# 2014 Colorado Alternate Assessment (CoAlt) 

# Operational <br> Technical Report 

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McGraw-Hill Education CTB Monterey, California 93940

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## Acronyms and Abbreviations

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

## Executive Summary

The 2013-14 Colorado Alternate Assessment (CoAlt) Operational Technical Report documents the processes and procedures implemented in support of the 2013-14 spring administration of the CoAlt by McGraw-Hill Education CTB (CTB) and the Colorado Department of Education (CDE). The technical report shows how the processes and procedures were applied as well as how the results relate to the issues of validity and reliability, the Standards for Educational and Psychological Testing [American Educational Research Association (AERA), American Psychological Association (APA), \& National Council on Measurement in Education (NCME), 1999], and the federal Peer Review process as detailed in the Standards and Assessments Peer Review Guidance (USDOE, 2007). Some primary findings presented in this technical report are summarized below.
Purpose: As succinctly stated in the CoAlt Examiner's Manual Spring 2014 (CDE, 2014a), the purpose of the CoAlt is as follows:

The Colorado Alternate Assessment (CoAlt) is a standards-based assessment designed specifically for eligible students with significant cognitive disabilities and is meant to provide a picture of student performance to schools, districts, educators, parents, and the community. The primary purpose of the assessment program is to determine the level at which Colorado students meet the Expanded Benchmarks that are linked to the Colorado Model Content Standards in the content areas assessed. The data should be used to keep abreast of individual student progress toward attaining achievement in the content areas. (p. 1)
Administration: The administration of the 2013-14 CoAlt occurred from February 5, 2014 through March 14, 2014. A high level of security is maintained on all testing materials at all levels. For all content areas, each test administration occurs on an individual student basis where teachers/test examiners mark the student's response and the level of independence at which the student performed. The assessment administration is not timed and can be conducted over several days in order to accommodate the students and minimize fatigue.
Student Population: The CDE provides an eligibility checklist to be evaluated by a student's Individualized Education Program (IEP) team in order to determine whether the student should be assessed with the Transitional Colorado Assessment Program (TCAP) or the CoAlt. Within the context of the 2013-14 administration, as few as 518 (grade 9 Reading and Writing) and as many as 690 (grade 5 Writing) students participated in the CoAlt administration, compared to the 2012-13 administration where between 466 (grade 10 Reading and Science) and 684 (grade 4 Writing) students participated.
Operational Analyses: The CoAlt uses raw score reporting, incorporating both the content score and the level of independence with which a student answers an item to determine the total score for the item and ultimately the content area. Standard setting activities conducted in 2007 and 2008 (dependent on the content area) were based upon approximately the same items that are currently presented. The test forms include some item overages by standard in order to ensure that if items must be suppressed from scoring, a sufficient number of items will remain for each reported score. Items undergo classical item analyses yearly in order to ensure that the item performance is not dramatically altered from year to year, which could suggest item exposure or other issues that would raise concerns about item validity and year-to-year comparability of scores. Any item that displays problematic classical statistics or dramatic changes across years is carefully reviewed to determine the appropriateness of continuing to include the item in scoring and reporting. Within the context of the 2013-14 CoAlt administration, no items required suppression due to classical statistics or due to changes in
item performance over time. This report contains information regarding the statistics for each item and for the forms overall for both this administration and longitudinal comparisons.
Results: In general, longitudinal results indicate that the percentage of students with the highest proficiency levels, Developing and Novice, has remained generally stable for all content areas since the 2013-14 administration. Across all grade levels the average change in Developing and Novice combined was $-1.01 \%$ for Reading, $-1.28 \%$ for Writing, and $-2.33 \%$ for Mathematics. The greatest increase was in Mathematics grade 4 with a $3.42 \%$ increase across the two administrations. The greatest decrease was in Writing grade 5 with a $-8.62 \%$ decrease across the two administrations.

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

## Overview

## Introduction

This document describes the CoAlt with a specific focus on the results of the 2013-14 assessment year. The CoAlt is an alternate standards-based assessment designed for eligible students with significant cognitive disabilities (CDE, 2014b).

The 2013-14 CoAlt administration assessed students in Reading (RD), Writing (WR), and Mathematics (MA) at grades 3-10. For all grade levels and content areas the forms and administration guidelines were consistent with the 2012-13 CoAlt. The testing window opened February 5, 2014 for all grade levels and closed March 14, 2014.

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

The type of items, the response formats, scoring procedures, and test administration procedures should be selected based on the purposes of the test, the domain to be measured, and the intended test takers. To the extent possible, test content should be chosen to ensure that intended inferences from test scores are equally valid for members of different groups of test takers. The test review process should include empirical analyses and, when appropriate, the use of expert judges to review items and response formats. The qualifications, relevant experiences, and demographic characteristics of expert judges should also be documented. (p. 44)
The entire CoAlt process pays close attention to each of these directions.
In addition to being guided by the Standards for Educational and Psychological Testing (AERA, APA, \& NCME, 1999), guidance from the Standards and Assessments Peer Review Guidance
(USDOE, 2007) is beneficial. This technical report provides evidence toward a variety of Critical Elements of Peer Review (CE) as part of the guidance for Peer Review. The majority of this document covers evidence in Section 4: A system of assessment with high quality from the Standards and Assessments Peer Review Guidance (USDOE, 2007), including CEs 4.1 (validity), 4.2 (reliability), 4.3 (fairness and accessibility), 4.5 (administration, scoring, analysis, and reporting), and 4.6 (accommodations). For Critical Elements in other sections of the Standards and Assessments Peer Review Guidance (USDOE, 2007), Appendix A details the chapter in the Standards and Assessments Peer Review Guidance (USDOE, 2007) and the corresponding section in this technical report.

## Purpose of the CoAlt

In the 2005-06 school year, the federal No Child Left Behind Act (NCLB) required all states to test all students in Reading and Mathematics in grades 3 through 8 and once in high school. Based on the NCLB legislation, student performance, reported in terms of proficiency categories, is used to determine the Adequate Yearly Progress (AYP) of students at the school, district, and state levels. Beginning in the 2007-08 school year, states were additionally required to administer Science assessments at least once in grades $3-5$, once in grades $6-9$, and once in grades 10-12.
The CoAlt has historically been administered in Reading, Mathematics, and Writing in grades 310 and in Science in grades 5, 8, and 10. In the 2013-14 academic year, Science was not administered as part of the CoAlt. The addition of the Writing content area is critical within the state of Colorado, although it is not required by the federal government within the NCLB legislation. Reading and Writing are treated as separate content areas, are assessed with different items, have different Performance Level Descriptors (PLDs), and maintain separate scoring and reporting.

The 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA) requires participation of students with disabilities in state- and district-wide assessments. Specifically, IDEA stipulates in section 612 part A, number 16, "All children with disabilities are included in all general State and district wide assessment programs, including assessments described under section 1111 of the Elementary and Secondary Education Act of 1965, with appropriate accommodations and alternate assessments where necessary and as indicated in their respective individualized education programs" (USDOE, 2004). All decisions regarding the participation of a student with disabilities in the TCAP or CoAlt assessments must be addressed by the student's Individualized Education Program (IEP) team, including the parent as an equal participant. The CoAlt is designed to meet the requirements of the NCLB accountability goals and IDEA and to provide students, parents, teachers, and schools with information about how students are progressing in relation to the Colorado Model Content Standards and Expanded Benchmarks, as summarized in the CoAlt Assessment Frameworks (CDE, 2014a).

## Use of the Assessment Information

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

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

## Part 1: Standards

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

The 2013-14 CoAlt forms consist of custom multiple-choice (MC) and constructed-response (CR) performance task items measuring skills associated with the Colorado Model Content Standards and associated assessment frameworks for Reading, Writing, and Mathematics. The Colorado Model Content Standards consist of a set of standards that are found across grades within a given content area. For each standard, the knowledge and skills students are expected to acquire at a given grade level are described by Benchmarks that vary across grade spans: K-4, 5-8, and 9-12. The Assessment Frameworks further describe the Assessment Objectives within each Benchmark by grade assessed. The CoAlt uses the Expanded Benchmarks, which are based on the Colorado Model Content Standards. These are the basis for the CoAlt Assessment Frameworks, which describe Critical Concepts (like the Benchmarks) and Assessment Objectives. The CoAlt Assessment Frameworks are available online at the following website:
http://www.cde.state.co.us/sites/default/files/documents/assessment/documents/coalt/coalt ass essment framework.pdf.

