%
		Specific Learning Disability	3.80%	5.09%	8.98%	10.51%	11.34%	9.07%
		Speech/Language Disability	0.95%	2.45%	2.59%	2.72%	2.84%	2.90%
		Traumatic Brain Injury	0.95%	1.13%	1.21%	1.45%	0.76%	0.97%
		Visual Disability	0.16%	0%	0.69%	0.18%	0.38%	0.19%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6				
			Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
MA	Gender	Female	-1.03%	-2.08%	1.87%	-3.15%	7.05%
		Male	0.71%	2.08%	-1.51%	3.55%	-7.61%
	Primary Disability	Autism	-0.59%	0.35%	3.10%	2.16%	0.77%
		Deaf-Blind	0%	-0.52%	0.16%	0.17%	0.19%
		Emotional Disability	-0.65%	0.44%	-0.58%	-0.24%	0.16%
		Hearing Disability	0.13%	-0.68%	-0.95%	0.68%	-0.41%
		Limited Intellectual Capacity	0.73%	1.82%	-3.67%	5.88%	-3.12%
		Multiple Disabilities	-0.06%	1.48%	2.11%	-6.55%	1.95%
		Physical Disability	2.92%	1.91%	1.57%	-1.44%	-1.92%
		Specific Learning Disability	-1.29%	-3.90%	-1.53%	-0.84%	2.27%
		Speech/Language Disability	-1.50%	-0.14%	-0.13%	-0.12%	-0.06%
		Traumatic Brain Injury	-0.18%	-0.08%	-0.24%	0.69%	-0.21%
		Visual Disability	0.16%	-0.69%	0.51%	-0.20%	0.19%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7					
			2012	2011	2010	2009	2008	2007
MA	Gender	Female	36.99%	39.15%	38.75%	40.23%	35.65%	38.17%
		Male	63.01%	60.50%	61.06%	59.01%	64.36%	61.41%
	Primary Disability	Autism	15.61%	14.59%	10.40%	10.63%	8.86%	8.74%
		Deaf-Blind	0.19%	0.53%	0%	0.19%	0%	0%
		Emotional Disability	0.58%	0.53%	0.76%	1.52%	1.35%	0.85%
		Hearing Disability	0.00%	0.36%	1.70%	0.95%	1.35%	1.07%
		Limited Intellectual Capacity	31.98%	33.99%	36.11%	30.36%	30.44%	34.54%
		Multiple Disabilities	37.38%	31.67%	32.89%	36.43%	36.42%	32.41%
		Physical Disability	7.13%	8.54%	8.32%	8.16%	8.67%	7.25%
		Specific Learning Disability	5.20%	6.58%	6.81%	8.16%	9.83%	11.94%
		Speech/Language Disability	0.58%	1.25%	1.51%	2.66%	0.96%	1.71%
		Traumatic Brain Injury	1.35%	1.25%	1.32%	0.76%	2.12%	0.64%
		Visual Disability	0%	0.53%	0.19%	0.19%	0%	0.21%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

		Grade 7				
		Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
Gender	Female	-2.16%	0.39%	-1.48%	4.58%	-2.52%
	Male	2.51%	-0.56%	2.05%	-5.34%	2.95%
MA Primary Disability	Autism	1.02%	4.19%	-0.23%	1.76%	0.12%
	Deaf-Blind	-0.34%	0.53%	-0.19%	0.19%	0%
	Emotional Disability	0.05%	-0.22%	-0.76%	0.17%	0.50%
	Hearing Disability	-0.36%	-1.35%	0.75%	-0.40%	0.28%
	Limited Intellectual Capacity	-2.01%	-2.12%	5.75%	-0.08%	-4.10%
	Multiple Disabilities	5.71%	-1.22%	-3.54%	0.02%	4.01%
	Physical Disability	-1.41%	0.22%	0.16%	-0.51%	1.42%
	Specific Learning Disability	-1.38%	-0.22%	-1.35%	-1.67%	-2.11%
	Speech/Language Disability	-0.67%	-0.27%	-1.15%	1.69%	-0.75%
	Traumatic Brain Injury	0.10%	-0.08%	0.56%	-1.36%	1.48%
	Visual Disability	-0.53%	0.35%	0%	0.19%	-0.21%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

			Grade 8					
Content	Variable	Subgroup	2012	2011	2010	2009	2008	2007
	Gender	Female	38.46%	40.91%	40.08%	37.64%	39.53%	39.96%
		Male	61.54%	59.09%	59.54%	62.18%	60.47%	59.67%
MA	Primary Disability	Autism	14.47%	11.27%	10.31%	10.33%	9.20%	9.31%
		Deaf-Blind	0.55%	0.20%	0%	0%	0%	0.18%
		Emotional Disability	0.37%	0.40%	0.76%	1.11%	1.76%	0.73%
		Hearing Disability	0.37%	0.99%	0.95%	1.48%	1.37%	0.73%
		Limited Intellectual Capacity	36.26%	34.98%	32.25%	31.00%	33.46%	36.13%
		Multiple Disabilities	33.70%	36.96%	39.70%	38.01%	35.81%	35.95%
		Physical Disability	8.42%	8.10%	8.40%	8.30%	6.07%	5.66%
		Specific Learning Disability	3.48%	4.55%	4.58%	6.83%	9.20%	6.02%
		Speech/Language Disability	0.55%	0.59%	2.10%	1.66%	1.96%	2.19%
		Traumatic Brain Injury	1.47%	1.58%	0.76%	1.29%	0.59%	1.64%
		Visual Disability	0.37%	0.40%	0.19%	0%	0.59%	0.37%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8				
			Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
MA	Gender	Female	-2.45%	0.83%	2.44%	-1.89%	-0.43%
		Male	2.45%	-0.45%	-2.64%	1.71%	0.80%
	Primary Disability	Autism	3.21%	0.96%	-0.03%	1.13%	-0.11%
		Deaf-Blind	0.35%	0.20%	0%	0%	-0.18%
		Emotional Disability	-0.03%	-0.37%	-0.34%	-0.65%	1.03%
		Hearing Disability	-0.62%	0.03%	-0.52%	0.11%	0.64%
		Limited Intellectual Capacity	1.28%	2.73%	1.26%	-2.47%	-2.67%
		Multiple Disabilities	-3.26%	-2.74%	1.69%	2.20%	-0.14%
		Physical Disability	0.32%	-0.29%	0.09%	2.24%	0.41%
		Specific Learning Disability	-1.07%	-0.04%	-2.25%	-2.37%	3.18%
		Speech/Language Disability	-0.04%	-1.51%	0.44%	-0.30%	-0.23%
		Traumatic Brain Injury	-0.11%	0.82%	-0.53%	0.71%	-1.05%
		Visual Disability	-0.03%	0.20%	0.19%	-0.59%	0.22%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9					
			2012	2011	2010	2009	2008	2007
MA	Gender	Female	38.49%	40.79%	37.06%	39.21%	41.03%	39.50%
		Male	61.51%	58.84%	62.75%	60.59%	58.97%	60.29%
	Primary Disability	Autism	11.41%	10.90%	9.17%	10.10%	8.17%	6.30%
		Deaf-Blind	0%	0%	0.18%	0%	0.18%	0.42%
		Emotional Disability	0.61%	0.56%	1.65%	0.59%	1.07%	1.05%
		Hearing Disability	1.22%	0.19%	1.65%	1.19%	0.53%	2.94%
		Limited Intellectual Capacity	35.44%	34.02%	33.95%	35.84%	37.83%	38.66%
		Multiple Disabilities	36.86%	41.17%	38.53%	34.06%	34.46%	34.45%
		Physical Disability	8.35%	6.39%	6.79%	7.72%	5.51%	7.98%
		Specific Learning Disability	2.85%	4.32%	5.87%	6.73%	9.59%	5.25%
		Speech/Language Disability	1.43%	0.94%	0.92%	2.18%	1.60%	1.26%
		Traumatic Brain Injury	1.43%	1.13%	1.10%	0.79%	0.71%	1.26%
		Visual Disability	0.41%	0.19%	0%	0.40%	0.36%	0.21%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

		Grade 9				
		Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
Gender	Female	-2.30%	3.72%	-2.14%	-1.82%	1.53%
	Male	2.67%	-3.92%	2.16%	1.62%	-1.32%
MA Primary Disability	Autism	0.51%	1.73%	-0.92%	1.93%	1.87%
	Deaf-Blind	0.00%	-0.18%	0.18%	-0.18%	-0.24%
	Emotional Disability	0.05%	-1.09%	1.06%	-0.47%	0.02%
	Hearing Disability	1.03%	-1.46%	0.46%	0.66%	-2.41%
	Limited Intellectual Capacity	1.42%	0.08%	-1.90%	-1.99%	-0.83%
	Multiple Disabilities	-4.31%	2.63%	4.47%	-0.40%	0.01%
	Physical Disability	1.96%	-0.40%	-0.93%	2.22%	-2.47%
	Specific Learning Disability	-1.47%	-1.55%	-0.86%	-2.86%	4.34%
	Speech/Language Disability	0.49%	0.02%	-1.26%	0.58%	0.34%
	Traumatic Brain Injury	0.30%	0.03%	0.31%	0.08%	-0.55%
	Visual Disability	0.22%	0.19%	-0.40%	0.04%	0.15%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10					
			2012	2011	2010	2009	2008	2007
MA	Gender	Female	41.20%	38.79%	40.57%	40.30%	39.53%	36.91%
		Male	58.61%	61.21%	59.23%	59.52%	60.48%	62.86%
	Primary Disability	Autism	11.03%	10.10%	10.95%	8.87%	5.83%	6.04%
		Deaf-Blind	0.00%	0%	0.00%	0%	0.22%	0%
		Emotional Disability	0.97%	1.01%	0.61%	0.92%	1.30%	1.57%
		Hearing Disability	0.19%	0.40%	0.81%	0.92%	3.02%	1.57%
		Limited Intellectual Capacity	33.66%	35.35%	35.70%	37.89%	37.37%	33.33%
		Multiple Disabilities	43.52%	41.82%	37.53%	35.86%	36.72%	41.61%
		Physical Disability	5.61%	5.86%	6.29%	5.55%	8.21%	8.28%
		Specific Learning Disability	2.51%	4.04%	5.68%	6.65%	4.97%	5.15%
		Speech/Language Disability	0.97%	0.61%	1.22%	1.29%	1.30%	2.01%
		Traumatic Brain Injury	1.35%	0.81%	0.81%	1.29%	1.08%	0.45%
		Visual Disability	0.19%	0%	0.20%	0.56%	0%	0%

Table 89
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10				
			Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008	Difference 2008- 2007
MA	Gender	Female	2.41%	-1.78%	0.27%	0.77%	2.61%
		Male	-2.60%	1.98%	-0.29%	-0.96%	-2.39%
	Primary Disability	Autism	0.93%	-0.85%	2.08%	3.04%	-0.21%
		Deaf-Blind	0%	0%	0%	-0.22%	0.22%
		Emotional Disability	-0.04%	0.40%	-0.32%	-0.37%	-0.27%
		Hearing Disability	-0.21%	-0.41%	-0.11%	-2.10%	1.45%
		Limited Intellectual Capacity	-1.69%	-0.35%	-2.19%	0.53%	4.04%
		Multiple Disabilities	1.70%	4.29%	1.67%	-0.86%	-4.89%
		Physical Disability	-0.25%	-0.43%	0.74%	-2.66%	-0.07%
		Specific Learning Disability	-1.53%	-1.64%	-0.97%	1.69%	-0.18%
		Speech/Language Disability	0.36%	-0.61%	-0.08%	0%	-0.71%
		Traumatic Brain Injury	0.54%	0%	-0.48%	0.21%	0.63%
		Visual Disability	0.19%	-0.20%	-0.35%	0.56%	0%

Table 90
Science Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 5								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
SC	Gender	Female	37.58%	36.20%	38.87%	39.93%	39.17%	1.38%	-2.67%	-1.06%	0.76%
		Male	61.93%	63.34%	60.80%	59.73%	60.83%	-1.41%	2.55%	1.07%	-1.10%
	Primary Disability	Autism	16.50%	14.72%	12.63%	12.18%	8.66%	1.78%	2.10%	0.44%	3.52%
		Deaf-Blind	0%	0.15%	0%	0.17%	0%	-0.15%	0.15%	-0.17%	0.17%
		Emotional Disability	0.49%	0.61%	1.16%	2.20%	1.44%	-0.12%	-0.55%	-1.04%	0.76%
		Hearing Disability	0.33%	0.46%	1.33%	1.35%	1.63%	-0.13%	-0.87%	-0.03%	-0.27%
		Limited Intellectual Capacity	30.72%	31.90%	26.41%	29.61%	33.03%	-1.18%	5.49%	-3.20%	-3.42%
		Multiple Disabilities	33.01%	30.22%	29.57%	28.77%	30.14%	2.80%	0.65%	0.80%	-1.38%
		Physical Disability	11.27%	11.81%	11.96%	11.34%	9.75%	-0.54%	-0.15%	0.62%	1.59%
		Specific Learning Disability	4.74%	6.90%	10.30%	8.80%	10.29%	-2.16%	-3.40%	1.50%	-1.49%
		Speech/Language Disability	1.47%	1.99%	5.48%	3.72%	3.97%	-0.52%	-3.49%	1.76%	-0.25%
		Traumatic Brain Injury	0.65%	0.92%	0.66%	1.02%	1.08%	-0.27%	0.26%	-0.35%	-0.07%
		Visual Disability	0.49%	0%	0.17%	0.51%	0%	0.49%	-0.17%	-0.34%	0.51%

Table 90
Science Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 8								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
SC	Gender	Female	37.77%	40.48%	39.81%	38.17%	38.86%	-2.71%	0.67%	1.64%	-0.69%
		Male	62.23%	59.52%	59.81%	61.65%	61.14%	2.71%	-0.28%	-1.85%	0.51%
	Primary Disability	Autism	14.78%	11.11%	10.29%	10.46%	9.67%	3.67%	0.82%	-0.17%	0.79%
		Deaf-Blind	0.36%	0.20%	0%	0%	0%	0.16%	0.20%	0%	0%
		Emotional Disability	0.55%	0.20%	0.97%	0.73%	1.58%	0.35%	-0.77%	0.24%	-0.84%
		Hearing Disability	0.36%	0.99%	0.97%	1.28%	1.38%	-0.63%	0.02%	-0.31%	-0.10%
		Limited Intellectual Capacity	36.86%	35.12%	32.82%	31.38%	33.93%	1.74%	2.30%	1.44%	-2.55%
		Multiple Disabilities	33.76%	36.71%	40.39%	37.80%	36.49%	-2.95%	-3.68%	2.59%	1.31%
		Physical Disability	7.85%	8.33%	7.96%	8.99%	5.52%	-0.48%	0.37%	-1.03%	3.47%
		Specific Learning Disability	3.10%	4.76%	4.08%	6.24%	8.68%	-1.66%	0.68%	-2.16%	-2.44%
		Speech/Language Disability	0.55%	0.60%	1.55%	1.65%	1.78%	-0.05%	-0.96%	-0.10%	-0.12%
		Traumatic Brain Injury	1.46%	1.59%	0.78%	1.47%	0.39%	-0.13%	0.81%	-0.69%	1.07%
		Visual Disability	0.36%	0.40%	0.19%	0%	0.59%	-0.04%	0.20%	0.19%	-0.59%

Table 90
Science Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 10								
			2012	2011	2010	2009	2008	Difference 2012- 2011	Difference 2011- 2010	Difference 2010- 2009	Difference 2009- 2008
SC	Gender	Female	41.05%	38.98%	39.71%	40.26%	39.52%	2.07%	-0.73%	-0.55%	0.74%
		Male	58.75%	61.02%	60.29%	59.56%	60.48%	-2.27%	0.73%	0.74%	-0.92%
	Primary Disability	Autism	11.48%	10.61%	10.92%	9.19%	6.11%	0.87%	-0.31%	1.73%	3.08%
		Deaf-Blind	0%	0%	0%	0%	0.22%	0%	0%	0%	-0.22%
		Emotional Disability	0.97%	1.02%	0.63%	0.92%	1.31%	-0.05%	0.39%	-0.29%	-0.39%
		Hearing Disability	0.19%	0.41%	0.84%	1.10%	2.84%	-0.22%	-0.43%	-0.26%	-1.74%
		Limited Intellectual Capacity	33.46%	35.10%	36.13%	38.24%	37.56%	-1.64%	-1.03%	-2.10%	0.68%
		Multiple Disabilities	43.39%	42.04%	39.29%	35.29%	36.68%	1.35%	2.76%	3.99%	-1.39%
		Physical Disability	5.45%	5.92%	5.25%	5.33%	8.52%	-0.47%	0.67%	-0.08%	-3.18%
		Specific Learning Disability	2.53%	3.47%	4.62%	6.80%	4.59%	-0.94%	-1.15%	-2.18%	2.22%
		Speech/Language Disability	0.97%	0.61%	1.26%	1.10%	1.09%	0.36%	-0.65%	0.16%	0.01%
		Traumatic Brain Injury	1.36%	0.82%	0.84%	1.29%	1.09%	0.54%	-0.02%	-0.45%	0.20%
		Visual Disability	0.19%	0%	0.21%	0.55%	0%	0.19%	-0.21%	-0.34%	0.55%

Table 91
Reading Longitudinal Summary of *P*-values

		High <i>P</i> -value								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.84	0.86	0.85	0.85	0.87	-0.02	0.02	0.00	-0.02
	4	0.84	0.86	0.86	0.86	0.88	-0.02	0.00	0.00	-0.02
	5	0.86	0.87	0.86	0.89	0.87	-0.02	0.01	-0.03	0.02
	6	0.89	0.84	0.88	0.86	0.85	0.05	-0.03	0.01	0.01
	7	0.85	0.87	0.84	0.85	0.85	-0.02	0.03	-0.01	0.00
	8	0.86	0.83	0.84	0.81	0.87	0.03	-0.01	0.03	-0.06
	9	0.82	0.82	0.83	0.80	0.85	0.00	-0.01	0.03	-0.05
	10	0.75	0.74	0.74	0.76	0.70	0.01	0.01	-0.02	0.06
		Mean <i>P</i> -value								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.54	0.56	0.56	0.57	0.59	-0.02	0.00	-0.01	-0.02
	4	0.55	0.56	0.57	0.58	0.58	-0.01	-0.01	-0.01	0.00
	5	0.56	0.60	0.59	0.60	0.59	-0.04	0.01	-0.01	0.01
	6	0.62	0.61	0.62	0.61	0.61	0.01	-0.01	0.01	0.01
	7	0.55	0.55	0.54	0.53	0.53	-0.01	0.02	0.00	0.01
	8	0.54	0.51	0.52	0.51	0.54	0.03	-0.01	0.01	-0.02
	9	0.53	0.52	0.53	0.53	0.54	0.00	-0.01	0.00	-0.01
	10	0.50	0.48	0.49	0.51	0.48	0.01	-0.01	-0.03	0.04
		Low <i>P</i> -value								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.24	0.28	0.27	0.25	0.28	-0.04	0.01	0.02	-0.03
	4	0.25	0.27	0.24	0.26	0.27	-0.02	0.03	-0.02	-0.01
	5	0.24	0.25	0.24	0.25	0.27	-0.01	0.01	-0.01	-0.02
	6	0.23	0.21	0.24	0.23	0.18	0.02	-0.03	0.01	0.04
	7	0.25	0.26	0.25	0.23	0.23	-0.01	0.00	0.03	0.00
	8	0.34	0.30	0.30	0.29	0.33	0.05	-0.01	0.01	-0.04
	9	0.29	0.26	0.28	0.28	0.27	0.04	-0.03	0.00	0.01
	10	0.26	0.26	0.27	0.25	0.25	0.00	-0.01	0.02	0.00

