

2009 CSAPA

Operational Technical Report

Submitted

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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
<u>CR</u>	Constructed-Response
<u>CSAP</u>	Colorado Student Assessment Program
<u>CSAPA</u>	Colorado Student Assessment Program Alternate
<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>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>USDOE</u>	United States Department of Education
<u>WR</u>	Writing

Executive Summary

The 2008–09 Colorado Student Assessment Program Alternate (CSAPA) Operational Technical Report documents the processes and procedures implemented in support of the 2008–09 spring administration of the CSAPA 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 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 CSAPA 2009 Examiners Manual (CDE, 2008), the purpose of the CSAPA is as follows: “The CSAPA 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 2008–09 CSAPA occurred from February 4, 2009 through March 27, 2009. 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 eligibility checklists by grade and content area to be evaluated by a student’s Individualized Education Program (IEP) team in order to determine whether the student should be assessed with the Colorado Student Assessment Program (CSAP) or the CSAPA. Within the context of the 2008–09 administration as few as 497 (grade 9 Reading) and as many as 692 (grade 3 Reading) students participated in the CSAPA administration, as compared to the 2007–08 administration where between 458 (grade 10 Science) and 642 (grade 3 Reading) students participated.

For the first time, within the context of the 2008–09 administration, teachers/test administrators were asked to voluntarily and confidentially respond to an online survey regarding the response modes for students assessed with the CSAPA. The results of this survey indicate that the majority of students utilize verbal responses; between 54% (grade 7) and 69% (grade 10) of students utilize verbal responses in relation to assessment, and between 67% (grade 7) and 82% (grade 5) of students utilize verbal responses in relation to daily classroom interactions.

Operational Analyses: The CSAPA 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 2008–09 CSAPA 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 proficiency levels of *Developing* and *Novice* has remained generally stable for all content areas, with in general a slight increase for each content area across all grades since the 2007–08 administration. Across all grade levels the average change in *Developing* and *Novice* combined was 0.69% for Reading, 0.51% for Writing, 0.72% for Mathematics, and 1.15% for Science. The greatest increase was in Mathematics grade 5 with a 6% increase across the two administrations. The greatest decrease was in Mathematics grade 8 with a 7% 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 CSAPA 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 CSAPA can be made from the CSAPA scoring and reporting.

Overview

Introduction

This document describes the Colorado Student Assessment Program Alternate (CSAPA) with a specific focus on the results of the 2008–09 assessment year. The CSAPA is an alternate assessment for students with a disability who are unable to participate in the general, on-grade Colorado assessment (Colorado Student Assessment Program, CSAP), even with accommodations (CDE, 2009a).

The 2008–09 CSAPA 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 2007–08 CSAPA. The testing window opened February 4, 2009 for all grade levels and closed March 27, 2009.

The work involved in the development of the curriculum standards, the 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 CSAPA 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 CSAPA 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 (CE) as part of the guidance for Peer Review. The majority of this document covers evidence in Section 4 – Technical Quality, CEs 4.1 (validity), 4.2 (reliability), and 4.5 (administration, scoring, analysis, and reporting). For other CEs, text boxes are used to highlight areas for general reference, where complete review of text reveals additional links to CEs.

Purpose of the CSAPA

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 must also administer science assessments at least once in grades 3–5, once in grades 6–9, and once in grades 10–12.

The CSAPA 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 districtwide assessments. Specifically, IDEA stipulates in section 612 part A, number 16, “All children with disabilities are included in all general State and districtwide 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 CSAP or CSAPA assessment must be addressed by the student’s Individualized Education Program (IEP) team, including the parent as an equal participant. The CSAPA is designed to meet the requirements of the NCLB accountability goals, 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 CSAPA provides achievement information to schools, teachers, parents, and students serving multiple purposes. In addition to providing results for use in state and federal accountability programs, CSAPA 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

CE 1.1. 1.3

Alternate assessment standards were developed for CSAPA 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 2008–09 CSAPA forms consist of custom multiple-choice (MC) and constructed-response (CR) performance task items measuring skills associated with the Colorado Model Content Standards and associating 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 Colorado Model Content Standards and Expanded Benchmarks were developed for the CSAPA. These are the basis for the CSAPA Assessment Frameworks, which describe Critical Concepts (like the Benchmarks) and Assessment Objectives. A copy of the CSAPA Assessment Framework for each content area is found in Appendix A. They are also available online at the following websites: Mathematics

http://www.cde.state.co.us/cdesped/download/pdf/Assessment_Frameworks_Math.pdf,
Reading

http://www.cde.state.co.us/cdesped/download/pdf/Assessment_Frameworks_Reading.pdf,
Writing

http://www.cde.state.co.us/cdesped/download/pdf/Assessment_Frameworks_Writing.pdf, and
Science

http://www.cde.state.co.us/cdesped/download/pdf/Assessment_Frameworks_Science.pdf.

Part 2: Test Development

CE 3.6. 5.4

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

CSAPA 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 CSAP 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 per standard by grade and content area are provided. 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 CSAPA 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. The section on Scoring in Part 5 and Tables 26 and 27 provide more reference to the application of the scoring rules and logic. Both scoring rubrics are applicable for any grade level or content area assessed by the CSAPA. 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 CSAPA 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 Thompson, Thurlow, Johnstone, and Altman (2005), 25 states use a scoring rubric that incorporates level of assistance. 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.

¹ Across all grade levels and content areas no items were suppressed from scoring for the 2008–09 CSAPA administration.

² The CDE refers to the accommodations used within the context of the CSAPA as expanded accommodations, due to the fact that the CSAPA 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 CSAPA accommodations in order to differentiate the CSAPA accommodations from those used with the CSAP assessment.

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

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

Item Selection

Item selection for the CSAPA 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.

Alignment Studies

Validity and alignment studies for the CSAPA for all content areas are planned for the future.

Part 3: Description of the Population

Description of Students

CE 3.7, 6.1

Students assessed with the CSAPA 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 CSAPA.

Student Eligibility Criteria

When determining whether a student who is eligible for special education services should participate in the CSAPA or the CSAP, the student's IEP team must determine that the student meets the criteria from the eligibility checklist for each content area. When the IEP team concurs that the CSAPA is the most appropriate assessment, then the CSAPA should be administered as opposed to the CSAP in order to provide a meaningful evaluation of the student's current academic achievement.

As stated on the CDE website, most succinctly within the CSAPA Parent Brochure (CDE, 2009b): "A student who is eligible for CSAPA must meet all of the following criteria in order to qualify: 1) The student must have a significant cognitive disability. AND 2) The student's cognitive disability presents challenges to access the content on CSAP even with allowable

accommodations. AND 3) The nature of the student's cognitive disability must be noted on the student's IEP. AND 4) The student requires the use of a modified general curriculum or is working toward alternate achievement standards that are aligned with the Colorado State Content Standards. AND 5) The IEP team considered participation on CSAP with allowable accommodations before deciding on eligibility for CSAPA. AND 6) The IEP team considered all elements in the Eligibility Packet."

The CDE provides eligibility checklists by grade and content area to be evaluated by a student's IEP team in order to determine whether the student should be assessed with the CSAP or CSAPA. The eligibility checklists can be found at the following website:
<http://www.cde.state.co.us/cdesped/Checklists.asp>.

Population Characteristics

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

Demographic data, such as gender and ethnicity information, are reported in Tables 6–9.³ Across grades and content areas, as few as 497 (grade 9 Reading) and as many as 692 (grade 3 Reading) students participated. As can be seen in Figure 1, the total number of participating students is highest for: Reading at grades 3–5, Writing at grade 7, Mathematics at grades 6 and 9, and Science at grades 8 and 10. 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 7 Mathematics) to 67% (grade 3 Reading). Additionally the majority of students are of White (not Hispanic) ethnicity, with the percentage of White students ranging from 51% (grade 3 Writing) to 59% (grade 10 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 83% (grade 4 Reading and Writing) to a high of 88% (grade 10 Science). The vast majority of students, ranging from 98% (grade 3 Writing) to 100% (grade 8 Mathematics and grade 10 Mathematics and Science), indicate ELL status for Bilingual students as "No." The majority of students, ranging from 83% (grade 4 Reading and Writing) to 88% (grade 10 Science), indicate ELL status for ESL students as "No."

Information is also collected regarding students' eligibility for Free and Reduced Price Lunch programs and is reported in Tables 14–17 for each content area respectively. At the lower grade levels (grades 3–6) more students are eligible for the Free Lunch program, while at the upper grade levels (grades 7–10) fewer students are eligible for either program. For Reading between 42% (grade 4) and 50% (grade 10) of students were not eligible for either program, while between 42% (grade 10) and 48% (grade 5) were eligible for the Free Lunch program, and

³ Subgroups with fewer than 10 students have only sample sizes reported (no statistics are calculated or reported) in accordance with FERPA regulations. This rule is instituted throughout all tables, figures, and reporting.

between 7% (grade 9) and 11% (grade 4) were eligible for the Reduced Price Lunch program. For Writing between 42% (grade 4) and 50% (grade 10) of students were not eligible for either program, while between 43% (grades 7 and 10) and 48% (grade 5) were eligible for the Free Lunch program, and between 7% (grade 9) and 11% (grade 4) were eligible for the Reduced Price Lunch program. For Mathematics between 43% (grade 6) and 51% (grade 10) of students were not eligible for either program, while between 41% (grade 10) and 47% (grade 5) were eligible for the Free Lunch program, and between 7% (grade 9) and 11% (grade 8) were eligible for the Reduced Price Lunch program. For Science between 45% (grade 5) and 50% (grade 10) of students were not eligible for either program, while between 42% (grade 10) and 47% (grade 5) were eligible for the Free Lunch program, and between 7% (grade 5) and 10% (grade 8) were eligible for the Reduced Price Lunch program.

Students' primary disability information is categorized in Tables 18–21 by grade and content area. Within all content areas “Limited Intellectual Capacity” and “Multiple Disabilities” 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 “Limited Intellectual Capacity” and “Multiple Disabilities” categories, followed by “Autism,” “Physical Disabilities,” and “Specific Learning Disabilities.”

Expanded accommodations provided to students during the CSAPA 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. Across all grade levels and content areas no expanded accommodations are provided to the vast majority of students in order for them to access the test items. This is most strikingly illustrated in Figures 3–6. There are between 81% (grade 8 Mathematics) and 87% (grade 3 Reading) students provided no expanded accommodations. For those students requiring additional expanded accommodations, the typical expanded accommodation varies by content area. For Reading the most common expanded accommodations across grade levels are “Modified Picture Symbols” and “Sign Language.” For Writing the most common expanded accommodation is “Assistive Technology.” For Mathematics, at all grade levels, the most common expanded accommodation is “Objects.” For Science the most common expanded accommodation varies by grade level.

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 in Appendix B. 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.

⁴ The CSAPA 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.

Collecting the information about a student's level of independence (or engagement as defined by the Item Presentation and Level of Independence Protocols, see Appendix B and C respectively) and the amount of assistance provided by teachers provides specific data on the standardization of the administrations 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 CSAPA. Training was provided by the Unit of Student Assessment from the CDE with the support of CTB. The participants were given sample items, the item presentation protocol, Level of Independence protocol, and were allowed to look over live test booklets. (All participants signed security agreements prior to participation.) The training format included a PowerPoint presentation (found at http://www.cde.state.co.us/cdeassess/documents/csapa/index_csapa.html by clicking on the link for "2009 CSAPA Administration Training Materials"), 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 CSAPA 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 Unit of Student Assessment of the CDE will continue to provide staff development and training on the operational administration and scoring of the CSAPA each year.

Part 5: Scoring

Scoring Rubrics

Two scoring rubrics are used to collect student responses and provide item-by-item scores. One rubric is applicable to MC items and this rubric appears in Table 26. The second rubric is applicable to CR items and appears in Table 27. Both rubrics are applicable for any grade level or content area assessed by the CSAPA. 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 CSAPA 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 Thompson, Thurlow, Johnstone, and Altman (2005), 25 states use a scoring rubric that incorporates level of assistance. 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 CSAPA there are never more than 4 response options, though there can be as few as two. The following examples reflect the situation in which all possible bubbles are utilized, 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). Answer choices A through D are actual responses that the student could provide in response to the test question 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. 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.

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 CSAPA. Appendix C (Level of Independence Protocol) 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 does not necessarily indicate 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.

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, Appendix B and C respectively, for details.)

The CSAPA also includes CR type items 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 two 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 type item 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 these 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 are awarded for a Partially independent response, and 0 points are awarded 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 using 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 88.35% (grade 3 Mathematics) and 94.29% (grade 4 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 CSAPA. The primary reason for invalidation, in general, was that the student is "Taking CSAP Assessment." The percentage of students with this invalidation code range from a low of 0.71% (grade 9 Mathematics) to a high of 4.38% (grade 5 Science) where this code is the most frequently indicated. The exceptions to this are in grades 3 and 4 Reading and Writing and grade 9 Mathematics where "Parental Refusal" is the highest invalidation category and in grade 10 Mathematics where "Test Not Completed" is the most common reason for invalidation.

CE 2.3

Part 6: Standard Setting

Student performance on the CSAPA 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 student's 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*. 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*. 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.

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.

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 grade 5 and 8 PLDs. Thus, 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*) 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 *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 (Livingston & Zieky, 1982) study, 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 (Jaeger, 1995) study. 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 synthesize the results from both the modified Contrasting Groups study and the profile sorting study. A separate synthesis discussion was held for each content area. The participants identified trends in the data and recommended changes in the cut scores to promote cross-grade articulation within a content area. The impact data (percentages within each proficiency level) and cut scores approved by the CDE and applied to the 2008–09 data are shown in Table 46. More information about the cut scores and impact data can be found later in this report in Part 7: Analysis and Results—Proficiency Level Data.

Part 7: Analyses and Results

CE 1.3

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 CSAPA 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

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

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 when 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 CSAPA 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 3's as "1" for MC items such that only fully independent student scores are counted correct and all CR item scores of 0, 1, 3, and 5 as "0" and 2, 4, and 6 as "1" for all CR items scored on the 6-point rubric. The purpose for removing the level of independence information from the data is to provide information about content only performance apart from prompting or examiner provided assistance. Additionally, classical item analysis indices typically assume that the item score is related only to item performance, and not any additional information (Gulliksen, 1950).

Item Difficulty (p -values)

Typically in traditional assessments, and as seen in similar alternate assessments, p -values range between 0.30 and 0.90. Items with p -values less than 0.30 are considered more difficult, as less than 30% of the students are getting the correct answer, while p -values greater than 0.90 indicate a fairly easy item. Sometimes the lower bound of p -values can drop below 0.30. Those items must 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 CSAPA 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 including weighted - with level of independence, and unweighted - without level of independence. Table 37 provides a summary including the minimum, mean, and maximum

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

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. In general the mean p -values across content areas are around the mean difficulty of 0.50 as suggested by Gulliksen (1950). The mean p -values range from 0.45 (grade 10 Mathematics) to 0.70 (grade 8 Science).

Weighted (with level of independence)

When the data are weighted by level of independence, the p -values of Reading items range from 0.23 (grade 6) to 0.89 (grade 5). There are a total of 12 Reading items with p -values below 0.30 including a total of three items with p -values below 0.25. The one grade 6 item with a 0.23 p -value measures students' ability to identify author's purpose for writing. The two items in grade 7 both share the same passage, where one item (p -value 0.24) measures students' ability to make predictions, make inferences, or draw conclusions after reading a passage, and the other (p -value 0.23) measures students' ability to distinguish between fact and opinion. The mean p -value by grade level ranges from a low of 0.51 (grade 8) to a high of 0.61 (grade 6). The mean p -value across all Reading items is 0.56.

The p -values of Writing items range from 0.19 (grade 10) to 0.85 (grade 7). There are a total of 13 Writing items with p -values below 0.30 including five items with p -values below 0.25. The grade 4 item with a 0.22 p -value measures students' ability to identify parts of speech. The grade 5 item with a 0.23 p -value measures students' ability to proofread to correct errors in grammar, punctuation, and spelling. The grade 7 item with a 0.24 p -value measures students' ability to use upper and lower case letters in creating a product. There are two items at grade 10 with p -values below 0.25: the item with a 0.19 p -value is an item that measures students' ability to use upper and lower case letters in creating a product, and the item with a 0.23 p -value measures students' ability to employ standard English usage rules during writing tasks. The mean p -value by grade level ranges from a low of 0.53 (grade 8) to a high of 0.59 (grade 6). The mean p -value across all Writing items is 0.55.

The p -values of Mathematics items range from 0.09 (grade 10) to 0.89 (grade 4). There are a total of 24 Mathematics items with p -values below 0.30 including 12 items with p -values below 0.25. The grade 4 item with a 0.16 p -value measures students' ability to use data to solve a problem. The grade 7 item with a 0.16 p -value measures students' ability to calculate perimeter. The grade 8 item with a 0.23 p -value measures students' ability to calculate area. There are three items at grade 9 with p -values below 0.25: the item with a 0.19 p -value measures students' ability to use data to solve a problem, the first item with a 0.23 p -value measures students' ability to calculate perimeter, and the second item with a 0.23 p -value measures students' ability to choose the correct operation to solve a problem. There are six items at grade 10 with p -values below 0.25: the item with a 0.09 p -value measures students' ability to calculate perimeter, the item with a 0.18 p -value measures students' ability to add simple fractions, the first item with a 0.19 p -value measures students' ability to extend a growing numeric pattern by supplying the next element, the second item with a 0.19 p -value measures students' ability to convert dimensions from inches to feet, the item with a 0.23 p -value measures students' ability to understand characteristics of a graph, and the item with a 0.24 p -value measures students' ability to solve a simple problem involving division. The mean p -value by grade level ranges from a low of 0.45 (grade 10) to a high of 0.64 (grade 4). The mean p -value across all Mathematics items is 0.55.

The p -values of Science items range from 0.27 (grade 10) to 0.89 (grade 5). There are a total of two Science items with p -values below 0.30, including zero items with p -values below 0.25. The mean p -value by grade level is 0.61 (grade 10), 0.69 (grade 5) and 0.70 (grade 8), with a mean p -value across all items of 0.67.

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 0.20 (grade 6) to 0.88 (grade 5). There are a total of 21 items with p -values below 0.30 including ten items with p -values below 0.25. The mean p -value across all Reading items is 0.53. The p -values of Writing items range from 0.17 (grade 10) to 0.82 (grade 7). There are a total of 25 items with p -values below 0.30 including nine items with p -values below 0.25. The mean p -value across all Writing items is 0.52. The p -values of Mathematics items range from 0.06 (grade 10) to 0.86 (grade 4). There are a total of 36 items with p -values below 0.30 including 22 items with p -values below 0.25. The mean p -value across all Mathematics items is 0.49. The p -values for Science items range from 0.25 (grade 8) to 0.87 (grade 5). There are a total of three items with p -values below 0.30 including zero items with p -values with below 0.25. The mean p -value across all Science items is 0.63.

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

Item Discrimination (point biserial correlation)

The point biserial correlation, a derivation of the Pearson product moment correlation is used here as an index of item discrimination. The point biserial correlation assumes that item responses are based upon a dichotomy, or right and wrong responses. 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 one divided by the square root of the quantity of the sample size minus one. With the CSAPA data the minimum number of students tested, over all content areas, is 497 (grade 9 Reading). 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 0.0449. Thus the critical value for the correlation would be 0.0898. No items in the CSAPA assessment fall below a critical value of 0.09. Further, 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 included. 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.

The range and mean of the Reading, Writing, Mathematics, and Science point biserials including level of independence are, respectively, as follows: Reading 0.20 (grade 7) to 0.75 (grade 5) with a mean across all items of 0.56; Writing 0.17 (grade 9) to 0.88 (grade 8) with a mean across all items of 0.57; Mathematics 0.14 (grade 10) to 0.83 (grade 3) with a mean across all items of 0.59; and Science 0.17 (grade 8) to 0.77 (grade 8) with a mean across all items of 0.61.

Across all grade levels and content areas there are just two items with point biserial values lower than the generally accepted critical cut-off of 0.15, one in Mathematics grade 8 and the other in Mathematics grade 10. The item in Mathematics at grade 8 with a point biserial value below the critical cut-off of 0.15 has a point biserial of 0.14. This item measures students' ability to calculate area. The p -value for this item is 0.23. The item in Mathematics at grade 10 with a point biserial value below the critical cut-off of 0.15 has a point biserial of 0.14. This item measures students' ability to extend a growing numeric pattern by supplying the next element. The p -value for this item is 0.19. What this means is 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 range and mean of the Reading, Writing, Mathematics, and Science point biserials without including level of independence are as follows: Reading 0.20 (grade 7) to 0.74 (grade 5) with a mean across all items of 0.56; Writing 0.15 (grade 9) to 0.84 (grade 8) with a mean across all items of 0.57; Mathematics 0.13 (grade 9) to 0.80 (grade 3) with a mean across all items of 0.58; and Science 0.17 (grade 8) to 0.79 (grade 8) with a mean across all items of 0.62.

When not including level of independence, across all grade levels and content areas there were two items with point biserial values lower than the critical cut-off of 0.15, both in Mathematics, one in grade 9 and one in grade 10. The item in Mathematics in grade 9 with a point biserial value below the critical cut-off of 0.15 has a point biserial of 0.13. The p -value for this item is 0.14. The item in Mathematics in grade 10 with a point biserial value below the critical cut-off of 0.15 has a point biserial of 0.14. The p -value for this item is 0.17. Again, 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 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 relatively stable (on average) regardless of the inclusion of level of independence in the scoring. For Reading, Writing, and Science the mean difference was 0.00, and for Mathematics it was 0.01.

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 those values including the level of independence in the scoring as is done for operational scoring and reporting of CSAPA results.

Content Standards Level Statistics

CE 1.3, 5.2

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 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 38–41. As the tables indicate, the areas that are difficult for Reading, Writing, Mathematics, and Science vary by grade.

In Reading, “demonstrate understanding of symbolic representation” is the least difficult (by mean p -value) for grades 3–5, while “demonstrate understanding of beginning principles of phonics” is the least difficult for grades 6–10. The most difficult critical concept for grades 3, 5–7, 9, and 10 is “demonstrate knowledge that various texts have different purposes,” while for grades 4 and 8 “identify elements of literature” is the most difficult. The range of mean p -values is 0.34 (grade 7 Expanded Benchmark 3.1) to 0.76 (grade 4 Expanded Benchmark 1.2) with a trend that, in general, higher grade levels have lower mean p -values.

For Writing, the least difficult critical concept for all grades except grades 3 and 4 is “demonstrate an understanding that writing communicates a message.” For grade 3 the least difficult critical concept is “organize writing to create a draft document,” and for grade 4 the least difficult critical concept is “use systematic conventions to make 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 the most difficult critical concept is “edit a written product using legible handwriting/word processor for publication,” and for grade 10 the most difficult critical concept is “use systematic conventions to make written product understandable by others.” The range of mean p -values is 0.39 (grade 8 Expanded Benchmark 2.2) to 0.75 (grade 9 Expanded Benchmark 1.1).

Mean p -values in Mathematics indicate that the least difficult critical concept for grades 3, 4, 6, 7, 9, and 10 is “counts, represents quantities, reads and writes numbers,” while the least difficult critical concept for grades 5 and 8 is “identifies, sorts, and matches geometric shapes.” The most difficult Mathematics critical concept at grades 4, 7, and 9 is “uses calculation strategies to compute problems,” while for grades 5, 8, and 10 the most difficult critical concept is “identifies, describes, and creates patterns to solve problems,” and finally for grades 3 and 6 the most difficult critical concept is “applies a variety of measurement skills.” The range of mean p -values is 0.33 (grade 10 Expanded Benchmark 2) to 0.73 (grade 4 Expanded Benchmark 1) with a trend that, in general, higher grade levels have lower mean p -values.

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, where for grades 8 and 10 the most difficult critical concept is “demonstrates an understanding of the fundamental properties of matter and energy,” while for

grade 5 the most difficult critical concept 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 0.42 (grade 10 Expanded Benchmark 3) to 0.76 (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 illustrate critical concepts that are sufficiently correlated with the total test. Specifically, the Reading values range from 0.33 (grade 7 Expanded Benchmark 3.1) to 0.67 (grade 3 Expanded Benchmark 1.2). In Writing the values range from 0.43 (grade 9 Expanded Benchmark 2.3) to 0.75 (grade 8 Expanded Benchmark 1.1). In Mathematics the values range from 0.37 (grade 10 Expanded Benchmark 2) to 0.71 (grade 3 Expanded Benchmark 1). In Science the values range from 0.41 (grade 10 Expanded Benchmark 3) to 0.69 (grade 8 Expanded Benchmark 2).

Total Test Level Statistics

Student performance is described in different ways, including total raw scores, performance on specific content expanded benchmarks/critical concepts, and proficiency levels (the details of which are described in detail in the CSAPA 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 ethnicity can be found in Tables 6–9. In general, Males and Females perform similarly in Reading, Writing, Mathematics, and Science (Figures 7–10). In general, across ethnicities students also perform similarly (Figures 11–14). In Reading, Figure 11, White (not Hispanic) students somewhat outperform other ethnicities at grades 3 and 5–7, while African American students somewhat outperform other ethnicities at grades 4 and 8–10. In Writing, Figure 12, White (not Hispanic) students somewhat outperform other ethnicities at grades 3 and 6, while African American students somewhat outperform other ethnicities at grades 4 and 8–10, and Asian/Pacific Islander/American Indian/Alaskan Native students are the highest performers at grades 5 and 7. In Mathematics, Figure 13, Asian/Pacific Islander/American Indian/Alaskan Native students have the highest performance at grades 3, 5, and 7, African American students have the highest performance at grades 4 and 8–10, while Hispanic students somewhat outperform other ethnicities at grade 6. In Science, Figure 14, African American students have the highest performance at grades 8 and 10, while Asian/Pacific Islander/American Indian/Alaskan Native students have the highest performance at grade 5.

Raw score frequency distributions by grade and content area are found in Tables 42–45.

Proficiency Level Data

CE 2.1, 2.3.1, 5.6

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

Table 46 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 2009 CSAPA 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*, (and shown in Figure 19) are highest for: Reading grade 5, Writing grade 6, Mathematics grade 5, and Science grade 8. Pass rates range from 28% to 48% in Reading, 30% to 45% in Writing, 26% to 55% in Mathematics, and 37% to 52% 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 CSAPA 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 error that occurs 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 (i.e., 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 additionally 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' performance would be if given the assessment over multiple occasions.

For the CSAPA 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 CSAPA 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 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 with 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. In general, the point biserial correlations are within acceptable ranges and above the critical cut-off value of 0.15, with only two exceptions, as previously noted (Mathematics one item in grade 8 and one item in grade 10).

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. 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 CSAPA 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 CSAPA.

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 CSAPA it is likely that the reliability estimates will be quite high. Given that the CSAPA 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 2008–09 CSAPA test administration based upon the total group and a variety of subgroups. As is evident in the tables, the coefficients are quite high. At the total group level (summarized in Table 47), the range for the reliabilities by content area are these: Reading 0.92 (grade 10) to 0.94 (grade 6); Writing 0.93 (grade 10) to 0.94 (grade 7); Mathematics 0.93 (grade 9) to 0.95 (grade 5); and Science 0.92 (grade 10) to 0.95 (grade 8). It is likely that the heterogeneity of the CSAPA 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 Females in grade 10 Science where the reliability value equals 0.91. The lowest total score reliability by ethnicity is for the Asian/Pacific Islander/American Indian/Alaskan Native subgroup in grade 7 Reading with a value of 0.86. Tables 10–13 illustrate that the lowest total score reliability by Language Proficiency status is 0.85 for Reading grade 7 “NEP,” the lowest total score reliability by ELL program–Bilingual status is 0.92 for Reading grade 10 “No,” and the lowest total score reliability by ELL program–English as a Second Language status is 0.86 for Science grade 5 “Choice.” As seen in Tables 14–17 the range for total score reliability by Free/Reduced Price Lunch status is 0.90 for Writing grade 10 “Reduced Price Lunch Eligible” to 0.96 for Mathematics grade 5 “Reduced Price Lunch Eligible.” Tables 18–21 illustrate that the lowest total score reliability by Primary Disability is 0.48 for Writing grade 7 “Speech/Language Disability” with a sample size of 11. For those subgroups with sufficient sample sizes for reporting fewer than 24% had reliabilities less than 0.80, with sample sizes ranging from the minimum for reporting of 10 to a maximum of 85, thus those reliability estimates should be interpreted with caution due to the small sample sizes. Less than 10% of subgroups had reliability values of less than 0.70. The highest total score reliability by Primary Disability was 0.96 for Mathematics grade 7 “Autism.” The vast majority (approximately 77%) 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 0.42 for Reading grade 10 “Sign Language,” which is the only value below 0.80 (there are just 11 students in this subgroup). The next lowest total score reliability value is 0.80 for Writing grade 10 “Assistive Technology” and the highest is 0.98 for Mathematics grade 7 “Eye Gaze.”

Another measure of reliability is a direct estimate of the degree of measurement error in students’ total score on a test, which for the CSAPA is a raw score. 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 above. 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 CSAPA an 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 47. At the total group level, SEMs for Reading

range from 6.52 (grade 6, 105 total possible points) to 7.18 (grade 10, 102 total possible points); for Writing from 7.23 (grade 5, 105 total possible points) to 7.58 (grade 4, 108 total possible points); for Mathematics from 7.76 (grade 3, 126 total possible points) to 9.89 (grade 5, 171 total possible points); and for Science from 5.96 (grade 5, 96 total possible points) to 7.33 (grade 10, 102 total possible points). These are within acceptable ranges given that the CSAPA 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 9.89 (grade 5 Mathematics) reflects approximately three MC items, two CR items, or some combination thereof.

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 48 illustrates classification consistency and classification accuracy indices based on the Livingston and Lewis (1995) method. 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. The average PC is 0.56 across all grades and content areas and ranges from 0.50 (grade 5 Science) to 0.62 (grade 6 Reading). Probability of misclassification (PM) is simply 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. Average Chance across all grades and content areas is 0.23 and ranges from 0.21 (grade 10 Reading) to 0.27 (grade 6 Reading).

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 CSAPA data in Table 48. Average kappa is 0.43 and ranges from 0.36 (grade 5 Science) to 0.48 (grade 3 Writing) over all grade levels and content areas. The relative similarity in grades with lowest and highest kappa values supports the PC findings.

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. The average PA is 0.67 ranging from 0.59 (grade 5 Science) to 0.74 (grade 6 Reading). Finally, Table 48 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) addressed 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 on-going 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); as well as 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 CSAPA 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 CSAPA, 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 ethnic, gender, or disability groups. Additionally alignment studies for the CSAPA for all content areas are planned for the future.

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 CSAPA is defined as students with a severe cognitive disability who cannot otherwise participate in the general CSAP even with accommodations. Given the high-stakes nature of the CSAPA 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 CSAPA 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 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 CSAPA).

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 47 and raw score frequency distributions by grade and content area are found in Tables 42–45. Data by expanded benchmark or critical concept are found in Tables 38–41. These data are reviewed and explained in greater detail in Part 7: Analyses and Results.

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 10 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 CSAPA, 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 percentage of total items across all grades, by content area, on which students responded with each level of independence are found in Table 49. Overall, students responded independently to most items. Eighty-five percent of students responded independently (Level 4 according to the Level of Independence Protocol in Appendix C) across items in Reading, 84% in Writing, 78% in Mathematics, and 86% in Science.

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 50 illustrate 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, 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 CSAPA 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 51. The occurrences of coding errors due to a level 1 "no response" and a correct response given (average 0.61%, maximum 1.29%) are on average higher than error due to no response provided to the item with level of independence coded as 2–4 (average 0.26%, maximum 0.69%). These types of errors have been continuously reduced from the 2006–07 CSAPA administration through the present 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 47. In general there are fewer students achieving

the maximum score than the minimum score. In Reading at four grade levels no students achieve the maximum possible score, while as many as 25 students (grade 4) earned the minimum possible score. In Writing there are five grade levels with no students achieving the maximum possible score, while at grade 5 30 students earned the minimum possible score. Mathematics is similar to Reading with four grade levels in which no students earned the maximum possible score and the minimum score was earned by 26 students in grade 7. Science is different in that for grades 5 and 8 more students achieved the maximum score than the minimum score, and at all grade levels at least three students earned the maximum 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 42–45. 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 CSAPA 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 of student utilized during assessment, response mode of 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 52. Percent of exact agreement and kappa rates are lower than anticipated, averaging 47% and 0.32, respectively. Differences tend to be within a single rating 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 92%. 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 8%. As test examiners become more familiar with the performance levels and are able to reflect on the performance levels students received based on their CSAPA 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. It was seen that the average amount of discrepant ratings decreased from the 2007–08 administration to the 2008–09 administration, indicating that examiners are developing a better understanding of the proficiency levels relative to the performance of their students.

Table 53 provides survey data from the examiners in relation to the response mode utilized by the students within the context of the CSAPA assessment activities. The survey question stated,

“Please indicate the primary method of response a student used during the CSAPA 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 110 responses. Teachers reported that most students used a Verbal Response mode, with an average of 63% 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 25% of students. The remaining options each had an average of fewer than 4% of the students.

Table 54 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 75%, followed by Pointing/Gesturing with an average of 10%. The remaining options each had an average of 3% or less.

Tables 55–58 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, with the exception of grade 9 Mathematics, zero percent of students achieve a proficiency rating of *Novice* with an average level of independence less than 3.5. Equally, 100% of students with an average level of independence of 1.0–1.4 achieve a proficiency level of *Inconclusive*. The greater the average level of independence with which a student responds, the more likely they are to have a higher proficiency rating. It is important to note that it is appropriate for independent responses to receive low scores (such as the percentage of students with the highest average level of independence scoring in the *Inconclusive* level) due to the possibility for an incorrect though independent response to be given. This finding is reassuring as it illustrates that examiners are not simply redirecting if the student answers the question incorrectly at first.

Part 10: Longitudinal Analyses

Reading, Writing, and Science comparisons examine the differences between 2008–09 and 2007–08, while Mathematics comparisons examine differences going back three years 2008–09, 2007–08, and 2006–07. Throughout this section differences are calculated as the most recent year compared to the prior year. As such differences are 2008–09 minus 2007–08 and 2007–08 minus 2006–07 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 Reading assessment by year. It is illustrated that in general the number of students increased across the two assessment years. The exceptions to this are at grades 6 and 9 where there were decreases in the number of students participating of 8 and 69, respectively.

Table 59 illustrates the means and standard deviations at the total group level by grade for Reading. It is seen that differences are 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 decrease (0.42 to 2.28 points), while the means for grades 5–7 and 10 increase (1.08 to 3.73 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 reflect very minor variations in student performance.

Table 63 illustrates the population of students participating in the CSAPA Reading assessment by year based upon gender, ethnicity, and primary disability, as well as indicating any differences in the population between the two years. The largest change by gender group is seen in grade 7 with a nearly 5% shift in the gender groupings. The smallest difference is observed at grade 10 with less than three-quarters of a percent of variation. Student ethnicity has also remained quite stable with the smallest change observed for grade 3 African American students, a difference of 0.03%. The greatest difference is at grade 5 for White (not Hispanic) students with 6.45% more students in 2008–09. The primary disability classifications have also remained quite stable as detailed in Table 63 by grade level and as illustrated for the overall group in Figure 28. The smallest difference in the percentage of students classified with a specific primary disability is a zero percent change for the percent of students classified as having a “Visual Disability” in grade 6. The largest difference is 7.17% for “Limited Intellectual Capacity” in grade 6.

The p -values are illustrated in Table 67. The mean p -values remain quite stable across administrations with grade 4 illustrating a difference of -0.004⁹ and the largest difference observed at grade 10 with a difference of 0.04. Equally the range of p -values remained stable. The highest observed p -value in 2007–08 was 0.88 in grade 4, and in 2008–09 the highest observed p -value is 0.89 in grade 5. The lowest observed p -value in 2007–08 was 0.18 in grade 6 and in 2008–09 the lowest observed p -value is 0.23 in grade 6.

Table 71 illustrates the point biserial statistics. The mean point biserials remain quite stable across administrations with grade 8 illustrating a difference of -0.0014 and the largest difference observed at grade 6 with a difference of -0.0188. Equally, the range of point biserial values remained stable. The highest observed point biserial in 2007–08 was 0.74 in grade 9, and in 2008–09 the highest observed point biserial is 0.75 in grade 5. The lowest observed point biserial in 2007–08 was 0.24 in grade 7, and in 2008–09 the lowest observed point biserial is 0.20 in grade 7.

Another important trait to examine over time is the impact data which is presented in Table 75. Grade 10 saw a 4% decrease in the percentage of students classified as *Inconclusive*. There is a 4% decrease in the percentage of students classified as *Exploring* at grade 6. A 6% increase in

⁹ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.

students was observed at grade 6 in the *Emerging* classification. There was a 5% decrease in students classified as *Developing* in grade 9, and a 3% increase in students classified as *Novice* at grade 10. Overall the percentage of students classified as *Developing* and *Novice* combined increased by nearly 6% at grade 10. In general the impact data are relatively stable across the two administrations.

Writing

Figure 21 illustrates the number of students participating in the CSAPA Writing assessment in 2007–08 and 2008–09. It is illustrated that in general the number of students increased across the two assessment years. The exceptions to this are at grades 6 and 9 where there were decreases in the number of students participating of 1 and 71, respectively.

Table 60 illustrates the means and standard deviations at the total group level by grade for Writing. It is seen that 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 decrease (0.30 to 2.24 points), while the means for grades 5–7 and 10 increase (1.15 to 4.08 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 64 illustrates the population of students participating in the CSAPA Writing assessment based upon gender, ethnicity, and primary disability, as well as indicating any differences in the population between the two years. The largest change by gender group is seen in grade 7 with a nearly 5% shift in the gender groupings. The smallest difference is observed at grade 5 with less than two-thirds of a percent of variation. Student ethnicity has also remained quite stable with the smallest change, a difference of 0.01%, observed for grade 6 Asian/Pacific Islander/American Indian/Alaskan Native students, while the greatest difference is at grade 5 for White (not Hispanic) with 6.48% more students. The primary disability classifications have also remained quite stable as detailed in Table 64 by grade level and as illustrated for the overall group in Figure 29. The smallest difference in the percentage of students classified with a specific primary disability is a zero percent change for the percent of students classified as having “Multiple Disabilities” in grade 3. The largest difference is 6.79% for “Limited Intellectual Capacity” in grade 6.

The p -values are illustrated in Table 68. The mean p -values remain quite stable across administrations with grade 9 illustrating a difference of -0.003 and the largest difference observed at grade 10 with a difference of 0.031. Equally the range of p -values remained stable. The highest observed p -value in 2007–08 was 0.86 in grade 8, and in 2008–09 the highest observed p -value is 0.85 in grade 7. The lowest observed p -value in 2007–08 was 0.17 in grade 10 and in 2008–09 the lowest observed p -value is 0.19 in grade 10.

Table 72 illustrates the point biserial statistics. The mean point biserials remain quite stable across administrations with grade 3 illustrating a difference of 0.0002 and the largest difference observed at grade 6 with a difference of -0.0182. Equally, the range of point biserial values remained stable. The highest observed point biserial in 2007–08 was 0.86 in grade 7, and in 2008–09 the highest observed point biserial is 0.88 in grade 8. The lowest observed point biserial in 2007–08 was 0.13 in grade 7, and in 2008–09 the lowest observed point biserial is 0.17 in grade 9.

Another important trait to examine over time is the impact data which is presented in Table 76. Grade 7 saw a 4% decrease in the percentage of students classified as *Inconclusive*, while grade 8 saw a nearly 3% increase at this level. There is a 7% decrease in the percentage of students

classified as *Exploring* at grade 10, while there is an increase of 2% at this level for grade 3 students. A 3% decrease for grade 5 students classified as *Emerging* was contrasted by a 2% increase at grade 6. There was a 4% decrease in students classified as *Developing* in grade 9, with a 6% increase at grade 6. Within the *Novice* classification there was a 3% decrease at grade 6 (the only decrease evidenced), with a 5% increase at grade 10. Within the combined levels of *Developing* and *Novice* there were decreases of 1% to 4% in the impact data at grades 3, 4, 8, and 9, and increases of 2% to 5% at grades 5–7 and 10. In general the impact data are relatively stable across the two administrations.

Mathematics

Figure 22 illustrates the number of students participating in the CSAPA Mathematics assessment in 2006–07, 2007–08, and 2008–09, and shows that in general the number of students increased across the assessment years. The exceptions to this are at grades 8 and 9 where for grade 8 there was a sharp decrease in the number of students from 2006–07 to 2007–08 and the 2008–09 numbers are more similar to the 2006–07 numbers, though still slightly lower. At grade 9 there was a large spike in 2007–08 as compared to 2006–07 and 2008–09.

Table 61 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. 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 65 illustrates the population of students participating in the CSAPA Mathematics assessment based upon gender, ethnicity, and primary disability. The largest change by gender group between 2006–07 and 2007–08 is -8% for grade 6 Males, while the smallest difference is observed at grade 4 with less than one-quarter of a percent of variation. For 2007–08 to 2008–09 the largest difference by gender group is observed for grade 7 Males with a 5% decrease, while the smallest difference is observed for grade 4 Females with a 0.11% decrease. Student ethnicity has also remained generally stable; the smallest change observed from 2006–07 to 2007–08 was for grade 4 African American students, a difference of -0.03%, while the smallest difference between 2007–08 and 2008–09 was for grade 8 Hispanic students with a 0.07% difference. The greatest difference between 2006–07 and 2007–08 was for grade 4 Hispanic students with a -5.87% change, while for 2007–08 to 2008–09 the greatest difference is for grade 5 White students with a 7.28% change. The primary disability classifications have also remained quite stable as detailed in Table 65 by grade level and as illustrated for the total group in Figure 30. The smallest difference in the percentage of students classified with a specific primary disability between 2006–07 and 2007–08 is a 0.01% change at grade 9 for the students classified as having “Multiple Disabilities,” while for 2007–08 to 2008–09 the smallest difference is a zero percent change for the percent of students classified as having a “Specific Learning Disability” in grade 10. The largest difference between 2006–07 and 2007–08 is -5.17% for grade 3 “Limited Intellectual Capacity” while for 2007–08 to 2008–09 the largest difference is -6.55% for grade 6 students classified as having “Multiple Disabilities.”

The p -values for 2006–07, 2007–08, and 2008–09 are illustrated in Table 69 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 0.0066 at grade 6 and the smallest 2007–08 to 2008–09 difference of -0.0002 at grade 7. The largest difference for 2006–07 to 2007–08 was 0.0251 for grade 8, and for 2007–08 to 2008–09 the largest difference is also at grade 8, -0.0317. Equally the range of p -values remained stable. The highest observed p -value across all years was at grade 4 with values of 0.90 (2006–07), 0.91 (2007–08), and 0.89 (2008–09). The lowest observed p -value across all years was at grade 10 with values of 0.08 (2006–07), 0.07 (2007–08), and 0.09 (2008–09).

Table 73 illustrates the point biserial statistics for 2006–07, 2007–08, and 2008–09 and provides results of the differences. The mean point biserials remain quite stable across administrations with grade 9 illustrating a difference of -0.0012 for 2006–07 to 2007–08 and -0.0046 for 2007–08 to 2008–09. 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 the highest point biserial value was 0.82 at grade 6, and in 2008–09 the highest observed point biserial is 0.83 at grade 3. The lowest observed point biserial across all years was observed in grade 10 with a 2006–07 value of 0.12, 2007–08 equal to 0.09, and in 2008–09 equal to 0.14.

The impact data for 2006–07, 2007–08, and 2008–09 as well as the differences are presented in Table 77. At the level of *Inconclusive* from 2006–07 to 2007–08 the largest decrease was 4% for grade 10, and the largest increase was 6% for grade 7, while for 2007–08 to 2008–09 the largest decrease was 4% for grade 6 and the largest increase was 4% for grade 8. At the *Exploring* level from 2006–07 to 2007–08 all values decreased with values ranging from 0% grade 10 to 3% for grade 8, while for 2007–08 to 2008–09 the largest decrease was 2% for grade 9 and the largest increase was 3% for grade 5. At the *Emerging* level from 2006–07 to 2007–08 the largest decrease was 5% for grade 8, and the largest increase was 2% for grade 10, while for 2007–08 to 2008–09 the largest decrease was 7% for grade 5 and the largest increase was 3% for grade 8. At the *Developing* level from 2006–07 to 2007–08 the largest decrease was 6% for grade 7, and the largest increase was 6% for grade 4, while for 2007–08 to 2008–09 the largest decrease was 7% for grade 8 and the largest increase was 6% for grade 6. At the *Novice* level from 2006–07 to 2007–08 the largest decrease was 6% for grade 4, and the largest increase was 6% for grade 6, while for 2007–08 to 2008–09 the largest decrease was 4% for grade 6 and the largest increase was 3% for grade 10. When combining *Developing* and *Novice* from 2006–07 to 2007–08 the largest decrease was 3% for grade 7, and the largest increase was 8% for grade 8, while for 2007–08 to 2008–09 the largest decrease was 7% for grade 8 and the largest increase was 6% for grade 5. In general the impact data are relatively stable across the two administrations.

Science

Figure 23 illustrates the number of students participating in the CSAPA Science assessment in 2007–08 and 2008–09, illustrating that the number of students increased across the two assessment years. Table 62 illustrates the means and standard deviations at the total group level by grade for Science. It is seen that differences are small as 1.26 points (grade 5), -1.32 points (grade 8), and 3.19 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 66 illustrates the population of students participating in the CSAPA Science assessment based upon gender, ethnicity, and primary disability, as well as indicating any differences in the

population between the two years. The largest change by gender group is seen in grade 5 with just a 1% shift in the gender groupings. Student ethnicity has also remained quite stable with the smallest change observed for grade 8 Asian/Pacific Islander/American Indian/Alaskan Native students, a difference of -0.46% between 2007–08 and 2008–09. The greatest difference is at grade 5 for White (not Hispanic) students with 6.45% more students in 2008–09 as compared to 2007–08. The primary disability classifications have also remained quite stable as detailed in Table 66 by grade level and as illustrated for the overall group in Figure 31. The smallest difference 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 “Speech/Language Disability” in grade 10. The largest difference is 3.52% for “Autism” in grade 3.

The p -values are illustrated in Table 70 providing results of the difference between years. The mean p -values remain quite stable across administrations with grade 5 illustrating a difference of 0.01, a grade 8 difference of -0.02, and a grade 10 difference of 0.03. Equally the range of p -values remained stable. The highest observed p -value in 2007–08 was 0.88 in grade 5, and in 2008–09 the highest observed p -value is 0.89 in grade 5. The lowest observed p -value in 2007–08 was 0.26 in grade 10 and in 2008–09 the lowest observed p -value is 0.27 in grade 10.

Table 74 illustrates the point biserial statistics. The mean point biserials remain quite stable across administrations with grade 8 illustrating a difference of 0.0009 and the largest difference observed at grade 10 with a difference of 0.0078. Equally, the range of point biserial values remained stable. The highest observed point biserial in 2007–08 was 0.79 in grade 5, and in 2008–09 the highest observed point biserial is 0.77 in grade 8. The lowest observed point biserial in 2007–08 and 2008–09 was 0.17 in grade 8.

The impact data for Science is presented in Table 78. The percentage of students classified as *Inconclusive* decreased for grades 5 and 10, and increased by less than 1% for grade 8. The percentage of students scoring at the *Exploring* level increased slightly for grades 5 and 8, but declined by nearly 7% for grade 10. The percentage of students classified as *Emerging* declined at grades 5 and 8, but increased by nearly 6% for grade 10. The percentage of students scoring at the *Developing* level decreased for grades 5 and 10 while increasing at grade 8. There was an increase in the percentage of students scoring at the *Novice* level for both grades 5 (2%) and grade 10 (6%), though the percentage decreased at grade 8 by nearly 3%. A similar trend is seen in the combination of the *Developing* and *Novice* levels, with grade 5 increasing by nearly 2%, grade 8 decreasing by just over 1%, and grade 10 increasing by nearly 3%. In general the impact data are relatively stable across the two administrations.

Conclusion

The 2008–09 CSAPA Technical Report documents the processes and procedures implemented to support the 2008–09 spring CSAPA administration by CTB and the CDE. The Technical Report shows how the applied processes and procedures, as well as the results, relate to the issues of validity and reliability, the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999), and the federal Peer Review process.

The CSAPA began with the item and test development process. Alternate assessment standards were developed for the CSAPA 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 2008–09 CSAPA forms consisted of custom MC and CR performance task items measuring skills associated with the Colorado Model Content Standards and associating

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:

Item and Test Development (Part 2)

- Items for spring 2009 were the same as those used in the spring 2008 forms.
- Review of items with 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 CSAP or CSAPA based upon eligibility criteria provided by the CDE.
- Population characteristics
 - Participation rate ranges from a minimum of 497 students (grade 9 Reading) to a maximum of 692 students (grade 3 Reading)
 - Majority Male students, 59% (grade 7 Mathematics) to 67% (grade 3 Reading)
 - Majority White students, 51% (grade 3 Writing) to 59% (grade 10 Mathematics)
 - Dominant ELL classification of Not Applicable, 83% (grade 4 Reading and Writing) to 88% (grade 10 Science)
 - Dominant Free/Reduced Price Lunch Program eligibility at lower grade levels (3–6) of Free Lunch program eligibility, while upper grade levels (7–10) of no eligibility
 - Most common primary disability of either “Limited Intellectual Capacity” or “Multiple Disabilities”
 - No expanded accommodations, beyond those built into the assessment such as one-on-one administration with no time limits, are provided to most students in order for them to access the CSAPA items.

Test Administration (Part 4)

- District and School Assessment Coordinators and Special Education teachers are trained on the administration of the CSAPA, 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 4, 2009 through March 27, 2009.
- 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 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 (all grade level) forms.
- The 2007 and 2008 cut scores have been implemented again, without revision, within the context of the 2008–09 CSAPA administration.

Analyses and Results (Part 7)

- Item level statistics including item difficulty (p -value) and item discrimination (point biserial correlation) were evaluated both with and without the level of independence with which the student responded to the item included in the calculation of the statistics.
 - Including level of independence
 - P -value minimum = 0.09 grade 10 Mathematics
 - P -value maximum = 0.89 grade 5 Science
 - Point biserial minimum = 0.14 grade 10 Mathematics
 - Point biserial maximum = 0.88 grade 8 Writing
 - Not including level of independence
 - P -value minimum = 0.06 grade 10 Mathematics
 - P -value maximum = 0.88 grade 5 Reading
 - Point biserial minimum = 0.13 grade 9 Mathematics
 - Point biserial maximum = 0.84 grade 8 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” mean p -value = 0.76.
 - 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” mean p -value = 0.33.
- Summary descriptive statistics for the reported raw scores were reported for the total group as well as relevant subgroups such as: gender, ethnicity, ELL, Free/Reduced Price Lunch Program eligibility, primary disability, and expanded accommodation.
 - Reading total group
 - Means range from 52.53 (grade 10) to 64.54 (grade 6)
 - Standard deviations range from 24.85 (grade 10) to 27.18 (grade 5)
 - Writing total group
 - Means range from 58.34 (grade 3) to 64.58 (grade 7)
 - Standard deviations range from 27.60 (grade 10) to 29.38 (grade 8)
 - Mathematics total group
 - Means range from 71.98 (grade 9) to 104.89 (grade 5)
 - Standard deviations range from 34.79 (grade 3) to 45.69 (grade 5)
 - Science total group
 - Means range from 62.34 (grade 10) to 69.94 (grade 8)
 - Standard deviations range from 24.27 (grade 5) to 26.75 (grade 10)

- The percentage of students at each performance level was analyzed. The ranges for each performance level were:
 - *Inconclusive*: 7% (grade 4 Mathematics) to 18% (grade 8 Writing)
 - *Exploring*: 14% (grade 6 Mathematics) to 30% (grade 8 Reading)
 - *Emerging*: 17% (grade 8 Science) to 38% (grade 10 Writing)
 - *Developing*: 15% (grade 10 Science) to 43% (grade 5 Mathematics)
 - *Novice*: 4% (grade 3 Writing) to 27% (grade 3 Mathematics)
 - *Developing and Novice Combined*: 26% (grade 10 Mathematics) to 55% (grade 5 Mathematics)
- Data files containing the demographic information of each students, as well as item responses and raw scores for all content areas were provided to the CDE.

Reliability and Validity (Part 8)

- The reliability of the 2008–09 CSAPA was estimated in four ways:
 - Point biserial correlation – item specific reliability
 - Including level of independence ranges 0.14 (grade 10 Mathematics) to 0.88 (grade 8 Writing)
 - Not including level of independence ranges 0.13 (grade 9 Mathematics) to 0.84 (grade 8 Writing)
 - Internal consistency using Cronbach’s alpha – total test reliability ranges
 - Reading: 0.92 (grade 10) to 0.94 (grade 6)
 - Writing: 0.93 (grade 10) to 0.94 (grade 7)
 - Mathematics: 0.93 (grade 9) to 0.95 (grade 5)
 - Science: 0.92 (grade 10) to 0.95 (grade 8)
 - Standard error of measurement (SEM) – total test reliability ranges
 - Reading: 6.52 (grade 6) to 7.18 (grade 10)
 - Writing: 7.23 (grade 5) to 7.58 (grade 4)
 - Mathematics: 7.76 (grade 3) to 9.89 (grade 5)
 - Science: 5.96 (grade 5) to 7.33 (grade 10)
 - Classification consistency and accuracy – total test reliability
 - Probability of a correct classification ranges from 0.50 (grade 5 Science) to 0.62 (grade 6 Reading).
 - Probability of accuracy ranges from 0.59 (grade 5 Science) to 0.74 (grade 6 Reading).
 - Kappa ranges from 0.36 (grade 5 Science) to 0.48 (grade 3 Writing).
- 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)

- Examined level of independence across grades by content area across all items in each content area
 - Level 1 ranges 4% (Science) to 6% (Mathematics)
 - Level 2 ranges 3% (Science) to 6% (Mathematics)
 - Level 3 ranges 7% (Science) to 10% (Mathematics)
 - Level 4 ranges 78% (Mathematics) to 86% (Science)
- Additional reliability coefficient (KR20) 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 over prior years
 - Indicating Level 1 for Level of Independence but a correct answer ranges 0.28% (grade 4 Reading) to 1.29% (grade 9 Reading)
 - Indicating Levels 2–4 for Level of Independence but not providing a response ranges 0.02% (grade 8 Science) to 0.69% (grade 3 Writing)
- Range of scores across students – examining the number of students at the ceiling and the floor.
 - The most students hit the ceiling in grade 8 Science (23 students obtain the maximum possible score)
 - The most students obtain the lowest possible score (the floor) for grade 5 Writing (30 students)
- Matched data comparing teacher responses to online survey regarding teacher's perceived level of student performance, and actual scored performance level using weighted kappa ranging from 0.76 grade 5 Science to 0.94 grade 7 Mathematics.
- Response modes analysis (based on mean reported)
 - Assessment activities
 - Most common: Verbal Response
 - Least common: Communication Device
 - Classroom interactions
 - Most common: Verbal Response
 - Least common: Other
- Average Level of Independence related to Proficiency Level
 - Proficiency level of *Novice* only contains average Level of Independence of 3.5 to 4.0 for Reading, Writing, and Science
 - Combined Proficiency level of *Developing* and *Novice* only contains average Level of Independence of 3.0 to 4.0 for all content areas
 - Average Level of Independence equal to 1.0 to 1.4 always scores as *Inconclusive* for all content areas

Longitudinal Analyses (Part 10)

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

- Changes in item statistics
 - *P*-values
 - High values
 - 2008–09 ranged from 0.76 grade 10 Reading to 0.89 grade 5 Science
 - 2007–08 ranged from 0.70 grade 10 Reading to 0.91 grade 4 Mathematics
 - 2006–07 Mathematics ranged from 0.72 grade 9 to 0.90 grade 4
 - Mean values
 - 2008–09 ranged from 0.45 grade 10 Mathematics to 0.70 grade 8 Science
 - 2007–08 ranged from 0.44 grade 10 Mathematics to 0.71 grade 8 Science
 - 2006–07 Mathematics ranged from 0.41 grade 10 to 0.67 grade 3
 - Low values
 - 2008–09 ranged from 0.09 grade 10 Mathematics to 0.41 grade 5 Science
 - 2007–08 ranged from 0.07 grade 10 Mathematics to 0.42 grade 5 Science
 - 2006–07 Mathematics ranged from 0.08 grade 10 to 0.39 grade 3
 - Point Biserial values
 - High values
 - 2008–09 ranged from 0.68 grade 10 Reading to 0.88 grade 8 Writing
 - 2007–08 ranged from 0.68 grade 4 Reading to 0.86 grade 7 Writing
 - 2006–07 Mathematics ranged from 0.74 grade 7 to 0.81 grade 9
 - Mean values
 - 2008–09 ranged from 0.52 grade 10 Mathematics to 0.65 grade 3 Mathematics
 - 2007–08 ranged from 0.49 grade 10 Mathematics to 0.64 grade 6 Mathematics
 - 2006–07 Mathematics ranged from 0.52 grade 10 to 0.63 grade 4
 - Low values
 - 2008–09 ranged from 0.14 grade 10 Mathematics to 0.38 grade 5 Mathematics
 - 2007–08 ranged from 0.09 grade 10 Mathematics to 0.42 grade 5 Science
 - 2006–07 Mathematics ranged from 0.12 grade 10 to 0.36 grade 3

- Impact Data over time
 - *Inconclusive*
 - 2008–09 ranged from 7% grade 4 Mathematics to 18% grade 8 Writing
 - 2007–08 ranged from 6% grade 4 Mathematics to 17% grade 8 Reading
 - 2006–07 Mathematics ranged from 6% grade 3 to 18% grade 10
 - *Exploring*
 - 2008–09 ranged from 14% grade 6 Mathematics to 30% grade 8 Reading
 - 2007–08 ranged from 12% grade 5 Mathematics to 28% grade 10 Reading
 - 2006–07 Mathematics ranged from 15% grade 5 to 29% grade 8
 - *Emerging*
 - 2008–09 ranged from 17% grade 5 Mathematics to 38% grade 10 Writing
 - 2007–08 ranged from 17% grade 8 Science to 38% grade 10 Mathematics
 - 2006–07 Mathematics ranged from 23% grade 5 to 36% grade 10
 - *Developing*
 - 2008–09 ranged from 15% grade 10 Science to 43% grade 5 Mathematics
 - 2007–08 ranged from 17% grade 10 Mathematics to 38% grade 5 Mathematics
 - 2006–07 Mathematics ranged from 16% grade 10 to 42% grade 5
 - *Novice*
 - 2008–09 ranged from 3% grade 3 Writing to 30% grade 8 Science
 - 2007–08 ranged from 3% grade 3 Writing to 33% grade 8 Science
 - 2006–07 Mathematics ranged from 4% grade 10 to 26% grade 3
 - *Developing and Novice combined*
 - 2008–09 ranged from 26% grade 10 Mathematics to 55% grade 5 Mathematics
 - 2007–08 ranged from 22% grade 10 Mathematics to 53% grade 8 Science
 - 2006–07 Mathematics ranged from 20% grade 10 to 53% grade 3

References

- Almond, P., & Case, B. (2004). *Alternate assessments for students with significant cognitive disabilities*. Harcourt. Retrieved [January 31, 2008] from the World Wide Web: <http://harcourtassessment.com/hai/Images/pdf/assessmentReports/AlternateAssessments-Final.pdf>
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, D.C.: American Educational Research Association.
- Barton, K. (2007). Validity and accommodations: The journey toward accessible assessments. In C. Cahalan Laitusis & L. Cook (Eds). *Large-scale assessment and accommodations: What works?*, (pp.81–94). Arlington, VA: Council for Exceptional Children.
- Colorado Department of Education (2008). *Examiners manual spring 2009*. CTB/McGraw-Hill. Retrieved [September 21, 2009] from the World Wide Web: http://www.cde.state.co.us/cdeassess/documents/csapa/2009/0000_CSAPA-Examiner_Manual%202009.pdf
- Colorado Department of Education (2009a). *CSAPA/Eligibility*. Retrieved [September 21, 2009] from the World Wide Web: <http://www.cde.state.co.us/cdesped/CSAPAEligibility.asp>
- Colorado Department of Education (2009b). *Parent Brochure Colorado Student Assessment Program Alternate (CSAPA)*. Retrieved [September 21, 2009] from the World Wide Web: <http://www.cde.state.co.us/cdeassess/documents/csapa/2009/CSAPAParentbrochure%20final.pdf>
- Crocker, L. & Algina, J. (1986). *Introduction to classical and modern test theory*. New York: Harcourt Brace Jovanovich College Publishers.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- CTB/McGraw-Hill (2004). *Guidelines to Inclusive Test Administration*. CTB/McGraw-Hill. http://www.ctb.com/media/articles/pdfs/general/guidelines_inclusive.pdf
- CTB/McGraw-Hill (2007). *Standard setting technical report 2007 for grades 3–10 mathematics and grade 10 science*. Monterey, CA: Author.
- CTB/McGraw-Hill (2008). *Standard setting technical report 2008 for grades 3–10 reading, grades 3–10 writing, and grades 5, 8, and 10 science*. Monterey, CA: Author.
- Ebel, R. L. (1965). *Measuring educational achievement*. Englewood Cliffs, NJ: Prentice-Hall.
- Gulliksen, H. (1950). *Theory of mental tests*. New York: Wiley.
- Jaeger, R. M. (1995). Setting performance standards through two-stage judgmental policy capturing. *Applied Measurement in Education*, 8, 15–40.