## Part 2: Test Development

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

## Test Design

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

[^0]Within the context of the CoAlt, MC items are worth up to 3 points and CR items are worth up to 6 points in order to incorporate the level of independence with which the student responds to the item into the item scoring. There is a separate rubric for each item type, and the rubrics are applicable across grade levels and content areas. The section on Scoring in Part 5 and Tables 26 and 27 provide more reference to the application of the scoring rules and logic. These scoring rubrics incorporate the level of student independence or assistance received for each item and each score level therein. This type of scoring was developed in an effort to both recognize and capture how students taking the CoAlt actually respond, their level of content knowledge, and the amount of support they need during the test administration-apart from typical expanded accommodations. ${ }^{2}$ This type of scaffolded scoring rubric is often used in alternate assessments. According to Quenemoen, Perie, and Kearns (2010), 26 states use a scoring rubric that incorporates level of assistance (either with a multi-dimensional or scaffolded design). In addition, Almond and Case (2004) note that such a scoring approach, where level of assistance (independence) is captured, extends beyond scoring accuracy to provide additional and appropriate data for students with significant cognitive disabilities who are administered performance-type assessments.

## Item Review and Test Fairness

All items are expected to be fair for all examinees. Various procedures are employed to review item fairness, also referred to as bias. Once the items are developed, they must go through a series of reviews and analyses prior to being selected as part of the item pool. A content and bias review has two purposes: to ensure that the items are grade-level appropriate and to ensure that any sensitivity issues are identified and addressed. Grade-level appropriateness is evaluated by grade-level experts who possess the on-the-ground knowledge of how content is taught in the classroom. Sensitivity reviews ensure that items are free of offensive, disturbing, or inappropriate language or content.
Content reviews and sensitivity and bias reviews were conducted on all items by internal and external experts. The Steering Committee reviewed all items before the assessment administration. The review was led by the CDE. CTB participated in the review process, under the direction of the CDE, by providing papers for the event and staff from the Project Development Team for instruction and interpretation.

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

## Item Selection

Item selection was completed by content editors at CTB 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

[^1]operational analyses results such that selected items will reflect the best content and statistical characteristics. Such characteristics are described in Part 7: Analyses and Results of this report.

## Part 3: Description of the Population

## Description of Students

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

## Student Eligibility Criteria

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

The IEP Team is responsible to determine that the student:

1) Meets eligibility as a student with a significant cognitive disability (Intellectual Disability).
2) Will access the general curriculum based on alternate academic achievement standards (Colorado Academic Standards/Extended Evidence Outcomes).
3) Will participate in alternate assessment based on alternate academic achievement standards (CoAlt, 11th Grade Alternate for Colorado ACT, and alternate classroom/district assessments).
Each year, the IEP Team will consider the academic achievement standard and assessments for each content area separately.
The CDE provides an Alternate Assessment Eligibility Criteria Worksheet to be evaluated by a student's IEP team in order to determine whether the student should be assessed with the TCAP or CoAlt. The Alternate Assessment Eligibility Criteria Worksheet can be found at the following website:
http://www.cde.state.co.us/sites/default/files/documents/cdesped/download/pdf/eligibilitycriteria worksheet alternateassessment.pdf.

## Population Characteristics

It is important to understand the types of students participating in the CoAlt. It is anticipated that the characteristics and resulting performance of students who participate will provide clarity about which students benefit the most from the CoAlt.
Demographic data, such as gender and ethnicity information, are reported in Tables 5-7. ${ }^{3}$ Across grades and content areas, as few as 518 (grade 9 Reading and Writing) and as many as 690 (grade 5 Writing) students participated in the 2013-14 CoAlt administration. As can be seen

[^2]in Figure 1, the total number of participating students is highest for Writing and Mathematics in grade 5 and is highest for Reading in grade 4. In all grades and across all content areas, the population of students is primarily male, with the percentages of male students ranging from $60.44 \%$ (grade 8 Mathematics) to $68.61 \%$ (grade 3 Mathematics). Additionally, the majority of students are of White ethnicity, with the percentage of White students ranging from 45.32\% (grade 4 Writing) to 52.99\% (grade 10 Mathematics).
Additional descriptive information includes ELL status, reported in Tables 8-10, for each content area. The tables include information related to Language Proficiency [Fluent English Proficient (FEP), Limited English Proficient (LEP), Not English Proficient (NEP), Primary Home Language Other Than English (PHLOTE), Former ELL (FELL) 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 78.63\% (grade 6 Reading) to 84.75\% (grade 10 Mathematics). Nearly all students (roughly 99\% across all content areas and grade levels), indicate ELL status for Bilingual students as "No." The majority of students, ranging from 79.39\% (grade 6 Reading) to 85.66\% (grade 10 Mathematics), 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 11-13 for each content area respectively. Across grades and content areas, most students are either eligible for a Free Lunch as opposed to a Reduced Price Lunch or they are not eligible. The percentage of students eligible for a Free Lunch ranges from $40.31 \%$ (grade 9 Mathematics) to $53.22 \%$ (grade 4 Writing). A small percentage of students are eligible for a Reduced Price Lunch, ranging from 7.11\% (grade 4 Reading) to $11.13 \%$ (grade 9 Mathematics). The percentage of students not eligible for either program ranges from a low of $39.33 \%$ (grade 4 Writing) to $48.18 \%$ (grade 9 Mathematics).
Students' primary disability information is categorized in Tables $14-16$ by grade and content area. Within all content areas "Multiple Disabilities," "Limited Intellectual Capacity," and "Autism" are the most common primary disabilities indicated. Figure 2 also captures the data to more easily illustrate the predominant primary disabilities.
Expanded accommodations provided to students during the CoAlt assessment are reported in Tables 17-19. While the test is a one-on-one administration with no time limits, there are a variety of additional expanded accommodations teachers/test examiners utilize to assure accessibility by students to the test items. It is important to note that a given student can have more than one expanded accommodation, further, the percentages reported in Tables 17-19 are based on the total population. Across all grade levels and content areas, no expanded accommodations are provided to the vast majority of students for them to access the test items. This is most strikingly illustrated in Figures 3-5. There are between $82.24 \%$ (grade 5 Mathematics) to $91.02 \%$ (grade 8 Reading) of students provided no expanded accommodations. For those students requiring additional expanded accommodations, Assistive Technology is among the most commonly used but the typical expanded accommodation varies by content area. Across all grades and content areas, the most common expanded accommodation used for a grade level was always less than $7 \%$.

## Part 4: Test Administration

For all content areas, each test is administered on an individual student basis where teachers/test examiners mark the student's response and the level of independence at which the student performed. Examiners mark two ratings per item: actual student raw response and
level of independence in the Test Protocol; ${ }^{4}$ these ratings are later transferred by the test examiner to the scannable answer document. ${ }^{5}$ The administration is guided by the Item Presentation Protocol, found at the following link:
http://www.cde.state.co.us/sites/default/files/documents/assessment/documents/coalt/csapa_item _pres_protocol.pdf. The assessment can be administered over several days in order to accommodate the students and minimize fatigue. It is expected that all students be presented with and attempt all items for each content area.