Table 92
Writing Longitudinal Summary of *P*-values

		High <i>P</i> -value								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.79	0.79	0.81	0.81	0.83	0.00	-0.02	0.00	-0.02
	4	0.78	0.79	0.82	0.81	0.84	-0.01	-0.03	0.01	-0.03
	5	0.80	0.84	0.82	0.84	0.83	-0.04	0.01	-0.02	0.01
	6	0.85	0.82	0.86	0.82	0.83	0.03	-0.04	0.03	-0.01
	7	0.82	0.85	0.83	0.85	0.81	-0.02	0.01	-0.02	0.03
	8	0.86	0.81	0.85	0.82	0.86	0.05	-0.04	0.03	-0.04
	9	0.79	0.81	0.80	0.83	0.84	-0.02	0.01	-0.04	0.00
	10	0.83	0.80	0.82	0.84	0.82	0.04	-0.03	-0.02	0.02
		Mean <i>P</i> -value								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.49	0.52	0.53	0.54	0.55	-0.02	-0.01	-0.01	-0.02
	4	0.52	0.51	0.54	0.54	0.55	0.01	-0.03	-0.01	0.00
	5	0.54	0.58	0.58	0.59	0.58	-0.04	0.00	-0.01	0.01
	6	0.60	0.59	0.61	0.59	0.58	0.01	-0.02	0.01	0.02
	7	0.57	0.58	0.57	0.57	0.55	-0.01	0.02	-0.01	0.02
	8	0.55	0.54	0.54	0.53	0.55	0.02	0.00	0.01	-0.02
	9	0.53	0.53	0.53	0.54	0.55	0.01	0.00	-0.01	0.00
	10	0.53	0.51	0.52	0.54	0.51	0.02	-0.01	-0.02	0.03
		Low <i>P</i> -value								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.25	0.25	0.24	0.26	0.30	0.00	0.01	-0.01	-0.04
	4	0.19	0.20	0.19	0.22	0.21	-0.02	0.02	-0.04	0.02
	5	0.22	0.23	0.25	0.23	0.25	-0.01	-0.02	0.02	-0.02
	6	0.34	0.36	0.37	0.32	0.33	-0.02	-0.01	0.05	-0.01
	7	0.23	0.21	0.22	0.24	0.21	0.02	-0.01	-0.01	0.02
	8	0.27	0.27	0.27	0.25	0.25	0.00	0.00	0.02	0.00
	9	0.27	0.26	0.27	0.29	0.24	0.01	-0.01	-0.01	0.04
	10	0.19	0.15	0.16	0.19	0.17	0.04	-0.01	-0.03	0.02

Table 93
Mathematics Longitudinal Summary of *P*-values

		High <i>P</i> -value					
Content	Grade	2012	2011	2010	2009	2008	2007
MA	3	0.86	0.89	0.87	0.87	0.88	0.90
	4	0.86	0.87	0.89	0.89	0.91	0.90
	5	0.84	0.86	0.84	0.86	0.86	0.87
	6	0.86	0.84	0.83	0.81	0.79	0.79
	7	0.81	0.81	0.80	0.81	0.78	0.82
	8	0.81	0.80	0.81	0.80	0.81	0.81
	9	0.76	0.78	0.76	0.76	0.77	0.72
	10	0.79	0.79	0.83	0.82	0.83	0.81

		Mean <i>P</i> -value					
Content	Grade	2012	2011	2010	2009	2008	2007
MA	3	0.60	0.62	0.63	0.64	0.65	0.67
	4	0.61	0.61	0.64	0.64	0.66	0.63
	5	0.56	0.59	0.59	0.61	0.59	0.60
	6	0.60	0.58	0.60	0.58	0.57	0.57
	7	0.54	0.55	0.53	0.53	0.53	0.55
	8	0.56	0.54	0.53	0.52	0.55	0.52
	9	0.46	0.46	0.46	0.47	0.47	0.45
	10	0.44	0.42	0.45	0.45	0.44	0.41

		Low <i>P</i> -value					
Content	Grade	2012	2011	2010	2009	2008	2007
MA	3	0.35	0.34	0.34	0.37	0.34	0.39
	4	0.10	0.13	0.12	0.16	0.14	0.16
	5	0.30	0.32	0.29	0.33	0.33	0.31
	6	0.32	0.30	0.27	0.27	0.30	0.26
	7	0.14	0.15	0.15	0.16	0.19	0.21
	8	0.25	0.25	0.22	0.23	0.23	0.23
	9	0.21	0.21	0.16	0.19	0.19	0.17
	10	0.07	0.06	0.08	0.09	0.07	0.08

Table 93
Science Longitudinal Subgroup Participation (continued)

High <i>P</i> -value							
		Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007	
MA	3	-0.03	0.01	0.00	-0.01	-0.01	
	4	-0.02	-0.02	0.01	-0.02	0.00	
	5	-0.02	0.01	-0.02	0.00	-0.01	
	6	0.02	0.01	0.02	0.01	0.01	
	7	0.00	0.01	-0.01	0.03	-0.04	
	8	0.02	-0.01	0.00	-0.01	0.00	
	9	-0.02	0.02	0.00	0.00	0.04	
	10	0.00	-0.04	0.01	-0.01	0.02	
	Mean <i>P</i> -value						
			Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	-0.02	-0.02	0.00	-0.01	-0.02	
	4	0.00	-0.03	0.00	-0.02	0.02	
	5	-0.03	0.01	-0.02	0.02	-0.01	
	6	0.02	-0.01	0.02	0.00	0.01	
	7	-0.02	0.03	0.00	0.00	-0.02	
	8	0.02	0.00	0.01	-0.03	0.03	
	9	0.01	0.00	-0.01	0.00	0.02	
	10	0.02	-0.02	-0.01	0.02	0.02	
	Low <i>P</i> -value						
			Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	0.01	0.00	-0.03	0.02	-0.05	
	4	-0.03	0.01	-0.05	0.02	-0.02	
	5	-0.02	0.03	-0.03	0.00	0.02	
	6	0.02	0.03	0.00	-0.03	0.04	
	7	-0.01	0.00	-0.01	-0.03	-0.02	
	8	0.01	0.03	-0.01	-0.01	0.00	
	9	0.00	0.04	-0.02	0.00	0.02	
	10	0.00	-0.02	0.00	0.01	-0.01	

Table 94
Science Longitudinal Summary of *P*-values

High <i>P</i> -value										
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.85	0.88	0.87	0.89	0.88	-0.02	0.01	-0.02	0.02
SC	8	0.87	0.86	0.85	0.87	0.88	0.01	0.01	-0.01	-0.01
	10	0.85	0.84	0.86	0.88	0.86	0.02	-0.02	-0.02	0.02

Mean <i>P</i> -value										
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.64	0.67	0.67	0.69	0.68	-0.03	0.01	-0.02	0.01
SC	8	0.72	0.70	0.70	0.70	0.71	0.02	0.00	0.00	-0.02
	10	0.58	0.58	0.58	0.61	0.58	0.00	0.00	-0.03	0.03

Low <i>P</i> -value										
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.37	0.41	0.39	0.41	0.42	-0.03	0.02	-0.02	-0.01
SC	8	0.30	0.25	0.26	0.28	0.32	0.05	-0.01	-0.02	-0.04
	10	0.24	0.24	0.26	0.27	0.26	0.00	-0.02	-0.02	0.01

Table 95
Reading Longitudinal Summary of Point Biserials

		High Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.74	0.73	0.73	0.73	0.72	0.01	0.00	0.00	0.00
	4	0.70	0.72	0.71	0.72	0.68	-0.02	0.01	-0.01	0.04
	5	0.73	0.73	0.75	0.75	0.74	0.00	-0.02	0.00	0.01
	6	0.69	0.73	0.71	0.74	0.72	-0.04	0.02	-0.03	0.01
	7	0.71	0.68	0.72	0.71	0.71	0.02	-0.03	0.01	0.00
	8	0.69	0.72	0.72	0.69	0.70	-0.02	-0.01	0.03	-0.01
	9	0.71	0.72	0.72	0.71	0.74	-0.02	0.00	0.01	-0.03
	10	0.68	0.70	0.69	0.68	0.68	-0.02	0.01	0.01	-0.01
		Mean Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.56	0.55	0.55	0.57	0.55	0.01	-0.01	-0.01	0.02
	4	0.55	0.56	0.55	0.57	0.55	0.00	0.01	-0.02	0.02
	5	0.58	0.57	0.59	0.58	0.58	0.00	-0.01	0.00	0.01
	6	0.56	0.59	0.57	0.59	0.60	-0.03	0.02	-0.01	-0.02
	7	0.52	0.49	0.52	0.53	0.53	0.03	-0.03	-0.01	0.00
	8	0.53	0.53	0.55	0.54	0.54	0.00	-0.02	0.01	0.00
	9	0.56	0.56	0.57	0.57	0.57	0.00	-0.02	0.00	0.00
	10	0.50	0.50	0.51	0.52	0.52	-0.01	-0.01	-0.01	0.00
		Low Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
RD	3	0.31	0.28	0.26	0.29	0.31	0.03	0.02	-0.03	-0.02
	4	0.31	0.29	0.28	0.35	0.36	0.01	0.01	-0.07	-0.01
	5	0.19	0.21	0.16	0.24	0.28	-0.02	0.04	-0.08	-0.04
	6	0.16	0.24	0.28	0.31	0.35	-0.08	-0.04	-0.04	-0.03
	7	0.22	0.14	0.16	0.20	0.24	0.08	-0.02	-0.04	-0.04
	8	0.32	0.28	0.35	0.32	0.31	0.03	-0.06	0.03	0.01
	9	0.37	0.35	0.40	0.37	0.37	0.02	-0.05	0.03	0.00
	10	0.28	0.27	0.33	0.33	0.36	0.01	-0.06	0.00	-0.03

Table 96
Writing Longitudinal Summary of Point Biserials

		High Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.82	0.83	0.82	0.83	0.82	-0.01	0.01	-0.01	0.01
	4	0.84	0.84	0.82	0.84	0.82	-0.01	0.02	-0.02	0.01
	5	0.86	0.84	0.85	0.85	0.84	0.02	-0.01	0.00	0.01
	6	0.85	0.87	0.85	0.83	0.85	-0.02	0.02	0.02	-0.02
	7	0.88	0.85	0.84	0.84	0.86	0.02	0.01	0.00	-0.02
	8	0.87	0.87	0.87	0.88	0.85	0.00	-0.01	0.00	0.02
	9	0.86	0.85	0.87	0.84	0.85	0.02	-0.02	0.03	-0.02
	10	0.83	0.85	0.86	0.85	0.84	-0.02	-0.01	0.01	0.01

		Mean Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.57	0.58	0.58	0.58	0.58	-0.01	0.00	0.00	0.00
	4	0.56	0.57	0.56	0.57	0.56	0.00	0.01	-0.01	0.01
	5	0.58	0.57	0.60	0.58	0.58	0.01	-0.03	0.02	0.01
	6	0.59	0.60	0.58	0.59	0.61	-0.01	0.02	-0.01	-0.02
	7	0.60	0.56	0.60	0.59	0.61	0.04	-0.03	0.00	-0.01
	8	0.57	0.58	0.58	0.58	0.56	-0.02	0.00	0.00	0.01
	9	0.58	0.57	0.59	0.57	0.58	0.01	-0.02	0.02	-0.01
	10	0.53	0.54	0.54	0.55	0.54	-0.02	0.00	-0.01	0.01

		Low Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
WR	3	0.25	0.21	0.23	0.25	0.24	0.04	-0.02	-0.02	0.01
	4	0.21	0.16	0.12	0.21	0.21	0.05	0.03	-0.08	0.00
	5	0.17	0.20	0.21	0.18	0.21	-0.04	-0.01	0.03	-0.02
	6	0.20	0.27	0.20	0.23	0.29	-0.07	0.07	-0.03	-0.06
	7	0.15	0.12	0.21	0.20	0.13	0.03	-0.09	0.00	0.08
	8	0.14	0.18	0.17	0.20	0.20	-0.04	0.01	-0.03	-0.01
	9	0.19	0.20	0.22	0.17	0.19	-0.01	-0.02	0.05	-0.02
	10	0.14	0.12	0.12	0.21	0.20	0.02	0.00	-0.09	0.01

Table 97
Mathematics Longitudinal Summary of Point Biserials

		High Point Biserial					
Content	Grade	2012	2011	2010	2009	2008	2007
MA	3	0.82	0.82	0.82	0.83	0.81	0.80
	4	0.83	0.79	0.78	0.80	0.78	0.77
	5	0.79	0.80	0.79	0.81	0.78	0.77
	6	0.78	0.76	0.77	0.79	0.82	0.79
	7	0.77	0.73	0.76	0.77	0.78	0.74
	8	0.81	0.81	0.79	0.80	0.79	0.79
	9	0.77	0.77	0.79	0.76	0.80	0.81
	10	0.75	0.76	0.75	0.73	0.73	0.74

		Mean Point Biserial					
Content	Grade	2012	2011	2010	2009	2008	2007
MA	3	0.65	0.65	0.64	0.65	0.63	0.62
	4	0.65	0.65	0.63	0.65	0.64	0.63
	5	0.62	0.62	0.63	0.63	0.61	0.59
	6	0.62	0.61	0.60	0.60	0.64	0.61
	7	0.59	0.56	0.57	0.59	0.61	0.58
	8	0.58	0.59	0.58	0.58	0.58	0.56
	9	0.53	0.53	0.54	0.52	0.53	0.53
	10	0.49	0.48	0.50	0.52	0.49	0.52

		Low Point Biserial					
Content	Grade	2012	2011	2010	2009	2008	2007
MA	3	0.40	0.38	0.36	0.35	0.28	0.36
	4	0.17	0.26	0.20	0.29	0.25	0.25
	5	0.36	0.39	0.34	0.38	0.36	0.35
	6	0.19	0.18	0.15	0.18	0.27	0.25
	7	0.27	0.27	0.32	0.34	0.33	0.27
	8	0.18	0.13	0.21	0.14	0.10	0.16
	9	0.25	0.21	0.20	0.19	0.17	0.21
	10	0.07	0.03	0.09	0.14	0.09	0.12

Table 97 Mathematics Longitudinal Summary of Point Biserials (continued)

		High Point Biserial				
		Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	0.00	0.00	-0.01	0.02	0.01
	4	0.04	0.01	-0.01	0.01	0.01
	5	-0.01	0.00	-0.02	0.03	0.01
	6	0.02	-0.01	-0.02	-0.03	0.03
	7	0.03	-0.02	-0.01	-0.01	0.04
	8	0.00	0.02	-0.01	0.01	-0.01
	9	-0.01	-0.02	0.03	-0.04	-0.01
	10	-0.01	0.02	0.02	-0.01	-0.01
		Mean Point Biserial				
		Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	0.00	0.00	-0.01	0.02	0.02
	4	0.00	0.01	-0.02	0.01	0.01
	5	0.01	-0.02	0.01	0.02	0.02
	6	0.01	0.01	0.00	-0.04	0.03
	7	0.02	-0.01	-0.02	-0.01	0.03
	8	-0.01	0.01	0.00	0.01	0.01
	9	0.01	-0.01	0.01	0.00	0.00
	10	0.00	-0.02	-0.02	0.03	-0.03
		Low Point Biserial				
		Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008	Difference 2008-2007
MA	3	0.02	0.02	0.01	0.07	-0.08
	4	-0.08	0.05	-0.08	0.03	0.00
	5	-0.03	0.05	-0.04	0.02	0.01
	6	0.01	0.03	-0.03	-0.09	0.02
	7	0.01	-0.05	-0.02	0.00	0.06
	8	0.05	-0.08	0.08	0.04	-0.06
	9	0.04	0.01	0.01	0.02	-0.05
	10	0.04	-0.07	-0.04	0.05	-0.03

Table 98
Science Longitudinal Summary of Point Biserials

		High Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.75	0.76	0.76	0.77	0.79	-0.01	0.00	0.00	-0.02
SC	8	0.76	0.78	0.80	0.77	0.77	-0.02	-0.02	0.03	0.00
	10	0.76	0.76	0.78	0.76	0.75	0.00	-0.02	0.01	0.02

		Mean Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.62	0.62	0.64	0.63	0.62	0.00	-0.02	0.02	0.00
SC	8	0.63	0.66	0.66	0.64	0.64	-0.03	-0.01	0.02	0.00
	10	0.57	0.56	0.58	0.58	0.57	0.01	-0.02	0.00	0.01

		Low Point Biserial								
Content	Grade	2012	2011	2010	2009	2008	Difference 2012-2011	Difference 2011-2010	Difference 2010-2009	Difference 2009-2008
	5	0.29	0.33	0.43	0.34	0.42	-0.04	-0.10	0.09	-0.08
SC	8	0.24	0.16	0.17	0.17	0.17	0.09	-0.02	0.01	0.00
	10	0.26	0.19	0.27	0.29	0.23	0.07	-0.08	-0.02	0.06

Table 99
Reading Longitudinal Summary of Impact Data

		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%
		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%

Table 99
Reading Longitudinal Summary of Impact Data (continued)

		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%
		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%

Table 99
Reading 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
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%

		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 100
Writing Longitudinal Summary of Impact Data

		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%
		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%

Table 100
Writing Longitudinal Summary of Impact Data (continued)

		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%
		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%

Table 100
Writing 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
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%

		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 101
Mathematics Longitudinal Summary of Impact Data

		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%
		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%

Table 101
Mathematics Longitudinal Summary of Impact Data (continued)

		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%
		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%

Table 101
Mathematics Longitudinal Summary of Impact Data (continued)

		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%

		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%

Table 101
Mathematics 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
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%
		Difference between 2008 and 2007					
		Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
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 102
Science Longitudinal Summary of Impact Data

2012							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
SC	5	13.89%	26.63%	17.65%	20.10%	21.73%	41.83%
	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
SC	5	12.73%	20.25%	20.71%	21.93%	24.39%	46.32%
	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
SC	5	13.62%	19.27%	19.77%	23.42%	23.92%	47.34%
	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
SC	5	9.98%	19.12%	23.18%	21.49%	26.23%	47.72%
	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 102
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
SC	5	12.09%	16.97%	24.91%	21.84%	24.19%	46.03%
	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 2012 and 2011							
Percent of Students in Each Proficiency Level							
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
SC	5	1.16%	6.39%	-3.06%	-1.83%	-2.65%	-4.49%
	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
SC	5	-0.89%	0.98%	0.94%	-1.49%	0.47%	-1.02%
	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
SC	5	3.64%	0.15%	-3.41%	1.93%	-2.31%	-0.37%
	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 102
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 2011-12 by Grade and Content