- Linn, R. L. (2008). Educational accountability systems. In K. E. Ryan & L. A. Shepard (Eds.) *The Future of Test-Based Educational Accountability*, (pp. 3–24). New York: Routledge.
- Livingston, S. A., & Lewis, C. (1995). Estimating the consistency and accuracy of classifications based on test scores. *Journal of Educational Measurement*, 32, 179–197.
- Livingston, S. A., & Zieky, M. J. (1982). *Passing scores*. Princeton, NJ: Educational Testing Service.
- Mehrens, W. A., & Lehmann, I. J. (1991). *Measurement and Evaluation in Education and Psychology*, 3rd ed. New York: Holt, Rinehart, and Winston.
- Schmeiser, C. B., & Welch, C. J. (2006). Test development. In R. L. Brennan (Ed.) *Educational Measurement 4th ed.*, (pp. 307–353). Westport, CT: Praeger.
- Thompson, S. J., Thurlow, M. L., Johnstone, C. J., & Altman, J. R. (2005). *2005 State special education outcomes: Steps forward in a decade of change*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved [January 31, 2008], from the World Wide Web: <http://cehd.umn.edu/NCEO/OnlinePubs/2005StateReport.pdf>
- United States Department of Education (2004). *Individuals with disabilities education improvement act of 2004*. USDOE. Retrieved [September 9, 2008] from the World Wide Web: <http://idea.ed.gov/download/statute.html>
- United States Department of Education (2007). *Standards and Assessments Peer Review Guidance: Information and Examples for Meeting Requirements of the No Child Left Behind Act of 2001*. U.S. Department of Education, Office of Elementary and Secondary Education. <http://www.ed.gov/policy/elsec/guid/saaprguidance.pdf>

Tables 1–78

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			

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	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		
	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			

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	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	

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	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	7	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	

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	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	

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	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	

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	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	-	105
	4	35	35	-	105
	5	35	35	-	105
	6	35	35	-	105
	7	35	35	-	105
	8	35	35	-	105
	9	34	34	-	102
	10	34	34	-	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 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	692	100%	60.54	26.14	1	21	0.93	6.71
		Female	228	32.95%	62.82	24.20	0	5	0.92	6.80
		Male	461	66.62%	59.59	26.94	1	16	0.94	6.66
		African American	67	9.68%	57.57	27.82	0	3	0.94	6.54
		Asian/ Pacific Islander/American Indian/Alaskan Native	24	3.47%	61.67	20.02	0	1	0.88	6.91
		Hispanic	247	35.69%	57.17	25.15	0	6	0.93	6.89
		White (not Hispanic)	351	50.72%	63.63	26.49	1	11	0.94	6.59
		Missing	3	0.43%	-	-	-	-	-	-
	4	Total	644	100%	60.72	26.58	0	25	0.94	6.74
		Female	237	36.80%	59.40	29.37	0	17	0.95	6.57
		Male	405	62.89%	61.48	24.75	0	8	0.92	6.84
		African American	55	8.54%	62.98	24.20	0	0	0.92	7.01
		Asian/ Pacific Islander/American Indian/Alaskan Native	22	3.42%	61.68	30.82	0	1	0.96	6.33
		Hispanic	223	34.63%	60.26	26.94	0	15	0.94	6.76
		White (not Hispanic)	343	53.26%	60.49	26.48	0	9	0.94	6.72
		Missing	1	0.16%	-	-	-	-	-	-

Table 6
Reading Descriptive Statistics by Gender and 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	612	100%	63.22	27.18	4	23	0.94	6.70
		Female	243	39.71%	60.91	27.55	1	9	0.94	6.79
		Male	367	59.97%	64.69	26.91	3	14	0.94	6.65
		African American	50	8.17%	61.66	27.46	0	1	0.94	6.76
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	3.76%	62.39	23.14	0	1	0.90	7.24
		Hispanic	184	30.07%	62.08	27.75	1	9	0.94	6.72
		White (not Hispanic)	353	57.68%	64.03	27.21	3	12	0.94	6.66
		Missing	2	0.33%	-	-	-	-	-	-
	6	Total	547	100%	64.54	26.59	5	19	0.94	6.52
		Female	208	38.03%	62.35	27.18	1	9	0.94	6.50
		Male	337	61.61%	65.74	26.18	4	10	0.94	6.54
		African American	55	10.06%	64.16	26.75	1	3	0.94	6.60
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	4.21%	57.48	33.69	0	1	0.97	6.14
		Hispanic	183	33.46%	62.19	27.46	3	11	0.94	6.46
		White (not Hispanic)	284	51.92%	66.52	25.26	1	4	0.93	6.58
		Missing	2	0.37%	-	-	-	-	-	-

Table 6
Reading Descriptive Statistics by Gender and 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	532	100%	56.28	24.86	0	24	0.92	6.93
		Female	209	39.29%	55.61	25.86	0	11	0.93	6.79
		Male	319	59.96%	56.93	24.11	0	13	0.92	7.02
		African American	54	10.15%	53.24	28.66	0	4	0.95	6.65
		Asian/ Pacific Islander/American Indian/Alaskan Native	20	3.76%	55.90	19.56	0	0	0.86	7.25
		Hispanic	157	29.51%	55.93	22.79	0	5	0.90	7.18
		White (not Hispanic)	297	55.83%	57.27	25.44	0	15	0.93	6.81
		Missing	4	0.75%	-	-	-	-	-	-
	8	Total	544	100%	54.03	26.31	0	19	0.93	7.14
		Female	197	36.21%	54.83	25.66	0	7	0.92	7.17
		Male	345	63.42%	53.44	26.69	0	12	0.93	7.12
		African American	42	7.72%	56.38	25.27	0	2	0.92	7.23
		Asian/ Pacific Islander/American Indian/Alaskan Native	19	3.49%	50.74	23.40	0	0	0.91	7.17
		Hispanic	174	31.99%	52.04	26.43	0	7	0.93	7.19
		White (not Hispanic)	307	56.43%	54.89	26.58	0	10	0.93	7.08
Missing	2	0.37%	-	-	-	-	-	-		

Table 6
Reading Descriptive Statistics by Gender and 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	497	100%	54.39	27.07	5	18	0.94	6.82
		Female	191	38.43%	54.71	28.13	1	9	0.94	6.71
		Male	305	61.37%	54.22	26.47	4	9	0.93	6.89
		African American	48	9.66%	62.15	25.09	0	1	0.93	6.63
		Asian/ Pacific Islander/American Indian/Alaskan Native	17	3.42%	44.18	26.69	0	2	0.93	7.05
		Hispanic	159	31.99%	55.85	26.42	2	5	0.93	6.85
		White (not Hispanic)	272	54.73%	52.83	27.60	3	10	0.94	6.83
		Missing	1	0.20%	-	-	-	-	-	-
		Total	533	100%	52.53	24.85	0	13	0.92	7.18
	10	Female	212	39.78%	52.82	24.67	0	7	0.91	7.22
		Male	320	60.04%	52.29	25.03	0	6	0.92	7.16
		African American	43	8.07%	61.19	22.64	0	0	0.90	7.22
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	4.32%	45.78	28.38	0	2	0.94	6.85
		Hispanic	151	28.33%	52.64	24.48	0	2	0.91	7.29
		White (not Hispanic)	315	59.10%	51.75	24.90	0	9	0.92	7.16
		Missing	1	0.19%	-	-	-	-	-	-

Table 7
Writing Descriptive Statistics by Gender and 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	686	100%	58.34	27.93	1	24	0.93	7.46
		Female	229	33.38%	58.58	27.42	0	7	0.93	7.44
		Male	454	66.18%	58.30	28.19	1	17	0.93	7.46
		African American	67	9.77%	57.84	29.45	0	4	0.94	7.18
		Asian/ Pacific Islander/American Indian/Alaskan Native	24	3.50%	57.79	24.33	0	1	0.91	7.35
		Hispanic	245	35.71%	56.36	27.37	1	7	0.92	7.59
		White (not Hispanic)	347	50.58%	59.98	28.23	0	12	0.93	7.40
		Missing	3	0.44%	-	-	-	-	-	-
	4	Total	638	100%	61.13	28.85	0	25	0.93	7.58
		Female	236	36.99%	58.52	31.68	0	16	0.94	7.47
		Male	400	62.70%	62.69	26.90	0	9	0.92	7.65
		African American	54	8.46%	65.80	24.69	0	0	0.91	7.50
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	3.61%	65.13	32.81	0	1	0.95	7.06
		Hispanic	221	34.64%	61.45	28.94	0	14	0.93	7.63
		White (not Hispanic)	339	53.14%	59.81	29.11	0	10	0.93	7.60
		Missing	1	0.16%	-	-	-	-	-	-

Table 7
Writing Descriptive Statistics by Gender and 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	605	100%	64.20	27.91	0	30	0.93	7.23
		Female	239	39.50%	62.67	28.86	0	11	0.94	7.33
		Male	364	60.17%	65.10	27.29	0	19	0.93	7.17
		African American	51	8.43%	63.80	26.23	0	1	0.92	7.36
		Asian/ Pacific Islander/American Indian/Alaskan Native	24	3.97%	68.00	22.34	0	1	0.90	6.94
		Hispanic	181	29.92%	62.91	29.29	0	13	0.94	7.27
		White (not Hispanic)	347	57.36%	64.55	27.86	0	15	0.93	7.21
		Missing	2	0.33%	-	-	-	-	-	-
	6	Total	549	100%	64.44	28.51	0	22	0.93	7.31
		Female	211	38.43%	62.82	28.89	0	10	0.94	7.33
		Male	336	61.20%	65.35	28.32	0	12	0.93	7.30
		African American	54	9.84%	62.22	30.46	0	3	0.94	7.48
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	4.19%	52.43	35.65	0	2	0.96	7.32
		Hispanic	185	33.70%	64.98	28.28	0	12	0.94	7.21
		White (not Hispanic)	285	51.91%	65.35	27.62	0	5	0.93	7.32
Missing	2	0.36%	-	-	-	-	-	-		

Table 7
Writing Descriptive Statistics by Gender and 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	533	100%	64.58	29.31	1	23	0.94	7.35
		Female	208	39.02%	63.49	30.29	0	10	0.94	7.40
		Male	321	60.23%	65.46	28.62	1	13	0.93	7.31
		African American	53	9.94%	62.81	31.93	0	3	0.95	7.26
		Asian/ Pacific Islander/American Indian/Alaskan Native	22	4.13%	65.50	23.29	0	0	0.88	7.95
		Hispanic	157	29.46%	65.13	26.79	0	4	0.92	7.46
		White (not Hispanic)	297	55.72%	64.72	30.53	1	16	0.94	7.26
		Missing	4	0.75%	-	-	-	-	-	-
	8	Total	542	100%	59.63	29.38	0	24	0.93	7.58
		Female	195	35.98%	61.58	29.54	0	8	0.94	7.50
		Male	345	63.65%	58.42	29.32	0	16	0.93	7.62
		African American	42	7.75%	64.67	29.63	0	2	0.94	7.31
		Asian/ Pacific Islander/American Indian/Alaskan Native	19	3.51%	56.79	27.68	0	0	0.91	8.14
		Hispanic	172	31.73%	58.37	29.73	0	9	0.93	7.63
		White (not Hispanic)	307	56.64%	59.71	29.36	0	13	0.93	7.56
		Missing	2	0.37%	-	-	-	-	-	-

Table 7
Writing Descriptive Statistics by Gender and 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	498	100%	60.19	27.87	0	20	0.93	7.40
		Female	190	38.15%	59.46	28.91	0	10	0.93	7.41
		Male	307	61.65%	60.69	27.27	0	10	0.93	7.40
		African American	48	9.64%	67.81	26.79	0	2	0.94	6.77
		Asian/ Pacific Islander/American Indian/Alaskan Native	17	3.41%	50.24	32.94	0	2	0.95	7.64
		Hispanic	160	32.13%	59.79	27.09	0	7	0.93	7.40
		White (not Hispanic)	272	54.62%	59.75	28.06	0	9	0.93	7.49
		Missing	1	0.20%	-	-	-	-	-	-
		Total	533	100%	62.23	27.60	1	17	0.93	7.49
	10	Female	213	39.96%	62.91	27.68	0	7	0.93	7.52
		Male	319	59.85%	61.74	27.62	1	10	0.93	7.48
		African American	42	7.88%	72.74	20.25	0	1	0.87	7.26
		Asian/ Pacific Islander/American Indian/Alaskan Native	22	4.13%	53.91	32.41	0	2	0.95	7.52
		Hispanic	153	28.71%	61.41	27.09	1	2	0.92	7.72
		White (not Hispanic)	315	59.10%	61.77	28.12	0	12	0.93	7.42
		Missing	1	0.19%	-	-	-	-	-	-

Table 8
Mathematics Descriptive Statistics by Gender and 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	660	100%	81.33	34.79	5	19	0.95	7.76
		Female	218	33.03%	81.45	34.34	1	8	0.95	7.66
		Male	439	66.52%	81.44	35.02	4	11	0.95	7.80
		African American	67	10.15%	80.10	37.78	1	3	0.96	7.66
		Asian/ Pacific Islander/American Indian/Alaskan Native	22	3.33%	85.18	30.31	0	1	0.94	7.56
		Hispanic	233	35.30%	78.56	34.81	2	5	0.95	7.99
		White (not Hispanic)	335	50.76%	83.48	34.38	2	10	0.95	7.61
		Missing	3	0.46%	-	-	-	-	-	-
		4	Total	615	100%	82.98	35.91	3	22	0.95
	Female		234	38.05%	78.74	38.70	0	14	0.96	8.06
	Male		380	61.79%	85.51	33.88	3	8	0.94	8.17
	African American		54	8.78%	85.11	28.48	0	0	0.91	8.55
	Asian/ Pacific Islander/American Indian/Alaskan Native		22	3.58%	84.46	39.47	0	1	0.96	7.90
	Hispanic		212	34.47%	83.85	37.07	0	13	0.95	8.03
	White (not Hispanic)	326	53.01%	81.87	36.12	3	8	0.95	8.12	
Missing	1	0.16%	-	-	-	-	-	-		

Table 8
Mathematics Descriptive Statistics by Gender and 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	588	100%	104.89	45.69	0	21	0.95	9.89
		Female	232	39.46%	101.07	45.58	0	7	0.95	10.07
		Male	354	60.20%	107.28	45.76	0	14	0.95	9.77
		African American	51	8.67%	103.59	40.54	0	1	0.94	10.09
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	3.91%	112.09	35.94	0	1	0.92	10.30
		Hispanic	173	29.42%	103.91	49.29	0	8	0.96	9.66
		White (not Hispanic)	339	57.65%	104.98	45.33	0	11	0.95	9.94
		Missing	2	0.34%	-	-	-	-	-	-
	6	Total	552	100%	81.96	36.76	2	16	0.94	8.80
		Female	208	37.68%	79.49	35.86	0	8	0.94	8.88
		Male	342	61.96%	83.21	37.23	2	8	0.94	8.76
		African American	56	10.15%	78.48	36.65	0	2	0.94	9.04
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	4.17%	68.13	42.58	0	1	0.96	8.84
		Hispanic	185	33.51%	82.87	38.20	0	9	0.95	8.71
		White (not Hispanic)	286	51.81%	82.86	35.19	2	4	0.94	8.80
Missing	2	0.36%	-	-	-	-	-	-		

Table 8
Mathematics Descriptive Statistics by Gender and 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	527	100%	73.16	35.38	1	26	0.94	8.75
		Female	212	40.23%	69.81	36.11	1	12	0.94	8.77
		Male	311	59.01%	75.84	34.54	0	14	0.94	8.73
		African American	55	10.44%	70.49	37.54	0	4	0.95	8.68
		Asian/ Pacific Islander/American Indian/Alaskan Native	24	4.55%	79.13	29.51	0	0	0.91	8.97
		Hispanic	156	29.60%	76.22	33.19	0	4	0.93	8.80
		White (not Hispanic)	288	54.65%	71.94	36.37	1	18	0.94	8.70
		Missing	4	0.76%	-	-	-	-	-	-
		8	Total	542	100%	78.28	39.66	0	19	0.95
	Female		204	37.64%	79.07	38.61	0	6	0.94	9.43
	Male		337	62.18%	77.79	40.38	0	13	0.95	9.14
	African American		43	7.93%	80.19	35.39	0	2	0.93	9.60
	Asian/ Pacific Islander/American Indian/Alaskan Native		19	3.51%	74.79	37.00	0	0	0.94	9.32
	Hispanic		169	31.18%	77.70	41.21	0	8	0.95	9.16
	White (not Hispanic)	310	57.20%	78.54	39.73	0	9	0.95	9.23	
Missing	1	0.19%	-	-	-	-	-	-		

Table 8
Mathematics Descriptive Statistics by Gender and 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	505	100%	71.98	35.41	0	20	0.93	9.33
		Female	198	39.21%	70.71	36.07	0	11	0.93	9.32
		Male	306	60.59%	72.88	35.04	0	9	0.93	9.34
		African American	47	9.31%	80.21	31.22	0	1	0.91	9.11
		Asian/ Pacific Islander/American Indian/Alaskan Native	16	3.17%	56.50	42.86	0	2	0.96	8.94
		Hispanic	160	31.68%	74.17	36.66	0	6	0.93	9.35
		White (not Hispanic)	281	55.64%	70.32	34.68	0	11	0.93	9.35
		Missing	1	0.20%	-	-	-	-	-	-
	10	Total	541	100%	76.23	36.83	0	14	0.93	9.55
		Female	218	40.30%	75.89	34.64	0	8	0.92	9.62
		Male	322	59.52%	76.36	38.30	0	6	0.94	9.50
		African American	43	7.95%	84.07	27.35	0	1	0.87	9.78
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	4.25%	63.39	46.82	0	2	0.97	8.66
		Hispanic	153	28.28%	80.54	36.24	0	2	0.93	9.47
White (not Hispanic)	321	59.34%	73.94	37.13	0	9	0.93	9.61		
Missing	1	0.19%	-	-	-	-	-	-		

Table 9
Science Descriptive Statistics by Gender and 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	591	100%	67.69	24.27	18	19	0.94	5.96
		Female	236	39.93%	64.94	24.82	4	8	0.94	6.14
		Male	353	59.73%	69.48	23.81	14	11	0.94	5.82
		African American	49	8.29%	68.33	21.31	1	1	0.92	6.05
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	3.89%	70.70	20.98	1	1	0.90	6.50
		Hispanic	177	29.95%	66.98	26.03	7	7	0.95	5.85
		White (not Hispanic)	340	57.53%	67.71	24.06	9	10	0.94	5.97
		Missing	2	0.34%	-	-	-	-	-	-
	8	Total	545	100%	69.94	26.23	23	12	0.95	6.03
		Female	208	38.17%	70.69	26.07	5	6	0.95	5.89
		Male	336	61.65%	69.46	26.39	18	6	0.95	6.10
		African American	41	7.52%	72.12	24.99	2	1	0.95	5.80
		Asian/ Pacific Islander/American Indian/Alaskan Native	19	3.49%	65.05	24.61	1	0	0.93	6.70
		Hispanic	170	31.19%	68.64	27.67	4	4	0.95	6.01
		White (not Hispanic)	314	57.62%	70.65	25.77	16	7	0.95	6.02
		Missing	1	0.18%	-	-	-	-	-	-

Table 9
Science Descriptive Statistics by Gender and 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	544	100%	62.34	26.75	3	18	0.92	7.33
		Female	219	40.26%	62.47	25.30	0	8	0.91	7.44
		Male	324	59.56%	62.20	27.74	3	10	0.93	7.26
		African American	45	8.27%	68.44	20.41	0	1	0.87	7.24
		Asian/ Pacific Islander/American Indian/Alaskan Native	23	4.23%	52.65	33.29	1	2	0.96	6.88
		Hispanic	155	28.49%	64.15	26.07	1	3	0.92	7.32
		White (not Hispanic)	320	58.82%	61.25	27.20	1	12	0.93	7.36
		Missing	1	0.18%	-	-	-	-	-	-

Table 10
Reading 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				
RD	3	Language Proficiency	Not Applicable	580	83.82%	61.38	26.52	1	20	0.94	6.64
			NEP	87	12.57%	57.72	20.29	0	1	0.88	7.16
			LEP	16	2.31%	45.19	32.32	0	0	0.96	6.66
			FEP	5	0.72%	-	-	-	-	-	-
		ELL Program - Bilingual	No	680	98.27%	60.57	26.15	1	21	0.93	6.71
			Yes	8	1.16%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	588	84.97%	61.40	26.41	1	20	0.94	6.65
			Yes	83	11.99%	54.55	23.38	0	1	0.91	7.11
			Monitored Y1	4	0.58%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-
			Choice	12	1.73%	59.42	22.52	0	0	0.90	7.10

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	534	82.92%	61.09	26.76	0	19	0.94	6.73
			NEP	87	13.51%	57.55	25.69	0	6	0.93	6.78
			LEP	14	2.17%	66.14	27.33	0	0	0.94	6.49
			FEP	8	1.24%	-	-	-	-	-	-
		ELL Program - Bilingual	No	639	99.22%	60.81	26.49	0	24	0.94	6.74
			Yes	2	0.31%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	534	82.92%	61.27	26.58	0	18	0.94	6.74
			Yes	88	13.67%	59.81	26.07	0	6	0.93	6.70
			Monitored Y1	3	0.47%	-	-	-	-	-	-
			Monitored Y2	2	0.31%	-	-	-	-	-	-
			Exited Y3+	2	0.31%	-	-	-	-	-	-
			Choice	12	1.86%	52.08	26.76	0	0	0.94	6.82

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	515	84.15%	63.06	27.56	4	21	0.94	6.67
			NEP	75	12.26%	65.01	22.39	0	0	0.90	7.09
			LEP	14	2.29%	60.43	37.63	0	2	0.98	5.72
			FEP	6	0.98%	-	-	-	-	-	-
		ELL Program - Bilingual	No	601	98.20%	63.09	27.18	4	23	0.94	6.71
			Yes	9	1.47%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	524	85.62%	63.18	27.59	4	21	0.94	6.66
			Yes	68	11.11%	61.44	24.42	0	2	0.92	6.98
			Monitored Y1	5	0.82%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	1	0.16%	-	-	-	-	-	-
			Choice	12	1.96%	76.50	23.48	0	0	0.92	6.60

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	474	86.65%	64.44	26.66	3	16	0.94	6.53	
			NEP	49	8.96%	62.82	25.67	0	2	0.94	6.52	
			LEP	9	1.65%	-	-	-	-	-	-	-
			FEP	13	2.38%	81.85	21.05	2	0	0.92	6.07	
		ELL Program - Bilingual	No	542	99.09%	64.42	26.64	5	19	0.94	6.52	
			Yes	1	0.18%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	2	0.37%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	477	87.20%	64.47	26.61	3	16	0.94	6.54	
			Yes	53	9.69%	59.72	26.79	0	3	0.94	6.49	
			Monitored Y1	4	0.73%	-	-	-	-	-	-	-
			Monitored Y2	3	0.55%	-	-	-	-	-	-	-
			Exited Y3+	4	0.73%	-	-	-	-	-	-	-
			Choice	4	0.73%	-	-	-	-	-	-	-

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	464	87.22%	56.42	25.41	0	22	0.93	6.86
			NEP	48	9.02%	53.44	18.87	0	1	0.85	7.40
			LEP	12	2.26%	58.17	27.35	0	1	0.93	7.01
			FEP	7	1.32%	-	-	-	-	-	-
		ELL Program - Bilingual	No	528	99.25%	56.21	24.93	0	24	0.92	6.92
			Yes	2	0.38%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	465	87.41%	56.46	25.40	0	22	0.93	6.86
			Yes	51	9.59%	53.69	21.12	0	2	0.88	7.28
			Monitored Y1	2	0.38%	-	-	-	-	-	-
			Monitored Y2	2	0.38%	-	-	-	-	-	-
			Exited Y3+	3	0.56%	-	-	-	-	-	-
			Choice	7	1.32%	-	-	-	-	-	-

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	463	85.11%	55.14	26.74	0	17	0.93	7.07
			NEP	59	10.85%	49.39	20.09	0	1	0.86	7.62
			LEP	15	2.76%	36.40	28.98	0	1	0.94	6.87
			FEP	6	1.10%	-	-	-	-	-	-
		ELL Program - Bilingual	No	542	99.63%	53.99	26.32	0	19	0.93	7.14
			Yes	1	0.18%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	464	85.29%	55.21	26.74	0	17	0.93	7.07
			Yes	67	12.32%	46.93	22.68	0	2	0.89	7.52
			Monitored Y1	2	0.37%	-	-	-	-	-	-
			Monitored Y2	2	0.37%	-	-	-	-	-	-
			Exited Y3+	2	0.37%	-	-	-	-	-	-
			Choice	6	1.10%	-	-	-	-	-	-

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	427	85.92%	54.87	27.48	4	17	0.94	6.79
			NEP	48	9.66%	49.13	21.10	0	0	0.88	7.30
			LEP	13	2.62%	55.31	33.06	1	1	0.97	6.12
			FEP	7	1.41%	-	-	-	-	-	-
		ELL Program - Bilingual	No	495	99.60%	54.36	27.10	5	18	0.94	6.82
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	427	85.92%	54.87	27.48	4	17	0.94	6.79
			Yes	48	9.66%	53.56	22.77	0	0	0.90	7.04
			Monitored Y1	3	0.60%	-	-	-	-	-	-
			Monitored Y2	1	0.20%	-	-	-	-	-	-
			Exited Y3+	3	0.60%	-	-	-	-	-	-
			Choice	13	2.62%	38.92	25.61	1	1	0.93	6.98

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	468	87.81%	53.74	25.05	0	12	0.92	7.15
			NEP	42	7.88%	40.50	20.84	0	1	0.88	7.36
			LEP	7	1.31%	-	-	-	-	-	-
			FEP	15	2.81%	47.27	22.49	0	0	0.89	7.53
		ELL Program - Bilingual	No	532	99.81%	52.50	24.87	0	13	0.92	7.19
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	468	87.81%	53.74	25.05	0	12	0.92	7.15
			Yes	42	7.88%	40.05	20.56	0	1	0.87	7.41
			Monitored Y1	3	0.56%	-	-	-	-	-	-
			Monitored Y2	5	0.94%	-	-	-	-	-	-
			Exited Y3+	6	1.13%	-	-	-	-	-	-
			Choice	8	1.50%	-	-	-	-	-	-

Table 11
Writing Descriptive Statistics by English Language Proficiency

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
WR	3	Language Proficiency	Not Applicable	575	83.82%	58.83	28.11	0	23	0.93	7.42
			NEP	86	12.54%	58.13	24.98	1	1	0.91	7.57
			LEP	16	2.33%	41.06	33.39	0	0	0.95	7.58
			FEP	5	0.73%	-	-	-	-	-	-
		ELL Program - Bilingual	No	673	98.11%	58.32	27.98	1	24	0.93	7.45
			Yes	9	1.31%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	584	85.13%	58.85	28.01	0	23	0.93	7.43
			Yes	82	11.95%	53.51	27.78	1	1	0.93	7.61
			Monitored Y1	4	0.58%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-
			Choice	11	1.60%	65.82	23.54	0	0	0.89	7.67

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	529	82.92%	61.23	29.12	0	20	0.93	7.58
			NEP	85	13.32%	59.78	27.69	0	5	0.92	7.65
			LEP	14	2.19%	67.57	29.47	0	0	0.94	7.46
			FEP	9	1.41%	-	-	-	-	-	-
		ELL Program - Bilingual	No	633	99.22%	61.25	28.76	0	24	0.93	7.59
			Yes	2	0.31%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	529	82.92%	61.42	28.93	0	19	0.93	7.58
			Yes	86	13.48%	62.31	26.92	0	5	0.92	7.57
			Monitored Y1	3	0.47%	-	-	-	-	-	-
			Monitored Y2	2	0.31%	-	-	-	-	-	-
			Exited Y3+	3	0.47%	-	-	-	-	-	-
			Choice	12	1.88%	51.50	35.02	0	0	0.95	7.48

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	511	84.46%	63.96	28.25	0	26	0.94	7.20
			NEP	72	11.90%	68.04	23.20	0	1	0.90	7.34
			LEP	14	2.31%	52.79	37.21	0	3	0.96	7.30
			FEP	6	0.99%	-	-	-	-	-	-
		ELL Program - Bilingual	No	595	98.35%	64.03	27.87	0	30	0.93	7.24
			Yes	8	1.32%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	519	85.79%	64.08	28.31	0	26	0.94	7.19
			Yes	67	11.07%	63.54	25.79	0	4	0.92	7.49
			Monitored Y1	5	0.83%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	1	0.17%	-	-	-	-	-	-
			Choice	11	1.82%	73.36	24.66	0	0	0.92	7.05

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	474	86.34%	63.87	28.78	0	19	0.94	7.33	
			NEP	51	9.29%	66.84	26.72	0	3	0.93	7.00	
			LEP	9	1.64%	-	-	-	-	-	-	-
			FEP	13	2.37%	78.31	22.29	0	0	0.90	7.11	
		ELL Program - Bilingual	No	544	99.09%	64.25	28.57	0	22	0.93	7.32	
			Yes	1	0.18%	-	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-	-
			Exited Y3+	2	0.36%	-	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-	-
		ELL Program - ESL	No	477	86.89%	64.01	28.75	0	19	0.94	7.32	
			Yes	55	10.02%	64.27	28.28	0	3	0.94	7.13	
			Monitored Y1	4	0.73%	-	-	-	-	-	-	-
			Monitored Y2	3	0.55%	-	-	-	-	-	-	-
			Exited Y3+	4	0.73%	-	-	-	-	-	-	-
			Choice	4	0.73%	-	-	-	-	-	-	-

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	465	87.24%	64.31	29.58	1	21	0.94	7.35
			NEP	48	9.01%	64.21	25.92	0	1	0.91	7.61
			LEP	12	2.25%	69.42	34.62	0	1	0.96	6.50
			FEP	7	1.31%	-	-	-	-	-	-
		ELL Program - Bilingual	No	529	99.25%	64.49	29.39	1	23	0.94	7.35
			Yes	2	0.38%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	466	87.43%	64.39	29.59	1	21	0.94	7.34
			Yes	51	9.57%	64.51	27.44	0	2	0.93	7.45
			Monitored Y1	2	0.38%	-	-	-	-	-	-
			Monitored Y2	2	0.38%	-	-	-	-	-	-
			Exited Y3+	3	0.56%	-	-	-	-	-	-
			Choice	7	1.31%	-	-	-	-	-	-

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	463	85.42%	60.09	29.51	0	21	0.94	7.52
			NEP	57	10.52%	60.44	25.86	0	2	0.91	7.86
			LEP	15	2.77%	38.07	31.77	0	1	0.94	7.87
			FEP	6	1.11%	-	-	-	-	-	-
		ELL Program - Bilingual	No	540	99.63%	59.57	29.41	0	24	0.93	7.58
			Yes	1	0.19%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	464	85.61%	60.15	29.51	0	21	0.94	7.52
			Yes	65	11.99%	56.17	28.44	0	3	0.92	7.87
			Monitored Y1	2	0.37%	-	-	-	-	-	-
			Monitored Y2	2	0.37%	-	-	-	-	-	-
			Exited Y3+	2	0.37%	-	-	-	-	-	-
			Choice	6	1.11%	-	-	-	-	-	-

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	427	85.74%	60.90	28.20	0	19	0.93	7.34
			NEP	49	9.84%	54.84	23.58	0	0	0.88	8.06
			LEP	13	2.61%	54.08	30.67	0	1	0.95	7.10
			FEP	7	1.41%	-	-	-	-	-	-
		ELL Program - Bilingual	No	496	99.60%	60.18	27.90	0	20	0.93	7.40
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	427	85.74%	60.90	28.20	0	19	0.93	7.34
			Yes	49	9.84%	57.53	24.09	0	0	0.90	7.69
			Monitored Y1	3	0.60%	-	-	-	-	-	-
			Monitored Y2	1	0.20%	-	-	-	-	-	-
			Exited Y3+	3	0.60%	-	-	-	-	-	-
			Choice	13	2.61%	43.92	26.21	0	1	0.90	8.31

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	469	87.99%	63.15	27.69	1	16	0.93	7.44
			NEP	41	7.69%	51.61	24.39	0	1	0.89	7.96
			LEP	7	1.31%	-	-	-	-	-	-
			FEP	15	2.81%	62.20	30.26	0	0	0.94	7.14
		ELL Program - Bilingual	No	532	99.81%	62.21	27.62	1	17	0.93	7.49
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	469	87.99%	63.15	27.69	1	16	0.93	7.44
			Yes	43	8.07%	51.33	24.76	0	1	0.89	8.10
			Monitored Y1	3	0.56%	-	-	-	-	-	-
			Monitored Y2	5	0.94%	-	-	-	-	-	-
			Exited Y3+	6	1.13%	-	-	-	-	-	-
			Choice	6	1.13%	-	-	-	-	-	-

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	554	83.94%	81.56	35.30	5	18	0.95	7.68
			NEP	82	12.42%	83.22	28.41	0	1	0.92	8.16
			LEP	15	2.27%	62.33	43.24	0	0	0.97	7.75
			FEP	5	0.76%	-	-	-	-	-	-
		ELL Program - Bilingual	No	650	98.49%	81.37	34.84	5	19	0.95	7.74
			Yes	6	0.91%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	560	84.85%	81.57	35.20	5	18	0.95	7.70
			Yes	80	12.12%	77.64	32.32	0	1	0.94	8.22
			Monitored Y1	4	0.61%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	1	0.15%	-	-	-	-	-	-
			Choice	11	1.67%	95.73	27.96	0	0	0.94	7.04

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	82.93%	82.96	35.92	3	17	0.95	8.09
			NEP	83	13.50%	83.58	36.22	0	5	0.95	8.24
			LEP	13	2.11%	83.77	39.75	0	0	0.96	8.42
			FEP	8	1.30%	-	-	-	-	-	-
		ELL Program - Bilingual	No	610	99.19%	83.08	35.75	3	21	0.95	8.14
			Yes	2	0.33%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	510	82.93%	83.35	35.67	3	16	0.95	8.10
			Yes	83	13.50%	85.48	34.86	0	5	0.94	8.29
			Monitored Y1	3	0.49%	-	-	-	-	-	-
			Monitored Y2	2	0.33%	-	-	-	-	-	-
			Exited Y3+	2	0.33%	-	-	-	-	-	-
			Choice	12	1.95%	68.25	45.63	0	0	0.97	7.81

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	497	84.52%	103.86	45.86	0	17	0.95	9.91
			NEP	69	11.74%	115.38	39.38	0	1	0.94	9.88
			LEP	15	2.55%	94.33	64.15	0	3	0.98	8.74
			FEP	5	0.85%	-	-	-	-	-	-
		ELL Program - Bilingual	No	580	98.64%	104.85	45.86	0	21	0.95	9.88
			Yes	6	1.02%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	503	85.54%	103.84	45.73	0	17	0.95	9.92
			Yes	68	11.57%	111.46	46.67	0	4	0.96	9.60
			Monitored Y1	5	0.85%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	10	1.70%	118.40	40.85	0	0	0.94	10.27

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	477	86.41%	81.03	36.81	2	12	0.94	8.82
			NEP	50	9.06%	87.32	36.09	0	3	0.94	8.52
			LEP	11	1.99%	70.27	39.26	0	1	0.94	9.45
			FEP	12	2.17%	100.17	28.71	0	0	0.92	8.28
		ELL Program - Bilingual	No	547	99.09%	81.76	36.82	2	16	0.94	8.80
			Yes	1	0.18%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	2	0.36%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	480	86.96%	81.08	36.71	2	12	0.94	8.82
			Yes	55	9.96%	82.58	38.33	0	4	0.95	8.65
			Monitored Y1	4	0.73%	-	-	-	-	-	-
			Monitored Y2	2	0.36%	-	-	-	-	-	-
			Exited Y3+	4	0.73%	-	-	-	-	-	-
			Choice	5	0.91%	-	-	-	-	-	-

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	462	87.67%	72.74	35.62	1	24	0.94	8.73
			NEP	45	8.54%	74.82	30.89	0	1	0.92	8.92
			LEP	13	2.47%	80.23	39.04	0	1	0.95	8.77
			FEP	6	1.14%	-	-	-	-	-	-
		ELL Program - Bilingual	No	523	99.24%	73.12	35.36	1	26	0.94	8.75
			Yes	2	0.38%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	463	87.86%	72.92	35.68	1	24	0.94	8.73
			Yes	49	9.30%	74.61	33.21	0	2	0.93	8.91
			Monitored Y1	1	0.19%	-	-	-	-	-	-
			Monitored Y2	2	0.38%	-	-	-	-	-	-
			Exited Y3+	3	0.57%	-	-	-	-	-	-
			Choice	7	1.33%	-	-	-	-	-	-

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	468	86.35%	79.24	39.72	0	16	0.95	9.24
			NEP	55	10.15%	77.16	35.78	0	2	0.93	9.32
			LEP	15	2.77%	52.93	44.61	0	1	0.96	8.99
			FEP	3	0.55%	-	-	-	-	-	-
		ELL Program - Bilingual	No	541	99.82%	78.32	39.68	0	19	0.95	9.25
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	468	86.35%	79.24	39.72	0	16	0.95	9.24
			Yes	64	11.81%	73.41	38.70	0	3	0.94	9.30
			Monitored Y1	2	0.37%	-	-	-	-	-	-
			Monitored Y2	1	0.19%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	6	1.11%	-	-	-	-	-	-

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	437	86.54%	72.37	35.53	0	18	0.93	9.31
			NEP	46	9.11%	69.13	32.99	0	1	0.92	9.60
			LEP	13	2.57%	66.31	41.23	0	1	0.95	9.13
			FEP	7	1.39%	-	-	-	-	-	-
		ELL Program - Bilingual	No	503	99.60%	72.00	35.46	0	20	0.93	9.33
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	437	86.54%	72.37	35.53	0	18	0.93	9.31
			Yes	49	9.70%	71.82	33.27	0	1	0.92	9.55
			Monitored Y1	3	0.59%	-	-	-	-	-	-
			Monitored Y2	1	0.20%	-	-	-	-	-	-
			Exited Y3+	3	0.59%	-	-	-	-	-	-
			Choice	10	1.98%	52.30	38.23	0	1	0.94	9.29

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	477	88.17%	76.91	36.98	0	13	0.93	9.56
			NEP	41	7.58%	67.34	35.75	0	1	0.93	9.39
			LEP	7	1.29%	-	-	-	-	-	-
			FEP	15	2.77%	75.47	38.06	0	0	0.94	9.60
		ELL Program - Bilingual	No	540	99.82%	76.17	36.84	0	14	0.93	9.55
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	477	88.17%	76.91	36.98	0	13	0.93	9.56
			Yes	42	7.76%	67.64	35.92	0	1	0.93	9.48
			Monitored Y1	2	0.37%	-	-	-	-	-	-
			Monitored Y2	5	0.92%	-	-	-	-	-	-
			Exited Y3+	7	1.29%	-	-	-	-	-	-
			Choice	7	1.29%	-	-	-	-	-	-

Table 13
Science Descriptive Statistics by English Language Proficiency

Content	Grade	Variable	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
						Mean	SD				
SC	5	Language Proficiency	Not Applicable	498	84.26%	67.55	24.43	15	16	0.94	5.95
			NEP	71	12.01%	71.14	19.46	2	1	0.90	6.12
			LEP	14	2.37%	57.36	36.66	1	2	0.98	5.48
			FEP	6	1.02%	-	-	-	-	-	-
		ELL Program - Bilingual	No	584	98.82%	67.72	24.33	18	19	0.94	5.95
			Yes	5	0.85%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	503	85.11%	67.49	24.40	15	16	0.94	5.95
			Yes	69	11.68%	68.00	24.40	3	3	0.94	6.02
			Monitored Y1	5	0.85%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	1	0.17%	-	-	-	-	-	-
			Choice	11	1.86%	77.91	15.48	0	0	0.86	5.72

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	468	85.87%	70.61	26.24	22	10	0.95	5.96
			NEP	58	10.64%	69.40	23.86	1	1	0.93	6.17
			LEP	15	2.75%	49.87	30.66	0	1	0.95	7.13
			FEP	3	0.55%	-	-	-	-	-	-
		ELL Program - Bilingual	No	543	99.63%	69.90	26.24	22	12	0.95	6.03
			Yes	1	0.18%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
			ELL Program - ESL	No	469	86.06%	70.67	26.25	23	10	0.95
		Yes		66	12.11%	64.67	26.94	0	2	0.94	6.45
		Monitored Y1		2	0.37%	-	-	-	-	-	-
		Monitored Y2		1	0.18%	-	-	-	-	-	-
		Exited Y3+		0	0%	-	-	-	-	-	-
		Choice		6	1.10%	-	-	-	-	-	-

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	480	88.24%	63.06	26.84	3	16	0.93	7.30
			NEP	41	7.54%	51.59	26.07	0	2	0.91	7.66
			LEP	7	1.29%	-	-	-	-	-	-
			FEP	15	2.76%	65.60	22.00	0	0	0.89	7.45
		ELL Program - Bilingual	No	543	99.82%	62.31	26.76	3	18	0.92	7.33
			Yes	0	0%	-	-	-	-	-	-
			Monitored Y1	0	0%	-	-	-	-	-	-
			Monitored Y2	0	0%	-	-	-	-	-	-
			Exited Y3+	0	0%	-	-	-	-	-	-
			Choice	0	0%	-	-	-	-	-	-
		ELL Program - ESL	No	480	88.24%	63.06	26.84	3	16	0.93	7.30
			Yes	41	7.54%	53.29	26.64	0	2	0.92	7.72
			Monitored Y1	3	0.55%	-	-	-	-	-	-
			Monitored Y2	4	0.74%	-	-	-	-	-	-
			Exited Y3+	7	1.29%	-	-	-	-	-	-
			Choice	8	1.47%	-	-	-	-	-	-

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	326	47.11%	60.90	25.01	0	8	0.93	6.77
		Reduced Lunch Eligible	52	7.51%	59.04	25.97	0	3	0.93	6.63
		Not Eligible	309	44.65%	60.73	27.05	1	10	0.94	6.65
	4	Free Lunch Eligible	296	45.96%	61.37	25.84	0	11	0.93	6.77
		Reduced Lunch Eligible	70	10.87%	66.71	24.32	0	2	0.92	6.73
		Not Eligible	273	42.39%	58.78	27.45	0	11	0.94	6.73
	5	Free Lunch Eligible	292	47.71%	63.04	27.46	1	12	0.94	6.70
		Reduced Lunch Eligible	44	7.19%	65.98	25.81	1	1	0.93	6.64
		Not Eligible	274	44.77%	62.89	27.23	2	10	0.94	6.71
	6	Free Lunch Eligible	254	46.44%	64.99	25.87	2	8	0.94	6.57
		Reduced Lunch Eligible	56	10.24%	65.63	26.88	2	1	0.94	6.41
		Not Eligible	233	42.60%	63.35	27.38	1	10	0.94	6.53
	7	Free Lunch Eligible	228	42.86%	57.89	24.27	0	11	0.92	7.04
		Reduced Lunch Eligible	50	9.40%	58.02	23.42	0	1	0.91	6.90
		Not Eligible	248	46.62%	54.81	25.61	0	12	0.93	6.83
	8	Free Lunch Eligible	235	43.20%	54.58	26.04	0	6	0.92	7.21
		Reduced Lunch Eligible	56	10.29%	55.27	25.31	0	2	0.92	7.11
		Not Eligible	250	45.96%	53.08	26.89	0	11	0.93	7.06
	9	Free Lunch Eligible	221	44.47%	54.40	26.79	3	5	0.94	6.83
		Reduced Lunch Eligible	34	6.84%	56.82	24.57	0	1	0.92	7.12
		Not Eligible	240	48.29%	53.98	27.81	2	12	0.94	6.77
10	Free Lunch Eligible	226	42.40%	50.87	23.68	0	4	0.91	7.30	
	Reduced Lunch Eligible	40	7.51%	49.50	25.84	0	2	0.92	7.19	
	Not Eligible	265	49.72%	54.40	25.67	0	7	0.92	7.09	

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	323	47.09%	59.87	27.04	1	9	0.92	7.43
		Reduced Lunch Eligible	50	7.29%	56.46	28.30	0	3	0.93	7.51
		Not Eligible	309	45.04%	57.05	28.71	0	12	0.93	7.47
	4	Free Lunch Eligible	293	45.93%	62.50	27.41	0	9	0.92	7.60
		Reduced Lunch Eligible	69	10.82%	66.86	26.76	0	3	0.92	7.35
		Not Eligible	271	42.48%	58.62	30.35	0	12	0.94	7.62
	5	Free Lunch Eligible	289	47.77%	64.19	28.49	0	17	0.94	7.19
		Reduced Lunch Eligible	44	7.27%	65.66	26.25	0	1	0.93	7.15
		Not Eligible	270	44.63%	63.82	27.66	0	12	0.93	7.29
	6	Free Lunch Eligible	255	46.45%	65.28	27.09	0	8	0.93	7.32
		Reduced Lunch Eligible	55	10.02%	67.93	28.53	0	2	0.94	7.06
		Not Eligible	235	42.81%	62.32	30.01	0	12	0.94	7.34
	7	Free Lunch Eligible	227	42.59%	67.17	27.98	1	9	0.93	7.22
		Reduced Lunch Eligible	51	9.57%	63.22	28.64	0	1	0.93	7.45
		Not Eligible	249	46.72%	62.85	30.56	0	13	0.94	7.42
	8	Free Lunch Eligible	233	42.99%	61.12	28.68	0	7	0.93	7.58
		Reduced Lunch Eligible	56	10.33%	60.68	27.99	0	3	0.93	7.43
		Not Eligible	250	46.13%	57.85	30.45	0	14	0.94	7.61
	9	Free Lunch Eligible	223	44.78%	59.35	27.19	0	8	0.92	7.48
		Reduced Lunch Eligible	34	6.83%	60.38	27.79	0	2	0.93	7.37
		Not Eligible	239	47.99%	60.92	28.65	0	10	0.93	7.35
10	Free Lunch Eligible	227	42.59%	60.57	26.63	1	4	0.92	7.61	
	Reduced Lunch Eligible	40	7.51%	60.85	24.60	0	1	0.90	7.73	
	Not Eligible	264	49.53%	63.80	28.91	0	12	0.94	7.36	

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	305	46.21%	83.34	34.45	2	8	0.95	7.68
		Reduced Lunch Eligible	51	7.73%	82.24	35.89	0	2	0.95	7.72
		Not Eligible	300	45.46%	79.24	34.87	3	9	0.95	7.83
	4	Free Lunch Eligible	282	45.85%	86.06	34.89	2	9	0.95	8.10
		Reduced Lunch Eligible	62	10.08%	88.94	33.91	1	2	0.95	7.90
		Not Eligible	268	43.58%	78.79	36.62	0	10	0.95	8.19
	5	Free Lunch Eligible	275	46.77%	108.48	46.28	0	12	0.96	9.75
		Reduced Lunch Eligible	42	7.14%	104.00	46.19	0	1	0.96	9.72
		Not Eligible	269	45.75%	101.22	45.01	0	8	0.95	10.05
	6	Free Lunch Eligible	256	46.38%	85.31	36.59	0	7	0.94	8.64
		Reduced Lunch Eligible	57	10.33%	84.14	37.17	0	2	0.95	8.57
		Not Eligible	235	42.57%	77.12	36.44	2	7	0.94	9.02
	7	Free Lunch Eligible	223	42.32%	77.48	33.76	1	11	0.93	8.70
		Reduced Lunch Eligible	50	9.49%	73.34	34.81	0	2	0.94	8.73
		Not Eligible	248	47.06%	70.06	36.40	0	13	0.94	8.76
	8	Free Lunch Eligible	232	42.80%	80.67	38.83	0	7	0.94	9.34
		Reduced Lunch Eligible	57	10.52%	80.74	37.88	0	1	0.94	9.08
		Not Eligible	251	46.31%	75.57	40.90	0	11	0.95	9.18
	9	Free Lunch Eligible	223	44.16%	73.37	35.44	0	7	0.93	9.26
		Reduced Lunch Eligible	35	6.93%	73.46	35.93	0	2	0.93	9.61
		Not Eligible	245	48.52%	70.55	35.50	0	11	0.93	9.36
	10	Free Lunch Eligible	224	41.41%	76.19	34.99	0	4	0.93	9.50
		Reduced Lunch Eligible	40	7.39%	75.98	36.61	0	1	0.93	9.51
		Not Eligible	275	50.83%	76.22	38.49	0	9	0.94	9.59

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	279	47.21%	68.54	24.94	9	10	0.94	5.91
		Reduced Lunch Eligible	43	7.28%	70.47	21.56	2	1	0.93	5.75
		Not Eligible	267	45.18%	66.28	24.04	7	8	0.94	6.02
	8	Free Lunch Eligible	232	42.57%	71.66	25.23	11	4	0.94	6.04
		Reduced Lunch Eligible	57	10.46%	73.75	24.26	3	1	0.95	5.66
		Not Eligible	254	46.61%	67.52	27.48	9	7	0.95	6.08
	10	Free Lunch Eligible	229	42.10%	62.39	25.49	1	6	0.92	7.38
		Reduced Lunch Eligible	40	7.35%	62.70	27.29	1	2	0.93	7.39
		Not Eligible	273	50.18%	62.21	27.84	1	10	0.93	7.28

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	98	14.16%	54.44	28.68	1	2	0.95	6.50	
		Deaf-Blind	2	0.29%	-	-	-	-	-	-	
		Emotional Disability	6	0.87%	-	-	-	-	-	-	
		Hearing Disability	6	0.87%	-	-	-	-	-	-	
		Limited Intellectual Capacity	188	27.17%	64.62	21.26	0	2	0.90	6.87	
		Multiple Disabilities	165	23.84%	44.37	26.80	0	12	0.94	6.79	
		Physical Disability	95	13.73%	63.49	24.30	0	2	0.92	6.77	
		Specific Learning Disability	71	10.26%	79.76	14.01	0	0	0.80	6.33	
		Speech/Language Disability	53	7.66%	76.25	15.38	0	0	0.82	6.49	
		Traumatic Brain Injury	7	1.01%	-	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-	-		

Table 18
Reading Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RD	4	Autism	80	12.42%	53.34	22.37	0	0	0.90	7.00
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	9	1.40%	-	-	-	-	-	-
		Hearing Disability	9	1.40%	-	-	-	-	-	-
		Limited Intellectual Capacity	151	23.45%	65.90	21.04	0	1	0.90	6.79
		Multiple Disabilities	177	27.48%	41.50	27.00	0	22	0.94	6.69
		Physical Disability	82	12.73%	62.65	24.87	0	2	0.92	6.99
		Specific Learning Disability	85	13.20%	82.52	13.29	0	0	0.78	6.21
		Speech/Language Disability	42	6.52%	84.60	11.10	0	0	0.72	5.91
		Traumatic Brain Injury	6	0.93%	-	-	-	-	-	-
		Visual Disability	2	0.31%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	1	0.16%	-	-	-	-	-	-		

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	70	11.44%	60.43	27.02	1	2	0.94	6.74
		Deaf-Blind	1	0.16%	-	-	-	-	-	-
		Emotional Disability	13	2.12%	85.62	11.82	1	0	0.76	5.78
		Hearing Disability	9	1.47%	-	-	-	-	-	-
		Limited Intellectual Capacity	174	28.43%	66.82	22.07	1	0	0.90	6.91
		Multiple Disabilities	173	28.27%	46.99	27.12	0	15	0.94	6.87
		Physical Disability	65	10.62%	60.60	29.43	0	5	0.95	6.70
		Specific Learning Disability	71	11.60%	85.99	11.66	0	0	0.75	5.84
		Speech/Language Disability	23	3.76%	85.87	10.58	1	0	0.70	5.84
		Traumatic Brain Injury	7	1.14%	-	-	-	-	-	-
		Visual Disability	4	0.65%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.33%	-	-	-	-	-	-		

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	58	10.60%	59.71	26.57	0	0	0.94	6.71
		Deaf-Blind	2	0.37%	-	-	-	-	-	-
		Emotional Disability	7	1.28%	-	-	-	-	-	-
		Hearing Disability	12	2.19%	66.25	20.50	0	0	0.89	6.80
		Limited Intellectual Capacity	189	34.55%	71.43	19.88	3	1	0.89	6.60
		Multiple Disabilities	161	29.43%	47.01	28.74	0	17	0.95	6.55
		Physical Disability	38	6.95%	69.08	25.68	1	1	0.94	6.48
		Specific Learning Disability	56	10.24%	85.45	10.01	0	0	0.65	5.89
		Speech/Language Disability	13	2.38%	82.46	15.45	0	0	0.85	6.01
		Traumatic Brain Injury	8	1.46%	-	-	-	-	-	-
		Visual Disability	1	0.18%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.37%	-	-	-	-	-	-		

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	56	10.53%	49.96	24.99	0	1	0.93	6.83
		Deaf-Blind	1	0.19%	-	-	-	-	-	-
		Emotional Disability	6	1.13%	-	-	-	-	-	-
		Hearing Disability	7	1.32%	-	-	-	-	-	-
		Limited Intellectual Capacity	161	30.26%	63.08	19.41	0	1	0.87	7.09
		Multiple Disabilities	192	36.09%	42.61	24.43	0	22	0.92	6.88
		Physical Disability	44	8.27%	67.20	22.61	0	0	0.91	6.65
		Specific Learning Disability	51	9.59%	77.80	13.85	0	0	0.77	6.58
		Speech/Language Disability	10	1.88%	77.10	10.50	0	0	0.60	6.67
		Traumatic Brain Injury	3	0.56%	-	-	-	-	-	-
		Visual Disability	1	0.19%	-	-	-	-	-	-
		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	57	10.48%	51.98	27.14	0	2	0.93	6.94
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	0.92%	-	-	-	-	-	-
		Hearing Disability	8	1.47%	-	-	-	-	-	-
		Limited Intellectual Capacity	168	30.88%	57.54	22.66	0	3	0.90	7.32
		Multiple Disabilities	203	37.32%	41.37	23.92	0	14	0.91	7.17
		Physical Disability	45	8.27%	68.51	26.69	0	0	0.93	6.82
		Specific Learning Disability	40	7.35%	76.15	15.83	0	0	0.82	6.76
		Speech/Language Disability	10	1.84%	84.10	12.03	0	0	0.73	6.21
		Traumatic Brain Injury	8	1.47%	-	-	-	-	-	-
		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	9	Autism	49	9.86%	45.39	20.10	0	1	0.87	7.21	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	3	0.60%	-	-	-	-	-	-	
		Hearing Disability	6	1.21%	-	-	-	-	-	-	
		Limited Intellectual Capacity	180	36.22%	61.51	23.54	3	0	0.91	6.94	
		Multiple Disabilities	176	35.41%	41.21	27.99	1	17	0.94	6.61	
		Physical Disability	35	7.04%	69.74	21.51	0	0	0.91	6.60	
		Specific Learning Disability	31	6.24%	72.84	21.24	0	0	0.90	6.59	
		Speech/Language Disability	10	2.01%	79.70	13.91	1	0	0.81	6.13	
		Traumatic Brain Injury	3	0.60%	-	-	-	-	-	-	-
		Visual Disability	2	0.40%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	2	0.40%	-	-	-	-	-	-	-		

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	45	8.44%	51.31	24.16	0	0	0.91	7.11
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	0.94%	-	-	-	-	-	-
		Hearing Disability	6	1.13%	-	-	-	-	-	-
		Limited Intellectual Capacity	203	38.09%	57.21	20.72	0	1	0.87	7.45
		Multiple Disabilities	192	36.02%	39.15	23.89	0	12	0.91	7.05
		Physical Disability	30	5.63%	66.20	23.32	0	0	0.91	6.92
		Specific Learning Disability	35	6.57%	78.60	13.87	0	0	0.78	6.45
		Speech/Language Disability	6	1.13%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.31%	-	-	-	-	-	-
		Visual Disability	3	0.56%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	1	0.19%	-	-	-	-	-	-

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	96	13.99%	52.88	30.72	0	2	0.95	7.14	
		Deaf-Blind	2	0.29%	-	-	-	-	-	-	
		Emotional Disability	5	0.73%	-	-	-	-	-	-	
		Hearing Disability	6	0.88%	-	-	-	-	-	-	
		Limited Intellectual Capacity	188	27.41%	64.27	23.85	0	2	0.91	7.31	
		Multiple Disabilities	165	24.05%	40.67	27.59	0	15	0.92	7.61	
		Physical Disability	95	13.85%	57.45	25.97	0	2	0.91	7.92	
		Specific Learning Disability	69	10.06%	78.41	14.35	0	0	0.80	6.34	
		Speech/Language Disability	52	7.58%	76.73	14.89	1	0	0.80	6.68	
		Traumatic Brain Injury	7	1.02%	-	-	-	-	-	-	-
		Visual Disability	1	0.15%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	0	0%	-	-	-	-	-	-	-		

Table 19
Writing Descriptive Statistics by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
		Autism	79	12.38%	54.71	26.19	0	0	0.91	7.72
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	9	1.41%	-	-	-	-	-	-
		Hearing Disability	9	1.41%	-	-	-	-	-	-
		Limited Intellectual Capacity	151	23.67%	68.21	22.43	0	0	0.89	7.41
		Multiple Disabilities	175	27.43%	39.83	29.19	0	24	0.93	7.75
WR	4	Physical Disability	81	12.70%	59.65	27.32	0	1	0.92	7.85
		Specific Learning Disability	83	13.01%	83.06	12.57	0	0	0.75	6.22
		Speech/Language Disability	42	6.58%	88.43	8.70	0	0	0.58	5.61
		Traumatic Brain Injury	6	0.94%	-	-	-	-	-	-
		Visual Disability	2	0.31%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
		Missing	1	0.16%	-	-	-	-	-	-

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	69	11.41%	62.99	28.61	0	3	0.94	7.08
		Deaf-Blind	1	0.17%	-	-	-	-	-	-
		Emotional Disability	13	2.15%	85.77	11.17	0	0	0.75	5.54
		Hearing Disability	9	1.49%	-	-	-	-	-	-
		Limited Intellectual Capacity	172	28.43%	70.14	21.06	0	0	0.89	7.10
		Multiple Disabilities	172	28.43%	45.27	28.43	0	21	0.93	7.75
		Physical Disability	66	10.91%	62.27	29.41	0	5	0.94	7.21
		Specific Learning Disability	67	11.07%	86.36	9.66	0	0	0.67	5.55
		Speech/Language Disability	23	3.80%	87.43	8.90	0	0	0.64	5.32
		Traumatic Brain Injury	7	1.16%	-	-	-	-	-	-
		Visual Disability	4	0.66%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.33%	-	-	-	-	-	-		

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	59	10.75%	58.39	30.51	0	2	0.94	7.43	
		Deaf-Blind	2	0.36%	-	-	-	-	-	-	
		Emotional Disability	7	1.28%	-	-	-	-	-	-	
		Hearing Disability	13	2.37%	76.46	15.34	0	0	0.81	6.62	
		Limited Intellectual Capacity	189	34.43%	72.48	21.01	0	1	0.89	7.10	
		Multiple Disabilities	160	29.14%	45.43	31.32	0	18	0.94	7.54	
		Physical Disability	38	6.92%	67.26	26.81	0	1	0.93	7.28	
		Specific Learning Disability	56	10.20%	85.36	10.30	0	0	0.68	5.86	
		Speech/Language Disability	14	2.55%	84.93	12.15	0	0	0.76	5.94	
		Traumatic Brain Injury	8	1.46%	-	-	-	-	-	-	-
		Visual Disability	1	0.18%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	2	0.36%	-	-	-	-	-	-	-		

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				
		Autism	56	10.51%	56.79	33.05	0	1	0.95	7.10
		Deaf-Blind	1	0.19%	-	-	-	-	-	-
		Emotional Disability	7	1.31%	-	-	-	-	-	-
		Hearing Disability	7	1.31%	-	-	-	-	-	-
		Limited Intellectual Capacity	160	30.02%	72.71	21.51	0	0	0.89	7.12
		Multiple Disabilities	192	36.02%	48.61	29.74	1	22	0.93	7.79
WR	7	Physical Disability	44	8.26%	74.45	27.62	0	0	0.94	6.72
		Specific Learning Disability	51	9.57%	89.41	10.77	0	0	0.72	5.69
		Speech/Language Disability	11	2.06%	91.55	7.49	0	0	0.48	5.38
		Traumatic Brain Injury	3	0.56%	-	-	-	-	-	-
		Visual Disability	1	0.19%	-	-	-	-	-	-
		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	58	10.70%	56.33	30.04	0	1	0.94	7.52	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	5	0.92%	-	-	-	-	-	-	
		Hearing Disability	8	1.48%	-	-	-	-	-	-	
		Limited Intellectual Capacity	166	30.63%	65.84	24.88	0	3	0.91	7.40	
		Multiple Disabilities	202	37.27%	45.26	29.49	0	19	0.93	7.83	
		Physical Disability	45	8.30%	70.76	27.97	0	1	0.93	7.23	
		Specific Learning Disability	40	7.38%	83.93	8.51	0	0	0.50	6.04	
		Speech/Language Disability	10	1.85%	83.50	10.33	0	0	0.72	5.51	
		Traumatic Brain Injury	8	1.48%	-	-	-	-	-	-	-
		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	9	Autism	50	10.04%	55.20	24.74	0	0	0.90	7.82	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	3	0.60%	-	-	-	-	-	-	
		Hearing Disability	6	1.21%	-	-	-	-	-	-	
		Limited Intellectual Capacity	181	36.35%	68.45	21.71	0	2	0.90	6.99	
		Multiple Disabilities	175	35.14%	44.62	30.43	0	18	0.94	7.61	
		Physical Disability	35	7.03%	75.26	19.78	0	0	0.88	6.95	
		Specific Learning Disability	31	6.23%	79.74	16.96	0	0	0.86	6.34	
		Speech/Language Disability	10	2.01%	81.00	14.22	0	0	0.78	6.65	
		Traumatic Brain Injury	3	0.60%	-	-	-	-	-	-	-
		Visual Disability	2	0.40%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	2	0.40%	-	-	-	-	-	-	-		

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	44	8.26%	62.98	25.37	0	0	0.91	7.75
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	4	0.75%	-	-	-	-	-	-
		Hearing Disability	6	1.13%	-	-	-	-	-	-
		Limited Intellectual Capacity	203	38.09%	68.26	21.13	0	2	0.88	7.27
		Multiple Disabilities	193	36.21%	46.77	30.36	0	15	0.94	7.74
		Physical Disability	30	5.63%	75.10	21.79	0	0	0.91	6.60
		Specific Learning Disability	35	6.57%	87.60	9.69	1	0	0.62	5.97
		Speech/Language Disability	6	1.13%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.50%	-	-	-	-	-	-
		Visual Disability	3	0.56%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	1	0.19%	-	-	-	-	-	-		

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	93	14.09%	73.18	37.16	3	0	0.95	7.89
		Deaf-Blind	2	0.30%	-	-	-	-	-	-
		Emotional Disability	4	0.61%	-	-	-	-	-	-
		Hearing Disability	4	0.61%	-	-	-	-	-	-
		Limited Intellectual Capacity	185	28.03%	89.57	28.81	2	1	0.93	7.65
		Multiple Disabilities	165	25.00%	60.00	37.29	0	14	0.95	8.03
		Physical Disability	96	14.55%	84.50	29.98	0	2	0.93	8.16
		Specific Learning Disability	55	8.33%	104.93	14.14	0	0	0.77	6.78
		Speech/Language Disability	49	7.42%	103.59	18.17	0	0	0.86	6.85
		Traumatic Brain Injury	7	1.06%	-	-	-	-	-	-
		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	4	Autism	76	12.36%	73.36	32.40	1	1	0.93	8.41	
		Deaf-Blind	0	0%	-	-	-	-	-	-	
		Emotional Disability	8	1.30%	-	-	-	-	-	-	
		Hearing Disability	4	0.65%	-	-	-	-	-	-	
		Limited Intellectual Capacity	148	24.07%	93.43	25.47	0	1	0.90	8.21	
		Multiple Disabilities	175	28.46%	57.82	39.14	0	18	0.96	8.28	
		Physical Disability	81	13.17%	83.52	33.41	0	2	0.94	8.48	
		Specific Learning Disability	75	12.20%	111.05	12.44	1	0	0.71	6.69	
		Speech/Language Disability	39	6.34%	112.72	12.23	1	0	0.69	6.83	
		Traumatic Brain Injury	6	0.98%	-	-	-	-	-	-	-
		Visual Disability	2	0.33%	-	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-	-
Missing	1	0.16%	-	-	-	-	-	-	-		

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	70	11.91%	97.73	45.26	0	2	0.95	9.74
		Deaf-Blind	2	0.34%	-	-	-	-	-	-
		Emotional Disability	12	2.04%	142.58	16.71	0	0	0.74	8.47
		Hearing Disability	5	0.85%	-	-	-	-	-	-
		Limited Intellectual Capacity	172	29.25%	116.95	34.64	0	0	0.92	10.02
		Multiple Disabilities	173	29.42%	77.09	48.08	0	15	0.96	9.94
		Physical Disability	66	11.22%	102.97	46.69	0	3	0.96	9.87
		Specific Learning Disability	52	8.84%	142.67	14.83	0	0	0.62	9.13
		Speech/Language Disability	23	3.91%	139.57	17.80	0	0	0.69	9.95
		Traumatic Brain Injury	7	1.19%	-	-	-	-	-	-
		Visual Disability	4	0.68%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.34%	-	-	-	-	-	-		

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	62	11.23%	69.24	38.71	0	1	0.95	8.98
		Deaf-Blind	2	0.36%	-	-	-	-	-	-
		Emotional Disability	7	1.27%	-	-	-	-	-	-
		Hearing Disability	10	1.81%	86.50	22.73	0	0	0.84	9.06
		Limited Intellectual Capacity	189	34.24%	91.35	28.27	0	1	0.90	8.85
		Multiple Disabilities	159	28.80%	58.67	38.83	1	13	0.95	8.69
		Physical Disability	39	7.07%	86.62	32.58	0	1	0.92	9.36
		Specific Learning Disability	58	10.51%	112.55	14.99	1	0	0.76	7.35
		Speech/Language Disability	15	2.72%	107.73	19.54	0	0	0.83	7.96
		Traumatic Brain Injury	8	1.45%	-	-	-	-	-	-
		Visual Disability	1	0.18%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.36%	-	-	-	-	-	-		

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	56	10.63%	66.25	41.03	0	3	0.96	8.27
		Deaf-Blind	1	0.19%	-	-	-	-	-	-
		Emotional Disability	8	1.52%	-	-	-	-	-	-
		Hearing Disability	5	0.95%	-	-	-	-	-	-
		Limited Intellectual Capacity	160	30.36%	81.81	24.59	0	0	0.87	8.95
		Multiple Disabilities	192	36.43%	53.34	34.92	0	22	0.94	8.85
		Physical Disability	43	8.16%	82.09	31.81	0	1	0.93	8.46
		Specific Learning Disability	43	8.16%	109.79	13.33	1	0	0.72	7.02
		Speech/Language Disability	14	2.66%	107.50	14.11	0	0	0.73	7.36
		Traumatic Brain Injury	4	0.76%	-	-	-	-	-	-
		Visual Disability	1	0.19%	-	-	-	-	-	-
		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	56	10.33%	72.23	41.30	0	1	0.95	9.05
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	6	1.11%	-	-	-	-	-	-
		Hearing Disability	8	1.48%	-	-	-	-	-	-
		Limited Intellectual Capacity	168	31.00%	85.94	33.60	0	3	0.92	9.40
		Multiple Disabilities	206	38.01%	59.11	37.34	0	15	0.94	9.15
		Physical Disability	45	8.30%	94.00	38.08	0	0	0.94	9.09
		Specific Learning Disability	37	6.83%	116.35	19.02	0	0	0.82	8.11
		Speech/Language Disability	9	1.66%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.29%	-	-	-	-	-	-
		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	9	Autism	51	10.10%	65.04	35.31	0	0	0.93	9.49
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	3	0.59%	-	-	-	-	-	-
		Hearing Disability	6	1.19%	-	-	-	-	-	-
		Limited Intellectual Capacity	181	35.84%	81.75	30.68	0	2	0.91	9.22
		Multiple Disabilities	172	34.06%	50.80	34.38	0	18	0.93	9.06
		Physical Disability	39	7.72%	88.49	23.96	0	0	0.85	9.31
		Specific Learning Disability	34	6.73%	101.71	20.32	0	0	0.83	8.49
		Speech/Language Disability	11	2.18%	108.00	16.97	0	0	0.72	9.00
		Traumatic Brain Injury	4	0.79%	-	-	-	-	-	-
		Visual Disability	2	0.40%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.40%	-	-	-	-	-	-		

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	48	8.87%	75.63	37.10	0	0	0.93	9.63
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	0.92%	-	-	-	-	-	-
		Hearing Disability	5	0.92%	-	-	-	-	-	-
		Limited Intellectual Capacity	205	37.89%	83.36	28.62	0	2	0.89	9.56
		Multiple Disabilities	194	35.86%	54.43	35.73	0	12	0.93	9.48
		Physical Disability	30	5.55%	90.23	34.39	0	0	0.93	9.26
		Specific Learning Disability	36	6.65%	119.33	14.54	0	0	0.71	7.79
		Speech/Language Disability	7	1.29%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.29%	-	-	-	-	-	-
		Visual Disability	3	0.56%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	1	0.19%	-	-	-	-	-	-		

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	72	12.18%	62.07	22.20	3	2	0.92	6.33
		Deaf-Blind	1	0.17%	-	-	-	-	-	-
		Emotional Disability	13	2.20%	86.85	9.56	1	0	0.80	4.30
		Hearing Disability	8	1.35%	-	-	-	-	-	-
		Limited Intellectual Capacity	175	29.61%	73.99	16.87	3	0	0.88	5.87
		Multiple Disabilities	170	28.77%	54.39	26.97	2	12	0.94	6.40
		Physical Disability	67	11.34%	63.55	27.64	1	4	0.95	5.96
		Specific Learning Disability	52	8.80%	88.96	5.62	7	0	0.49	4.02
		Speech/Language Disability	22	3.72%	84.41	9.86	1	0	0.75	4.95
		Traumatic Brain Injury	6	1.02%	-	-	-	-	-	-
		Visual Disability	3	0.51%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	2	0.34%	-	-	-	-	-	-		

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	57	10.46%	65.79	28.28	3	0	0.95	6.14
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	4	0.73%	-	-	-	-	-	-
		Hearing Disability	7	1.28%	-	-	-	-	-	-
		Limited Intellectual Capacity	171	31.38%	77.36	19.42	8	2	0.91	5.79
		Multiple Disabilities	206	37.80%	57.34	27.87	2	10	0.94	6.62
		Physical Disability	49	8.99%	78.71	24.47	4	0	0.95	5.23
		Specific Learning Disability	34	6.24%	90.26	6.59	2	0	0.59	4.23
		Speech/Language Disability	9	1.65%	-	-	-	-	-	-
		Traumatic Brain Injury	8	1.47%	-	-	-	-	-	-
		Visual Disability	0	0%	-	-	-	-	-	-
		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	50	9.19%	57.60	27.91	0	2	0.93	7.39
		Deaf-Blind	0	0%	-	-	-	-	-	-
		Emotional Disability	5	0.92%	-	-	-	-	-	-
		Hearing Disability	6	1.10%	-	-	-	-	-	-
		Limited Intellectual Capacity	208	38.24%	69.00	20.81	0	2	0.88	7.35
		Multiple Disabilities	192	35.29%	46.94	27.26	0	14	0.93	7.45
		Physical Disability	29	5.33%	72.38	22.92	0	0	0.91	7.06
		Specific Learning Disability	37	6.80%	89.95	8.08	1	0	0.61	5.06
		Speech/Language Disability	6	1.10%	-	-	-	-	-	-
		Traumatic Brain Injury	7	1.29%	-	-	-	-	-	-
		Visual Disability	3	0.55%	-	-	-	-	-	-
		None	0	0%	-	-	-	-	-	-
Missing	1	0.18%	-	-	-	-	-	-		

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	600	86.71%	62.56	25.25	1	16	0.93	6.68
		Assistive Technology	16	2.31%	44.50	26.08	0	0	0.93	7.14
		Braille	2	0.29%	-	-	-	-	-	-
		Eye Gaze	17	2.46%	32.47	27.45	0	2	0.95	5.97
		Modified Picture Symbols	21	3.04%	35.76	19.10	0	0	0.85	7.36
		Objects	10	1.45%	30.20	19.15	0	1	0.88	6.75
		Sign Language	16	2.31%	43.31	19.46	0	0	0.85	7.55
		Translation Into Native Language	0	0%	-	-	-	-	-	-
		Other	13	1.88%	52.15	26.93	0	0	0.93	7.11
	4	None	547	84.94%	64.13	24.85	0	15	0.93	6.74
		Assistive Technology	14	2.17%	31.86	26.32	0	3	0.94	6.36
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	19	2.95%	18.58	15.55	0	3	0.87	5.59
		Modified Picture Symbols	28	4.35%	32.93	23.90	0	1	0.93	6.35
		Objects	13	2.02%	29.92	21.47	0	2	0.92	5.95
		Sign Language	19	2.95%	55.05	24.86	0	0	0.92	7.06
		Translation Into Native Language	0	0%	-	-	-	-	-	-
Other	11	1.71%	15.91	20.40	0	3	0.94	4.99		

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	523	85.46%	66.28	25.79	4	17	0.93	6.71
		Assistive Technology	8	1.31%	-	-	-	-	-	-
		Braille	2	0.33%	-	-	-	-	-	-
		Eye Gaze	12	1.96%	21.08	24.08	0	4	0.96	4.97
		Modified Picture Symbols	18	2.94%	38.17	18.50	0	0	0.85	7.28
		Objects	11	1.80%	32.27	23.14	0	1	0.94	5.61
		Sign Language	22	3.60%	58.68	21.63	0	0	0.89	7.07
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	12	1.96%	39.25	30.47	0	1	0.96	6.40	
	6	None	464	84.83%	68.33	24.35	5	13	0.93	6.48
		Assistive Technology	22	4.02%	47.36	29.46	0	0	0.95	6.69
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	15	2.74%	10.60	13.03	0	5	0.91	3.95
		Modified Picture Symbols	24	4.39%	40.63	22.51	0	1	0.90	7.00
		Objects	11	2.01%	19.82	18.46	0	1	0.92	5.38
		Sign Language	19	3.47%	50.84	22.37	0	0	0.89	7.31
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	16	2.93%	51.50	36.63	0	1	0.97	6.11		

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	444	83.46%	59.40	23.63	0	14	0.91	6.95
		Assistive Technology	11	2.07%	34.64	26.97	0	2	0.95	6.28
		Braille	1	0.19%	-	-	-	-	-	-
		Eye Gaze	14	2.63%	18.36	28.97	0	8	0.98	3.68
		Modified Picture Symbols	28	5.26%	33.14	22.65	0	2	0.92	6.30
		Objects	4	0.75%	-	-	-	-	-	-
		Sign Language	10	1.88%	48.30	16.67	0	0	0.80	7.52
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	12	2.26%	44.08	26.14	0	1	0.92	7.24	
	8	None	456	83.82%	57.70	25.44	0	9	0.92	7.18
		Assistive Technology	9	1.65%	-	-	-	-	-	-
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	22	4.04%	18.68	22.81	0	7	0.95	4.88
		Modified Picture Symbols	17	3.13%	36.29	20.11	0	2	0.87	7.21
		Objects	8	1.47%	-	-	-	-	-	-
		Sign Language	16	2.94%	36.50	17.48	0	1	0.81	7.60
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	16	2.94%	41.56	21.79	0	0	0.90	6.74		

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	426	85.71%	55.62	26.32	5	12	0.93	6.90
		Assistive Technology	8	1.61%	-	-	-	-	-	-
		Braille	4	0.81%	-	-	-	-	-	-
		Eye Gaze	3	0.60%	-	-	-	-	-	-
		Modified Picture Symbols	13	2.62%	30.23	25.44	0	1	0.94	6.40
		Objects	7	1.41%	-	-	-	-	-	-
		Sign Language	6	1.21%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
		Other	10	2.01%	47.90	27.39	0	1	0.94	6.82
	10	None	452	84.80%	53.84	23.96	0	9	0.91	7.26
		Assistive Technology	7	1.31%	-	-	-	-	-	-
		Braille	3	0.56%	-	-	-	-	-	-
		Eye Gaze	9	1.69%	-	-	-	-	-	-
		Modified Picture Symbols	5	0.94%	-	-	-	-	-	-
		Objects	2	0.38%	-	-	-	-	-	-
		Sign Language	11	2.06%	35.36	10.67	0	0	0.42	8.12
		Translation Into Native Language	0	0%	-	-	-	-	-	-
Other	14	2.63%	54.29	30.00	0	0	0.95	6.92		

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	590	86.01%	61.01	26.80	1	18	0.92	7.36
		Assistive Technology	23	3.35%	43.87	25.41	0	0	0.90	8.00
		Braille	2	0.29%	-	-	-	-	-	-
		Eye Gaze	17	2.48%	20.76	22.06	0	2	0.94	5.41
		Modified Picture Symbols	18	2.62%	27.28	19.85	0	1	0.86	7.49
		Objects	7	1.02%	-	-	-	-	-	-
		Sign Language	16	2.33%	39.50	28.63	0	0	0.92	7.95
		Translation Into Native Language	1	0.15%	-	-	-	-	-	-
		Other	13	1.90%	44.00	31.05	0	1	0.94	7.83
	4	None	537	84.17%	64.55	26.96	0	13	0.92	7.51
		Assistive Technology	25	3.92%	44.00	27.72	0	2	0.91	8.13
		Braille	1	0.16%	-	-	-	-	-	-
		Eye Gaze	19	2.98%	11.79	15.97	0	6	0.92	4.52
		Modified Picture Symbols	24	3.76%	27.25	25.77	0	4	0.93	6.69
		Objects	11	1.72%	17.00	19.31	0	3	0.90	6.03
		Sign Language	17	2.67%	61.18	30.66	0	1	0.94	7.20
		Translation Into Native Language	1	0.16%	-	-	-	-	-	-
Other	14	2.19%	12.79	21.41	0	5	0.94	5.05		

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	515	85.12%	67.09	25.97	0	20	0.92	7.19
		Assistive Technology	16	2.65%	44.75	29.78	0	0	0.94	7.42
		Braille	2	0.33%	-	-	-	-	-	-
		Eye Gaze	12	1.98%	12.50	18.83	0	6	0.94	4.78
		Modified Picture Symbols	17	2.81%	32.53	22.59	0	1	0.87	8.05
		Objects	9	1.49%	-	-	-	-	-	-
		Sign Language	22	3.64%	61.91	23.90	0	0	0.91	7.34
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	11	1.82%	44.36	30.98	0	1	0.94	7.33	
	6	None	459	83.61%	68.41	26.28	0	14	0.93	7.14
		Assistive Technology	31	5.65%	44.06	25.12	0	0	0.90	7.96
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	16	2.91%	12.88	18.67	0	6	0.95	4.32
		Modified Picture Symbols	19	3.46%	31.26	23.45	0	1	0.90	7.24
		Objects	13	2.37%	16.62	19.19	0	3	0.94	4.66
		Sign Language	21	3.83%	57.62	26.15	0	0	0.91	7.78
Translation Into Native Language		1	0.18%	-	-	-	-	-	-	
Other	17	3.10%	46.65	36.95	0	1	0.96	7.12		