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

## Teacher/Test Examiner Training

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

## Additional Training

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

## Part 5: Scoring

## Scoring Rubrics

Two scoring rubrics are used to collect student responses and provide item-by-item scores. One rubric is applicable to MC items and this rubric appears in Table 20. The second rubric is applicable to CR items and appears in Table 21. Both rubrics are applicable for any grade level or content area assessed by the CoAlt. These scoring rubrics incorporate the level of student independence or assistance received for each item and each score level therein. This type of scoring was developed in an effort to both recognize and capture how students taking the CoAlt actually respond, their level of content knowledge and the amount of support they need during the test administration apart from typical accommodations. This type of scaffolded scoring rubric

[^3]is often used in alternate assessments. According to Quenemoen, Perie, and Kearns (2010), 26 states use a scoring rubric that incorporates level of assistance (either with a multi-dimensional or scaffolded design). In addition, Almond and Case (2004) note that such a scoring approach, where level of assistance (independence) is captured, extends beyond scoring accuracy to provide additional and appropriate data for students with significant cognitive disabilities who are administered performance-type assessments.

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

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

## Level of Independence

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

## Multiple-Choice Item Types

Table 20 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 ensure examiners are trained and able to assist students accurately without over assisting, to provide adequate support to students while allowing opportunities to grow independently as well as to provide a clearer evaluation of what students really know and can do academically. (See the Item Presentation and the Level of Independence Protocols for additional information.)

## Constructed-Response Item Types

The CoAlt also includes CR item types where student responses reflect multiple steps or where students provide multiple responses. The rubric for CR item types is found in Table 21. For multiple responses, the student receives up to 2 points for each correct response. This is akin to a $0-2$ rubric. Thus it is possible for students to get full credit for a correct response ( 2 points), partial credit for a partially correct response (1 point), or no credit for an incorrect response ( 0 points). Within the context of the CR items, Level of Independence points are awarded as 4 points for a fully independent response where the student performs the task without assistance (Independent), 2 points for a partially independent response where the student performs the task with a partial physical, verbal, or gestural prompt from the test examiner (Partial), and 0 points for a limited independent response where the student performs the task with a full physical prompt from the test examiner (Limited).
The CR rubric and multi-step/multiple response item type is more clearly illustrated by an example. (Please note that this is only an example and not an actual item description.) An item might require the student to correctly group positive and negative numbers. The test examiner marks in the Test Protocol the frequency of numbers correctly identified, where the response options reflect: A) 5 out of 5 , B) 3 or 4 out of $5, C) 2$ or less out of 5 , D) other, E) no response. Within this context, answer choice A is fully correct (2 points), answer choice B is partially correct (1 point), answer choice C is incorrect or does not illustrate sufficient mastery of the concept/skill being measured ( 0 points), and answer choices $D$ and $E$ are incorrect responses ( 0 points). Combining point values 0,1 , and 2 with the level of independence displayed by the student in responding, where 4 points are awarded for an Independent response, 2 points for a Partial Independence response, and 0 points for a Limited Independent response, result in the rubric in Table 21.
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), the student would earn 4 points, resulting in a total item score of 6 points. If the student answered with a partial physical, verbal, or gestural prompt (Partial Independence), the student would earn 2 points, for a total of 4 points. If the student answered with a full physical prompt (Limited Independence), the student would earn 0 independent points, resulting in a total item score of 2 points.

A student with a partially correct response (B: 3 or 4 out of 5 ) earns 1 point for the partially correct response. If the item was answered independently (Independent), the student would earn 4 points, resulting in a total item score of 5 points. If the student answered with a partial physical, verbal, or gestural prompt (Partial Independence), the student would earn 2 points, resulting in a total item score of 3 points. If the student answered with a full physical prompt (Limited Independence), earning 0 independence points, then the item score is 1.

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

The scoring rules are instituted automatically by computer, utilizing the scannable answer documents, based upon the test examiner's coded responses for all item types; meaning, all items are designed such that the examiner bubbles the student responses and level of independence as captured in the Test Protocol onto a scannable answer sheet, from which scoring programs assign item-by-item scores. Examiners are not responsible for applying the scoring rubrics appearing in Tables 20 and 21; 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 ensure each student's score is based on a valid set of scored items. It is critical that the information reported is trustworthy. Without valid and therefore trustworthy data, valid conclusions and interpretations are not possible. Thus, there are safeguards in place to assure that reported data are valid, such that appropriate decisions can be made. For example, when a student's test is indicated as invalid by the examiner via a specific bubble on the answer document or if a student's response array includes $15 \%$ or more items that are flagged, the student does not receive a score. Student items are flagged if item scores are out of range (beyond the maximum value), invalid or illogical (such as a level of independence equal to 1 "no response" and a correct answer marked), items with multiple marks (i.e., more than one response option or level of independence bubbled), items with an incomplete response (either the response option OR level of independence are not marked), or when both the response option and level of independence are omitted (all items must be attempted and documented).

A summary of the percentages of invalid test scores due to the $15 \%$ rule or due to examiner bubbling of the "invalid" bubble on a student's answer document is located in Table 22. In Table 22, it is illustrated that between $91.84 \%$ (grade 9 Reading) to $96.50 \%$ (grade 5 Writing) of responses were valid for scoring, reporting, and data summary. Table 23 provides further details about the types of bubbles available to examiners for test score invalidation and the frequency with which they were used on the CoAlt. The most common reasons for invalidation were "Parental Refusal", "Test Not Completed", and "Taking TCAP Assessment".

## Part 6: Standard Setting

Student performance on the CoAlt is described in terms of proficiency levels. The purpose of setting standards on a test is to enhance its validity by increasing the interpretability of students' scores. There were two distinct standard setting activities for the CSAPA. (At the time of the standard setting activities, the CoAlt was named the Colorado Student Assessment Program

Alternate, or CSAPA.) The first occurred in 2007 for the Mathematics and Science (grade 10 only) content areas. Specific details of this standard setting are contained within the standard setting technical report available from the CDE entitled Standard Setting Technical Report 2007 for Grades 3-10 Mathematics and Grade 10 Science (CTB/McGraw-Hill, 2007). The second occurred in 2008 for the Reading, Writing, and Science ${ }^{6}$ content areas for all grades. Specific details of this standard setting are contained within the standard setting technical report available from the CDE entitled Standard Setting Technical Report 2008 for Grades 3-10 Reading, Grades 3-10 Writing, and Grades 5, 8, and 10 Science (CTB/McGraw-Hill, 2008). The purpose of each standard setting was to identify cut scores that would separate students into five proficiency levels: Inconclusive, Exploring, Emerging, Developing, and Novice, with Novice representing the highest level of achievement.

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

Recommended cut scores defining Inconclusive, Exploring, Emerging, Developing, and Novice were developed via Profile Sorting procedures, which were accompanied by a Contrasting Groups Survey administered to test examiners during the testing window. Live CSAPA data for all valid ${ }^{7}$ students were included in the Profile Sorting procedure. Standard setting participants sorted response profiles into proficiency levels by reflecting their judgments on the contentspecific performance characterized by each profile.
Each standard setting was divided into three phases. In the first phase of the standard setting, Colorado special educators of students tested by the CSAPA were invited to participate in a modified Contrasting Groups study (Livingston \& Zieky, 1982), in which they rated each of their students into one of the five proficiency levels, by content area.
In the second phase of the standard setting, a committee of educators from across the state of Colorado convened and engaged in a profile sorting study (Jaeger, 1995). During the CSAPA Profile Sorting workshop, participants examined scored response vectors (student profiles) and classified them into the five proficiency levels.
In the third phase of the standard setting, the participants at the CSAPA Profile Sorting workshop convened for synthesis discussions to review the results from both the modified Contrasting Groups study and the profile sorting study. A separate synthesis discussion was held for each content area. The participants identified trends in the data and recommended changes in the cut scores to promote cross-grade articulation within a content area. The impact data (percentages within each proficiency level) and cut scores approved by the CDE and applied to the 2013-14 data are shown in Table 58. More information about the cut scores and impact data can be found later in this report in Part 7: Analyses and Results-Proficiency Level Data.

[^4]
## Part 7: Analyses and Results

This section describes the item and total test level statistics calculated and analyzed along with the results thereof. Due to the small sample sizes at each grade, only raw score statistics were calculated. These include raw scores at the total test level and at each standard. No scaling of scores was conducted. Furthermore, because the same test form is used each year, no equating was or will be conducted on these or future operational CoAlt items. This requires reliance on raw score and classical test statistics.