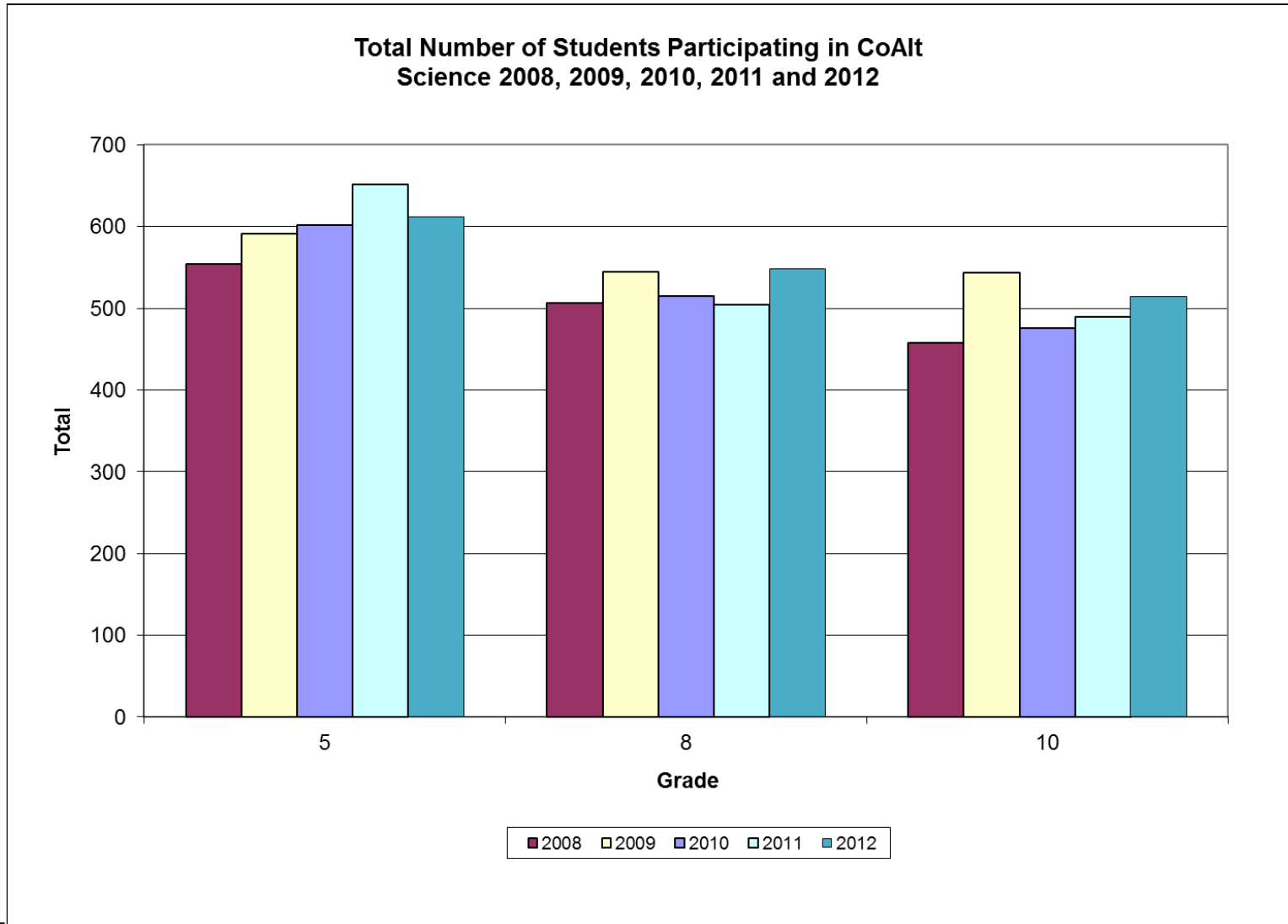


Figure 2
Percent of Participating Students by Coded Disability

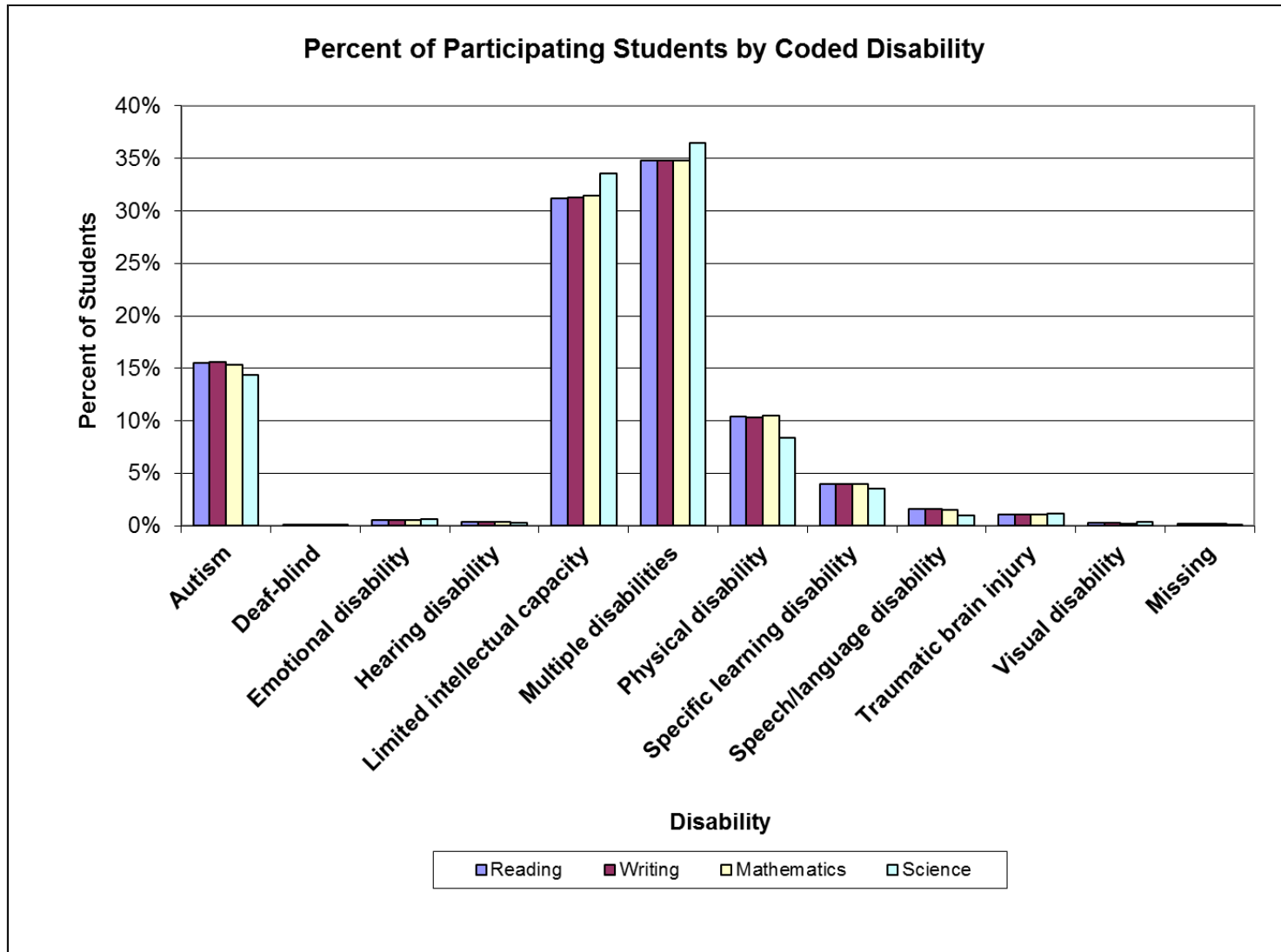


Figure 3
Reading Percent of Students Utilizing Expanded Accommodations

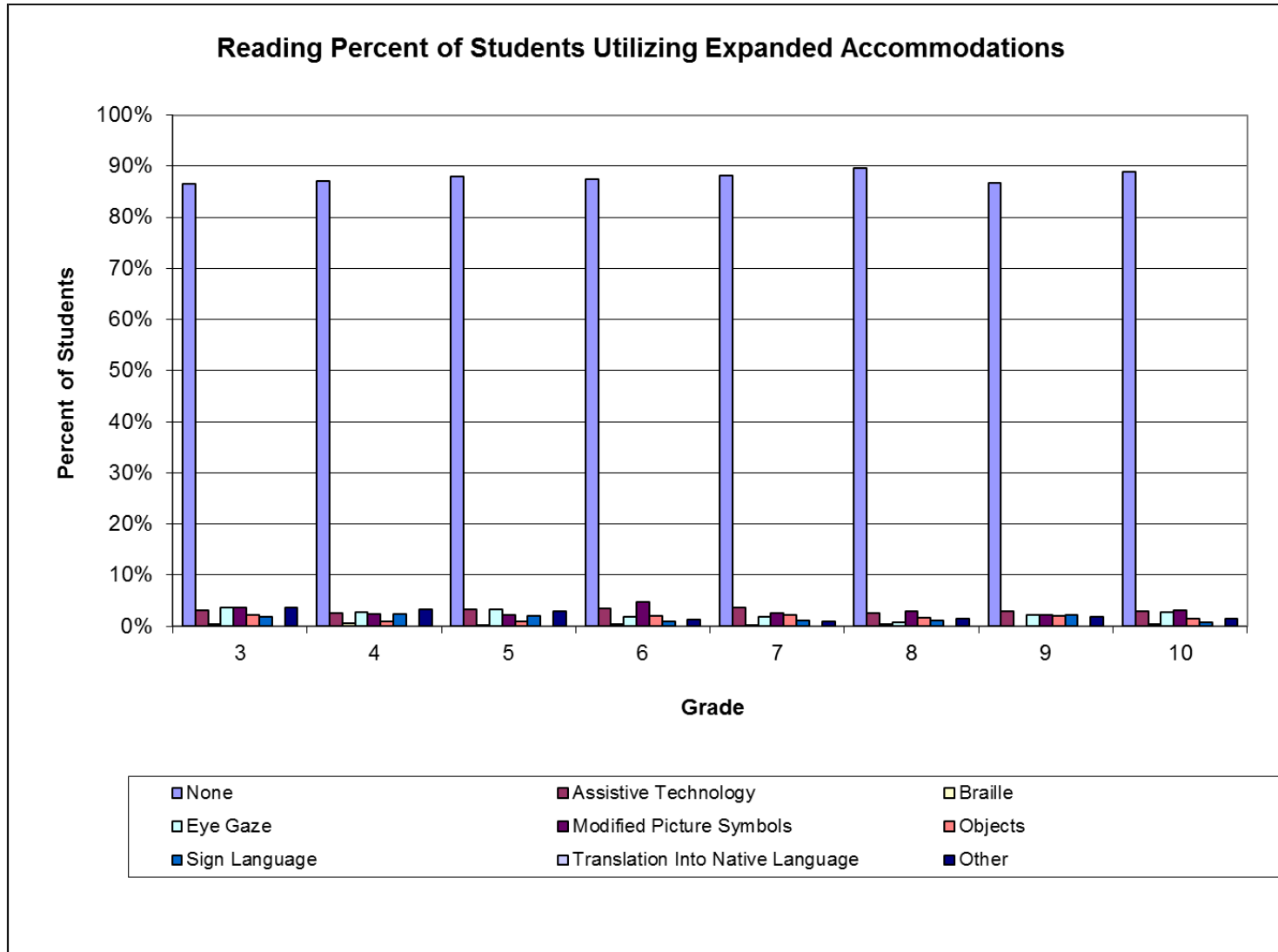


Figure 4
Writing Percent of Students Utilizing Expanded Accommodations

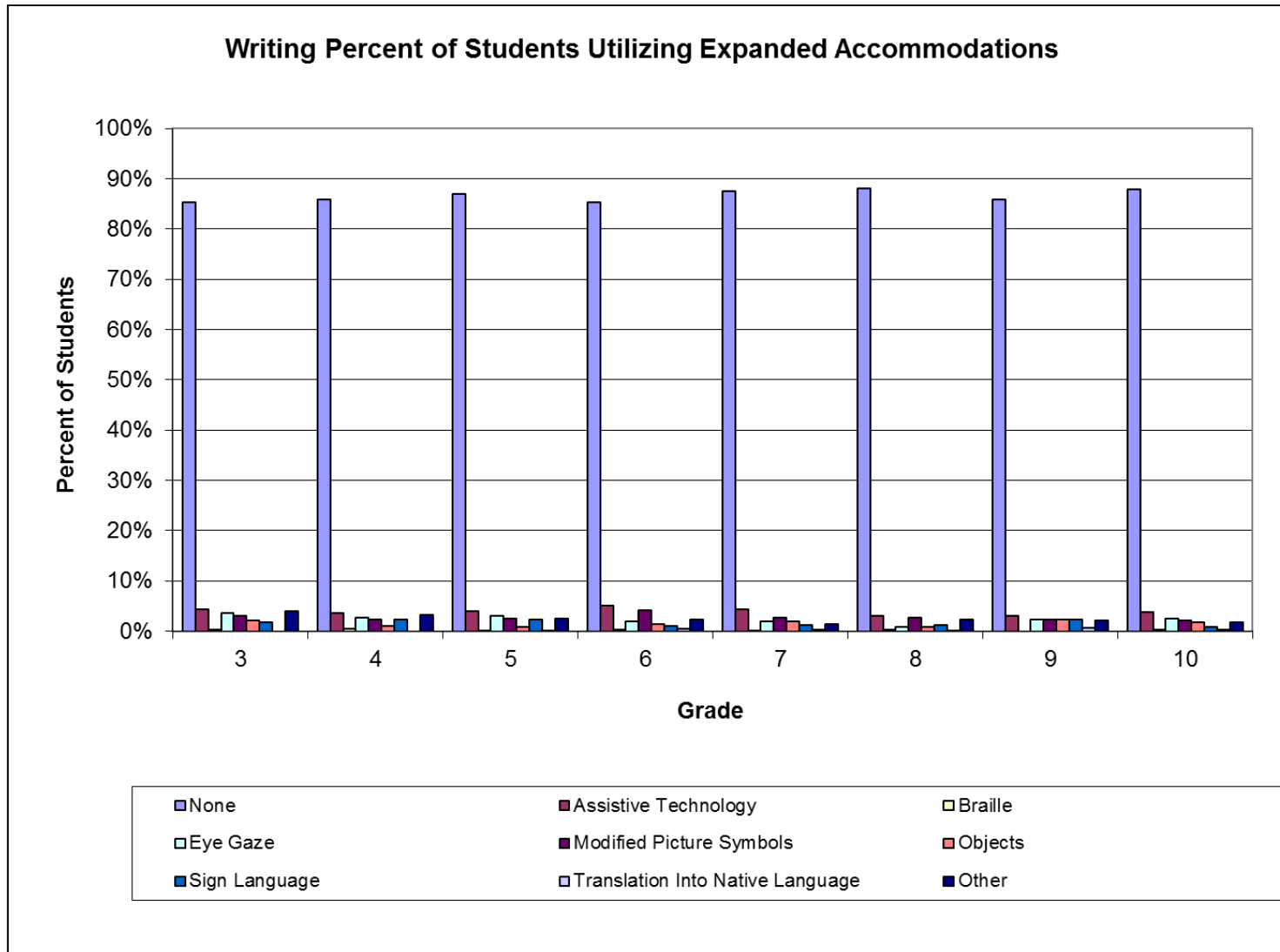


Figure 5
Mathematics Percent of Students Utilizing Expanded Accommodations

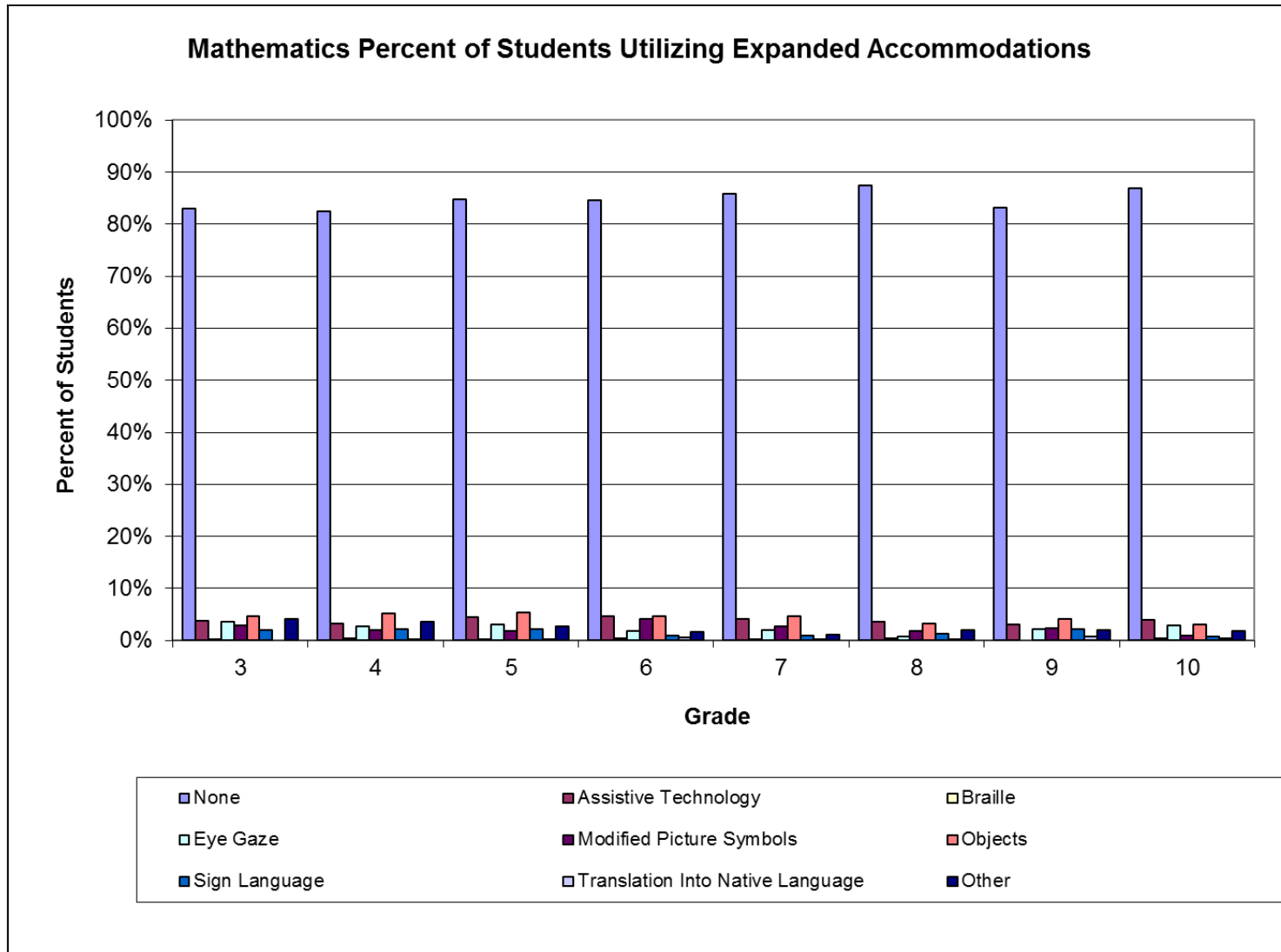


Figure 6
Science Percent of Students Utilizing Expanded Accommodations