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	445	83.49%	68.45	27.36	1	13	0.93	7.23
		Assistive Technology	21	3.94%	46.14	29.30	0	2	0.93	7.66
		Braille	1	0.19%	-	-	-	-	-	-
		Eye Gaze	15	2.81%	14.67	27.88	0	8	0.98	3.58
		Modified Picture Symbols	15	2.81%	13.07	18.23	0	2	0.91	5.39
		Objects	4	0.75%	-	-	-	-	-	-
		Sign Language	10	1.88%	65.60	20.49	0	0	0.84	8.09
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	12	2.25%	48.67	31.53	0	1	0.93	8.43	
	8	None	452	83.40%	63.46	27.66	0	14	0.93	7.50
		Assistive Technology	22	4.06%	46.82	30.28	0	1	0.93	7.91
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	22	4.06%	14.14	22.83	0	8	0.96	4.28
		Modified Picture Symbols	12	2.21%	42.42	27.59	0	1	0.92	7.88
		Objects	8	1.48%	-	-	-	-	-	-
		Sign Language	16	2.95%	51.69	31.75	0	0	0.94	7.74
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	16	2.95%	36.56	25.17	0	2	0.91	7.75		

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	420	84.34%	61.98	26.81	0	12	0.92	7.38
		Assistive Technology	15	3.01%	37.53	26.39	0	1	0.92	7.41
		Braille	4	0.80%	-	-	-	-	-	-
		Eye Gaze	4	0.80%	-	-	-	-	-	-
		Modified Picture Symbols	10	2.01%	26.90	27.40	0	1	0.93	7.15
		Objects	5	1.00%	-	-	-	-	-	-
		Sign Language	7	1.41%	-	-	-	-	-	-
		Translation Into Native Language	1	0.20%	-	-	-	-	-	-
		Other	12	2.41%	56.83	26.58	0	1	0.91	7.78
	10	None	446	83.68%	64.20	26.41	1	11	0.92	7.43
		Assistive Technology	12	2.25%	44.00	18.61	0	0	0.80	8.34
		Braille	3	0.56%	-	-	-	-	-	-
		Eye Gaze	8	1.50%	-	-	-	-	-	-
		Modified Picture Symbols	4	0.75%	-	-	-	-	-	-
		Objects	3	0.56%	-	-	-	-	-	-
		Sign Language	11	2.06%	43.73	29.10	0	0	0.91	8.59
		Translation Into Native Language	1	0.19%	-	-	-	-	-	-
Other	14	2.63%	59.57	30.64	0	0	0.94	7.59		

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	561	85.00%	84.59	33.11	5	15	0.95	7.69
		Assistive Technology	15	2.27%	42.40	31.92	0	1	0.93	8.54
		Braille	1	0.15%	-	-	-	-	-	-
		Eye Gaze	16	2.42%	33.88	24.92	0	1	0.92	7.20
		Modified Picture Symbols	18	2.73%	46.11	23.74	0	0	0.86	8.81
		Objects	23	3.49%	49.26	37.16	0	3	0.96	7.58
		Sign Language	14	2.12%	56.86	32.72	0	0	0.93	8.77
		Translation Into Native Language	2	0.30%	-	-	-	-	-	-
	Other	12	1.82%	65.42	35.75	0	0	0.94	8.70	
	4	None	511	83.09%	87.96	32.71	3	10	0.94	8.09
		Assistive Technology	14	2.28%	50.93	32.70	0	1	0.92	8.97
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	20	3.25%	15.40	16.07	0	5	0.89	5.30
		Modified Picture Symbols	20	3.25%	30.05	32.53	0	5	0.95	7.06
		Objects	33	5.37%	55.88	38.40	0	2	0.96	8.14
		Sign Language	15	2.44%	73.60	40.14	0	1	0.95	8.56
Translation Into Native Language		1	0.16%	-	-	-	-	-	-	
Other	17	2.76%	22.82	32.43	0	4	0.96	6.15		

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	492	83.67%	110.59	41.85	0	12	0.94	9.90
		Assistive Technology	13	2.21%	53.62	42.40	0	0	0.95	9.83
		Braille	1	0.17%	-	-	-	-	-	-
		Eye Gaze	13	2.21%	23.85	28.88	0	5	0.94	6.83
		Modified Picture Symbols	20	3.40%	53.25	33.71	0	1	0.91	10.09
		Objects	26	4.42%	75.39	50.72	0	2	0.97	9.21
		Sign Language	17	2.89%	98.47	39.06	0	0	0.94	9.88
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	9	1.53%	-	-	-	-	-	-	
	6	None	462	83.70%	86.82	34.26	2	10	0.93	8.74
		Assistive Technology	0	0%	-	-	-	-	-	-
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	12	2.17%	8.50	12.15	0	4	0.87	4.35
		Modified Picture Symbols	17	3.08%	40.29	27.31	0	1	0.89	8.88
		Objects	32	5.80%	53.66	38.99	0	2	0.95	8.73
		Sign Language	16	2.90%	70.75	31.09	0	0	0.91	9.28
Translation Into Native Language		1	0.18%	-	-	-	-	-	-	
Other	15	2.72%	55.60	41.04	0	1	0.96	8.68		

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	432	81.97%	78.16	33.03	1	15	0.93	8.72
		Assistive Technology	12	2.28%	31.75	22.02	0	2	0.86	8.35
		Braille	1	0.19%	-	-	-	-	-	-
		Eye Gaze	15	2.85%	14.67	31.69	0	8	0.98	3.90
		Modified Picture Symbols	12	2.28%	22.83	27.60	0	2	0.93	7.09
		Objects	21	3.99%	62.48	34.11	0	1	0.93	9.28
		Sign Language	8	1.52%	-	-	-	-	-	-
		Translation Into Native Language	1	0.19%	-	-	-	-	-	-
	Other	13	2.47%	54.54	33.99	0	1	0.93	9.12	
	8	None	439	81.00%	84.38	37.34	0	10	0.94	9.26
		Assistive Technology	14	2.58%	50.36	34.99	0	0	0.94	8.89
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	21	3.88%	18.48	30.58	0	7	0.97	5.15
		Modified Picture Symbols	11	2.03%	48.00	32.45	0	1	0.92	8.97
		Objects	34	6.27%	56.44	41.24	0	3	0.95	8.89
		Sign Language	14	2.58%	72.93	43.17	0	1	0.95	9.59
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	21	3.88%	49.33	32.56	0	1	0.93	8.86		

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	410	81.19%	73.54	34.04	0	13	0.92	9.42
		Assistive Technology	15	2.97%	47.07	28.92	0	2	0.90	9.12
		Braille	3	0.59%	-	-	-	-	-	-
		Eye Gaze	5	0.99%	-	-	-	-	-	-
		Modified Picture Symbols	10	1.98%	40.40	37.62	0	1	0.96	7.83
		Objects	25	4.95%	71.92	48.48	0	2	0.97	7.96
		Sign Language	7	1.39%	-	-	-	-	-	-
		Translation Into Native Language	0	0%	-	-	-	-	-	-
		Other	13	2.57%	66.69	37.09	0	1	0.94	9.07
	10	None	444	82.07%	78.62	35.52	0	7	0.93	9.58
		Assistive Technology	10	1.85%	42.30	31.82	0	0	0.92	9.26
		Braille	2	0.37%	-	-	-	-	-	-
		Eye Gaze	7	1.29%	-	-	-	-	-	-
		Modified Picture Symbols	6	1.11%	-	-	-	-	-	-
		Objects	20	3.70%	65.10	35.06	0	0	0.93	9.40
		Sign Language	10	1.85%	50.50	32.32	0	0	0.90	10.02
		Translation Into Native Language	1	0.19%	-	-	-	-	-	-
Other	14	2.59%	67.86	37.02	0	0	0.93	9.47		

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	505	85.45%	70.45	22.14	17	12	0.93	5.85
		Assistive Technology	9	1.52%	-	-	-	-	-	-
		Braille	1	0.17%	-	-	-	-	-	-
		Eye Gaze	11	1.86%	21.82	28.69	0	4	0.97	4.74
		Modified Picture Symbols	14	2.37%	42.14	23.79	0	1	0.91	7.11
		Objects	7	1.18%	-	-	-	-	-	-
		Sign Language	21	3.55%	64.81	17.99	0	0	0.87	6.46
		Translation Into Native Language	0	0%	-	-	-	-	-	-
	Other	8	1.35%	-	-	-	-	-	-	
	8	None	458	84.04%	73.72	23.73	22	5	0.94	5.91
		Assistive Technology	7	1.28%	-	-	-	-	-	-
		Braille	0	0%	-	-	-	-	-	-
		Eye Gaze	22	4.04%	26.09	26.72	1	5	0.95	5.67
		Modified Picture Symbols	15	2.75%	58.33	30.06	0	1	0.96	5.82
		Objects	7	1.28%	-	-	-	-	-	-
		Sign Language	14	2.57%	59.57	22.35	0	0	0.91	6.86
Translation Into Native Language		0	0%	-	-	-	-	-	-	
Other	17	3.12%	48.65	30.05	0	0	0.96	6.33		

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	462	84.93%	63.76	25.63	2	12	0.92	7.34
		Assistive Technology	7	1.29%	-	-	-	-	-	-
		Braille	1	0.18%	-	-	-	-	-	-
		Eye Gaze	8	1.47%	-	-	-	-	-	-
		Modified Picture Symbols	6	1.10%	-	-	-	-	-	-
		Objects	5	0.92%	-	-	-	-	-	-
		Sign Language	9	1.65%	-	-	-	-	-	-
		Translation Into Native Language	1	0.18%	-	-	-	-	-	-
		Other	15	2.76%	61.47	27.67	0	0	0.93	7.39

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
		Further coded:
0	Incorrect or No response	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	7.36%	3.48%	3.88%	92.64%
	4	5.71%	3.66%	2.05%	94.29%
	5	7.41%	5.14%	2.27%	92.59%
	6	9.29%	6.14%	3.15%	90.71%
	7	9.22%	5.97%	3.24%	90.79%
	8	10.38%	7.25%	3.13%	89.62%
	9	10.93%	6.27%	4.66%	89.07%
	10	9.81%	6.26%	3.55%	90.19%
WR	3	8.17%	4.28%	3.88%	91.83%
	4	6.59%	4.39%	2.20%	93.41%
	5	8.47%	6.05%	2.42%	91.53%
	6	8.96%	5.47%	3.48%	91.05%
	7	9.04%	5.97%	3.07%	90.96%
	8	10.71%	7.25%	3.46%	89.29%
	9	10.75%	6.63%	4.12%	89.25%
	10	9.81%	6.43%	3.38%	90.19%
MA	3	11.65%	7.10%	4.55%	88.35%
	4	9.96%	6.74%	3.22%	90.04%
	5	11.04%	7.11%	3.93%	88.96%
	6	8.46%	4.64%	3.81%	91.54%
	7	10.07%	6.14%	3.92%	89.93%
	8	10.71%	8.24%	2.47%	89.29%
	9	9.50%	3.94%	5.56%	90.50%
	10	8.46%	4.23%	4.23%	91.54%
SC	5	10.59%	7.41%	3.18%	89.41%
	8	10.21%	7.74%	2.47%	89.79%
	10	7.95%	4.40%	3.55%	92.05%

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 CSAP Assessment		District Ed. Services		Missing	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
RD	3	721	96.51%	9	1.20%	4	0.53%	1	0.13%	0	0%	6	0.80%	6	0.80%	0	0%
	4	658	96.33%	9	1.31%	5	0.73%	1	0.14%	0	0%	6	0.87%	4	0.58%	0	0%
	5	627	94.85%	11	1.66%	4	0.60%	3	0.45%	0	0%	12	1.81%	4	0.60%	0	0%
	6	564	93.53%	5	0.82%	10	1.65%	0	0%	1	0.16%	19	3.15%	2	0.33%	2	0.33%
	7	549	93.68%	7	1.19%	6	1.02%	2	0.34%	0	0%	19	3.24%	1	0.17%	2	0.34%
	8	563	92.75%	10	1.64%	11	1.81%	1	0.16%	0	0%	19	3.13%	3	0.49%	0	0%
	9	520	93.18%	10	1.79%	4	0.71%	0	0%	0	0%	20	3.58%	1	0.17%	3	0.53%
10	552	93.40%	7	1.18%	9	1.52%	2	0.33%	0	0%	17	2.87%	2	0.33%	2	0.33%	
WR	3	715	95.71%	9	1.20%	6	0.80%	1	0.13%	3	0.40%	7	0.93%	6	0.80%	0	0%
	4	653	95.60%	9	1.31%	7	1.02%	1	0.14%	1	0.14%	8	1.17%	4	0.58%	0	0%
	5	621	93.94%	11	1.66%	4	0.60%	3	0.45%	2	0.30%	16	2.42%	4	0.60%	0	0%
	6	568	94.19%	5	0.82%	9	1.49%	0	0%	0	0%	17	2.81%	2	0.33%	2	0.33%
	7	549	93.68%	7	1.19%	6	1.02%	2	0.34%	0	0%	19	3.24%	1	0.17%	2	0.34%
	8	563	92.75%	10	1.64%	11	1.81%	1	0.16%	0	0%	19	3.13%	3	0.49%	0	0%
	9	518	92.83%	10	1.79%	6	1.07%	0	0%	0	0%	20	3.58%	1	0.17%	3	0.53%
10	552	93.40%	7	1.18%	9	1.52%	2	0.33%	0	0%	18	3.04%	2	0.33%	1	0.16%	
MA	3	694	92.90%	9	1.20%	7	0.93%	2	0.26%	3	0.40%	26	3.48%	6	0.80%	0	0%
	4	637	93.26%	9	1.31%	5	0.73%	2	0.29%	0	0%	25	3.66%	5	0.73%	0	0%
	5	614	92.88%	11	1.66%	2	0.30%	2	0.30%	1	0.15%	27	4.08%	4	0.60%	0	0%
	6	573	95.02%	5	0.82%	9	1.49%	0	0%	1	0.16%	11	1.82%	2	0.33%	2	0.33%
	7	548	93.51%	7	1.19%	7	1.19%	2	0.34%	0	0%	19	3.24%	1	0.17%	2	0.34%
	8	556	91.59%	10	1.64%	10	1.64%	1	0.16%	0	0%	26	4.28%	3	0.49%	1	0.16%
	9	533	95.51%	10	1.79%	7	1.25%	0	0%	0	0%	4	0.71%	1	0.17%	3	0.53%
10	564	95.43%	7	1.18%	9	1.52%	2	0.33%	0	0%	5	0.84%	2	0.33%	2	0.33%	
SC	5	612	92.58%	11	1.66%	2	0.30%	3	0.45%	0	0%	29	4.38%	4	0.60%	0	0%
	8	560	92.25%	10	1.64%	9	1.48%	2	0.32%	0	0%	23	3.78%	3	0.49%	0	0%
	10	563	95.26%	7	1.18%	7	1.18%	2	0.33%	0	0%	8	1.35%	2	0.33%	2	0.33%

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	16.62%	0.58%	1.30%	0.58%	4.05%	4.34%	72.54%
		10	36.71%	1.59%	1.30%	2.17%	3.47%	16.33%	38.44%
		15	22.25%	0.29%	0.87%	0.43%	2.46%	7.23%	66.47%
		20	39.31%	2.46%	0.72%	7.66%	1.45%	35.12%	13.30%
		24	40.17%	2.46%	0.43%	3.76%	1.45%	38.30%	13.44%
		29	25.58%	0.43%	0.58%	1.73%	2.46%	17.92%	51.30%
	4	5	16.69%	0.16%	0.47%	0.62%	2.81%	2.81%	76.44%
		10	34.63%	1.25%	1.40%	2.81%	4.99%	8.42%	46.49%
		15	20.59%	0.16%	0.47%	0.94%	1.72%	4.84%	71.30%
		20	33.23%	1.87%	0.31%	5.77%	1.40%	38.69%	18.72%
		25	34.48%	2.03%	0.47%	4.68%	0.94%	36.19%	21.22%
		30	22.47%	0.16%	0.31%	0.62%	1.56%	13.26%	61.62%
	5	5	13.84%	0.66%	0.33%	0.49%	2.64%	2.64%	79.41%
		10	29.82%	0.82%	1.65%	2.31%	3.79%	11.04%	50.58%
		15	17.63%	0.16%	0.49%	0.33%	0.82%	3.30%	77.27%
		20	29.16%	1.81%	0.66%	6.10%	1.15%	36.24%	24.88%
		24	28.01%	2.14%	0.66%	5.11%	1.48%	38.55%	24.05%
		29	20.10%	0.49%	0%	1.32%	1.65%	11.04%	65.40%
	6	5	15.85%	0.18%	0.73%	0.36%	2.19%	1.64%	79.05%
		10	29.14%	1.46%	0.91%	2.55%	4.19%	6.74%	55.01%
		15	18.40%	0%	1.46%	0.91%	1.46%	9.65%	68.12%
		20	32.24%	1.64%	0.18%	3.46%	2.55%	36.61%	23.32%
		24	29.87%	2.37%	0.36%	5.10%	2.00%	34.79%	25.50%
		29	20.58%	0.18%	0.18%	1.28%	0.73%	10.20%	66.85%

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

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
WR	7	5	12.66%	0.37%	0.74%	0.74%	2.23%	3.17%	80.07%
		10	32.03%	0.93%	0.74%	1.30%	2.61%	8.38%	54.00%
		15	15.27%	0.37%	0.74%	0.93%	2.23%	4.66%	75.79%
		20	33.52%	2.42%	0.19%	4.28%	2.05%	31.84%	25.70%
		25	30.73%	2.42%	0.37%	3.72%	1.12%	37.80%	23.84%
		30	27.75%	0.37%	1.30%	0.74%	3.17%	5.77%	60.89%
	8	5	16.51%	0.37%	0.37%	0.37%	1.83%	2.20%	78.35%
		10	38.72%	0.73%	0.55%	1.47%	2.57%	10.28%	45.69%
		15	20.55%	0%	0.92%	0%	1.47%	3.85%	73.21%
		20	32.84%	1.10%	0%	3.49%	1.10%	32.11%	29.36%
		25	33.21%	1.47%	0.37%	3.67%	1.65%	35.78%	23.85%
		30	31.38%	0.18%	1.10%	0.18%	2.75%	8.99%	55.41%
	9	5	13.66%	0.40%	0.60%	0.80%	3.01%	4.82%	76.71%
		10	27.31%	1.20%	0.60%	3.41%	1.81%	9.64%	56.02%
		15	16.06%	0%	0.60%	0.20%	1.20%	3.82%	78.11%
		20	25.30%	2.41%	0.20%	6.22%	0%	34.14%	31.73%
		24	28.72%	3.21%	0%	5.42%	1.00%	33.74%	27.91%
		29	25.30%	0%	1.81%	1.61%	3.82%	6.02%	61.45%
	10	5	13.01%	0.56%	1.12%	1.67%	1.49%	3.53%	78.63%
		10	23.42%	0.93%	1.86%	2.23%	1.67%	7.44%	62.45%
		15	17.10%	0.19%	0.74%	0.56%	2.42%	3.72%	75.28%
		20	20.82%	1.49%	0.56%	4.28%	1.12%	34.57%	37.18%
		25	24.16%	3.16%	0.37%	5.39%	1.49%	33.46%	31.97%
		30	23.61%	0.56%	2.04%	0.93%	4.83%	9.85%	58.18%

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
MA	3	2	14.61%	1.05%	2.56%	3.16%	4.07%	8.28%	66.27%
		4	28.77%	1.05%	2.41%	5.27%	7.68%	14.01%	40.81%
		5	16.87%	0.90%	0.90%	1.21%	3.01%	9.19%	67.92%
		9	25.15%	1.66%	0.75%	3.16%	4.37%	11.45%	53.46%
		12	39.16%	1.81%	2.41%	7.53%	5.87%	25.75%	17.47%
		13	26.36%	1.20%	2.11%	2.71%	6.33%	4.82%	56.48%
		17	30.72%	1.05%	1.51%	1.21%	6.63%	5.57%	53.31%
		23	9.64%	0.90%	1.66%	1.66%	7.68%	3.01%	75.45%
	4	24	31.33%	2.86%	1.05%	6.93%	2.56%	35.39%	19.88%
		26	26.51%	4.07%	3.01%	10.69%	3.61%	39.46%	12.65%
		2	14.73%	1.62%	1.94%	1.62%	3.40%	9.55%	67.15%
		3	16.18%	0.16%	0.81%	1.29%	2.91%	5.18%	73.46%
		4	23.46%	0.81%	2.27%	4.69%	4.69%	16.51%	47.57%
		9	27.83%	1.78%	0.81%	2.91%	3.88%	13.27%	49.52%
		12	37.38%	2.59%	2.59%	5.02%	5.34%	19.26%	27.83%
		16	37.54%	1.13%	4.05%	1.62%	7.28%	3.72%	44.66%
4	18	11.17%	1.13%	0.81%	0.81%	5.50%	3.40%	77.18%	
	19	22.49%	2.10%	2.75%	2.10%	11.17%	4.37%	55.02%	
	20	33.33%	2.59%	4.37%	3.88%	8.41%	8.58%	38.84%	
	26	30.58%	1.13%	2.75%	5.99%	4.37%	29.13%	26.05%	
	28	52.10%	0.16%	2.43%	1.62%	3.40%	11.65%	28.64%	

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

Content	Grade	Item Number	% of Students Obtaining Score Level								
			0	1	2	3	4	5	6		
MA	5	3	30.30%	0.84%	1.35%	5.22%	2.69%	21.38%	38.22%		
		4	15.66%	2.19%	1.68%	3.87%	4.21%	12.12%	60.27%		
		5	25.93%	1.18%	4.04%	2.53%	12.29%	14.14%	39.90%		
		6	44.44%	2.19%	2.36%	3.20%	4.55%	15.66%	27.61%		
		9	16.67%	0.67%	0.67%	1.35%	2.02%	6.90%	71.72%		
		12	21.89%	2.02%	1.52%	2.19%	4.04%	9.76%	58.59%		
		13	29.29%	1.85%	0.51%	4.71%	3.87%	14.14%	45.62%		
		17	47.48%	2.36%	1.35%	5.89%	2.53%	26.43%	13.97%		
		18	55.72%	0.67%	1.01%	2.53%	3.70%	9.93%	26.43%		
		22	9.93%	1.35%	0.67%	1.35%	3.03%	4.71%	78.96%		
		23	15.66%	1.01%	2.19%	3.37%	4.71%	9.60%	63.47%		
		25	27.95%	2.36%	3.70%	2.69%	7.91%	7.74%	47.64%		
		26	35.35%	1.35%	1.68%	6.40%	3.70%	20.71%	30.81%		
		27	41.08%	1.68%	3.20%	3.37%	4.88%	18.52%	27.27%		
		28	61.95%	0.51%	2.53%	1.35%	4.88%	6.40%	22.39%		
		29	38.55%	2.86%	3.70%	3.03%	5.89%	9.93%	36.03%		
		31	16.33%	0.17%	1.18%	0.51%	4.55%	3.20%	74.07%		
		6	6	1	25.67%	1.08%	1.62%	4.31%	3.95%	22.80%	40.58%
				2	19.57%	1.97%	1.08%	3.05%	3.05%	14.72%	56.55%
				3	15.26%	1.44%	1.08%	2.69%	1.26%	8.44%	69.84%
4	28.37%			1.26%	4.31%	2.33%	9.70%	11.85%	42.19%		
6	27.29%			0.90%	2.33%	1.98%	5.75%	11.31%	50.45%		
12	28.73%			3.77%	1.62%	7.90%	4.49%	31.24%	22.26%		
15	28.37%			0.72%	4.13%	3.77%	7.18%	7.54%	48.29%		
19	17.77%			1.44%	2.51%	4.49%	6.82%	7.54%	59.43%		
20	41.47%			2.15%	3.41%	3.05%	8.62%	5.39%	35.91%		
29	27.65%			1.26%	1.97%	6.28%	7.00%	16.70%	39.14%		
30	60.50%			0.18%	1.08%	2.69%	2.15%	19.57%	13.82%		
31	30.16%	1.97%	3.23%	5.03%	8.26%	9.70%	41.65%				

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	26.64%	1.13%	0.75%	6.94%	2.06%	37.34%	25.14%
		2	19.33%	1.88%	0.56%	3.19%	2.25%	17.07%	55.72%
		3	14.82%	0.19%	0.75%	2.81%	1.69%	9.76%	69.98%
		4	30.96%	0.56%	2.25%	3.19%	7.69%	11.82%	43.53%
		6	27.96%	0.75%	1.31%	2.81%	4.69%	8.82%	53.66%
		16	42.21%	1.50%	3.38%	2.06%	4.88%	7.13%	38.84%
		17	18.01%	2.25%	2.63%	2.25%	5.25%	6.19%	63.42%
		20	38.84%	1.13%	2.63%	3.00%	9.94%	15.20%	29.27%
		26	32.46%	1.31%	1.50%	5.07%	4.13%	27.21%	28.33%
	8	27	26.27%	1.69%	2.06%	6.00%	4.50%	19.89%	39.59%
		29	53.28%	1.13%	2.25%	1.50%	4.50%	8.07%	29.27%
		1	27.99%	1.29%	1.11%	7.37%	3.13%	34.99%	24.13%
		2	21.36%	1.47%	1.11%	5.71%	2.03%	18.42%	49.91%
		3	35.18%	0.74%	2.21%	2.39%	9.39%	7.92%	42.17%
		4	51.75%	0.18%	3.31%	0.55%	6.63%	3.68%	33.89%
		6	20.07%	1.29%	1.11%	4.42%	1.29%	27.81%	44.02%
		7	36.10%	1.29%	3.13%	2.58%	8.10%	8.47%	40.33%
		18	36.83%	0.92%	2.95%	2.39%	4.42%	8.10%	44.38%
		21	19.15%	2.95%	2.21%	3.13%	6.81%	7.74%	58.01%
29	37.02%	1.47%	1.66%	5.34%	3.32%	30.57%	20.63%		
30	28.73%	2.21%	3.50%	4.97%	7.55%	26.52%	26.52%		
31	49.36%	1.11%	2.95%	1.66%	4.42%	9.21%	31.31%		

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	21.70%	0.99%	1.58%	4.73%	3.55%	19.92%	47.54%
		2	18.54%	1.97%	0.99%	3.16%	2.76%	19.13%	53.45%
		3	30.77%	0.20%	3.35%	1.97%	8.68%	8.88%	46.15%
		5	17.36%	0.99%	0.79%	3.35%	1.97%	27.02%	48.52%
		6	43.20%	2.37%	4.34%	5.33%	10.45%	9.47%	24.85%
		13	33.33%	2.56%	2.76%	6.31%	5.72%	13.02%	36.29%
		15	31.76%	2.96%	4.14%	1.97%	6.11%	6.11%	46.94%
		25	36.29%	1.58%	1.78%	2.96%	3.95%	19.53%	33.93%
		28	33.14%	0.59%	1.97%	2.76%	4.73%	19.72%	37.08%
	29	48.32%	1.38%	1.58%	3.35%	3.35%	10.85%	31.16%	
	10	1	24.50%	0.37%	1.10%	5.12%	4.02%	18.28%	46.62%
		2	18.65%	1.28%	0.73%	4.02%	1.65%	20.29%	53.38%
		3	32.72%	0.55%	3.29%	1.83%	7.86%	5.67%	48.08%
		4	41.13%	1.65%	3.47%	2.38%	8.59%	7.31%	35.47%
		6	17.00%	1.83%	0.73%	2.01%	3.29%	23.58%	51.55%
		15	20.48%	2.74%	3.29%	4.39%	10.24%	8.59%	50.27%
		19	42.96%	2.38%	2.01%	3.29%	4.39%	17.19%	27.79%
		24	14.08%	1.46%	0.55%	1.10%	5.67%	3.29%	73.86%
		28	33.64%	1.46%	1.65%	3.47%	3.66%	24.68%	31.44%
29		31.44%	1.65%	2.19%	5.12%	2.19%	38.76%	18.65%	
	30	46.62%	1.46%	1.83%	2.74%	3.29%	21.76%	22.30%	
	36	53.20%	2.38%	5.12%	2.93%	8.78%	8.96%	18.65%	

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

Content	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
SC	5	12	8.91%	0%	0.67%	1.85%	7.73%	7.06%	73.78%
		19	10.92%	0.50%	1.51%	5.55%	3.70%	15.80%	62.02%
	8	21	10.81%	0.92%	2.20%	3.85%	2.38%	18.68%	61.17%
		23	11.17%	0.92%	1.28%	4.21%	4.76%	13.19%	64.47%
		29	15.02%	0.92%	1.28%	5.86%	6.04%	24.36%	46.52%
	10	10	33.70%	0.37%	3.30%	0.55%	4.21%	3.85%	54.03%
		21	19.60%	1.10%	1.10%	3.85%	4.76%	16.67%	52.93%
		27	39.56%	0.73%	1.47%	0.55%	2.56%	2.02%	53.11%
		28	48.17%	0%	1.10%	0.73%	1.83%	5.68%	42.49%

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	0.73	0.68	1	0.69	0.66
		2	3	0.58	0.52	1	0.54	0.54
		3	3	0.34	0.49	1	0.30	0.48
		4	3	0.25	0.29	1	0.23	0.31
		5	3	0.30	0.37	1	0.26	0.39
		6	3	0.51	0.46	1	0.47	0.47
		7	3	0.63	0.54	1	0.56	0.56
		8	3	0.69	0.57	1	0.65	0.59
		9	3	0.45	0.35	1	0.41	0.36
		10	3	0.34	0.46	1	0.32	0.46
		11	3	0.70	0.56	1	0.67	0.58
		12	3	0.75	0.63	1	0.71	0.64
		13	3	0.83	0.71	1	0.80	0.73
		14	3	0.85	0.69	1	0.84	0.71
		15	3	0.74	0.72	1	0.70	0.71
		16	3	0.73	0.71	1	0.70	0.70
		17	3	0.77	0.72	1	0.75	0.70
		18	3	0.34	0.46	1	0.31	0.44
		19	3	0.79	0.66	1	0.77	0.67
		20	3	0.32	0.30	1	0.28	0.29
		21	3	0.74	0.66	1	0.69	0.67
		22	3	0.79	0.73	1	0.76	0.73
		23	3	0.65	0.67	1	0.61	0.67
		24	3	0.75	0.71	1	0.72	0.71
		25	3	0.47	0.58	1	0.42	0.58
		26	3	0.62	0.66	1	0.56	0.67
		27	3	0.55	0.56	1	0.52	0.57
		28	3	0.52	0.58	1	0.50	0.59
		29	3	0.62	0.68	1	0.60	0.68
		30	3	0.43	0.53	1	0.40	0.53
		31	3	0.58	0.60	1	0.55	0.62
		32	3	0.40	0.48	1	0.36	0.50
		33	3	0.38	0.52	1	0.35	0.52
		34	3	0.39	0.40	1	0.35	0.43
		35	3	0.53	0.65	1	0.50	0.63

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	0.59	0.59	1	0.55	0.59
		2	3	0.31	0.36	1	0.28	0.36
		3	3	0.26	0.36	1	0.23	0.33
		4	3	0.55	0.61	1	0.51	0.60
		5	3	0.50	0.57	1	0.47	0.57
		6	3	0.65	0.69	1	0.61	0.70
		7	3	0.67	0.55	1	0.63	0.56
		8	3	0.62	0.62	1	0.61	0.63
		9	3	0.59	0.56	1	0.56	0.57
		10	3	0.43	0.52	1	0.38	0.51
		11	3	0.84	0.69	1	0.83	0.70
		12	3	0.86	0.68	1	0.85	0.68
		13	3	0.83	0.59	1	0.81	0.61
		14	3	0.74	0.72	1	0.71	0.73
		15	3	0.72	0.59	1	0.70	0.61
		16	3	0.80	0.70	1	0.78	0.69
		17	3	0.79	0.67	1	0.77	0.67
		18	3	0.83	0.71	1	0.83	0.70
		19	3	0.31	0.40	1	0.28	0.40
		20	3	0.42	0.35	1	0.38	0.35
		21	3	0.63	0.69	1	0.61	0.69
		22	3	0.39	0.38	1	0.35	0.36
		23	3	0.74	0.72	1	0.72	0.73
		24	3	0.74	0.69	1	0.72	0.69
		25	3	0.64	0.63	1	0.60	0.64
		26	3	0.56	0.57	1	0.53	0.55
		27	3	0.43	0.50	1	0.40	0.50
		28	3	0.38	0.49	1	0.36	0.51
		29	3	0.33	0.44	1	0.31	0.46
		30	3	0.48	0.47	1	0.45	0.49
		31	3	0.53	0.59	1	0.50	0.58
		32	3	0.46	0.48	1	0.43	0.49
		33	3	0.60	0.52	1	0.54	0.52
		34	3	0.52	0.57	1	0.49	0.58
		35	3	0.45	0.60	1	0.42	0.60

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	0.71	0.67	1	0.69	0.67
		2	3	0.81	0.64	1	0.79	0.66
		3	3	0.35	0.43	1	0.32	0.45
		4	3	0.55	0.55	1	0.51	0.56
		5	3	0.47	0.55	1	0.44	0.56
		6	3	0.47	0.50	1	0.44	0.50
		7	3	0.42	0.40	1	0.39	0.41
		8	3	0.55	0.52	1	0.52	0.53
		9	3	0.53	0.62	1	0.49	0.61
		10	3	0.49	0.41	1	0.46	0.40
		11	3	0.81	0.69	1	0.79	0.68
		12	3	0.89	0.64	1	0.88	0.63
		13	3	0.85	0.66	1	0.84	0.66
		14	3	0.71	0.61	1	0.68	0.59
		15	3	0.77	0.64	1	0.73	0.63
		16	3	0.84	0.66	1	0.83	0.67
		17	3	0.47	0.44	1	0.44	0.43
		18	3	0.25	0.24	1	0.22	0.22
		19	3	0.59	0.64	1	0.57	0.65
		20	3	0.52	0.55	1	0.48	0.53
		21	3	0.76	0.75	1	0.74	0.74
		22	3	0.58	0.58	1	0.55	0.56
		23	3	0.63	0.67	1	0.59	0.68
		24	3	0.43	0.33	1	0.39	0.35
		25	3	0.74	0.68	1	0.71	0.67
		26	3	0.51	0.55	1	0.48	0.54
		27	3	0.44	0.54	1	0.41	0.55
		28	3	0.64	0.64	1	0.60	0.65
		29	3	0.64	0.70	1	0.61	0.70
		30	3	0.65	0.72	1	0.62	0.72
		31	3	0.69	0.72	1	0.67	0.73
		32	3	0.43	0.55	1	0.41	0.56
		33	3	0.57	0.68	1	0.54	0.67
		34	3	0.49	0.50	1	0.46	0.51
		35	3	0.71	0.74	1	0.68	0.74

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	6	1	3	0.26	0.41	1	0.23	0.41
		2	3	0.81	0.66	1	0.79	0.68
		3	3	0.45	0.53	1	0.43	0.53
		4	3	0.75	0.59	1	0.72	0.61
		5	3	0.59	0.55	1	0.55	0.55
		6	3	0.33	0.49	1	0.31	0.49
		7	3	0.45	0.31	1	0.42	0.33
		8	3	0.23	0.35	1	0.20	0.35
		9	3	0.77	0.70	1	0.74	0.70
		10	3	0.40	0.43	1	0.37	0.44
		11	3	0.86	0.71	1	0.85	0.70
		12	3	0.81	0.72	1	0.80	0.71
		13	3	0.83	0.71	1	0.81	0.71
		14	3	0.69	0.60	1	0.64	0.57
		15	3	0.73	0.60	1	0.70	0.61
		16	3	0.78	0.74	1	0.76	0.74
		17	3	0.79	0.72	1	0.76	0.72
		18	3	0.63	0.66	1	0.59	0.65
		19	3	0.50	0.58	1	0.47	0.59
		20	3	0.62	0.67	1	0.59	0.68
		21	3	0.71	0.67	1	0.68	0.67
		22	3	0.76	0.69	1	0.72	0.69
		23	3	0.48	0.51	1	0.45	0.51
		24	3	0.53	0.54	1	0.52	0.54
		25	3	0.45	0.53	1	0.42	0.52
		26	3	0.52	0.57	1	0.50	0.57
		27	3	0.42	0.50	1	0.40	0.50
		28	3	0.60	0.59	1	0.57	0.60
		29	3	0.85	0.65	1	0.83	0.67
		30	3	0.71	0.68	1	0.69	0.69
		31	3	0.75	0.62	1	0.71	0.62
		32	3	0.50	0.54	1	0.47	0.56
		33	3	0.64	0.67	1	0.60	0.67
		34	3	0.41	0.38	1	0.39	0.37
		35	3	0.81	0.61	1	0.79	0.60

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	7	1	3	0.62	0.61	1	0.59	0.63
		2	3	0.33	0.32	1	0.31	0.34
		3	3	0.43	0.46	1	0.40	0.49
		4	3	0.56	0.52	1	0.54	0.55
		5	3	0.32	0.36	1	0.28	0.36
		6	3	0.48	0.44	1	0.45	0.46
		7	3	0.41	0.42	1	0.37	0.43
		8	3	0.40	0.51	1	0.37	0.50
		9	3	0.24	0.39	1	0.21	0.39
		10	3	0.23	0.20	1	0.20	0.20
		11	3	0.27	0.28	1	0.24	0.29
		12	3	0.61	0.64	1	0.57	0.65
		13	3	0.85	0.63	1	0.83	0.62
		14	3	0.63	0.68	1	0.60	0.67
		15	3	0.81	0.66	1	0.79	0.66
		16	3	0.82	0.67	1	0.81	0.68
		17	3	0.78	0.68	1	0.76	0.68
		18	3	0.76	0.71	1	0.74	0.71
		19	3	0.60	0.61	1	0.58	0.62
		20	3	0.63	0.66	1	0.60	0.68
		21	3	0.84	0.68	1	0.82	0.66
		22	3	0.65	0.66	1	0.62	0.67
		23	3	0.45	0.51	1	0.43	0.51
		24	3	0.76	0.59	1	0.73	0.59
		25	3	0.45	0.62	1	0.43	0.63
		26	3	0.31	0.33	1	0.28	0.37
		27	3	0.48	0.54	1	0.44	0.53
		28	3	0.55	0.65	1	0.53	0.67
		29	3	0.38	0.51	1	0.34	0.51
		30	3	0.60	0.65	1	0.58	0.66
		31	3	0.36	0.28	1	0.34	0.29
		32	3	0.26	0.48	1	0.24	0.49
		33	3	0.59	0.40	1	0.55	0.41
		34	3	0.71	0.68	1	0.68	0.70
		35	3	0.52	0.58	1	0.49	0.59

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
RD	8	1	3	0.32	0.43	1	0.29	0.43
		2	3	0.47	0.53	1	0.44	0.55
		3	3	0.29	0.39	1	0.26	0.39
		4	3	0.35	0.39	1	0.33	0.40
		5	3	0.40	0.53	1	0.37	0.53
		6	3	0.39	0.49	1	0.37	0.48
		7	3	0.36	0.48	1	0.34	0.51
		8	3	0.44	0.54	1	0.42	0.55
		9	3	0.44	0.49	1	0.41	0.51
		10	3	0.33	0.51	1	0.30	0.52
		11	3	0.68	0.64	1	0.66	0.64
		12	3	0.81	0.62	1	0.79	0.64
		13	3	0.47	0.48	1	0.45	0.47
		14	3	0.80	0.62	1	0.78	0.62
		15	3	0.75	0.69	1	0.73	0.69
		16	3	0.67	0.68	1	0.64	0.70
		17	3	0.71	0.65	1	0.68	0.66
		18	3	0.70	0.64	1	0.67	0.64
		19	3	0.40	0.49	1	0.38	0.48
		20	3	0.73	0.63	1	0.70	0.64
		21	3	0.37	0.38	1	0.34	0.38
		22	3	0.46	0.60	1	0.44	0.61
		23	3	0.59	0.63	1	0.56	0.64
		24	3	0.62	0.62	1	0.60	0.63
		25	3	0.55	0.58	1	0.53	0.59
		26	3	0.51	0.53	1	0.49	0.54
		27	3	0.45	0.51	1	0.42	0.52
		28	3	0.48	0.52	1	0.46	0.54
		29	3	0.42	0.52	1	0.40	0.52
		30	3	0.51	0.50	1	0.48	0.49
		31	3	0.36	0.32	1	0.33	0.32
		32	3	0.47	0.59	1	0.43	0.60
		33	3	0.48	0.48	1	0.45	0.50
		34	3	0.51	0.60	1	0.49	0.61
		35	3	0.65	0.63	1	0.61	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	9	1	3	0.37	0.49	1	0.34	0.49
		2	3	0.46	0.56	1	0.43	0.57
		3	3	0.50	0.66	1	0.47	0.67
		4	3	0.47	0.60	1	0.43	0.61
		5	3	0.45	0.54	1	0.43	0.55
		6	3	0.41	0.66	1	0.39	0.66
		7	3	0.52	0.56	1	0.50	0.56
		8	3	0.48	0.58	1	0.45	0.60
		9	3	0.33	0.49	1	0.31	0.49
		10	3	0.57	0.41	1	0.53	0.42
		11	3	0.65	0.58	1	0.61	0.58
		12	3	0.62	0.66	1	0.60	0.65
		13	3	0.79	0.67	1	0.77	0.68
		14	3	0.80	0.64	1	0.79	0.64
		15	3	0.69	0.64	1	0.66	0.66
		16	3	0.68	0.66	1	0.67	0.67
		17	3	0.74	0.67	1	0.72	0.68
		18	3	0.72	0.63	1	0.68	0.63
		19	3	0.73	0.61	1	0.69	0.60
		20	3	0.47	0.54	1	0.44	0.53
		21	3	0.36	0.46	1	0.33	0.45
		22	3	0.70	0.66	1	0.68	0.64
		23	3	0.68	0.63	1	0.65	0.64
		24	3	0.45	0.55	1	0.42	0.55
		25	3	0.49	0.58	1	0.46	0.59
		26	3	0.54	0.61	1	0.52	0.62
		27	3	0.36	0.42	1	0.34	0.43
		28	3	0.51	0.53	1	0.50	0.54
		29	3	0.34	0.41	1	0.32	0.41
		30	3	0.58	0.71	1	0.57	0.71
		31	3	0.49	0.64	1	0.47	0.62
		32	3	0.28	0.37	1	0.26	0.37
		33	3	0.52	0.56	1	0.49	0.57
		34	3	0.35	0.42	1	0.32	0.43

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	0.56	0.60	1	0.53	0.59
		2	3	0.42	0.38	1	0.40	0.38
		3	3	0.30	0.41	1	0.27	0.39
		4	3	0.41	0.33	1	0.38	0.34
		5	3	0.43	0.43	1	0.41	0.42
		6	3	0.50	0.50	1	0.48	0.51
		7	3	0.35	0.41	1	0.32	0.39
		8	3	0.64	0.60	1	0.62	0.62
		9	3	0.40	0.44	1	0.36	0.44
		10	3	0.64	0.52	1	0.61	0.53
		11	3	0.71	0.41	1	0.70	0.41
		12	3	0.48	0.54	1	0.46	0.54
		13	3	0.73	0.64	1	0.70	0.65
		14	3	0.49	0.36	1	0.46	0.34
		15	3	0.76	0.56	1	0.73	0.56
		16	3	0.54	0.57	1	0.51	0.57
		17	3	0.32	0.36	1	0.29	0.35
		18	3	0.50	0.57	1	0.48	0.57
		19	3	0.67	0.56	1	0.66	0.56
		20	3	0.48	0.38	1	0.45	0.39
		21	3	0.43	0.49	1	0.39	0.47
		22	3	0.44	0.52	1	0.42	0.53
		23	3	0.66	0.68	1	0.64	0.67
		24	3	0.43	0.51	1	0.40	0.51
		25	3	0.55	0.60	1	0.53	0.59
		26	3	0.25	0.35	1	0.23	0.34
		27	3	0.40	0.48	1	0.37	0.49
		28	3	0.50	0.68	1	0.48	0.68
		29	3	0.67	0.62	1	0.64	0.63
		30	3	0.74	0.60	1	0.72	0.61
		31	3	0.50	0.63	1	0.48	0.63
		32	3	0.60	0.65	1	0.58	0.66
		33	3	0.61	0.66	1	0.59	0.67
		34	3	0.39	0.58	1	0.38	0.57

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	0.30	0.31	1	0.24	0.31
		2	3	0.64	0.64	1	0.60	0.64
		3	3	0.78	0.68	1	0.74	0.67
		4	3	0.72	0.71	1	0.70	0.69
		5	6	0.80	0.76	2	0.75	0.74
		6	3	0.55	0.62	1	0.49	0.62
		7	3	0.54	0.60	1	0.51	0.62
		8	3	0.78	0.65	1	0.74	0.65
		9	3	0.81	0.61	1	0.78	0.60
		10	6	0.56	0.83	2	0.47	0.77
		11	3	0.75	0.71	1	0.72	0.70
		12	3	0.57	0.69	1	0.53	0.68
		13	3	0.43	0.56	1	0.40	0.57
		14	3	0.48	0.42	1	0.45	0.43
		15	6	0.75	0.79	2	0.70	0.75
		16	3	0.53	0.63	1	0.51	0.63
		17	3	0.44	0.44	1	0.40	0.46
		18	3	0.54	0.48	1	0.50	0.50
		19	3	0.33	0.25	1	0.28	0.24
		20	6	0.48	0.79	2	0.31	0.71
		21	3	0.26	0.33	1	0.23	0.35
		22	3	0.44	0.54	1	0.42	0.53
		23	3	0.50	0.51	1	0.46	0.51
		24	6	0.49	0.80	2	0.33	0.75
		25	3	0.32	0.37	1	0.29	0.40
		26	3	0.32	0.31	1	0.29	0.33
		27	3	0.49	0.57	1	0.45	0.55
		28	3	0.31	0.33	1	0.28	0.36
		29	6	0.69	0.81	2	0.60	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	0.33	0.34	1	0.28	0.34
		2	3	0.45	0.50	1	0.41	0.51
		3	3	0.71	0.67	1	0.68	0.67
		4	3	0.65	0.64	1	0.63	0.65
		5	6	0.81	0.75	2	0.78	0.72
		6	3	0.36	0.28	1	0.33	0.30
		7	3	0.54	0.58	1	0.50	0.57
		8	3	0.72	0.69	1	0.69	0.69
		9	3	0.67	0.68	1	0.64	0.69
		10	6	0.59	0.84	2	0.51	0.78
		11	3	0.77	0.69	1	0.73	0.70
		12	3	0.73	0.73	1	0.71	0.71
		13	3	0.32	0.40	1	0.28	0.42
		14	3	0.65	0.71	1	0.62	0.70
		15	6	0.77	0.78	2	0.74	0.77
		16	3	0.53	0.47	1	0.50	0.49
		17	3	0.34	0.41	1	0.31	0.42
		18	3	0.50	0.50	1	0.46	0.52
		19	3	0.36	0.29	1	0.32	0.28
		20	6	0.55	0.83	2	0.38	0.76
		21	3	0.22	0.21	1	0.20	0.22
		22	3	0.54	0.51	1	0.51	0.51
		23	3	0.55	0.55	1	0.52	0.56
		24	3	0.54	0.60	1	0.51	0.61
		25	6	0.55	0.82	2	0.39	0.76
		26	3	0.45	0.53	1	0.43	0.55
		27	3	0.39	0.32	1	0.37	0.33
		28	3	0.58	0.59	1	0.55	0.59
		29	3	0.39	0.43	1	0.35	0.43
		30	6	0.75	0.78	2	0.69	0.75

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	5	1	3	0.47	0.48	1	0.41	0.49
		2	3	0.75	0.62	1	0.72	0.62
		3	3	0.77	0.72	1	0.74	0.70
		4	3	0.76	0.72	1	0.74	0.70
		5	6	0.84	0.77	2	0.81	0.75
		6	3	0.38	0.42	1	0.34	0.42
		7	3	0.53	0.53	1	0.50	0.56
		8	3	0.77	0.67	1	0.74	0.66
		9	3	0.72	0.48	1	0.69	0.50
		10	6	0.64	0.83	2	0.56	0.78
		11	3	0.74	0.69	1	0.71	0.69
		12	3	0.76	0.75	1	0.74	0.73
		13	3	0.35	0.40	1	0.31	0.41
		14	3	0.66	0.59	1	0.64	0.60
		15	6	0.81	0.82	2	0.79	0.79
		16	3	0.65	0.61	1	0.63	0.63
		17	3	0.55	0.52	1	0.52	0.54
		18	3	0.59	0.56	1	0.56	0.54
		19	3	0.28	0.18	1	0.25	0.19
		20	6	0.59	0.85	2	0.43	0.78
		21	3	0.36	0.40	1	0.34	0.41
		22	3	0.63	0.62	1	0.59	0.62
		23	3	0.23	0.26	1	0.20	0.26
		24	6	0.60	0.83	2	0.43	0.76
		25	3	0.43	0.41	1	0.41	0.42
		26	3	0.45	0.39	1	0.43	0.41
		27	3	0.48	0.55	1	0.44	0.57
		28	3	0.54	0.45	1	0.51	0.47
		29	6	0.77	0.81	2	0.71	0.78

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	6	1	3	0.70	0.62	1	0.64	0.60
		2	3	0.68	0.65	1	0.64	0.65
		3	3	0.71	0.71	1	0.67	0.70
		4	3	0.76	0.70	1	0.74	0.69
		5	6	0.82	0.76	2	0.80	0.73
		6	3	0.76	0.79	1	0.73	0.77
		7	3	0.48	0.34	1	0.44	0.38
		8	3	0.69	0.73	1	0.67	0.71
		9	3	0.68	0.70	1	0.65	0.70
		10	6	0.65	0.83	2	0.58	0.80
		11	3	0.70	0.70	1	0.67	0.69
		12	3	0.76	0.70	1	0.73	0.69
		13	3	0.54	0.45	1	0.50	0.46
		14	3	0.48	0.40	1	0.45	0.42
		15	6	0.78	0.80	2	0.73	0.80
		16	3	0.71	0.74	1	0.68	0.74
		17	3	0.49	0.47	1	0.46	0.51
		18	3	0.53	0.51	1	0.49	0.50
		19	3	0.32	0.23	1	0.30	0.22
		20	6	0.58	0.81	2	0.42	0.74
		21	3	0.42	0.44	1	0.39	0.44
		22	3	0.49	0.49	1	0.46	0.48
		23	3	0.40	0.35	1	0.37	0.36
		24	6	0.59	0.79	2	0.43	0.73
		25	3	0.44	0.43	1	0.42	0.44
		26	3	0.40	0.31	1	0.38	0.30
		27	3	0.47	0.48	1	0.42	0.48
		28	3	0.46	0.50	1	0.43	0.50
		29	6	0.77	0.80	2	0.72	0.78

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	7	1	3	0.74	0.60	1	0.71	0.62
		2	3	0.50	0.66	1	0.47	0.68
		3	3	0.72	0.69	1	0.68	0.66
		4	3	0.75	0.69	1	0.72	0.69
		5	6	0.85	0.70	2	0.82	0.69
		6	3	0.57	0.58	1	0.53	0.59
		7	3	0.56	0.64	1	0.53	0.65
		8	3	0.69	0.71	1	0.66	0.70
		9	3	0.67	0.67	1	0.64	0.66
		10	6	0.64	0.84	2	0.59	0.83
		11	3	0.74	0.67	1	0.71	0.65
		12	3	0.33	0.39	1	0.31	0.41
		13	3	0.45	0.49	1	0.43	0.51
		14	3	0.73	0.67	1	0.71	0.68
		15	6	0.82	0.75	2	0.78	0.76
		16	3	0.53	0.54	1	0.49	0.54
		17	3	0.39	0.47	1	0.37	0.49
		18	3	0.66	0.71	1	0.63	0.72
		19	3	0.30	0.20	1	0.28	0.20
		20	6	0.56	0.84	2	0.42	0.78
		21	3	0.39	0.41	1	0.36	0.42
		22	3	0.43	0.36	1	0.41	0.36
		23	3	0.61	0.53	1	0.59	0.54
		24	3	0.40	0.40	1	0.38	0.42
		25	6	0.59	0.84	2	0.43	0.78
		26	3	0.24	0.28	1	0.21	0.29
		27	3	0.67	0.64	1	0.65	0.64
		28	3	0.48	0.58	1	0.45	0.58
		29	3	0.53	0.43	1	0.50	0.46
		30	6	0.69	0.81	2	0.64	0.81

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	8	1	3	0.68	0.69	1	0.65	0.68
		2	3	0.69	0.75	1	0.66	0.76
		3	3	0.72	0.75	1	0.69	0.74
		4	3	0.74	0.72	1	0.72	0.72
		5	6	0.82	0.73	2	0.80	0.73
		6	3	0.61	0.71	1	0.59	0.73
		7	3	0.77	0.66	1	0.75	0.67
		8	3	0.68	0.71	1	0.66	0.72
		9	3	0.60	0.71	1	0.57	0.70
		10	6	0.57	0.84	2	0.51	0.81
		11	3	0.41	0.40	1	0.39	0.42
		12	3	0.39	0.33	1	0.37	0.33
		13	3	0.28	0.31	1	0.26	0.33
		14	3	0.68	0.74	1	0.66	0.76
		15	6	0.78	0.77	2	0.75	0.75
		16	3	0.38	0.38	1	0.35	0.40
		17	3	0.37	0.35	1	0.34	0.35
		18	3	0.33	0.35	1	0.29	0.35
		19	3	0.25	0.20	1	0.22	0.19
		20	6	0.59	0.88	2	0.45	0.82
		21	3	0.31	0.26	1	0.28	0.25
		22	3	0.28	0.34	1	0.27	0.36
		23	3	0.40	0.52	1	0.37	0.54
		24	3	0.55	0.65	1	0.53	0.66
		25	6	0.57	0.83	2	0.42	0.76
		26	3	0.40	0.44	1	0.38	0.46
		27	3	0.29	0.25	1	0.27	0.26
		28	3	0.60	0.61	1	0.57	0.61
		29	3	0.42	0.55	1	0.39	0.54
		30	6	0.66	0.84	2	0.60	0.84

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	0.67	0.69	1	0.63	0.69
		2	3	0.72	0.63	1	0.69	0.63
		3	3	0.76	0.67	1	0.72	0.65
		4	3	0.78	0.73	1	0.75	0.73
		5	6	0.83	0.75	2	0.79	0.75
		6	3	0.54	0.50	1	0.52	0.49
		7	3	0.51	0.60	1	0.49	0.61
		8	3	0.39	0.44	1	0.37	0.45
		9	3	0.47	0.41	1	0.43	0.41
		10	6	0.67	0.84	2	0.61	0.83
		11	3	0.69	0.60	1	0.67	0.61
		12	3	0.67	0.73	1	0.64	0.73
		13	3	0.43	0.51	1	0.40	0.51
		14	3	0.47	0.52	1	0.44	0.53
		15	6	0.82	0.75	2	0.80	0.73
		16	3	0.41	0.37	1	0.38	0.37
		17	3	0.32	0.46	1	0.30	0.46
		18	3	0.56	0.65	1	0.54	0.66
		19	3	0.31	0.17	1	0.28	0.15
		20	6	0.64	0.83	2	0.49	0.78
		21	3	0.42	0.47	1	0.40	0.46
		22	3	0.39	0.42	1	0.38	0.42
		23	3	0.53	0.52	1	0.51	0.55
		24	6	0.60	0.81	2	0.45	0.76
		25	3	0.31	0.36	1	0.30	0.37
		26	3	0.29	0.27	1	0.27	0.30
		27	3	0.47	0.53	1	0.44	0.55
		28	3	0.42	0.45	1	0.39	0.46
		29	6	0.71	0.82	2	0.65	0.81

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
WR	10	1	3	0.71	0.73	1	0.67	0.70
		2	3	0.54	0.66	1	0.53	0.68
		3	3	0.77	0.67	1	0.74	0.66
		4	3	0.80	0.67	1	0.78	0.66
		5	6	0.84	0.77	2	0.80	0.75
		6	3	0.62	0.61	1	0.60	0.61
		7	3	0.56	0.58	1	0.55	0.56
		8	3	0.46	0.57	1	0.43	0.56
		9	3	0.49	0.51	1	0.47	0.50
		10	6	0.72	0.85	2	0.66	0.82
		11	3	0.53	0.55	1	0.51	0.57
		12	3	0.25	0.31	1	0.22	0.30
		13	3	0.23	0.36	1	0.21	0.35
		14	3	0.50	0.45	1	0.48	0.47
		15	6	0.81	0.67	2	0.77	0.64
		16	3	0.37	0.38	1	0.36	0.38
		17	3	0.56	0.57	1	0.54	0.58
		18	3	0.49	0.46	1	0.46	0.47
		19	3	0.38	0.37	1	0.36	0.36
		20	6	0.69	0.84	2	0.54	0.80
		21	3	0.30	0.21	1	0.28	0.21
		22	3	0.47	0.33	1	0.45	0.34
		23	3	0.53	0.62	1	0.51	0.62
		24	3	0.50	0.50	1	0.48	0.51
		25	6	0.64	0.79	2	0.49	0.74
		26	3	0.49	0.55	1	0.47	0.55
		27	3	0.19	0.26	1	0.17	0.26
		28	3	0.64	0.60	1	0.62	0.61
		29	3	0.44	0.39	1	0.43	0.39
		30	6	0.71	0.79	2	0.64	0.78

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	0.87	0.70	1	0.84	0.66
		2	6	0.78	0.76	2	0.70	0.73
		3	3	0.71	0.77	1	0.64	0.75
		4	6	0.61	0.74	2	0.48	0.67
		5	6	0.79	0.80	2	0.73	0.78
		6	3	0.70	0.69	1	0.65	0.70
		7	3	0.81	0.68	1	0.79	0.67
		8	3	0.49	0.53	1	0.45	0.56
		9	6	0.68	0.62	2	0.59	0.62
		10	3	0.63	0.62	1	0.58	0.62
		11	3	0.56	0.56	1	0.51	0.58
		12	6	0.48	0.57	2	0.30	0.52
		13	6	0.67	0.81	2	0.59	0.75
		14	3	0.51	0.54	1	0.47	0.59
		15	3	0.67	0.71	1	0.61	0.71
		16	3	0.39	0.59	1	0.33	0.54
		17	6	0.64	0.83	2	0.56	0.80
		18	3	0.87	0.69	1	0.84	0.65
		19	3	0.77	0.62	1	0.74	0.62
		20	3	0.68	0.68	1	0.65	0.68
		21	3	0.77	0.74	1	0.72	0.73
		22	3	0.37	0.35	1	0.29	0.36
		23	6	0.85	0.66	2	0.77	0.60
		24	6	0.55	0.67	2	0.38	0.61
		25	3	0.49	0.44	1	0.44	0.47
		26	6	0.55	0.55	2	0.32	0.50
		27	3	0.51	0.58	1	0.48	0.57
		28	3	0.71	0.75	1	0.66	0.74
		29	3	0.59	0.72	1	0.55	0.72
		30	3	0.43	0.50	1	0.37	0.52
		31	3	0.59	0.71	1	0.52	0.68
		32	3	0.69	0.67	1	0.62	0.65

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	0.89	0.69	1	0.86	0.66
		2	6	0.79	0.76	2	0.72	0.74
		3	6	0.81	0.80	2	0.76	0.78
		4	6	0.68	0.75	2	0.56	0.70
		5	3	0.60	0.61	1	0.55	0.63
		6	3	0.71	0.67	1	0.67	0.66
		7	3	0.78	0.72	1	0.77	0.70
		8	3	0.58	0.58	1	0.54	0.60
		9	6	0.65	0.64	2	0.56	0.62
		10	3	0.70	0.67	1	0.67	0.67
		11	3	0.51	0.51	1	0.48	0.53
		12	6	0.51	0.60	2	0.38	0.57
		13	3	0.70	0.64	1	0.67	0.63
		14	3	0.62	0.50	1	0.59	0.50
		15	3	0.75	0.78	1	0.71	0.76
		16	6	0.55	0.60	2	0.47	0.60
		17	3	0.78	0.64	1	0.75	0.62
		18	6	0.85	0.76	2	0.79	0.68
		19	6	0.69	0.70	2	0.57	0.65
		20	6	0.56	0.74	2	0.43	0.67
		21	3	0.71	0.67	1	0.66	0.66
		22	3	0.76	0.76	1	0.73	0.74
		23	3	0.16	0.29	1	0.12	0.30
		24	3	0.71	0.59	1	0.68	0.61
		25	3	0.68	0.66	1	0.64	0.68
		26	6	0.57	0.66	2	0.41	0.58
		27	3	0.52	0.58	1	0.49	0.59
		28	6	0.42	0.63	2	0.35	0.60
		29	3	0.71	0.77	1	0.68	0.76
		30	3	0.57	0.64	1	0.52	0.65
		31	3	0.62	0.68	1	0.57	0.66
		32	3	0.38	0.54	1	0.34	0.56

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	5	1	3	0.86	0.65	1	0.84	0.60
		2	3	0.73	0.74	1	0.69	0.73
		3	6	0.61	0.70	2	0.49	0.67
		4	6	0.76	0.71	2	0.66	0.73
		5	6	0.63	0.70	2	0.47	0.65
		6	6	0.47	0.58	2	0.35	0.57
		7	3	0.82	0.67	1	0.80	0.66
		8	3	0.60	0.75	1	0.57	0.74
		9	6	0.80	0.77	2	0.75	0.75
		10	3	0.59	0.59	1	0.57	0.62
		11	3	0.38	0.38	1	0.33	0.39
		12	6	0.71	0.74	2	0.64	0.71
		13	6	0.63	0.55	2	0.53	0.55
		14	3	0.56	0.50	1	0.51	0.52
		15	3	0.62	0.64	1	0.57	0.64
		16	3	0.39	0.40	1	0.32	0.41
		17	6	0.41	0.46	2	0.27	0.45
		18	6	0.39	0.58	2	0.31	0.55
		19	3	0.70	0.74	1	0.66	0.72
		20	3	0.54	0.57	1	0.49	0.58
		21	3	0.63	0.52	1	0.60	0.53
		22	6	0.86	0.73	2	0.81	0.71
		23	6	0.77	0.81	2	0.68	0.76
		24	3	0.41	0.58	1	0.35	0.54
		25	6	0.62	0.78	2	0.52	0.74
		26	6	0.55	0.67	2	0.41	0.63
		27	6	0.49	0.55	2	0.37	0.56
		28	6	0.33	0.53	2	0.26	0.49
		29	6	0.51	0.59	2	0.41	0.59
		30	3	0.61	0.45	1	0.58	0.45
		31	6	0.80	0.68	2	0.76	0.67
		32	3	0.72	0.76	1	0.69	0.75
		33	3	0.66	0.64	1	0.63	0.66
		34	3	0.65	0.78	1	0.62	0.79
		35	3	0.54	0.59	1	0.51	0.60
		36	3	0.66	0.54	1	0.64	0.53
		37	3	0.81	0.70	1	0.78	0.69
		38	3	0.65	0.74	1	0.61	0.74
		39	3	0.39	0.43	1	0.35	0.46
		40	3	0.46	0.63	1	0.41	0.62

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	6	1	6	0.65	0.74	2	0.52	0.69
		2	6	0.73	0.72	2	0.64	0.72
		3	6	0.80	0.79	2	0.74	0.78
		4	6	0.61	0.66	2	0.48	0.60
		5	3	0.60	0.58	1	0.56	0.60
		6	6	0.66	0.74	2	0.56	0.71
		7	3	0.45	0.55	1	0.39	0.56
		8	3	0.81	0.63	1	0.78	0.63
		9	3	0.62	0.62	1	0.59	0.63
		10	3	0.50	0.48	1	0.47	0.50
		11	3	0.41	0.51	1	0.32	0.48
		12	6	0.56	0.68	2	0.38	0.62
		13	3	0.44	0.50	1	0.41	0.51
		14	3	0.61	0.60	1	0.55	0.57
		15	6	0.63	0.72	2	0.52	0.70
		16	3	0.56	0.59	1	0.52	0.59
		17	3	0.40	0.58	1	0.35	0.56
		18	3	0.50	0.52	1	0.46	0.53
		19	6	0.74	0.74	2	0.63	0.67
		20	6	0.49	0.73	2	0.39	0.66
		21	3	0.79	0.59	1	0.77	0.57
		22	3	0.27	0.18	1	0.24	0.17
		23	3	0.55	0.42	1	0.52	0.43
		24	3	0.78	0.65	1	0.76	0.64
		25	3	0.75	0.77	1	0.73	0.75
		26	3	0.32	0.19	1	0.29	0.20
		27	3	0.65	0.66	1	0.62	0.65
		28	3	0.52	0.47	1	0.49	0.47
		29	6	0.62	0.71	2	0.48	0.64
		30	6	0.33	0.58	2	0.24	0.56
		31	6	0.59	0.69	2	0.46	0.62
		32	3	0.80	0.71	1	0.78	0.68
		33	3	0.55	0.66	1	0.51	0.67
		34	3	0.31	0.52	1	0.26	0.50

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	7	1	6	0.62	0.64	2	0.44	0.60
		2	6	0.74	0.70	2	0.64	0.73
		3	6	0.81	0.75	2	0.75	0.77
		4	6	0.61	0.65	2	0.50	0.64
		5	3	0.50	0.57	1	0.44	0.54
		6	6	0.66	0.72	2	0.58	0.71
		7	3	0.48	0.56	1	0.46	0.58
		8	3	0.38	0.48	1	0.34	0.49
		9	3	0.54	0.52	1	0.51	0.53
		10	3	0.48	0.54	1	0.45	0.56
		11	3	0.31	0.34	1	0.27	0.34
		12	3	0.36	0.55	1	0.33	0.55
		13	3	0.57	0.66	1	0.54	0.65
		14	3	0.31	0.36	1	0.28	0.37
		15	3	0.53	0.57	1	0.49	0.58
		16	6	0.50	0.71	2	0.42	0.70
		17	6	0.74	0.76	2	0.67	0.70
		18	3	0.75	0.77	1	0.71	0.76
		19	3	0.37	0.55	1	0.32	0.55
		20	6	0.51	0.65	2	0.37	0.59
		21	3	0.55	0.55	1	0.52	0.57
		22	3	0.76	0.59	1	0.74	0.59
		23	3	0.67	0.68	1	0.65	0.66
		24	3	0.32	0.36	1	0.30	0.38
		25	3	0.61	0.57	1	0.59	0.56
		26	6	0.57	0.63	2	0.42	0.57
		27	6	0.63	0.71	2	0.50	0.68
		28	3	0.56	0.56	1	0.54	0.56
		29	6	0.41	0.68	2	0.33	0.66
		30	3	0.16	0.46	1	0.13	0.44
		31	3	0.51	0.67	1	0.48	0.68
		32	3	0.41	0.51	1	0.38	0.51
		33	3	0.50	0.56	1	0.47	0.56

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	8	1	6	0.60	0.66	2	0.42	0.62
		2	6	0.70	0.70	2	0.59	0.73
		3	6	0.57	0.72	2	0.46	0.69
		4	6	0.43	0.69	2	0.36	0.66
		5	3	0.40	0.41	1	0.38	0.45
		6	6	0.71	0.72	2	0.58	0.77
		7	6	0.55	0.67	2	0.45	0.63
		8	3	0.57	0.47	1	0.55	0.45
		9	3	0.34	0.39	1	0.30	0.38
		10	3	0.54	0.59	1	0.51	0.61
		11	3	0.36	0.36	1	0.33	0.38
		12	3	0.51	0.45	1	0.45	0.46
		13	3	0.32	0.50	1	0.30	0.51
		14	3	0.34	0.46	1	0.32	0.48
		15	3	0.44	0.72	1	0.41	0.73
		16	3	0.47	0.70	1	0.42	0.67
		17	3	0.60	0.54	1	0.51	0.49
		18	6	0.56	0.80	2	0.48	0.77
		19	3	0.48	0.66	1	0.44	0.64
		20	3	0.62	0.77	1	0.57	0.74
		21	6	0.72	0.74	2	0.62	0.71
		22	3	0.78	0.56	1	0.76	0.55
		23	3	0.80	0.58	1	0.77	0.56
		24	3	0.56	0.68	1	0.52	0.69
		25	3	0.46	0.68	1	0.41	0.67
		26	3	0.77	0.60	1	0.75	0.60
		27	3	0.55	0.52	1	0.52	0.52
		28	3	0.53	0.57	1	0.47	0.60
		29	6	0.52	0.65	2	0.36	0.61
		30	6	0.58	0.59	2	0.40	0.53
		31	6	0.44	0.71	2	0.36	0.69
		32	3	0.25	0.55	1	0.20	0.53
		33	3	0.23	0.14	1	0.20	0.15
		34	3	0.42	0.40	1	0.39	0.42
		35	3	0.64	0.65	1	0.61	0.63
		36	3	0.54	0.68	1	0.50	0.69
		37	3	0.32	0.36	1	0.29	0.35
		38	3	0.46	0.53	1	0.43	0.52

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	9	1	6	0.70	0.73	2	0.57	0.73
		2	6	0.73	0.67	2	0.63	0.71
		3	6	0.61	0.68	2	0.51	0.65
		4	3	0.45	0.41	1	0.39	0.43
		5	6	0.74	0.69	2	0.62	0.72
		6	6	0.44	0.57	2	0.30	0.53
		7	3	0.63	0.61	1	0.61	0.61
		8	3	0.54	0.53	1	0.49	0.54
		9	3	0.45	0.52	1	0.44	0.49
		10	3	0.47	0.39	1	0.42	0.40
		11	3	0.34	0.37	1	0.31	0.39
		12	3	0.29	0.43	1	0.27	0.43
		13	6	0.55	0.76	2	0.43	0.70
		14	3	0.37	0.65	1	0.32	0.66
		15	6	0.59	0.76	2	0.50	0.74
		16	3	0.51	0.55	1	0.42	0.50
		17	3	0.36	0.61	1	0.31	0.59
		18	3	0.19	0.19	1	0.14	0.13
		19	3	0.38	0.58	1	0.33	0.54
		20	3	0.76	0.56	1	0.72	0.54
		21	3	0.25	0.23	1	0.22	0.24
		22	3	0.37	0.34	1	0.33	0.33
		23	3	0.65	0.62	1	0.62	0.60
		24	3	0.63	0.51	1	0.61	0.50
		25	6	0.55	0.62	2	0.44	0.62
		26	3	0.67	0.61	1	0.64	0.61
		27	3	0.56	0.64	1	0.51	0.62
		28	6	0.59	0.66	2	0.47	0.64
		29	6	0.45	0.71	2	0.37	0.68
		30	3	0.23	0.58	1	0.17	0.53
		31	3	0.28	0.27	1	0.24	0.25
		32	3	0.25	0.29	1	0.22	0.28
		33	3	0.36	0.36	1	0.30	0.35
		34	3	0.48	0.59	1	0.46	0.62
		35	3	0.23	0.19	1	0.21	0.22
		36	3	0.38	0.39	1	0.35	0.39
		37	3	0.56	0.59	1	0.53	0.60
		38	3	0.36	0.44	1	0.33	0.43