## Item Level Statistics

Item statistics were reviewed for all content areas in order to ensure that items contributing to operational scores were appropriate. Items were flagged for intensive review based on the following statistical characteristics: 1 ) if the $p$-value was less than $0.30,2$ ) if the point-biserial value was less than 0.15 , and 3 ) if more than $5 \%$ of students omitted an item. Additionally, items were flagged for intensive review if the point-biserial value for a distractor was positive, and if the $p$-value for the item was greater than 0.95 . Each item's frequency distribution (number of students at each score level) as well as each item's overall $p$-value (proportion of students choosing the correct answer) and point-biserial item-test correlation (how correlated each individual item is with the test as a whole), were reviewed and results are presented in Tables 26-28 and discussed below.

The frequency distribution for each CR item in Writing and Mathematics is found in Tables 24$25,{ }^{8}$ where the number of students scoring at each score level for all 6-point items is illustrated. Interestingly, most CR items illustrate similar distributions, such that the majority of students obtain either the minimum ( 0 points) or the maximum ( 6 points) score. In general, the exception to this is a few items in most grade levels where there were also a high proportion of students scoring 5 points. This is likely reflective of the diversity of the population of students taking the CoAlt assessment.

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

## Item Difficulty ( $p$-values)

Typically in traditional assessments, and as seen in similar alternate assessments, $p$-values range between 0.30 and 0.90 . Items with $p$-values less than 0.30 are considered more difficult, as less than $30 \%$ of the students are getting the correct answer, while $p$-values greater than 0.90 indicate a fairly easy item. Sometimes the lower bound of $p$-values can drop below 0.30 . Those items should be reviewed in light of content to ensure the difficulty is due only to the content and skill assessed and not due to some illogic within the item. Items that are unduly easy, or above 0.90 , should be reviewed in light of content as well and whether or not

[^5]the item is providing additive information about students' skills. If the items are too easy, they are typically replaced by items that better discriminate between students who do or do not have certain skills. These approaches make for efficient use of test length and administration time. Additionally, mean $p$-values by grade level should be approximately 0.50 in order to maximize the validity of the assessments (Gulliksen, 1950).

The CoAlt $p$-values are stable across grades and content areas for the group as a whole. Tables 26-28 illustrate the item level data for each content area respectively. The data are presented both weighted-with level of independence, and unweighted-without level of independence. Table 29 provides a summary including the minimum, mean, and maximum $p$-values for each grade level and content area with the level of independence included in the scoring, as is used in operational scoring and reporting. The mean $p$-values range from 0.46 (grade 10 Mathematics) to $0.62^{9}$ (grade 3 Mathematics), with a mean of 0.54 . Table 30 provides a summary without including the level of independence. The mean $p$-values range from 0.40 (grade 10 Mathematics) to 0.60 (grade 6 Reading), with a mean of 0.51 . In general, the mean $p$-values across content areas are around the mean difficulty of 0.50 as suggested by Gulliksen (1950).

## Weighted (with level of independence)

When the data are weighted by level of independence, the $p$-values of Reading items range from $0.23^{10}$ (grade 5) to $0.87^{11}$ (grade 6). There are a total of 20 Reading items with $p$-values below 0.30 , including six items with a $p$-value below 0.25 . The grade 3 items with a 0.23 and $0.24 p$-values measures students' ability to demonstrate knowledge that various texts have different purposes. The grade 4 item with a $0.24 p$-value measures students' ability to use a variety of strategies to make meaning out of text. The grade 5 item with a $0.23 p$-value measures students' ability to demonstrate understanding of beginning principles of phonics. The grade 7 item with a $0.23 p$-value measures students' ability to make connections to reading passages. The grade 7 item with a $0.25 p$-value measures students' ability to demonstrate knowledge that various texts have different purposes. The mean $p$-value by grade-level ranges from a low of 0.50 (grade 10) to a high of 0.61 (grade 6), and the mean $p$-value across all Reading items is 0.55 .
The $p$-values of Writing items range from 0.17 (grade 10) to $0.83^{12}$ (grade 8). There are a total of 18 Writing items with $p$-values below 0.30 , including four items with $p$-values below 0.25 . The grade 4 item with a $0.18 p$-value measures students' ability to apply elements of writing through appropriate word usage. The grade 5 item with a $0.22 p$-value, the grade 7 item with a $0.21 p$ value, and the grade 10 item with a $0.17 p$-value measure students' ability to edit a written product using legible handwriting/word processor for publication. The mean $p$-value, by grade level, ranges from a low of 0.50 (grade 4) to 0.59 (grade 6). The mean $p$-value across all Writing items is 0.54 .

The $p$-values of Mathematics items range from 0.09 (grade 10) to 0.88 (grade 3). There are a total of 22 Mathematics items with $p$-values below 0.30 , including 13 items with $p$-values below 0.25 . There is one grade 4 item with a $0.12 p$-value and one grade 7 item with a $0.13 p$-value. There is one item in grade 8 with a $p$-value of 0.23 and one item with a $p$-value of $0.25^{13}$. There are three grade 9 items with $p$-values less than 0.25 ; one item with a $p$-value of 0.18 , one item with a $p$-value of 0.23 ; one item with a $p$-value of 0.22 . There are six grade 10 items with $p$ -

[^6]values less than 0.25 ; two items with a $p$-value of 0.20 , one item with a $p$-value of 0.24 , one item with a $p$-value of 0.09 , and two items with a $p$-value of 0.19 . These items measure a variety of content skills, and for purposes of brevity, the content measured by each individual item is not detailed. The mean $p$-value by grade-level ranges from a low of 0.46 (grade 10) to a high of $0.62^{14}$ (grade 4). The mean $p$-value across all Mathematics items is 0.54 .

## Unweighted (not including level of independence)

When the data are not weighted by level of independence, in order to be more true to the classical item statistics being reported, the $p$-values of Reading items range from $0.21^{15}$ (grade 4) to $0.85^{16}$ (grade 6). There are a total of 24 items with $p$-values below 0.30 , including 11 items with $p$-values below 0.25 . The mean $p$-value across all Reading items is 0.53 . The $p$-values of Writing items range from $0.16^{17}$ (grade 4) to 0.82 (grade 8). There are a total of 27 items with $p$-values below 0.30 , including 10 items with $p$-values below 0.25 . The mean $p$-value across all Writing items is 0.51 . The $p$-values of Mathematics items range from 0.06 (grade 10) to 0.86 (grade 3). There are a total of 39 items with $p$-values below 0.30 , including 18 items with $p$-values below 0.25 . The mean $p$-value across all Mathematics items is 0.49 .

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

## Item Discrimination (point-biserial correlation)

The point-biserial correlation, a derivation of the Pearson product moment correlation, is used here as an index of item discrimination. The point-biserial correlation assumes that item responses are based upon a dichotomy, or correct and incorrect. Additionally, there is no assumption of normality of the data, which is important given the frequency distributions observed (Schmeiser \& Welch, 2006). Further, given that the value of the point-biserial correlation tends to be lower than the biserial correlation due to sensitivity to item difficulty, a conservative approach was chosen and point-biserial rather than biserial correlation coefficients are reported. Due to the assumption of a dichotomous variable (correct versus incorrect item response), the data in Tables 26-28 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. Table 29 provides a summary including the minimum, mean, and maximum values for each grade level and content area with the level of independence included in the scoring, as is done with operational scoring and reporting. Table 30 provides a summary including the minimum, mean, and maximum values for each grade level and content area without including the level of independence in the scoring.
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

[^7]for items to be retained operationally should be significantly greater than zero, where significance is established by computing an approximation for the standard error for the Pearson product moment correlation. This approximation is based upon the sample size for each item, and the critical value should be set two standard errors above zero. The approximation is computed as $1 / \sqrt{N-1}$. With the CoAlt data the minimum number of students tested, over all content areas, is 518 (grade 9 Reading and Writing). Using this as the minimum N value, though it is noted that responses to individual items may have slightly lower N values, the obtained value is 0.0440 . Thus the critical value for the correlation would be 0.0880 . There is one item in the CoAlt assessment with a point-biserial value less than 0.0880. This item appears in Mathematics at grade 8 and has a point-biserial value of 0.077 ; this item has a $p$-value of 0.25 . 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.
The ranges and means of the Reading, Writing, and Mathematics point-biserials including level of independence are as follows: Reading ranged from 0.17 (grade 6) to $0.73^{18}$ (grade 5) with a mean across all items of 0.54 ; Writing ranged from 0.14 (grade 10) to $0.88^{19}$ (grade 8) with a mean across all items of 0.57 ; and Mathematics ranged 0.08 (grade 8 ) to $0.80^{20}$ (grade 3) with a mean across all items of 0.57 .