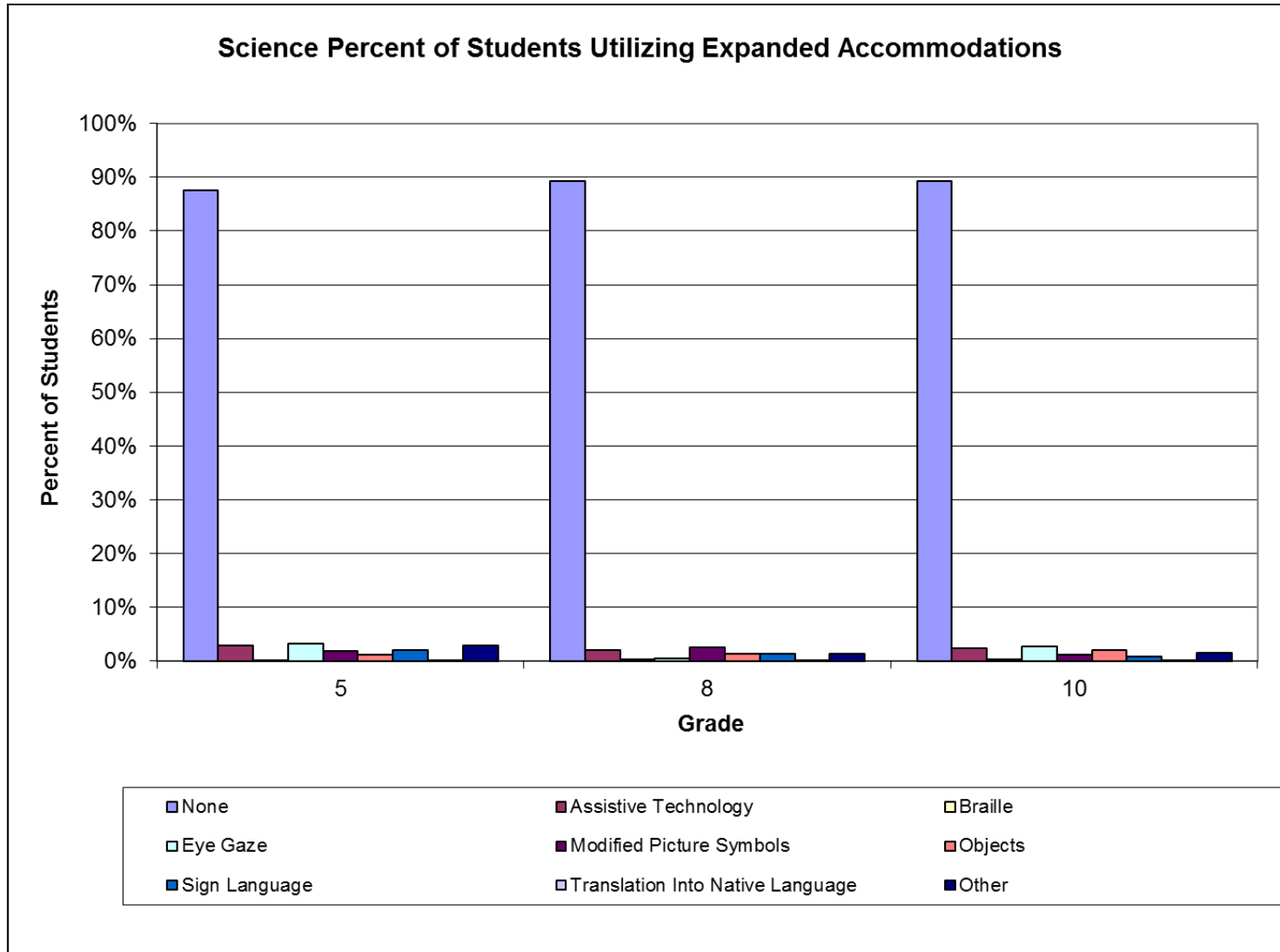


Figure 7
Reading Mean as Percent of Total Possible Score by Gender

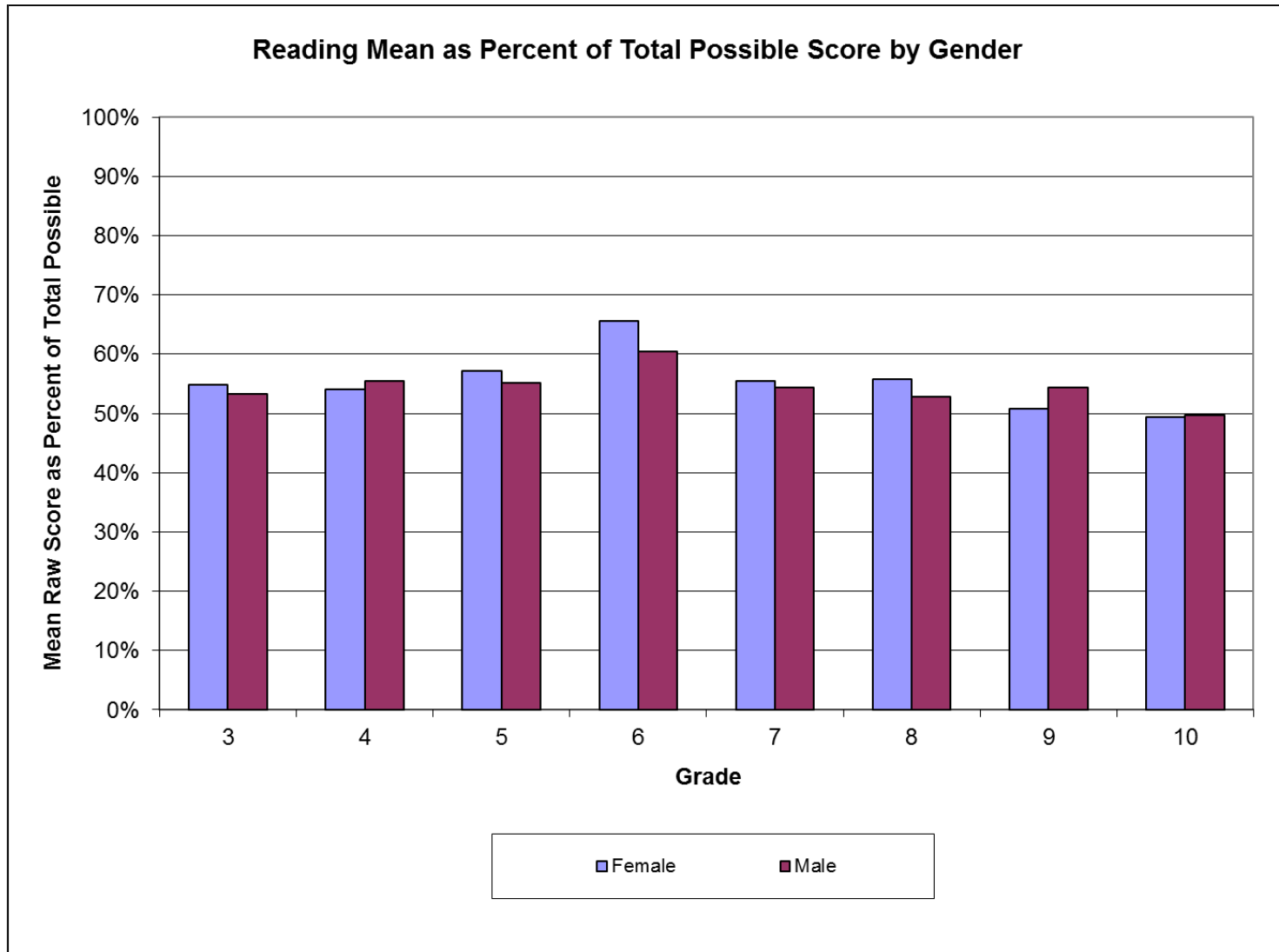


Figure 8
Writing Mean as Percent of Total Possible Score by Gender

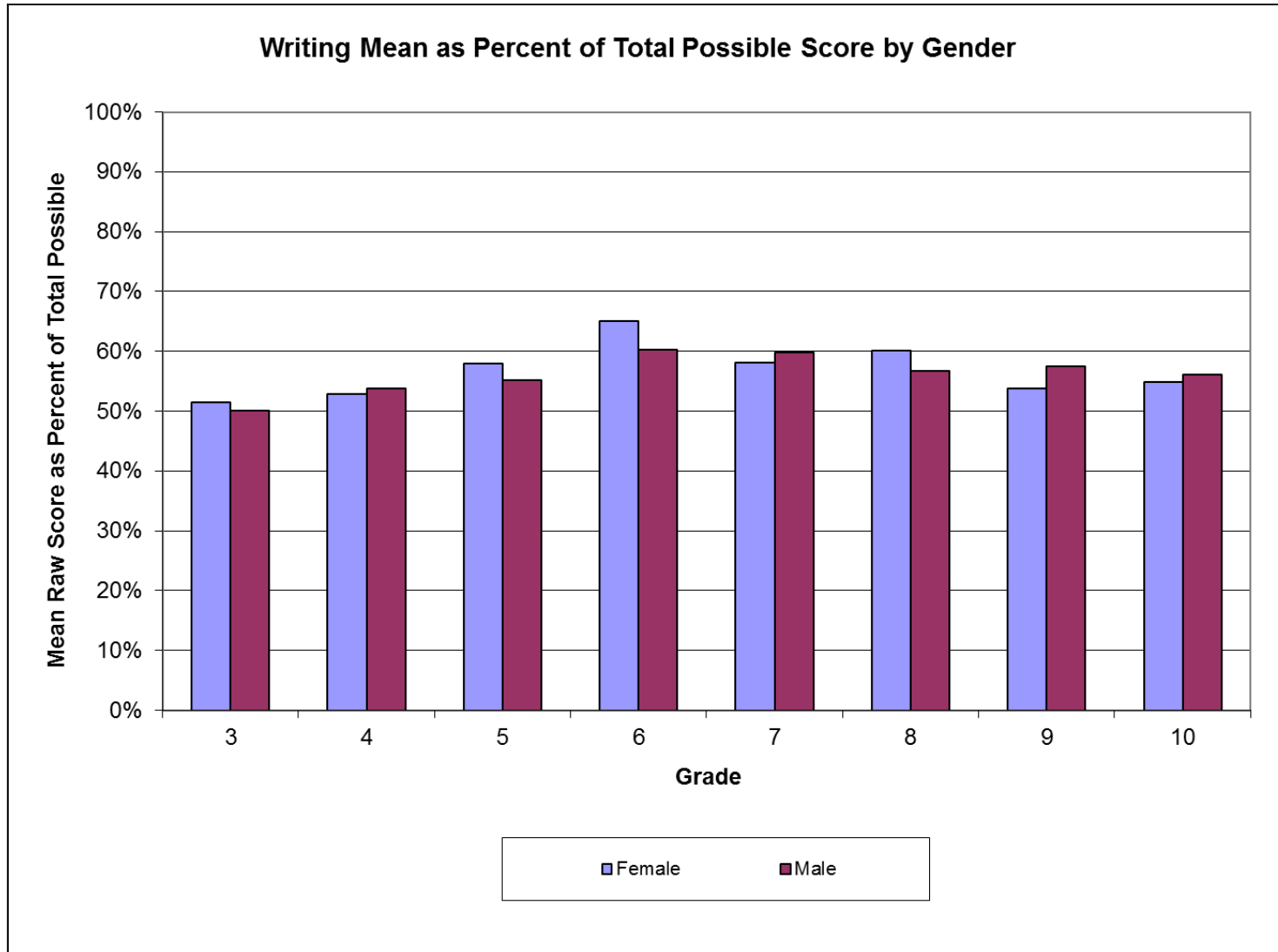


Figure 9
Mathematics Mean as Percent of Total Possible Score by Gender

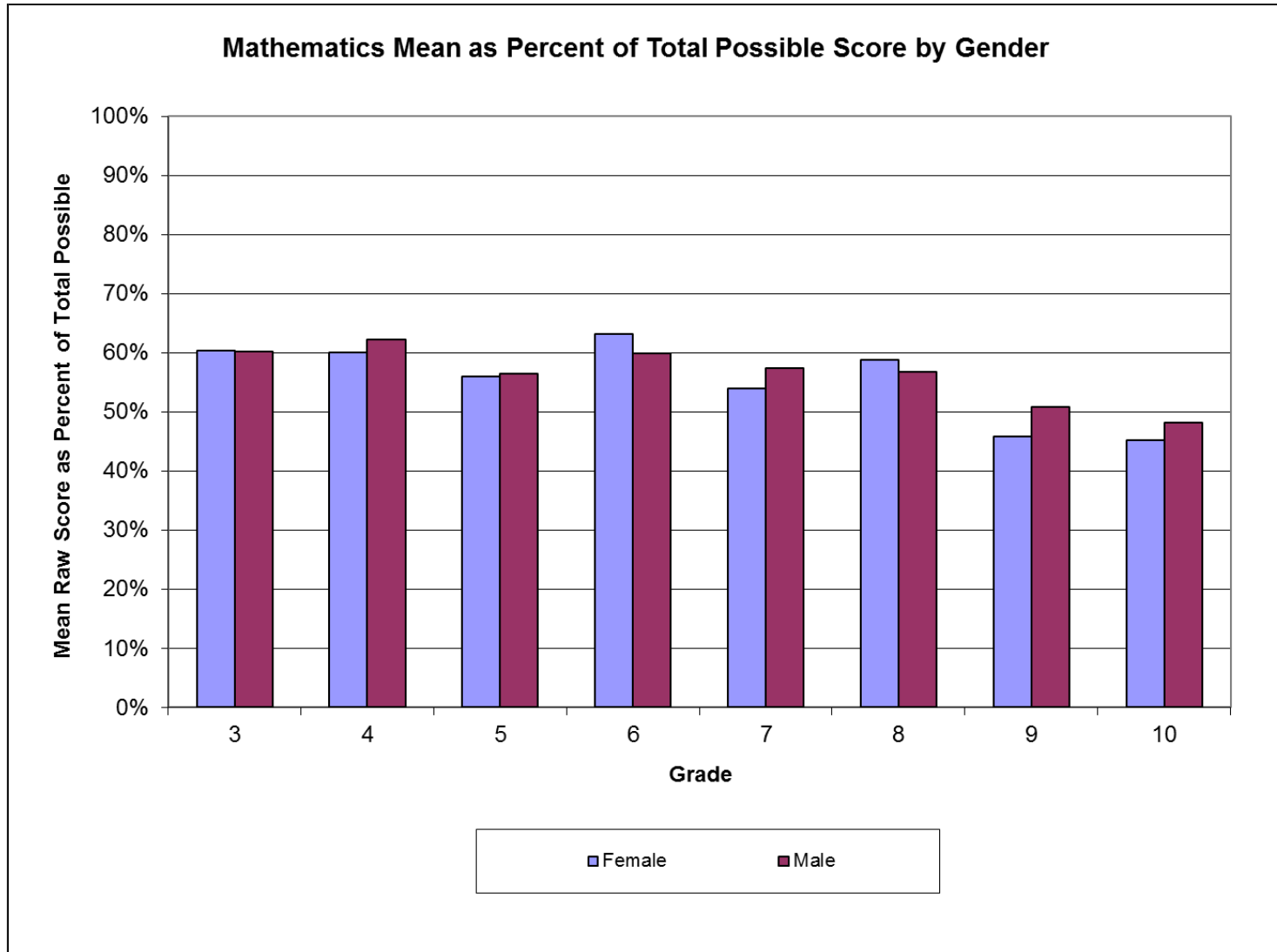


Figure 10
Science Mean as Percent of Total Possible Score by Gender

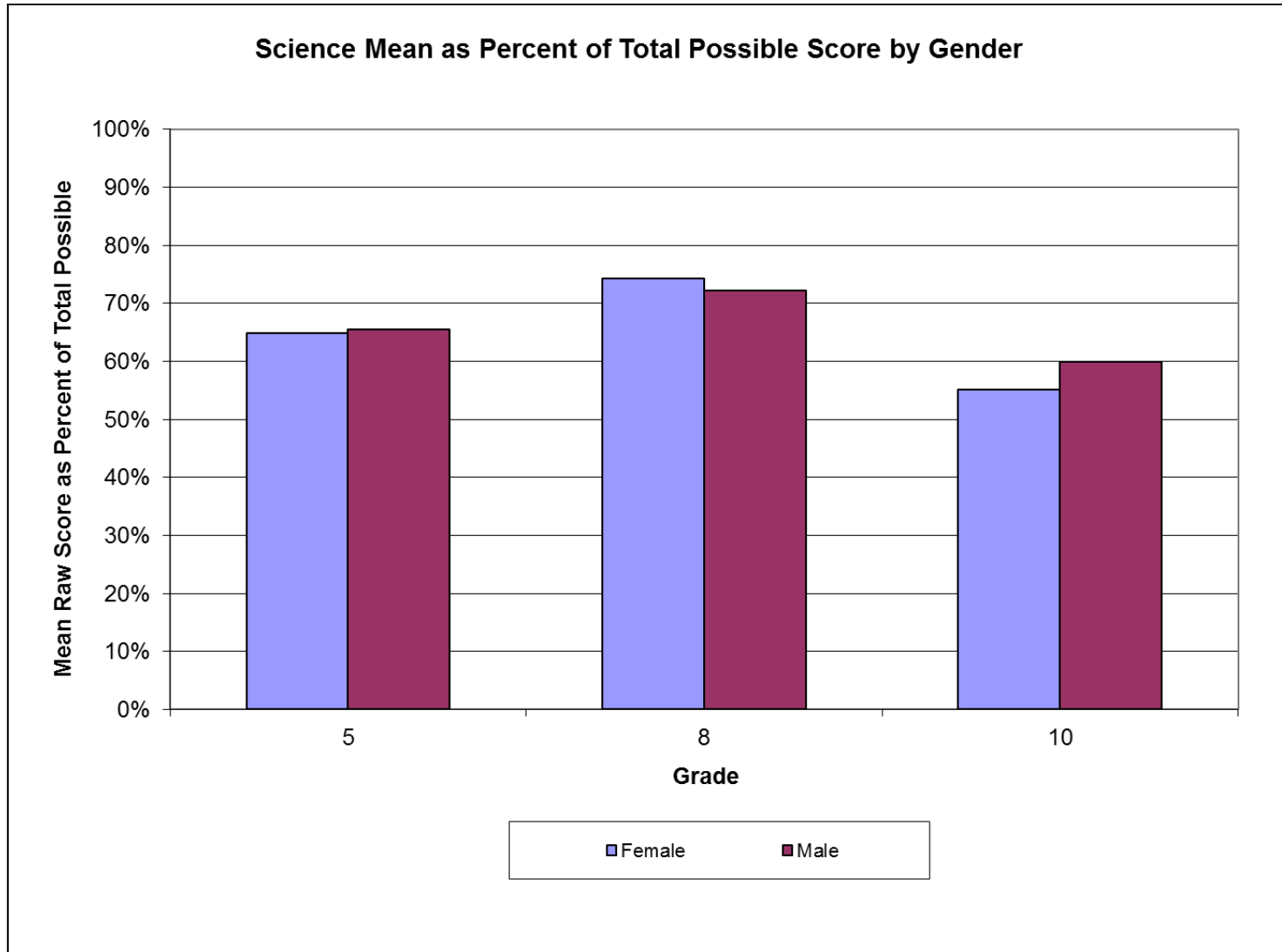


Figure 11
Reading Mean as Percent of Total Possible Score by Race/Ethnicity

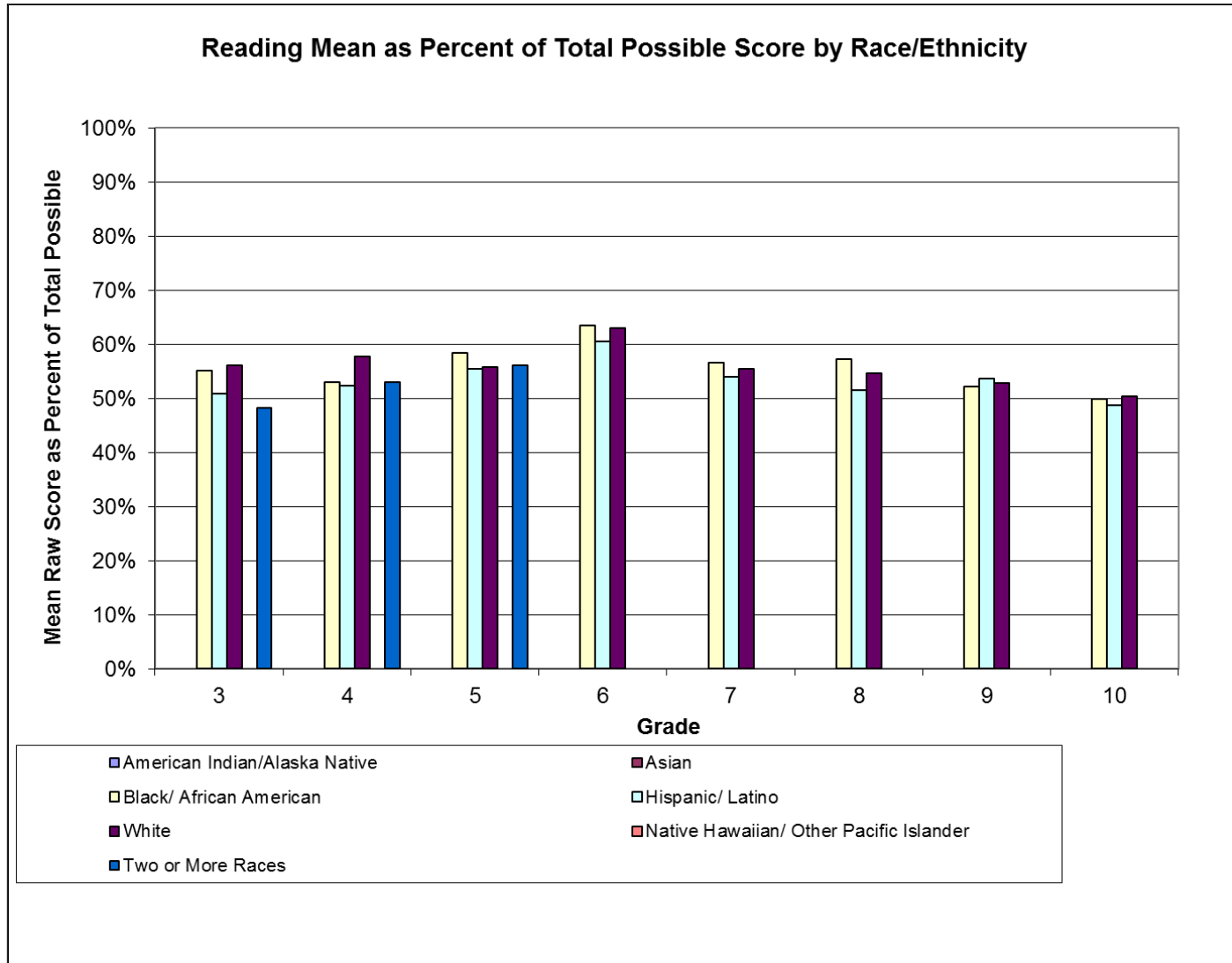