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
MA	10	1	6	0.68	0.69	2	0.56	0.68
		2	6	0.74	0.65	2	0.64	0.69
		3	6	0.60	0.69	2	0.51	0.66
		4	6	0.50	0.63	2	0.39	0.63
		5	3	0.27	0.43	1	0.23	0.43
		6	6	0.75	0.69	2	0.63	0.71
		7	3	0.70	0.61	1	0.67	0.59
		8	3	0.51	0.57	1	0.48	0.58
		9	3	0.42	0.49	1	0.39	0.50
		10	3	0.35	0.41	1	0.31	0.39
		11	3	0.19	0.14	1	0.17	0.14
		12	3	0.27	0.36	1	0.25	0.36
		13	3	0.29	0.30	1	0.25	0.26
		14	3	0.26	0.33	1	0.23	0.32
		15	6	0.68	0.73	2	0.55	0.67
		16	3	0.70	0.67	1	0.63	0.64
		17	3	0.70	0.66	1	0.67	0.65
		18	3	0.23	0.41	1	0.19	0.38
		19	6	0.48	0.71	2	0.36	0.69
		20	3	0.36	0.40	1	0.29	0.36
		21	3	0.31	0.58	1	0.28	0.57
		22	3	0.40	0.33	1	0.38	0.32
		23	3	0.60	0.56	1	0.58	0.55
		24	6	0.82	0.71	2	0.76	0.68
		25	3	0.26	0.45	1	0.23	0.42
		26	3	0.63	0.70	1	0.60	0.68
		27	3	0.63	0.59	1	0.59	0.60
		28	6	0.57	0.66	2	0.44	0.65
		29	6	0.56	0.60	2	0.38	0.57
		30	6	0.45	0.71	2	0.33	0.69
		31	3	0.09	0.41	1	0.06	0.37
		32	3	0.29	0.30	1	0.25	0.29
		33	3	0.19	0.17	1	0.17	0.17
		34	3	0.18	0.32	1	0.14	0.30
		35	3	0.33	0.53	1	0.31	0.55
		36	6	0.36	0.54	2	0.23	0.51
		37	3	0.47	0.54	1	0.44	0.54
		38	3	0.55	0.60	1	0.53	0.60
		39	3	0.56	0.57	1	0.54	0.59
		40	3	0.24	0.34	1	0.23	0.34

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
SC	5	1	3	0.88	0.65	1	0.86	0.64
		2	3	0.87	0.72	1	0.84	0.71
		3	3	0.73	0.62	1	0.70	0.62
		4	3	0.87	0.70	1	0.85	0.68
		5	3	0.76	0.67	1	0.73	0.67
		6	3	0.52	0.55	1	0.48	0.53
		7	3	0.77	0.65	1	0.75	0.64
		8	3	0.42	0.34	1	0.40	0.33
		9	3	0.64	0.51	1	0.61	0.53
		10	3	0.56	0.65	1	0.54	0.66
		11	3	0.44	0.49	1	0.41	0.47
		12	6	0.86	0.77	2	0.77	0.75
		13	3	0.80	0.67	1	0.78	0.66
		14	3	0.41	0.50	1	0.38	0.51
		15	3	0.72	0.70	1	0.69	0.69
		16	3	0.56	0.61	1	0.53	0.60
		17	3	0.76	0.71	1	0.72	0.69
		18	3	0.73	0.68	1	0.70	0.67
		19	6	0.81	0.75	2	0.70	0.79
		20	3	0.89	0.70	1	0.87	0.68
		21	3	0.84	0.72	1	0.81	0.71
		22	3	0.63	0.56	1	0.59	0.56
		23	3	0.64	0.59	1	0.61	0.59
		24	3	0.50	0.50	1	0.46	0.49
		25	3	0.76	0.67	1	0.74	0.65
		26	3	0.69	0.66	1	0.67	0.66
		27	3	0.64	0.65	1	0.62	0.66
		28	3	0.68	0.49	1	0.64	0.50
		29	3	0.72	0.66	1	0.70	0.66
		30	3	0.64	0.64	1	0.61	0.65

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	0.83	0.70	1	0.82	0.67
		2	3	0.73	0.61	1	0.69	0.64
		3	3	0.28	0.17	1	0.25	0.17
		4	3	0.80	0.70	1	0.77	0.72
		5	3	0.79	0.72	1	0.77	0.72
		6	3	0.72	0.64	1	0.70	0.66
		7	3	0.68	0.65	1	0.64	0.67
		8	3	0.54	0.55	1	0.51	0.54
		9	3	0.52	0.52	1	0.49	0.52
		10	3	0.65	0.64	1	0.60	0.63
		11	3	0.58	0.56	1	0.54	0.58
		12	3	0.63	0.54	1	0.61	0.56
		13	3	0.66	0.56	1	0.64	0.54
		14	3	0.72	0.63	1	0.70	0.63
		15	3	0.59	0.57	1	0.54	0.58
		16	3	0.80	0.74	1	0.77	0.75
		17	3	0.71	0.73	1	0.68	0.76
		18	3	0.71	0.64	1	0.69	0.63
		19	3	0.78	0.72	1	0.75	0.74
		20	3	0.83	0.73	1	0.81	0.72
		21	6	0.81	0.77	2	0.71	0.79
		22	3	0.66	0.58	1	0.62	0.59
		23	6	0.81	0.76	2	0.71	0.75
		24	3	0.63	0.64	1	0.60	0.65
		25	3	0.67	0.70	1	0.65	0.72
		26	3	0.72	0.72	1	0.70	0.75
		27	3	0.87	0.72	1	0.84	0.72
		28	3	0.80	0.76	1	0.78	0.77
		29	6	0.74	0.59	2	0.59	0.62
		30	3	0.63	0.67	1	0.60	0.70

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

Content	Grade	Item	With Level of Independence			Without Level of Independence		
			Max Score Points	Item Difficulty	Item-Test Correlation	Max Score Points	Item Difficulty	Item-Test Correlation
SC	10	1	3	0.41	0.34	1	0.38	0.30
		2	3	0.78	0.64	1	0.77	0.66
		3	3	0.66	0.55	1	0.63	0.58
		4	3	0.71	0.51	1	0.69	0.52
		5	3	0.88	0.64	1	0.86	0.64
		6	3	0.83	0.69	1	0.82	0.68
		7	3	0.88	0.63	1	0.87	0.62
		8	3	0.75	0.55	1	0.73	0.56
		9	3	0.27	0.41	1	0.25	0.41
		10	6	0.62	0.70	2	0.56	0.70
		11	3	0.63	0.64	1	0.60	0.66
		12	3	0.45	0.47	1	0.42	0.45
		13	3	0.42	0.40	1	0.38	0.41
		14	3	0.35	0.40	1	0.34	0.40
		15	3	0.75	0.51	1	0.72	0.52
		16	3	0.30	0.29	1	0.27	0.27
		17	3	0.68	0.58	1	0.65	0.60
		18	3	0.75	0.71	1	0.72	0.71
		19	3	0.66	0.68	1	0.64	0.67
		20	3	0.41	0.47	1	0.38	0.47
		21	6	0.73	0.69	2	0.61	0.71
		22	3	0.65	0.59	1	0.63	0.60
		23	3	0.42	0.54	1	0.38	0.54
		24	3	0.60	0.53	1	0.58	0.53
		25	3	0.61	0.64	1	0.58	0.65
		26	3	0.61	0.59	1	0.58	0.61
		27	6	0.57	0.76	2	0.54	0.77
		28	6	0.49	0.74	2	0.45	0.73
		29	3	0.79	0.62	1	0.76	0.64
		30	3	0.74	0.75	1	0.71	0.74

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

Content	Grade	<i>P</i> -value			Point Biserial		
		High	Mean	Low	High	Mean	Low
RD	3	0.85	0.57	0.25	0.73	0.57	0.29
	4	0.86	0.58	0.26	0.72	0.57	0.35
	5	0.89	0.60	0.25	0.75	0.58	0.24
	6	0.86	0.61	0.23	0.74	0.59	0.31
	7	0.85	0.53	0.23	0.71	0.53	0.20
	8	0.81	0.51	0.29	0.69	0.54	0.32
	9	0.80	0.53	0.28	0.71	0.57	0.37
	10	0.76	0.51	0.25	0.68	0.52	0.33
WR	3	0.81	0.54	0.26	0.83	0.58	0.25
	4	0.81	0.54	0.22	0.84	0.57	0.21
	5	0.84	0.59	0.23	0.85	0.58	0.18
	6	0.82	0.59	0.32	0.83	0.59	0.23
	7	0.85	0.57	0.24	0.84	0.59	0.20
	8	0.82	0.53	0.25	0.88	0.58	0.20
	9	0.83	0.54	0.29	0.84	0.57	0.17
	10	0.84	0.54	0.19	0.85	0.55	0.21
MA	3	0.87	0.64	0.37	0.83	0.65	0.35
	4	0.89	0.64	0.16	0.80	0.65	0.29
	5	0.86	0.61	0.33	0.81	0.63	0.38
	6	0.81	0.58	0.27	0.79	0.60	0.18
	7	0.81	0.53	0.16	0.77	0.59	0.34
	8	0.80	0.52	0.23	0.80	0.58	0.14
	9	0.76	0.47	0.19	0.76	0.52	0.19
	10	0.82	0.45	0.09	0.73	0.52	0.14
SC	5	0.89	0.69	0.41	0.77	0.63	0.34
	8	0.87	0.70	0.28	0.77	0.64	0.17
	10	0.88	0.61	0.27	0.76	0.58	0.29

Table 38
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	3	1.2	Demonstrate understanding of symbolic representation	0.85	0.73	0.47	0.15	0.72	0.67	0.58	0.06
		1.4	Use a variety of strategies to make meaning of text	0.79	0.71	0.63	0.07	0.73	0.66	0.54	0.07
		3.2	Understand informational text	0.73	0.63	0.45	0.12	0.68	0.54	0.35	0.12
		1.3	Demonstrate understanding of beginning principles of phonics	0.79	0.59	0.32	0.24	0.72	0.57	0.30	0.19
		2.1	Make connections to reading passages	0.62	0.50	0.30	0.12	0.66	0.52	0.37	0.11
		2.2	Identify elements of literature (character, plot, setting)	0.53	0.43	0.38	0.06	0.65	0.51	0.40	0.09
		3.1	Demonstrate knowledge that various texts have different purposes	0.62	0.42	0.25	0.16	0.68	0.50	0.29	0.15
	4	1.2	Demonstrate understanding of symbolic representation	0.86	0.76	0.65	0.08	0.72	0.66	0.59	0.06
		1.3	Demonstrate understanding of beginning principles of phonics	0.84	0.71	0.31	0.23	0.71	0.63	0.40	0.13
		1.4	Use a variety of strategies to make meaning of text	0.74	0.58	0.26	0.20	0.72	0.60	0.36	0.14
		2.1	Make connections to reading passages	0.60	0.54	0.46	0.06	0.59	0.55	0.48	0.05
		3.2	Understand informational text	0.67	0.51	0.31	0.15	0.62	0.50	0.35	0.14
		3.1	Demonstrate knowledge that various texts have different purposes	0.63	0.50	0.39	0.11	0.69	0.55	0.38	0.12
		2.2	Identify elements of literature (character, plot, setting)	0.56	0.44	0.33	0.09	0.57	0.50	0.44	0.05

Table 38
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	5	1.2	Demonstrate understanding of symbolic representation	0.89	0.73	0.58	0.14	0.67	0.63	0.58	0.04
		1.4	Use a variety of strategies to make meaning of text	0.81	0.67	0.47	0.14	0.75	0.66	0.55	0.07
		2.1	Make connections to reading passages	0.81	0.59	0.35	0.19	0.72	0.61	0.43	0.13
		1.3	Demonstrate understanding of beginning principles of phonics	0.84	0.57	0.25	0.24	0.66	0.51	0.24	0.17
		3.2	Understand informational text	0.71	0.57	0.49	0.08	0.67	0.55	0.41	0.10
		2.2	Identify elements of literature (character, plot, setting)	0.64	0.54	0.43	0.10	0.70	0.59	0.50	0.08
		3.1	Demonstrate knowledge that various texts have different purposes	0.71	0.52	0.42	0.12	0.74	0.53	0.33	0.17
	6	1.3	Demonstrate understanding of beginning principles of phonics	0.86	0.72	0.41	0.19	0.72	0.62	0.38	0.14
		1.2	Demonstrate understanding of symbolic representation	0.76	0.69	0.62	0.06	0.69	0.66	0.60	0.04
		1.4	Use a variety of strategies to make meaning of text	0.81	0.68	0.50	0.16	0.74	0.64	0.54	0.09
		2.1	Make connections to reading passages	0.77	0.61	0.52	0.10	0.70	0.61	0.54	0.07
		3.2	Understand informational text	0.81	0.57	0.40	0.19	0.66	0.51	0.31	0.14
		2.2	Identify elements of literature (character, plot, setting)	0.71	0.53	0.42	0.12	0.68	0.56	0.50	0.08
		3.1	Demonstrate knowledge that various texts have different purposes	0.85	0.48	0.23	0.29	0.65	0.51	0.35	0.13

Table 38
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	7	1.3	Demonstrate understanding of beginning principles of phonics	0.85	0.71	0.45	0.17	0.68	0.63	0.51	0.07
		1.2	Demonstrate understanding of symbolic representation	0.84	0.70	0.61	0.10	0.68	0.64	0.59	0.03
		1.4	Use a variety of strategies to make meaning of text	0.78	0.61	0.38	0.17	0.71	0.62	0.51	0.08
		3.2	Understand informational text	0.62	0.48	0.33	0.12	0.61	0.46	0.32	0.11
		2.1	Make connections to reading passages	0.71	0.46	0.24	0.20	0.68	0.52	0.36	0.15
		2.2	Identify elements of literature (character, plot, setting)	0.55	0.44	0.31	0.09	0.65	0.52	0.33	0.13
		3.1	Demonstrate knowledge that various texts have different purposes	0.59	0.34	0.23	0.15	0.48	0.33	0.20	0.11
	8	1.3	Demonstrate understanding of beginning principles of phonics	0.81	0.65	0.47	0.16	0.64	0.58	0.48	0.07
		1.2	Demonstrate understanding of symbolic representation	0.73	0.62	0.40	0.14	0.65	0.60	0.49	0.07
		1.4	Use a variety of strategies to make meaning of text	0.75	0.50	0.29	0.21	0.69	0.55	0.39	0.13
		3.2	Understand informational text	0.62	0.49	0.32	0.13	0.63	0.55	0.43	0.09
		3.1	Demonstrate knowledge that various texts have different purposes	0.65	0.47	0.37	0.11	0.63	0.55	0.38	0.10
		2.1	Make connections to reading passages	0.51	0.45	0.35	0.06	0.54	0.49	0.39	0.06
		2.2	Identify elements of literature (character, plot, setting)	0.48	0.41	0.36	0.05	0.52	0.47	0.32	0.09

Table 38
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty (*P*-value) (continued)

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RD	9	1.3	Demonstrate understanding of beginning principles of phonics	0.80	0.67	0.47	0.14	0.67	0.62	0.54	0.06
		1.2	Demonstrate understanding of symbolic representation	0.73	0.62	0.35	0.18	0.66	0.58	0.42	0.11
		1.4	Use a variety of strategies to make meaning of text	0.74	0.59	0.33	0.17	0.67	0.60	0.49	0.08
		3.2	Understand informational text	0.68	0.53	0.45	0.09	0.63	0.54	0.41	0.08
		2.2	Identify elements of literature (character, plot, setting)	0.58	0.49	0.34	0.09	0.71	0.57	0.41	0.11
		2.1	Make connections to reading passages	0.50	0.42	0.36	0.06	0.66	0.56	0.42	0.10
		3.1	Demonstrate knowledge that various texts have different purposes	0.49	0.42	0.28	0.09	0.64	0.52	0.37	0.11
	10	1.3	Demonstrate understanding of beginning principles of phonics	0.71	0.56	0.40	0.12	0.60	0.50	0.41	0.08
		1.2	Demonstrate understanding of symbolic representation	0.76	0.54	0.32	0.18	0.68	0.54	0.36	0.11
		1.4	Use a variety of strategies to make meaning of text	0.73	0.53	0.41	0.13	0.68	0.50	0.33	0.18
		2.2	Identify elements of literature (character, plot, setting)	0.74	0.53	0.25	0.20	0.65	0.54	0.35	0.13
		3.2	Understand informational text	0.64	0.52	0.43	0.09	0.60	0.54	0.49	0.05
		2.1	Make connections to reading passages	0.61	0.48	0.39	0.08	0.66	0.57	0.43	0.09
		3.1	Demonstrate knowledge that various texts have different purposes	0.67	0.44	0.30	0.14	0.56	0.43	0.38	0.08

Table 39
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	1.2	Organize writing to create a draft document	0.81	0.65	0.54	0.13	0.83	0.66	0.60	0.09
		1.1	Demonstrate an understanding that writing communicates a message	0.80	0.65	0.30	0.21	0.76	0.62	0.31	0.18
		2.1	Use systematic conventions to make written product understandable by others	0.75	0.58	0.43	0.14	0.79	0.63	0.42	0.13
		2.3	Edit a written product using legible handwriting/word processor for publication	0.69	0.44	0.31	0.14	0.81	0.49	0.31	0.18
		2.2	Apply elements of writing through appropriate word usage	0.54	0.42	0.26	0.11	0.80	0.52	0.25	0.23
	4	2.1	Use systematic conventions to make written product understandable by others	0.77	0.63	0.32	0.18	0.78	0.63	0.40	0.15
		1.1	Demonstrate an understanding that writing communicates a message	0.81	0.59	0.33	0.20	0.75	0.58	0.34	0.16
		1.2	Organize writing to create a draft document	0.72	0.58	0.36	0.14	0.84	0.61	0.28	0.21
		2.3	Edit a written product using legible handwriting/word processor for publication	0.75	0.52	0.39	0.13	0.78	0.54	0.32	0.14
		2.2	Apply elements of writing through appropriate word usage	0.55	0.44	0.22	0.13	0.83	0.51	0.21	0.24

Table 39
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	5	1.1	Demonstrate an understanding that writing communicates a message	0.84	0.72	0.47	0.14	0.77	0.66	0.48	0.12
		2.1	Use systematic conventions to make written product understandable by others	0.81	0.66	0.35	0.17	0.82	0.64	0.40	0.14
		1.2	Organize writing to create a draft document	0.77	0.61	0.38	0.16	0.83	0.58	0.42	0.16
		2.3	Edit a written product using legible handwriting/word processor for publication	0.77	0.50	0.23	0.17	0.81	0.50	0.26	0.18
		2.2	Apply elements of writing through appropriate word usage	0.60	0.50	0.28	0.14	0.85	0.56	0.18	0.26
	6	1.1	Demonstrate an understanding that writing communicates a message	0.82	0.73	0.68	0.06	0.76	0.69	0.62	0.05
		2.1	Use systematic conventions to make written product understandable by others	0.78	0.66	0.48	0.12	0.80	0.63	0.40	0.16
		1.2	Organize writing to create a draft document	0.76	0.65	0.48	0.10	0.83	0.68	0.34	0.19
		2.3	Edit a written product using legible handwriting/word processor for publication	0.77	0.49	0.40	0.13	0.80	0.48	0.31	0.16
		2.2	Apply elements of writing through appropriate word usage	0.59	0.49	0.32	0.10	0.81	0.54	0.23	0.22

Table 39
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	7	1.1	Demonstrate an understanding that writing communicates a message	0.85	0.71	0.50	0.11	0.81	0.69	0.60	0.07
		1.2	Organize writing to create a draft document	0.69	0.63	0.56	0.06	0.84	0.69	0.58	0.10
		2.1	Use systematic conventions to make written product understandable by others	0.82	0.60	0.33	0.19	0.75	0.58	0.39	0.14
		2.3	Edit a written product using legible handwriting/word processor for publication	0.67	0.49	0.24	0.16	0.64	0.48	0.28	0.13
		2.2	Apply elements of writing through appropriate word usage	0.66	0.47	0.30	0.13	0.84	0.55	0.20	0.25
	8	1.1	Demonstrate an understanding that writing communicates a message	0.82	0.72	0.66	0.06	0.84	0.75	0.69	0.05
		1.2	Organize writing to create a draft document	0.77	0.65	0.57	0.08	0.84	0.73	0.66	0.07
		2.1	Use systematic conventions to make written product understandable by others	0.78	0.49	0.28	0.20	0.77	0.49	0.31	0.21
		2.3	Edit a written product using legible handwriting/word processor for publication	0.60	0.44	0.29	0.11	0.65	0.50	0.25	0.14
		2.2	Apply elements of writing through appropriate word usage	0.59	0.39	0.25	0.14	0.88	0.46	0.20	0.28

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

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
WR	9	1.1	Demonstrate an understanding that writing communicates a message	0.83	0.75	0.67	0.06	0.82	0.71	0.63	0.07
		2.1	Use systematic conventions to make written product understandable by others	0.82	0.58	0.41	0.17	0.75	0.58	0.37	0.15
		1.2	Organize writing to create a draft document	0.67	0.52	0.39	0.10	0.84	0.56	0.41	0.17
		2.2	Apply elements of writing through appropriate word usage	0.64	0.47	0.31	0.14	0.83	0.56	0.17	0.25
		2.3	Edit a written product using legible handwriting/word processor for publication	0.53	0.40	0.29	0.09	0.53	0.43	0.27	0.10
	10	1.1	Demonstrate an understanding that writing communicates a message	0.84	0.73	0.54	0.10	0.79	0.72	0.66	0.06
		1.2	Organize writing to create a draft document	0.72	0.57	0.46	0.10	0.85	0.62	0.51	0.13
		2.2	Apply elements of writing through appropriate word usage	0.69	0.50	0.30	0.14	0.84	0.51	0.21	0.24
		2.3	Edit a written product using legible handwriting/word processor for publication	0.64	0.47	0.19	0.15	0.62	0.49	0.26	0.14
		2.1	Use systematic conventions to make written product understandable by others	0.81	0.45	0.23	0.21	0.67	0.45	0.31	0.13

Table 40
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	1	Counts, represents quantities, reads and writes numbers	0.87	0.72	0.49	0.12	0.80	0.71	0.53	0.08
		4	Identifies, sorts, and matches geometric shapes	0.87	0.72	0.37	0.18	0.74	0.62	0.35	0.14
		2	Identifies, describes, and creates patterns to solve problems	0.68	0.59	0.48	0.09	0.62	0.59	0.56	0.03
		3	Displays and analyzes data	0.67	0.58	0.39	0.12	0.83	0.70	0.54	0.13
		6	Uses calculation strategies to compute problems	0.69	0.57	0.43	0.11	0.72	0.65	0.50	0.10
		5	Applies a variety of measurement skills	0.71	0.56	0.49	0.09	0.75	0.60	0.44	0.12
	4	1	Counts, represents quantities, reads and writes numbers	0.89	0.73	0.58	0.11	0.80	0.70	0.58	0.07
		4	Identifies, sorts, and matches geometric shapes	0.85	0.71	0.55	0.11	0.78	0.65	0.50	0.10
		2	Identifies, describes, and creates patterns to solve problems	0.70	0.59	0.51	0.09	0.67	0.61	0.51	0.07
		5	Applies a variety of measurement skills	0.71	0.58	0.42	0.12	0.66	0.62	0.58	0.04
		3	Displays and analyzes data	0.76	0.58	0.16	0.24	0.76	0.63	0.29	0.20
		6	Uses calculation strategies to compute problems	0.71	0.57	0.38	0.14	0.77	0.66	0.54	0.09

Table 40
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	5	4	Identifies, sorts, and matches geometric shapes	0.86	0.69	0.51	0.13	0.76	0.62	0.45	0.12
		1	Counts, represents quantities, reads and writes numbers	0.86	0.66	0.38	0.15	0.77	0.67	0.38	0.11
		3	Displays and analyzes data	0.77	0.61	0.41	0.14	0.81	0.70	0.57	0.11
		6	Uses calculation strategies to compute problems	0.81	0.58	0.39	0.19	0.74	0.63	0.43	0.14
		5	Applies a variety of measurement skills	0.66	0.55	0.33	0.12	0.78	0.61	0.53	0.09
		2	Identifies, describes, and creates patterns to solve problems	0.63	0.50	0.39	0.12	0.64	0.52	0.40	0.09
	6	1	Counts, represents quantities, reads and writes numbers	0.81	0.66	0.45	0.12	0.79	0.68	0.55	0.08
		4	Identifies, sorts, and matches geometric shapes	0.79	0.63	0.27	0.22	0.77	0.52	0.18	0.23
		3	Displays and analyzes data	0.74	0.57	0.40	0.12	0.74	0.66	0.58	0.08
		6	Uses calculation strategies to compute problems	0.80	0.54	0.31	0.20	0.71	0.60	0.52	0.10
		2	Identifies, describes, and creates patterns to solve problems	0.62	0.51	0.41	0.09	0.68	0.56	0.48	0.09
		5	Applies a variety of measurement skills	0.65	0.51	0.32	0.15	0.71	0.55	0.19	0.19

Table 40
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	7	1	Counts, represents quantities, reads and writes numbers	0.81	0.63	0.48	0.12	0.75	0.66	0.56	0.07
		2	Identifies, describes, and creates patterns to solve problems	0.57	0.44	0.31	0.11	0.66	0.50	0.34	0.12
		3	Displays and analyzes data	0.75	0.58	0.37	0.17	0.77	0.69	0.55	0.09
		4	Identifies, sorts, and matches geometric shapes	0.76	0.57	0.32	0.19	0.68	0.54	0.36	0.13
		5	Applies a variety of measurement skills	0.63	0.49	0.16	0.18	0.71	0.60	0.46	0.09
		6	Uses calculation strategies to compute problems	0.51	0.45	0.38	0.07	0.67	0.55	0.48	0.08
	8	4	Identifies, sorts, and matches geometric shapes	0.80	0.68	0.46	0.16	0.68	0.62	0.56	0.06
		3	Displays and analyzes data	0.72	0.58	0.47	0.09	0.80	0.70	0.54	0.09
		1	Counts, represents quantities, reads and writes numbers	0.71	0.57	0.40	0.11	0.72	0.63	0.41	0.12
		6	Uses calculation strategies to compute problems	0.64	0.46	0.32	0.13	0.68	0.52	0.36	0.15
		5	Applies a variety of measurement skills	0.58	0.44	0.23	0.13	0.71	0.52	0.14	0.18
		2	Identifies, describes, and creates patterns to solve problems	0.54	0.42	0.32	0.09	0.72	0.51	0.36	0.12

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

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
MA	9	1	Counts, represents quantities, reads and writes numbers	0.74	0.62	0.44	0.13	0.73	0.63	0.41	0.11
		4	Identifies, sorts, and matches geometric shapes	0.76	0.53	0.25	0.21	0.62	0.45	0.23	0.16
		5	Applies a variety of measurement skills	0.67	0.45	0.23	0.17	0.71	0.55	0.27	0.17
		3	Displays and analyzes data	0.59	0.43	0.19	0.15	0.76	0.58	0.19	0.21
		2	Identifies, describes, and creates patterns to solve problems	0.54	0.41	0.29	0.09	0.65	0.48	0.37	0.10
		6	Uses calculation strategies to compute problems	0.56	0.39	0.23	0.11	0.59	0.43	0.19	0.15
	10	1	Counts, represents quantities, reads and writes numbers	0.75	0.57	0.27	0.18	0.69	0.62	0.43	0.09
		3	Displays and analyzes data	0.70	0.52	0.23	0.20	0.73	0.59	0.40	0.15
		4	Identifies, sorts, and matches geometric shapes	0.82	0.48	0.26	0.23	0.71	0.52	0.33	0.15
		5	Applies a variety of measurement skills	0.63	0.42	0.09	0.21	0.71	0.52	0.17	0.20
		6	Uses calculation strategies to compute problems	0.56	0.39	0.18	0.16	0.60	0.48	0.32	0.12
		2	Identifies, describes, and creates patterns to solve problems	0.51	0.33	0.19	0.11	0.57	0.37	0.14	0.14

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

Content	Grade	Expanded Benchmark	Critical Concept	<i>P</i> -value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
SC	5	5	Interacts with the weather and Earth systems	0.88	0.73	0.44	0.15	0.77	0.64	0.49	0.08
		4	Interacts with living things	0.89	0.70	0.50	0.14	0.75	0.64	0.50	0.09
		1	Makes observations, collects and organizes data	0.76	0.69	0.64	0.05	0.71	0.63	0.49	0.08
		3	Demonstrates an understanding of the fundamental properties of matter and energy	0.87	0.64	0.41	0.19	0.72	0.57	0.34	0.15
		2	Analyzes data and communicates results of scientific investigations	0.56	0.56	0.56	.	0.65	0.65	0.65	.
	8	2	Analyzes data and communicates results of scientific investigations	0.87	0.76	0.67	0.08	0.72	0.69	0.63	0.04
		1	Makes observations, collects and organizes data	0.81	0.73	0.66	0.06	0.76	0.69	0.56	0.09
		4	Interacts with living things	0.81	0.71	0.63	0.08	0.77	0.67	0.58	0.08
		5	Interacts with the weather and Earth systems	0.83	0.68	0.28	0.18	0.74	0.60	0.17	0.18
		3	Demonstrates an understanding of the fundamental properties of matter and energy	0.83	0.66	0.52	0.11	0.73	0.61	0.52	0.08
	10	2	Analyzes data and communicates results of scientific investigations	0.79	0.71	0.62	0.09	0.70	0.67	0.62	0.04
		5	Interacts with the weather and Earth systems	0.88	0.70	0.41	0.18	0.69	0.56	0.34	0.12
		1	Makes observations, collects and organizes data	0.75	0.67	0.60	0.06	0.75	0.61	0.51	0.09
		4	Interacts with living things	0.75	0.57	0.41	0.12	0.76	0.64	0.47	0.10
		3	Demonstrates an understanding of the fundamental properties of matter and energy	0.75	0.42	0.27	0.19	0.55	0.41	0.29	0.09

Table 42
Reading Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	21	21	3.03%	3.04%
		1	3	24	0.43%	3.47%
		2	1	25	0.14%	3.61%
		3	3	28	0.43%	4.05%
		4	2	30	0.29%	4.34%
		5	2	32	0.29%	4.62%
		6	4	36	0.58%	5.20%
		8	1	37	0.14%	5.35%
		9	3	40	0.43%	5.78%
		10	3	43	0.43%	6.21%
		12	2	45	0.29%	6.50%
		13	3	48	0.43%	6.94%
		14	2	50	0.29%	7.23%
		15	3	53	0.43%	7.66%
		16	1	54	0.14%	7.80%
		17	4	58	0.58%	8.38%
		18	4	62	0.58%	8.96%
		19	5	67	0.72%	9.68%
		20	2	69	0.29%	9.97%
		21	6	75	0.87%	10.84%
RD	3	22	5	80	0.72%	11.56%
		23	5	85	0.72%	12.28%
		24	6	91	0.87%	13.15%
		25	3	94	0.43%	13.58%
		26	2	96	0.29%	13.87%
		27	4	100	0.58%	14.45%
		29	2	102	0.29%	14.74%
		30	10	112	1.45%	16.19%
		31	2	114	0.29%	16.47%
		32	1	115	0.14%	16.62%
		33	7	122	1.01%	17.63%
		34	2	124	0.29%	17.92%
		35	3	127	0.43%	18.35%
		36	6	133	0.87%	19.22%
		37	1	134	0.14%	19.36%
		38	1	135	0.14%	19.51%
		39	9	144	1.30%	20.81%
		40	5	149	0.72%	21.53%
		41	6	155	0.87%	22.40%
		42	8	163	1.16%	23.56%
		43	1	164	0.14%	23.70%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		44	4	168	0.58%	24.28%
		45	10	178	1.45%	25.72%
		46	2	180	0.29%	26.01%
		47	5	185	0.72%	26.73%
		48	17	202	2.46%	29.19%
		49	4	206	0.58%	29.77%
		50	4	210	0.58%	30.35%
		51	9	219	1.30%	31.65%
		52	3	222	0.43%	32.08%
		53	3	225	0.43%	32.51%
		54	17	242	2.46%	34.97%
		55	2	244	0.29%	35.26%
		56	4	248	0.58%	35.84%
		57	18	266	2.60%	38.44%
		58	6	272	0.87%	39.31%
		59	9	281	1.30%	40.61%
		60	14	295	2.02%	42.63%
		61	11	306	1.59%	44.22%
		62	10	316	1.45%	45.67%
		63	27	343	3.90%	49.57%
RD	3	64	2	345	0.29%	49.86%
		65	5	350	0.72%	50.58%
		66	15	365	2.17%	52.75%
		68	9	374	1.30%	54.05%
		69	17	391	2.46%	56.50%
		70	8	399	1.16%	57.66%
		71	11	410	1.59%	59.25%
		72	23	433	3.32%	62.57%
		73	4	437	0.58%	63.15%
		74	6	443	0.87%	64.02%
		75	19	462	2.75%	66.76%
		76	4	466	0.58%	67.34%
		77	12	478	1.73%	69.08%
		78	21	499	3.03%	72.11%
		79	7	506	1.01%	73.12%
		80	7	513	1.01%	74.13%
		81	29	542	4.19%	78.32%
		82	2	544	0.29%	78.61%
		83	9	553	1.30%	79.91%
		84	22	575	3.18%	83.09%
		86	7	582	1.01%	84.10%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		87	15	597	2.17%	86.27%
		88	3	600	0.43%	86.71%
		89	1	601	0.14%	86.85%
		90	17	618	2.46%	89.31%
		91	3	621	0.43%	89.74%
		92	4	625	0.58%	90.32%
		93	21	646	3.03%	93.35%
RD	3	94	1	647	0.14%	93.50%
		95	3	650	0.43%	93.93%
		96	19	669	2.75%	96.68%
		97	1	670	0.14%	96.82%
		98	2	672	0.29%	97.11%
		99	9	681	1.30%	98.41%
		101	2	683	0.29%	98.70%
		102	8	691	1.16%	99.86%
		105	1	692	0.14%	100%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	25	25	3.88%	3.88%
		1	1	26	0.16%	4.04%
		3	3	29	0.47%	4.50%
		5	1	30	0.16%	4.66%
		6	2	32	0.31%	4.97%
		8	2	34	0.31%	5.28%
		9	4	38	0.62%	5.90%
		11	1	39	0.16%	6.06%
		12	4	43	0.62%	6.68%
		13	1	44	0.16%	6.83%
		14	2	46	0.31%	7.14%
		15	2	48	0.31%	7.45%
		16	1	49	0.16%	7.61%
		17	2	51	0.31%	7.92%
		18	4	55	0.62%	8.54%
		19	2	57	0.31%	8.85%
		20	1	58	0.16%	9.01%
		21	4	62	0.62%	9.63%
		22	2	64	0.31%	9.94%
		23	5	69	0.78%	10.71%
RD	4	24	4	73	0.62%	11.34%
		25	4	77	0.62%	11.96%
		26	5	82	0.78%	12.73%
		27	5	87	0.78%	13.51%
		28	2	89	0.31%	13.82%
		29	3	92	0.47%	14.29%
		30	8	100	1.24%	15.53%
		31	7	107	1.09%	16.62%
		32	1	108	0.16%	16.77%
		33	7	115	1.09%	17.86%
		34	2	117	0.31%	18.17%
		36	10	127	1.55%	19.72%
		37	4	131	0.62%	20.34%
		38	8	139	1.24%	21.58%
		39	6	145	0.93%	22.52%
		40	6	151	0.93%	23.45%
		41	4	155	0.62%	24.07%
		42	11	166	1.71%	25.78%
		44	4	170	0.62%	26.40%
		45	8	178	1.24%	27.64%
		47	6	184	0.93%	28.57%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		48	14	198	2.17%	30.75%
		49	5	203	0.78%	31.52%
		50	5	208	0.78%	32.30%
		51	13	221	2.02%	34.32%
		52	1	222	0.16%	34.47%
		53	6	228	0.93%	35.40%
		54	10	238	1.55%	36.96%
		55	1	239	0.16%	37.11%
		56	2	241	0.31%	37.42%
		57	18	259	2.80%	40.22%
		58	4	263	0.62%	40.84%
		59	4	267	0.62%	41.46%
		60	12	279	1.86%	43.32%
		61	3	282	0.47%	43.79%
		62	10	292	1.55%	45.34%
		63	18	310	2.80%	48.14%
		64	5	315	0.78%	48.91%
		65	8	323	1.24%	50.16%
		66	16	339	2.48%	52.64%
		67	4	343	0.62%	53.26%
RD	4	68	2	345	0.31%	53.57%
		69	19	364	2.95%	56.52%
		70	4	368	0.62%	57.14%
		71	4	372	0.62%	57.76%
		72	25	397	3.88%	61.65%
		74	8	405	1.24%	62.89%
		75	21	426	3.26%	66.15%
		76	4	430	0.62%	66.77%
		77	4	434	0.62%	67.39%
		78	23	457	3.57%	70.96%
		79	4	461	0.62%	71.58%
		80	5	466	0.78%	72.36%
		81	17	483	2.64%	75.00%
		82	2	485	0.31%	75.31%
		83	8	493	1.24%	76.55%
		84	21	514	3.26%	79.81%
		85	4	518	0.62%	80.44%
		86	3	521	0.47%	80.90%
		87	19	540	2.95%	83.85%
		88	3	543	0.47%	84.32%
		89	6	549	0.93%	85.25%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		90	18	567	2.80%	88.04%
		91	1	568	0.16%	88.20%
		92	8	576	1.24%	89.44%
		93	18	594	2.80%	92.24%
		94	3	597	0.47%	92.70%
		95	2	599	0.31%	93.01%
RD	4	96	15	614	2.33%	95.34%
		97	2	616	0.31%	95.65%
		98	6	622	0.93%	96.58%
		99	15	637	2.33%	98.91%
		100	1	638	0.16%	99.07%
		101	3	641	0.47%	99.53%
		102	3	644	0.47%	100%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	23	23	3.76%	3.76%
		2	4	27	0.65%	4.41%
		3	2	29	0.33%	4.74%
		6	4	33	0.65%	5.39%
		10	1	34	0.16%	5.56%
		12	2	36	0.33%	5.88%
		13	1	37	0.16%	6.05%
		14	1	38	0.16%	6.21%
		15	1	39	0.16%	6.37%
		16	1	40	0.16%	6.54%
		17	1	41	0.16%	6.70%
		18	3	44	0.49%	7.19%
		19	1	45	0.16%	7.35%
		20	1	46	0.16%	7.52%
		21	6	52	0.98%	8.50%
		22	2	54	0.33%	8.82%
		23	1	55	0.16%	8.99%
		24	1	56	0.16%	9.15%
		25	2	58	0.33%	9.48%
		26	4	62	0.65%	10.13%
RD	5	27	6	68	0.98%	11.11%
		28	5	73	0.82%	11.93%
		29	4	77	0.65%	12.58%
		30	9	86	1.47%	14.05%
		31	4	90	0.65%	14.71%
		32	5	95	0.82%	15.52%
		33	8	103	1.31%	16.83%
		34	2	105	0.33%	17.16%
		35	6	111	0.98%	18.14%
		36	7	118	1.14%	19.28%
		37	3	121	0.49%	19.77%
		38	6	127	0.98%	20.75%
		39	7	134	1.14%	21.90%
		40	5	139	0.82%	22.71%
		41	4	143	0.65%	23.37%
		42	8	151	1.31%	24.67%
		44	3	154	0.49%	25.16%
		45	17	171	2.78%	27.94%
		46	3	174	0.49%	28.43%
		47	3	177	0.49%	28.92%
		48	9	186	1.47%	30.39%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		50	4	190	0.65%	31.05%
		51	12	202	1.96%	33.01%
		52	3	205	0.49%	33.50%
		53	4	209	0.65%	34.15%
		54	6	215	0.98%	35.13%
		55	2	217	0.33%	35.46%
		56	2	219	0.33%	35.78%
		57	5	224	0.82%	36.60%
		58	1	225	0.16%	36.77%
		59	5	230	0.82%	37.58%
		60	14	244	2.29%	39.87%
		61	3	247	0.49%	40.36%
		62	9	256	1.47%	41.83%
		63	15	271	2.45%	44.28%
		64	3	274	0.49%	44.77%
		65	3	277	0.49%	45.26%
		66	14	291	2.29%	47.55%
		68	5	296	0.82%	48.37%
		69	17	313	2.78%	51.14%
		70	3	316	0.49%	51.63%
RD	5	71	5	321	0.82%	52.45%
		72	19	340	3.10%	55.56%
		73	5	345	0.82%	56.37%
		74	5	350	0.82%	57.19%
		75	16	366	2.61%	59.80%
		76	5	371	0.82%	60.62%
		77	8	379	1.31%	61.93%
		78	19	398	3.10%	65.03%
		79	3	401	0.49%	65.52%
		81	22	423	3.59%	69.12%
		82	7	430	1.14%	70.26%
		83	4	434	0.65%	70.92%
		84	22	456	3.59%	74.51%
		85	1	457	0.16%	74.67%
		86	6	463	0.98%	75.65%
		87	20	483	3.27%	78.92%
		88	2	485	0.33%	79.25%
		89	7	492	1.14%	80.39%
		90	21	513	3.43%	83.82%
		91	2	515	0.33%	84.15%
		92	3	518	0.49%	84.64%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		93	24	542	3.92%	88.56%
		94	5	547	0.82%	89.38%
		95	6	553	0.98%	90.36%
		96	25	578	4.09%	94.44%
		97	4	582	0.65%	95.10%
RD	5	98	8	590	1.31%	96.41%
		99	8	598	1.31%	97.71%
		100	1	599	0.16%	97.88%
		101	3	602	0.49%	98.37%
		102	6	608	0.98%	99.35%
		105	4	612	0.65%	100%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	3.47%	3.47%
		1	1	20	0.18%	3.66%
		2	2	22	0.37%	4.02%
		4	2	24	0.37%	4.39%
		5	1	25	0.18%	4.57%
		6	4	29	0.73%	5.30%
		8	2	31	0.37%	5.67%
		9	2	33	0.37%	6.03%
		12	2	35	0.37%	6.40%
		13	3	38	0.55%	6.95%
		15	3	41	0.55%	7.50%
		16	1	42	0.18%	7.68%
		17	2	44	0.37%	8.04%
		18	1	45	0.18%	8.23%
		20	2	47	0.37%	8.59%
		21	4	51	0.73%	9.32%
		22	4	55	0.73%	10.06%
		23	1	56	0.18%	10.24%
		24	4	60	0.73%	10.97%
		27	4	64	0.73%	11.70%
RD	6	28	1	65	0.18%	11.88%
		29	1	66	0.18%	12.07%
		30	3	69	0.55%	12.61%
		31	2	71	0.37%	12.98%
		32	3	74	0.55%	13.53%
		33	5	79	0.91%	14.44%
		34	1	80	0.18%	14.63%
		36	6	86	1.10%	15.72%
		37	1	87	0.18%	15.91%
		38	5	92	0.91%	16.82%
		39	5	97	0.91%	17.73%
		40	5	102	0.91%	18.65%
		41	1	103	0.18%	18.83%
		42	5	108	0.91%	19.74%
		43	2	110	0.37%	20.11%
		44	3	113	0.55%	20.66%
		45	5	118	0.91%	21.57%
		46	5	123	0.91%	22.49%
		47	3	126	0.55%	23.04%
		48	6	132	1.10%	24.13%
		50	3	135	0.55%	24.68%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		51	13	148	2.38%	27.06%
		52	5	153	0.91%	27.97%
		53	3	156	0.55%	28.52%
		54	15	171	2.74%	31.26%
		55	2	173	0.37%	31.63%
		56	3	176	0.55%	32.18%
		57	10	186	1.83%	34.00%
		58	4	190	0.73%	34.74%
		59	3	193	0.55%	35.28%
		60	10	203	1.83%	37.11%
		61	5	208	0.91%	38.03%
		62	2	210	0.37%	38.39%
		63	10	220	1.83%	40.22%
		64	3	223	0.55%	40.77%
		65	8	231	1.46%	42.23%
		66	15	246	2.74%	44.97%
		67	1	247	0.18%	45.16%
		68	7	254	1.28%	46.44%
		69	20	274	3.66%	50.09%
		70	5	279	0.91%	51.01%
RD	6	71	2	281	0.37%	51.37%
		72	14	295	2.56%	53.93%
		73	6	301	1.10%	55.03%
		74	4	305	0.73%	55.76%
		75	24	329	4.39%	60.15%
		76	4	333	0.73%	60.88%
		77	4	337	0.73%	61.61%
		78	19	356	3.47%	65.08%
		79	2	358	0.37%	65.45%
		80	5	363	0.91%	66.36%
		81	17	380	3.11%	69.47%
		82	1	381	0.18%	69.65%
		83	6	387	1.10%	70.75%
		84	24	411	4.39%	75.14%
		85	6	417	1.10%	76.23%
		86	10	427	1.83%	78.06%
		87	16	443	2.93%	80.99%
		88	3	446	0.55%	81.54%
		89	5	451	0.91%	82.45%
		90	21	472	3.84%	86.29%
		91	1	473	0.18%	86.47%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		92	1	474	0.18%	86.65%
		93	14	488	2.56%	89.21%
		94	1	489	0.18%	89.40%
		95	10	499	1.83%	91.23%
		96	15	514	2.74%	93.97%
RD	6	98	3	517	0.55%	94.52%
		99	9	526	1.65%	96.16%
		101	3	529	0.55%	96.71%
		102	9	538	1.65%	98.36%
		103	2	540	0.37%	98.72%
		104	2	542	0.37%	99.09%
		105	5	547	0.91%	100%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	24	24	4.51%	4.51%
		1	3	27	0.56%	5.08%
		2	2	29	0.38%	5.45%
		3	1	30	0.19%	5.64%
		5	1	31	0.19%	5.83%
		11	1	32	0.19%	6.02%
		14	1	33	0.19%	6.20%
		15	2	35	0.38%	6.58%
		16	3	38	0.56%	7.14%
		17	1	39	0.19%	7.33%
		18	4	43	0.75%	8.08%
		19	5	48	0.94%	9.02%
		20	1	49	0.19%	9.21%
		21	3	52	0.56%	9.77%
		23	3	55	0.56%	10.34%
		24	5	60	0.94%	11.28%
		25	4	64	0.75%	12.03%
		26	3	67	0.56%	12.59%
		27	7	74	1.32%	13.91%
		28	1	75	0.19%	14.10%
RD	7	29	2	77	0.38%	14.47%
		30	8	85	1.50%	15.98%
		31	5	90	0.94%	16.92%
		32	2	92	0.38%	17.29%
		33	9	101	1.69%	18.99%
		35	4	105	0.75%	19.74%
		36	13	118	2.44%	22.18%
		37	6	124	1.13%	23.31%
		38	4	128	0.75%	24.06%
		39	7	135	1.32%	25.38%
		40	2	137	0.38%	25.75%
		41	6	143	1.13%	26.88%
		42	13	156	2.44%	29.32%
		43	2	158	0.38%	29.70%
		44	4	162	0.75%	30.45%
		45	16	178	3.01%	33.46%
		46	5	183	0.94%	34.40%
		47	3	186	0.56%	34.96%
		48	13	199	2.44%	37.41%
		49	3	202	0.56%	37.97%
		50	4	206	0.75%	38.72%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		51	11	217	2.07%	40.79%
		52	3	220	0.56%	41.35%
		53	3	223	0.56%	41.92%
		54	12	235	2.26%	44.17%
		55	4	239	0.75%	44.93%
		56	3	242	0.56%	45.49%
		57	14	256	2.63%	48.12%
		58	1	257	0.19%	48.31%
		59	4	261	0.75%	49.06%
		60	11	272	2.07%	51.13%
		61	3	275	0.56%	51.69%
		62	5	280	0.94%	52.63%
		63	19	299	3.57%	56.20%
		64	2	301	0.38%	56.58%
		65	5	306	0.94%	57.52%
		66	19	325	3.57%	61.09%
		68	4	329	0.75%	61.84%
		69	23	352	4.32%	66.17%
		71	3	355	0.56%	66.73%
		72	17	372	3.20%	69.93%
RD	7	73	3	375	0.56%	70.49%
		74	6	381	1.13%	71.62%
		75	18	399	3.38%	75.00%
		76	1	400	0.19%	75.19%
		77	3	403	0.56%	75.75%
		78	24	427	4.51%	80.26%
		79	3	430	0.56%	80.83%
		80	3	433	0.56%	81.39%
		81	18	451	3.38%	84.77%
		82	1	452	0.19%	84.96%
		83	5	457	0.94%	85.90%
		84	15	472	2.82%	88.72%
		85	2	474	0.38%	89.10%
		86	2	476	0.38%	89.47%
		87	13	489	2.44%	91.92%
		88	4	493	0.75%	92.67%
		89	3	496	0.56%	93.23%
		90	13	509	2.44%	95.68%
		91	1	510	0.19%	95.87%
		92	2	512	0.38%	96.24%
		93	6	518	1.13%	97.37%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		94	2	520	0.38%	97.74%
		96	6	526	1.13%	98.87%
RD	7	99	1	527	0.19%	99.06%
		101	2	529	0.38%	99.44%
		102	2	531	0.38%	99.81%
		104	1	532	0.19%	100%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	3.49%	3.49%
		1	1	20	0.18%	3.68%
		2	4	24	0.74%	4.41%
		3	2	26	0.37%	4.78%
		4	2	28	0.37%	5.15%
		6	1	29	0.18%	5.33%
		7	1	30	0.18%	5.52%
		8	1	31	0.18%	5.70%
		9	1	32	0.18%	5.88%
		10	3	35	0.55%	6.43%
		11	1	36	0.18%	6.62%
		12	1	37	0.18%	6.80%
		13	1	38	0.18%	6.99%
		14	2	40	0.37%	7.35%
		15	5	45	0.92%	8.27%
		16	1	46	0.18%	8.46%
		17	2	48	0.37%	8.82%
		18	6	54	1.10%	9.93%
		19	2	56	0.37%	10.29%
		20	2	58	0.37%	10.66%
RD	8	21	7	65	1.29%	11.95%
		22	1	66	0.18%	12.13%
		23	1	67	0.18%	12.32%
		24	10	77	1.84%	14.15%
		25	4	81	0.74%	14.89%
		26	2	83	0.37%	15.26%
		27	12	95	2.21%	17.46%
		28	5	100	0.92%	18.38%
		29	1	101	0.18%	18.57%
		30	14	115	2.57%	21.14%
		31	1	116	0.18%	21.32%
		32	2	118	0.37%	21.69%
		33	9	127	1.65%	23.35%
		34	2	129	0.37%	23.71%
		35	3	132	0.55%	24.27%
		36	21	153	3.86%	28.13%
		37	3	156	0.55%	28.68%
		38	6	162	1.10%	29.78%
		39	15	177	2.76%	32.54%
		40	2	179	0.37%	32.90%
		41	3	182	0.55%	33.46%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		42	8	190	1.47%	34.93%
		43	6	196	1.10%	36.03%
		44	2	198	0.37%	36.40%
		45	11	209	2.02%	38.42%
		46	1	210	0.18%	38.60%
		47	4	214	0.74%	39.34%
		48	19	233	3.49%	42.83%
		49	4	237	0.74%	43.57%
		50	3	240	0.55%	44.12%
		51	17	257	3.13%	47.24%
		52	4	261	0.74%	47.98%
		53	4	265	0.74%	48.71%
		54	11	276	2.02%	50.74%
		55	2	278	0.37%	51.10%
		56	5	283	0.92%	52.02%
		57	11	294	2.02%	54.04%
		58	1	295	0.18%	54.23%
		59	9	304	1.65%	55.88%
		60	11	315	2.02%	57.90%
		61	1	316	0.18%	58.09%
RD	8	62	1	317	0.18%	58.27%
		63	15	332	2.76%	61.03%
		64	3	335	0.55%	61.58%
		65	2	337	0.37%	61.95%
		66	24	361	4.41%	66.36%
		67	2	363	0.37%	66.73%
		68	6	369	1.10%	67.83%
		69	12	381	2.21%	70.04%
		70	2	383	0.37%	70.40%
		71	4	387	0.74%	71.14%
		72	18	405	3.31%	74.45%
		73	2	407	0.37%	74.82%
		75	14	421	2.57%	77.39%
		76	1	422	0.18%	77.57%
		77	3	425	0.55%	78.13%
		78	13	438	2.39%	80.52%
		80	3	441	0.55%	81.07%
		81	9	450	1.65%	82.72%
		82	2	452	0.37%	83.09%
		83	1	453	0.18%	83.27%
		84	10	463	1.84%	85.11%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		86	2	465	0.37%	85.48%
		87	18	483	3.31%	88.79%
		88	2	485	0.37%	89.15%
		89	2	487	0.37%	89.52%
		90	11	498	2.02%	91.54%
		91	1	499	0.18%	91.73%
		92	2	501	0.37%	92.10%
		93	11	512	2.02%	94.12%
RD	8	94	1	513	0.18%	94.30%
		95	1	514	0.18%	94.49%
		96	7	521	1.29%	95.77%
		97	2	523	0.37%	96.14%
		98	2	525	0.37%	96.51%
		99	12	537	2.21%	98.71%
		102	5	542	0.92%	99.63%
		103	1	543	0.18%	99.82%
		104	1	544	0.18%	100%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	18	18	3.62%	3.62%
		1	1	19	0.20%	3.82%
		2	1	20	0.20%	4.02%
		3	3	23	0.60%	4.63%
		5	3	26	0.60%	5.23%
		6	5	31	1.01%	6.24%
		9	4	35	0.80%	7.04%
		10	1	36	0.20%	7.24%
		11	1	37	0.20%	7.45%
		12	3	40	0.60%	8.05%
		13	2	42	0.40%	8.45%
		14	2	44	0.40%	8.85%
		15	2	46	0.40%	9.26%
		16	3	49	0.60%	9.86%
		17	1	50	0.20%	10.06%
		18	3	53	0.60%	10.66%
		19	3	56	0.60%	11.27%
		20	2	58	0.40%	11.67%
		21	7	65	1.41%	13.08%
		22	1	66	0.20%	13.28%
RD	9	23	3	69	0.60%	13.88%
		24	10	79	2.01%	15.90%
		25	3	82	0.60%	16.50%
		26	5	87	1.01%	17.51%
		27	9	96	1.81%	19.32%
		28	2	98	0.40%	19.72%
		29	1	99	0.20%	19.92%
		30	10	109	2.01%	21.93%
		31	3	112	0.60%	22.54%
		32	2	114	0.40%	22.94%
		33	12	126	2.41%	25.35%
		34	3	129	0.60%	25.96%
		35	5	134	1.01%	26.96%
		36	7	141	1.41%	28.37%
		38	5	146	1.01%	29.38%
		39	9	155	1.81%	31.19%
		40	3	158	0.60%	31.79%
		41	1	159	0.20%	31.99%
		42	10	169	2.01%	34.00%
		43	2	171	0.40%	34.41%
		44	1	172	0.20%	34.61%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		45	17	189	3.42%	38.03%
		46	1	190	0.20%	38.23%
		47	4	194	0.80%	39.03%
		48	11	205	2.21%	41.25%
		49	3	208	0.60%	41.85%
		50	7	215	1.41%	43.26%
		51	13	228	2.62%	45.88%
		52	3	231	0.60%	46.48%
		53	5	236	1.01%	47.49%
		54	14	250	2.82%	50.30%
		55	2	252	0.40%	50.70%
		56	4	256	0.80%	51.51%
		57	13	269	2.62%	54.13%
		58	3	272	0.60%	54.73%
		59	3	275	0.60%	55.33%
		60	10	285	2.01%	57.34%
		61	1	286	0.20%	57.55%
		62	3	289	0.60%	58.15%
		63	13	302	2.62%	60.77%
		64	3	305	0.60%	61.37%
RD	9	65	4	309	0.80%	62.17%
		66	10	319	2.01%	64.19%
		67	2	321	0.40%	64.59%
		68	2	323	0.40%	64.99%
		69	9	332	1.81%	66.80%
		70	4	336	0.80%	67.61%
		71	2	338	0.40%	68.01%
		72	10	348	2.01%	70.02%
		73	2	350	0.40%	70.42%
		74	1	351	0.20%	70.62%
		75	15	366	3.02%	73.64%
		77	2	368	0.40%	74.04%
		78	13	381	2.62%	76.66%
		79	3	384	0.60%	77.26%
		80	3	387	0.60%	77.87%
		81	9	396	1.81%	79.68%
		82	3	399	0.60%	80.28%
		83	4	403	0.80%	81.09%
		84	14	417	2.82%	83.90%
		85	1	418	0.20%	84.11%
		86	5	423	1.01%	85.11%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		87	13	436	2.62%	87.73%
		89	3	439	0.60%	88.33%
		90	18	457	3.62%	91.95%
		91	1	458	0.20%	92.15%
		92	2	460	0.40%	92.56%
		93	13	473	2.62%	95.17%
RD	9	94	3	476	0.60%	95.78%
		95	2	478	0.40%	96.18%
		96	8	486	1.61%	97.79%
		98	1	487	0.20%	97.99%
		99	4	491	0.80%	98.79%
		100	1	492	0.20%	98.99%
		102	5	497	1.01%	100%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	13	13	2.44%	2.44%
		1	2	15	0.38%	2.81%
		2	2	17	0.38%	3.19%
		3	3	20	0.56%	3.75%
		4	3	23	0.56%	4.32%
		5	1	24	0.19%	4.50%
		8	1	25	0.19%	4.69%
		9	5	30	0.94%	5.63%
		11	1	31	0.19%	5.82%
		12	6	37	1.13%	6.94%
		13	3	40	0.56%	7.51%
		14	2	42	0.38%	7.88%
		15	4	46	0.75%	8.63%
		16	2	48	0.38%	9.01%
		18	2	50	0.38%	9.38%
		19	3	53	0.56%	9.94%
		20	1	54	0.19%	10.13%
		21	7	61	1.31%	11.45%
		22	1	62	0.19%	11.63%
		23	3	65	0.56%	12.20%
RD	10	24	10	75	1.88%	14.07%
		25	2	77	0.38%	14.45%
		26	5	82	0.94%	15.39%
		27	14	96	2.63%	18.01%
		28	3	99	0.56%	18.57%
		29	2	101	0.38%	18.95%
		30	14	115	2.63%	21.58%
		31	3	118	0.56%	22.14%
		32	2	120	0.38%	22.51%
		33	15	135	2.81%	25.33%
		34	5	140	0.94%	26.27%
		35	3	143	0.56%	26.83%
		36	15	158	2.81%	29.64%
		37	5	163	0.94%	30.58%
		38	1	164	0.19%	30.77%
		39	11	175	2.06%	32.83%
		40	3	178	0.56%	33.40%
		41	1	179	0.19%	33.58%
		42	16	195	3.00%	36.59%
		43	3	198	0.56%	37.15%
		44	3	201	0.56%	37.71%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		45	18	219	3.38%	41.09%
		46	2	221	0.38%	41.46%
		47	5	226	0.94%	42.40%
		48	15	241	2.81%	45.22%
		49	4	245	0.75%	45.97%
		50	5	250	0.94%	46.90%
		51	13	263	2.44%	49.34%
		52	2	265	0.38%	49.72%
		53	3	268	0.56%	50.28%
		54	9	277	1.69%	51.97%
		55	2	279	0.38%	52.35%
		56	4	283	0.75%	53.10%
		57	17	300	3.19%	56.29%
		59	4	304	0.75%	57.04%
		60	8	312	1.50%	58.54%
		61	4	316	0.75%	59.29%
		62	3	319	0.56%	59.85%
		63	14	333	2.63%	62.48%
		65	3	336	0.56%	63.04%
		66	13	349	2.44%	65.48%
RD	10	67	2	351	0.38%	65.85%
		68	10	361	1.88%	67.73%
		69	20	381	3.75%	71.48%
		70	3	384	0.56%	72.05%
		71	2	386	0.38%	72.42%
		72	15	401	2.81%	75.24%
		73	1	402	0.19%	75.42%
		74	5	407	0.94%	76.36%
		75	17	424	3.19%	79.55%
		76	2	426	0.38%	79.93%
		77	4	430	0.75%	80.68%
		78	13	443	2.44%	83.11%
		79	2	445	0.38%	83.49%
		80	5	450	0.94%	84.43%
		81	11	461	2.06%	86.49%
		82	2	463	0.38%	86.87%
		83	3	466	0.56%	87.43%
		84	16	482	3.00%	90.43%
		85	4	486	0.75%	91.18%
		86	2	488	0.38%	91.56%
		87	10	498	1.88%	93.43%

Table 42
Reading Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		88	1	499	0.19%	93.62%
		90	12	511	2.25%	95.87%
		91	1	512	0.19%	96.06%
		92	2	514	0.38%	96.44%
RD	10	93	9	523	1.69%	98.12%
		94	1	524	0.19%	98.31%
		96	5	529	0.94%	99.25%
		97	2	531	0.38%	99.63%
		98	1	532	0.19%	99.81%
		99	1	533	0.19%	100%