Across all grade levels and content areas there are just six items with point-biserial values lower than the generally accepted critical cut-off of 0.15 : one in Writing (grade 10) and five in Mathematics (grades 6, 8, 9, and 10). The grade 10 Writing item has a point-biserial value of 0.14 and a $p$-value of 0.17 and the item measures students' ability to edit a written product using legible handwriting/word processor for publication. The grade 6 Mathematics item has a pointbiserial value of $0.15^{21}$ and a $p$-value of 0.27 . The grade 8 Mathematics item has a point-biserial value of 0.08 and a $p$-value of 0.25 and measure students' ability to apply a variety of measurement skills. The grade 9 Mathematics item has a point-biserial of 0.09 and a $p$-value of 0.22 and measure students' ability to use calculation strategies to compute problems. One grade 10 Mathematics item has a point-biserial value of 0.10 and a $p$-value of 0.20 and the item measures students' ability to identify, describe, and create patterns to solve problems, and the other has a point-biserial of 0.12 and $p$-value of 0.19 and measures students' ability apply a variety of measurement skills. This means that these items have reduced discriminating power, such that students with high and low ability may have a similar probability of correctly responding to these items (since the $p$-values are also low).
The ranges and means of the Reading, Writing, and Mathematics point-biserials without level of independence are as follows: Reading ranged from 0.19 (grade 6) to 0.74 (grade 9 ) with a mean of 0.54 ; Writing ranged from 0.16 (grade 10) to $0.85^{22}$ (grade 7) with a mean of 0.57 ; and Mathematics ranged from $0.05^{23}$ (grade 8) to 0.81 (grade 4) with a mean of 0.57 .
When not including level of independence, there were four items across all grade levels and content areas with a point-biserial value lower than the critical cut-off of 0.15 . The grade 8 Mathematics item has a point-biserial of 0.05 and a $p$-value 0.22 ; the grade 9 Mathematics item has a point-biserial of 0.11 and a $p$-value of 0.20 ; one grade 10 Mathematics item has a point-

[^8]biserial of 0.05 and a $p$-value 0.18 and the other has a point-biserial of 0.11 and a $p$-value of 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 this item (since the $p$-value is also somewhat low).

The difference in the statistics as computed with and without level of independence included in scoring was also addressed. It was found that for all content areas, item discrimination statistics were stable (on average) regardless of the inclusion of level of independence in the scoring. For Reading the mean difference is 0.008 , for Writing the mean difference is 0.002 , for Mathematics the mean difference is -0.008 .

## Content Standards Level Statistics

Student performance on individual content standards (critical concepts) is reported in terms of the percentage of items within each critical concept students answered correctly. This proportion can be considered an average $p$-value across items within a specific critical concept. The critical concepts' $p$-values can also be compared from the standpoint of difficulty across the individual critical concepts. To illustrate the level of difficulty by critical concept, critical concepts at each grade are ranked according to the average proportion of students responding correctly to items within each critical concept. This type of analysis is also meant to show the most difficult critical concepts for the tested population. The results of the rankings are found in Tables 31-33. As the tables indicate, the areas that are difficult for Reading, Writing, and Mathematics vary by grade.

In Reading, "demonstrate understanding of symbolic representation" is the least difficult (by mean $p$-value) for grades $3-5$, while "demonstrate understanding of beginning principles of phonics" is the least difficult for grades $6-10$. The most difficult critical concept for grades 3,4 , and 8 is "identify elements of literature," while for grades $5-7,9$ and 10 it is "demonstrate knowledge that various texts have different purposes." The range of mean $p$-values is 0.37 (grade 7 Expanded Benchmark 3.1) to 0.74 (grade 6 Expanded Benchmark 1.3).

For Writing, the least difficult critical concept for grades 3 and $5-10$ is "demonstrate an understanding that writing communicates a message," and for grade 4 is "use systematic conventions to make written product understandable by others." The most difficult critical concept for grades $3-8$ is "apply elements of writing through appropriate word usage," for grade 9 is "edit a written product using legible handwriting/word processor for publication," and for grade 10 is "use systematic conventions to make written product understandable by others." The range of mean $p$-values is 0.38 (grade 3 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 3,5 , and 8 is "identifies, sorts, and matches geometric shapes," while the least difficult critical concept for grades $4,6,7,9$, and 10 is "counts, represents quantities, reads and writes numbers." The most difficult Mathematics critical concept at grades 3 and 6 is "applies a variety of measurement skills," for grades 4 it is "displays and analyzes data," for grades $5,7,8$, and 10 it is "identifies, describes, and creates patterns to solve problems," and for grade 9 it is "uses calculation strategies to compute problems." The range of mean $p$-values is 0.34 (grade 10 Expanded Benchmark 2) to $0.72^{24}$ (grade 4 Benchmark 1).
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

[^9]concepts. Again, all low p-value items were reviewed for content and appropriateness by CTB content experts and the CDE.
The average point-biserial value across the critical concepts was also computed in order to evaluate the degree of relationship between the critical concepts and the test as a whole. In general, the range of mean point-biserial values by critical concept/expanded benchmark illustrates critical concepts that are sufficiently correlated with the total test. Specifically, the Reading average values range from 0.32 (grade 7 Expanded Benchmark 3.1) to 0.65 (grade 7 Expanded Benchmark 1.2). In Writing, the average values range from 0.44 (grade 9 Expanded Benchmark 2.3) to 0.74 (grade 8 Expanded Benchmark 1.1). In Mathematics, the average values range from 0.31 (grade 10 Expanded Benchmark 2) to 0.68 (grade 8 Expanded Benchmark 3).

## Total Test Level Statistics

Student performance is described in different ways, including total raw scores, performance on specific content expanded benchmarks/critical concepts, and proficiency levels (the details of which are described in the CoAlt standard setting technical reports). The maximum number of points per grade and content area varies across grades and content areas and can be found in Table 4. Figures 6-11 illustrate mean scores as the percent of the total possible score. For example, if the mean score was 60 for a test with 120 possible total points, the figures would illustrate that the mean score was $50 \%$ of the total possible score. In this way, differences in mean scores that are related to the number of possible points are not directly confounded. It is important to note that the forms are not equated across grade levels, so comparisons in performance across grade levels are not appropriate.

The raw score performance statistics by grade and content, broken down by gender and race/ethnicity, can be found in Tables 5-7. In general, males and females perform similarly in Reading, Writing, and Mathematics (Figures 6-8). The largest difference is for Mathematics grade 9 where, on average, males have a higher score than females by $5.98 \%$. In general, students also perform similarly across race and ethnicity (Figures 9-11). In Reading, illustrated in Figure 9, White students slightly outperform other races/ethnicities at grade 3, 4, and 8 while Black/African American students somewhat outperform other races/ethnicities at grades 5, 9, and 10 , and students designating two or more races slightly outperform other races/ethnicities at grades 6 and 7. In Writing, illustrated in Figure 10, White students slightly outperform other race/ethnicities at grade 3, Black/African American students have the highest performance in grades $4,5,6,9$, and 10, and Hispanic/Latino students outperform others in grades 7 and 8 . In Mathematics, illustrated in Figure 11, White students have the highest performance in grade 3, Hispanic students slightly outperform other races/ethnicities at grades 4 and 8, Black/African American students have the highest performance at grades 5, 7, 9, and 10, and students identified with Two or More Races largely outperform other races/ethnicities at grade 6.
Raw score frequency distributions by grade and content area are found in Tables 34-57.