Figure 12
Writing Mean as Percent of Total Possible Score by Race/Ethnicity

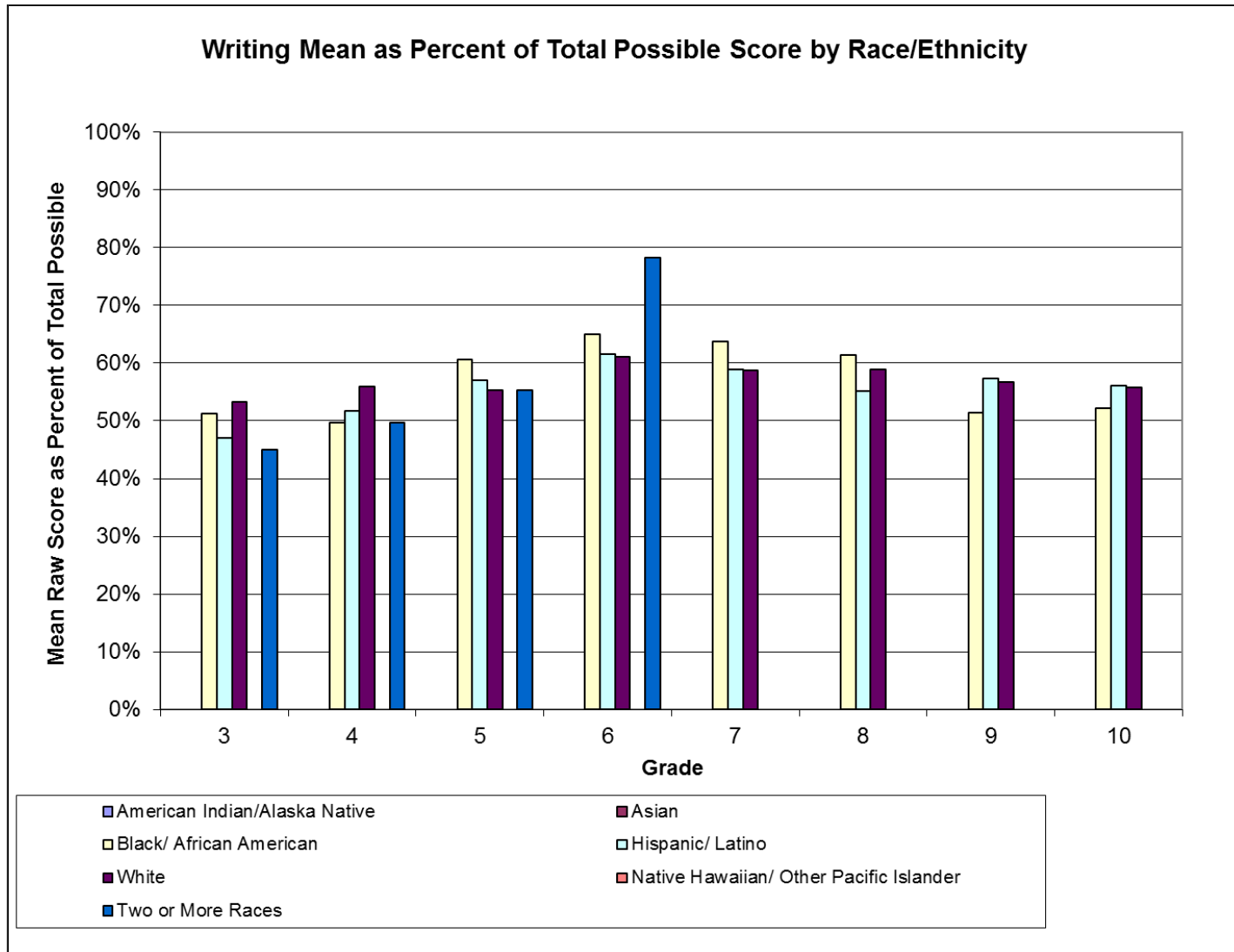


Figure 13
Mathematics Mean as Percent of Total Possible Score by Race/Ethnicity

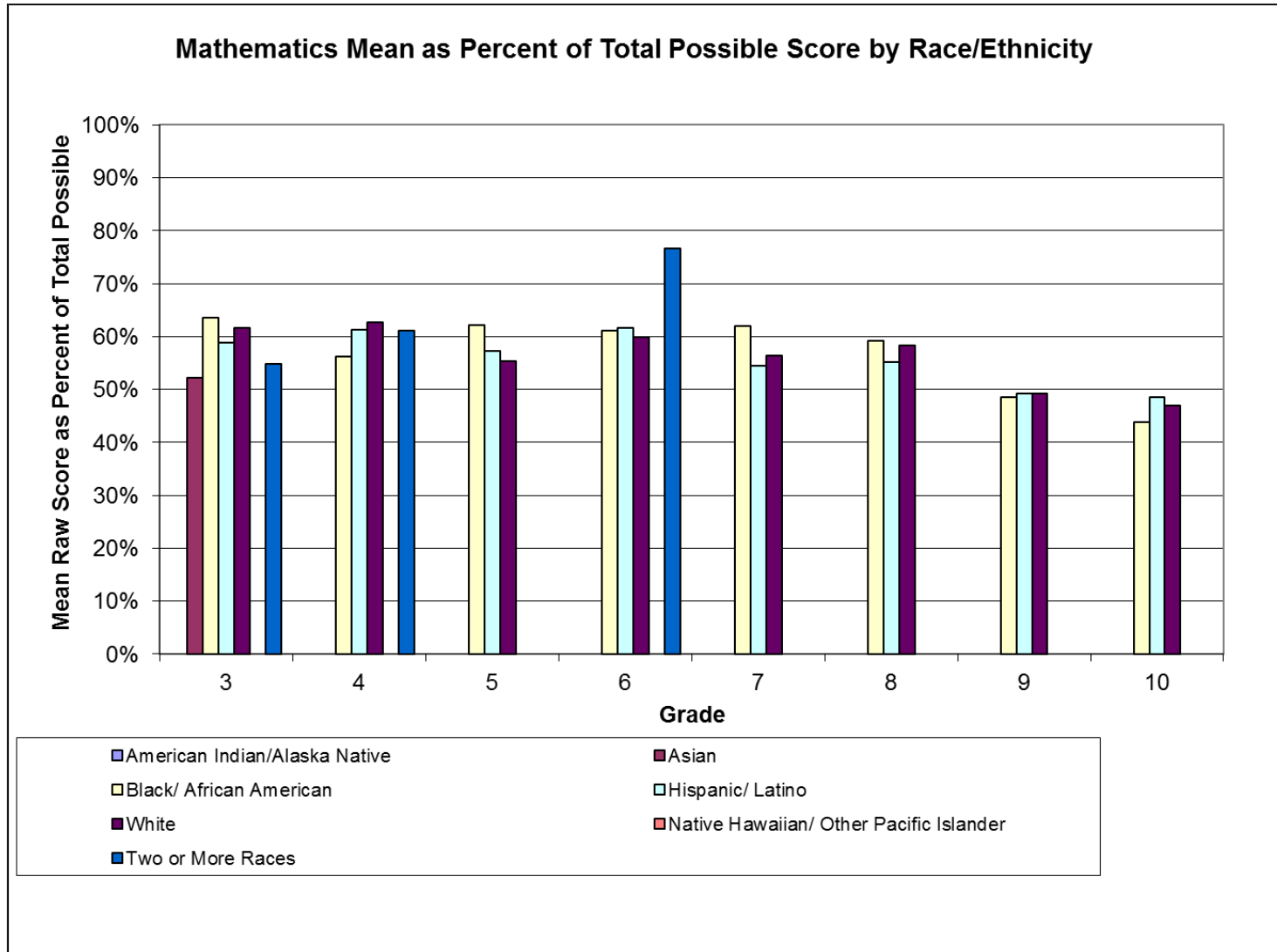


Figure 14
Science Mean as Percent of Total Possible Score by Race/Ethnicity

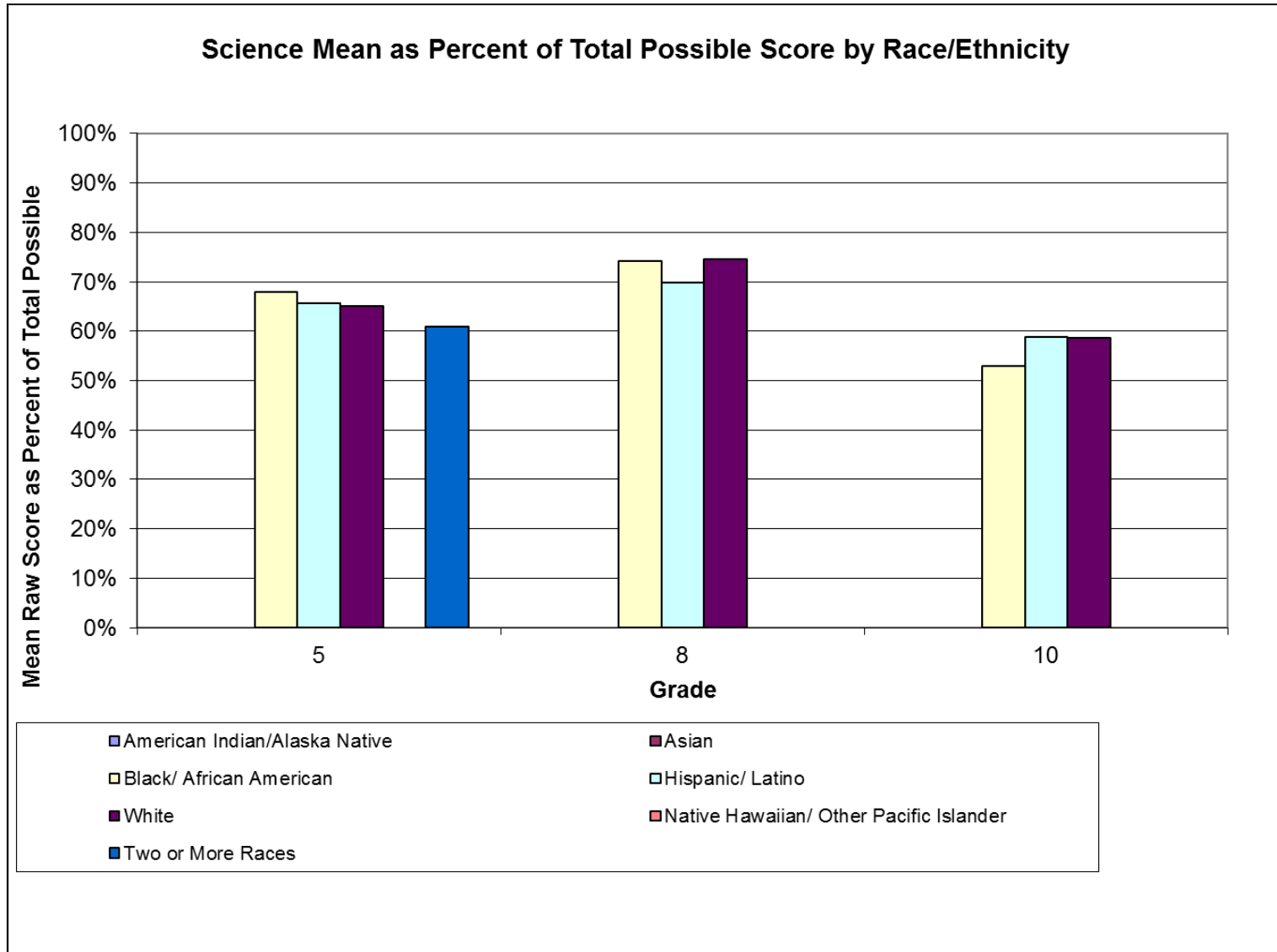


Figure 15
Reading Impact Data

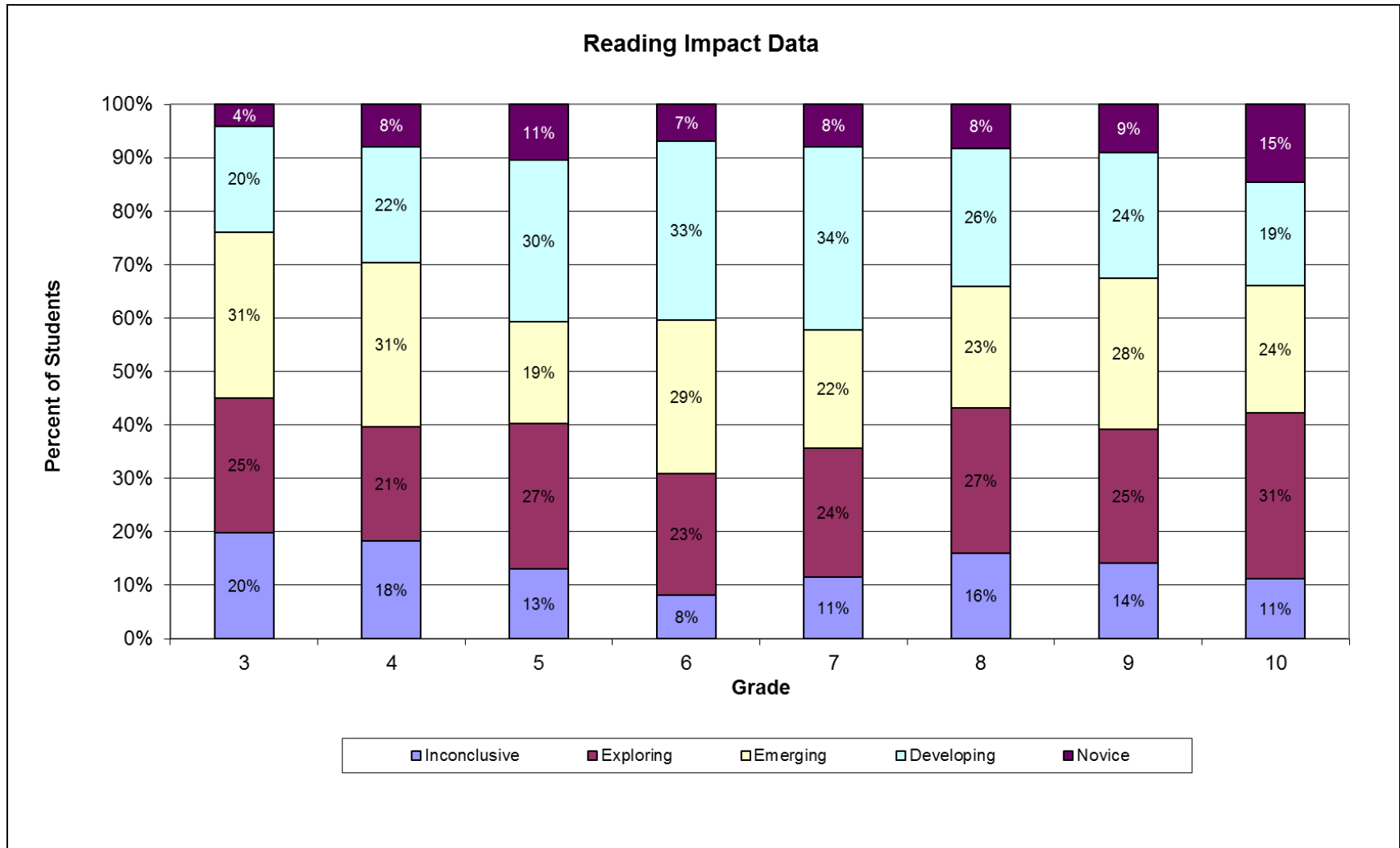


Figure 16
Writing Impact Data

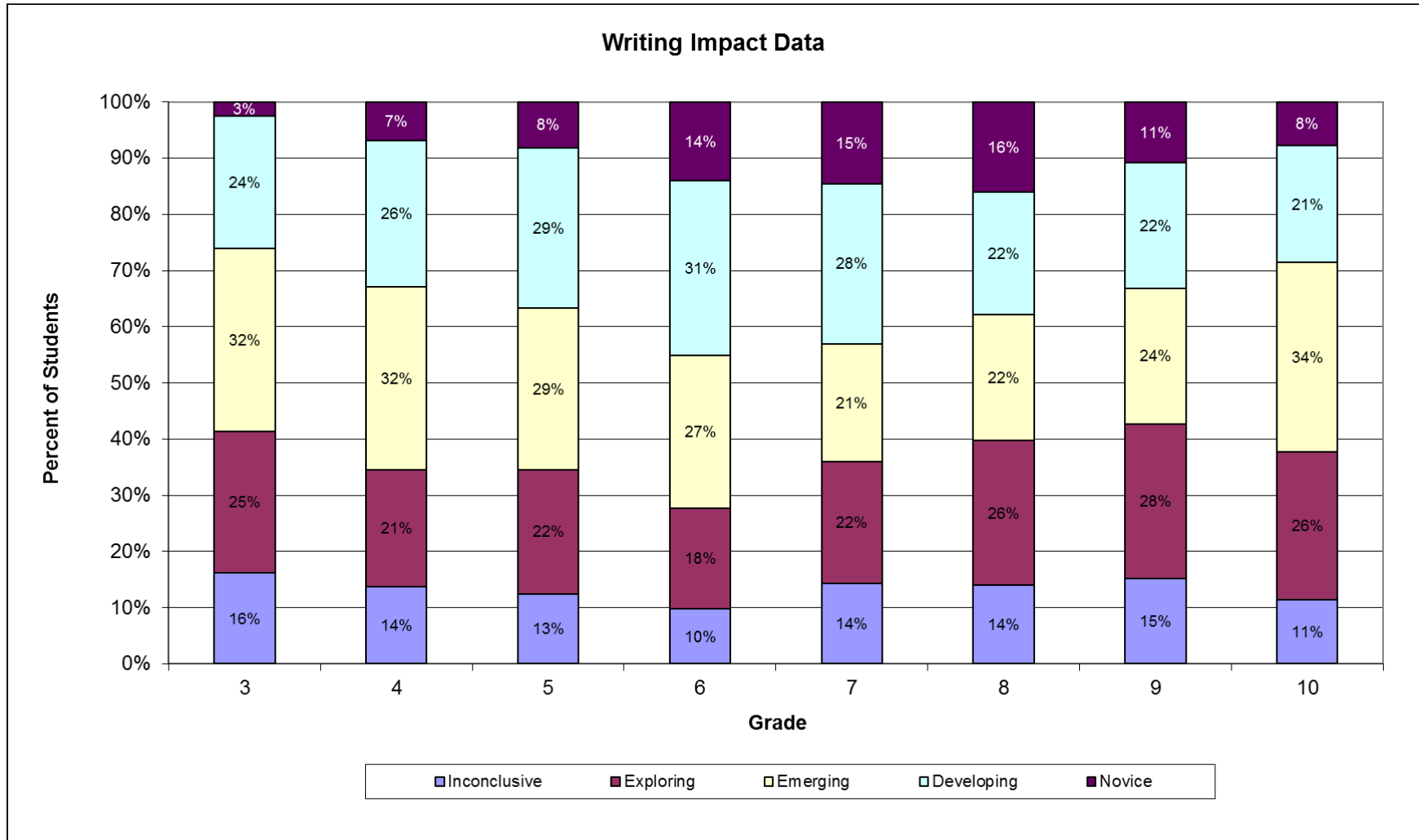


Figure 17
Mathematics Impact Data

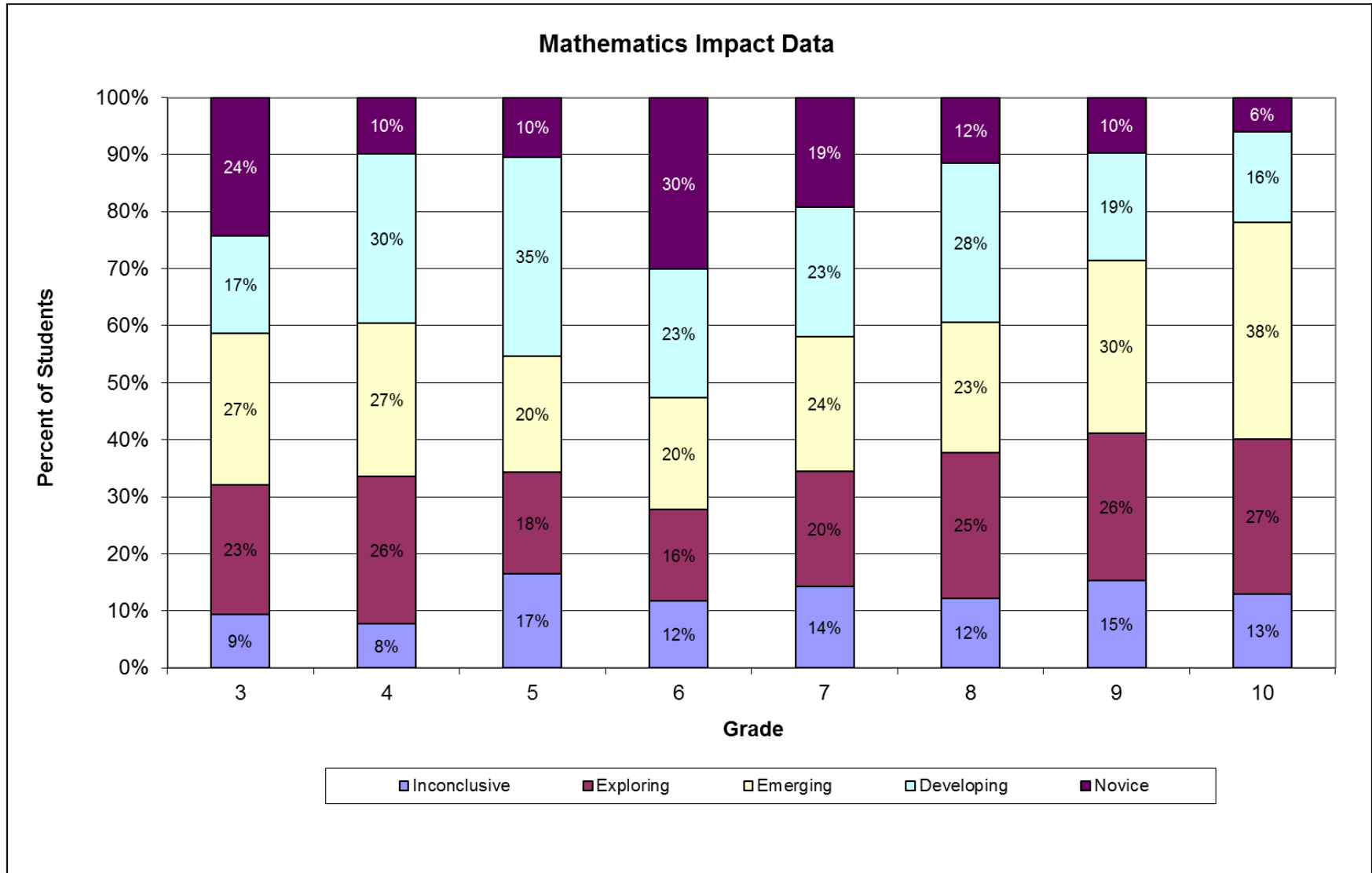