Table 43
Writing Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	24	24	3.50%	3.50%
		1	4	28	0.58%	4.08%
		3	6	34	0.87%	4.96%
		5	2	36	0.29%	5.25%
		6	1	37	0.15%	5.39%
		7	3	40	0.44%	5.83%
		8	2	42	0.29%	6.12%
		9	3	45	0.44%	6.56%
		10	5	50	0.73%	7.29%
		11	4	54	0.58%	7.87%
		12	10	64	1.46%	9.33%
		13	1	65	0.15%	9.48%
		14	4	69	0.58%	10.06%
		15	5	74	0.73%	10.79%
		16	4	78	0.58%	11.37%
		17	5	83	0.73%	12.10%
		18	5	88	0.73%	12.83%
		19	5	93	0.73%	13.56%
		20	2	95	0.29%	13.85%
		21	8	103	1.17%	15.02%
WR	3	22	5	108	0.73%	15.74%
		23	5	113	0.73%	16.47%
		24	6	119	0.87%	17.35%
		25	2	121	0.29%	17.64%
		26	2	123	0.29%	17.93%
		27	4	127	0.58%	18.51%
		28	5	132	0.73%	19.24%
		29	4	136	0.58%	19.83%
		30	7	143	1.02%	20.85%
		31	7	150	1.02%	21.87%
		32	7	157	1.02%	22.89%
		33	4	161	0.58%	23.47%
		34	2	163	0.29%	23.76%
		35	3	166	0.44%	24.20%
		36	1	167	0.15%	24.34%
		37	3	170	0.44%	24.78%
		38	6	176	0.87%	25.66%
		39	5	181	0.73%	26.39%
		40	3	184	0.44%	26.82%
		41	3	187	0.44%	27.26%
		42	6	193	0.87%	28.13%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		43	4	197	0.58%	28.72%
		44	7	204	1.02%	29.74%
		45	1	205	0.15%	29.88%
		47	11	216	1.60%	31.49%
		48	9	225	1.31%	32.80%
		49	2	227	0.29%	33.09%
		50	4	231	0.58%	33.67%
		51	7	238	1.02%	34.69%
		52	5	243	0.73%	35.42%
		53	9	252	1.31%	36.74%
		54	7	259	1.02%	37.76%
		55	14	273	2.04%	39.80%
		56	6	279	0.87%	40.67%
		57	4	283	0.58%	41.25%
		58	5	288	0.73%	41.98%
		59	9	297	1.31%	43.29%
		60	5	302	0.73%	44.02%
		61	5	307	0.73%	44.75%
		62	7	314	1.02%	45.77%
		63	12	326	1.75%	47.52%
WR	3	64	15	341	2.19%	49.71%
		65	6	347	0.87%	50.58%
		66	7	354	1.02%	51.60%
		67	13	367	1.90%	53.50%
		68	11	378	1.60%	55.10%
		69	10	388	1.46%	56.56%
		70	10	398	1.46%	58.02%
		71	8	406	1.17%	59.18%
		72	10	416	1.46%	60.64%
		73	8	424	1.17%	61.81%
		74	8	432	1.17%	62.97%
		75	15	447	2.19%	65.16%
		76	14	461	2.04%	67.20%
		77	11	472	1.60%	68.81%
		78	15	487	2.19%	70.99%
		79	13	500	1.90%	72.89%
		80	8	508	1.17%	74.05%
		81	11	519	1.60%	75.66%
		82	12	531	1.75%	77.41%
		83	15	546	2.19%	79.59%
		84	5	551	0.73%	80.32%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		85	20	571	2.92%	83.24%
		86	9	580	1.31%	84.55%
		87	9	589	1.31%	85.86%
		88	14	603	2.04%	87.90%
		89	10	613	1.46%	89.36%
		90	9	622	1.31%	90.67%
		91	14	636	2.04%	92.71%
		92	6	642	0.87%	93.59%
		93	10	652	1.46%	95.04%
WR	3	94	9	661	1.31%	96.36%
		95	1	662	0.15%	96.50%
		96	5	667	0.73%	97.23%
		97	2	669	0.29%	97.52%
		98	3	672	0.44%	97.96%
		99	4	676	0.58%	98.54%
		101	4	680	0.58%	99.13%
		102	3	683	0.44%	99.56%
		104	2	685	0.29%	99.85%
		105	1	686	0.15%	100%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	25	25	3.92%	3.92%
		1	1	26	0.16%	4.08%
		2	2	28	0.31%	4.39%
		3	5	33	0.78%	5.17%
		6	3	36	0.47%	5.64%
		7	1	37	0.16%	5.80%
		8	3	40	0.47%	6.27%
		9	7	47	1.10%	7.37%
		10	3	50	0.47%	7.84%
		11	1	51	0.16%	7.99%
		12	6	57	0.94%	8.93%
		14	5	62	0.78%	9.72%
		15	6	68	0.94%	10.66%
		16	4	72	0.63%	11.29%
		17	4	76	0.63%	11.91%
		18	3	79	0.47%	12.38%
		19	2	81	0.31%	12.70%
		20	7	88	1.10%	13.79%
		21	3	91	0.47%	14.26%
		22	3	94	0.47%	14.73%
WR	4	23	1	95	0.16%	14.89%
		24	7	102	1.10%	15.99%
		25	1	103	0.16%	16.14%
		26	5	108	0.78%	16.93%
		27	7	115	1.10%	18.03%
		28	3	118	0.47%	18.50%
		29	2	120	0.31%	18.81%
		30	4	124	0.63%	19.44%
		31	4	128	0.63%	20.06%
		32	2	130	0.31%	20.38%
		33	2	132	0.31%	20.69%
		34	3	135	0.47%	21.16%
		35	4	139	0.63%	21.79%
		36	5	144	0.78%	22.57%
		37	4	148	0.63%	23.20%
		38	5	153	0.78%	23.98%
		39	2	155	0.31%	24.30%
		40	2	157	0.31%	24.61%
		41	7	164	1.10%	25.71%
		42	8	172	1.25%	26.96%
		43	1	173	0.16%	27.12%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		44	3	176	0.47%	27.59%
		45	3	179	0.47%	28.06%
		46	5	184	0.78%	28.84%
		47	3	187	0.47%	29.31%
		48	4	191	0.63%	29.94%
		49	6	197	0.94%	30.88%
		50	5	202	0.78%	31.66%
		51	5	207	0.78%	32.45%
		52	4	211	0.63%	33.07%
		53	5	216	0.78%	33.86%
		54	8	224	1.25%	35.11%
		55	4	228	0.63%	35.74%
		56	4	232	0.63%	36.36%
		57	2	234	0.31%	36.68%
		58	6	240	0.94%	37.62%
		59	4	244	0.63%	38.25%
		60	10	254	1.57%	39.81%
		61	7	261	1.10%	40.91%
		62	4	265	0.63%	41.54%
		63	7	272	1.10%	42.63%
WR	4	64	12	284	1.88%	44.51%
		65	6	290	0.94%	45.46%
		66	6	296	0.94%	46.40%
		67	11	307	1.72%	48.12%
		68	10	317	1.57%	49.69%
		69	5	322	0.78%	50.47%
		70	15	337	2.35%	52.82%
		71	10	347	1.57%	54.39%
		72	7	354	1.10%	55.49%
		73	18	372	2.82%	58.31%
		74	9	381	1.41%	59.72%
		75	8	389	1.25%	60.97%
		76	13	402	2.04%	63.01%
		77	5	407	0.78%	63.79%
		78	6	413	0.94%	64.73%
		79	13	426	2.04%	66.77%
		80	10	436	1.57%	68.34%
		81	7	443	1.10%	69.44%
		82	12	455	1.88%	71.32%
		83	9	464	1.41%	72.73%
		84	9	473	1.41%	74.14%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		85	12	485	1.88%	76.02%
		86	11	496	1.72%	77.74%
		87	16	512	2.51%	80.25%
		88	9	521	1.41%	81.66%
		89	12	533	1.88%	83.54%
		90	19	552	2.98%	86.52%
		91	8	560	1.25%	87.77%
		92	8	568	1.25%	89.03%
		93	10	578	1.57%	90.60%
		94	7	585	1.10%	91.69%
WR	4	95	7	592	1.10%	92.79%
		96	8	600	1.25%	94.04%
		97	7	607	1.10%	95.14%
		98	7	614	1.10%	96.24%
		99	11	625	1.72%	97.96%
		100	3	628	0.47%	98.43%
		101	3	631	0.47%	98.90%
		102	3	634	0.47%	99.37%
		103	1	635	0.16%	99.53%
		104	1	636	0.16%	99.69%
		105	1	637	0.16%	99.84%
		107	1	638	0.16%	100%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	30	30	4.96%	4.96%
		2	1	31	0.17%	5.12%
		3	1	32	0.17%	5.29%
		4	1	33	0.17%	5.46%
		5	1	34	0.17%	5.62%
		6	1	35	0.17%	5.79%
		7	2	37	0.33%	6.12%
		9	2	39	0.33%	6.45%
		10	1	40	0.17%	6.61%
		11	2	42	0.33%	6.94%
		12	5	47	0.83%	7.77%
		14	2	49	0.33%	8.10%
		15	7	56	1.16%	9.26%
		17	4	60	0.66%	9.92%
		18	3	63	0.50%	10.41%
		19	6	69	0.99%	11.41%
		20	2	71	0.33%	11.74%
		21	3	74	0.50%	12.23%
		22	1	75	0.17%	12.40%
		23	6	81	0.99%	13.39%
WR	5	24	1	82	0.17%	13.55%
		25	2	84	0.33%	13.88%
		26	3	87	0.50%	14.38%
		27	5	92	0.83%	15.21%
		29	2	94	0.33%	15.54%
		30	3	97	0.50%	16.03%
		31	3	100	0.50%	16.53%
		32	4	104	0.66%	17.19%
		33	6	110	0.99%	18.18%
		34	1	111	0.17%	18.35%
		35	2	113	0.33%	18.68%
		36	5	118	0.83%	19.50%
		37	3	121	0.50%	20.00%
		38	2	123	0.33%	20.33%
		39	1	124	0.17%	20.50%
		40	3	127	0.50%	20.99%
		41	2	129	0.33%	21.32%
		42	5	134	0.83%	22.15%
		43	5	139	0.83%	22.98%
		44	1	140	0.17%	23.14%
		45	7	147	1.16%	24.30%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		46	2	149	0.33%	24.63%
		47	6	155	0.99%	25.62%
		48	4	159	0.66%	26.28%
		49	3	162	0.50%	26.78%
		51	3	165	0.50%	27.27%
		52	4	169	0.66%	27.93%
		53	1	170	0.17%	28.10%
		54	3	173	0.50%	28.60%
		55	3	176	0.50%	29.09%
		56	3	179	0.50%	29.59%
		57	6	185	0.99%	30.58%
		58	5	190	0.83%	31.41%
		59	4	194	0.66%	32.07%
		60	5	199	0.83%	32.89%
		61	5	204	0.83%	33.72%
		62	3	207	0.50%	34.22%
		63	8	215	1.32%	35.54%
		64	8	223	1.32%	36.86%
		65	5	228	0.83%	37.69%
		66	9	237	1.49%	39.17%
WR	5	67	9	246	1.49%	40.66%
		68	4	250	0.66%	41.32%
		69	9	259	1.49%	42.81%
		70	18	277	2.98%	45.79%
		71	7	284	1.16%	46.94%
		72	10	294	1.65%	48.60%
		73	14	308	2.31%	50.91%
		74	6	314	0.99%	51.90%
		75	13	327	2.15%	54.05%
		76	12	339	1.98%	56.03%
		77	7	346	1.16%	57.19%
		78	18	364	2.98%	60.17%
		79	24	388	3.97%	64.13%
		80	7	395	1.16%	65.29%
		81	15	410	2.48%	67.77%
		82	13	423	2.15%	69.92%
		83	10	433	1.65%	71.57%
		84	14	447	2.31%	73.88%
		85	16	463	2.64%	76.53%
		86	13	476	2.15%	78.68%
		87	11	487	1.82%	80.50%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		88	11	498	1.82%	82.31%
		89	12	510	1.98%	84.30%
		90	12	522	1.98%	86.28%
		91	7	529	1.16%	87.44%
		92	12	541	1.98%	89.42%
		93	13	554	2.15%	91.57%
		94	1	555	0.17%	91.74%
WR	5	95	11	566	1.82%	93.55%
		96	8	574	1.32%	94.88%
		97	4	578	0.66%	95.54%
		98	8	586	1.32%	96.86%
		99	7	593	1.16%	98.02%
		100	3	596	0.50%	98.51%
		101	4	600	0.66%	99.17%
		102	3	603	0.50%	99.67%
		103	2	605	0.33%	100%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	22	22	4.01%	4.01%
		1	4	26	0.73%	4.74%
		2	1	27	0.18%	4.92%
		3	2	29	0.36%	5.28%
		4	1	30	0.18%	5.46%
		5	1	31	0.18%	5.65%
		6	6	37	1.09%	6.74%
		7	3	40	0.55%	7.29%
		8	1	41	0.18%	7.47%
		9	4	45	0.73%	8.20%
		10	2	47	0.36%	8.56%
		11	1	48	0.18%	8.74%
		12	2	50	0.36%	9.11%
		13	3	53	0.55%	9.65%
		14	1	54	0.18%	9.84%
		15	1	55	0.18%	10.02%
		16	3	58	0.55%	10.57%
		17	1	59	0.18%	10.75%
		18	4	63	0.73%	11.48%
		19	2	65	0.36%	11.84%
WR	6	20	2	67	0.36%	12.20%
		21	4	71	0.73%	12.93%
		22	3	74	0.55%	13.48%
		23	1	75	0.18%	13.66%
		24	4	79	0.73%	14.39%
		25	2	81	0.36%	14.75%
		26	1	82	0.18%	14.94%
		27	3	85	0.55%	15.48%
		28	1	86	0.18%	15.67%
		29	5	91	0.91%	16.58%
		30	1	92	0.18%	16.76%
		31	3	95	0.55%	17.30%
		32	1	96	0.18%	17.49%
		33	1	97	0.18%	17.67%
		34	2	99	0.36%	18.03%
		35	4	103	0.73%	18.76%
		36	3	106	0.55%	19.31%
		37	2	108	0.36%	19.67%
		38	1	109	0.18%	19.85%
		39	2	111	0.36%	20.22%
		41	3	114	0.55%	20.77%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		42	1	115	0.18%	20.95%
		43	2	117	0.36%	21.31%
		44	7	124	1.28%	22.59%
		45	3	127	0.55%	23.13%
		46	6	133	1.09%	24.23%
		47	1	134	0.18%	24.41%
		48	4	138	0.73%	25.14%
		50	2	140	0.36%	25.50%
		51	8	148	1.46%	26.96%
		52	2	150	0.36%	27.32%
		53	3	153	0.55%	27.87%
		54	6	159	1.09%	28.96%
		55	6	165	1.09%	30.06%
		56	5	170	0.91%	30.97%
		57	2	172	0.36%	31.33%
		58	4	176	0.73%	32.06%
		59	6	182	1.09%	33.15%
		60	4	186	0.73%	33.88%
		61	5	191	0.91%	34.79%
		62	8	199	1.46%	36.25%
WR	6	63	2	201	0.36%	36.61%
		64	6	207	1.09%	37.71%
		65	4	211	0.73%	38.43%
		66	4	215	0.73%	39.16%
		67	9	224	1.64%	40.80%
		68	8	232	1.46%	42.26%
		69	5	237	0.91%	43.17%
		70	6	243	1.09%	44.26%
		71	7	250	1.28%	45.54%
		72	6	256	1.09%	46.63%
		73	13	269	2.37%	49.00%
		74	4	273	0.73%	49.73%
		75	9	282	1.64%	51.37%
		76	9	291	1.64%	53.01%
		77	9	300	1.64%	54.65%
		78	12	312	2.19%	56.83%
		79	14	326	2.55%	59.38%
		80	11	337	2.00%	61.38%
		81	19	356	3.46%	64.85%
		82	12	368	2.19%	67.03%
		83	11	379	2.00%	69.04%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		84	14	393	2.55%	71.59%
		85	22	415	4.01%	75.59%
		86	10	425	1.82%	77.41%
		87	10	435	1.82%	79.24%
		88	8	443	1.46%	80.69%
		89	14	457	2.55%	83.24%
		90	16	473	2.91%	86.16%
		91	7	480	1.28%	87.43%
		92	11	491	2.00%	89.44%
		93	8	499	1.46%	90.89%
WR	6	94	9	508	1.64%	92.53%
		95	4	512	0.73%	93.26%
		96	10	522	1.82%	95.08%
		97	6	528	1.09%	96.18%
		98	4	532	0.73%	96.90%
		99	4	536	0.73%	97.63%
		100	2	538	0.36%	98.00%
		101	3	541	0.55%	98.54%
		102	5	546	0.91%	99.45%
		103	1	547	0.18%	99.64%
		104	2	549	0.36%	100%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	23	23	4.32%	4.32%
		1	4	27	0.75%	5.07%
		2	2	29	0.38%	5.44%
		3	2	31	0.38%	5.82%
		4	2	33	0.38%	6.19%
		6	2	35	0.38%	6.57%
		7	1	36	0.19%	6.75%
		9	2	38	0.38%	7.13%
		11	1	39	0.19%	7.32%
		13	1	40	0.19%	7.51%
		14	3	43	0.56%	8.07%
		16	1	44	0.19%	8.26%
		17	1	45	0.19%	8.44%
		18	2	47	0.38%	8.82%
		19	2	49	0.38%	9.19%
		20	2	51	0.38%	9.57%
		21	5	56	0.94%	10.51%
		22	2	58	0.38%	10.88%
		23	4	62	0.75%	11.63%
		24	4	66	0.75%	12.38%
WR	7	25	2	68	0.38%	12.76%
		26	5	73	0.94%	13.70%
		27	5	78	0.94%	14.63%
		28	6	84	1.13%	15.76%
		29	3	87	0.56%	16.32%
		30	3	90	0.56%	16.89%
		32	2	92	0.38%	17.26%
		33	4	96	0.75%	18.01%
		34	4	100	0.75%	18.76%
		35	3	103	0.56%	19.33%
		36	5	108	0.94%	20.26%
		37	1	109	0.19%	20.45%
		38	1	110	0.19%	20.64%
		39	5	115	0.94%	21.58%
		40	3	118	0.56%	22.14%
		41	2	120	0.38%	22.51%
		42	10	130	1.88%	24.39%
		43	6	136	1.13%	25.52%
		44	3	139	0.56%	26.08%
		45	7	146	1.31%	27.39%
		46	1	147	0.19%	27.58%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		47	5	152	0.94%	28.52%
		48	1	153	0.19%	28.71%
		49	4	157	0.75%	29.46%
		50	2	159	0.38%	29.83%
		51	1	160	0.19%	30.02%
		52	3	163	0.56%	30.58%
		53	5	168	0.94%	31.52%
		54	4	172	0.75%	32.27%
		55	5	177	0.94%	33.21%
		56	8	185	1.50%	34.71%
		57	5	190	0.94%	35.65%
		58	3	193	0.56%	36.21%
		59	7	200	1.31%	37.52%
		60	3	203	0.56%	38.09%
		61	3	206	0.56%	38.65%
		62	4	210	0.75%	39.40%
		63	6	216	1.13%	40.53%
		64	8	224	1.50%	42.03%
		65	2	226	0.38%	42.40%
		66	6	232	1.13%	43.53%
WR	7	67	4	236	0.75%	44.28%
		68	2	238	0.38%	44.65%
		69	4	242	0.75%	45.40%
		70	12	254	2.25%	47.66%
		71	2	256	0.38%	48.03%
		72	8	264	1.50%	49.53%
		73	13	277	2.44%	51.97%
		74	3	280	0.56%	52.53%
		75	4	284	0.75%	53.28%
		76	5	289	0.94%	54.22%
		77	7	296	1.31%	55.54%
		78	6	302	1.13%	56.66%
		79	6	308	1.13%	57.79%
		80	8	316	1.50%	59.29%
		81	13	329	2.44%	61.73%
		82	15	344	2.81%	64.54%
		83	4	348	0.75%	65.29%
		84	9	357	1.69%	66.98%
		85	7	364	1.31%	68.29%
		86	13	377	2.44%	70.73%
		87	16	393	3.00%	73.73%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		88	12	405	2.25%	75.99%
		89	11	416	2.06%	78.05%
		90	7	423	1.31%	79.36%
		91	13	436	2.44%	81.80%
		92	9	445	1.69%	83.49%
		93	14	459	2.63%	86.12%
		94	5	464	0.94%	87.05%
		95	10	474	1.88%	88.93%
		96	7	481	1.31%	90.24%
		97	7	488	1.31%	91.56%
WR	7	98	7	495	1.31%	92.87%
		99	11	506	2.06%	94.93%
		100	2	508	0.38%	95.31%
		101	4	512	0.75%	96.06%
		102	7	519	1.31%	97.37%
		103	1	520	0.19%	97.56%
		104	1	521	0.19%	97.75%
		105	7	528	1.31%	99.06%
		106	3	531	0.56%	99.63%
		107	1	532	0.19%	99.81%
		108	1	533	0.19%	100%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	24	24	4.43%	4.43%
		1	2	26	0.37%	4.80%
		2	2	28	0.37%	5.17%
		3	1	29	0.18%	5.35%
		4	2	31	0.37%	5.72%
		5	1	32	0.18%	5.90%
		6	7	39	1.29%	7.20%
		8	2	41	0.37%	7.57%
		9	1	42	0.18%	7.75%
		10	3	45	0.55%	8.30%
		11	3	48	0.55%	8.86%
		12	4	52	0.74%	9.59%
		13	2	54	0.37%	9.96%
		14	1	55	0.18%	10.15%
		15	6	61	1.11%	11.26%
		17	5	66	0.92%	12.18%
		18	3	69	0.55%	12.73%
		19	1	70	0.18%	12.92%
		20	4	74	0.74%	13.65%
		21	7	81	1.29%	14.95%
WR	8	22	4	85	0.74%	15.68%
		23	3	88	0.55%	16.24%
		24	1	89	0.18%	16.42%
		25	3	92	0.55%	16.97%
		26	8	100	1.48%	18.45%
		27	6	106	1.11%	19.56%
		28	3	109	0.55%	20.11%
		29	8	117	1.48%	21.59%
		30	3	120	0.55%	22.14%
		31	3	123	0.55%	22.69%
		32	3	126	0.55%	23.25%
		33	8	134	1.48%	24.72%
		34	5	139	0.92%	25.65%
		35	3	142	0.55%	26.20%
		36	1	143	0.18%	26.38%
		37	3	146	0.55%	26.94%
		38	2	148	0.37%	27.31%
		39	8	156	1.48%	28.78%
		40	2	158	0.37%	29.15%
		41	4	162	0.74%	29.89%
		42	4	166	0.74%	30.63%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		43	2	168	0.37%	31.00%
		44	1	169	0.18%	31.18%
		45	4	173	0.74%	31.92%
		46	1	174	0.18%	32.10%
		47	5	179	0.92%	33.03%
		48	2	181	0.37%	33.40%
		49	3	184	0.55%	33.95%
		50	1	185	0.18%	34.13%
		51	7	192	1.29%	35.42%
		52	1	193	0.18%	35.61%
		53	1	194	0.18%	35.79%
		54	4	198	0.74%	36.53%
		55	5	203	0.92%	37.45%
		56	1	204	0.18%	37.64%
		57	2	206	0.37%	38.01%
		58	5	211	0.92%	38.93%
		59	2	213	0.37%	39.30%
		60	8	221	1.48%	40.78%
		61	3	224	0.55%	41.33%
		62	2	226	0.37%	41.70%
WR	8	63	7	233	1.29%	42.99%
		64	8	241	1.48%	44.47%
		65	5	246	0.92%	45.39%
		66	4	250	0.74%	46.13%
		67	10	260	1.85%	47.97%
		68	11	271	2.03%	50.00%
		69	5	276	0.92%	50.92%
		70	9	285	1.66%	52.58%
		71	7	292	1.29%	53.88%
		72	8	300	1.48%	55.35%
		73	7	307	1.29%	56.64%
		74	4	311	0.74%	57.38%
		75	7	318	1.29%	58.67%
		76	10	328	1.85%	60.52%
		77	10	338	1.85%	62.36%
		78	6	344	1.11%	63.47%
		79	15	359	2.77%	66.24%
		80	13	372	2.40%	68.64%
		81	11	383	2.03%	70.66%
		82	12	395	2.21%	72.88%
		83	11	406	2.03%	74.91%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		84	13	419	2.40%	77.31%
		85	10	429	1.85%	79.15%
		86	12	441	2.21%	81.37%
		87	10	451	1.85%	83.21%
		88	4	455	0.74%	83.95%
		89	12	467	2.21%	86.16%
		90	11	478	2.03%	88.19%
		91	9	487	1.66%	89.85%
		92	5	492	0.92%	90.78%
WR	8	93	14	506	2.58%	93.36%
		94	6	512	1.11%	94.47%
		95	6	518	1.11%	95.57%
		96	8	526	1.48%	97.05%
		97	1	527	0.18%	97.23%
		99	5	532	0.92%	98.16%
		100	2	534	0.37%	98.52%
		101	3	537	0.55%	99.08%
		102	3	540	0.55%	99.63%
		103	1	541	0.18%	99.82%
		105	1	542	0.18%	100%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	20	20	4.02%	4.02%
		1	3	23	0.60%	4.62%
		2	3	26	0.60%	5.22%
		3	1	27	0.20%	5.42%
		4	1	28	0.20%	5.62%
		5	1	29	0.20%	5.82%
		6	2	31	0.40%	6.23%
		7	1	32	0.20%	6.43%
		8	1	33	0.20%	6.63%
		9	3	36	0.60%	7.23%
		10	1	37	0.20%	7.43%
		11	2	39	0.40%	7.83%
		12	4	43	0.80%	8.64%
		13	1	44	0.20%	8.84%
		15	1	45	0.20%	9.04%
		16	2	47	0.40%	9.44%
		17	1	48	0.20%	9.64%
		18	4	52	0.80%	10.44%
		19	3	55	0.60%	11.04%
		20	3	58	0.60%	11.65%
WR	9	21	4	62	0.80%	12.45%
		22	2	64	0.40%	12.85%
		23	1	65	0.20%	13.05%
		24	5	70	1.00%	14.06%
		25	2	72	0.40%	14.46%
		26	5	77	1.00%	15.46%
		27	1	78	0.20%	15.66%
		28	2	80	0.40%	16.06%
		29	7	87	1.41%	17.47%
		30	5	92	1.00%	18.47%
		31	4	96	0.80%	19.28%
		32	6	102	1.20%	20.48%
		33	4	106	0.80%	21.29%
		34	4	110	0.80%	22.09%
		35	5	115	1.00%	23.09%
		36	4	119	0.80%	23.90%
		37	6	125	1.20%	25.10%
		38	3	128	0.60%	25.70%
		39	4	132	0.80%	26.51%
		40	3	135	0.60%	27.11%
		41	3	138	0.60%	27.71%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		42	2	140	0.40%	28.11%
		43	6	146	1.20%	29.32%
		44	1	147	0.20%	29.52%
		45	2	149	0.40%	29.92%
		46	4	153	0.80%	30.72%
		48	5	158	1.00%	31.73%
		49	4	162	0.80%	32.53%
		50	2	164	0.40%	32.93%
		51	2	166	0.40%	33.33%
		52	3	169	0.60%	33.94%
		53	4	173	0.80%	34.74%
		54	5	178	1.00%	35.74%
		55	3	181	0.60%	36.35%
		56	1	182	0.20%	36.55%
		57	2	184	0.40%	36.95%
		58	4	188	0.80%	37.75%
		59	1	189	0.20%	37.95%
		60	4	193	0.80%	38.76%
		61	3	196	0.60%	39.36%
		62	5	201	1.00%	40.36%
WR	9	63	3	204	0.60%	40.96%
		64	10	214	2.01%	42.97%
		65	8	222	1.61%	44.58%
		66	10	232	2.01%	46.59%
		67	9	241	1.81%	48.39%
		68	6	247	1.20%	49.60%
		69	6	253	1.20%	50.80%
		70	11	264	2.21%	53.01%
		71	7	271	1.41%	54.42%
		72	13	284	2.61%	57.03%
		73	5	289	1.00%	58.03%
		74	7	296	1.41%	59.44%
		75	12	308	2.41%	61.85%
		76	13	321	2.61%	64.46%
		77	14	335	2.81%	67.27%
		78	13	348	2.61%	69.88%
		79	8	356	1.61%	71.49%
		80	10	366	2.01%	73.49%
		81	9	375	1.81%	75.30%
		82	10	385	2.01%	77.31%
		83	6	391	1.20%	78.51%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		84	9	400	1.81%	80.32%
		85	2	402	0.40%	80.72%
		86	13	415	2.61%	83.33%
		87	15	430	3.01%	86.35%
		88	3	433	0.60%	86.95%
		89	6	439	1.20%	88.15%
		90	4	443	0.80%	88.96%
		91	3	446	0.60%	89.56%
WR	9	92	6	452	1.20%	90.76%
		93	13	465	2.61%	93.37%
		94	2	467	0.40%	93.78%
		95	9	476	1.81%	95.58%
		96	6	482	1.20%	96.79%
		98	3	485	0.60%	97.39%
		99	5	490	1.00%	98.39%
		100	3	493	0.60%	99.00%
		101	2	495	0.40%	99.40%
		102	3	498	0.60%	100%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	17	17	3.19%	3.19%
		2	2	19	0.38%	3.57%
		3	5	24	0.94%	4.50%
		4	2	26	0.38%	4.88%
		5	3	29	0.56%	5.44%
		6	4	33	0.75%	6.19%
		7	1	34	0.19%	6.38%
		8	2	36	0.38%	6.75%
		9	3	39	0.56%	7.32%
		10	2	41	0.38%	7.69%
		12	4	45	0.75%	8.44%
		13	1	46	0.19%	8.63%
		14	3	49	0.56%	9.19%
		15	4	53	0.75%	9.94%
		17	4	57	0.75%	10.69%
		18	4	61	0.75%	11.45%
		19	2	63	0.38%	11.82%
		20	3	66	0.56%	12.38%
		21	4	70	0.75%	13.13%
		22	1	71	0.19%	13.32%
WR	10	24	3	74	0.56%	13.88%
		26	3	77	0.56%	14.45%
		27	1	78	0.19%	14.63%
		28	2	80	0.38%	15.01%
		29	3	83	0.56%	15.57%
		30	2	85	0.38%	15.95%
		31	1	86	0.19%	16.14%
		32	4	90	0.75%	16.89%
		33	4	94	0.75%	17.64%
		34	3	97	0.56%	18.20%
		35	4	101	0.75%	18.95%
		36	3	104	0.56%	19.51%
		37	3	107	0.56%	20.08%
		38	2	109	0.38%	20.45%
		39	2	111	0.38%	20.83%
		40	3	114	0.56%	21.39%
		41	5	119	0.94%	22.33%
		42	5	124	0.94%	23.27%
		43	3	127	0.56%	23.83%
		44	2	129	0.38%	24.20%
		46	7	136	1.31%	25.52%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		47	5	141	0.94%	26.45%
		49	4	145	0.75%	27.21%
		50	9	154	1.69%	28.89%
		51	4	158	0.75%	29.64%
		52	4	162	0.75%	30.39%
		53	5	167	0.94%	31.33%
		54	3	170	0.56%	31.90%
		55	4	174	0.75%	32.65%
		56	3	177	0.56%	33.21%
		57	7	184	1.31%	34.52%
		58	2	186	0.38%	34.90%
		59	12	198	2.25%	37.15%
		60	1	199	0.19%	37.34%
		61	7	206	1.31%	38.65%
		62	3	209	0.56%	39.21%
		63	6	215	1.13%	40.34%
		64	7	222	1.31%	41.65%
		65	6	228	1.13%	42.78%
		66	10	238	1.88%	44.65%
		67	12	250	2.25%	46.90%
WR	10	68	9	259	1.69%	48.59%
		69	10	269	1.88%	50.47%
		70	11	280	2.06%	52.53%
		71	11	291	2.06%	54.60%
		72	10	301	1.88%	56.47%
		73	7	308	1.31%	57.79%
		74	11	319	2.06%	59.85%
		75	10	329	1.88%	61.73%
		76	10	339	1.88%	63.60%
		77	3	342	0.56%	64.17%
		78	13	355	2.44%	66.60%
		79	9	364	1.69%	68.29%
		80	10	374	1.88%	70.17%
		81	15	389	2.81%	72.98%
		82	10	399	1.88%	74.86%
		83	6	405	1.13%	75.99%
		84	8	413	1.50%	77.49%
		85	7	420	1.31%	78.80%
		86	10	430	1.88%	80.68%
		87	10	440	1.88%	82.55%
		88	9	449	1.69%	84.24%

Table 43
Writing Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		89	2	451	0.38%	84.62%
		90	11	462	2.06%	86.68%
		91	4	466	0.75%	87.43%
		92	6	472	1.13%	88.56%
		93	12	484	2.25%	90.81%
		94	3	487	0.56%	91.37%
		95	9	496	1.69%	93.06%
		96	14	510	2.63%	95.69%
		97	2	512	0.38%	96.06%
WR	10	98	5	517	0.94%	97.00%
		99	5	522	0.94%	97.94%
		100	3	525	0.56%	98.50%
		101	1	526	0.19%	98.69%
		102	1	527	0.19%	98.87%
		103	1	528	0.19%	99.06%
		104	1	529	0.19%	99.25%
		105	2	531	0.38%	99.63%
		106	1	532	0.19%	99.81%
		108	1	533	0.19%	100%

Table 44
Mathematics Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	2.88%	2.88%
		1	2	21	0.30%	3.18%
		2	2	23	0.30%	3.49%
		3	4	27	0.61%	4.09%
		4	1	28	0.15%	4.24%
		5	1	29	0.15%	4.39%
		6	4	33	0.61%	5.00%
		7	2	35	0.30%	5.30%
		8	1	36	0.15%	5.46%
		9	2	38	0.30%	5.76%
		10	1	39	0.15%	5.91%
		11	1	40	0.15%	6.06%
		12	3	43	0.45%	6.52%
		13	2	45	0.30%	6.82%
		14	5	50	0.76%	7.58%
		15	1	51	0.15%	7.73%
		16	2	53	0.30%	8.03%
		17	2	55	0.30%	8.33%
		19	1	56	0.15%	8.49%
		20	1	57	0.15%	8.64%
MA	3	21	4	61	0.61%	9.24%
		22	1	62	0.15%	9.39%
		23	4	66	0.61%	10.00%
		24	2	68	0.30%	10.30%
		25	5	73	0.76%	11.06%
		26	2	75	0.30%	11.36%
		28	3	78	0.45%	11.82%
		29	3	81	0.45%	12.27%
		30	4	85	0.61%	12.88%
		33	1	86	0.15%	13.03%
		34	3	89	0.45%	13.49%
		35	3	92	0.45%	13.94%
		36	3	95	0.45%	14.39%
		37	7	102	1.06%	15.46%
		38	3	105	0.45%	15.91%
		39	5	110	0.76%	16.67%
		40	3	113	0.45%	17.12%
		41	4	117	0.61%	17.73%
		42	3	120	0.45%	18.18%
		43	3	123	0.45%	18.64%
		44	4	127	0.61%	19.24%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		45	4	131	0.61%	19.85%
		46	1	132	0.15%	20.00%
		47	1	133	0.15%	20.15%
		48	1	134	0.15%	20.30%
		49	5	139	0.76%	21.06%
		50	3	142	0.45%	21.52%
		51	2	144	0.30%	21.82%
		52	3	147	0.45%	22.27%
		53	3	150	0.45%	22.73%
		54	2	152	0.30%	23.03%
		55	3	155	0.45%	23.49%
		56	4	159	0.61%	24.09%
		57	2	161	0.30%	24.39%
		58	4	165	0.61%	25.00%
		59	3	168	0.45%	25.46%
		61	1	169	0.15%	25.61%
		62	3	172	0.45%	26.06%
		63	3	175	0.45%	26.52%
		64	5	180	0.76%	27.27%
		65	3	183	0.45%	27.73%
MA	3	66	3	186	0.45%	28.18%
		67	1	187	0.15%	28.33%
		69	7	194	1.06%	29.39%
		70	3	197	0.45%	29.85%
		71	6	203	0.91%	30.76%
		72	3	206	0.45%	31.21%
		73	3	209	0.45%	31.67%
		74	4	213	0.61%	32.27%
		75	2	215	0.30%	32.58%
		76	4	219	0.61%	33.18%
		77	5	224	0.76%	33.94%
		78	4	228	0.61%	34.55%
		79	6	234	0.91%	35.46%
		80	7	241	1.06%	36.52%
		81	3	244	0.45%	36.97%
		82	4	248	0.61%	37.58%
		83	7	255	1.06%	38.64%
		84	5	260	0.76%	39.39%
		85	4	264	0.61%	40.00%
		86	5	269	0.76%	40.76%
		87	8	277	1.21%	41.97%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		88	3	280	0.45%	42.42%
		89	12	292	1.82%	44.24%
		90	13	305	1.97%	46.21%
		91	7	312	1.06%	47.27%
		92	9	321	1.36%	48.64%
		93	16	337	2.42%	51.06%
		94	10	347	1.52%	52.58%
		95	12	359	1.82%	54.39%
		96	8	367	1.21%	55.61%
		97	6	373	0.91%	56.52%
		98	6	379	0.91%	57.42%
		99	7	386	1.06%	58.49%
		100	15	401	2.27%	60.76%
		101	9	410	1.36%	62.12%
		102	12	422	1.82%	63.94%
		103	11	433	1.67%	65.61%
		104	13	446	1.97%	67.58%
		105	13	459	1.97%	69.55%
		106	10	469	1.52%	71.06%
MA	3	107	13	482	1.97%	73.03%
		108	14	496	2.12%	75.15%
		109	13	509	1.97%	77.12%
		110	12	521	1.82%	78.94%
		111	13	534	1.97%	80.91%
		112	17	551	2.58%	83.49%
		113	12	563	1.82%	85.30%
		114	13	576	1.97%	87.27%
		115	13	589	1.97%	89.24%
		116	15	604	2.27%	91.52%
		117	11	615	1.67%	93.18%
		118	8	623	1.21%	94.39%
		119	5	628	0.76%	95.15%
		120	5	633	0.76%	95.91%
		121	3	636	0.45%	96.36%
		122	7	643	1.06%	97.42%
		123	7	650	1.06%	98.49%
		124	2	652	0.30%	98.79%
		125	3	655	0.45%	99.24%
		126	5	660	0.76%	100%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	22	22	3.58%	3.58%
		1	4	26	0.65%	4.23%
		2	1	27	0.16%	4.39%
		3	4	31	0.65%	5.04%
		4	2	33	0.33%	5.37%
		5	1	34	0.16%	5.53%
		6	3	37	0.49%	6.02%
		7	1	38	0.16%	6.18%
		8	1	39	0.16%	6.34%
		9	3	42	0.49%	6.83%
		10	1	43	0.16%	6.99%
		11	2	45	0.33%	7.32%
		12	1	46	0.16%	7.48%
		13	2	48	0.33%	7.81%
		14	1	49	0.16%	7.97%
		15	1	50	0.16%	8.13%
		16	1	51	0.16%	8.29%
		17	2	53	0.33%	8.62%
		18	1	54	0.16%	8.78%
		19	1	55	0.16%	8.94%
MA	4	20	3	58	0.49%	9.43%
		21	2	60	0.33%	9.76%
		22	3	63	0.49%	10.24%
		23	2	65	0.33%	10.57%
		24	2	67	0.33%	10.89%
		25	1	68	0.16%	11.06%
		26	4	72	0.65%	11.71%
		27	1	73	0.16%	11.87%
		28	1	74	0.16%	12.03%
		29	2	76	0.33%	12.36%
		30	3	79	0.49%	12.85%
		31	1	80	0.16%	13.01%
		32	2	82	0.33%	13.33%
		34	2	84	0.33%	13.66%
		35	3	87	0.49%	14.15%
		36	4	91	0.65%	14.80%
		37	3	94	0.49%	15.29%
		39	3	97	0.49%	15.77%
		40	3	100	0.49%	16.26%
		41	2	102	0.33%	16.59%
		42	4	106	0.65%	17.24%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		43	2	108	0.33%	17.56%
		44	2	110	0.33%	17.89%
		45	2	112	0.33%	18.21%
		46	1	113	0.16%	18.37%
		47	2	115	0.33%	18.70%
		48	2	117	0.33%	19.02%
		49	1	118	0.16%	19.19%
		51	1	119	0.16%	19.35%
		52	3	122	0.49%	19.84%
		53	5	127	0.81%	20.65%
		54	1	128	0.16%	20.81%
		55	3	131	0.49%	21.30%
		56	2	133	0.33%	21.63%
		57	4	137	0.65%	22.28%
		58	3	140	0.49%	22.76%
		59	2	142	0.33%	23.09%
		60	2	144	0.33%	23.42%
		61	3	147	0.49%	23.90%
		62	3	150	0.49%	24.39%
		63	6	156	0.98%	25.37%
MA	4	64	8	164	1.30%	26.67%
		65	2	166	0.33%	26.99%
		66	3	169	0.49%	27.48%
		67	3	172	0.49%	27.97%
		69	3	175	0.49%	28.46%
		70	4	179	0.65%	29.11%
		71	2	181	0.33%	29.43%
		72	4	185	0.65%	30.08%
		73	4	189	0.65%	30.73%
		74	2	191	0.33%	31.06%
		75	5	196	0.81%	31.87%
		76	5	201	0.81%	32.68%
		77	4	205	0.65%	33.33%
		78	1	206	0.16%	33.50%
		79	6	212	0.98%	34.47%
		80	4	216	0.65%	35.12%
		81	6	222	0.98%	36.10%
		82	5	227	0.81%	36.91%
		83	6	233	0.98%	37.89%
		84	7	240	1.14%	39.02%
		85	6	246	0.98%	40.00%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		86	3	249	0.49%	40.49%
		87	7	256	1.14%	41.63%
		88	8	264	1.30%	42.93%
		89	6	270	0.98%	43.90%
		90	13	283	2.11%	46.02%
		91	6	289	0.98%	46.99%
		92	6	295	0.98%	47.97%
		93	8	303	1.30%	49.27%
		94	8	311	1.30%	50.57%
		95	6	317	0.98%	51.55%
		96	7	324	1.14%	52.68%
		97	6	330	0.98%	53.66%
		98	9	339	1.46%	55.12%
		99	11	350	1.79%	56.91%
		100	15	365	2.44%	59.35%
		101	14	379	2.28%	61.63%
		102	11	390	1.79%	63.42%
		103	8	398	1.30%	64.72%
		104	7	405	1.14%	65.85%
		105	5	410	0.81%	66.67%
MA	4	106	13	423	2.11%	68.78%
		107	6	429	0.98%	69.76%
		108	13	442	2.11%	71.87%
		109	3	445	0.49%	72.36%
		110	12	457	1.95%	74.31%
		111	8	465	1.30%	75.61%
		112	10	475	1.63%	77.24%
		113	12	487	1.95%	79.19%
		114	7	494	1.14%	80.33%
		115	14	508	2.28%	82.60%
		116	8	516	1.30%	83.90%
		117	18	534	2.93%	86.83%
		118	4	538	0.65%	87.48%
		119	11	549	1.79%	89.27%
		120	10	559	1.63%	90.89%
		121	4	563	0.65%	91.55%
		122	11	574	1.79%	93.33%
		123	15	589	2.44%	95.77%
		124	2	591	0.33%	96.10%
		125	11	602	1.79%	97.89%
		126	2	604	0.33%	98.21%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		127	2	606	0.33%	98.54%
MA	4	128	6	612	0.98%	99.51%
		129	3	615	0.49%	100%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	21	21	3.57%	3.57%
		1	1	22	0.17%	3.74%
		2	1	23	0.17%	3.91%
		3	3	26	0.51%	4.42%
		4	1	27	0.17%	4.59%
		5	2	29	0.34%	4.93%
		6	4	33	0.68%	5.61%
		9	1	34	0.17%	5.78%
		10	1	35	0.17%	5.95%
		12	1	36	0.17%	6.12%
		14	1	37	0.17%	6.29%
		15	2	39	0.34%	6.63%
		18	1	40	0.17%	6.80%
		19	1	41	0.17%	6.97%
		21	1	42	0.17%	7.14%
		22	1	43	0.17%	7.31%
		23	1	44	0.17%	7.48%
		24	2	46	0.34%	7.82%
		25	2	48	0.34%	8.16%
		26	1	49	0.17%	8.33%
MA	5	27	2	51	0.34%	8.67%
		28	2	53	0.34%	9.01%
		29	1	54	0.17%	9.18%
		30	4	58	0.68%	9.86%
		32	5	63	0.85%	10.71%
		33	1	64	0.17%	10.88%
		34	1	65	0.17%	11.05%
		35	1	66	0.17%	11.22%
		36	1	67	0.17%	11.40%
		38	2	69	0.34%	11.74%
		39	1	70	0.17%	11.91%
		40	1	71	0.17%	12.08%
		41	2	73	0.34%	12.42%
		42	2	75	0.34%	12.76%
		43	2	77	0.34%	13.10%
		44	1	78	0.17%	13.27%
		45	1	79	0.17%	13.44%
		46	5	84	0.85%	14.29%
		47	4	88	0.68%	14.97%
		48	1	89	0.17%	15.14%
		49	3	92	0.51%	15.65%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		50	1	93	0.17%	15.82%
		51	2	95	0.34%	16.16%
		52	3	98	0.51%	16.67%
		54	3	101	0.51%	17.18%
		55	4	105	0.68%	17.86%
		56	5	110	0.85%	18.71%
		57	5	115	0.85%	19.56%
		58	2	117	0.34%	19.90%
		59	2	119	0.34%	20.24%
		60	1	120	0.17%	20.41%
		61	1	121	0.17%	20.58%
		62	2	123	0.34%	20.92%
		63	2	125	0.34%	21.26%
		64	1	126	0.17%	21.43%
		65	1	127	0.17%	21.60%
		66	1	128	0.17%	21.77%
		67	5	133	0.85%	22.62%
		68	3	136	0.51%	23.13%
		69	3	139	0.51%	23.64%
		70	2	141	0.34%	23.98%
MA	5	71	2	143	0.34%	24.32%
		72	2	145	0.34%	24.66%
		73	2	147	0.34%	25.00%
		75	3	150	0.51%	25.51%
		76	1	151	0.17%	25.68%
		77	2	153	0.34%	26.02%
		78	3	156	0.51%	26.53%
		79	3	159	0.51%	27.04%
		80	2	161	0.34%	27.38%
		81	2	163	0.34%	27.72%
		82	4	167	0.68%	28.40%
		83	4	171	0.68%	29.08%
		84	1	172	0.17%	29.25%
		85	3	175	0.51%	29.76%
		86	3	178	0.51%	30.27%
		87	5	183	0.85%	31.12%
		88	2	185	0.34%	31.46%
		89	2	187	0.34%	31.80%
		90	1	188	0.17%	31.97%
		91	1	189	0.17%	32.14%
		92	2	191	0.34%	32.48%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		93	2	193	0.34%	32.82%
		94	3	196	0.51%	33.33%
		95	1	197	0.17%	33.50%
		96	1	198	0.17%	33.67%
		97	5	203	0.85%	34.52%
		98	1	204	0.17%	34.69%
		99	3	207	0.51%	35.20%
		100	5	212	0.85%	36.05%
		101	4	216	0.68%	36.74%
		102	4	220	0.68%	37.42%
		103	3	223	0.51%	37.93%
		104	4	227	0.68%	38.61%
		105	1	228	0.17%	38.78%
		106	5	233	0.85%	39.63%
		107	4	237	0.68%	40.31%
		108	4	241	0.68%	40.99%
		109	2	243	0.34%	41.33%
		110	5	248	0.85%	42.18%
		111	4	252	0.68%	42.86%
		112	4	256	0.68%	43.54%
MA	5	113	1	257	0.17%	43.71%
		114	6	263	1.02%	44.73%
		115	5	268	0.85%	45.58%
		116	6	274	1.02%	46.60%
		117	6	280	1.02%	47.62%
		118	4	284	0.68%	48.30%
		119	9	293	1.53%	49.83%
		120	4	297	0.68%	50.51%
		121	5	302	0.85%	51.36%
		122	7	309	1.19%	52.55%
		123	3	312	0.51%	53.06%
		124	10	322	1.70%	54.76%
		125	5	327	0.85%	55.61%
		126	7	334	1.19%	56.80%
		127	8	342	1.36%	58.16%
		128	5	347	0.85%	59.01%
		129	6	353	1.02%	60.03%
		130	5	358	0.85%	60.88%
		131	4	362	0.68%	61.57%
		132	13	375	2.21%	63.78%
		133	10	385	1.70%	65.48%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		134	7	392	1.19%	66.67%
		135	8	400	1.36%	68.03%
		136	9	409	1.53%	69.56%
		137	9	418	1.53%	71.09%
		138	6	424	1.02%	72.11%
		139	9	433	1.53%	73.64%
		140	16	449	2.72%	76.36%
		141	5	454	0.85%	77.21%
		142	4	458	0.68%	77.89%
		143	8	466	1.36%	79.25%
		144	10	476	1.70%	80.95%
		145	9	485	1.53%	82.48%
		146	8	493	1.36%	83.84%
		147	7	500	1.19%	85.03%
		148	6	506	1.02%	86.05%
		149	9	515	1.53%	87.59%
		150	10	525	1.70%	89.29%
MA	5	151	7	532	1.19%	90.48%
		152	6	538	1.02%	91.50%
		153	3	541	0.51%	92.01%
		154	2	543	0.34%	92.35%
		155	3	546	0.51%	92.86%
		156	4	550	0.68%	93.54%
		157	4	554	0.68%	94.22%
		158	2	556	0.34%	94.56%
		159	3	559	0.51%	95.07%
		160	2	561	0.34%	95.41%
		161	4	565	0.68%	96.09%
		162	8	573	1.36%	97.45%
		163	2	575	0.34%	97.79%
		164	5	580	0.85%	98.64%
		165	1	581	0.17%	98.81%
		166	2	583	0.34%	99.15%
		168	1	584	0.17%	99.32%
		169	3	587	0.51%	99.83%
		170	1	588	0.17%	100%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	16	16	2.90%	2.90%
		1	3	19	0.54%	3.44%
		2	2	21	0.36%	3.80%
		3	3	24	0.54%	4.35%
		5	2	26	0.36%	4.71%
		6	4	30	0.72%	5.44%
		7	1	31	0.18%	5.62%
		8	2	33	0.36%	5.98%
		9	2	35	0.36%	6.34%
		10	2	37	0.36%	6.70%
		11	1	38	0.18%	6.88%
		12	2	40	0.36%	7.25%
		13	3	43	0.54%	7.79%
		15	2	45	0.36%	8.15%
		16	3	48	0.54%	8.70%
		18	3	51	0.54%	9.24%
		19	1	52	0.18%	9.42%
		20	3	55	0.54%	9.96%
		21	1	56	0.18%	10.15%
		22	1	57	0.18%	10.33%
MA	6	23	1	58	0.18%	10.51%
		24	1	59	0.18%	10.69%
		25	1	60	0.18%	10.87%
		26	1	61	0.18%	11.05%
		27	2	63	0.36%	11.41%
		28	1	64	0.18%	11.59%
		29	6	70	1.09%	12.68%
		30	1	71	0.18%	12.86%
		31	3	74	0.54%	13.41%
		32	2	76	0.36%	13.77%
		33	1	77	0.18%	13.95%
		36	2	79	0.36%	14.31%
		37	4	83	0.72%	15.04%
		38	1	84	0.18%	15.22%
		39	1	85	0.18%	15.40%
		40	5	90	0.91%	16.30%
		41	3	93	0.54%	16.85%
		42	3	96	0.54%	17.39%
		43	3	99	0.54%	17.94%
		44	4	103	0.72%	18.66%
		45	5	108	0.91%	19.57%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		46	4	112	0.72%	20.29%
		47	2	114	0.36%	20.65%
		48	1	115	0.18%	20.83%
		49	1	116	0.18%	21.01%
		50	2	118	0.36%	21.38%
		51	2	120	0.36%	21.74%
		52	3	123	0.54%	22.28%
		53	4	127	0.72%	23.01%
		54	4	131	0.72%	23.73%
		55	3	134	0.54%	24.28%
		56	4	138	0.72%	25.00%
		57	1	139	0.18%	25.18%
		58	2	141	0.36%	25.54%
		59	2	143	0.36%	25.91%
		60	4	147	0.72%	26.63%
		61	2	149	0.36%	26.99%
		62	1	150	0.18%	27.17%
		63	6	156	1.09%	28.26%
		64	3	159	0.54%	28.80%
		65	3	162	0.54%	29.35%
MA	6	66	4	166	0.72%	30.07%
		67	4	170	0.72%	30.80%
		68	1	171	0.18%	30.98%
		69	6	177	1.09%	32.07%
		71	2	179	0.36%	32.43%
		72	6	185	1.09%	33.51%
		73	3	188	0.54%	34.06%
		74	4	192	0.72%	34.78%
		75	6	198	1.09%	35.87%
		76	4	202	0.72%	36.59%
		77	7	209	1.27%	37.86%
		78	4	213	0.72%	38.59%
		79	2	215	0.36%	38.95%
		80	2	217	0.36%	39.31%
		81	2	219	0.36%	39.67%
		82	6	225	1.09%	40.76%
		83	1	226	0.18%	40.94%
		84	6	232	1.09%	42.03%
		85	9	241	1.63%	43.66%
		86	5	246	0.91%	44.57%
		87	6	252	1.09%	45.65%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		88	4	256	0.72%	46.38%
		89	3	259	0.54%	46.92%
		90	3	262	0.54%	47.46%
		91	5	267	0.91%	48.37%
		92	5	272	0.91%	49.28%
		93	8	280	1.45%	50.73%
		94	6	286	1.09%	51.81%
		95	5	291	0.91%	52.72%
		96	9	300	1.63%	54.35%
		97	7	307	1.27%	55.62%
		98	7	314	1.27%	56.88%
		99	11	325	1.99%	58.88%
		100	7	332	1.27%	60.15%
		101	8	340	1.45%	61.59%
		102	5	345	0.91%	62.50%
		103	14	359	2.54%	65.04%
		104	3	362	0.54%	65.58%
		105	8	370	1.45%	67.03%
		106	6	376	1.09%	68.12%
		107	9	385	1.63%	69.75%
MA	6	108	11	396	1.99%	71.74%
		109	8	404	1.45%	73.19%
		110	11	415	1.99%	75.18%
		111	6	421	1.09%	76.27%
		112	5	426	0.91%	77.17%
		113	6	432	1.09%	78.26%
		114	10	442	1.81%	80.07%
		115	8	450	1.45%	81.52%
		116	7	457	1.27%	82.79%
		117	5	462	0.91%	83.70%
		118	12	474	2.17%	85.87%
		119	7	481	1.27%	87.14%
		120	9	490	1.63%	88.77%
		121	4	494	0.72%	89.49%
		122	8	502	1.45%	90.94%
		123	6	508	1.09%	92.03%
		124	2	510	0.36%	92.39%
		125	5	515	0.91%	93.30%
		126	7	522	1.27%	94.57%
		127	6	528	1.09%	95.65%
		128	5	533	0.91%	96.56%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		129	2	535	0.36%	96.92%
		130	2	537	0.36%	97.28%
		131	8	545	1.45%	98.73%
MA	6	132	3	548	0.54%	99.28%
		133	1	549	0.18%	99.46%
		134	1	550	0.18%	99.64%
		138	2	552	0.36%	100%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	26	26	4.93%	4.93%
		1	1	27	0.19%	5.12%
		2	1	28	0.19%	5.31%
		3	2	30	0.38%	5.69%
		5	1	31	0.19%	5.88%
		6	4	35	0.76%	6.64%
		7	2	37	0.38%	7.02%
		8	1	38	0.19%	7.21%
		10	3	41	0.57%	7.78%
		12	1	42	0.19%	7.97%
		13	1	43	0.19%	8.16%
		14	1	44	0.19%	8.35%
		15	4	48	0.76%	9.11%
		16	1	49	0.19%	9.30%
		17	1	50	0.19%	9.49%
		19	1	51	0.19%	9.68%
		20	1	52	0.19%	9.87%
		21	3	55	0.57%	10.44%
		22	1	56	0.19%	10.63%
		24	2	58	0.38%	11.01%
MA	7	25	2	60	0.38%	11.39%
		26	3	63	0.57%	11.95%
		27	3	66	0.57%	12.52%
		28	6	72	1.14%	13.66%
		29	3	75	0.57%	14.23%
		30	3	78	0.57%	14.80%
		31	3	81	0.57%	15.37%
		32	2	83	0.38%	15.75%
		33	3	86	0.57%	16.32%
		34	8	94	1.52%	17.84%
		35	2	96	0.38%	18.22%
		36	2	98	0.38%	18.60%
		37	4	102	0.76%	19.36%
		38	4	106	0.76%	20.11%
		39	3	109	0.57%	20.68%
		40	1	110	0.19%	20.87%
		41	3	113	0.57%	21.44%
		42	4	117	0.76%	22.20%
		43	2	119	0.38%	22.58%
		44	3	122	0.57%	23.15%
		45	1	123	0.19%	23.34%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		46	5	128	0.95%	24.29%
		47	1	129	0.19%	24.48%
		48	7	136	1.33%	25.81%
		49	5	141	0.95%	26.76%
		50	2	143	0.38%	27.14%
		51	3	146	0.57%	27.70%
		52	3	149	0.57%	28.27%
		53	6	155	1.14%	29.41%
		54	2	157	0.38%	29.79%
		55	5	162	0.95%	30.74%
		56	2	164	0.38%	31.12%
		57	4	168	0.76%	31.88%
		58	5	173	0.95%	32.83%
		59	3	176	0.57%	33.40%
		60	7	183	1.33%	34.73%
		61	2	185	0.38%	35.10%
		62	7	192	1.33%	36.43%
		63	3	195	0.57%	37.00%
		64	1	196	0.19%	37.19%
		65	5	201	0.95%	38.14%
MA	7	66	3	204	0.57%	38.71%
		67	3	207	0.57%	39.28%
		68	4	211	0.76%	40.04%
		69	6	217	1.14%	41.18%
		70	2	219	0.38%	41.56%
		71	3	222	0.57%	42.13%
		72	4	226	0.76%	42.88%
		73	6	232	1.14%	44.02%
		74	5	237	0.95%	44.97%
		75	4	241	0.76%	45.73%
		76	4	245	0.76%	46.49%
		77	6	251	1.14%	47.63%
		78	3	254	0.57%	48.20%
		79	4	258	0.76%	48.96%
		80	5	263	0.95%	49.91%
		81	7	270	1.33%	51.23%
		82	7	277	1.33%	52.56%
		83	4	281	0.76%	53.32%
		84	9	290	1.71%	55.03%
		85	5	295	0.95%	55.98%
		86	3	298	0.57%	56.55%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		87	2	300	0.38%	56.93%
		88	11	311	2.09%	59.01%
		89	5	316	0.95%	59.96%
		90	8	324	1.52%	61.48%
		91	6	330	1.14%	62.62%
		92	4	334	0.76%	63.38%
		93	4	338	0.76%	64.14%
		94	6	344	1.14%	65.28%
		95	8	352	1.52%	66.79%
		96	7	359	1.33%	68.12%
		97	7	366	1.33%	69.45%
		98	7	373	1.33%	70.78%
		99	7	380	1.33%	72.11%
		100	5	385	0.95%	73.06%
		101	9	394	1.71%	74.76%
		102	7	401	1.33%	76.09%
		103	7	408	1.33%	77.42%
		104	6	414	1.14%	78.56%
		105	8	422	1.52%	80.08%
		106	7	429	1.33%	81.40%
MA	7	107	7	436	1.33%	82.73%
		108	3	439	0.57%	83.30%
		109	3	442	0.57%	83.87%
		110	4	446	0.76%	84.63%
		111	4	450	0.76%	85.39%
		112	6	456	1.14%	86.53%
		113	12	468	2.28%	88.81%
		114	6	474	1.14%	89.94%
		115	6	480	1.14%	91.08%
		116	3	483	0.57%	91.65%
		117	3	486	0.57%	92.22%
		118	3	489	0.57%	92.79%
		119	4	493	0.76%	93.55%
		120	4	497	0.76%	94.31%
		121	4	501	0.76%	95.07%
		122	4	505	0.76%	95.83%
		123	5	510	0.95%	96.77%
		124	4	514	0.76%	97.53%
		125	3	517	0.57%	98.10%
		126	3	520	0.57%	98.67%
		127	1	521	0.19%	98.86%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		128	2	523	0.38%	99.24%
		129	1	524	0.19%	99.43%
MA	7	130	1	525	0.19%	99.62%
		131	1	526	0.19%	99.81%
		132	1	527	0.19%	100%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	3.51%	3.51%
		2	3	22	0.55%	4.06%
		3	4	26	0.74%	4.80%
		4	5	31	0.92%	5.72%
		6	2	33	0.37%	6.09%
		7	1	34	0.18%	6.27%
		8	1	35	0.18%	6.46%
		9	2	37	0.37%	6.83%
		10	3	40	0.55%	7.38%
		11	1	41	0.18%	7.57%
		12	1	42	0.18%	7.75%
		13	1	43	0.18%	7.93%
		14	4	47	0.74%	8.67%
		15	3	50	0.55%	9.23%
		16	1	51	0.18%	9.41%
		17	1	52	0.18%	9.59%
		18	4	56	0.74%	10.33%
		19	3	59	0.55%	10.89%
		20	1	60	0.18%	11.07%
		21	1	61	0.18%	11.26%
MA	8	22	4	65	0.74%	11.99%
		23	3	68	0.55%	12.55%
		24	4	72	0.74%	13.28%
		25	3	75	0.55%	13.84%
		26	4	79	0.74%	14.58%
		27	3	82	0.55%	15.13%
		28	2	84	0.37%	15.50%
		29	2	86	0.37%	15.87%
		30	2	88	0.37%	16.24%
		31	2	90	0.37%	16.61%
		32	1	91	0.18%	16.79%
		33	3	94	0.55%	17.34%
		34	2	96	0.37%	17.71%
		35	3	99	0.55%	18.27%
		36	3	102	0.55%	18.82%
		37	5	107	0.92%	19.74%
		38	2	109	0.37%	20.11%
		39	5	114	0.92%	21.03%
		40	2	116	0.37%	21.40%
		41	2	118	0.37%	21.77%
		42	1	119	0.18%	21.96%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		43	3	122	0.55%	22.51%
		44	3	125	0.55%	23.06%
		45	4	129	0.74%	23.80%
		46	2	131	0.37%	24.17%
		47	3	134	0.55%	24.72%
		48	3	137	0.55%	25.28%
		49	3	140	0.55%	25.83%
		50	4	144	0.74%	26.57%
		51	3	147	0.55%	27.12%
		52	5	152	0.92%	28.04%
		53	1	153	0.18%	28.23%
		54	3	156	0.55%	28.78%
		55	6	162	1.11%	29.89%
		56	3	165	0.55%	30.44%
		57	1	166	0.18%	30.63%
		58	2	168	0.37%	31.00%
		59	2	170	0.37%	31.37%
		60	3	173	0.55%	31.92%
		61	3	176	0.55%	32.47%
		62	4	180	0.74%	33.21%
MA	8	63	3	183	0.55%	33.76%
		64	5	188	0.92%	34.69%
		65	4	192	0.74%	35.42%
		66	4	196	0.74%	36.16%
		67	7	203	1.29%	37.45%
		68	7	210	1.29%	38.75%
		69	1	211	0.18%	38.93%
		70	4	215	0.74%	39.67%
		71	4	219	0.74%	40.41%
		72	3	222	0.55%	40.96%
		73	1	223	0.18%	41.14%
		74	3	226	0.55%	41.70%
		75	3	229	0.55%	42.25%
		76	4	233	0.74%	42.99%
		77	4	237	0.74%	43.73%
		78	7	244	1.29%	45.02%
		79	5	249	0.92%	45.94%
		80	1	250	0.18%	46.13%
		81	5	255	0.92%	47.05%
		82	6	261	1.11%	48.16%
		83	5	266	0.92%	49.08%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		84	4	270	0.74%	49.82%
		85	4	274	0.74%	50.55%
		86	6	280	1.11%	51.66%
		87	2	282	0.37%	52.03%
		88	4	286	0.74%	52.77%
		89	7	293	1.29%	54.06%
		90	3	296	0.55%	54.61%
		91	3	299	0.55%	55.17%
		92	6	305	1.11%	56.27%
		93	4	309	0.74%	57.01%
		94	4	313	0.74%	57.75%
		95	6	319	1.11%	58.86%
		96	6	325	1.11%	59.96%
		97	7	332	1.29%	61.26%
		98	5	337	0.92%	62.18%
		99	3	340	0.55%	62.73%
		100	8	348	1.48%	64.21%
		101	3	351	0.55%	64.76%
		102	3	354	0.55%	65.31%
		103	9	363	1.66%	66.97%
MA	8	104	8	371	1.48%	68.45%
		105	4	375	0.74%	69.19%
		106	5	380	0.92%	70.11%
		107	8	388	1.48%	71.59%
		108	4	392	0.74%	72.33%
		109	5	397	0.92%	73.25%
		110	4	401	0.74%	73.99%
		111	5	406	0.92%	74.91%
		112	5	411	0.92%	75.83%
		113	4	415	0.74%	76.57%
		114	4	419	0.74%	77.31%
		115	6	425	1.11%	78.41%
		116	8	433	1.48%	79.89%
		117	4	437	0.74%	80.63%
		118	6	443	1.11%	81.73%
		119	8	451	1.48%	83.21%
		120	10	461	1.85%	85.06%
		121	4	465	0.74%	85.79%
		122	5	470	0.92%	86.72%
		123	3	473	0.55%	87.27%
		124	6	479	1.11%	88.38%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		125	4	483	0.74%	89.11%
		126	6	489	1.11%	90.22%
		127	3	492	0.55%	90.78%
		128	6	498	1.11%	91.88%
		129	6	504	1.11%	92.99%
		130	3	507	0.55%	93.54%
		131	8	515	1.48%	95.02%
		132	2	517	0.37%	95.39%
MA	8	133	6	523	1.11%	96.49%
		134	3	526	0.55%	97.05%
		135	2	528	0.37%	97.42%
		136	1	529	0.18%	97.60%
		137	4	533	0.74%	98.34%
		138	1	534	0.18%	98.52%
		140	2	536	0.37%	98.89%
		141	4	540	0.74%	99.63%
		144	1	541	0.18%	99.82%
		146	1	542	0.18%	100%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	20	20	3.96%	3.96%
		1	2	22	0.40%	4.36%
		2	4	26	0.79%	5.15%
		3	3	29	0.59%	5.74%
		4	1	30	0.20%	5.94%
		5	1	31	0.20%	6.14%
		6	2	33	0.40%	6.54%
		7	3	36	0.59%	7.13%
		8	1	37	0.20%	7.33%
		9	1	38	0.20%	7.53%
		10	3	41	0.59%	8.12%
		11	2	43	0.40%	8.52%
		15	1	44	0.20%	8.71%
		16	2	46	0.40%	9.11%
		19	3	49	0.59%	9.70%
		20	4	53	0.79%	10.50%
		21	1	54	0.20%	10.69%
		22	3	57	0.59%	11.29%
		24	4	61	0.79%	12.08%
		25	1	62	0.20%	12.28%
MA	9	26	4	66	0.79%	13.07%
		27	1	67	0.20%	13.27%
		28	3	70	0.59%	13.86%
		29	1	71	0.20%	14.06%
		30	6	77	1.19%	15.25%
		31	2	79	0.40%	15.64%
		32	2	81	0.40%	16.04%
		33	2	83	0.40%	16.44%
		34	1	84	0.20%	16.63%
		35	4	88	0.79%	17.43%
		36	3	91	0.59%	18.02%
		37	4	95	0.79%	18.81%
		38	1	96	0.20%	19.01%
		40	5	101	0.99%	20.00%
		41	3	104	0.59%	20.59%
		42	5	109	0.99%	21.58%
		43	5	114	0.99%	22.57%
		44	3	117	0.59%	23.17%
		45	2	119	0.40%	23.56%
		46	1	120	0.20%	23.76%
		47	3	123	0.59%	24.36%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		48	6	129	1.19%	25.55%
		49	7	136	1.39%	26.93%
		50	7	143	1.39%	28.32%
		51	3	146	0.59%	28.91%
		52	6	152	1.19%	30.10%
		53	4	156	0.79%	30.89%
		54	5	161	0.99%	31.88%
		55	2	163	0.40%	32.28%
		56	8	171	1.58%	33.86%
		57	7	178	1.39%	35.25%
		58	2	180	0.40%	35.64%
		59	5	185	0.99%	36.63%
		60	6	191	1.19%	37.82%
		61	1	192	0.20%	38.02%
		62	3	195	0.59%	38.61%
		63	5	200	0.99%	39.60%
		64	3	203	0.59%	40.20%
		65	6	209	1.19%	41.39%
		66	2	211	0.40%	41.78%
		67	1	212	0.20%	41.98%
MA	9	68	4	216	0.79%	42.77%
		69	4	220	0.79%	43.56%
		70	3	223	0.59%	44.16%
		71	4	227	0.79%	44.95%
		72	3	230	0.59%	45.55%
		73	1	231	0.20%	45.74%
		74	4	235	0.79%	46.54%
		75	6	241	1.19%	47.72%
		76	4	245	0.79%	48.52%
		77	6	251	1.19%	49.70%
		78	7	258	1.39%	51.09%
		79	2	260	0.40%	51.49%
		80	5	265	0.99%	52.48%
		81	2	267	0.40%	52.87%
		82	4	271	0.79%	53.66%
		83	10	281	1.98%	55.64%
		84	8	289	1.58%	57.23%
		85	4	293	0.79%	58.02%
		86	7	300	1.39%	59.41%
		87	7	307	1.39%	60.79%
		88	6	313	1.19%	61.98%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		89	7	320	1.39%	63.37%
		90	5	325	0.99%	64.36%
		91	6	331	1.19%	65.55%
		92	6	337	1.19%	66.73%
		93	4	341	0.79%	67.53%
		94	8	349	1.58%	69.11%
		95	1	350	0.20%	69.31%
		96	4	354	0.79%	70.10%
		97	6	360	1.19%	71.29%
		98	5	365	0.99%	72.28%
		99	4	369	0.79%	73.07%
		100	5	374	0.99%	74.06%
		101	7	381	1.39%	75.45%
		102	10	391	1.98%	77.43%
		103	9	400	1.78%	79.21%
		104	5	405	0.99%	80.20%
		105	3	408	0.59%	80.79%
		106	6	414	1.19%	81.98%
		107	3	417	0.59%	82.57%
		108	8	425	1.58%	84.16%
MA	9	109	5	430	0.99%	85.15%
		110	4	434	0.79%	85.94%
		111	3	437	0.59%	86.54%
		112	4	441	0.79%	87.33%
		113	4	445	0.79%	88.12%
		114	1	446	0.20%	88.32%
		115	9	455	1.78%	90.10%
		116	5	460	0.99%	91.09%
		117	3	463	0.59%	91.68%
		118	4	467	0.79%	92.48%
		119	4	471	0.79%	93.27%
		120	2	473	0.40%	93.66%
		121	4	477	0.79%	94.46%
		122	6	483	1.19%	95.64%
		123	4	487	0.79%	96.44%
		124	1	488	0.20%	96.63%
		125	2	490	0.40%	97.03%
		126	1	491	0.20%	97.23%
		127	2	493	0.40%	97.62%
		128	3	496	0.59%	98.22%
		129	3	499	0.59%	98.81%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		130	1	500	0.20%	99.01%
		131	1	501	0.20%	99.21%
MA	9	132	1	502	0.20%	99.41%
		134	1	503	0.20%	99.60%
		135	1	504	0.20%	99.80%
		138	1	505	0.20%	100%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	14	14	2.59%	2.59%
		1	3	17	0.55%	3.14%
		2	2	19	0.37%	3.51%
		3	7	26	1.29%	4.81%
		4	1	27	0.18%	4.99%
		5	2	29	0.37%	5.36%
		6	4	33	0.74%	6.10%
		9	2	35	0.37%	6.47%
		10	4	39	0.74%	7.21%
		12	3	42	0.55%	7.76%
		13	1	43	0.18%	7.95%
		14	1	44	0.18%	8.13%
		15	1	45	0.18%	8.32%
		16	1	46	0.18%	8.50%
		17	2	48	0.37%	8.87%
		18	2	50	0.37%	9.24%
		19	2	52	0.37%	9.61%
		20	2	54	0.37%	9.98%
		21	2	56	0.37%	10.35%
		22	2	58	0.37%	10.72%
MA	10	24	1	59	0.18%	10.91%
		25	5	64	0.92%	11.83%
		26	1	65	0.18%	12.02%
		27	3	68	0.55%	12.57%
		28	2	70	0.37%	12.94%
		29	2	72	0.37%	13.31%
		30	2	74	0.37%	13.68%
		31	1	75	0.18%	13.86%
		32	1	76	0.18%	14.05%
		33	2	78	0.37%	14.42%
		34	5	83	0.92%	15.34%
		35	2	85	0.37%	15.71%
		36	2	87	0.37%	16.08%
		37	2	89	0.37%	16.45%
		38	2	91	0.37%	16.82%
		39	2	93	0.37%	17.19%
		40	4	97	0.74%	17.93%
		41	2	99	0.37%	18.30%
		42	1	100	0.18%	18.48%
		43	2	102	0.37%	18.85%
		44	6	108	1.11%	19.96%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		45	2	110	0.37%	20.33%
		46	6	116	1.11%	21.44%
		47	5	121	0.92%	22.37%
		48	3	124	0.55%	22.92%
		49	4	128	0.74%	23.66%
		50	3	131	0.55%	24.21%
		51	6	137	1.11%	25.32%
		52	3	140	0.55%	25.88%
		53	3	143	0.55%	26.43%
		54	4	147	0.74%	27.17%
		55	4	151	0.74%	27.91%
		56	2	153	0.37%	28.28%
		57	8	161	1.48%	29.76%
		58	2	163	0.37%	30.13%
		59	3	166	0.55%	30.68%
		60	6	172	1.11%	31.79%
		61	5	177	0.92%	32.72%
		62	8	185	1.48%	34.20%
		63	5	190	0.92%	35.12%
		64	6	196	1.11%	36.23%
MA	10	65	6	202	1.11%	37.34%
		66	4	206	0.74%	38.08%
		67	8	214	1.48%	39.56%
		68	5	219	0.92%	40.48%
		69	3	222	0.55%	41.04%
		70	4	226	0.74%	41.77%
		71	4	230	0.74%	42.51%
		72	1	231	0.18%	42.70%
		73	5	236	0.92%	43.62%
		74	4	240	0.74%	44.36%
		75	9	249	1.66%	46.03%
		76	4	253	0.74%	46.77%
		77	6	259	1.11%	47.87%
		78	6	265	1.11%	48.98%
		79	4	269	0.74%	49.72%
		80	2	271	0.37%	50.09%
		81	5	276	0.92%	51.02%
		82	4	280	0.74%	51.76%
		83	6	286	1.11%	52.87%
		84	7	293	1.29%	54.16%
		85	7	300	1.29%	55.45%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		86	6	306	1.11%	56.56%
		87	3	309	0.55%	57.12%
		88	6	315	1.11%	58.23%
		89	8	323	1.48%	59.70%
		90	8	331	1.48%	61.18%
		91	3	334	0.55%	61.74%
		92	4	338	0.74%	62.48%
		93	7	345	1.29%	63.77%
		94	4	349	0.74%	64.51%
		95	6	355	1.11%	65.62%
		96	7	362	1.29%	66.91%
		97	3	365	0.55%	67.47%
		98	3	368	0.55%	68.02%
		99	8	376	1.48%	69.50%
		100	4	380	0.74%	70.24%
		101	10	390	1.85%	72.09%
		102	5	395	0.92%	73.01%
		103	5	400	0.92%	73.94%
		104	4	404	0.74%	74.68%
		105	9	413	1.66%	76.34%
MA	10	106	6	419	1.11%	77.45%
		107	3	422	0.55%	78.00%
		108	3	425	0.55%	78.56%
		109	4	429	0.74%	79.30%
		110	3	432	0.55%	79.85%
		111	4	436	0.74%	80.59%
		112	4	440	0.74%	81.33%
		113	12	452	2.22%	83.55%
		114	1	453	0.18%	83.73%
		115	6	459	1.11%	84.84%
		116	11	470	2.03%	86.88%
		117	4	474	0.74%	87.62%
		118	5	479	0.92%	88.54%
		119	5	484	0.92%	89.46%
		120	1	485	0.18%	89.65%
		121	3	488	0.55%	90.20%
		122	3	491	0.55%	90.76%
		123	2	493	0.37%	91.13%
		124	6	499	1.11%	92.24%
		125	5	504	0.92%	93.16%
		126	1	505	0.18%	93.35%

Table 44
Mathematics Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		127	1	506	0.18%	93.53%
		128	2	508	0.37%	93.90%
		129	1	509	0.18%	94.09%
		130	3	512	0.55%	94.64%
		131	1	513	0.18%	94.82%
		132	1	514	0.18%	95.01%
		133	3	517	0.55%	95.56%
		134	4	521	0.74%	96.30%
		135	4	525	0.74%	97.04%
MA	10	137	3	528	0.55%	97.60%
		139	3	531	0.55%	98.15%
		140	2	533	0.37%	98.52%
		141	2	535	0.37%	98.89%
		144	1	536	0.18%	99.08%
		145	2	538	0.37%	99.45%
		148	1	539	0.18%	99.63%
		149	1	540	0.18%	99.82%
		154	1	541	0.18%	100%