## Proficiency Level Data

Student performance on the CoAlt is also described in terms of proficiency levels. The CoAlt categorizes performance into five categories: Inconclusive, Exploring, Emerging, Developing, and Novice, with Novice representing the highest level of proficiency.
Table 58 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 12-14. All impact data are calculated on the basis of performance on the 2014 CoAlt test administration; however, the cut scores were developed
at the 2007 and 2008 standard settings. Overall pass rates, as defined by the combination of the two highest proficiency levels, Developing and Novice (shown in Figure 15), are 40\% or greater for Reading grade 5, Mathematics grades 3-6, and Writing grade 6. Pass rates range from $18 \%$ to $41 \%$ in Reading, $24 \%$ to $44 \%$ in Writing, and $29 \%$ to $49 \%$ in Mathematics.

## Part 8: Summary of Results—Reliability and Validity

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

## Reliability

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

Random errors are just that-random. They are varied and inconsistent, impacting students within a group differently. Random error adds variability but does not affect average performance for a group. Standardization of assessments is meant to minimize errors that occur because of random factors that affect a student's performance on the assessment.
Systematic errors are caused by factors that affect measurement across an entire group of students in the same manner, or they may be specific to some subgroup characteristics (e.g., students who need accommodations, but are not offered them). An example of a systematic error is when students with disabilities are administered a test without the accommodation(s) they require (for example, giving a blind student a regular, non-Braille, non-Large Print form). Other systematic errors can include improper test administrator training, mishandled test materials, or scanner malfunctions.

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

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

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

## Item-specific reliability

Item-specific reliability statistics include the point-biserial correlation, also called an item-test correlation. It is one type of internal consistency measure that is a derivation of the Pearson product moment correlation measuring the correlation between each item and the group of items remaining on the test overall. The correlation provides an indication of how consistently each item measures information similar to the other items on a test measuring a single overall
construct, such as Mathematics. Tables 26-28 illustrate point-biserials item by item, while Table 29 summarizes the point-biserials (and $p$-values) for each grade and content area based upon the operational scoring, including level of independence, and Table 30 summarizes the point-biserials (and $p$-values) for each grade and content area without including level of independence. In general, the point-biserial correlations including level of independence as done in operational scoring and reporting, are within acceptable ranges and above the critical cut-off value of 0.15 , with only six exceptions as previously noted (one in Writing grade 10; and five in Mathematics, one in grade 6, two in grade 8, one in grade 9, and one in grade 10).

## Total test reliability

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

## Cronbach's alpha

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

$$
\hat{\alpha}=\frac{k}{k-1}\left(1-\frac{\sum \hat{\sigma}_{i}^{2}}{\hat{\sigma}_{X}^{2}}\right)
$$

where $k$ is the number of items on the test form, $\hat{\sigma}_{i}^{2}$ is the variance of item $i$, and $\hat{\sigma}_{X}^{2}$ is the total test variance. Cronbach's alpha is appropriate for both dichotomously scored items and those with a wide range of scoring weights (Crocker \& Algina, 1986), making it an appropriate statistic for use with the CoAlt.
There are a number of factors that influence reliability coefficients, including group variation, time limits, test length, and the assumption of independence in the data. When the individuals participating in an assessment are sufficiently diverse, the reliability estimates will be increased, while a more homogeneous group will produce lower reliability estimates (Crocker \& Algina, 1986). Given the very diverse population of students who participate in the CoAlt, it is likely that the reliability estimates will be quite high. Since the CoAlt is untimed, time limits are irrelevant. Further, test length has been established based upon sufficient measurement of the standards as identified by the CDE, thus test length is unlikely to be significantly modified. However, because the teacher is a constant variable across all student responses, the reliability coefficients should be interpreted in light of the fact that the data across items are not strictly independent.
Tables 5-19 show the reliability coefficients (Cronbach's alpha) for all grades and content areas from the 2013-14 CoAlt test administration based upon the total group and relevant subgroups. As is evident in the tables, the coefficients are quite high. At the total group level (summarized in Table 59), the ranges for the reliabilities by content area are as follows: Reading 0.91 (grade 10) to 0.94 (grade 6); Writing $0.92^{25}$ (grade 3) to 0.94 (grade 7); and Mathematics $0.93^{26}$ (grade 10) to

[^10]$0.95^{27}$ (grade 5). It is likely that the heterogeneity of the CoAlt population contributes to the high reliabilities.

At the subgroup level the reliabilities remain high. As seen in Tables 5-7, the lowest total score reliability by gender is for females in grade 10 Reading where the reliability value equals $0.91^{28}$. The lowest total score reliability by race/ethnicity is for the Two or More Races subgroup in grade 3 Writing with a value of 0.87 . Tables $8-10$ illustrate that the lowest total score reliability by Language Proficiency status is 0.84 for Reading grade 7 "NEP," the lowest total score reliability by ELL program-Bilingual status is 0.91 for Reading grade 10 "No," and the lowest total score reliability by ELL program-English as a Second Language status is 0.84 for Reading grade 7 "Yes." As seen in Tables 11-13, the range for total score reliability by Free/Reduced Price Lunch status is 0.88 for Reading grade 10 "Reduced Lunch Eligible" to $0.96^{29}$ for Mathematics grade 5 "Reduced Lunch Eligible."

Tables 14-16 illustrate that the lowest total score reliability by Primary Disability is 0.55 for Writing grade 10 "Specific learning disability" with a sample size of 19 . Homogeneity in the sample can decrease variance and the magnitude of the correlation. This group of students has a mean score of 87.16 out of 108 possible points and the standard deviation for the group is 8.74. Given the small sample size and homogenous sample, the reliability statistic was rendered ineffectual. For those subgroups with sufficient sample sizes for reporting (greater than 15), fewer than $15 \%$ had reliabilities less than 0.80 , with sample sizes ranging from 17 to a maximum of 23 , thus those reliability estimates should be interpreted with caution due to the small sample sizes. The highest total score reliability by Primary Disability was $0.95^{30}$ for Mathematics grade 5 "Multiple disabilities."

As seen in Tables 17-19, the lowest total score reliability by Expanded Accommodation is 0.80 for Reading grade 8 "Modified Picture Symbols." The highest total score reliability value is $0.96^{31}$ for Mathematics grade 5 "Objects."

## Standard Error of Measurement

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

$$
S E M=S D_{-} T S(\sqrt{1-\hat{\alpha}})
$$

where $S D_{-} T S$ is the standard deviation of the total score and $\hat{\alpha}$ is the result of the calculation of Cronbach's alpha shown previously. The SEMs represent the total standard error of measurement in the raw score metric across all items in a given form. It is important to note that for the CoAlt a MC item contributes up to 3 points and a CR item contributes up to 6 points.
The SEMs by test for the total group and all subgroups are given in Tables 5-19 and are summarized at the total group level in Table 59. At the total group level, SEMs for Reading range from 6.66 (grade 6, 105 total possible points) to 7.34 (grade 10, 102 total possible points); for Writing from 7.44 (grade 9, 105 total possible point) to 7.80 (grade 4, 108 total possible

[^11]points); and for Mathematics from 8.13 (grade 3, 126 total possible points) to 10.13 (grade 5, 171 total possible points). These are within acceptable ranges given that the CoAlt is on a raw score scale, with each item contributing up to 3 or 6 points (dependent on item type). Therefore, even the highest SEM value of 10.13 (grade 5 Mathematics) reflects approximately three MC items or two CR items, or some combination thereof.