Figure 18
Science Impact Data

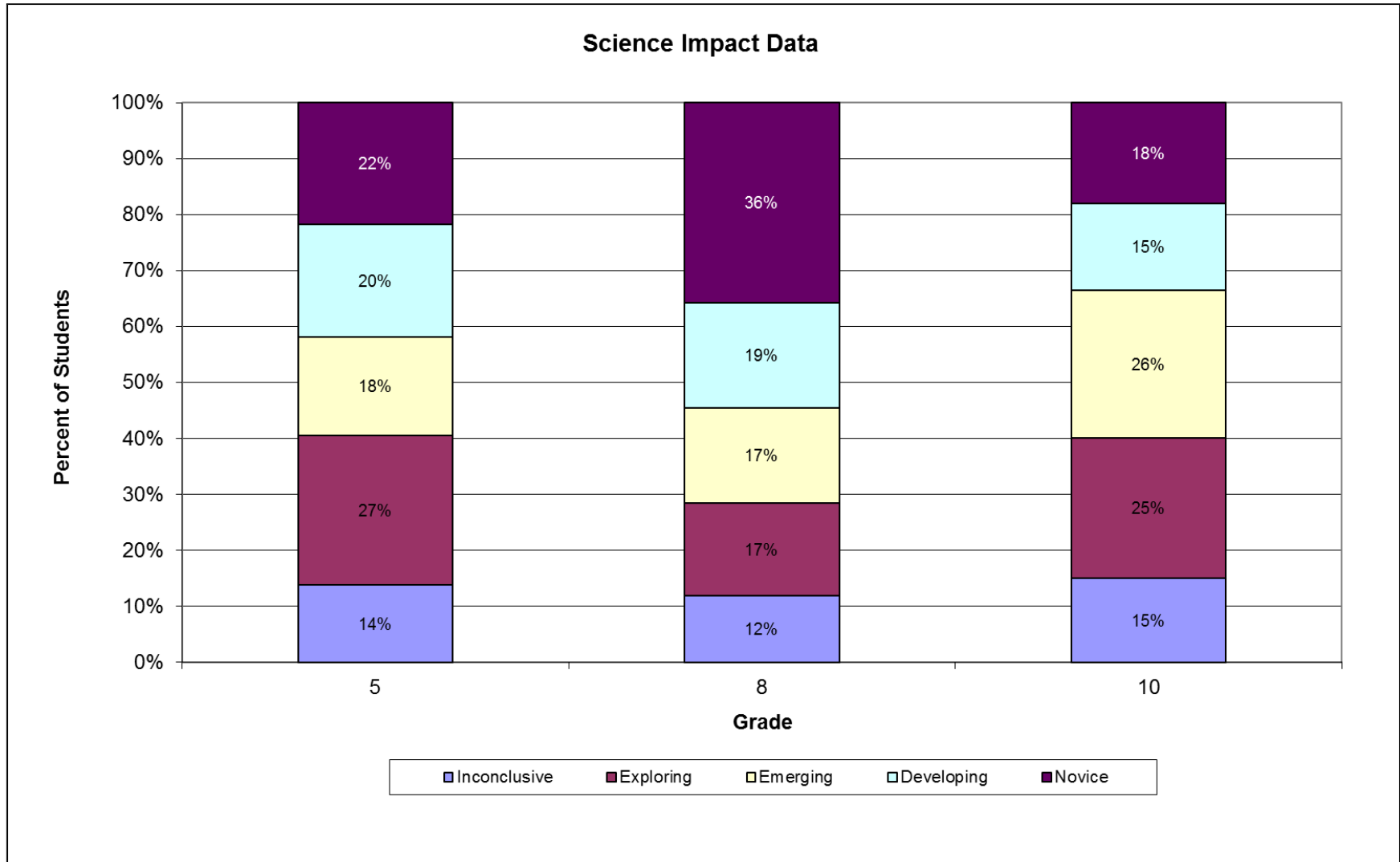


Figure 19
Impact Data—Developing and Novice Combined

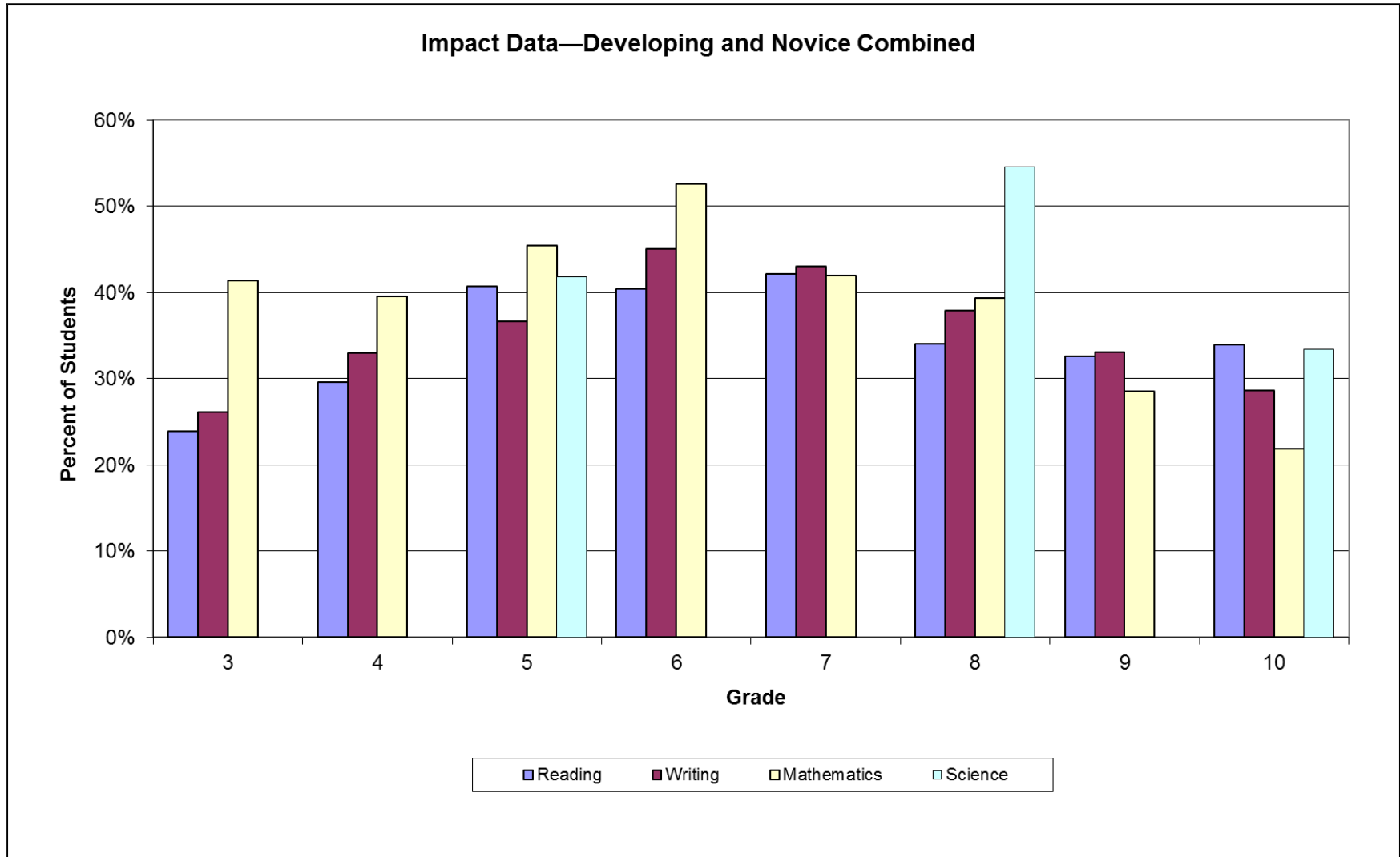


Figure 20
Total Number of Students Participating in CoAlt Reading 2008, 2009, 2010, 2011, and 2012

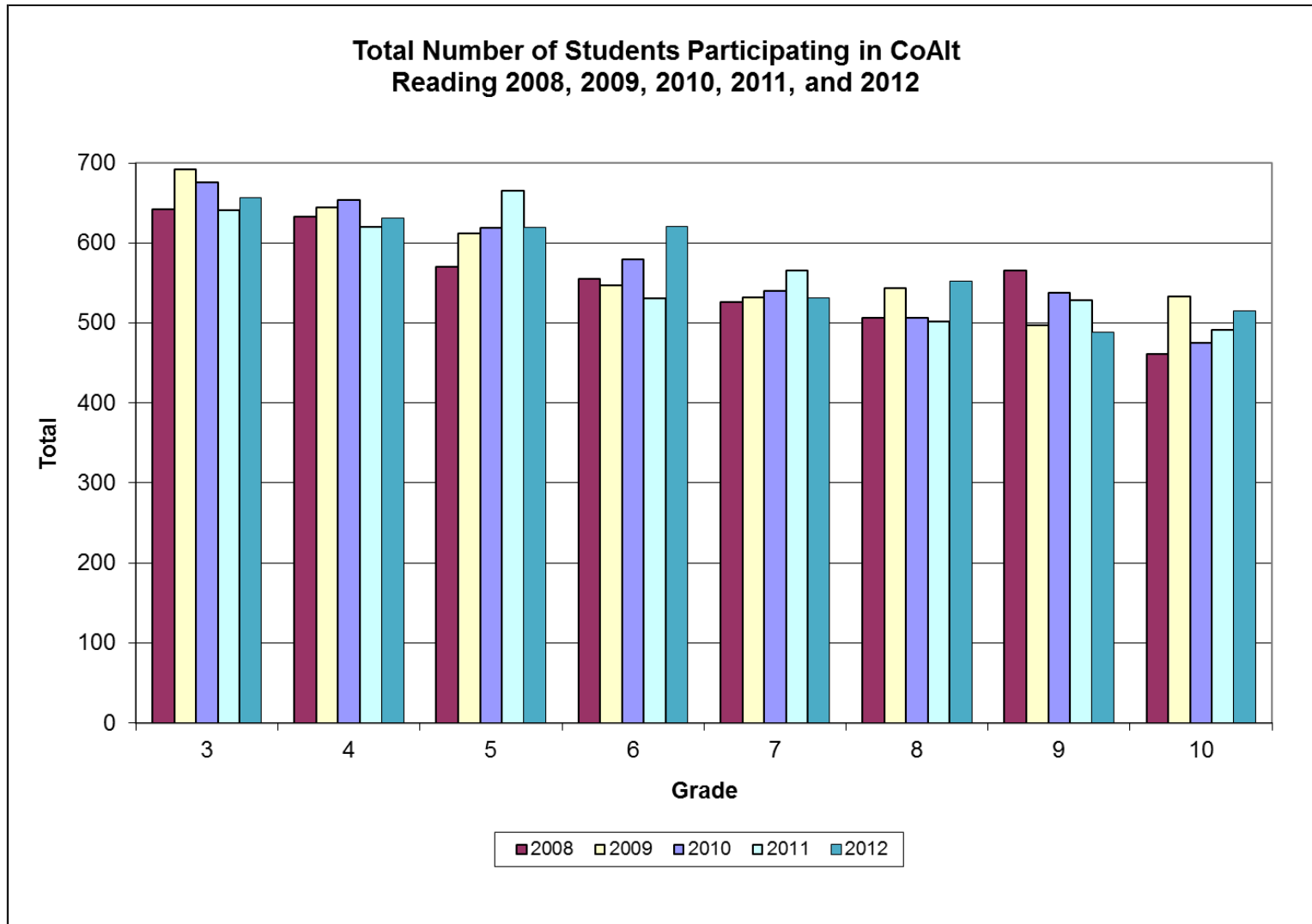


Figure 21
Total Number of Students Participating in CoAlt Writing 2008, 2009, 2010, 2011, and 2012

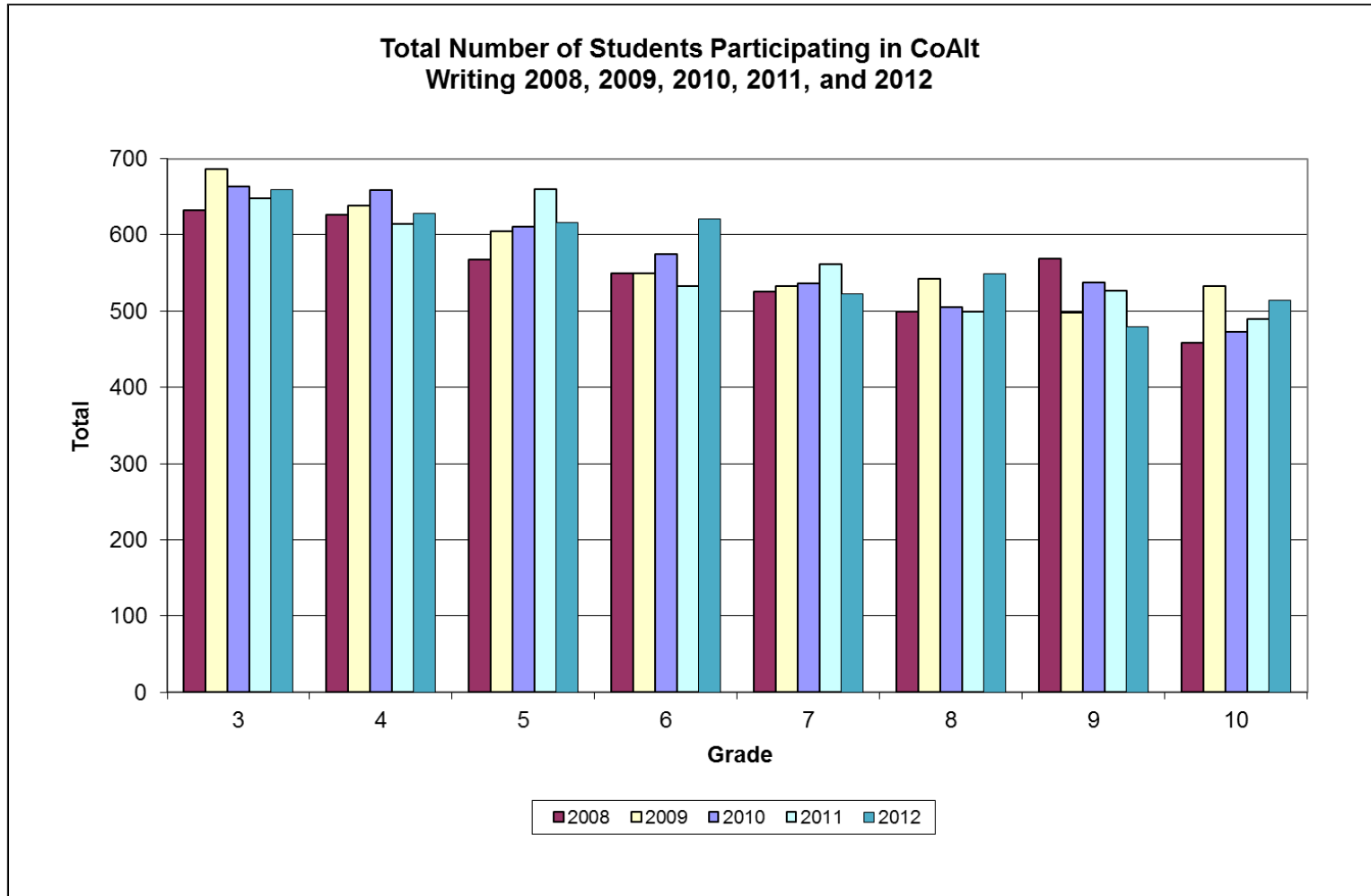


Figure 22
Total Number of Students Participating in CoAlt Mathematics 2007, 2008, 2009, 2010, 2011, and 2012