Table 45
Science Raw Score Frequency Distributions

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	19	19	3.21%	3.22%
		2	2	21	0.34%	3.55%
		3	3	24	0.51%	4.06%
		5	1	25	0.17%	4.23%
		6	1	26	0.17%	4.40%
		8	1	27	0.17%	4.57%
		11	1	28	0.17%	4.74%
		12	2	30	0.34%	5.08%
		13	1	31	0.17%	5.25%
		14	1	32	0.17%	5.42%
		15	2	34	0.34%	5.75%
		16	1	35	0.17%	5.92%
		17	1	36	0.17%	6.09%
		18	1	37	0.17%	6.26%
		19	1	38	0.17%	6.43%
		21	1	39	0.17%	6.60%
		23	1	40	0.17%	6.77%
		25	1	41	0.17%	6.94%
		26	6	47	1.02%	7.95%
		28	1	48	0.17%	8.12%
SC	5	29	1	49	0.17%	8.29%
		30	2	51	0.34%	8.63%
		31	5	56	0.85%	9.48%
		32	3	59	0.51%	9.98%
		33	1	60	0.17%	10.15%
		34	3	63	0.51%	10.66%
		35	1	64	0.17%	10.83%
		36	5	69	0.85%	11.68%
		37	2	71	0.34%	12.01%
		38	2	73	0.34%	12.35%
		39	5	78	0.85%	13.20%
		40	7	85	1.18%	14.38%
		41	3	88	0.51%	14.89%
		42	4	92	0.68%	15.57%
		43	4	96	0.68%	16.24%
		44	6	102	1.02%	17.26%
		45	4	106	0.68%	17.94%
		46	1	107	0.17%	18.11%
		47	5	112	0.85%	18.95%
		48	4	116	0.68%	19.63%
		49	3	119	0.51%	20.14%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		50	7	126	1.18%	21.32%
		51	6	132	1.02%	22.34%
		52	5	137	0.85%	23.18%
		53	11	148	1.86%	25.04%
		54	3	151	0.51%	25.55%
		55	5	156	0.85%	26.40%
		56	6	162	1.02%	27.41%
		57	2	164	0.34%	27.75%
		58	3	167	0.51%	28.26%
		59	5	172	0.85%	29.10%
		60	7	179	1.18%	30.29%
		61	3	182	0.51%	30.80%
		62	4	186	0.68%	31.47%
		63	8	194	1.35%	32.83%
		64	4	198	0.68%	33.50%
		65	7	205	1.18%	34.69%
		66	6	211	1.02%	35.70%
		67	7	218	1.18%	36.89%
		68	11	229	1.86%	38.75%
		69	18	247	3.05%	41.79%
SC	5	70	5	252	0.85%	42.64%
		71	6	258	1.02%	43.66%
		72	18	276	3.05%	46.70%
		73	3	279	0.51%	47.21%
		74	5	284	0.85%	48.05%
		75	25	309	4.23%	52.28%
		76	5	314	0.85%	53.13%
		77	3	317	0.51%	53.64%
		78	27	344	4.57%	58.21%
		79	4	348	0.68%	58.88%
		80	11	359	1.86%	60.75%
		81	25	384	4.23%	64.98%
		82	4	388	0.68%	65.65%
		83	5	393	0.85%	66.50%
		84	30	423	5.08%	71.57%
		85	3	426	0.51%	72.08%
		86	10	436	1.69%	73.77%
		87	33	469	5.58%	79.36%
		88	6	475	1.02%	80.37%
		89	8	483	1.35%	81.73%
		90	42	525	7.11%	88.83%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		91	1	526	0.17%	89.00%
		92	7	533	1.18%	90.19%
SC	5	93	30	563	5.08%	95.26%
		94	7	570	1.18%	96.45%
		95	3	573	0.51%	96.95%
		96	18	591	3.05%	100%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	12	12	2.20%	2.20%
		2	3	15	0.55%	2.75%
		3	4	19	0.73%	3.49%
		5	3	22	0.55%	4.04%
		6	2	24	0.37%	4.40%
		7	1	25	0.18%	4.59%
		8	1	26	0.18%	4.77%
		9	1	27	0.18%	4.95%
		10	2	29	0.37%	5.32%
		12	2	31	0.37%	5.69%
		15	3	34	0.55%	6.24%
		16	1	35	0.18%	6.42%
		17	2	37	0.37%	6.79%
		18	1	38	0.18%	6.97%
		19	1	39	0.18%	7.16%
		21	1	40	0.18%	7.34%
		23	2	42	0.37%	7.71%
		24	1	43	0.18%	7.89%
		26	3	46	0.55%	8.44%
		27	2	48	0.37%	8.81%
SC	8	28	2	50	0.37%	9.17%
		29	4	54	0.73%	9.91%
		30	2	56	0.37%	10.28%
		31	3	59	0.55%	10.83%
		33	1	60	0.18%	11.01%
		34	5	65	0.92%	11.93%
		35	2	67	0.37%	12.29%
		36	1	68	0.18%	12.48%
		37	4	72	0.73%	13.21%
		38	4	76	0.73%	13.95%
		39	1	77	0.18%	14.13%
		40	3	80	0.55%	14.68%
		42	6	86	1.10%	15.78%
		43	7	93	1.28%	17.06%
		44	4	97	0.73%	17.80%
		45	1	98	0.18%	17.98%
		46	7	105	1.28%	19.27%
		48	3	108	0.55%	19.82%
		49	4	112	0.73%	20.55%
		50	8	120	1.47%	22.02%
		51	5	125	0.92%	22.94%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		52	2	127	0.37%	23.30%
		53	4	131	0.73%	24.04%
		54	7	138	1.28%	25.32%
		55	3	141	0.55%	25.87%
		56	4	145	0.73%	26.61%
		57	3	148	0.55%	27.16%
		58	6	154	1.10%	28.26%
		59	7	161	1.28%	29.54%
		60	5	166	0.92%	30.46%
		61	4	170	0.73%	31.19%
		62	2	172	0.37%	31.56%
		63	2	174	0.37%	31.93%
		64	6	180	1.10%	33.03%
		65	5	185	0.92%	33.95%
		66	5	190	0.92%	34.86%
		67	5	195	0.92%	35.78%
		68	8	203	1.47%	37.25%
		69	4	207	0.73%	37.98%
		70	5	212	0.92%	38.90%
		71	6	218	1.10%	40.00%
SC	8	72	5	223	0.92%	40.92%
		73	7	230	1.28%	42.20%
		74	10	240	1.83%	44.04%
		75	6	246	1.10%	45.14%
		76	2	248	0.37%	45.51%
		77	11	259	2.02%	47.52%
		78	4	263	0.73%	48.26%
		80	7	270	1.28%	49.54%
		81	22	292	4.04%	53.58%
		82	5	297	0.92%	54.50%
		83	17	314	3.12%	57.62%
		84	13	327	2.39%	60.00%
		85	4	331	0.73%	60.73%
		86	18	349	3.30%	64.04%
		87	23	372	4.22%	68.26%
		88	7	379	1.28%	69.54%
		89	12	391	2.20%	71.74%
		90	26	417	4.77%	76.51%
		91	11	428	2.02%	78.53%
		92	14	442	2.57%	81.10%
		93	28	470	5.14%	86.24%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
SC	8	94	7	477	1.28%	87.52%
		95	14	491	2.57%	90.09%
		96	24	515	4.40%	94.50%
		97	2	517	0.37%	94.86%
		98	5	522	0.92%	95.78%
		99	23	545	4.22%	100%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		0	18	18	3.31%	3.31%
		1	1	19	0.18%	3.49%
		2	2	21	0.37%	3.86%
		3	2	23	0.37%	4.23%
		4	1	24	0.18%	4.41%
		6	2	26	0.37%	4.78%
		7	3	29	0.55%	5.33%
		9	1	30	0.18%	5.52%
		10	2	32	0.37%	5.88%
		12	3	35	0.55%	6.43%
		14	1	36	0.18%	6.62%
		15	3	39	0.55%	7.17%
		16	1	40	0.18%	7.35%
		17	2	42	0.37%	7.72%
		18	1	43	0.18%	7.90%
		19	2	45	0.37%	8.27%
		20	1	46	0.18%	8.46%
		21	2	48	0.37%	8.82%
		22	3	51	0.55%	9.38%
		23	3	54	0.55%	9.93%
SC	10	24	4	58	0.74%	10.66%
		25	6	64	1.10%	11.77%
		26	2	66	0.37%	12.13%
		27	3	69	0.55%	12.68%
		28	1	70	0.18%	12.87%
		29	1	71	0.18%	13.05%
		30	7	78	1.29%	14.34%
		31	2	80	0.37%	14.71%
		32	5	85	0.92%	15.63%
		33	6	91	1.10%	16.73%
		34	2	93	0.37%	17.10%
		35	4	97	0.74%	17.83%
		36	3	100	0.55%	18.38%
		37	4	104	0.74%	19.12%
		38	10	114	1.84%	20.96%
		39	7	121	1.29%	22.24%
		40	5	126	0.92%	23.16%
		41	3	129	0.55%	23.71%
		42	5	134	0.92%	24.63%
		43	2	136	0.37%	25.00%
		44	9	145	1.65%	26.65%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		45	5	150	0.92%	27.57%
		46	1	151	0.18%	27.76%
		47	8	159	1.47%	29.23%
		48	3	162	0.55%	29.78%
		50	2	164	0.37%	30.15%
		51	6	170	1.10%	31.25%
		52	4	174	0.74%	31.99%
		53	6	180	1.10%	33.09%
		54	9	189	1.65%	34.74%
		55	6	195	1.10%	35.85%
		56	8	203	1.47%	37.32%
		57	4	207	0.74%	38.05%
		58	2	209	0.37%	38.42%
		59	5	214	0.92%	39.34%
		60	9	223	1.65%	40.99%
		61	3	226	0.55%	41.54%
		62	6	232	1.10%	42.65%
		63	9	241	1.65%	44.30%
		64	4	245	0.74%	45.04%
		65	4	249	0.74%	45.77%
SC	10	66	10	259	1.84%	47.61%
		67	4	263	0.74%	48.35%
		68	6	269	1.10%	49.45%
		69	14	283	2.57%	52.02%
		70	7	290	1.29%	53.31%
		71	6	296	1.10%	54.41%
		72	13	309	2.39%	56.80%
		73	2	311	0.37%	57.17%
		74	5	316	0.92%	58.09%
		75	11	327	2.02%	60.11%
		76	3	330	0.55%	60.66%
		77	13	343	2.39%	63.05%
		78	13	356	2.39%	65.44%
		79	3	359	0.55%	65.99%
		80	9	368	1.65%	67.65%
		81	22	390	4.04%	71.69%
		82	3	393	0.55%	72.24%
		83	3	396	0.55%	72.79%
		84	21	417	3.86%	76.65%
		85	5	422	0.92%	77.57%
		86	3	425	0.55%	78.13%

Table 45
Science Raw Score Frequency Distributions (continued)

Content	Grade	Raw Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent
		87	24	449	4.41%	82.54%
		88	2	451	0.37%	82.90%
		89	5	456	0.92%	83.82%
		90	19	475	3.49%	87.32%
		91	3	478	0.55%	87.87%
		92	4	482	0.74%	88.60%
		93	13	495	2.39%	90.99%
SC	10	94	2	497	0.37%	91.36%
		95	5	502	0.92%	92.28%
		96	24	526	4.41%	96.69%
		97	4	530	0.74%	97.43%
		98	3	533	0.55%	97.98%
		99	5	538	0.92%	98.90%
		100	3	541	0.55%	99.45%
		102	3	544	0.55%	100%

Table 46
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	692	31	56	79	95	16.19%	19.08%	36.85%	21.39%	6.50%	27.89%
	4	644	32	53	76	93	16.61%	17.86%	31.68%	23.29%	10.56%	33.85%
	5	612	26	52	72	93	9.48%	23.53%	19.44%	32.19%	15.36%	47.55%
	6	547	25	53	78	97	10.97%	17.00%	33.64%	32.36%	6.03%	38.39%
	7	532	27	50	68	88	12.59%	25.38%	23.12%	30.83%	8.08%	38.91%
	8	544	29	53	70	91	18.38%	29.60%	22.06%	21.51%	8.46%	29.96%
	9	497	24	48	71	89	13.88%	25.15%	28.57%	20.12%	12.27%	32.39%
	10	533	23	43	64	80	11.63%	24.95%	25.89%	21.01%	16.51%	37.52%
WR	3	686	18	48	78	96	12.10%	19.39%	37.32%	27.70%	3.50%	31.20%
	4	638	19	46	78	94	12.38%	15.67%	35.74%	26.80%	9.40%	36.21%
	5	605	19	50	78	93	10.41%	16.36%	30.41%	32.23%	10.58%	42.81%
	6	549	18	51	78	93	10.75%	14.75%	29.14%	34.79%	10.56%	45.36%
	7	533	23	57	80	94	10.88%	23.83%	23.08%	28.33%	13.88%	42.21%
	8	542	27	62	80	90	18.45%	22.88%	24.91%	19.93%	13.84%	33.76%
	9	498	21	60	79	91	11.65%	26.31%	31.93%	19.08%	11.04%	30.12%
	10	533	21	56	81	93	12.38%	20.26%	37.52%	18.39%	11.44%	29.83%
MA	3	660	19	63	93	108	8.33%	17.73%	22.58%	24.39%	26.97%	51.36%
	4	615	13	72	99	119	7.48%	21.95%	25.69%	32.36%	12.52%	44.88%
	5	588	41	82	115	150	12.07%	15.65%	17.01%	42.86%	12.42%	55.27%
	6	552	28	60	92	113	11.41%	14.49%	22.46%	28.80%	22.83%	51.63%
	7	527	29	61	89	110	13.66%	21.06%	24.29%	24.86%	16.13%	40.99%
	8	542	30	76	107	129	15.87%	26.38%	27.86%	21.77%	8.12%	29.89%
	9	505	29	63	97	116	13.86%	24.75%	31.49%	20.00%	9.90%	29.90%
	10	541	29	67	104	125	12.94%	25.14%	35.86%	18.30%	7.76%	26.06%
SC	5	591	33	60	76	87	9.98%	19.12%	23.18%	21.49%	26.23%	47.72%
	8	545	40	63	80	89	14.13%	17.43%	16.70%	21.28%	30.46%	51.74%
	10	544	28	54	78	87	12.68%	20.40%	29.96%	15.07%	21.88%	36.95%

Table 47
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	692	60.54	26.14	1	21	0.93	6.71
	4	644	60.72	26.58	0	25	0.94	6.74
	5	612	63.22	27.18	4	23	0.94	6.70
	6	547	64.54	26.59	5	19	0.94	6.52
	7	532	56.28	24.86	0	24	0.92	6.93
	8	544	54.03	26.31	0	19	0.93	7.14
	9	497	54.39	27.07	5	18	0.94	6.82
	10	533	52.53	24.85	0	13	0.92	7.18
WR	3	686	58.34	27.93	1	24	0.93	7.46
	4	638	61.13	28.85	0	25	0.93	7.58
	5	605	64.20	27.91	0	30	0.93	7.23
	6	549	64.44	28.51	0	22	0.93	7.31
	7	533	64.58	29.31	1	23	0.94	7.35
	8	542	59.63	29.38	0	24	0.93	7.58
	9	498	60.19	27.87	0	20	0.93	7.40
	10	533	62.23	27.60	1	17	0.93	7.49
MA	3	660	81.33	34.79	5	19	0.95	7.76
	4	615	82.98	35.91	3	22	0.95	8.13
	5	588	104.89	45.69	0	21	0.95	9.89
	6	552	81.96	36.76	2	16	0.94	8.80
	7	527	73.16	35.38	1	26	0.94	8.75
	8	542	78.28	39.66	0	19	0.95	9.25
	9	505	71.98	35.41	0	20	0.93	9.33
	10	541	76.23	36.83	0	14	0.93	9.55
SC	5	591	67.69	24.27	18	19	0.94	5.96
	8	545	69.94	26.23	23	12	0.95	6.03
	10	544	62.34	26.75	3	18	0.92	7.33

Table 48
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	0.60	0.25	0.47	0.40	0.71	0.14	0.15
	4	0.58	0.24	0.45	0.42	0.70	0.16	0.14
	5	0.58	0.24	0.45	0.42	0.69	0.21	0.11
	6	0.62	0.27	0.48	0.38	0.74	0.12	0.14
	7	0.60	0.24	0.48	0.40	0.71	0.17	0.12
	8	0.60	0.22	0.48	0.40	0.70	0.16	0.14
	9	0.58	0.22	0.47	0.42	0.69	0.16	0.15
	10	0.58	0.21	0.47	0.42	0.69	0.15	0.16
WR	3	0.62	0.27	0.48	0.38	0.73	0.12	0.15
	4	0.57	0.25	0.43	0.43	0.69	0.17	0.14
	5	0.56	0.26	0.41	0.44	0.68	0.16	0.16
	6	0.54	0.25	0.39	0.46	0.67	0.17	0.17
	7	0.54	0.22	0.41	0.46	0.64	0.22	0.14
	8	0.52	0.21	0.39	0.48	0.60	0.22	0.18
	9	0.55	0.23	0.42	0.45	0.66	0.18	0.16
	10	0.55	0.25	0.41	0.45	0.66	0.17	0.17
MA	3	0.52	0.22	0.38	0.48	0.60	0.20	0.20
	4	0.56	0.26	0.41	0.44	0.69	0.17	0.14
	5	0.58	0.27	0.42	0.42	0.69	0.19	0.11
	6	0.53	0.22	0.40	0.47	0.63	0.17	0.20
	7	0.55	0.21	0.43	0.45	0.65	0.18	0.18
	8	0.58	0.23	0.45	0.42	0.69	0.17	0.14
	9	0.58	0.23	0.45	0.42	0.68	0.18	0.14
	10	0.60	0.24	0.47	0.40	0.70	0.17	0.12
SC	5	0.50	0.22	0.36	0.50	0.59	0.28	0.13
	8	0.50	0.21	0.37	0.50	0.59	0.18	0.23
	10	0.54	0.21	0.42	0.46	0.64	0.16	0.20

Table 49
Level of Independence - Total Percentage by Level Across All Items

Content	Total Items	Level of Independence			
		1	2	3	4
RD	159908	5.12%	3.65%	6.66%	84.54%
WR	135059	5.30%	3.66%	7.01%	84.02%
MA	161725	6.34%	5.66%	10.38%	77.59%
SC	50364	4.30%	2.66%	6.54%	86.48%

Table 50
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	0.96	0.98
	4	0.97	0.99
	5	0.97	0.99
	6	0.97	0.99
	7	0.98	0.99
	8	0.98	0.99
	9	0.97	0.99
	10	0.97	0.99
MA	3	0.96	0.98
	4	0.97	0.99
	5	0.97	0.99
	6	0.96	0.98
	7	0.97	0.99
	8	0.97	0.99
	9	0.97	0.99
	10	0.97	0.99
SC	5	0.97	0.99
	8	0.98	0.99
	10	0.97	0.99

Table 51
Percentages of Test Administrator Coding Errors

Content	Grade	Level 1 and correct answer	Levels 2 - 4 and no response
RD	3	0.53%	0.49%
	4	0.28%	0.30%
	5	0.67%	0.08%
	6	0.45%	0.18%
	7	0.88%	0.22%
	8	0.68%	0.04%
	9	1.29%	0.14%
	10	0.65%	0.20%
WR	3	0.42%	0.69%
	4	0.31%	0.27%
	5	0.65%	0.13%
	6	0.41%	0.18%
	7	0.81%	0.27%
	8	0.59%	0.05%
	9	1.10%	0.27%
	10	0.29%	0.29%
MA	3	0.56%	0.37%
	4	0.32%	0.42%
	5	0.63%	0.21%
	6	0.37%	0.44%
	7	0.79%	0.46%
	8	0.52%	0.20%
	9	1.03%	0.44%
	10	0.35%	0.39%
SC	5	0.68%	0.04%
	8	0.88%	0.02%
	10	0.40%	0.17%

Table 52
Reliability of Test Examiner Rated Performance Level (via Contrasting Groups Surveys) versus Earned Performance Level

Content	Grade	N Matched Records	Kappa	Weighted Kappa	Percent Perfect	Percent Adjacent	Percent Discrepant
RD	3	101	0.36	0.82	53.47%	38.61%	7.92%
	4	113	0.37	0.90	51.33%	43.36%	5.31%
	5	96	0.23	0.82	39.58%	48.96%	11.46%
	6	100	0.40	0.93	54.00%	43.00%	3.00%
	7	104	0.34	0.91	49.04%	45.19%	5.77%
	8	115	0.30	0.85	46.09%	46.09%	7.83%
	9	88	0.39	0.90	52.27%	42.05%	5.68%
	10	114	0.33	0.91	47.37%	47.37%	5.26%
WR	3	101	0.24	0.85	42.57%	48.52%	8.91%
	4	112	0.38	0.85	51.79%	38.39%	9.82%
	5	92	0.22	0.82	38.04%	50.00%	11.96%
	6	102	0.35	0.88	50.00%	39.22%	10.78%
	7	103	0.32	0.91	46.60%	48.54%	4.85%
	8	116	0.31	0.84	46.55%	44.83%	8.62%
	9	86	0.31	0.86	46.51%	45.35%	8.14%
	10	115	0.25	0.88	43.48%	49.57%	6.96%
MA	3	94	0.21	0.88	37.23%	50.00%	12.77%
	4	110	0.22	0.84	40.00%	52.73%	7.27%
	5	87	0.41	0.82	55.17%	32.18%	12.64%
	6	98	0.39	0.89	53.06%	38.78%	8.16%
	7	89	0.31	0.94	46.07%	52.81%	1.12%
	8	113	0.29	0.79	45.13%	42.48%	12.39%
	9	87	0.22	0.85	40.23%	49.43%	10.35%
	10	114	0.36	0.91	50.00%	46.49%	3.51%
SC	5	89	0.21	0.76	38.20%	41.57%	20.23%
	8	113	0.45	0.86	56.64%	34.51%	8.85%
	11	116	0.39	0.90	51.72%	42.24%	6.03%

Table 53
Response Mode Analysis – Assessment Activities

Grade	Response Mode																
	Total N	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	%	N
3	102	0	0%	0	0%	0	0%	28	27.45%	2	1.96%	65	63.73%	4	3.92%	3	2.94%
4	117	2	1.71%	3	2.56%	2	1.71%	30	25.64%	1	0.86%	73	62.39%	3	2.56%	3	2.56%
5	99	1	1.01%	1	1.01%	2	2.02%	22	22.22%	3	3.03%	68	68.69%	2	2.02%	0	0%
6	108	2	1.85%	1	0.93%	4	3.70%	31	28.70%	5	4.63%	62	57.41%	2	1.85%	1	0.93%
7	112	4	3.57%	2	1.79%	2	1.79%	35	31.25%	4	3.57%	61	54.46%	3	2.68%	1	0.89%
8	128	1	0.78%	4	3.13%	2	1.56%	35	27.34%	4	3.13%	78	60.94%	4	3.13%	0	0%
9	94	0	0%	1	1.06%	0	0%	19	20.21%	1	1.06%	65	69.15%	8	8.51%	0	0%
10	120	0	0%	1	0.83%	0	0%	22	18.33%	6	5.00%	83	69.17%	4	3.33%	4	3.33%

Table 54
Response Mode Analysis – School Interactions

Grade	Total N	Response Mode																	
		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	102	1	0.98%	0	0%	3	2.94%	10	9.80%	3	2.94%	76	74.51%	7	6.86%	1	0.98%	1	0.98%
4	117	2	1.71%	1	0.86%	4	3.42%	17	14.53%	1	0.86%	86	73.50%	1	0.86%	3	2.56%	2	1.71%
5	99	0	0%	0	0%	3	3%	5	5.05%	3	3.03%	81	81.82%	3	3.03%	3	3.03%	1	1.01%
6	108	2	1.85%	2	1.85%	2	1.85%	14	12.96%	5	4.63%	80	74.07%	0	0%	2	1.85%	1	0.93%
7	112	3	2.68%	5	4.46%	3	2.68%	13	11.61%	4	3.57%	75	66.96%	5	4.46%	3	2.68%	1	0.89%
8	128	0	0%	4	3.13%	3	2%	12	9.38%	4	3.13%	96	75.00%	4	3.13%	4	3.13%	1	0.78%
9	94	2	2.13%	0	0%	2	2.13%	8	8.51%	2	2.13%	73	77.66%	3	3.19%	4	4.26%	0	0%
10	120	1	0.83%	1	0.83%	1	0.83%	11	9.17%	5	4.17%	91	75.83%	3	2.50%	3	2.50%	4	3.33%

Table 55
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	5.47%	20.00%	41.54%	25.30%	7.69%
		3.0-3.4	47.22%	22.22%	30.56%	0%	0%
		2.5-2.9	61.91%	33.33%	4.76%	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	7.55%	18.17%	35.25%	26.80%	12.23%
		3.0-3.4	50.00%	26.67%	20.00%	3.33%	0%
		2.5-2.9	62.50%	25.00%	12.50%	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	3.16%	22.49%	20.63%	36.25%	17.47%
		3.0-3.4	19.23%	50.00%	23.08%	7.69%	0%
		2.5-2.9	33.33%	53.33%	13.33%	0%	0%
		2.0-2.4	50.00%	50.00%	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	2.74%	16.88%	36.29%	37.13%	6.96%
		3.0-3.4	20.83%	29.17%	45.83%	4.17%	0%
		2.5-2.9	33.33%	55.56%	11.11%	0%	0%
		2.0-2.4	90.91%	9.09%	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	3.97%	26.27%	25.17%	35.10%	9.49%
		3.0-3.4	26.09%	26.09%	26.09%	21.74%	0%
		2.5-2.9	18.75%	62.50%	18.75%	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	9.62%	30.77%	25.00%	24.79%	9.83%
		3.0-3.4	38.10%	42.86%	14.29%	4.76%	0%
		2.5-2.9	66.67%	33.33%	0%	0%	0%
		2.0-2.4	76.92%	23.08%	0%	0%	0%
		1.5-1.9	100%	0%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	9	3.5-4.0	5.61%	26.17%	31.54%	22.43%	14.25%
		3.0-3.4	32.00%	36.00%	16.00%	16.00%	0%
		2.5-2.9	50.00%	20.00%	30.00%	0%	0%
		2.0-2.4	83.33%	16.67%	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	4.33%	25.76%	28.36%	22.51%	19.05%
		3.0-3.4	19.23%	34.62%	15.39%	30.77%	0%
		2.5-2.9	45.46%	36.36%	18.18%	0%	0%
		2.0-2.4	90.00%	0%	10.00%	0%	0%
		1.5-1.9	80.00%	20.00%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%

Table 56
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	4.06%	16.93%	41.98%	32.80%	4.23%
		3.0-3.4	21.43%	41.07%	30.36%	7.14%	0%
		2.5-2.9	47.06%	47.06%	5.88%	0%	0%
		2.0-2.4	63.64%	36.36%	0%	0%	0%
		1.5-1.9	81.82%	18.18%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	4	3.5-4.0	3.33%	14.05%	40.11%	31.42%	11.09%
		3.0-3.4	35.14%	32.43%	29.73%	2.70%	0%
		2.5-2.9	40.00%	60.00%	0%	0%	0%
		2.0-2.4	69.23%	30.77%	0%	0%	0%
		1.5-1.9	84.62%	15.39%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	5	3.5-4.0	3.26%	14.40%	32.82%	37.24%	12.28%
		3.0-3.4	16.67%	40.00%	40.00%	3.33%	0%
		2.5-2.9	23.08%	69.23%	7.69%	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%
	6	3.5-4.0	3.20%	13.22%	31.56%	39.66%	12.37%
		3.0-3.4	12.90%	35.48%	35.48%	16.13%	0%
		2.5-2.9	22.22%	66.67%	11.11%	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%
	7	3.5-4.0	3.28%	22.27%	25.55%	32.75%	16.16%
		3.0-3.4	26.09%	43.48%	26.09%	4.35%	0%
		2.5-2.9	22.22%	77.78%	0%	0%	0%
		2.0-2.4	100%	0%	0%	0%	0%
		1.5-1.9	75.00%	25.00%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
8	3.5-4.0	8.03%	23.64%	29.07%	22.99%	16.27%	
	3.0-3.4	66.67%	23.33%	3.33%	6.67%	0%	
	2.5-2.9	36.36%	63.64%	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%	
9	3.5-4.0	4.84%	25.81%	35.02%	21.66%	12.67%	
	3.0-3.4	28.00%	52.00%	16.00%	4.00%	0%	
	2.5-2.9	27.27%	45.46%	27.27%	0%	0%	
	2.0-2.4	83.33%	16.67%	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	4.69%	21.11%	40.51%	20.68%	13.01%	
	3.0-3.4	33.33%	25.00%	37.50%	4.17%	0%	
	2.5-2.9	70.00%	20.00%	10.00%	0%	0%	
	2.0-2.4	83.33%	16.67%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	

Table 57
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	0.78%	8.40%	24.81%	31.25%	34.77%
		3.0-3.4	3.03%	63.64%	31.82%	1.52%	0%
		2.5-2.9	17.86%	78.57%	3.57%	0%	0%
		2.0-2.4	61.54%	38.46%	0%	0%	0%
		1.5-1.9	68.75%	31.25%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	4	3.5-4.0	0%	13.33%	30.91%	40.20%	15.56%
		3.0-3.4	7.32%	80.49%	12.20%	0%	0%
		2.5-2.9	14.82%	85.19%	0%	0%	0%
		2.0-2.4	21.43%	78.57%	0%	0%	0%
		1.5-1.9	77.78%	22.22%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	5	3.5-4.0	2.97%	11.25%	16.99%	53.29%	15.50%
		3.0-3.4	12.50%	53.57%	32.14%	1.79%	0%
		2.5-2.9	41.18%	47.06%	11.77%	0%	0%
		2.0-2.4	90.91%	9.09%	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	1.56%	11.16%	24.55%	34.60%	28.13%
		3.0-3.4	20.00%	37.14%	31.43%	11.43%	0%
		2.5-2.9	42.31%	46.15%	11.54%	0%	0%
		2.0-2.4	76.47%	23.53%	0%	0%	0%
		1.5-1.9	88.89%	11.11%	0%	0%	0%
		1.0-1.4	100%	0%	0%	0%	0%
	7	3.5-4.0	3.52%	18.78%	27.93%	29.81%	19.95%
		3.0-3.4	12.82%	56.41%	20.51%	10.26%	0%
		2.5-2.9	61.11%	33.33%	5.56%	0%	0%
		2.0-2.4	66.67%	33.33%	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	3.61%	25.48%	32.45%	27.89%	10.58%	
	3.0-3.4	20.76%	45.28%	30.19%	3.77%	0%	
	2.5-2.9	79.17%	20.83%	0%	0%	0%	
	2.0-2.4	55.56%	44.44%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	
9	3.5-4.0	4.24%	22.20%	36.66%	24.69%	12.22%	
	3.0-3.4	22.22%	53.70%	18.52%	3.70%	1.85%	
	2.5-2.9	50.00%	42.86%	7.14%	0%	0%	
	2.0-2.4	77.78%	11.11%	11.11%	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	2.76%	24.37%	41.84%	21.38%	9.66%	
	3.0-3.4	22.00%	46.00%	20.00%	12.00%	0%	
	2.5-2.9	53.85%	30.77%	15.39%	0%	0%	
	2.0-2.4	78.57%	21.43%	0%	0%	0%	
	1.5-1.9	100%	0%	0%	0%	0%	
	1.0-1.4	100%	0%	0%	0%	0%	

Table 58
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	4.12%	18.73%	24.53%	23.60%	29.03%
		3.0-3.4	15.00%	50.00%	30.00%	5.00%	0%
		2.5-2.9	77.78%	22.22%	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%
	8	3.5-4.0	6.11%	16.63%	17.90%	24.42%	34.95%
		3.0-3.4	35.71%	42.86%	21.43%	0%	0%
		2.5-2.9	42.86%	57.14%	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	5.01%	20.88%	32.15%	17.12%	24.84%
		3.0-3.4	31.82%	36.36%	31.82%	0%	0%
		2.5-2.9	66.67%	16.67%	16.67%	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%

Table 59
Reading Longitudinal Total Group Means and Standard Deviations

Content	Grade	2009		2008		Difference 2009-2008	
		Raw Score		Raw Score		Raw Score	
		Mean	SD	Mean	SD	Mean	SD
RD	3	60.54	26.14	61.69	25.59	-1.14	0.55
	4	60.72	26.58	61.14	25.52	-0.42	1.06
	5	63.22	27.18	61.51	27.30	1.71	-0.12
	6	64.54	26.59	63.25	28.20	1.29	-1.61
	7	56.28	24.86	55.20	25.07	1.08	-0.21
	8	54.03	26.31	56.31	26.35	-2.28	-0.04
	9	54.39	27.07	55.39	26.70	-1.00	0.37
	10	52.53	24.85	48.80	24.97	3.73	-0.12

Table 60
Writing Longitudinal Total Group Means and Standard Deviations

Content	Grade	2009		2008		Difference 2009-2008	
		Raw Score		Raw Score		Raw Score	
		Mean	SD	Mean	SD	Mean	SD
WR	3	58.34	27.93	60.05	27.69	-1.71	0.24
	4	61.13	28.85	61.92	27.87	-0.79	0.97
	5	64.20	27.91	63.05	28.11	1.15	-0.20
	6	64.44	28.51	62.65	29.81	1.78	-1.30
	7	64.58	29.31	61.57	31.16	3.01	-1.84
	8	59.63	29.38	61.87	28.34	-2.24	1.04
	9	60.19	27.87	60.50	28.04	-0.30	-0.17
	10	62.23	27.60	58.15	27.71	4.08	-0.11

Table 61
Mathematics Longitudinal Total Group Means and Standard Deviations

Content	Grade	2009		2008		2007		Difference 2009-2008		Difference 2008-2007	
		Raw Score		Raw Score		Raw Score		Raw Score		Raw Score	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
MA	3	81.33	34.79	82.14	33.75	84.24	31.56	-0.81	1.04	-2.10	2.19
	4	82.98	35.91	84.97	34.87	85.88	35.50	-1.98	1.04	-0.92	-0.63
	5	104.89	45.69	100.95	45.42	102.30	42.79	3.94	0.28	-1.35	2.63
	6	81.96	36.76	79.99	40.58	79.28	38.15	1.97	-3.82	0.70	2.43
	7	73.16	35.38	72.11	37.24	75.18	33.78	1.05	-1.86	-3.08	3.46
	8	78.28	39.66	82.94	39.03	79.29	37.54	-4.66	0.63	3.65	1.49
	9	71.98	35.41	71.80	35.54	68.76	35.54	0.18	-0.13	3.05	0.00
	10	76.23	36.83	72.23	35.80	69.47	37.11	4.00	1.03	2.76	-1.32

Table 62
Science Longitudinal Total Group Means and Standard Deviations

Content	Grade	2009		2008		Difference 2009-2008	
		Raw Score		Raw Score		Raw Score	
		Mean	SD	Mean	SD	Mean	SD
SC	5	67.69	24.27	66.42	25.02	1.26	-0.75
	8	69.94	26.23	71.26	25.75	-1.32	0.48
	10	62.34	26.75	59.15	26.55	3.19	0.19

Table 63
Reading Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 3			Grade 4			Grade 5		
			2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
RD	Gender	Female	32.95%	34.58%	-1.63%	36.80%	37.76%	-0.96%	39.71%	38.95%	0.76%
		Male	66.62%	65.42%	1.20%	62.89%	61.77%	1.12%	59.97%	61.05%	-1.09%
	Ethnicity	African American	9.68%	9.66%	0.03%	8.54%	8.85%	-0.31%	8.17%	8.60%	-0.43%
		Asian/ Pacific Islander/American	3.47%	3.58%	-0.12%	3.42%	3.63%	-0.22%	3.76%	4.21%	-0.45%
		Indian/Alaskan Native									
		Hispanic	35.69%	37.23%	-1.53%	34.63%	30.81%	3.82%	30.07%	35.97%	-5.90%
		White (not Hispanic)	50.72%	49.53%	1.19%	53.26%	56.08%	-2.82%	57.68%	51.23%	6.45%
	Primary Disability	Autism	14.16%	12.77%	1.39%	12.42%	10.11%	2.31%	11.44%	8.07%	3.37%
		Deaf-Blind	0.29%	0%	0.29%	0%	0.16%	-0.16%	0.16%	0.35%	-0.19%
		Emotional Disability	0.87%	1.56%	-0.69%	1.40%	2.37%	-0.97%	2.12%	1.58%	0.55%
		Hearing Disability	0.87%	2.18%	-1.31%	1.40%	1.26%	0.13%	1.47%	1.75%	-0.28%
		Limited Intellectual Capacity	27.17%	21.18%	5.98%	23.45%	25.59%	-2.15%	28.43%	31.75%	-3.32%
		Multiple Disabilities	23.84%	24.14%	-0.30%	27.48%	28.91%	-1.43%	28.27%	29.12%	-0.86%
		Physical Disability	13.73%	12.62%	1.11%	12.73%	11.37%	1.36%	10.62%	9.30%	1.32%
		Specific Learning Disability	10.26%	15.11%	-4.85%	13.20%	13.90%	-0.70%	11.60%	12.63%	-1.03%
		Speech/Language Disability	7.66%	9.50%	-1.84%	6.52%	4.58%	1.94%	3.76%	4.39%	-0.63%
		Traumatic Brain Injury	1.01%	0.62%	0.39%	0.93%	0.95%	-0.02%	1.14%	1.05%	0.09%
		Visual Disability	0.15%	0.31%	-0.17%	0.31%	0.32%	-0.01%	0.65%	0%	0.65%

Table 63
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6			Grade 7			Grade 8		
			2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
RD	Gender	Female	38.03%	40.36%	-2.33%	39.29%	35.55%	3.74%	36.21%	38.93%	-2.72%
		Male	61.61%	58.92%	2.69%	59.96%	64.45%	-4.49%	63.42%	61.07%	2.35%
	Ethnicity	African American	10.06%	10.63%	-0.58%	10.15%	7.61%	2.55%	7.72%	10.47%	-2.75%
		Asian/ Pacific Islander/American Indian/Alaskan Native	4.21%	4.14%	0.06%	3.76%	3.23%	0.53%	3.49%	3.95%	-0.46%
		Hispanic	33.46%	29.73%	3.73%	29.51%	31.94%	-2.43%	31.99%	31.82%	0.17%
		White (not Hispanic)	51.92%	54.96%	-3.04%	55.83%	57.22%	-1.40%	56.43%	53.76%	2.68%
		Autism	10.60%	9.19%	1.41%	10.53%	9.32%	1.21%	10.48%	9.09%	1.39%
	Primary Disability	Deaf-Blind	0.37%	0.18%	0.19%	0.19%	0%	0.19%	0%	0%	0%
		Emotional Disability	1.28%	1.26%	0.02%	1.13%	1.14%	-0.01%	0.92%	1.38%	-0.46%
		Hearing Disability	2.19%	1.26%	0.93%	1.32%	1.33%	-0.02%	1.47%	1.38%	0.09%
		Limited Intellectual Capacity	34.55%	27.39%	7.17%	30.26%	30.42%	-0.16%	30.88%	33.60%	-2.72%
		Multiple Disabilities	29.43%	34.41%	-4.98%	36.09%	35.93%	0.16%	37.32%	36.17%	1.15%
		Physical Disability	6.95%	8.65%	-1.70%	8.27%	9.13%	-0.85%	8.27%	5.93%	2.34%
		Specific Learning Disability	10.24%	13.15%	-2.92%	9.59%	10.08%	-0.49%	7.35%	9.09%	-1.74%
		Speech/Language Disability	2.38%	2.88%	-0.51%	1.88%	0.95%	0.93%	1.84%	2.37%	-0.53%
		Traumatic Brain Injury	1.46%	0.90%	0.56%	0.56%	1.71%	-1.15%	1.47%	0.40%	1.08%
Visual Disability	0.18%	0.18%	0%	0.19%	0%	0.19%	0%	0.59%	-0.59%		

Table 63
Reading Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9			Grade 10		
			2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
RD	Gender	Female	38.43%	40.64%	-2.21%	39.78%	39.05%	0.73%
		Male	61.37%	59.36%	2.00%	60.04%	60.95%	-0.92%
	Ethnicity	African American	9.66%	9.19%	0.47%	8.07%	9.76%	-1.69%
		Asian/ Pacific Islander/American Indian/Alaskan Native	3.42%	3.89%	-0.47%	4.32%	5.42%	-1.11%
		Hispanic	31.99%	29.86%	2.13%	28.33%	29.28%	-0.95%
		White (not Hispanic)	54.73%	57.07%	-2.34%	59.10%	55.53%	3.57%
		Autism	9.86%	7.95%	1.91%	8.44%	5.86%	2.59%
	Primary Disability	Deaf-Blind	0%	0.18%	-0.18%	0%	0.22%	-0.22%
		Emotional Disability	0.60%	1.06%	-0.46%	0.94%	1.30%	-0.36%
		Hearing Disability	1.21%	0.88%	0.32%	1.13%	2.82%	-1.69%
		Limited Intellectual Capacity	36.22%	37.46%	-1.24%	38.09%	35.79%	2.29%
		Multiple Disabilities	35.41%	34.45%	0.96%	36.02%	38.40%	-2.37%
		Physical Disability	7.04%	5.48%	1.57%	5.63%	8.68%	-3.05%
		Specific Learning Disability	6.24%	10.07%	-3.83%	6.57%	4.99%	1.58%
		Speech/Language Disability	2.01%	1.41%	0.60%	1.13%	0.87%	0.26%
Traumatic Brain Injury		0.60%	0.71%	-0.10%	1.31%	1.09%	0.23%	
Visual Disability	0.40%	0.35%	0.05%	0.56%	0%	0.56%		

Table 64
Writing Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 3			Grade 4			Grade 5		
			2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
WR	Gender	Female	33.38%	34.81%	-1.43%	36.99%	37.70%	-0.71%	39.50%	38.91%	0.60%
		Male	66.18%	65.19%	0.99%	62.70%	61.82%	0.87%	60.17%	61.09%	-0.93%
	Ethnicity	African American	9.77%	9.65%	0.12%	8.46%	8.95%	-0.48%	8.43%	8.63%	-0.20%
		Asian/ Pacific Islander/American Indian/Alaskan Native	3.50%	3.48%	0.02%	3.61%	3.67%	-0.07%	3.97%	4.23%	-0.26%
		Hispanic	35.71%	37.66%	-1.94%	34.64%	30.51%	4.13%	29.92%	36.27%	-6.35%
		White (not Hispanic)	50.58%	49.21%	1.37%	53.14%	56.23%	-3.10%	57.36%	50.88%	6.48%
		Autism	13.99%	12.66%	1.34%	12.38%	10.22%	2.16%	11.41%	8.10%	3.31%
	Primary Disability	Deaf-Blind	0.29%	0%	0.29%	0%	0.16%	-0.16%	0.17%	0.35%	-0.19%
		Emotional Disability	0.73%	1.58%	-0.85%	1.41%	2.24%	-0.83%	2.15%	1.59%	0.56%
		Hearing Disability	0.88%	2.22%	-1.34%	1.41%	1.44%	-0.03%	1.49%	1.76%	-0.27%
		Limited Intellectual Capacity	27.41%	21.20%	6.20%	23.67%	26.04%	-2.37%	28.43%	31.87%	-3.44%
		Multiple Disabilities	24.05%	24.05%	0%	27.43%	28.75%	-1.33%	28.43%	29.05%	-0.62%
		Physical Disability	13.85%	12.66%	1.19%	12.70%	11.02%	1.67%	10.91%	9.33%	1.58%
		Specific Learning Disability	10.06%	15.35%	-5.29%	13.01%	13.74%	-0.73%	11.07%	12.50%	-1.43%
		Speech/Language Disability	7.58%	9.49%	-1.91%	6.58%	4.63%	1.95%	3.80%	4.40%	-0.60%
		Traumatic Brain Injury	1.02%	0.63%	0.39%	0.94%	0.96%	-0.02%	1.16%	1.06%	0.10%
	Visual Disability	0.15%	0.16%	-0.01%	0.31%	0.32%	-0.01%	0.66%	0%	0.66%	

Table 64
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 6			Grade 7			Grade 8		
			2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
WR	Gender	Female	38.43%	40.36%	-1.93%	39.02%	34.79%	4.23%	35.98%	39.28%	-3.30%
		Male	61.20%	58.91%	2.29%	60.23%	65.21%	-4.98%	63.65%	60.72%	2.93%
	Ethnicity	African American	9.84%	10.73%	-0.89%	9.94%	7.61%	2.34%	7.75%	10.62%	-2.87%
		Asian/ Pacific Islander/American Indian/Alaskan Native	4.19%	4.18%	0.01%	4.13%	3.04%	1.09%	3.51%	4.21%	-0.70%
		Hispanic	33.70%	30.18%	3.52%	29.46%	31.94%	-2.48%	31.73%	31.86%	-0.13%
		White (not Hispanic)	51.91%	54.36%	-2.45%	55.72%	57.41%	-1.69%	56.64%	53.31%	3.34%
		Autism	10.75%	9.27%	1.47%	10.51%	9.70%	0.81%	10.70%	9.22%	1.48%
	Primary Disability	Deaf-Blind	0.36%	0.18%	0.18%	0.19%	0%	0.19%	0%	0%	0%
		Emotional Disability	1.28%	1.27%	0%	1.31%	1.14%	0.17%	0.92%	1.60%	-0.68%
		Hearing Disability	2.37%	1.27%	1.10%	1.31%	1.33%	-0.02%	1.48%	1.40%	0.07%
		Limited Intellectual Capacity	34.43%	27.64%	6.79%	30.02%	29.85%	0.17%	30.63%	33.27%	-2.64%
		Multiple Disabilities	29.14%	34.55%	-5.40%	36.02%	35.93%	0.09%	37.27%	35.87%	1.40%
		Physical Disability	6.92%	8.36%	-1.44%	8.26%	9.13%	-0.87%	8.30%	6.01%	2.29%
		Specific Learning Disability	10.20%	12.73%	-2.53%	9.57%	10.08%	-0.51%	7.38%	9.62%	-2.24%
		Speech/Language Disability	2.55%	2.91%	-0.36%	2.06%	0.95%	1.11%	1.85%	2.00%	-0.16%
Traumatic Brain Injury		1.46%	0.91%	0.55%	0.56%	1.90%	-1.34%	1.48%	0.40%	1.08%	
Visual Disability	0.18%	0.36%	-0.18%	0.19%	0%	0.19%	0%	0.60%	-0.60%		

Table 64
Writing Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9			Grade 10		
			2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
WR	Gender	Female	38.15%	40.60%	-2.45%	39.96%	39.22%	0.75%
		Male	61.65%	59.40%	2.25%	59.85%	60.78%	-0.93%
	Ethnicity	African American	9.64%	8.96%	0.68%	7.88%	9.80%	-1.92%
		Asian/ Pacific Islander/American Indian/Alaskan Native	3.41%	3.87%	-0.45%	4.13%	5.45%	-1.32%
		Hispanic	32.13%	30.05%	2.08%	28.71%	29.41%	-0.71%
		White (not Hispanic)	54.62%	57.12%	-2.50%	59.10%	55.34%	3.76%
		Autism	10.04%	7.73%	2.31%	8.26%	6.10%	2.16%
	Primary Disability	Deaf-Blind	0%	0.18%	-0.18%	0%	0.22%	-0.22%
		Emotional Disability	0.60%	1.05%	-0.45%	0.75%	1.31%	-0.56%
		Hearing Disability	1.21%	0.88%	0.33%	1.13%	2.83%	-1.71%
		Limited Intellectual Capacity	36.35%	37.43%	-1.09%	38.09%	36.60%	1.49%
		Multiple Disabilities	35.14%	34.80%	0.34%	36.21%	37.69%	-1.48%
		Physical Disability	7.03%	5.62%	1.40%	5.63%	8.28%	-2.65%
		Specific Learning Disability	6.23%	9.84%	-3.62%	6.57%	5.01%	1.56%
Speech/Language Disability		2.01%	1.41%	0.60%	1.13%	0.87%	0.26%	
Traumatic Brain Injury		0.60%	0.70%	-0.10%	1.50%	1.09%	0.41%	
Visual Disability	0.40%	0.35%	0.05%	0.56%	0%	0.56%		

Table 65
Mathematics Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 3					Grade 4				
			2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007
	Gender	Female	33.03%	35.52%	39.29%	-2.49%	-3.78%	38.05%	38.16%	38.39%	-0.11%	-0.23%
		Male	66.52%	64.48%	60.71%	2.03%	3.78%	61.79%	61.33%	61.02%	0.46%	0.31%
	Ethnicity	African American	10.15%	10.00%	9.31%	0.15%	0.69%	8.78%	9.03%	9.06%	-0.25%	-0.03%
		Asian/ Pacific Islander/American Indian/Alaskan Native	3.33%	3.79%	4.10%	-0.46%	-0.30%	3.58%	3.75%	3.35%	-0.17%	0.40%
		Hispanic	35.30%	35.86%	32.40%	-0.56%	3.46%	34.47%	30.15%	36.02%	4.32%	-5.87%
		White (not Hispanic)	50.76%	50.35%	54.19%	0.41%	-3.85%	53.01%	56.39%	50.98%	-3.38%	5.40%
MA	Primary Disability	Autism	14.09%	12.24%	8.57%	1.85%	3.67%	12.36%	11.07%	8.47%	1.29%	2.60%
		Deaf-Blind	0.30%	0%	0.37%	0.30%	-0.37%	0%	0.17%	0.20%	-0.17%	-0.03%
		Emotional Disability	0.61%	1.72%	2.24%	-1.12%	-0.52%	1.30%	2.39%	1.38%	-1.08%	1.01%
		Hearing Disability	0.61%	1.55%	0.75%	-0.95%	0.80%	0.65%	1.19%	1.97%	-0.54%	-0.78%
		Limited Intellectual Capacity	28.03%	22.76%	27.93%	5.27%	-5.17%	24.07%	27.09%	30.51%	-3.02%	-3.42%
		Multiple Disabilities	25.00%	26.21%	26.63%	-1.21%	-0.42%	28.46%	30.66%	28.15%	-2.21%	2.51%
		Physical Disability	14.55%	13.62%	12.10%	0.92%	1.52%	13.17%	10.56%	11.22%	2.61%	-0.66%
		Specific Learning Disability	8.33%	12.41%	12.10%	-4.08%	0.31%	12.20%	10.73%	10.83%	1.46%	-0.10%
		Speech/Language Disability	7.42%	8.62%	8.19%	-1.20%	0.43%	6.34%	4.26%	5.32%	2.08%	-1.06%
		Traumatic Brain Injury	1.06%	0.52%	0.56%	0.54%	-0.04%	0.98%	1.02%	1.18%	-0.05%	-0.16%
Visual Disability	0%	0.35%	0.37%	-0.35%	-0.03%	0.33%	0.34%	0.39%	-0.02%	-0.05%		

Table 65
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 5					Grade 6				
			2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007
	Gender	Female	39.46%	38.91%	40.51%	0.55%	-1.60%	37.68%	40.83%	33.78%	-3.15%	7.05%
		Male	60.20%	61.09%	59.28%	-0.89%	1.81%	61.96%	58.41%	66.02%	3.55%	-7.61%
	Ethnicity	African American	8.67%	9.21%	11.60%	-0.54%	-2.39%	10.15%	11.15%	10.04%	-1.01%	1.11%
		Asian/ Pacific Islander/American Indian/Alaskan Native	3.91%	4.51%	5.06%	-0.60%	-0.55%	4.17%	4.54%	3.28%	-0.37%	1.26%
		Hispanic	29.42%	35.90%	31.22%	-6.48%	4.68%	33.51%	29.30%	33.78%	4.21%	-4.48%
		White (not Hispanic)	57.65%	50.38%	51.90%	7.28%	-1.52%	51.81%	54.44%	52.70%	-2.63%	1.74%
MA	Primary Disability	Autism	11.91%	8.84%	9.07%	3.07%	-0.24%	11.23%	9.07%	8.30%	2.16%	0.77%
		Deaf-Blind	0.34%	0.19%	0.21%	0.15%	-0.02%	0.36%	0.19%	0%	0.17%	0.19%
		Emotional Disability	2.04%	1.50%	1.48%	0.54%	0.02%	1.27%	1.51%	1.35%	-0.24%	0.16%
		Hearing Disability	0.85%	1.32%	0.84%	-0.47%	0.48%	1.81%	1.13%	1.54%	0.68%	-0.41%
		Limited Intellectual Capacity	29.25%	34.02%	31.86%	-4.77%	2.16%	34.24%	28.36%	31.47%	5.88%	-3.12%
		Multiple Disabilities	29.42%	30.08%	31.65%	-0.65%	-1.58%	28.80%	35.35%	33.40%	-6.55%	1.95%
		Physical Disability	11.22%	9.21%	10.34%	2.01%	-1.13%	7.07%	8.51%	10.43%	-1.44%	-1.92%
		Specific Learning Disability	8.84%	9.59%	9.49%	-0.74%	0.10%	10.51%	11.34%	9.07%	-0.84%	2.27%
		Speech/Language Disability	3.91%	4.32%	4.01%	-0.41%	0.31%	2.72%	2.84%	2.90%	-0.12%	-0.06%
		Traumatic Brain Injury	1.19%	0.94%	0.21%	0.25%	0.73%	1.45%	0.76%	0.97%	0.69%	-0.21%
Visual Disability	0.68%	0%	0.21%	0.68%	-0.21%	0.18%	0.38%	0.19%	-0.20%	0.19%		

Table 65
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 7					Grade 8				
			2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007
	Gender	Female	40.23%	35.65%	38.17%	4.58%	-2.52%	37.64%	39.53%	39.96%	-1.89%	-0.43%
		Male	59.01%	64.36%	61.41%	-5.34%	2.95%	62.18%	60.47%	59.67%	1.71%	0.80%
	Ethnicity	African American	10.44%	7.51%	10.24%	2.92%	-2.72%	7.93%	10.57%	9.12%	-2.63%	1.44%
		Asian/ Pacific Islander/American Indian/Alaskan Native	4.55%	2.89%	2.77%	1.66%	0.12%	3.51%	3.91%	4.20%	-0.41%	-0.28%
		Hispanic	29.60%	31.79%	32.62%	-2.19%	-0.83%	31.18%	31.12%	29.56%	0.07%	1.55%
		White (not Hispanic)	54.65%	57.80%	53.95%	-3.15%	3.86%	57.20%	54.40%	56.75%	2.79%	-2.35%
		Autism	10.63%	8.86%	8.74%	1.76%	0.12%	10.33%	9.20%	9.31%	1.13%	-0.11%
MA	Primary Disability	Deaf-Blind	0.19%	0%	0%	0.19%	0%	0%	0%	0.18%	0%	-0.18%
		Emotional Disability	1.52%	1.35%	0.85%	0.17%	0.50%	1.11%	1.76%	0.73%	-0.65%	1.03%
		Hearing Disability	0.95%	1.35%	1.07%	-0.40%	0.28%	1.48%	1.37%	0.73%	0.11%	0.64%
		Limited Intellectual Capacity	30.36%	30.44%	34.54%	-0.08%	-4.10%	31.00%	33.46%	36.13%	-2.47%	-2.67%
		Multiple Disabilities	36.43%	36.42%	32.41%	0.02%	4.01%	38.01%	35.81%	35.95%	2.20%	-0.14%
		Physical Disability	8.16%	8.67%	7.25%	-0.51%	1.42%	8.30%	6.07%	5.66%	2.24%	0.41%
		Specific Learning Disability	8.16%	9.83%	11.94%	-1.67%	-2.11%	6.83%	9.20%	6.02%	-2.37%	3.18%
		Speech/Language Disability	2.66%	0.96%	1.71%	1.69%	-0.75%	1.66%	1.96%	2.19%	-0.30%	-0.23%
		Traumatic Brain Injury	0.76%	2.12%	0.64%	-1.36%	1.48%	1.29%	0.59%	1.64%	0.71%	-1.05%
		Visual Disability	0.19%	0%	0.21%	0.19%	-0.21%	0%	0.59%	0.59%	-0.59%	0%

Table 65
Mathematics Longitudinal Subgroup Participation (continued)

Content	Variable	Subgroup	Grade 9					Grade 10				
			2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007
	Gender	Female	39.21%	41.03%	39.50%	-1.82%	1.53%	40.30%	39.53%	36.91%	0.77%	2.61%
		Male	60.59%	58.97%	60.29%	1.62%	-1.32%	59.52%	60.48%	62.86%	-0.96%	-2.39%
	Ethnicity	African American	9.31%	9.06%	10.50%	0.25%	-1.45%	7.95%	9.94%	8.50%	-1.99%	1.43%
		Asian/ Pacific Islander/American Indian/Alaskan Native	3.17%	3.73%	4.41%	-0.56%	-0.68%	4.25%	5.40%	3.58%	-1.15%	1.82%
		Hispanic	31.68%	29.31%	31.09%	2.38%	-1.79%	28.28%	29.59%	27.52%	-1.31%	2.07%
		White (not Hispanic)	55.64%	57.90%	53.99%	-2.26%	3.91%	59.34%	55.08%	60.40%	4.26%	-5.33%
MA	Primary Disability	Autism	10.10%	8.17%	6.30%	1.93%	1.87%	8.87%	5.83%	6.04%	3.04%	-0.21%
		Deaf-Blind	0%	0.18%	0.42%	-0.18%	-0.24%	0%	0.22%	0%	-0.22%	0.22%
		Emotional Disability	0.59%	1.07%	1.05%	-0.47%	0.02%	0.92%	1.30%	1.57%	-0.37%	-0.27%
		Hearing Disability	1.19%	0.53%	2.94%	0.66%	-2.41%	0.92%	3.02%	1.57%	-2.10%	1.45%
		Limited Intellectual Capacity	35.84%	37.83%	38.66%	-1.99%	-0.83%	37.89%	37.37%	33.33%	0.53%	4.04%
		Multiple Disabilities	34.06%	34.46%	34.45%	-0.40%	0.01%	35.86%	36.72%	41.61%	-0.86%	-4.89%
		Physical Disability	7.72%	5.51%	7.98%	2.22%	-2.47%	5.55%	8.21%	8.28%	-2.66%	-0.07%
		Specific Learning Disability	6.73%	9.59%	5.25%	-2.86%	4.34%	6.65%	4.97%	5.15%	1.69%	-0.18%
		Speech/Language Disability	2.18%	1.60%	1.26%	0.58%	0.34%	1.29%	1.30%	2.01%	0%	-0.71%
		Traumatic Brain Injury	0.79%	0.71%	1.26%	0.08%	-0.55%	1.29%	1.08%	0.45%	0.21%	0.63%
Visual Disability	0.40%	0.36%	0.21%	0.04%	0.15%	0.56%	0%	0%	0.56%	0%		

Table 66
Science Longitudinal Subgroup Participation

Content	Variable	Subgroup	Grade 5			Grade 8			Grade 10		
			2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
SC	Gender	Female	39.93%	39.17%	0.76%	38.17%	38.86%	-0.69%	40.26%	39.52%	0.74%
		Male	59.73%	60.83%	-1.10%	61.65%	61.14%	0.51%	59.56%	60.48%	-0.92%
	Ethnicity	African American	8.29%	9.03%	-0.73%	7.52%	10.45%	-2.93%	8.27%	9.83%	-1.55%
		Asian/ Pacific Islander/American Indian/Alaskan Native	3.89%	4.51%	-0.62%	3.49%	3.95%	-0.46%	4.23%	5.46%	-1.23%
		Hispanic	29.95%	35.38%	-5.43%	31.19%	31.95%	-0.76%	28.49%	30.13%	-1.64%
		White (not Hispanic)	57.53%	51.08%	6.45%	57.62%	53.65%	3.97%	58.82%	54.59%	4.24%
	Primary Disability	Autism	12.18%	8.66%	3.52%	10.46%	9.67%	0.79%	9.19%	6.11%	3.08%
		Deaf-Blind	0.17%	0%	0.17%	0%	0%	0%	0%	0.22%	-0.22%
		Emotional Disability	2.20%	1.44%	0.76%	0.73%	1.58%	-0.84%	0.92%	1.31%	-0.39%
		Hearing Disability	1.35%	1.63%	-0.27%	1.28%	1.38%	-0.10%	1.10%	2.84%	-1.74%
		Limited Intellectual Capacity	29.61%	33.03%	-3.42%	31.38%	33.93%	-2.55%	38.24%	37.56%	0.68%
		Multiple Disabilities	28.77%	30.14%	-1.38%	37.80%	36.49%	1.31%	35.29%	36.68%	-1.39%
		Physical Disability	11.34%	9.75%	1.59%	8.99%	5.52%	3.47%	5.33%	8.52%	-3.18%
		Specific Learning Disability	8.80%	10.29%	-1.49%	6.24%	8.68%	-2.44%	6.80%	4.59%	2.22%
Speech/Language Disability		3.72%	3.97%	-0.25%	1.65%	1.78%	-0.12%	1.10%	1.09%	0.01%	
Traumatic Brain Injury		1.02%	1.08%	-0.07%	1.47%	0.39%	1.07%	1.29%	1.09%	0.20%	
Visual Disability	0.51%	0%	0.51%	0%	0.59%	-0.59%	0.55%	0%	0.55%		

Table 67
Reading Longitudinal Summary of *P*-values

Content	Grade	High <i>P</i> -value			Mean <i>P</i> -value			Low <i>P</i> -value		
		2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
RD	3	0.85	0.87	-0.02	0.57	0.59	-0.02	0.25	0.28	-0.03
	4	0.86	0.88	-0.02	0.58	0.58	0	0.26	0.27	-0.01
	5	0.89	0.87	0.02	0.60	0.59	0.01	0.25	0.27	-0.02
	6	0.86	0.85	0.01	0.61	0.61	0.01	0.23	0.18	0.04
	7	0.85	0.85	0	0.53	0.53	0.01	0.23	0.23	0
	8	0.81	0.87	-0.06	0.51	0.54	-0.02	0.29	0.33	-0.04
	9	0.80	0.85	-0.05	0.53	0.54	-0.01	0.28	0.27	0.01
	10	0.76	0.70	0.06	0.51	0.48	0.04	0.25	0.25	0

Table 68
Writing Longitudinal Summary of *P*-values

Content	Grade	High <i>P</i> -value			Mean <i>P</i> -value			Low <i>P</i> -value		
		2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
WR	3	0.81	0.83	-0.02	0.54	0.55	-0.02	0.26	0.30	-0.04
	4	0.81	0.84	-0.03	0.54	0.55	0	0.22	0.21	0.02
	5	0.84	0.83	0.01	0.59	0.58	0.01	0.23	0.25	-0.02
	6	0.82	0.83	-0.01	0.59	0.58	0.02	0.32	0.33	-0.01
	7	0.85	0.81	0.03	0.57	0.55	0.02	0.24	0.21	0.02
	8	0.82	0.86	-0.04	0.53	0.55	-0.02	0.25	0.25	0
	9	0.83	0.84	0	0.54	0.55	0	0.29	0.24	0.04
	10	0.84	0.82	0.02	0.54	0.51	0.03	0.19	0.17	0.02

Table 69
Mathematics Longitudinal Summary of *P*-values

Content	Grade	High <i>P</i> -value					Mean <i>P</i> -value					Low <i>P</i> -value				
		2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007
MA	3	0.87	0.88	0.90	-0.01	-0.01	0.64	0.65	0.67	-0.01	-0.02	0.37	0.34	0.39	0.02	-0.05
	4	0.89	0.91	0.90	-0.02	0	0.64	0.66	0.63	-0.02	0.02	0.16	0.14	0.16	0.02	-0.02
	5	0.86	0.86	0.87	0	-0.01	0.61	0.59	0.60	0.02	-0.01	0.33	0.33	0.31	0	0.02
	6	0.81	0.79	0.79	0.01	0.01	0.58	0.57	0.57	0	0.01	0.27	0.30	0.26	-0.03	0.04
	7	0.81	0.78	0.82	0.03	-0.04	0.53	0.53	0.55	0	-0.02	0.16	0.19	0.21	-0.03	-0.02
	8	0.80	0.81	0.81	-0.01	0	0.52	0.55	0.52	-0.03	0.03	0.23	0.23	0.23	-0.01	0
	9	0.76	0.77	0.72	0	0.04	0.47	0.47	0.45	0	0.02	0.19	0.19	0.17	0	0.02
	10	0.82	0.83	0.81	-0.01	0.02	0.45	0.44	0.41	0.02	0.02	0.09	0.07	0.08	0.01	-0.01

Table 70
Science Longitudinal Summary of *P*-values

Content	Grade	High <i>P</i> -value			Mean <i>P</i> -value			Low <i>P</i> -value		
		2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
SC	5	0.89	0.88	0.02	0.69	0.68	0.01	0.41	0.42	-0.01
	8	0.87	0.88	-0.01	0.70	0.71	-0.02	0.28	0.32	-0.04
	10	0.88	0.86	0.02	0.61	0.58	0.03	0.27	0.26	0.01

Table 71
Reading Longitudinal Summary of Point Biserials

Content	Grade	High Point Biserial			Mean Point Biserial			Low Point Biserial		
		2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
RD	3	0.73	0.72	0	0.57	0.55	0.02	0.29	0.31	-0.02
	4	0.72	0.68	0.04	0.57	0.55	0.02	0.35	0.36	-0.01
	5	0.75	0.74	0.01	0.58	0.58	0.01	0.24	0.28	-0.04
	6	0.74	0.72	0.01	0.59	0.60	-0.02	0.31	0.35	-0.03
	7	0.71	0.71	0	0.53	0.53	0	0.20	0.24	-0.04
	8	0.69	0.70	-0.01	0.54	0.54	0	0.32	0.31	0.01
	9	0.71	0.74	-0.03	0.57	0.57	0	0.37	0.37	0
	10	0.68	0.68	-0.01	0.52	0.52	0	0.33	0.36	-0.03

Table 72
Writing Longitudinal Summary of Point Biserials

Content	Grade	High Point Biserial			Mean Point Biserial			Low Point Biserial		
		2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
WR	3	0.83	0.82	0.01	0.58	0.58	0	0.25	0.24	0.01
	4	0.84	0.82	0.01	0.57	0.56	0.01	0.21	0.21	0
	5	0.85	0.84	0.01	0.58	0.58	0.01	0.18	0.21	-0.02
	6	0.83	0.85	-0.02	0.59	0.61	-0.02	0.23	0.29	-0.06
	7	0.84	0.86	-0.02	0.59	0.61	-0.01	0.20	0.13	0.08
	8	0.88	0.85	0.02	0.58	0.56	0.01	0.20	0.20	-0.01
	9	0.84	0.85	-0.02	0.57	0.58	-0.01	0.17	0.19	-0.02
	10	0.85	0.84	0.01	0.55	0.54	0.01	0.21	0.20	0.01

Table 73
Mathematics Longitudinal Summary of Point Biserials

Content	Grade	High Point Biserial					Mean Point Biserial					Low Point Biserial				
		2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007	2009	2008	2007	Difference 2009-2008	Difference 2008-2007
MA	3	0.83	0.81	0.80	0.02	0.01	0.65	0.63	0.62	0.02	0.02	0.35	0.28	0.36	0.07	-0.08
	4	0.80	0.78	0.77	0.01	0.01	0.65	0.64	0.63	0.01	0.01	0.29	0.25	0.25	0.03	0
	5	0.81	0.78	0.77	0.03	0.01	0.63	0.61	0.59	0.02	0.02	0.38	0.36	0.35	0.02	0.01
	6	0.79	0.82	0.79	-0.03	0.03	0.60	0.64	0.61	-0.04	0.03	0.18	0.27	0.25	-0.09	0.02
	7	0.77	0.78	0.74	-0.01	0.04	0.59	0.61	0.58	-0.01	0.03	0.34	0.33	0.27	0	0.06
	8	0.80	0.79	0.79	0.01	-0.01	0.58	0.58	0.56	0.01	0.01	0.14	0.10	0.16	0.04	-0.06
	9	0.76	0.80	0.81	-0.04	-0.01	0.52	0.53	0.53	0	0	0.19	0.17	0.21	0.02	-0.05
	10	0.73	0.73	0.74	-0.01	-0.01	0.52	0.49	0.52	0.03	-0.03	0.14	0.09	0.12	0.05	-0.03

Table 74
Science Longitudinal Summary of Point Biserials

Content	Grade	High Point Biserial			Mean Point Biserial			Low Point Biserial		
		2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008	2009	2008	Difference 2009-2008
SC	5	0.77	0.79	-0.02	0.63	0.62	0	0.34	0.42	-0.08
	8	0.77	0.77	0	0.64	0.64	0	0.17	0.17	0
	10	0.76	0.75	0.02	0.58	0.57	0.01	0.29	0.23	0.06

Table 75
Reading Longitudinal Summary of Impact Data

		2009						2008					
		Percent of Students in Each Proficiency Level						Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
RD	3	16.19%	19.08%	36.85%	21.39%	6.50%	27.89%	13.24%	20.25%	37.85%	24.14%	4.52%	28.66%
	4	16.61%	17.86%	31.68%	23.29%	10.56%	33.85%	13.27%	19.43%	35.70%	21.64%	9.95%	31.60%
	5	9.48%	23.53%	19.44%	32.19%	15.36%	47.55%	12.46%	20.70%	23.33%	30.18%	13.33%	43.51%
	6	10.97%	17.00%	33.64%	32.36%	6.03%	38.39%	11.53%	20.90%	27.39%	32.79%	7.39%	40.18%
	7	12.59%	25.38%	23.12%	30.83%	8.08%	38.91%	13.69%	24.71%	25.86%	29.28%	6.46%	35.74%
	8	18.38%	29.60%	22.06%	21.51%	8.46%	29.96%	16.80%	26.09%	22.73%	25.89%	8.50%	34.39%
	9	13.88%	25.15%	28.57%	20.12%	12.27%	32.39%	13.96%	22.79%	28.27%	25.44%	9.54%	34.98%
	10	11.63%	24.95%	25.89%	21.01%	16.51%	37.52%	15.18%	28.42%	24.51%	18.22%	13.67%	31.89%

		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 76
Writing Longitudinal Summary of Impact Data

		2009						2008					
		Percent of Students in Each Proficiency Level						Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
WR	3	12.10%	19.39%	37.32%	27.70%	3.50%	31.20%	10.92%	17.09%	37.03%	31.80%	3.16%	34.97%
	4	12.38%	15.67%	35.74%	26.80%	9.40%	36.21%	10.70%	15.81%	36.10%	29.23%	8.15%	37.38%
	5	10.41%	16.36%	30.41%	32.23%	10.58%	42.81%	11.62%	14.96%	33.27%	29.75%	10.39%	40.14%
	6	10.75%	14.75%	29.14%	34.79%	10.56%	45.36%	12.18%	19.09%	26.73%	28.55%	13.45%	42.00%
	7	10.88%	23.83%	23.08%	28.33%	13.88%	42.21%	15.21%	22.81%	21.67%	26.62%	13.69%	40.30%
	8	18.45%	22.88%	24.91%	19.93%	13.84%	33.76%	15.83%	23.05%	25.65%	21.84%	13.63%	35.47%
	9	11.65%	26.31%	31.93%	19.08%	11.04%	30.12%	13.01%	25.13%	29.53%	23.37%	8.96%	32.34%
	10	12.38%	20.26%	37.52%	18.39%	11.44%	29.83%	12.42%	27.02%	35.73%	18.08%	6.75%	24.84%

		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 77
Mathematics Longitudinal Summary of Impact Data

		2009						2008						2007					
		Percent of Students in Each Proficiency Level						Percent of Students in Each Proficiency Level						Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	8.33%	17.73%	22.58%	24.39%	26.97%	51.36%	8.45%	15.17%	25.52%	24.66%	26.21%	50.86%	5.59%	16.76%	24.21%	27.56%	25.88%	53.45%
	4	7.48%	21.95%	25.69%	32.36%	12.52%	44.88%	6.30%	20.61%	25.89%	35.78%	11.41%	47.19%	5.91%	22.24%	24.80%	29.53%	17.52%	47.05%
	5	12.07%	15.65%	17.01%	42.86%	12.42%	55.27%	14.66%	12.22%	24.06%	37.97%	11.09%	49.06%	12.03%	14.98%	22.78%	41.77%	8.44%	50.21%
	6	11.41%	14.49%	22.46%	28.80%	22.83%	51.63%	15.88%	13.42%	20.79%	23.25%	26.65%	49.91%	13.13%	15.83%	23.17%	26.83%	21.04%	47.88%
	7	13.66%	21.06%	24.29%	24.86%	16.13%	40.99%	16.76%	18.88%	25.05%	20.23%	19.08%	39.31%	10.66%	19.40%	27.72%	25.80%	16.42%	42.22%
	8	15.87%	26.38%	27.86%	21.77%	8.12%	29.89%	12.13%	26.03%	24.66%	28.77%	8.41%	37.18%	12.04%	29.01%	29.38%	23.18%	6.39%	29.56%
	9	13.86%	24.75%	31.49%	20.00%	9.90%	29.90%	13.50%	26.82%	30.55%	17.76%	11.37%	29.13%	14.92%	27.52%	32.14%	17.44%	7.98%	25.42%
	10	12.94%	25.14%	35.86%	18.30%	7.76%	26.06%	14.47%	25.49%	38.44%	16.63%	4.97%	21.60%	18.12%	25.50%	36.02%	16.11%	4.25%	20.36%