## Classification Consistency and Accuracy

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

Table 60 illustrates classification consistency and classification accuracy indices based on the Livingston and Lewis (1995) methodology. Note that the values of all indices depend on several factors, such as the reliability of the 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 interrater reliability and the expectation is that this probability would be high. For Reading, the average PC is 0.65 across all grades and ranges from 0.60 (grade 10) to 0.70 (grade 6). For Writing, the average PC is 0.62 across all grades and ranges from 0.57 (grade 8) to 0.68 (grade 3). For Mathematics, the average PC is 0.65 across all grades and ranges from $0.63^{32}$ (grade 7) to 0.68 (grade 5). Probability of misclassification (PM) is 1 minus PC.

The probability of a correct classification by chance (Chance) is the probability that the classification is correct and is due to chance alone. The probability of Chance is estimated under a complete random assignment procedure using the marginal distribution of each form. The Chance probability is expected to be low. For Reading, the average Chance is 0.24 across all grades and ranges from 0.21 (grade 10) to 0.27 (grade 6). For Writing, the average Chance is 0.23 across all grades and ranges from $0.21^{33}$ (grade 8) to 0.27 (grade 3). For Mathematics, the average Chance is 0.23 across all grades and ranges from $0.21^{34}$ (grade 7) to 0.26 (grade 4).

Cohen's kappa (kappa) provides the same type of reliability or agreement statistic as described previously with the Livingston and Lewis (1995) classification consistency methodology, representing the agreement of the classifications between the two parallel forms with the consideration of the probability of a correct classification by chance, PC minus Chance divided by one minus Chance. In general, the value of kappa is lower than the value of PC because the probability of a correct classification by chance is larger than zero. This is true of the CoAlt data in Table 60. For Reading, the average kappa is 0.54 across all grades and ranges from 0.50 (grade 10) to 0.59 (grade 6). For Writing, the average kappa is 0.50 across all grades and ranges from 0.46 (grade 8 ) to 0.56 (grade 3). For Mathematics, the average kappa is 0.55

[^12]across all grades and ranges from $0.53^{35}$ (grade 9) to 0.58 (grade 5). Landis and Koch (1977, p. 165) suggest the following as guidelines for interpretations of kappa:

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

Consistency and accuracy are important to consider in concert. The probability of accuracy (PA) represents the agreement between the observed classification based on the actual test form and true classification, given the modeled form. For Reading, the average PA is 0.75 across all grades and ranges from 0.71 (grade 10) to 0.79 (grade 6). For Writing, the average PA is 0.71 across all grades and ranges from 0.64 (grade 8 ) to 0.77 (grade 3). For Mathematics, the average PA is 0.75 across all grades and ranges from 0.72 (grade 7) to $0.77^{36}$ (grade 5). Finally, Table 60 provides the probability of false positives (FP) and false negatives (FN) as measures of error in the data table and these are low, as expected.

## Validity

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

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

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

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

[^13]Generally, achievement tests are used for student level outcomes, either 1) making predictions about students, or 2) describing students' performance (Mehrens \& Lehmann, 1991). In addition, tests are now also used for the purpose of accountability and measuring AYP. As stated by R. L. Linn (2008), "Tests are used as policy tools to hold teachers and school administrators accountable for student learning and as levers to change instruction in the classroom" (p. 4). The CDE uses various assessment data in reporting AYP and in various programmatic and policy level decisions. Specific to student level outcomes, the CoAlt documents student performance in the areas of Reading, Writing, and Mathematics as defined by the standards. To ensure that test scores allow interpretations appropriate for this purpose, the content of the test must be carefully matched to the specified standards. The 1999 AERA, APA, \& NCME Standards for Educational and Psychological Testing state:

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

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

The validity of an assessment is also evidenced by establishing that the population of students for which the assessment is purposed and built is well targeted, and that those are the students who participate. The targeted student population for the CoAlt is defined as students with a severe cognitive disability who cannot otherwise participate in the general TCAP even with accommodations. Given the high-stakes nature of the CoAlt and the requirements of NCLB and Peer Review Evidence, as well as the need for eligibility criteria data, it is important to note who was actually included in the CoAlt and gather data on their performance. The number of students in various subgroups who participated, along with each group's summary scores, is presented in Tables 5-7 (specific to gender and race/ethnicity), Tables 8-10 (specific to ELL status), Tables 11-13 (specific to Free/Reduced Price Lunch eligibility), Tables 14-16 (specific to primary disability), and Tables 17-19 (specific to expanded accommodation provided on the CoAlt).

It is also important that students are able to demonstrate a range of performance 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 59 and raw score frequency distributions by grade and content area are found in Tables 34-57. Data by expanded benchmark or critical concept are
found in Tables 31-33. These data are reviewed and explained in greater detail in Part 7: Analyses and Results in this report.

An assessment that is valid should be similarly reliable for subgroups of similar sample sizes. Therefore, in addition to the total group data, subgroup total test performance and the associated test reliabilities and standard errors must also be reported. Tables 5-19 show these by subgroup for only those subgroups with ample sample sizes to report statistics (no groups less than 16 have statistics reported, only sample size information). Specific details on test reliability and standard errors are further described in the reliability section.

## Part 9: Special Studies

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

## Level of Independence

The percentages of total items across all grades, by content area, on which students responded with each level of independence, are found in Table 61. Overall, students responded independently to most items. In Reading, $88 \%$ of items were responded to independently (Level 4 according to the Level of Independence Protocol). In Writing, this value was $87 \%$, and in Mathematics, it was $81 \%$.

## 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 one item independently would be more likely to answer other items independently than they would be to require assistance (demonstrating a lower level 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 62 illustrates the consistency of the level of independence ratings, describing by grade and content area the reliability of students at the highest level of independence (Level 4) compared with students at the remaining lower levels. The data demonstrate high reliabilities of at least 0.95 across all grade and content areas. This is an indication that the level of independence at which students perform and/or examiners provide assistance is consistent across items.
Given that students tend to respond independently is a good sign that examiners are not overassisting their students on CoAlt and provides clearer data on the students' level of contentbased understanding. Additional information regarding the level of independence is found by 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 63. The occurrences of coding errors due to a level 1 "no response" and a correct response given (average $0.23 \%$, maximum $0.57 \%$ ) are on average higher than error due to no
response provided to the item with level of independence coded as $2-4$ (average $0.15 \%$, maximum $0.33 \%$ ).

## 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 5-7 and Table 59. In all grades and content areas there are fewer students achieving the maximum score than the minimum score. In Reading, at two grade levels (grades 3 and 9), no students achieved the maximum possible score. The highest number of students to earn the maximum score was 4 at grade 6 , while the number of students who received the minimum score ranged from 11 (grade 3) to 25 students (grade 4). In Writing, there are four grade levels (grades 4 and 8 -10) with no students achieving the maximum possible score. The greatest number of students to earn the maximum was 5 at grade 6 and the number of students who received the minimum score ranged from 12 (grade 3) to 24 students (grade 4). In Mathematics, there are three grade levels (grades 7, 9 and 10) in which no students earned the maximum possible score and the greatest number of students to earn the maximum score was 3 at grade 4, while the minimum score was earned by up to 10 students (grade 3) to 24 students (grade 10). This information is also illustrated by subgroups in Tables 5-19.

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 34-57. It is seen that students are fairly evenly spread out across the range of scores, though there is some "clumping" evident at the top and bottom of the distributions as is typical with this population of students.

## Performance Levels and Response Modes

Tables 64-66 illustrate the average level of independence with which a student answers the test items by content area in relation to the percentage of students in each of the proficiency levels. The student's average level of independence was calculated as a simple average of the level of independence scores across all test items by content area. This provided a range for the levels of independence with which students tended to respond. Then, for each of the five proficiency levels, the percentage of students within each range of independence was calculated. It can be seen that zero percent of students with an average level of independence less than 3.5 achieved a proficiency rating of Novice. All students with an average level of independence of 1.0-1.4 achieved a proficiency level of Inconclusive. The greater the average level of independence with which a student responds the more likely they are to have a higher proficiency rating. It is important to note that it is appropriate for independent responses to receive low scores (such as the percentage of students with the highest average level of independence scoring in the Inconclusive level) due to the possibility for an incorrect though independent response to be given. This finding is reassuring as it illustrates that examiners are not simply redirecting if the student answers the question incorrectly at first.