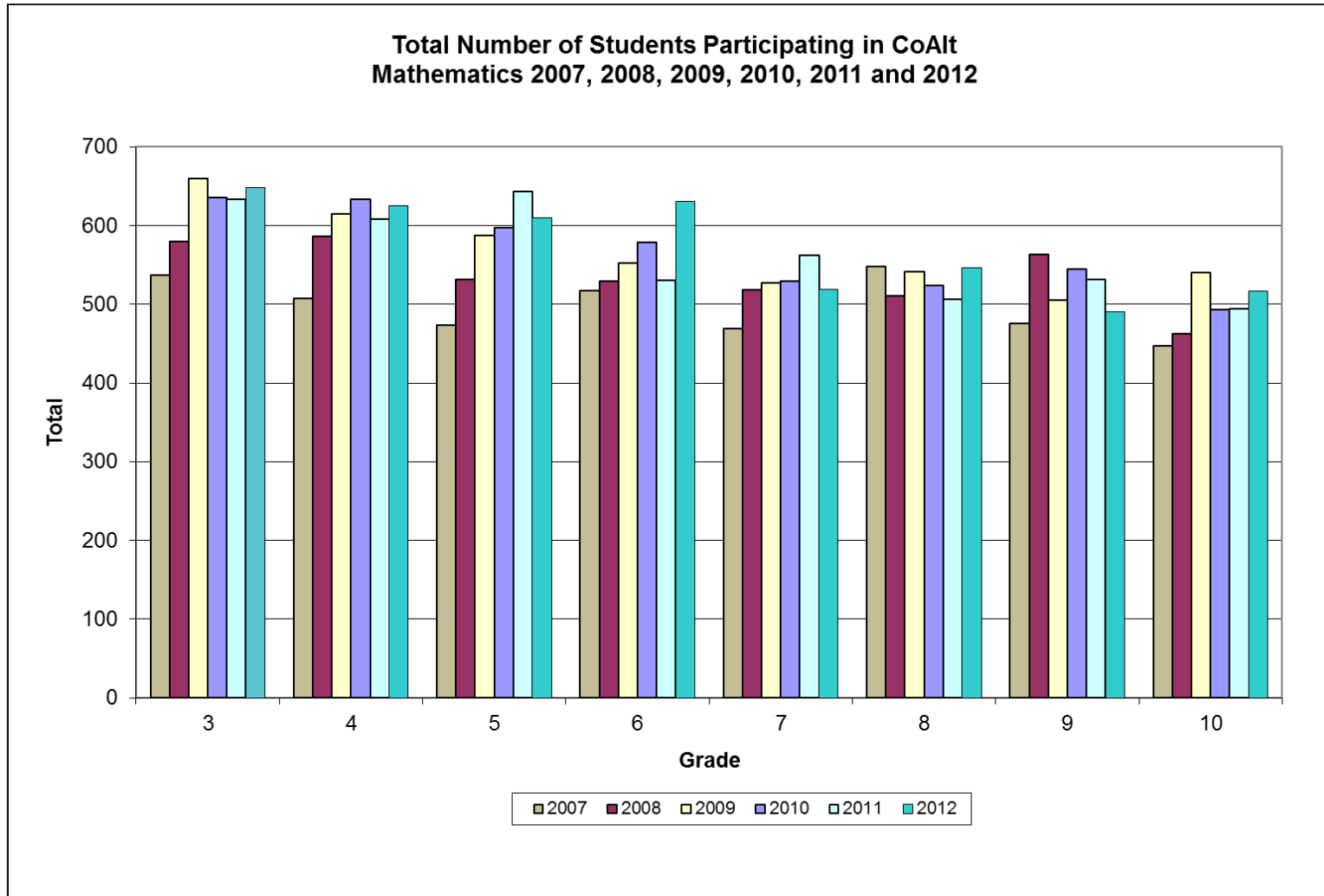


Figure 23
Total Number of Students Participating in CoAlt Science 2008, 2009, 2010, and 2011

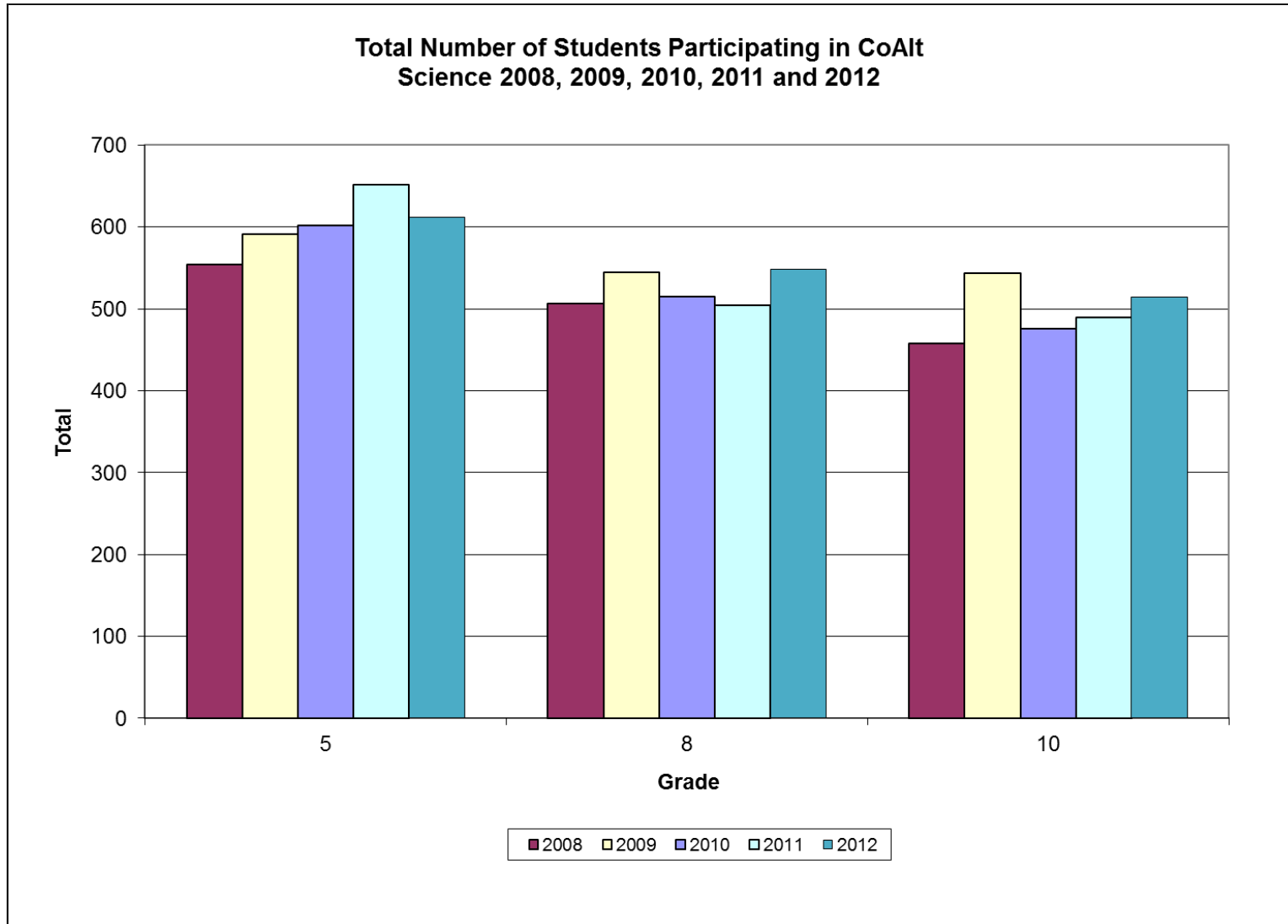


Figure 24
Mean Score as Percent of Total for Reading 2008, 2009, 2010, 2011, and 2012

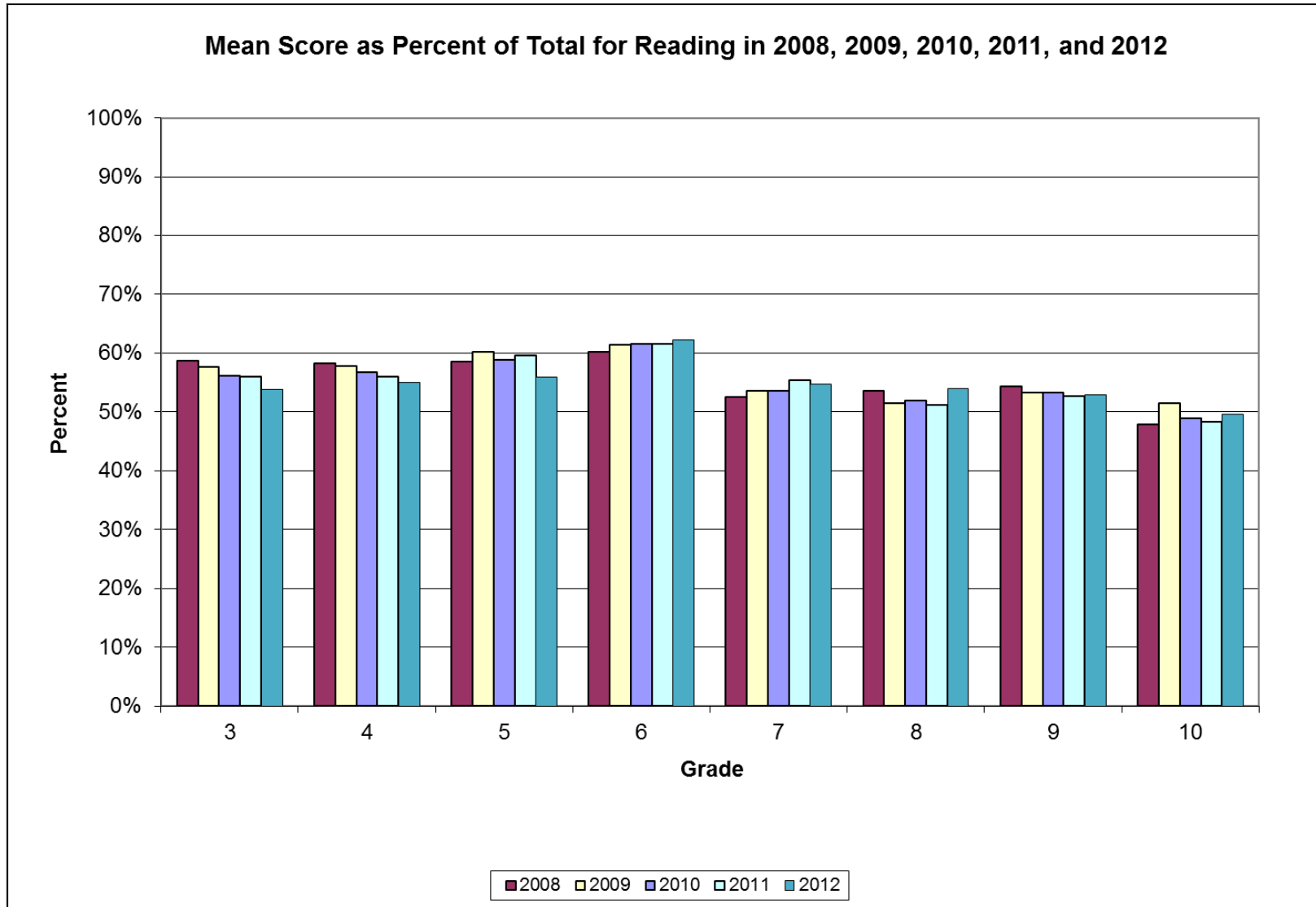


Figure 25
Mean Score as Percent of Total for Writing 2008, 2009, 2010, 2011, and 2012

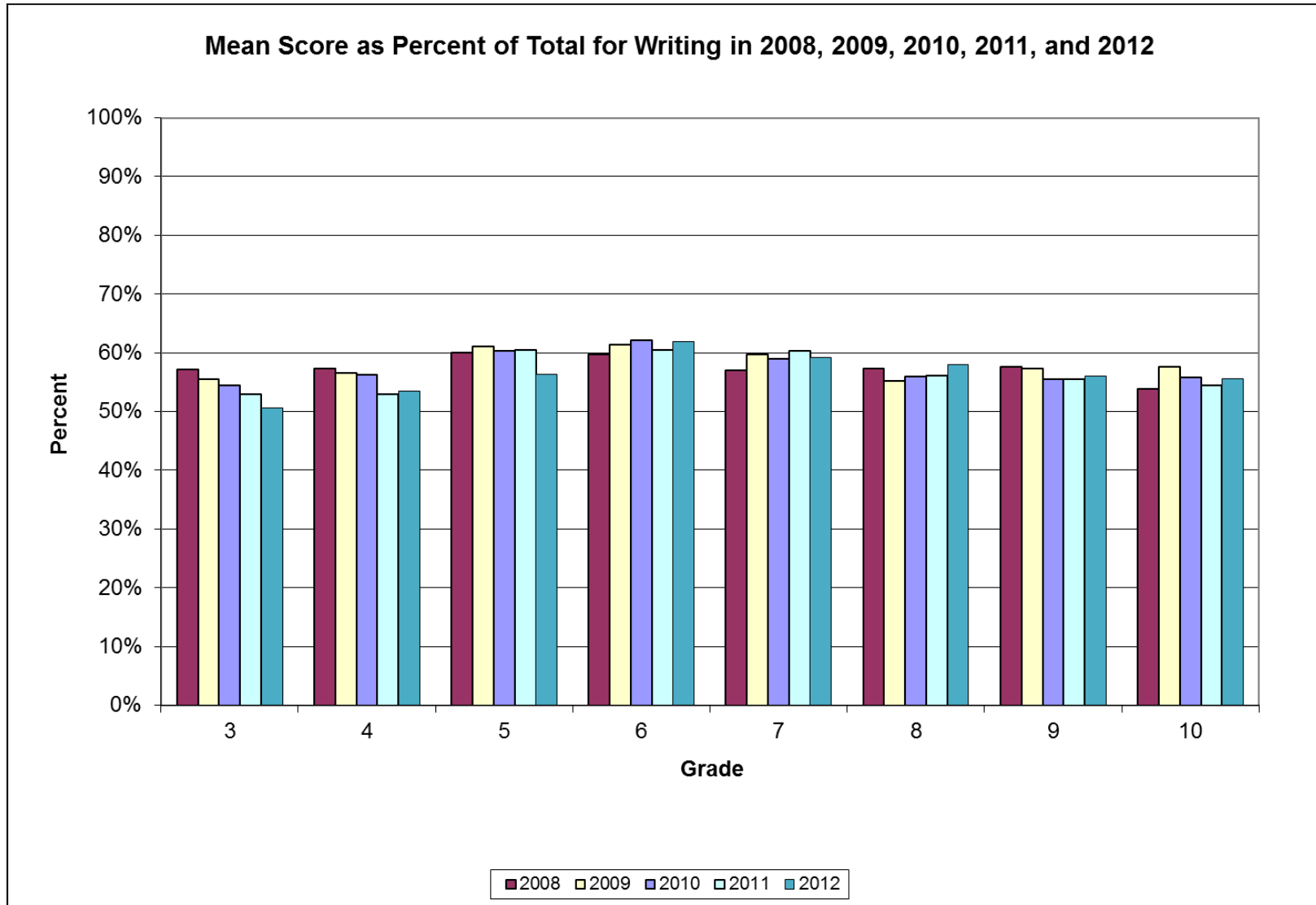


Figure 26
Mean Score as Percent of Total for Mathematics 2007, 2008, 2009, 2010, 2011, and 2012

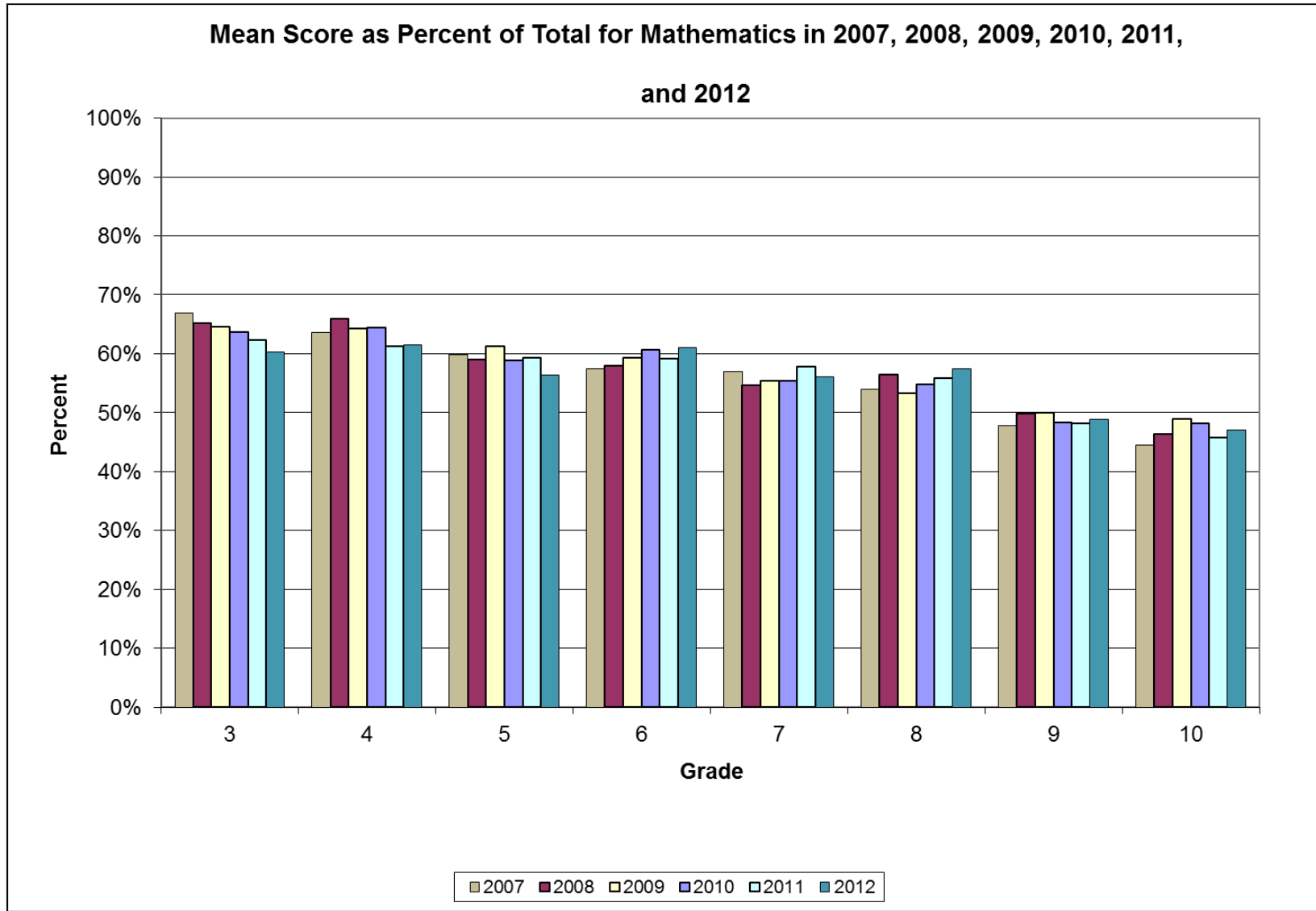


Figure 27
Mean Score as Percent of Total for Science 2008, 2009, 2010, 2011, and 2012