		Difference between 2009 and 2008						Difference between 2008 and 2007					
		Percent of Students in Each Proficiency Level						Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
MA	3	-0.12%	2.55%	-2.94%	-0.26%	0.76%	0.50%	2.86%	-1.59%	1.31%	-2.91%	0.32%	-2.58%
	4	1.18%	1.34%	-0.20%	-3.42%	1.11%	-2.31%	0.40%	-1.63%	1.09%	6.25%	-6.11%	0.14%
	5	-2.59%	3.43%	-7.05%	4.89%	1.32%	6.21%	2.64%	-2.76%	1.28%	-3.80%	2.65%	-1.15%
	6	-4.47%	1.07%	1.67%	5.55%	-3.83%	1.72%	2.75%	-2.41%	-2.37%	-3.58%	5.61%	2.03%
	7	-3.10%	2.18%	-0.76%	4.63%	-2.95%	1.68%	6.10%	-0.52%	-2.67%	-5.57%	2.66%	-2.91%
	8	3.73%	0.36%	3.20%	-7.00%	-0.30%	-7.29%	0.09%	-2.99%	-4.72%	5.59%	2.03%	7.62%
	9	0.36%	-2.07%	0.93%	2.24%	-1.47%	0.77%	-1.42%	-0.70%	-1.59%	0.33%	3.38%	3.71%
	10	-1.53%	-0.35%	-2.59%	1.67%	2.80%	4.46%	-3.65%	-0.02%	2.43%	0.52%	0.72%	1.24%

Table 78
Science Longitudinal Summary of Impact Data

		2009						2008					
		Percent of Students in Each Proficiency Level						Percent of Students in Each Proficiency Level					
Content	Grade	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined	Inconclusive	Exploring	Emerging	Developing	Novice	Developing & Novice Combined
	5	9.98%	19.12%	23.18%	21.49%	26.23%	47.72%	12.09%	16.97%	24.91%	21.84%	24.19%	46.03%
SC	8	14.13%	17.43%	16.70%	21.28%	30.46%	51.74%	13.41%	16.57%	17.16%	19.72%	33.14%	52.86%
	10	12.68%	20.40%	29.96%	15.07%	21.88%	36.95%	14.63%	27.29%	24.02%	17.90%	16.16%	34.06%

		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 CSAPA 2008–09 by Grade and Content

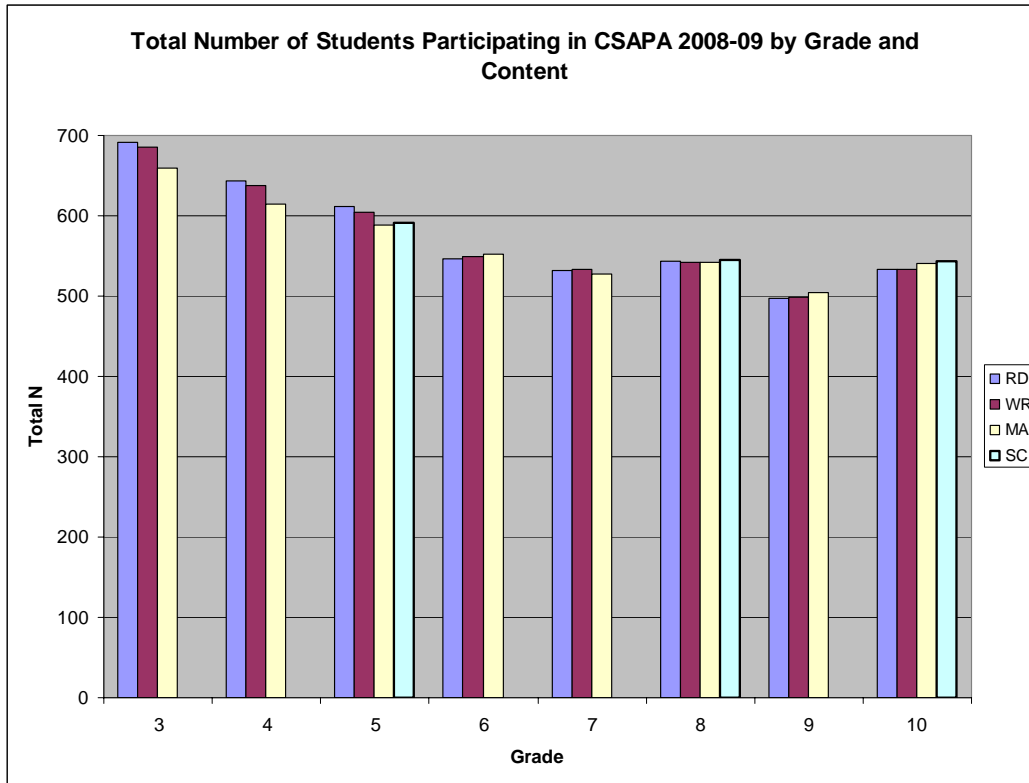


Figure 2
Percent of Participating Students by Coded Disability

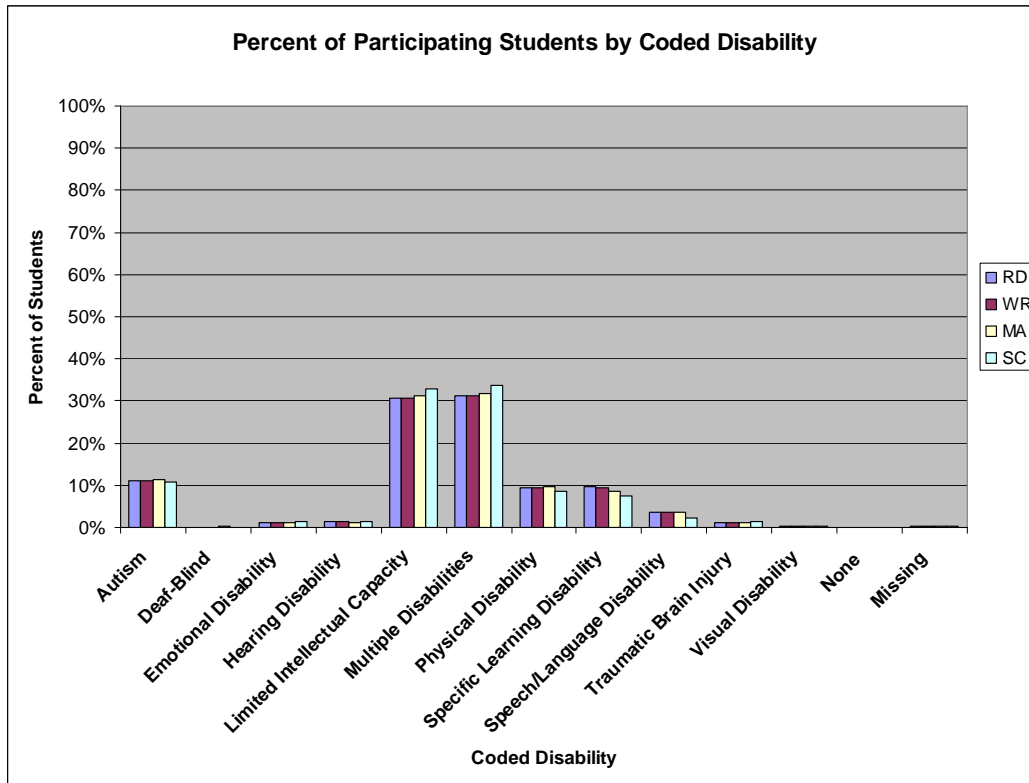


Figure 3
Reading Percent of Students Utilizing Expanded Accommodations

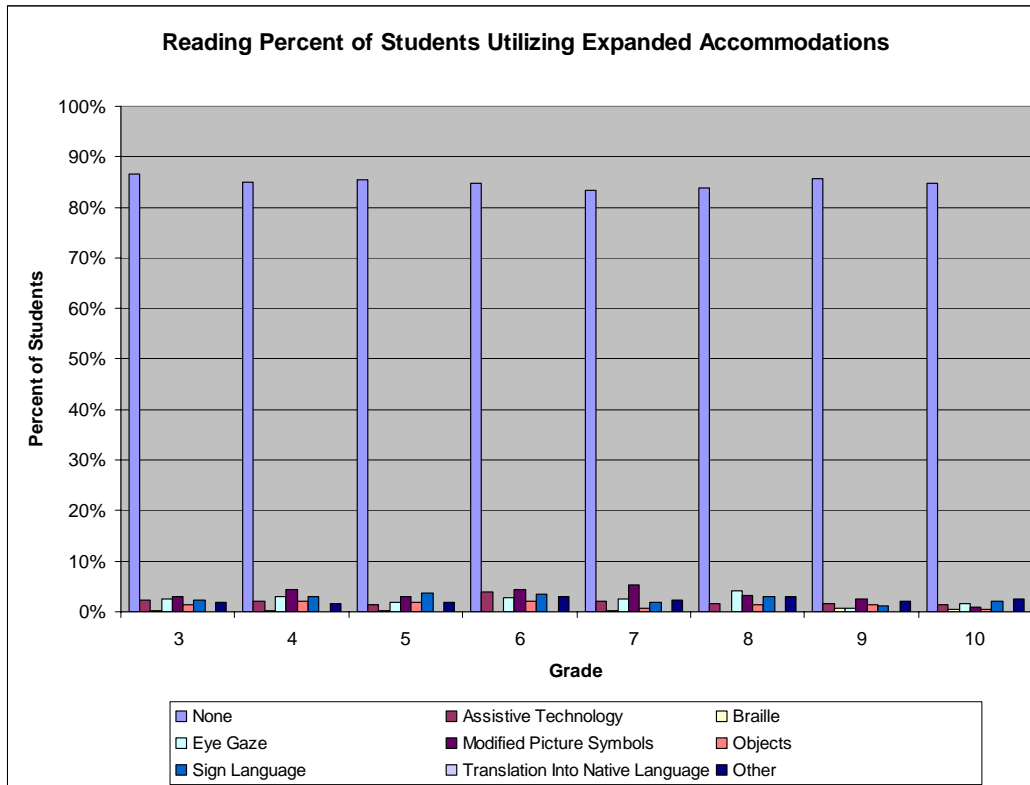


Figure 4
Writing Percent of Students Utilizing Expanded Accommodations

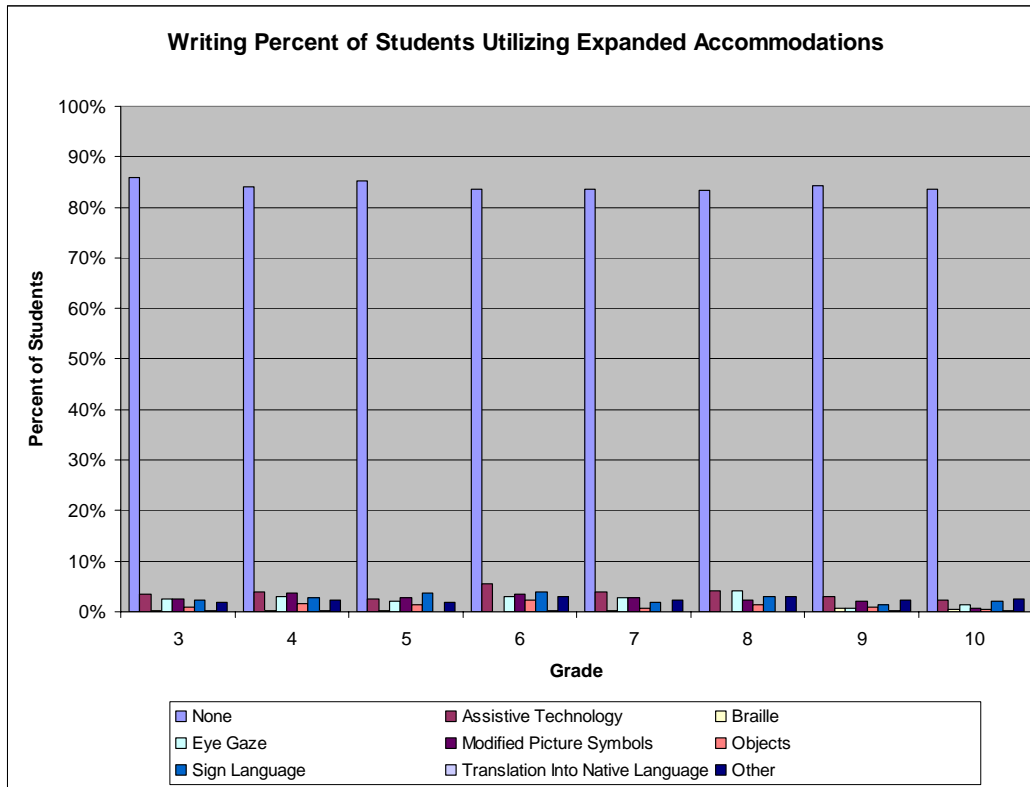


Figure 5
Mathematics Percent of Students Utilizing Expanded Accommodations

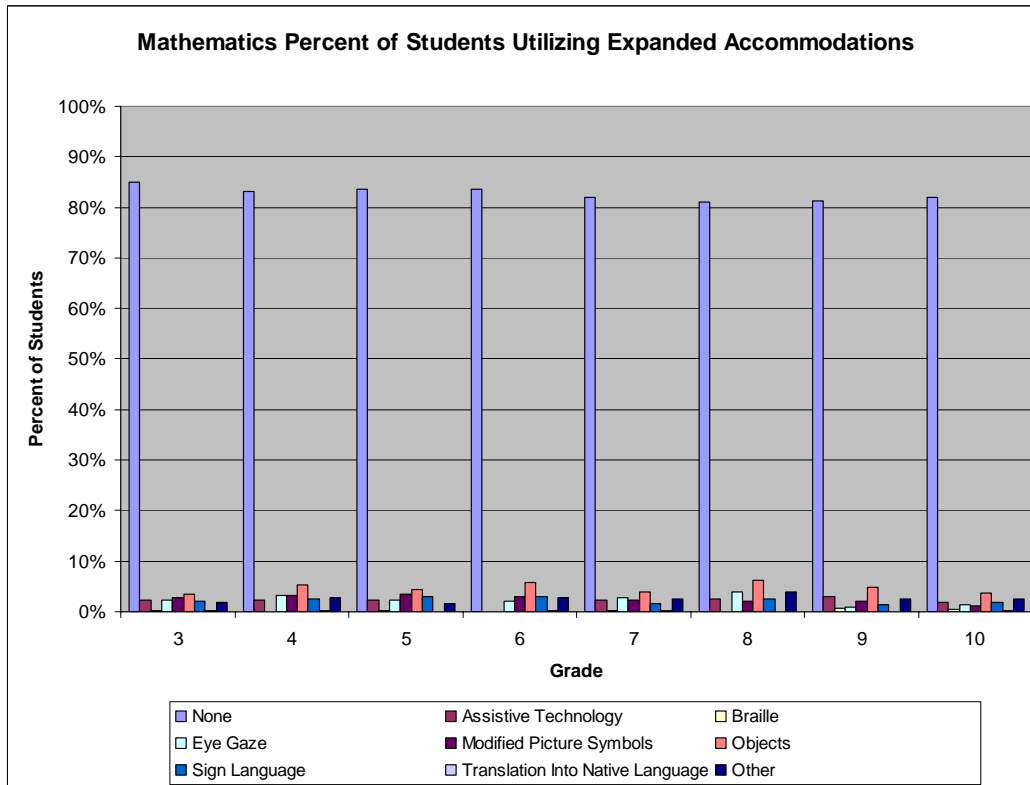


Figure 6
Science Percent of Students Utilizing Expanded Accommodations

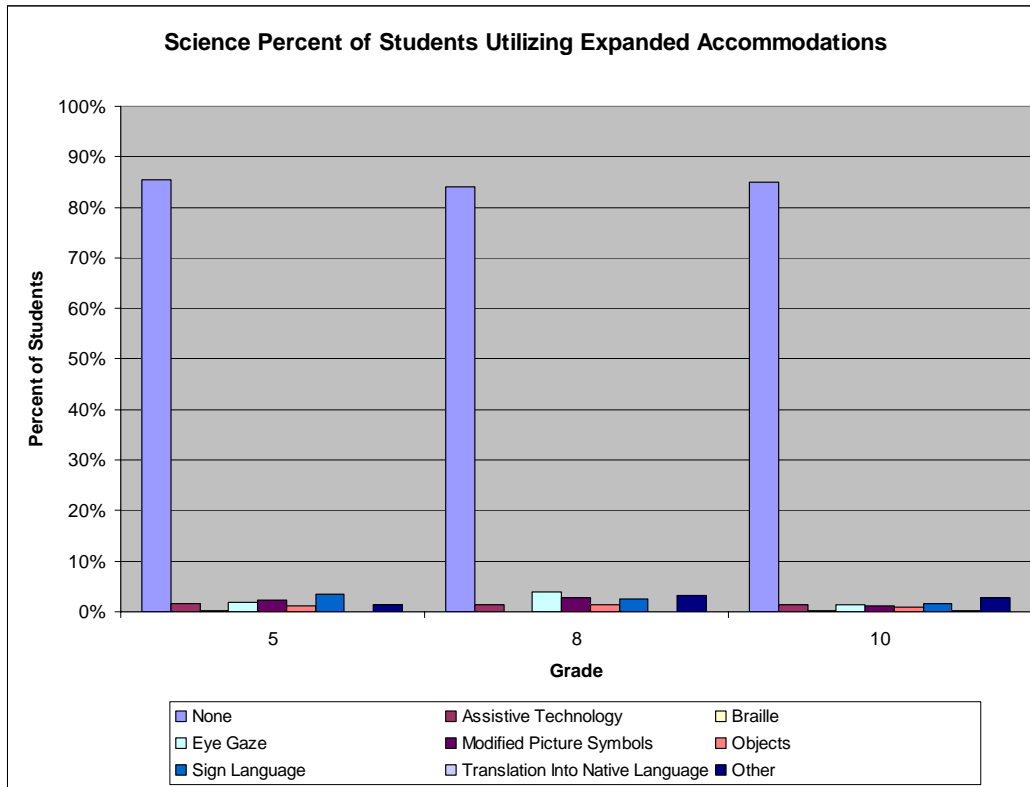


Figure 7
Reading Mean as Percent of Total Possible Score by Gender

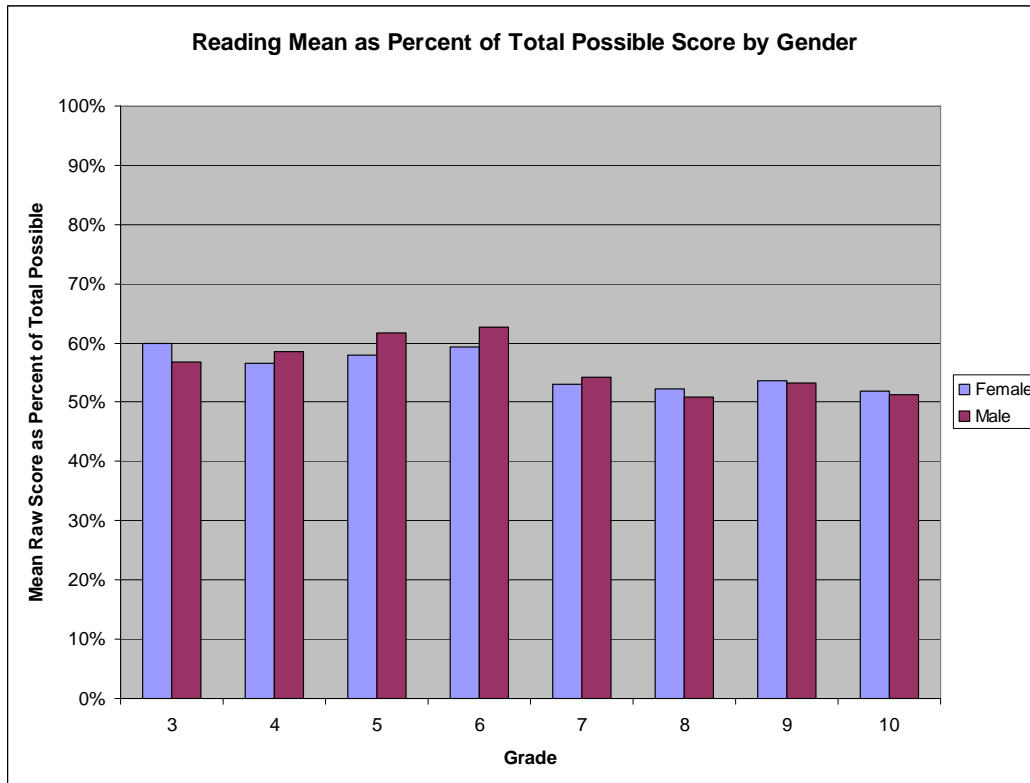


Figure 8
Writing Mean as Percent of Total Possible Score by Gender

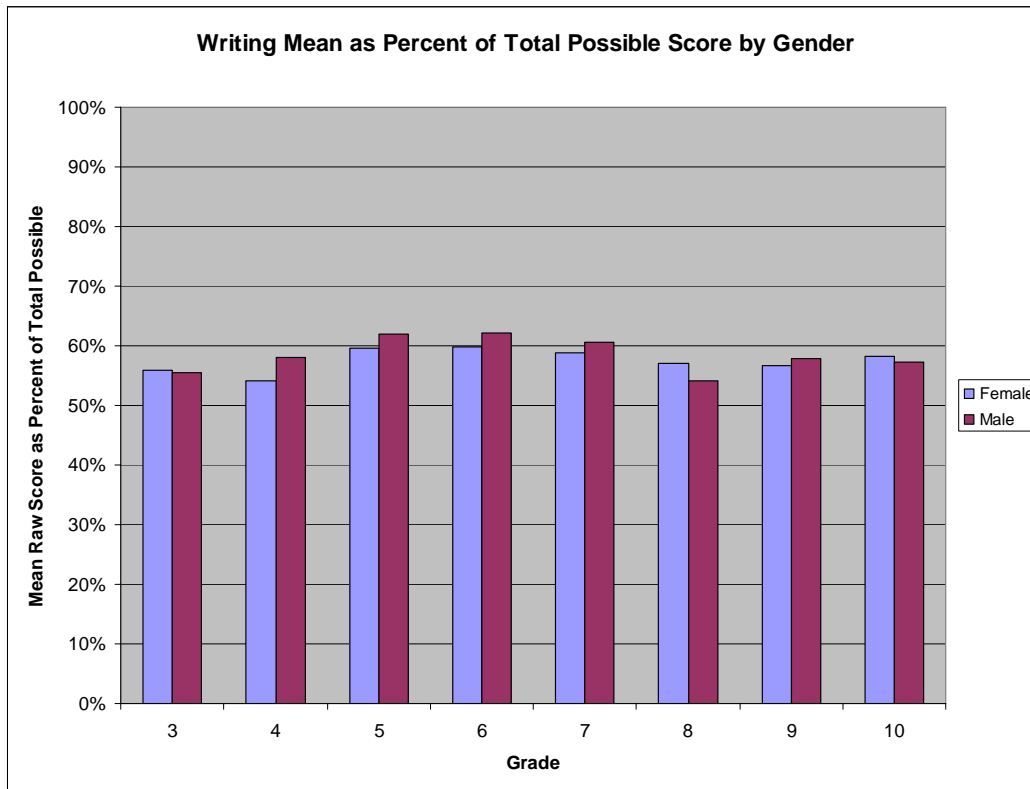


Figure 9
Mathematics Mean as Percent of Total Possible Score by Gender

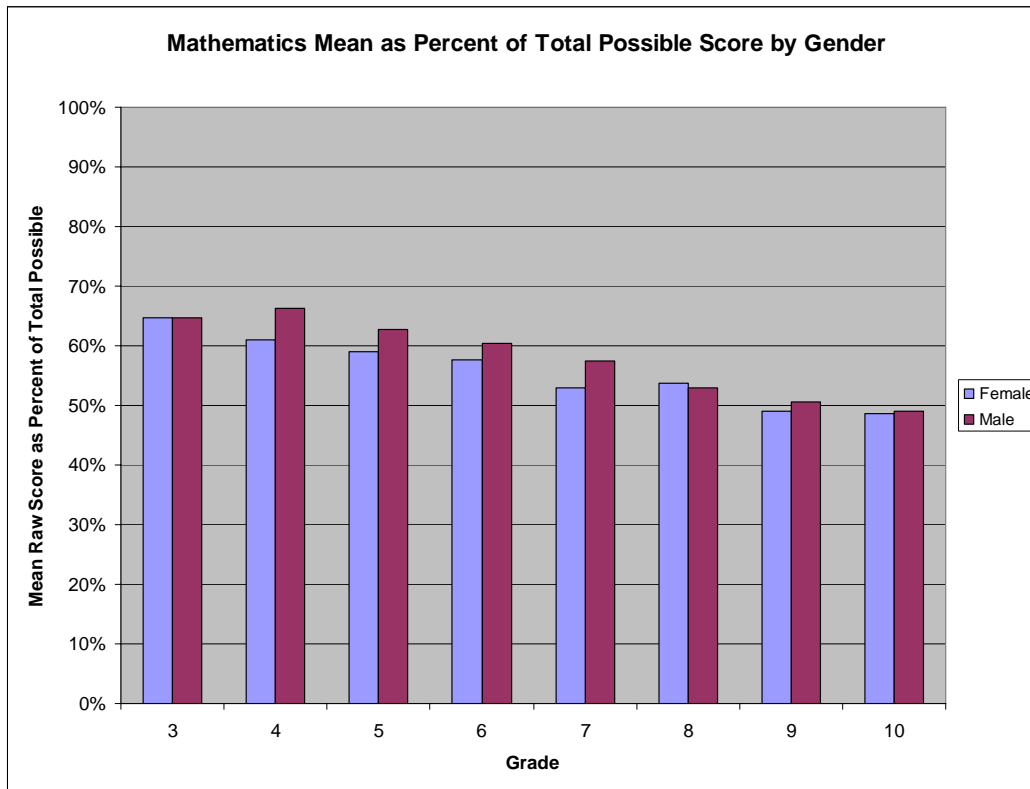


Figure 10
Science Mean as Percent of Total Possible Score by Gender

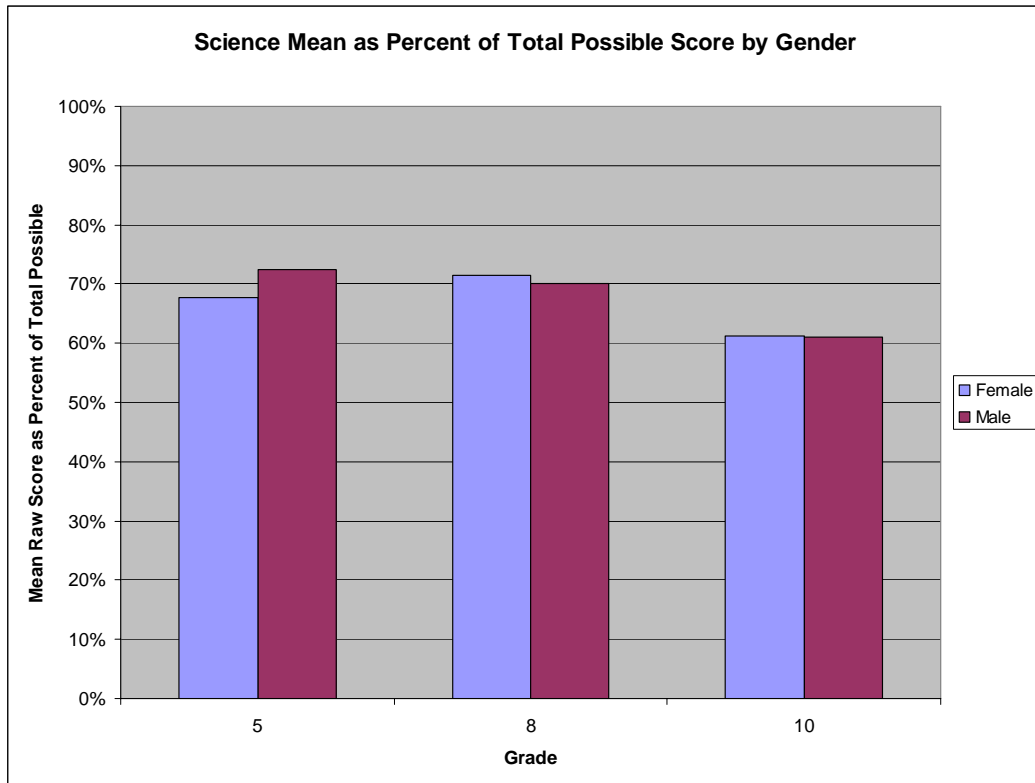


Figure 11
Reading Mean as Percent of Total Possible Score by Ethnicity

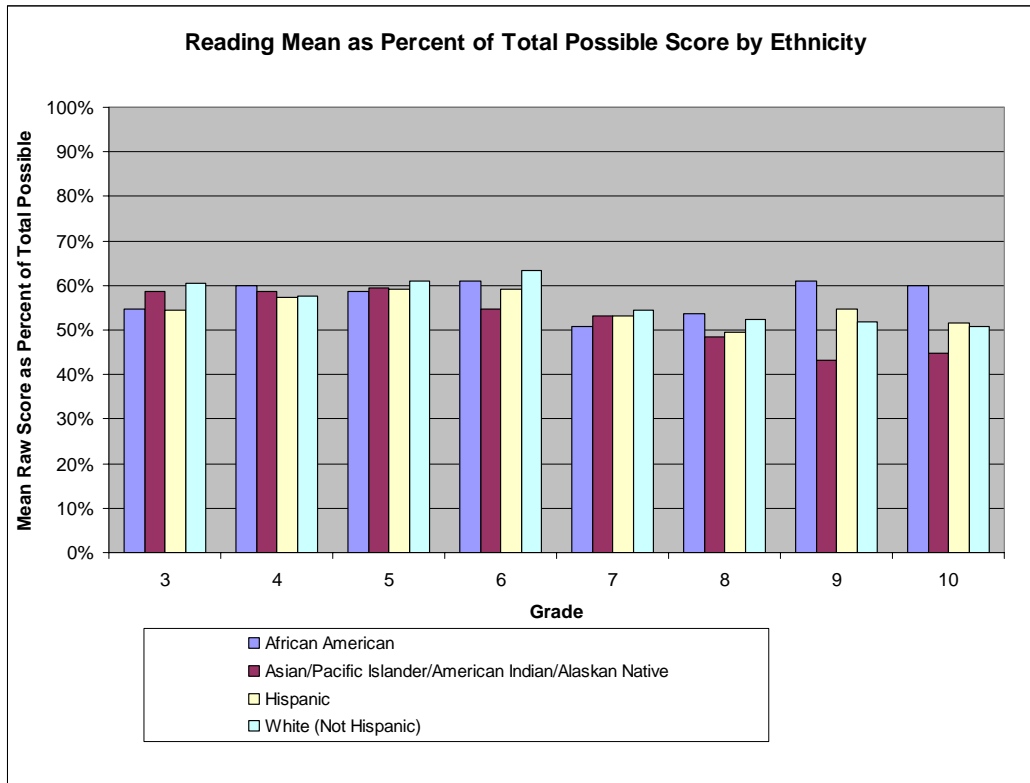


Figure 12
Writing Mean as Percent of Total Possible Score by Ethnicity

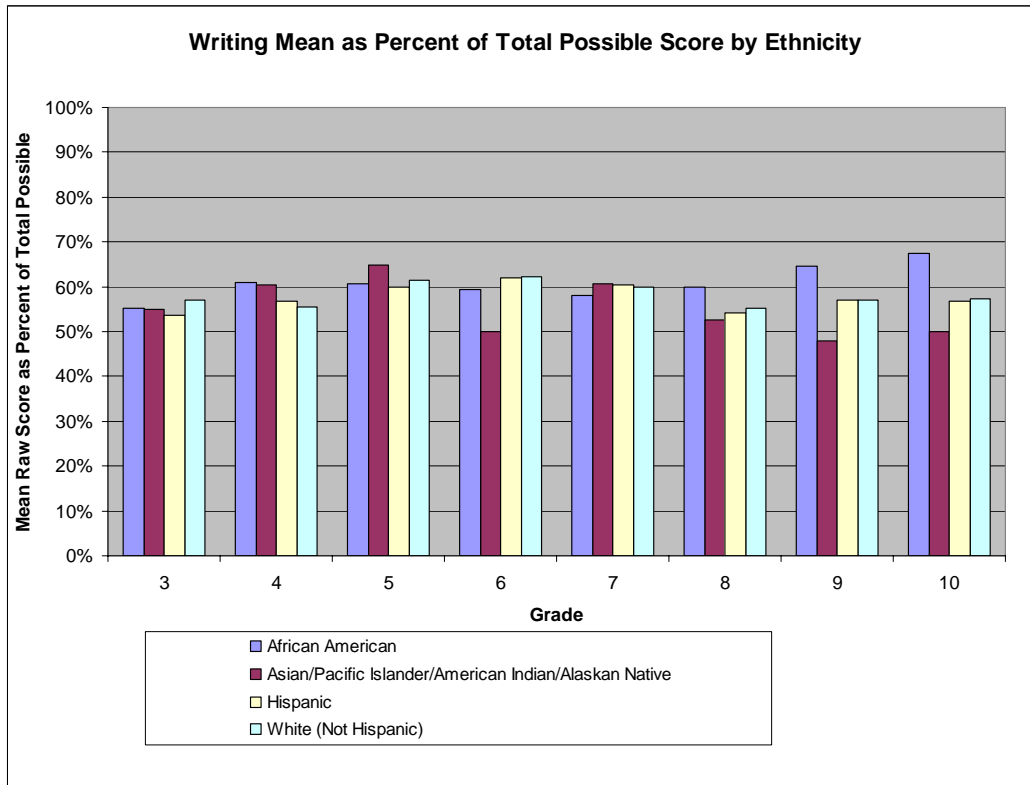


Figure 13
Mathematics Mean as Percent of Total Possible Score by Ethnicity

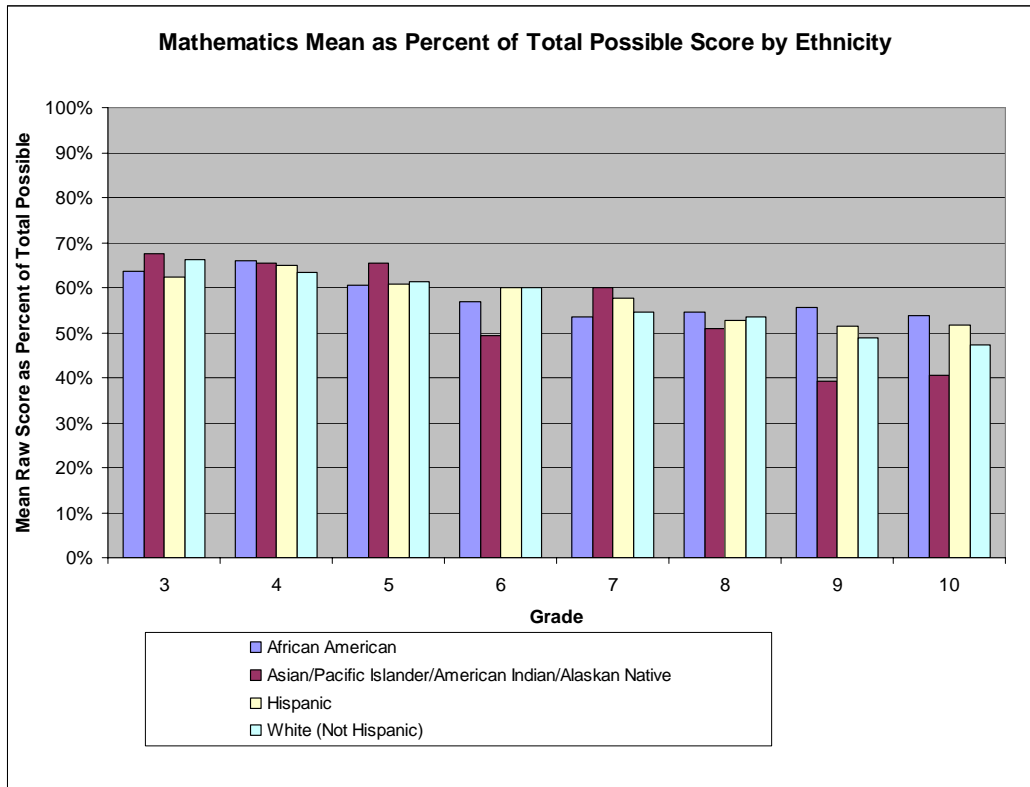


Figure 14
Science Mean as Percent of Total Possible Score by Ethnicity

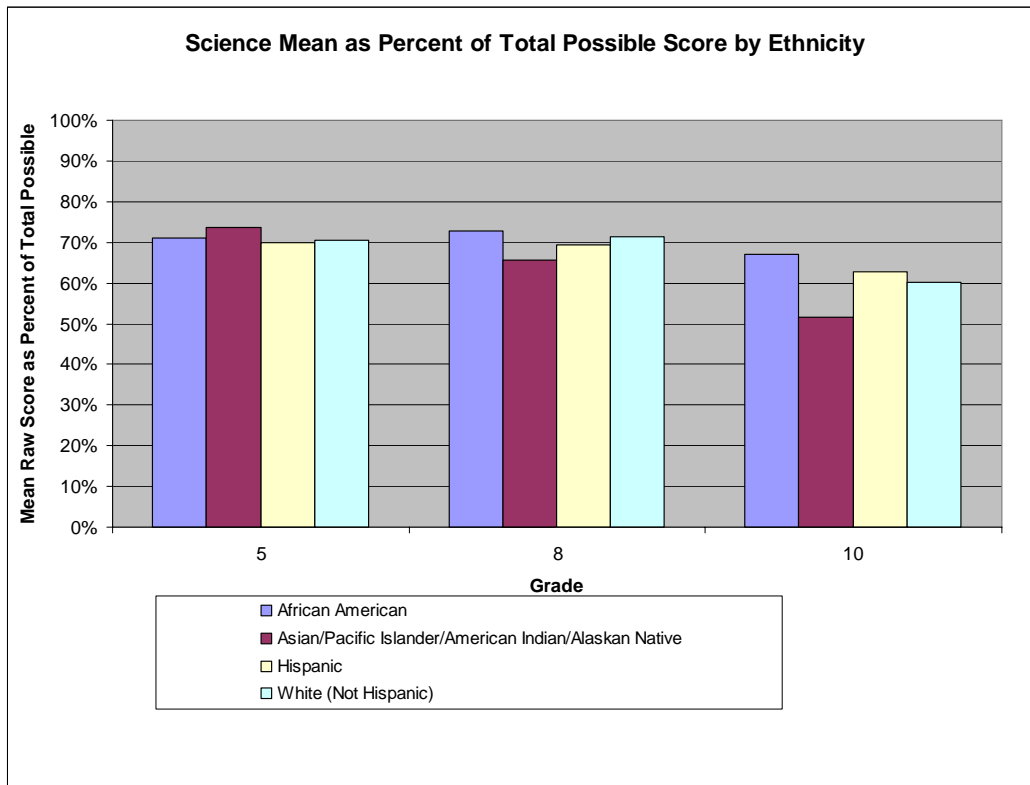


Figure 15
Reading Impact Data

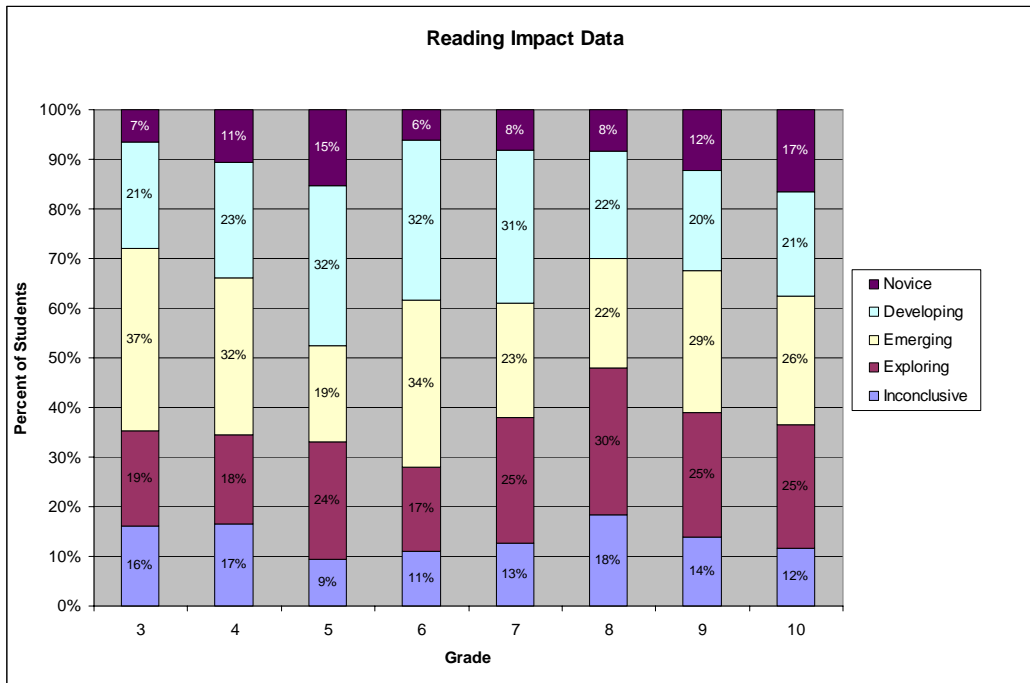


Figure 16
Writing Impact Data

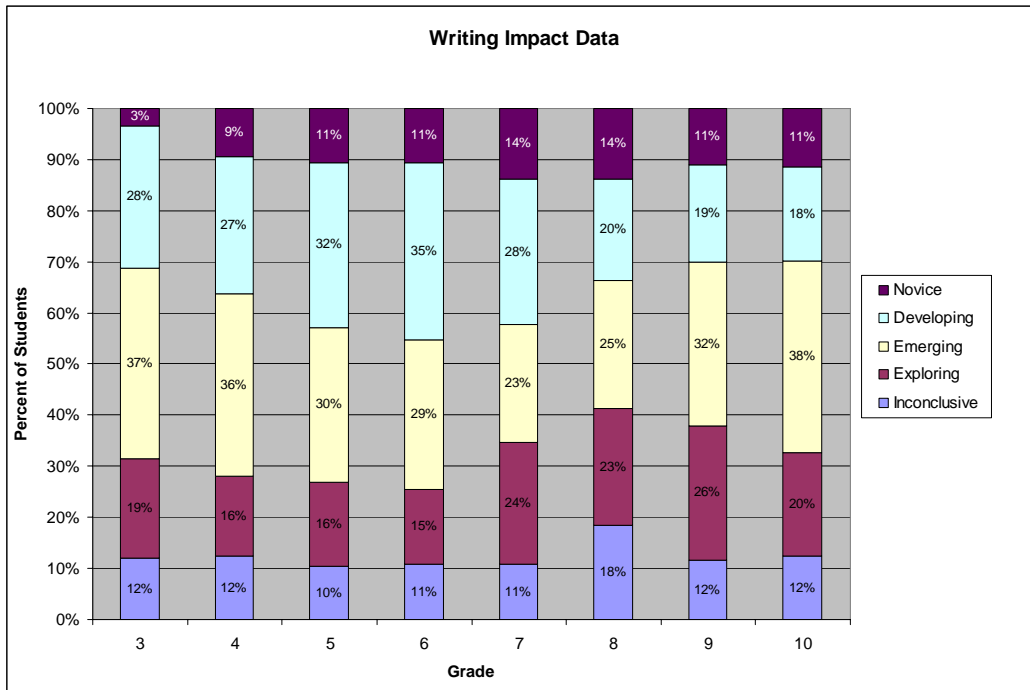


Figure 17
Mathematics Impact Data

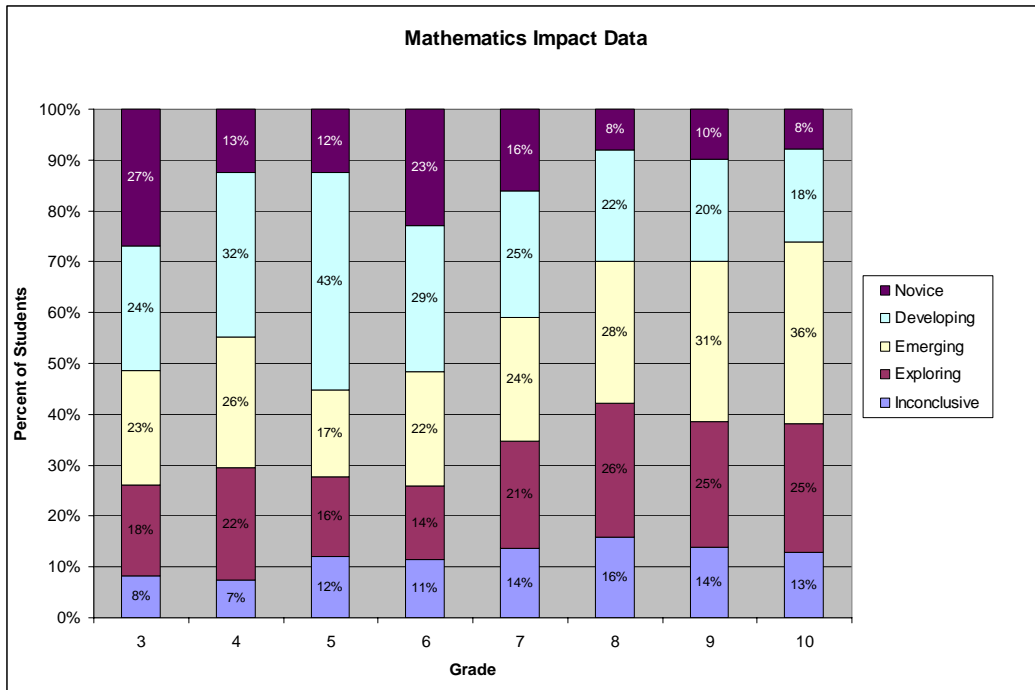


Figure 18
Science Impact Data

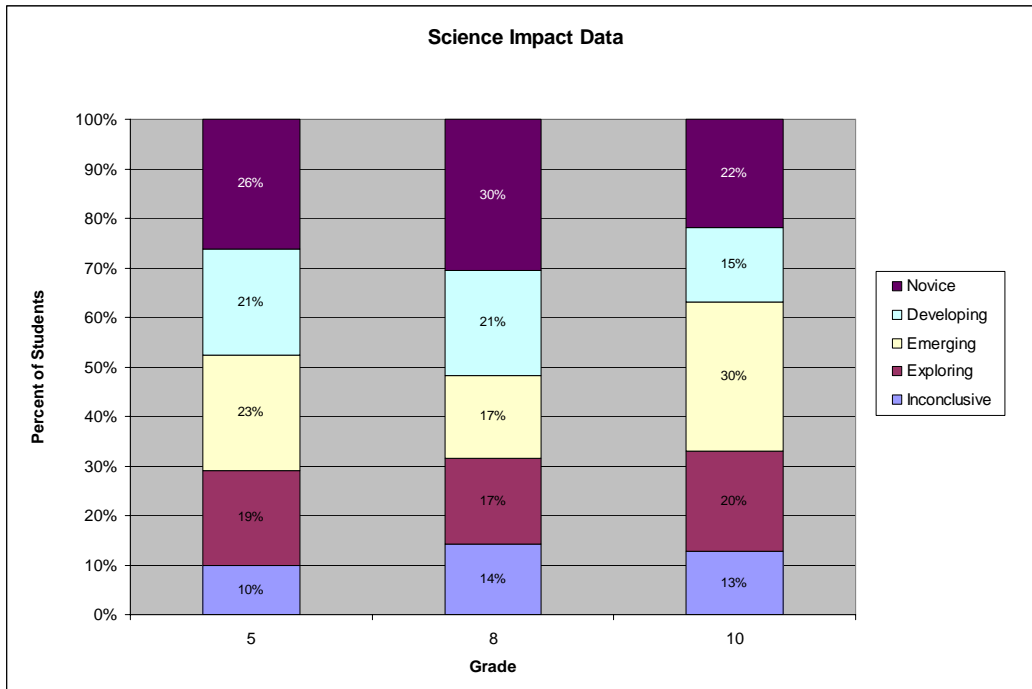


Figure 19
Impact Data – Developing and Novice Combined

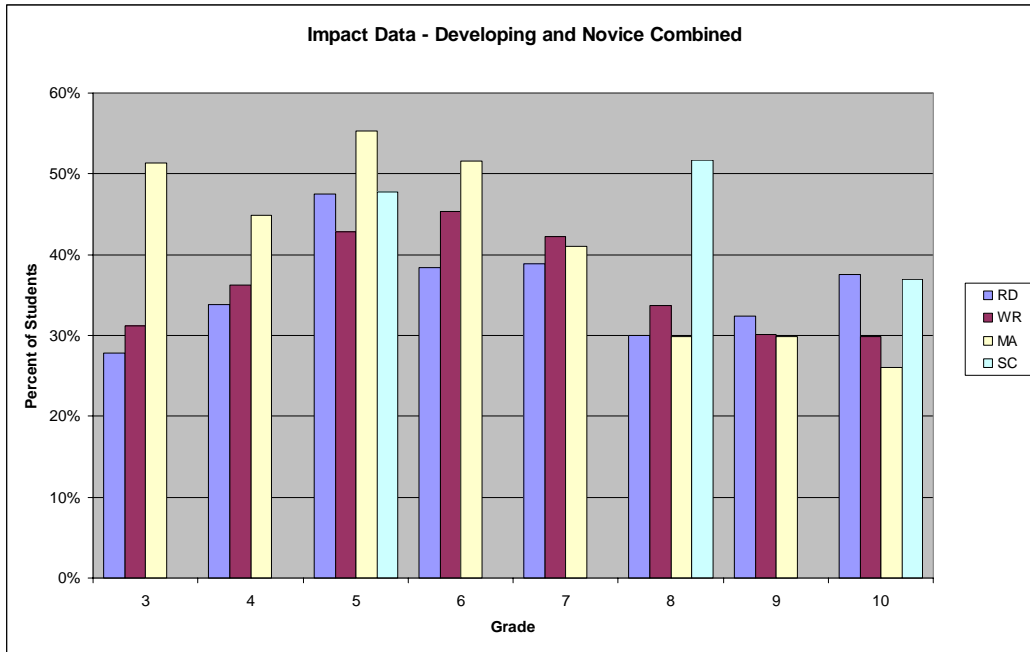


Figure 20
Total Number of Students Participating in CSAPA Reading 2008 and 2009

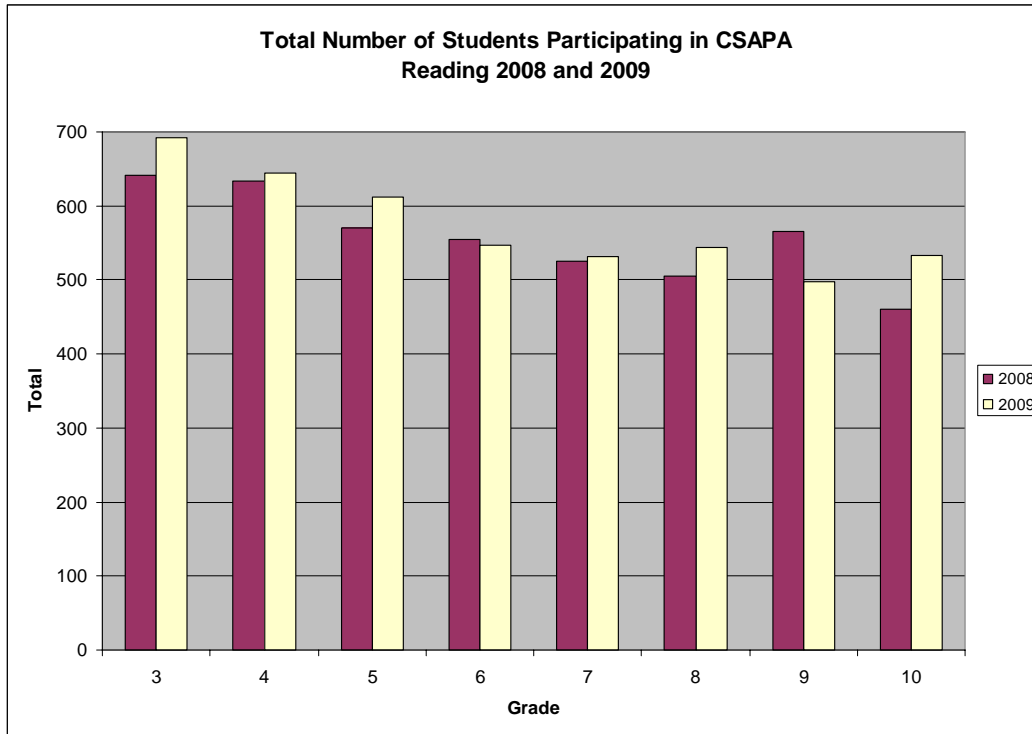


Figure 21
Total Number of Students Participating in CSAPA Writing 2008 and 2009

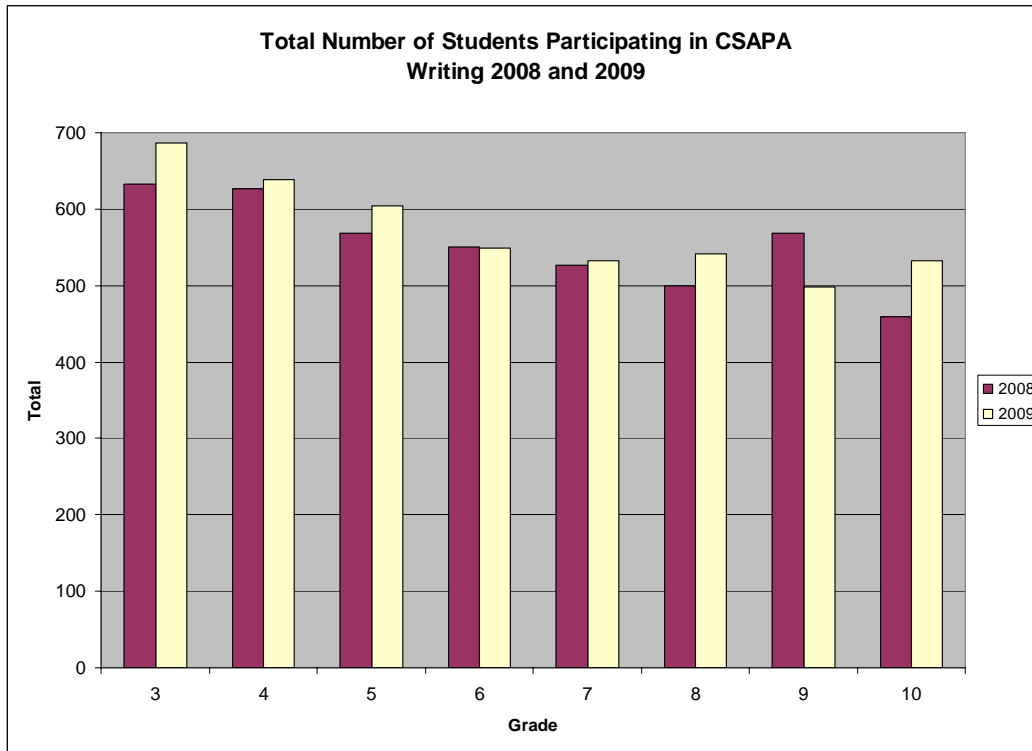


Figure 22
Total Number of Students Participating in CSAPA Mathematics 2007, 2008, and 2009

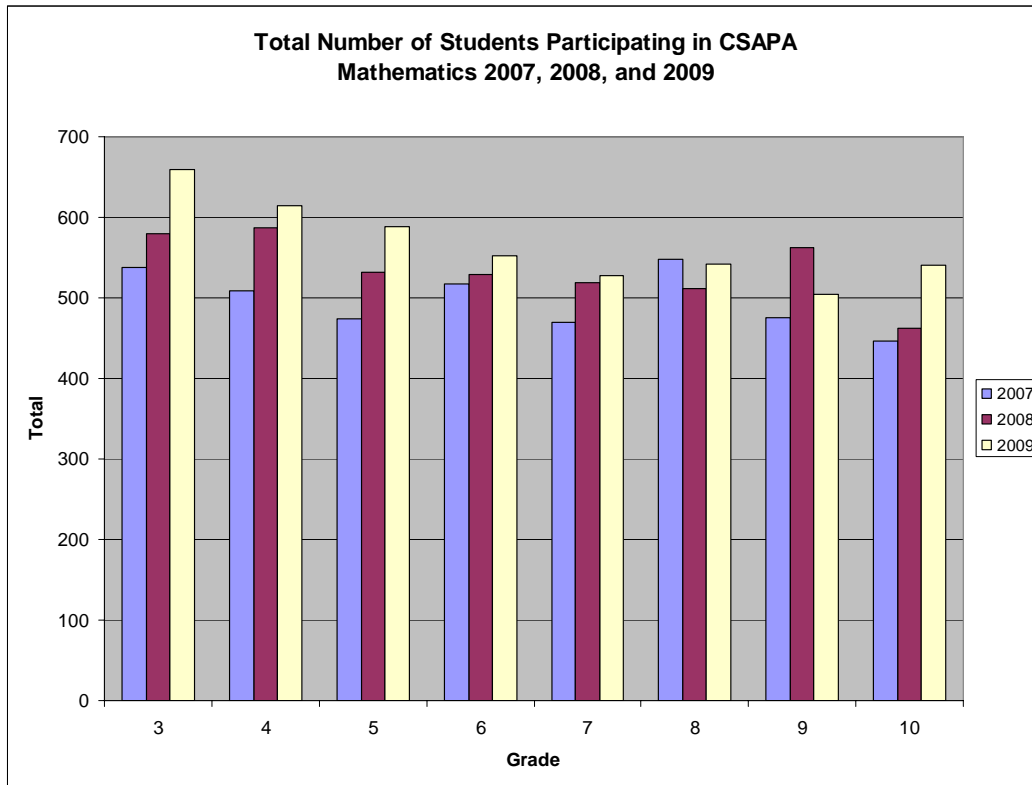


Figure 23
Total Number of Students Participating in CSAPA Science 2008 and 2009

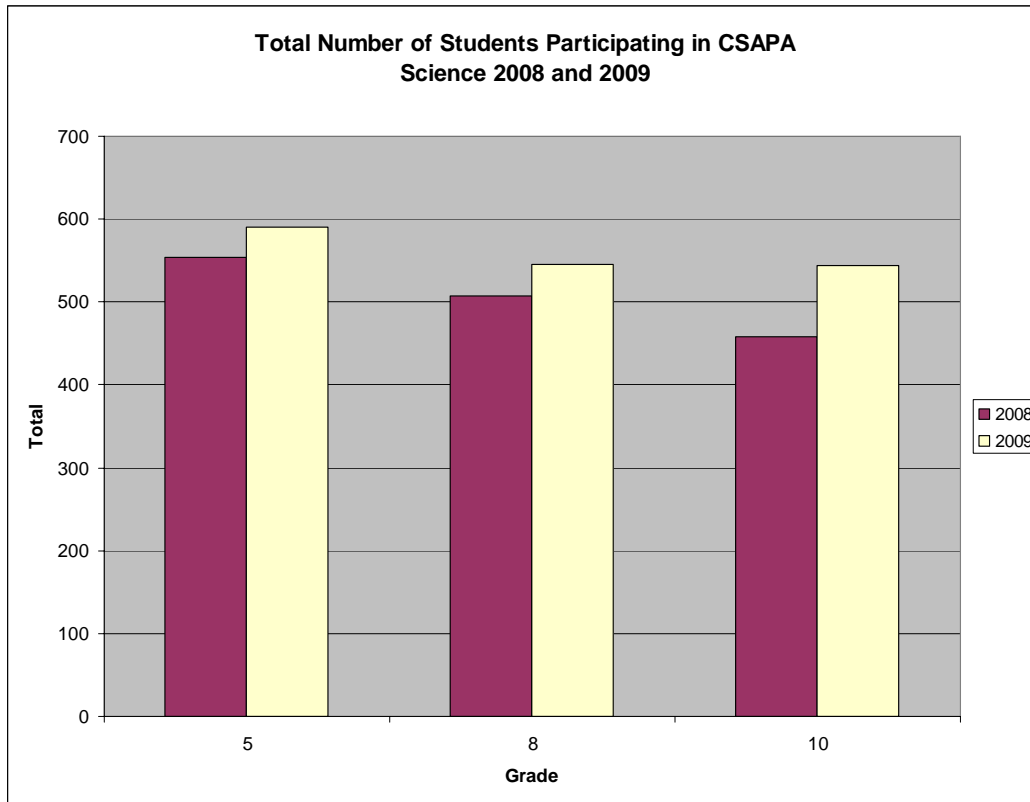


Figure 24
Mean Score as Percent of Total for Reading in 2008 and 2009

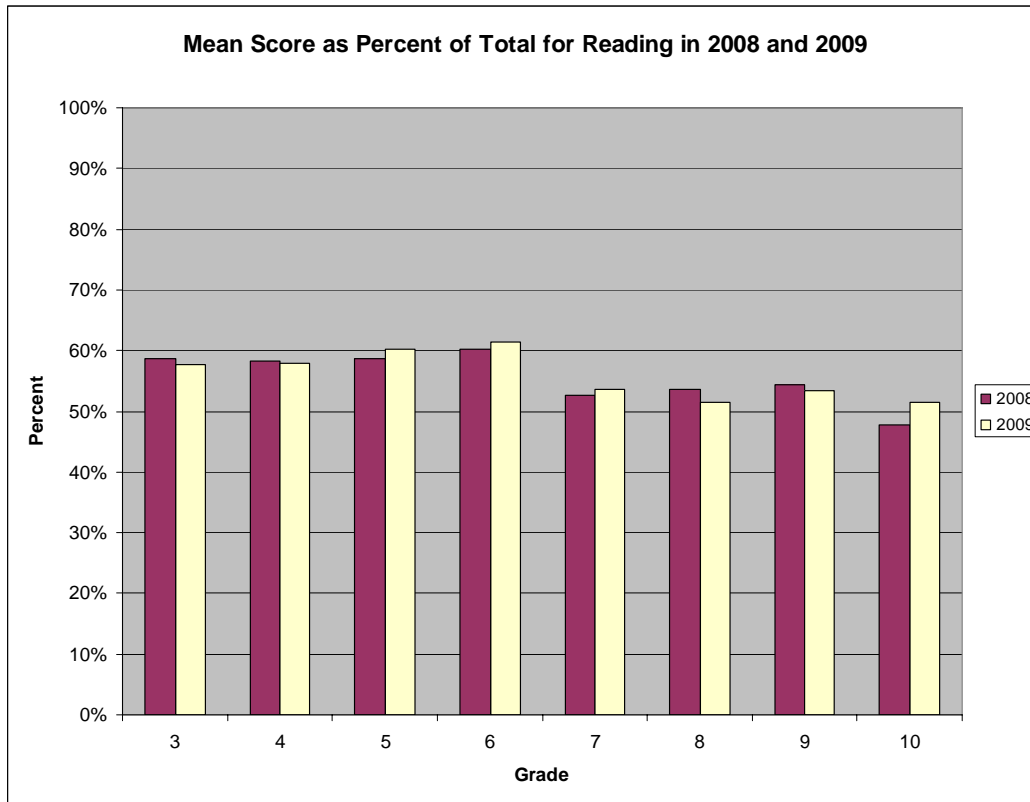


Figure 25
Mean Score as Percent of Total for Writing in 2008 and 2009

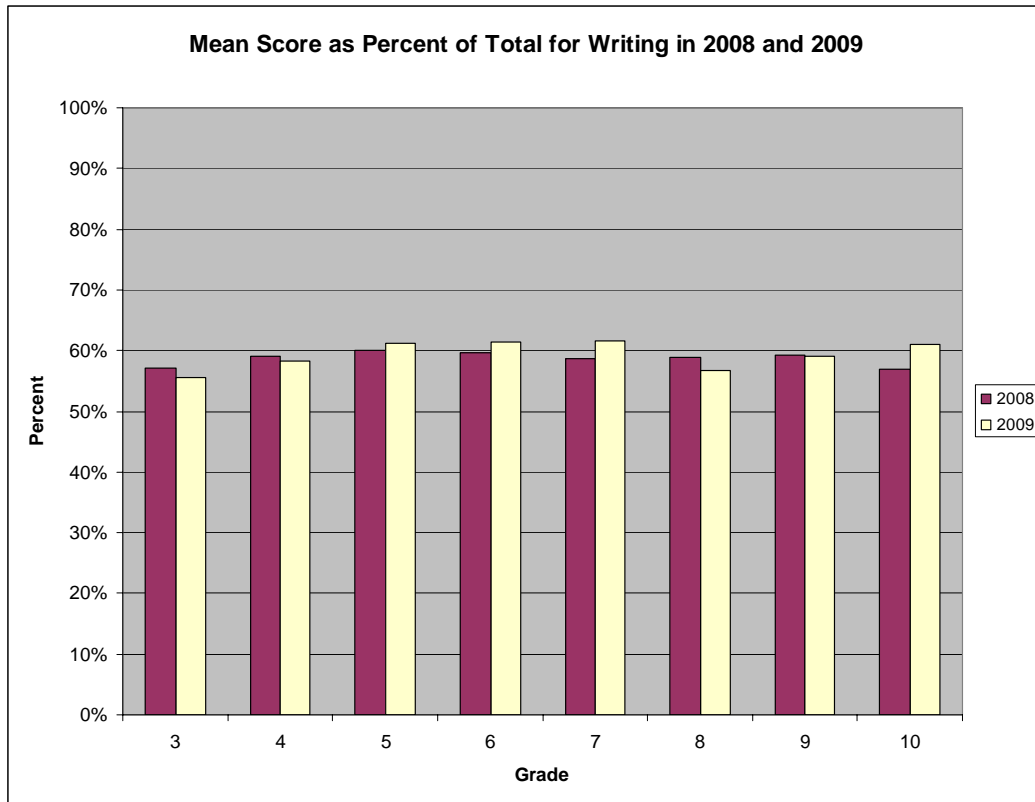


Figure 26
Mean Score as Percent of Total for Mathematics in 2007, 2008, and 2009

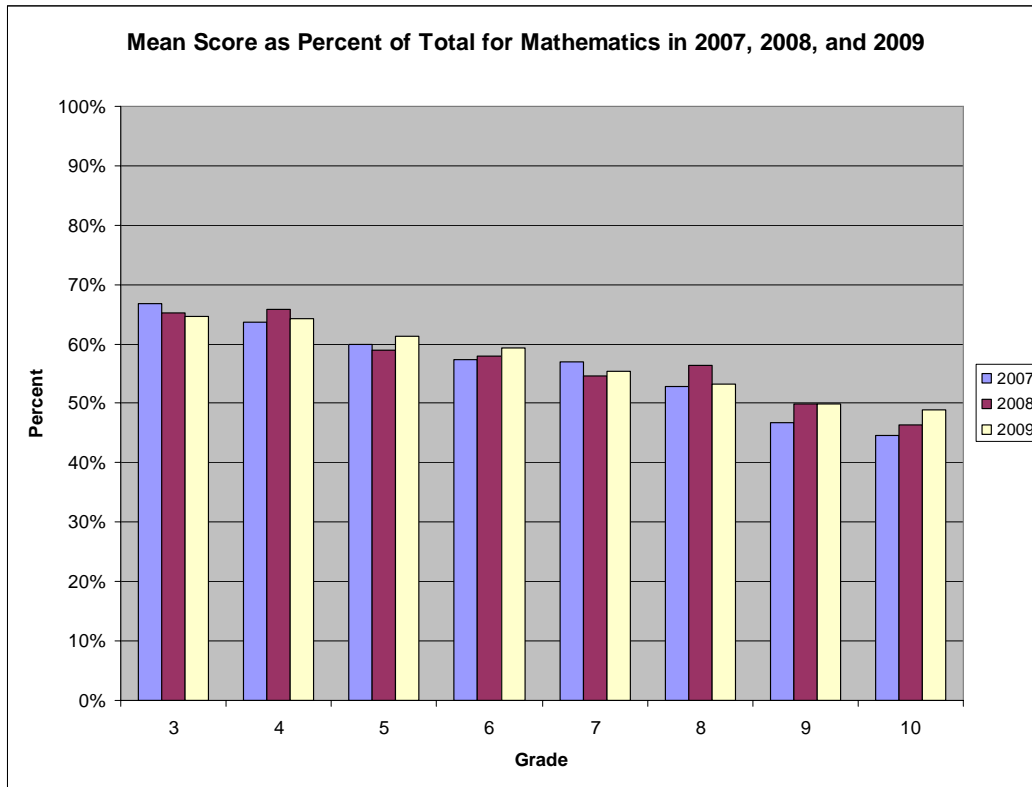


Figure 27
Mean Score as Percent of Total for Science in 2008 and 2009

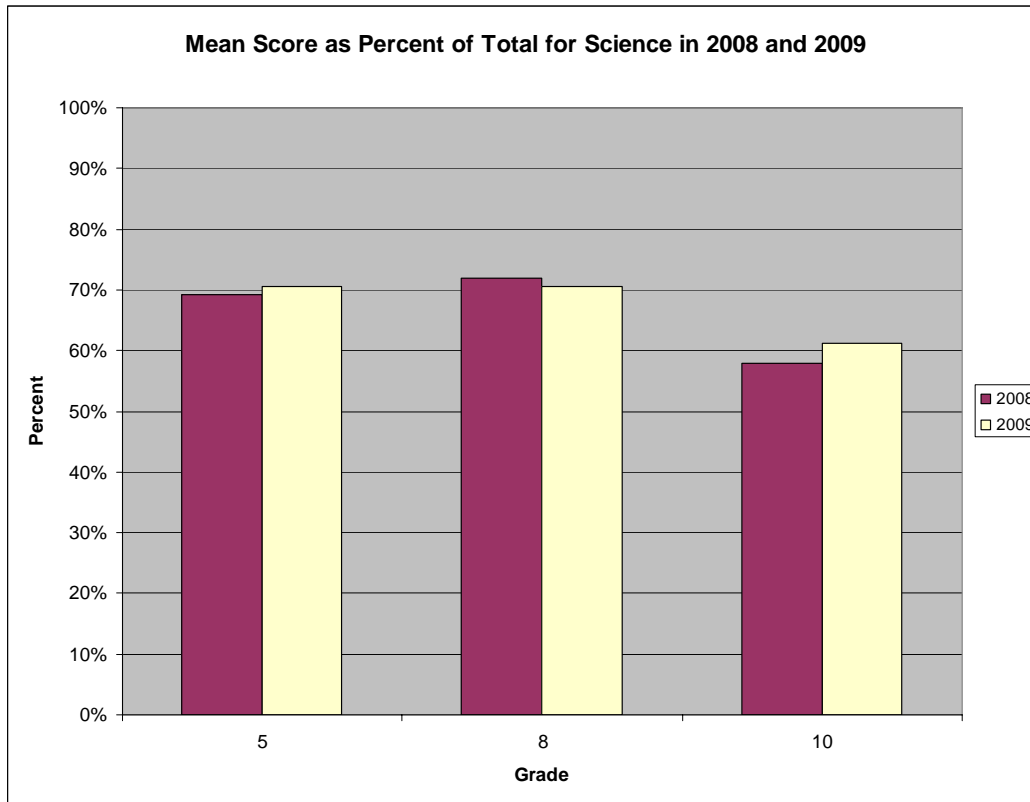


Figure 28
Percent of Participating Students by Coded Disability Longitudinally for Reading