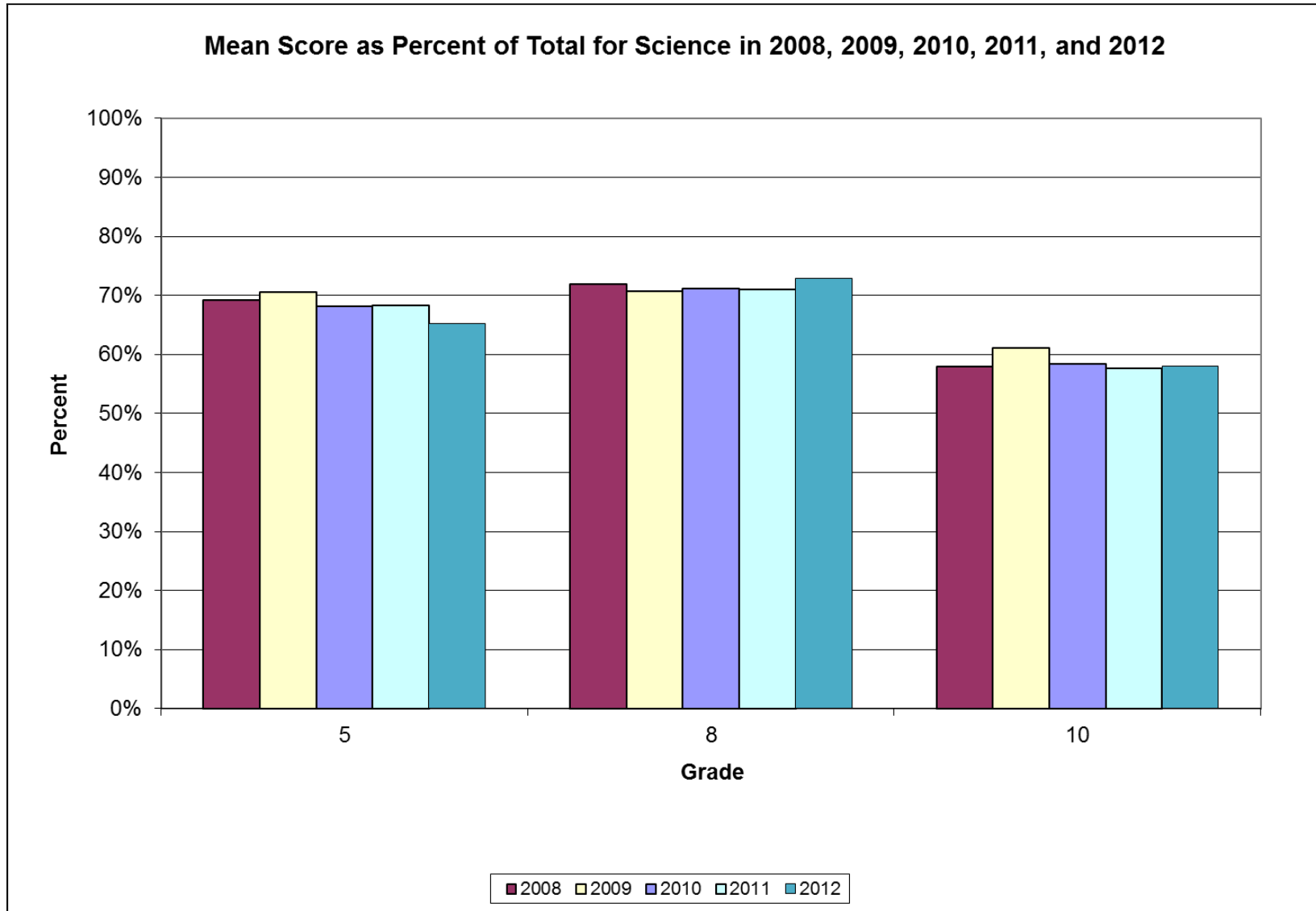


Figure 28
Percent of Participating Students by Coded Disability Longitudinally for Reading

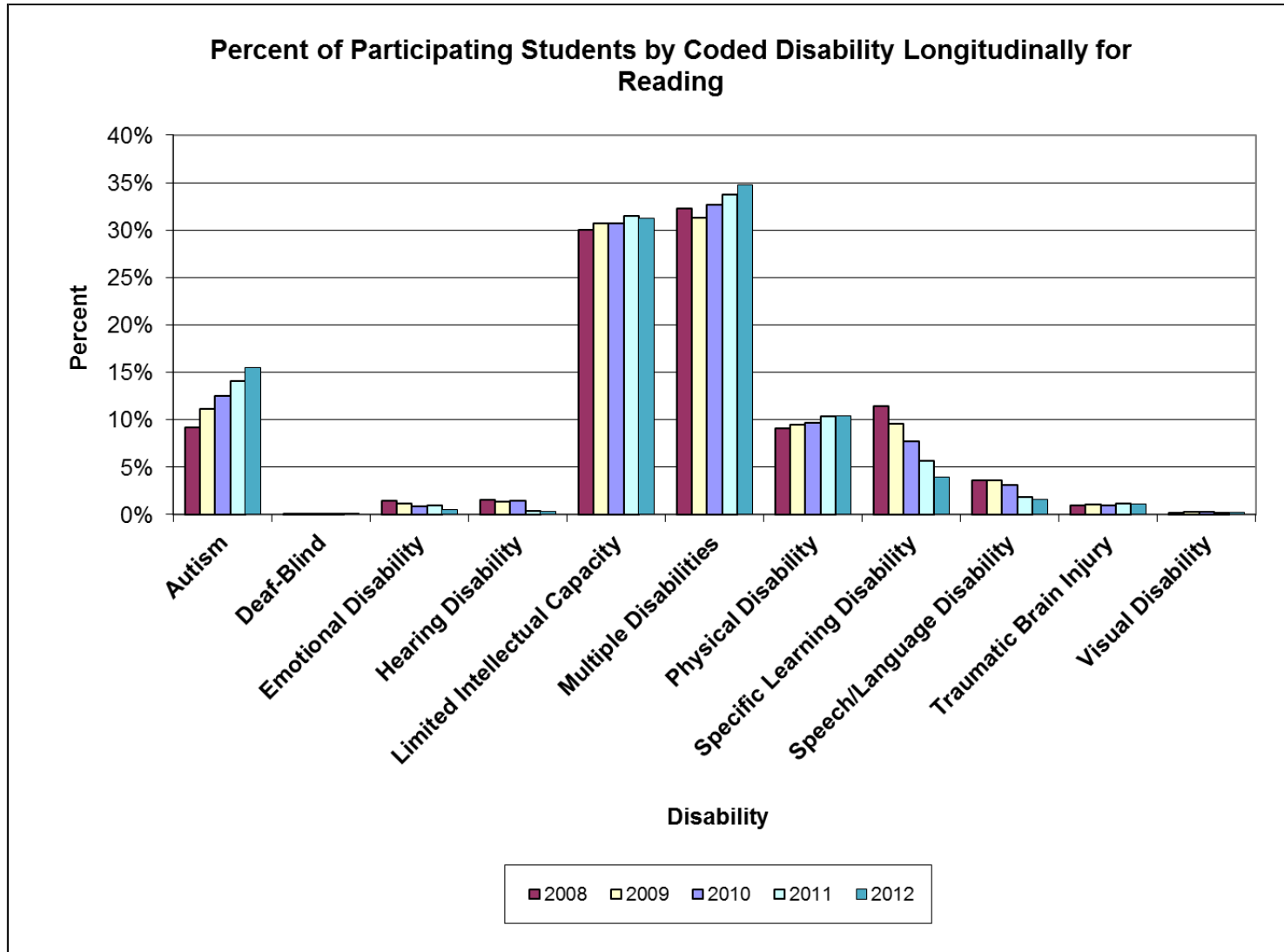


Figure 29
Percent of Participating Students by Coded Disability Longitudinally for Writing

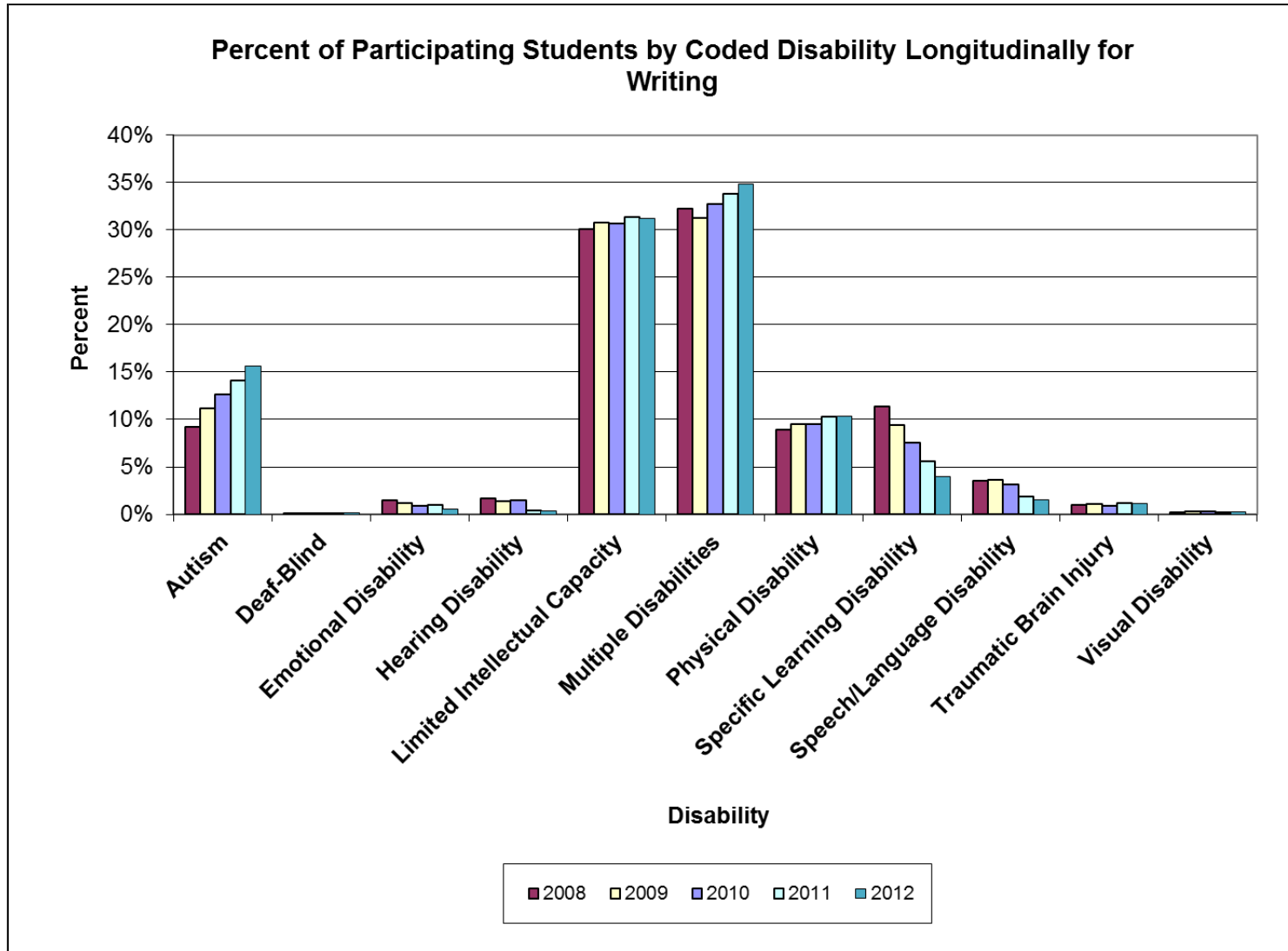


Figure 30
Percent of Participating Students by Coded Disability Longitudinally for Mathematics

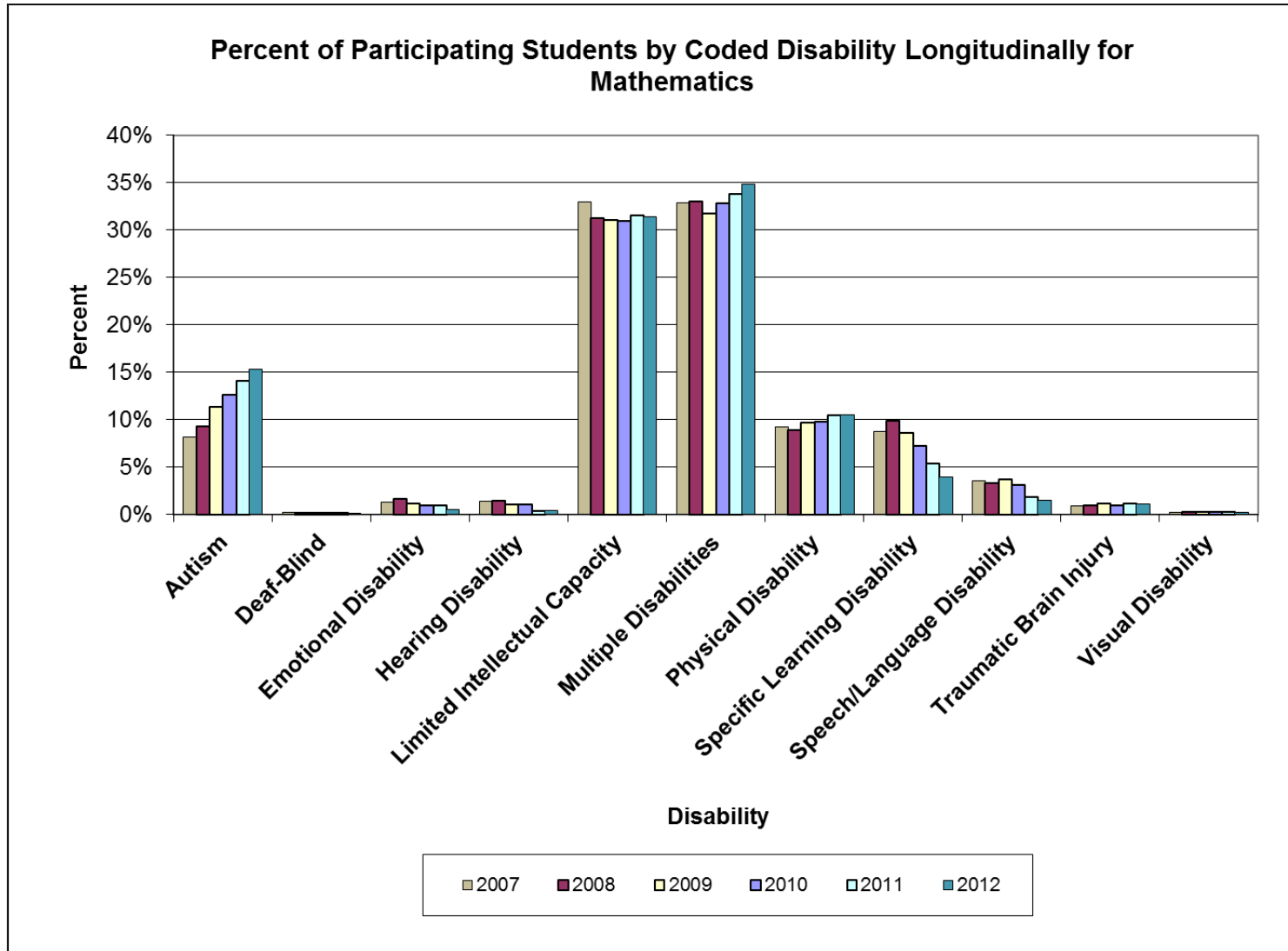
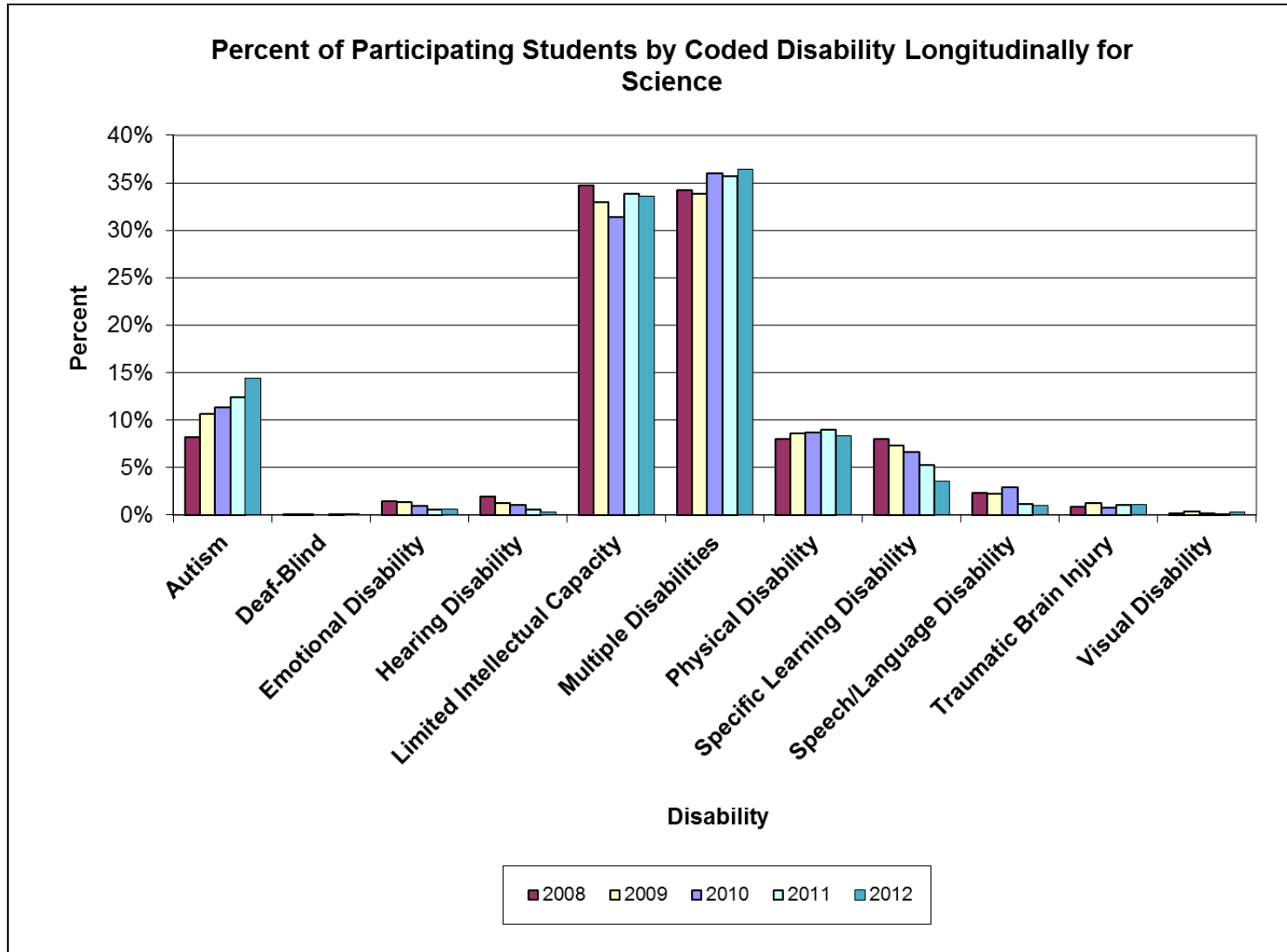


Figure 31
Percent of Participating Students by Coded Disability Longitudinally for Science



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