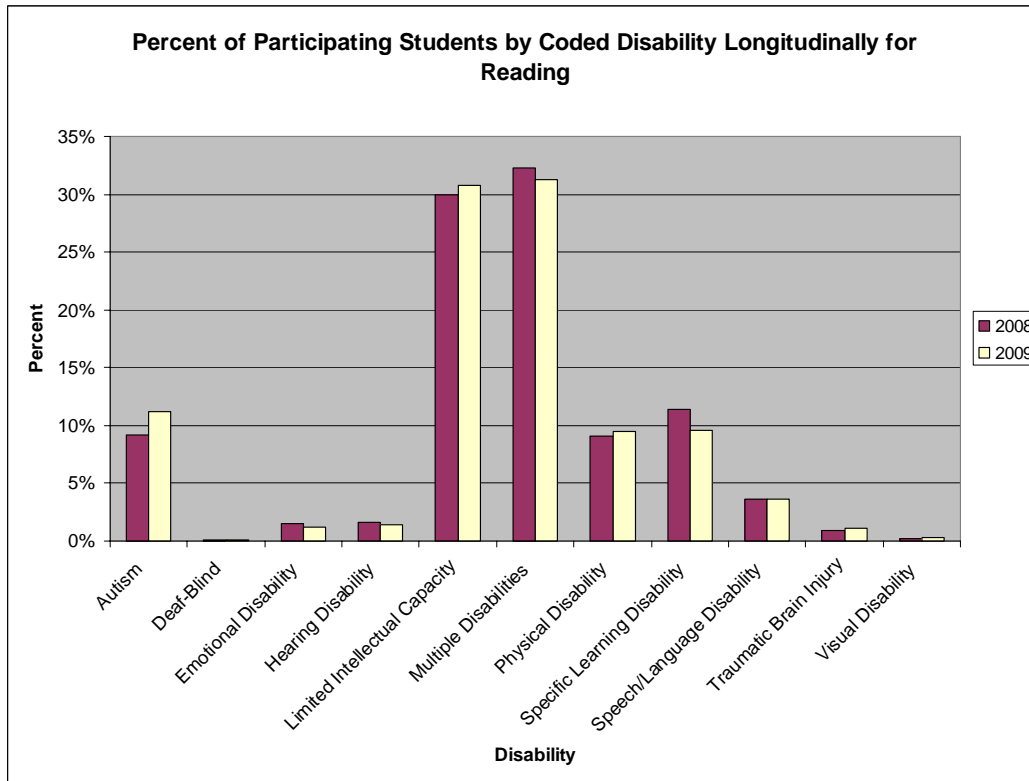


Figure 29
Percent of Participating Students by Coded Disability Longitudinally for Writing

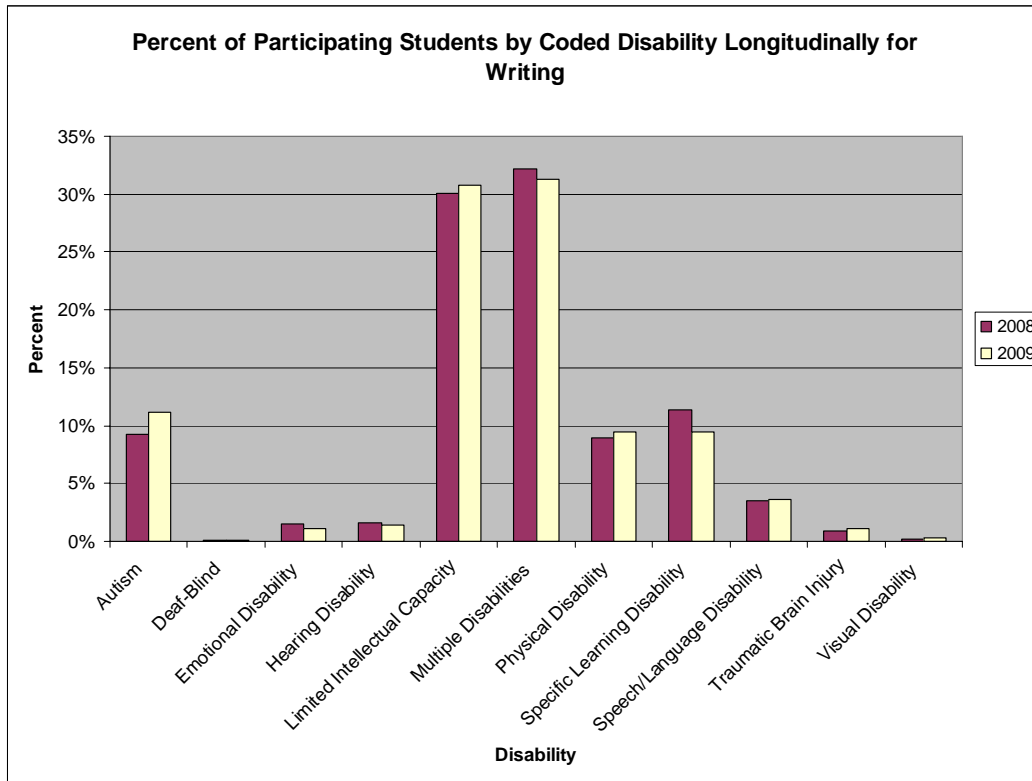


Figure 30
Percent of Participating Students by Coded Disability Longitudinally for Mathematics

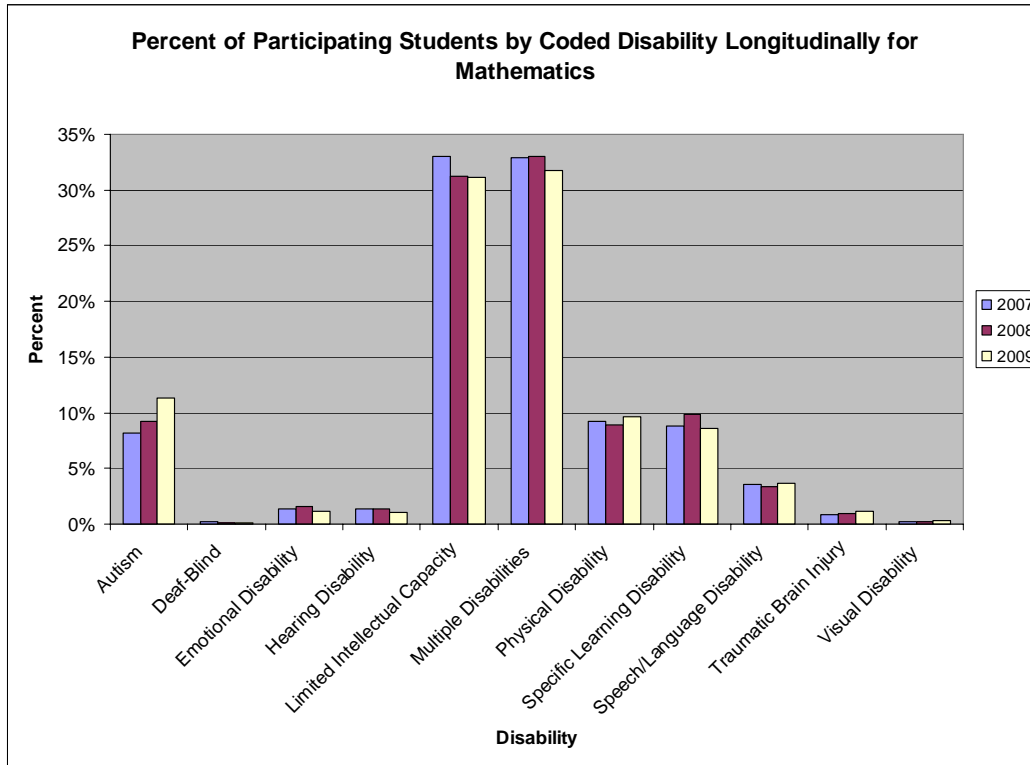
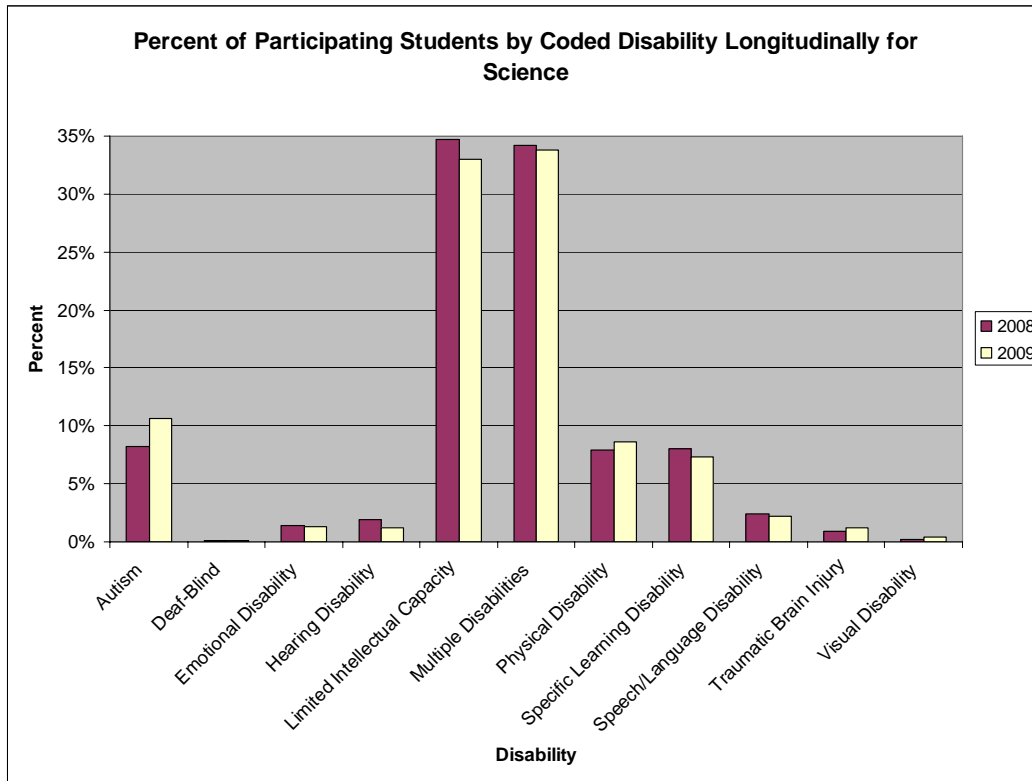


Figure 31
Percent of Participating Students by Coded Disability Longitudinally for Science



Appendix A

CSAPA Assessment Frameworks

The Colorado Student Assessment Program Alternate (CSAPA) Reading Assessment Framework

Standard 1: Students read and understand a variety of materials Expanded Benchmark: 1.0 Recognize and Make Meaning of Text (Students understand that text has meaning and use a variety of strategies to recognize and make meaning of unfamiliar text)								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Demonstrate understanding of symbolic representation					Understands meaning of environmental print	Understands meaning of environmental print		
	Differentiates a letter from pictures/symbol/objects	Differentiates a letter from pictures/symbol/objects	Differentiates a letter from pictures/symbol/objects	Differentiates a letter from pictures/symbol/objects	Differentiates a letter from pictures/symbol/objects	Differentiates a letter from pictures/symbol/objects	Differentiates a letter from pictures/symbol/objects	Differentiates a letter from pictures/symbol/objects
	Knows the capital letters	Knows the capital letters	Knows the lowercase and capital letters					
	Reads a word	Reads a word	Reads a simple sentence or word	Reads a simple sentence or word	Reads a simple sentence		Reads a simple sentence	Reads a simple sentence
						Adds prefixes and suffixes to create a new word from a familiar word	Adds prefixes and suffixes to create a new word from a familiar word	Uses knowledge of root word to decipher unfamiliar word Chooses suffix to create a new word from a familiar word

Standard 1: Students read and understand a variety of materials Expanded Benchmark: 1.0 Recognize and Make Meaning of Text (Students understand that text has meaning and use a variety of strategies to recognize and make meaning of unfamiliar text)								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Demonstrate understanding of beginning principles of phonics	Identifies the letter that makes a given sound	Identifies the letter that makes a given sound	Identifies the letter that makes a given sound	Identifies the letter that makes a given sound	Identifies the letter that makes a given sound	Identifies the letter that makes a given sound	Identifies the letter that makes a given sound	Identifies the letter that makes a given sound
	Identifies a word by the beginning sound or ending sound	Identifies a word by the beginning sound	Identifies the sound in the middle of a word Identifies a word by the ending sound	Identifies words by beginning or ending sounds	Identifies a word by the beginning sound Identifies a word by distinguishing between the ending consonant blend sounds	Identifies a word by distinguishing between the beginning and ending consonant blend sounds	Identifies a word by distinguishing between the beginning and ending consonant blend sounds	Identifies a word by distinguishing between the beginning and ending consonant blend sounds
	Understands that similar letter patterns make similar sounds	Understands slightly more complex letter patterns	Understands more complex letter patterns	Understands that complex letter patterns represent specific sounds	Understands vowel sounds are made up of more than one letter pattern	Understands that letters combine in words to create sounds	Understands that words are made up of letter patterns that represent sounds	Understands that some letter patterns represent the same sounds even though they are very different

Standard 1: Students read and understand a variety of materials Expanded Benchmark: 1.0 Recognize and Make Meaning of Text (Students understand that text has meaning and use a variety of strategies to recognize and make meaning of unfamiliar text)								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Use a variety of strategies to make meaning of text				Uses context to determine unknown words in a sentence	Uses context to determine unknown words in a sentence	Uses context to determine unknown words in a sentence	Uses context to determine the meaning of unknown words in a sentence	Uses context to determine the meaning of unknown words in a sentence
	Recognizes use of a familiar classroom object					Communicates meaning of familiar words		Communicates meaning by choosing correct order of events in a story
	Reads simple high frequency words	Reads simple high frequency words	Reads simple high frequency words	Reads simple high frequency words	Reads high frequency words	Reads high frequency words	Reads high frequency words	Reads high frequency words
		Understands source used to find the meaning of an unfamiliar word	Understands source used to find the meaning of an unfamiliar word	Understands resources to find necessary information		Understands source used to find the meaning of an unfamiliar word		
	Uses bold print, titles to comprehend text							
	Identifies prepositional sentence	Identifies prepositional sentence	Identifies prepositional sentence	Identifies prepositional sentence	Identifies prepositional sentence			
		Understands figurative language	Understands figurative language					Identifies meaning of sentence that has figurative language
					Understands the meaning of a message in quotes		Understands the meaning of a message in quotes	Understands the meaning of a message in quotes

Standard 1: Students read and understand a variety of materials Expanded Benchmark: 2.0 Comprehend Reading Passage/Selection (Students use a variety of comprehension strategies before, during, and after reading)								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Make connections to reading passage				Identifies object in picture that relates to the reading passage				
	Makes a prediction about an event in an informational article	Makes a prediction about an event in a story	Makes a prediction about an event in a story Makes inferences about events in a story Draws conclusions about what will happen next in a given series of events	Makes a prediction about the use of an object presented as text Makes an inference about a character's action	Makes a prediction about an event discussed in an informational article Makes an inference to explain why something happens	Makes a prediction about an action in a story Makes an inference about a character in a story Draws a conclusion after reading an informational article	Makes a prediction directly related to an informational article Makes an inference about a character's action Draws a conclusion after reading an informational article	Makes a series of predictions related to a story
	Identifies a picture that matches a word in the sentence Identifies a picture that matches a sentence	Identifies a picture that matches a sentence Identifies a descriptive word that relates to a sentence	Identifies a labeled picture that matches a more complex sentence	Uses pictures to relate information about a story Uses vocabulary to substitute for a word in sentence	Uses pictures to relate information about a story	Uses pictures and/or vocabulary to relate information about a story	Uses vocabulary and pictures to relate information about a story	Uses vocabulary to relate information about a story

Standard 1: Students read and understand a variety of materials Expanded Benchmark: 2.0 Comprehend Reading Passage/Selection (Students use a variety of comprehension strategies before, during, and after reading)								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Identify elements of literature (character, plot, setting)	Understands who is telling a story			Understands where a story happens			Understands why a character feels a certain way	Understands a character's reason for action
		Identifies main character		Identifies main character				Identifies main character
			Communicates details about main character		Communicates details about main character	Communicates details about main character		
			Relates an event in a story	Relates an event in a story				
	Relates ending sequence of events in a story	Relates ending sequence of events in a story	Chooses ending sequence of events in a story		Relates sequence of events in a story		Relates sequence of events in a story	
			Identifies the solution to a problem in a story		Identifies the problem in a story	Identifies the solution to a problem in a story	Identifies the solution to a problem in a story	
	Identifies the setting of a story	Identifies the setting of a story				Identifies the setting of a story		Identifies the setting of a story
		Identifies cause and effect			Identifies cause and effect			
	Identifies main idea of the story	Identifies main idea of the story	Identifies supporting details related to the story	Identifies character elements Identifies main idea of the story		Identifies main idea of the story	Identifies the main idea of the story	Identifies character elements Identifies the main idea of the story

Standard 4: Students apply thinking skills to their reading, writing, speaking, listening, and viewing Expanded Benchmark: 3.0 Interact with a variety of texts (Students understand a variety of text, including literary, informational, and functional texts. Students read for a variety of purposes)								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Demonstrate knowledge that various texts have different purposes	Understands use of variety of texts	Understands use of variety of texts	Understands use of variety of texts	Uses a variety of texts for finding relevant information	Uses a variety of texts for finding relevant information	Uses a variety of texts for finding relevant information	Identifies resources to find more information about a topic	Identifies resources to find more information about a topic
			Identifies purpose in a variety of literary genre			Identifies purpose in a variety of literary genre		
		Identifies the difference between fiction and non-fiction	Identifies the difference between fiction and non-fiction				Identifies the difference between fiction and non-fiction	Identifies the difference between fiction and non-fiction
	Distinguishes between fact and opinion			Distinguishes between fact and opinion	Distinguishes between fact and opinion	Distinguishes between fact and opinion	Identifies between fact and opinion	Identifies between fact and opinion
		Identifies author's purpose for writing	Identifies author's purpose for writing	Identifies author's purpose for writing	Identifies author's purpose for writing	Identifies author's purpose for writing		
	Identifies author's point of view or feelings about a person or event	Identifies author's point of view or feelings about a person or event		Identifies author's point of view or feelings about a person or event	Identifies author's point of view or feelings about a person or event	Identifies author's point of view or feelings about a person or event	Identifies author's point of view or feelings about a person or event	Identifies author's point of view or feelings about a person or event

Standard 4: Students apply thinking skills to their reading, writing, speaking, listening and viewing Expanded Benchmark: 3.0 Interact with a variety of texts (Students understand a variety of text, including literary, informational and functional texts. Students read for a variety of purposes)								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Identifies a variety of resources Relates and sorts information (details) about a specific topic or purpose of a reading passage	Identifies a variety of resources	Identifies a variety of resources	Identifies a variety of resources		Identifies a variety of resources		Identifies a variety of resources	
	Relates and sorts information (details) about a specific topic or purpose of a reading passage	Relates and sorts information (details) about a specific topic or purpose of a reading passage	Relates and sorts information (details) about a specific topic or purpose of a reading passage	Relates and sorts information (details) about a specific topic or purpose of a reading passage	Identifies and sorts information (details) about a specific topic or purpose of a reading passage	Identifies and sorts information (details) about a specific topic or purpose of a reading passage	Identifies and sorts information (details) about a specific topic or purpose of a reading passage	
					Uses directions given to complete a simple statement based on context	Understands order of directions as given	Understands order of directions as given	
							Asks appropriate question to clarify directions	
		Recognizes similarities between different sources of information	Recognizes similarities between different sources of information		Recognizes similarities between different sources of information	Recognizes similarities between different sources of information	Understands similarities between different sources of information	

The Colorado Student Assessment Program Alternate (CSAPA) Writing Assessment Framework

Standard 2: Students write and speak for a variety of purposes and audiences Expanded Benchmark: 1.0 Generate topics and develop ideas by creating a document for a variety of purposes and audiences for the purpose of publication								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Demonstrate an understanding that writing communicates a message					Writes to communicate meaning	Writes to communicate meaning	Writes to communicate meaning	Writes to communicate meaning
	Arranges pictures/symbols to tell story	Arranges pictures/symbols to tell story	Arranges pictures/symbols to tell story	Chooses a picture that belongs at the end of a story	Chooses a sentence that belongs at the end of a story	Chooses a sentence that belongs at the end of a story	Chooses a picture that belongs at the end of a story	Chooses a picture that belongs at the end of a story
	Knows the correct orientation (right side up, left to right)	Knows the correct orientation (right side up, left to right)	Knows the correct orientation (right side up, left to right)	Knows the correct orientation (right side up, left to right)	Knows the correct orientation (right side up, left to right)	Knows the correct orientation (right side up, left to right)	Knows the correct orientation (right side up, left to right)	Knows the correct orientation (right side up, left to right)
	Writes first name	Writes first name	Writes first name	Writes first name	Writes first name	Writes first name	Writes first and last name	Writes first and last name
Organize writing to create a draft document	Organizes writing so there is a logical sequence	Organizes writing so there is a logical sequence	Organizes writing so there is a logical sequence	Organizes writing so there is a logical sequence	Organizes writing so there is a logical sequence	Organizes writing so there is an introduction	Organizes writing so there is a conclusion	Organizes writing so there is an introduction
	Chooses key points to include in writing	Chooses key points to include in writing	Chooses key points to include in writing	Chooses key points to include in writing	Chooses key points to include in writing	Chooses key points to include in writing	Chooses key points to include in writing	Chooses key points to include in writing
	Writes a simple sentence or a word	Writes a simple sentence or a word	Writes a simple sentence	Writes a simple sentence	Writes a simple sentence	Writes a sentence	Writes a sentence	Writes a complex sentence

Standard 3: Students write and speak using conventional grammar, usage sentence structure, punctuation, capitalization, and spelling Expanded Benchmark: 2.0 Use appropriate conventions, mechanics, and format to create a readable and legible written product									
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	
Use systematic conventions to make written product understandable by others	Spells by completing a word with a missing letter	Spells by completing a word with a missing letter	Spells by completing a word with a missing letter	Identifies the missing letter from a word	Identifies the missing letter from a word	Identifies the missing letters from a word	Identifies the missing letters from a word	Identifies the missing letters from a word	
	Identifies correct capitalization	Identifies correct capitalization	Identifies correct punctuation	Identifies correct punctuation	Identifies correct punctuation	Identifies correct punctuation		Identifies correct capitalization and punctuation	
	Writes a letter	Writes a letter	Writes a letter	Writes a letter	Writes a letter	Writes a letter	Writes a letter	Writes a letter	
	Identifies the proper spacing of a sentence Identifies standard English usage rules	Identifies the correct way to write a number Identifies standard English usage rules	Identifies the correct way to write a number Identifies standard English usage rules	Identifies the correct way to write a number Identifies standard English usage rules	Identifies the correct way to write a number Identifies standard English usage rules	Identifies the correct way to write a number Identifies standard English usage rules	Identifies the correct way to write a number Chooses standard English usage rules	Understands text organization	Understands text organization
						Selects the resource to use for a report	Selects the resource to use for a report		
								Chooses a resource to include in a bibliography	Chooses a resource to include in a bibliography

Standard 3: Students write and speak using conventional grammar, usage sentence structure, punctuation, capitalization and spelling Expanded Benchmark: 2.0 Use appropriate conventions, mechanics and format to create a readable and legible written product									
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	
Apply elements of writing through appropriate word usage	Maintains appropriate tense throughout text	Maintains appropriate tense throughout text	Maintains appropriate tense throughout text	Maintains appropriate tense throughout text	Maintains appropriate tense throughout text	Maintains appropriate tense throughout text	Maintains appropriate tense throughout text	Maintains appropriate tense throughout text	
	Uses correct modifier to complete a sentence	Uses correct modifier to complete a sentence	Uses correct modifier to complete a sentence	Uses correct modifier to complete a sentence	Uses correct modifier to complete a sentence	Uses correct modifier to complete a sentence	Uses correct modifier to complete a sentence	Uses correct modifier to complete a sentence	
	Identifies parts of speech (nouns, verbs, etc.)	Identifies parts of speech (nouns, verbs, etc.)	Identifies parts of speech (nouns, verbs, etc.)	Identifies parts of speech (nouns, verbs, etc.)	Identifies parts of speech (nouns, verbs, etc.)	Identifies parts of speech (nouns, verbs, etc.)	Identifies parts of speech (nouns, verbs, etc.)	Identifies parts of speech (nouns, verbs, etc.)	
	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation	Writes a complete sentence using subject/verb agreement, correct capitalization and correct punctuation
	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs	Understands that sentences are made up of nouns and verbs

Standard 3: Students write and speak using conventional grammar, usage sentence structure, punctuation, capitalization and spelling								
Expanded Benchmark: 2.0 Use appropriate conventions, mechanics and format to create a readable and legible written product								
Critical Concept	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Edit a written product using legible handwriting/word processor for publication	Corrects an underlined word	Corrects an underlined word	Corrects an underlined word	Corrects an underlined word	Corrects an underlined word	Corrects an underlined word	Corrects an underlined word	Corrects an underlined word
	Chooses correct use of upper and lower case letters	Chooses correct use of upper and lower case letters	Chooses correct use of upper and lower case letters	Chooses correct way to write a sentence	Chooses correct way to write a sentence	Chooses correct way to write a sentence	Chooses correct way to write a sentence	Chooses correct way to write a sentence
	Copies a word neatly on a line	Copies a word neatly on a line	Copies a word neatly on a line	Copies a word neatly on a line				
	Understands that sentences begin with a capital letter	Understands that sentences begin with a capital letter	Understands that sentences begin with a capital letter	Understands that sentences begin with a capital letter	Understands that sentences begin with a capital letter	Understands that sentences begin with a capital letter	Understands that sentences begin with a capital letter	Chooses the sentence that has the correct capital letters

The Colorado Student Assessment Program Alternate (CSAPA) Mathematics Assessment Frameworks

NUMBER SENSE							
Standard 1: Students develop number sense and use numbers and number relationships in problem-solving situations and communicate the reasoning used in solving these problems.							
Critical Concept 1: Counts, represents quantities, reads and writes numbers							
Grade 3	Grade 4	Grade 5*	Grade 6	Grade 7	Grade 8*	Grade 9	Grade 10*
Demonstrates the concept of one	Demonstrates the concept of one	Demonstrates the concept of one					
Knows when groups of objects are more or less	Knows when groups of objects are more or less	Knows when groups of objects are more or less					
Estimates an appropriate number for a quantity up to 10	Estimates an appropriate number for a quantity up to 10	Estimates an appropriate number for a quantity up to 20	Estimates an appropriate number for a quantity up to 25	Estimates an appropriate number for a quantity up to 30	Estimates an appropriate number for a quantity up to 30	Estimates an appropriate number for a quantity up to 40	Estimates an appropriate number for a quantity up to 40
Counts to 10	Counts to 12	Counts to 20	Counts to 25	Counts to 30	Counts to 35	Counts to 40	Counts to 45
		Counts forward from a given number (up to 20)	Counts forward from a given number (up to 25)	Counts forward from a given number (up to 30)	Counts forward from a given number (up to 35)	Counts forward from a given number (up to 40)	Counts forward from a given number (up to 45)
Recognizes numerals (up to 10)	Recognizes numerals (up to 12)	Recognizes numerals (up to 20)					
Demonstrates an understanding of a numeral and the quantity it represents (up to 10)	Demonstrates an understanding of a numeral and the quantity it represents (up to 12)	Demonstrates an understanding of a numeral and the quantity it represents (up to 20)					

NUMBER SENSE (continued)							
Standard 1: Students develop number sense and use numbers and number relationships in problem-solving situations and communicate the reasoning used in solving these problems.							
Critical Concept 1: Counts, represents quantities, reads and writes numbers							
Grade 3	Grade 4	Grade 5*	Grade 6	Grade 7	Grade 8*	Grade 9	Grade 10*
Writes/creates a single digit number (from 1-5)	Writes/creates a single digit number (from 6-9)	Writes/creates a two digit number (from 12-20)	Writes/creates a two digit number (from 21-25)	Writes/creates a two digit number (from 26-30)	Writes/creates a three digit number (in the 100s)	Writes/creates a three digit number (in the 200s)	Writes/creates a three digit number (in the 300s)
Understands which number is greater than/less than (up to 10)	Understands which number is greater than/less than (up to 12)	Understands which number is greater than/less than (up to 20)	Understands which number is greater than/less than (up to 25)				
		Demonstrates an understanding of ones and tens place value in numbers up to 20	Demonstrates an understanding of ones and tens place value in numbers up to 25	Demonstrates an understanding of ones and tens place value in numbers up to 30	Demonstrates an understanding of ones and tens place value in numbers up to 35	Demonstrates an understanding of ones and tens place value in numbers up to 40	Demonstrates an understanding of ones and tens place value in numbers up to 45
		Reads a number sentence (adding/subtracting numbers up to 20)	Reads a number sentence (adding/subtracting numbers up to 25)	Reads a number sentence (adding/subtracting numbers up to 30)			
					Produces a number sentence (addition/subtraction only with sets up to 35)	Produces a number sentence (any operator and sets up to 40)	Produces a number sentence (any operator and sets up to 45)
			Demonstrate an understanding of a whole unit	Identifies 1/2	Identifies 1/4	Identifies 1/3	Identifies 3/4
		Skip counts by 2s to 20			Skip counts by 5s to 35		Skip counts by 10s to 40

ALGEBRAIC METHODS							
Standard 2: Students use algebraic methods to explore, model, and describe patterns and functions involving numbers, shapes, data, and graphs in problem-solving situations and communicate the reasoning used in solving these problems.							
Critical Concept 2: Identifies, describes, and creates patterns to solve problems							
Grade 3	Grade 4	Grade 5*	Grade 6	Grade 7	Grade 8*	Grade 9	Grade 10*
Reproduces a repeated event (3 times)	Reproduces a repeated event (3 times)	Reproduces a repeated event (3 times)					
Extend a repeating pattern by one element	Extend a repeating pattern by one element	Extend a repeating pattern by two elements	Extend a repeating pattern by two elements	Extend a repeating pattern by three elements	Extend a repeating pattern by three elements	Extend a repeating pattern by four elements	Extend a repeating pattern by four elements
Finds and supplies 1 missing element in a repeating pattern	Finds and supplies 1 missing element in a repeating pattern	Finds and supplies 1 missing element in a repeating pattern	Finds and supplies 2 missing elements in a repeating pattern	Finds and supplies 2 missing elements in a repeating pattern	Finds and supplies 3 missing elements in a repeating pattern	Finds and supplies 3 missing elements in a repeating pattern	Finds and supplies 3 missing elements in a repeating pattern
Extends a growing geometric pattern by supplying the next element	Extends a growing geometric pattern by supplying the next element	Extends a growing geometric pattern by supplying the next element	Extends a growing geometric pattern by supplying the next element	Extends a growing numeric pattern by supplying the next element	Extends a growing numeric pattern by supplying the next element	Extends a growing numeric pattern by supplying the next element	Extends a growing numeric pattern by supplying the next element
		Finds and supplies a missing element in a growing geometric pattern	Finds and supplies a missing element in a growing geometric pattern	Finds and supplies a missing element in a growing numeric pattern	Finds and supplies a missing element in a growing numeric pattern	Finds and supplies a missing element in a growing numeric pattern	Finds and supplies a missing element in a growing numeric pattern
		Describes a growing geometric pattern	Describes a growing geometric pattern	Describes a growing numeric pattern	Describes a growing numeric pattern	Describes a growing numeric pattern	Describes a growing numeric pattern
				Identifies the relationship between variables	Identifies the relationship between variables	Identifies the relationship between variables	Identifies the relationship between variables
				Given a numerical relationship between two variables, finds the value of one given the other	Given a numerical relationship between two variables, finds the value of one given the other	Given a numerical relationship between two variables, finds the value of one given the other	Given a numerical relationship between two variables, finds the value of one given the other

DATA & PROBABILITY							
Standard 3: Students use data collection and analysis, statistics, and probability in problem-solving situations and communicate the reasoning used in solving these problems.							
Critical Concept 3: Displays and analyzes data							
Grade 3	Grade 4	Grade 5*	Grade 6	Grade 7	Grade 8*	Grade 9	Grade 10*
Displays two categories on a bar graph	Displays three categories on a bar graph	Displays four categories on a bar graph	Displays five categories on a bar graph	Places two data points on a line graph	Places three data points on a line graph	Places four data points on a line graph	Places five data points on a line graph
Determines which category has the most/least	Determines which category has the most/least	Determines which category has the most/least	Determines which category has the most/least				
Interprets data on a graph or table	Interprets data on a graph or table	Interprets data on a graph or table	Interprets data on a graph or table	Interprets data on a graph or table	Interprets data on a graph or table	Interprets data on a graph or table	Interprets data on a graph or table
Uses data to solve a problem	Uses data to solve a problem	Uses data to solve a problem	Uses data to solve a problem	Uses data to solve a problem	Uses data to solve a problem	Uses data to solve a problem	Uses data to solve a problem
					Understands characteristics of a graph	Understands characteristics of a graph	Understands characteristics of a graph
			Predicts an outcome based on available information	Predicts an outcome based on available information from graph	Predicts an outcome based on available information from graph	Predicts an outcome based on available information from graph	Predicts an outcome based on available information from graph
Displays up to 2 data categories on a table	Displays up to 3 data categories on a table	Displays up to 4 data categories on a table	Collects and records information about chance events	Collects and records data (up to 5 categories on a table)	Collects and records data (up to 5 categories on a table)	Collects and records data (up to 5 categories on a table)	Collects and records data (up to 5 categories on a table)

GEOMETRIC CONCEPTS							
Standard 4: Students use geometric concepts, properties, and relationships in problem-solving situations and communicate the reasoning used in solving these problems.							
Critical Concept 4: Identifies, sorts, and matches geometric shapes							
Grade 3	Grade 4	Grade 5*	Grade 6	Grade 7	Grade 8*	Grade 9	Grade 10*
Sorts 2 objects by shape (circle, square, triangle)	Sorts 3 objects by shape (circle, square, triangle)	Sorts 4 objects by size and shape (circle, square, triangle, rectangle, oval, trapezoid)				Identify angles of a triangle (acute, obtuse, right)	Identify angles of a triangle (acute, obtuse, right)
Identifies 2-dimensional shapes (circle, square, triangle)	Identifies 2-dimensional shapes (circle, square, triangle)	Identifies 2-dimensional shapes (rectangle, oval, trapezoid)	Identifies 2-dimensional shapes (rhombus, pentagon, oval)	Identifies 3-dimensional shapes (cube, sphere, cylinder)	Identifies 3-dimensional shapes (cone, pyramid, prism)	Identifies geometric properties of 3-dimensional shapes	Identifies geometric properties of 3-dimensional shapes
Identifies shapes in nontypical display (circle, square, triangle)	Identifies shapes in nontypical display (circle, square, triangle)	Identifies shapes in nontypical display (rectangle, oval, trapezoid)	Identifies shapes in nontypical display (rhombus, pentagon, oval)				
Identifies shapes in environments (circle, square, triangle)	Identifies shapes in environments (circle, square, triangle)	Identifies shapes in environments (rectangle, oval, trapezoid)	Identifies shapes in environments (rhombus, pentagon, oval)				
				Identifies two dimensional shapes in a three dimensional object (cube, cylinder)	Identifies two dimensional shapes in a three dimensional object (cone, pyramid, prism)	Identifies two dimensional shapes in a three dimensional object	Identifies two dimensional shapes in a three dimensional object
Matches 2 shapes to picture (circle, square, triangle)	Matches 3 shapes to picture (circle, square, triangle)	Matches 4 shapes to picture (rectangle, oval, trapezoid)					
Discriminates shapes (circle, square, triangle) by size (bigger, smaller, the same)	Discriminates shapes (circle, square, triangle) by size (bigger, smaller, the same)	Discriminates shapes (rectangle, oval, trapezoid) by size (bigger, smaller, the same)			Determines if two lines are congruent	Determines if two lines are congruent	Determines if two lines are congruent
			Differentiates between lines and curves	Differentiates between lines and curves	Differentiates between lines and curves		
			Places shapes together to make another shape (circle, square, triangle)	Places shapes together to make another shape (circle, square, triangle, rectangle)	Places shapes together to make another shape (circle, square, triangle, rectangle)	Places shapes together to make another shape (circle, square, triangle, rectangle)	Places shapes together to make another shape (cone, pyramid, cylinder, cube, prism)

MEASUREMENT							
Standard 5: Students use a variety of tools and techniques to measure, apply the results in problem-solving situations, and communicate the reasoning used in solving these problems.							
Critical Concept 5: Applies a variety of measurement skills							
Grade 3	Grade 4	Grade 5*	Grade 6	Grade 7	Grade 8*	Grade 9	Grade 10*
Identifies tools associated with measurement (ruler, measuring cup, spoon, thermometer)	Identifies tools associated with measurement (ruler, measuring cup, spoon, thermometer)	Identifies tools associated with measurement (ruler, measuring cup, scale, thermometer)	Identifies tools associated with measurement (ruler, measuring cup, scale, protractor)				
		Demonstrates an understanding of directionality (right, left, up, down)	Demonstrates an understanding of directionality (right, left, up, down)	Demonstrates an understanding of directionality (right, left, up, down)	Demonstrates an understanding of directionality (north, south, east, west)	Demonstrates an understanding of directionality (north, south, east, west)	Demonstrates an understanding of directionality (north, south, east, west)
Estimates length /height in nonstandard units	Estimates length /height in nonstandard units	Estimates length /height in nonstandard units	Estimates length /height in nonstandard units	Estimates length /height in nonstandard units	Estimates area in nonstandard units	Estimates area in nonstandard units	Estimates area in nonstandard units
Manipulates measuring tool	Measures length with a standard tool (exact inches)	Measures length with a standard tool (exact inches)	Measures length with a standard tool (may include 1/2 inches)	Measures length with a standard tool (may include 1/2 inches)	Measures length with a standard tool (may include 1/2 inches)	Measures length with a standard tool (may include 1/2 inches)	Measures length with a standard tool (may include 1/2 inches)
Compares lengths (longer than, shorter than, the same)	Compares lengths (longer than, shorter than, the same)	Compares lengths (longer than, shorter than, the same)	Compares lengths (longer than, shorter than, the same)	Estimates length in inches	Estimates length in inches	Estimates length in feet	Estimates length in feet
Measures an object using nonstandard tools	Measures an object using nonstandard tools	Measures an object using nonstandard tools					
	Uses vocabulary associated with measurement (inch, hour, minute, cup, degree)	Uses vocabulary associated with measurement (inch, hour, minute, cup, degree)	Uses vocabulary associated with measurement (inch, hour, minute, cup, degree)	Uses vocabulary associated with measurement (foot, pound, inch, hour, minute, cup, degree)	Uses vocabulary associated with measurement (foot, pound, inch, hour, minute, cup, degree)	Uses vocabulary associated with measurement (foot, pound, mile, inch, hour, minute, cup, degree)	Uses vocabulary associated with measurement (foot, pound, mile, inch, hour, minute, cup, degree)
				Calculates perimeter	Calculates perimeter	Calculates perimeter	Calculates perimeter
					Calculates area	Calculates area	Calculates area
					Identifies 12 inches equals 1 foot	Converts dimensions from inches to feet	Converts dimensions from inches to feet

PROBLEM SOLVING SKILLS							
Standard 6: Students link concepts and procedures as they develop and use computational techniques, including estimation, mental arithmetic, paper-and-pencil, calculators, and computers, in problem-solving situations and communicate the reasoning used in solving these problems.							
Critical Concept 6: Uses calculation strategies to compute problems							
Grade 3	Grade 4	Grade 5*	Grade 6	Grade 7	Grade 8*	Grade 9	Grade 10*
Understands the concept of none	Understands the concept of none	Understands the concept of none	Understands the concept of none	Adds simple fractions (halves only)	Adds simple fractions (halves and fourths)	Adds simple fractions (halves, thirds, and fourths)	Adds simple fractions (halves, thirds, and fourths)
Demonstrates an understanding of addition by finding an accurate/correct answer (2 sets up to 10 items)	Demonstrates an understanding of addition by finding an accurate/correct answer (2 sets up to 12 items)	Demonstrates an understanding of addition by finding an accurate/correct answer (2 sets up to 20 items)	Demonstrates an understanding of addition by finding an accurate/correct answer (2 sets up to 25 items)	Demonstrates an understanding of addition by finding an accurate/correct answer (2 sets up to 30 items)	Demonstrates an understanding of addition by finding an accurate/correct answer (2 sets up to 35 items)	Demonstrates an understanding of addition by finding an accurate/correct answer (3 sets up to 40 items)	Demonstrates an understanding of addition by finding an accurate/correct answer (3 sets up to 45 items)
Chooses correct operation to solve a problem (addition, subtraction)	Chooses correct operation to solve a problem (addition, subtraction)	Chooses correct operation to solve a problem (addition, subtraction)	Chooses correct operation to solve a problem (addition, subtraction)	Chooses correct operation to solve a problem (addition, subtraction)	Chooses correct operation to solve a problem (addition, subtraction, multiplication)	Chooses correct operation to solve a problem (any operator)	Chooses correct operation to solve a problem (any operator)
Employs strategies to find simple subtraction facts (sets up to 10 items)	Employs strategies to find simple subtraction facts (sets up to 12 items)	Employs strategies to find simple subtraction facts (sets up to 20 items)	Employs strategies to find simple subtraction facts (sets up to 25 items)	Employs strategies to find simple subtraction facts (sets up to 30 items)	Employs strategies to find simple subtraction facts (sets up to 35 items)	Employs strategies to find simple subtraction facts (sets up to 40 items)	Employs strategies to find simple subtraction facts (sets up to 45 items)
					Solves a simple multiplication problem (sets up to 35)	Solves a simple multiplication problem (sets up to 40)	Solves a simple multiplication problem (sets up to 45)
Uses a calculator for whole number calculations (addition/subtraction sets up to 10) NOT ASSESSING	Uses a calculator for whole number calculations (addition/subtraction sets up to 12) NOT ASSESSING	Uses a calculator for whole number calculations (addition/subtraction sets up to 20) NOT ASSESSING	Uses a calculator for whole number calculations (addition/subtraction sets up to 25) NOT ASSESSING	Uses a calculator for whole number calculations (addition/subtraction sets up to 30) NOT ASSESSING	Uses a calculator for whole number calculations (addition/subtraction/multiplication sets up to 35) NOT ASSESSING	Uses a calculator for whole number calculations (any operator sets up to 40) NOT ASSESSING	Uses a calculator for whole number calculations (any operator sets up to 45) NOT ASSESSING
						Solves simple problems involving division (sets up to 40)	Solves simple problems involving division (sets up to 45)

The Colorado Student Assessment Program Alternate (CSAPA) Science Assessment Framework

Standard 1: Under the processes of scientific investigation and design, conduct, communicate about and evaluate such investigations			
Expanded Benchmark: 1. Make quantitative and qualitative observations			
Critical Concept	Grade 5	Grade 8	Grade 10
Use senses		Demonstrates an awareness of the environment	Demonstrates an ability to investigate the environment
	Identifies different parts of the environment	Identifies different environmental conditions	Indicates an understanding of differences in environmental conditions based on use of senses
		Observes a partial sequence of events	Observes a complete sequence of events
	Recognizes that objects have different properties	Recognizes that objects have different properties	Recognizes specific properties of an object
Use tools	Identifies tools used in scientific investigations	Identifies the function of tools used in scientific investigations	Manipulates measurement tools
		Selects the appropriate tool to gain information	Selects and use tools in a purposeful manner to gain information about an object
	Understands qualitative descriptive terms	Provides a qualitative description of the properties of an object	Provides a qualitative description of the properties of an object
			Uses a measurement tool to provide a quantitative description of the properties of an object

Standard 1: Under the processes of scientific investigation and design, conduct, communicate about and evaluate such investigations			
Expanded Benchmark: 1. Make quantitative and qualitative observations (continued)			
Critical Concept	Grade 5	Grade 8	Grade 10
Organize observations	Matches observations to pictures, diagrams, or graphs	Matches observations to pictures, diagrams, or graphs Makes a conclusion from observations	Uses observations as data Records observations Makes a record of observations Makes a record of observations over time
	Labels observations	Labels observations	Labels observations
		Sequences observations in subcategories	Sequences observations in subcategories Organizes observations to make a prediction
Communicate observations	Attends to a task in order to make an observation	Attends to a task in order to make an observation	Attends to a task in order to make an observation
	Communicates the sequence of scientific events	Displays information about observations in a variety of ways	Provides descriptive information about the observation Displays information about observations in a variety of ways
			Determines most appropriate way to display observations/data
	Matches data to an observation	Arranges data to communicate sequence of scientific events Matches data to an observation	Arranges data to communicate sequence of scientific events

Standard 1: Under the processes of scientific investigation and design, conduct, communicate about and evaluate such investigations			
Expanded Benchmark: 2. Ask questions for information based on observations			
Critical Concept	Grade 5	Grade 8	Grade 10
Know what a scientific (testable) question is	Collects information	Collects information	Collects information to answer a question
			Differentiates between a testable and non-testable question
	Asks a question about the information	Poses a question relative to the information (possibly not testable)	Poses a testable question (e.g., what makes ice melt, heat or cold?)
Pose a question around a testable vs. non-testable problem	Asks questions to gain information		Asks questions to gain information
		Poses additional questions about an investigation	Poses informational questions (e.g., who, what, why, where, when, how)
		Identifies resources to gain additional scientific information	Identifies resources to gain additional scientific information
Standard 1: Under the processes of scientific investigation and design, conduct, communicate about and evaluate such investigations			
Expanded Benchmark: 3. Make predictions related to observations, experiences and patterns			
Critical Concept	Grade 5	Grade 8	Grade 10
Make predictions related to observations, experiences and patterns	Demonstrates an understanding of cause and effect in scientific events	Differentiates between the cause and effect of an event	Demonstrates an understanding of cause and effect in scientific events
		Determines if a prediction is valid	Determines if the prediction is based upon experience or knowledge
			Distinguishes between a guess and prediction and explain the reasoning
			Asks questions to get more information when needed
		Makes an appropriate prediction based on observation/information	Makes an appropriate prediction based on observation/information

Standard 1: Under the processes of scientific investigation and design, conduct, communicate about and evaluate such investigations			
Expanded Benchmark: 4. Collect, organize, and analyze data			
Critical Concept	Grade 5	Grade 8	Grade 10
Collect, organize, and analyze data	Indicates an awareness of collections within the environment	Indicates an awareness of collections within the environment	Indicates an awareness of collections within the environment
	Identifies objects to add to collections	Identifies objects to add to collections	Identifies appropriate objects to add to collections
			Identifies ways to collect data (e.g., qualitative and quantitative methods)
	Identifies data to collect for a problem or situations	Determines data to collect for a problem or situations	Determines appropriate data to collect for a problem or situations
			Uses a symbol to represent information/data
		Gathers data	Gathers data
		Knows ways to organize data	Knows ways to organize data
	Sorts objects into categories	Sorts objects into categories	Sorts objects into categories and subcategories (e.g., living vs. nonliving)
			Organizes data to show patterns and trends (e.g., order, sequence)
		Recognizes when patterns in data exist	Recognizes when patterns in data exist (e.g., indicate attributes or criteria for organizing data)
			Recognizes when relationships in data exist (e.g., leaves are associated with trees)
		Recognizes that variations in data exist	Recognizes that variations in data exist (e.g., differences in the height/eye color of classmates; variation in leaves)
			Explains the patterns and relationships in the data
Employs safe techniques for investigations	Employs safe techniques for investigations	Employs safe techniques for investigations	

Standard 1: Under the processes of scientific investigation and design, conduct, communicate about and evaluate such investigations			
Expanded Benchmark: 5. Communicate results of investigations			
Critical Concept	Grade 5	Grade 8	Grade 10
Communicate results of investigations			Uses data to construct explanation (graphs, pictures)
		Labels units	Labels units
	Identifies different ways of measuring	Identifies different ways of measuring	Identifies different ways of measuring (descriptive)
	Describes data source for meaning	Describes data source for meaning	Describes data source for meaning
			Determines if and how findings support or do not support the scientific question/predictions
			Explains how unexpected findings lead to new questions and add to understandings
			Explains how the data supports findings
		Relates results to predictions	Relates results to predictions
			Applies results to another situation

Standard 2: Physical Science: Students know and understand common properties, forms and changes in matter and energy			
Expanded Benchmark: 1. Demonstrate awareness of physical and chemical properties			
Critical Concept	Grade 5	Grade 8	Grade 10
Make qualitative observations about physical properties	Uses senses to make observations	Uses senses to make observations	Uses senses to make observations
	Uses simple descriptors such as color, odor, texture, size, shape, etc. to relate information about properties of living and non-living matter	Uses simple descriptors such as color, odor, texture, size, shape, etc. to relate information about properties of living and non-living matter	Uses simple descriptors such as color, odor, texture, size, shape, etc. to relate information about properties of living and non-living matter
	Describes temperature using labels such as hot/cold/warm/tepid	Describes temperature using labels such as hot/cold/warm/tepid	Describes temperature using labels such as hot/cold/warm/tepid
	Describes volume using labels such as more/less/same	Describes volume using labels such as more/less/same	Describes volume using labels such as more/less/same
	Describes mass using labels such as heavy/light	Describes mass using labels such as heavy/light	Describes mass using labels such as heavy/light
			Identifies homogenous mixtures from non-homogenous mixtures
			Identifies a mixture as a solution
		Classifies objects based on physical properties (e.g., textures, living vs. non-living, type of object)	Classifies objects based on physical properties (e.g., textures, living vs. non-living, type of object)
			Classifies objects based on chemical properties (the ability of something to react)
		Classifies objects based on states of matter	Classifies objects based on states of matter
		Provides a justification for how objects were classified into groups	

Standard 2: Physical Science: Students know and understand common properties, forms and changes in matter and energy			
Expanded Benchmark: 1. Demonstrate awareness of physical and chemical properties			
Critical Concept	Grade 5	Grade 8	Grade 10
Make quantitative observations	Demonstrates an understanding that counting is saying numbers	Demonstrates an understanding that counting is saying numbers	Demonstrates an understanding that counting is saying numbers
	Shows a quantity	Shows a quantity	Shows a quantity
	Applies a number label to a quantity	Applies a number label to a quantity	Applies a number label to a quantity
		Demonstrates the relationship between a number symbol and quantity	Demonstrates the relationship between a number symbol and quantity
	Identifies measurement tools		
	Makes comparisons between different quantities	Makes comparisons between different quantities	Makes comparisons between different quantities
		Uses appropriate tools for measurement such as a scale, thermometer, measuring cup	Uses appropriate tools for measurement such as a scale, thermometer, measuring cup
			Knows that temperature is described by degrees (e.g., Fahrenheit, Celsius)
			Knows that volume is described by volume terms (e.g., teaspoon, tablespoon, cup, liter)
			Knows that there are appropriate units for measuring and describing mass (e.g., pounds and grams)
			Demonstrates conservation of mass, volume
			Chooses appropriate units of measurement

Standard 2: Physical Science: Students know and understand common properties, forms and changes in matter and energy			
Expanded Benchmark: 2. Make observations associated with energy			
Critical Concept	Grade 5	Grade 8	Grade 10
Make observations associated with energy		Identifies the forms of energy	Identifies the forms of energy (e.g., heat, light, sound, mechanical, potential/kinetic)
	Identifies non-living objects that need energy to function	Identifies non-living objects that need energy to function	Identifies non-living objects that need energy to function
		Describes ways in which non-living objects get energy	Describes ways in which non-living objects get energy
	Understands that objects can move at different speeds	Understands that objects can move at different speeds	Understands that objects can move at different speeds
	Describes transformation of forms of energy in terms of motion (e.g., fast, slow)	Describes transformation of forms of energy in terms of motion (e.g., fast, slow)	Describes transformation of forms of energy in terms of motion (e.g., fast, slow)
	Understands that objects move as a result of force	Understands that objects move as a result of force	Understands that objects move as a result of force
		Understands that objects can move at different speeds based on the amount of force	Understands that objects can move at different speeds based on the amount of force
		Understands that objects can move at different speeds and in different directions based on the amount and type of force	Understands that objects can move at different speeds and in different directions based on the amount and type of force
			Understands that a change in force will cause a change in speed and/or direction of the object
		Describes transformation of forms of energy in terms of temperature	
Standard 2: Physical Science: Students know and understand common properties, forms and changes in matter and energy			
Expanded Benchmark: 3. Understand interactions between matter and energy			
Critical Concept	Grade 5	Grade 8	Grade 10
Understand interactions between matter and energy	Content is above grade level	Demonstrates that energy can be transferred in different ways	Demonstrates that energy can be transferred in different ways (e.g., simple electric circuits)
		Knows when heat is introduced, changes in matter take place	Knows when heat is introduced, changes in matter take place

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other in the environment			
Expanded Benchmark: 1. Understand the characteristics and structures of living things (plant and animals)			
Critical Concept	Grade 5	Grade 8	Grade 10
Understand the characteristics and structures of living things (plant and animals)	Identifies living matter Identifies non-living matter	Distinguishes between living vs. non-living matter	Distinguishes between living vs. non-living matter
		Describes characteristics of living matter	Describes characteristics of living matter
		Describes characteristics of non-living matter	Describes characteristics of non-living matter
			Recognizes properties/characteristics of plants
			Recognizes properties/characteristics of animals
Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other in the environment			
Expanded Benchmark: 2. Demonstrate an understanding of the processes of life			
Critical Concept	Grade 5	Grade 8	Grade 10
Demonstrate an understanding of the processes of life	Identifies basic needs of living things	Identifies basic needs of living things	Identifies basic needs of living things
	Identifies the young/adult stages of some common plants and animals	Identifies how living organisms attain basic needs	Identifies how living organisms attain basic needs
		Recognizes that all living organisms have a life cycle that vary in length	Recognizes that all living organisms have a life cycle that vary in length
		Identifies stages of a life cycle	Identifies stages of a life cycle
			Recognizes that living things respond to their environment

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other in the environment			
Expanded Benchmark: 3. Understand how living things interact with each other and the environment			
Critical Concept	Grade 5	Grade 8	Grade 10
Understand how living things interact with each other and the environment		Recognizes how organisms are affected by other living and nonliving things in the environment	Recognizes how organisms are affected by other living and nonliving things in the environment
	Recognizes that food sources come from the environment	Recognizes that food sources come from the environment	Recognizes that food sources come from the environment
		Describes the parts of a food chain	Describes the parts of a food chain
		Knows the steps of a food chain	Knows the steps of a food chain
			Describes the parts of a food web
			Recognizes that the food chain and food web are affected by changes to other living and non-living things in the environment
	Describes how organisms are dependent upon the non-living environment	Describes how organisms are dependent upon the non-living environment	Describes how organisms are dependent upon each other (living) and non-living environment
	Recognizes that a change in the environment can affect everything living in the environment	Recognizes how a change in the environment can affect everything living in the environment	Recognizes how a change in the environment can affect everything living in the environment
			Demonstrates an understanding that when an area becomes overpopulated, natural resources become less available
			Demonstrates an understanding that when natural resources in the environment are overused, the environment becomes degraded

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other in the environment			
Expanded Benchmark: 4. Understand the human body is a system			
Critical Concept	Grade 5	Grade 8	Grade 10
Understand the human body is a system		Recognizes that both living and non-living things can be recycled	Recognizes that both living and non-living things can be recycled
	Identifies/sequences the main stages in the life cycle of a human	Describes the human life cycle, including the concept of aging, sickness, health, change	Describes the human life cycle, including the concept of aging, sickness, health, change
	Identifies the observable parts of the body	Identifies the observable parts of the body	Identifies the observable parts of the body
	Describes the functions of the observable parts of the body	Describes the functions of the observable parts of the body	Describes the functions of the observable parts of the body
		Identifies the main, internal parts of the body	Identifies the main, internal parts of the body
		Describes functions of internal parts of the body	Describes functions of internal parts of the body
		Recognizes that certain parts of the body make up a subsystem	Recognizes that certain parts of the body make up a subsystem
			Describes the functions of subsystems (digestive, respiration) and how they interrelate
		Identifies how environmental conditions and personal decisions can affect parts of the body	Understands how environmental conditions and personal decisions can affect parts of the body (e.g. allergies, smoking, food quality)
		Identifies the stages of human aging/maturation	Identifies when a system is not functioning properly
			Recognizes how adaptations (natural and artificial) can support living things when a system does not function properly
			Explains the stages of human aging/maturation (birth, infancy, early childhood, adolescence, adulthood, death)

Standard 4: Earth and Space Science: Students know and understand the processes and interaction of Earth’s systems and the structure and dynamics of Earth and other objects in space			
Expanded Benchmark: 1. Interact with the weather			
Critical Concept	Grade 5	Grade 8	Grade 10
Interact with the weather	Demonstrates an awareness of changes in weather/temperature	Demonstrates an awareness of changes in weather/temperature	Demonstrates an awareness of changes in weather/temperature
	Identifies types of weather	Identifies types of weather	Identifies types of weather
	Uses simple qualitative labels to indicate weather properties	Uses simple qualitative labels to indicate weather properties	Uses simple qualitative labels to indicate weather properties
	Identifies materials/clothing/recreation/transportation appropriate to the weather	Identifies materials/clothing/recreation/transportation appropriate to the weather	Identifies materials/clothing/recreation/transportation appropriate to the weather
	Identifies seasons	Identifies seasons	Labels seasons
	Identifies types of weather related to a season	Identifies types of weather related to a season	Identifies types of weather related to a season
			Identifies features and weather patterns associated with catastrophic events
	Distinguishes between catastrophic events	Distinguishes between catastrophic events	Distinguishes between catastrophic events
	Makes daily qualitative observations about the weather	Makes daily qualitative observations about the weather	Makes daily qualitative observations about the weather
			Graphs qualitative observations about weather
		Uses a simple tool (e.g., thermometer, weather vane, rain gauge) to make quantitative observations about the weather	Uses a simple tool (e.g. thermometer, weather vane, rain gauge) to make quantitative observations about the weather
			Graphs quantitative information about weather
			Uses resources and information to predict subsequent day’s weather based on weather patterns

Standard 4: Earth and Space Science: Students know and understand the processes and interaction of Earth’s systems and the structure and dynamics of Earth and other objects in space			
Expanded Benchmark: 2. Recognize Earth’s features			
Critical Concept	Grade 5	Grade 8	Grade 10
Recognize Earth’s features	Uses appropriate qualitative labels to describe properties of Earth’s materials (wet, hard, rough, dry, smooth)	Uses appropriate qualitative labels to describe properties of Earth’s materials (wet, hard, rough, dry, smooth)	Uses appropriate qualitative labels to describe properties of Earth’s materials (wet, hard, rough, dry, smooth)
	Distinguishes between Earth materials (soil, water, sand, rock)	Distinguishes between Earth materials (soil, water, sand, rock)	Distinguishes between Earth materials (soil, water, sand, rock)
	Identifies distinctive landforms (water, rivers, lake, beaches, mountains, valleys)	Identifies distinctive land forms (water, rivers, lake, beaches, mountains, valleys)	Identifies distinctive land forms (water, rivers, lake, beaches, mountains, valleys)
		Recognizes differences in landforms and different surfaces	Recognizes differences in rocks
		Matches Earth’s materials to landforms (e.g., sand to beaches, rocks to mountains, water to lakes and rivers)	Matches Earth’s materials to landforms (e.g., sand to beaches, rocks to mountains, water to lakes and rivers)
	Identifies natural events (erosion, floods, blizzards, volcanoes)	Identifies natural events (erosion, floods, blizzards, volcanoes)	Identifies natural events (erosion, floods, blizzards, volcanoes)
			Recognizes that the surface of the Earth changes by differences processes and/or natural events
			Recognizes that fossils provide evidence of Earth’s history

Standard 4: Earth and Space Science: Students know and understand the processes and interaction of Earth’s systems and the structure and dynamics of Earth and other objects in space			
Expanded Benchmark: 3. Identify fundamental properties and uses of water			
Critical Concept	Grade 5	Grade 8	Grade 10
Identify fundamental properties and uses of water	Identifies sources of water	Identifies sources of water	Identifies sources of water
	Identifies the uses of water	Identifies the uses of water	Identifies the uses of water
		Associates snow, ice, hail, etc. with water	Associates snow, ice, hail, etc. with water
			Recognizes states of water (solid, liquid, gas)
	Identifies natural sources of water	Identifies natural sources of water	Identifies natural sources of water
		Recognizes ways to conserve water	Recognizes ways to conserve water
		Recognizes that water flows downward	Recognizes that water flows downward
			Recognizes that water has a cycle (e.g., precipitation, evaporation, condensation)

Standard 4: Earth and Space Science: Students know and understand the processes and interaction of Earth’s systems and the structure and dynamics of Earth and other objects in space			
Expanded Benchmark: 4. Recognize objects in space and interaction with Earth’s systems			
Critical Concept	Grade 5	Grade 8	Grade 10
Recognize objects in space and interaction with Earth’s systems	Labels objects in the sky that can be viewed unaided (e.g., birds, sun, moon, stars, clouds, plane)	Labels objects in the sky that can be viewed unaided (e.g., birds, sun, moon, stars, clouds, plane)	Labels objects in the sky that can be viewed unaided (e.g., birds, sun, moon, stars, clouds, plane)
	Identifies sun, moon, stars	Identifies sun, moon, stars	Identifies sun, moon, stars
	Associates sun with daylight and stars with twilight/evening	Associates sun with daylight and stars with twilight/evening	Associates sun with daylight and stars with twilight/evening
		Identifies the sun as a source of heat and light	Identifies the sun as a source of heat and light
		Describes the effects of sun’s light and heat on living things	Describes the effects of sun’s light and heat on living things
			Recognizes that earth’s rotation causes the sun to appear differently throughout the day (e.g., sunrise, high noon, sunset)
		Recognizes that objects in the sky have patterns of movement (e.g., the sun appears to move across the sky)	Recognizes that objects in the sky have patterns of movement (e.g., the sun appears to move across the sky)
	Identifies the moon’s appearance using quantitative labels (full moon, half moon, quarter moon)	Identifies the moon’s appearance using quantitative labels (full moon, half moon, quarter moon)	Identifies the moon’s appearance using quantitative labels (full moon, half moon, quarter moon)
			Distinguishes between fiction and fact regarding space exploration
			Recognizes how aerospace design impacts space travel (e.g., where you can go on an airplane vs. where you can go on a space shuttle)
		Identifies ways in which basic needs can be met in space	

Standard 5: Students know and understand interrelationships among science, technology and human activity and how they can affect the world			
Expanded Benchmark: 1. Understand the impact of science and technology			
Critical Concept	Grade 5	Grade 8	Grade 10
Understand the impact of science and technology	Discriminates between human and natural made objects	Discriminates between human and natural made objects	Discriminates between human and natural made objects
		Understands that technology is human made	Understands that technology is human made
	Recognizes examples of practical technology (e.g., computers, printers, telephone, electronic games, electric wheelchairs)	Recognizes examples of practical technology (e.g., computers, printers, telephone, electronic games, electric wheelchairs)	Recognizes examples of practical technology (e.g., computers, printers, telephone, electronic games, electric wheelchairs)
			Identifies ways that a problem/need can be solved/met through the use of technology
			Identifies ways in which science and technology are related (e.g., electricity to turn on computer, thermometer to measure temperature)
			Recognizes science provides knowledge base while technology applies that knowledge (e.g., Parts of the human ear pick up sound waves. Hearing aids were developed to assist people who do not hear well.)
			Identifies contributions of science and technology to quality of life (e.g., Devices, such as a wheelchairs, have changed over time)
		Recognizes and identify benefits as well as risks of technological advances (e.g., Cars allow people to travel from one place to another. However, the exhaust from a car causes air pollution.)	Recognizes and identify benefits as well as risks of technological advances (e.g., Cars allow people to travel from one place to another. However, the exhaust from a car causes air pollution.)

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world			
Expanded Benchmark: 2. Understand that humans affect their world through technology and science			
Critical Concept	Grade 5	Grade 8	Grade 10
Understand that humans affect their world through technology and science		Identifies careers related to the science/technology fields	Identifies careers related to the science/technology fields
		Identifies scientific/technological inventions	Identifies scientific/technological inventions
			Describes how different careers affect the world through science and technology
			Recognizes an invention
			Describes and creates a technological invention that would improve personal quality of life
			Makes and communicates a simple connection among scientific disciplines

Standard 6: Students understand that science involves a particular way of knowing and understanding common connections among scientific disciplines			
Expanded Benchmark: 1. Understand how to recognize and control variables in an experiment			
Critical Concept	Grade 5	Grade 8	Grade 10
Understand how to recognize and control variables in an experiment	Content is above grade level	Recognizes when conditions are the same or different for a test or task	Recognizes when conditions are the same or different for a test or task
			Identifies what a “fair” test is
		Sequences the steps of a simple experiment	Sets up a simple experiment
Standard 6: Students understand that science involves a particular way of knowing and understanding common connections among scientific disciplines			
Expanded Benchmark: 2. Know what can be answered scientifically			
Critical Concept	Grade 5	Grade 8	Grade 10
Know what can be answered scientifically	Content is above grade level		Identifies what is science and what is not (opinion vs. evidence)
			Identifies which questions can be answered through an experiment
			Describes how the structure of an object is related to its use or function
		Recognizes that the human body is made up of different systems that work together (e.g., digestive, circulatory, respiratory, nervous)	Recognizes that the human body is made up of different systems that work together (e.g., digestive, circulatory, respiratory, nervous)

Standard 6: Students understand that science involves a particular way of knowing and understanding common connections among scientific disciplines			
Expanded Benchmark: 3. Use a model to understand scientific phenomena			
Critical Concept	Grade 5	Grade 8	Grade 10
Use a model to understand scientific phenomena	Content is above grade level		Understands that a physical object represents a model
		Identifies a model	Identifies a model
			Uses a simple model to explain scientific principles
			Understands that a mathematical equation can represent a model
			Understands that a computer graphic can represent a model

Appendix B

CSAPA Item Presentation Protocol

Colorado Student Assessment Program Alternate (CSAPA) Item Presentation Protocol

START: Gain student attention.

LEVEL 4: Follow the item prompt on the Examiner's Page, using the student's usual mode of expressive communication. (*Expressive communication includes writing, speaking, eye gaze, signing, use of communication devices, pointing to, touching.*)

If the student does not respond to the directive, give the directive again either:

- use the same item prompt, or
- simplify unfamiliar terminology used in the item prompt using synonyms which provide the student opportunity to demonstrate skill/understanding.

Mark: If the student is able to respond/complete the task (correct or incorrect answer), mark both codes:

- Level of Independence is Level 4, and
- Student Response is marked.

Go On: If the student is unable to respond/complete the task, move to Level 3.

LEVEL 3: If the student is not engaged after Level 4 redirecting and simplification of terms, provide the student with additional information to encourage engagement in the task, or ask questions which encourage the student to think further about the task. If the student is unresponsive, prompt the student to engage in and respond to the item/complete the task.

Mark: If the student responds/completes the task (correct or incorrect answer), mark both codes:

- Level of Independence is Level 3, and
- Student Response is marked.

Go On: If the student is unable to respond/complete the task, move to Level 2.

LEVEL 2: If the student is not engaged or unresponsive after Level 3, direct the student to the answer by elaborating upon and/or modeling correct response, such as using a:

- verbal prompt (tell the student the answer, provide a forced choice);
- gestural prompt (point to the answer); or
- physical prompt (use hand over hand with both student and teacher making the choice).

Mark: If the student is engaged during Full verbal, gestural or physical prompt (Level 2), mark both codes:

- Level of Independence is Level 2, and
- Student Response is marked.

Go On: If the student is NOT engaged during Level 2 move to Level 1.

LEVEL 1: Mark this only when the student is unresponsive even after Level 2. Mark both codes:

- Level of Independence is Level 1, and
- Student Response is marked as a NO RESPONSE.

Appendix C

CSAPA Level of Independence Protocol

Colorado Student Assessment Program Alternate (CSAPA) Level of Independence Protocol

4 Independent	3 Partial Independence	2 Limited Independence	1 No Response
Performs task independently	Performs task with partial independence	Performs task with limited independence and requires modeling	Mark this only when the student is unable to respond/complete the task even after Level 2.
Critical Question: Is the student engaged and able to independently complete this task correctly or incorrectly?	Critical Question: Is the addition of information to personalize and/or contextualize the item enough for the student to be engaged and able to complete this task correctly or incorrectly?	Critical Question: Is the student able to replicate the task correctly or incorrectly if they are shown the answer or procedure?	
The student is fully engaged and performs the task independently and does not require assistance; or at most requires refocusing.	The student becomes engaged and is able to perform the task without being shown/told the answer.	The student is able to perform the task only after being shown/told what the answer is	
Protocol: Follow the item prompt on the Examiner’s Page, using the student’s usual mode of expressive communication**. If the student does not respond to the prompt: <ul style="list-style-type: none"> • repeat the same item prompt, or • simplify*** 	Protocol: If the student is not engaged after Level 4: provide the student with additional information to encourage engagement in the task OR ask questions which encourage the student to think further about the task	Protocol: If the student is not engaged after Level 3: direct the student to the answer by modeling correct response, such as using a: <ul style="list-style-type: none"> • verbal prompt; OR • gestural prompt; OR • physical prompt The student must then independently provide a response (correct or incorrect).	
➤Mark Level 4 ➤Mark Student Response <i>(Incorrect or Correct)</i> OR GO ON to Level 3 if student is unable to respond/complete the task	➤Mark Level 3 ➤Mark Student Response <i>(Incorrect or Correct)</i> OR GO ON to Level 2 if student is unable to respond/complete the task	➤Mark Level 2 ➤Mark Student Response <i>(Incorrect or Correct)</i> OR GO ON to Level 1 if student is unable to respond/complete the task	➤Mark Level 1 ➤Mark “No Response”

***Expressive communication* - includes writing, speaking, eye gaze, signing, use of communication devices, pointing to, touching.)

****simplify* – unfamiliar terminology used in the item prompt using synonyms which provide the student opportunity to demonstrate skill/understanding without invalidating the construct