## Part 10: Longitudinal Analyses

Reading and Writing comparisons examine the differences across seven years, 2007-08, 200809, 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14 while Mathematics comparisons examine differences for eight years, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14. Throughout this section, differences are calculated as the most recent year compared to the prior year. As such, differences are calculated as 2013-2014 minus 2012-

13, 2012-2013 minus 2011-12, and so forth. 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 16 illustrates the number of students participating in the CSAPA/CoAlt Reading assessment by year. It can be seen that between 2008 and 2014 there has been a variety of increasing and decreasing trends in the number of students across all grades.
Table 67 illustrates the means and standard deviations at the total group level by grade for Reading. It is seen that differences from 2007-08 to 2008-09 were as small as -0.42 points for grade 4 and as large as 3.73 points for grade 10. It is also seen that the means for grades $3,4,8$, and 9 decreased ( -0.42 to -2.28 points), while the means for grades $5-7$ and 10 increased (1.08 to 3.73 points). Differences from 2008-09 to 2009-10 were as small as -0.04 points for grade 7 and as large as -2.67 points for grade 10. It is also seen that the means for grades $3-5,7,9$, and 10 decreased ( -0.04 to -2.67 points), while the means for grades 6 and 8 increased ( 0.06 to 0.57 points). Differences from 2009-10 to 2010-11 were as small as 0.06 points for grade 6 and as large as 1.93 points for grade 7 . It is also seen that the means for grades 3,4 , and $8-10$ decreased ( -0.09 to -0.88 points), while the means for grades $5-7$ increased ( 0.06 to 1.93 points). Differences from 2010-11 to 2011-12 were as small as 0.30 points for grade 9 and as large as 3.89 points for grade 5 . It is also seen that the means for grades $3-5$, and 7 decreased ( -0.66 to -3.89 points), while the means for grades 6 and $8-10$ increased ( 0.30 to 2.90 points). Differences from 2011-12 to 2012-13 were as small as 0.17 in grade 8 and as large as 3.45 in grade 5 . It is also seen that means increased in grades 3,5 , and $7-10$ ( 0.17 to 3.45 points) whereas the means decreased in grades 4 and 6 ( -0.35 to -2.14 points). From 2012-13 to 2013-14 differences ranged from -0.11 in grade 3 to -3.71 in grade 5 . Mean scores increased in grades 4 (1.51) and 9 (1.64) and decreased in grades $3,5-8$, and $10(-0.11$ to -3.71$)$. This trend is also illustrated in Figure 19 where the mean score as a percent of the total possible score is presented. Given the nature of the Reading assessment, ranging by grade from 102 to 105 possible points, these small differences in mean scores over time reflect very minor variations in student performance.
Table 70 illustrates the population of students participating in the CSAPA/CoAlt Reading assessment by year based upon gender and primary disability, as well as indicating any differences in the population between the four years. The largest change by gender group from 2007-08 to 2008-09 was seen in grade 7 with a nearly $5 \%$ shift in the gender groupings. The smallest difference was observed at grade 10 with less than $0.75 \%$ of variation. The largest change by gender group from 2008-09 to 2009-10 was seen in grade 8 with a $-3.5 \%$ decline in the percentage of male students. The smallest difference was observed at grade 7 with less than $0.25 \%$ of variation in the percentage of male students. The largest change by gender group from $2009-10$ to $2010-11$ is seen in grade 9 with a $\pm 4.29 \%$ change for male ( - ) and female (+) students. The smallest difference is observed at grade 10 with $-0.46 \%$ of change in the percentage of female students. The largest change by gender group from 2010-11 to 2011-12 was seen in grade 10 with a $-2.66 \%$ decline in the percentage of male students. The smallest difference was observed at grade 6 with a $0.22 \%$ of variation in the percentage of male students. The smallest change by gender group from 2011-12 to 2012-13 was observed at grade 8 with a $\pm 0.08 \%$ change in the percentage of male (+) and female (-) students. The largest difference was seen in grade 10 with a $1.88 \%$ increase in male students. The largest different by gender group from

2012-13 to 2013-14 was seen in grade 3 with a $-3.62 \%$ change in the percentage of female students, and the smallest difference was a $-0.04 \%$ change in the percentage of males students in grade 7.

The primary disability classifications have also remained relatively stable as detailed in Table 70 by grade level and as illustrated for the overall group in Figure 22, only differences for groups containing students in both administrations are referenced here. The smallest difference between the 2007-08 and 2008-09 administrations in the percentage of students classified with a specific primary disability was a zero percent change for the percent of students classified as having a "Visual Disability" in grade 6. The largest difference was $7.17 \%$ for "Limited Intellectual Capacity" in grade 6. The smallest difference between the 2008-09 and 2009-10 administrations in the percentage of students classified with a specific primary disability was a zero percent change for the percent of students classified as having a "Visual Disability" in grade 7. The largest difference was an increase of $5.91 \%$ for "Limited Intellectual Capacity" in grade 4. The smallest difference between the 2009-10 and 2010-11 administrations in the percentage of students classified with a specific primary disability is a $-0.01 \%$ change for the percent of students classified as having a "Physical Disability" in grade 7. The largest difference is an increase of $5.77 \%$ for "Multiple Disabilities" in grade 4. The smallest difference between the 2010-11 and 2011-12 administrations in the percentage of students classified with a specific primary disability is a zero percent change for the percent of students classified as "Deaf-Blind" in grades 6, 9, and 10. The largest difference is an increase of $5.24 \%$ for "Multiple Disabilities" in grade 7. The smallest difference between the 2011-12 and 2012-13 administrations is a $-0.01 \%$ change in grade 4 students classified with "Visual Disability" and in grade 6 students classified with "Hearing Disability." The largest difference is a $5.97 \%$ decrease in grade 6 students with the classification "Physical Disability." Between 2012-13 and 2013-14, the largest difference seen was a $6.18 \%$ increase in the percentage of students with the classification "Multiple Disabilities" in grade 7, and the smallest difference was a $0 \%$ change, which occurred in multiple disability classifications and grades.
A longitudinal summary of $p$-values is illustrated in Table 73 for Reading. The mean $p$-values remain quite stable across administrations with the smallest difference from 2007-08 to 2008-09 of $-0.004^{37}$ at grade 4 ; for 2008-09 to 2009-10 the smallest difference was at grade $9,-0.001$; for 2009-10 to 2010-11 the smallest difference was at grade $3,-0.004$; for 2010-11 to 2011-12 the smallest difference was at grade $9,0.003$; and for 2011-12 to 2012-13 the smallest difference was at grade 8, at 0.0005 . In 2013-14 there was no difference in mean $p$-values for grades 3 and 10. The largest difference for 2007-08 to 2008-09 was observed at grade 10 with a difference of 0.036 ; for 2008-09 to 2009-10 the largest difference, of -0.027 , was at grade 10; for 2009-10 to 2010-11 the largest difference of 0.018 , was at grade 7; for 2010-11 to 2011-12 the largest difference of -0.036 , was at grade 5 . Equally, the range of $p$-values remained stable and for 201112 to 2012-13. The largest difference of 0.033 was at grade 5 , and similarly from 2012-13 to 2013-14 the largest difference of -0.04 was at grade 5 . The highest observed $p$-value was 0.88 in grade 4 (2007-08); 0.89 in grade 5 (2008-09); 0.88 in grade 6 (2009-10); $0.87^{38}$ in grade 5 (201011); 0.89 in grade 6 (2011-12), 0.89 in grade 5 (2012-13), and $0.87^{39}$ in grade 6 (2013-14). The lowest observed $p$-value has historically always been in grade 6 . It was 0.18 in 2007-08; 0.23 in 2008-09; 0.24 in 2009-10; 0.21 in 2010-11, and $0.23^{40}$ in 2010-11. In 2012-13 the lowest observed $p$-value was $0.23^{41}$ in grade 4, and in 2013-14 the lowest $p$-value was $0.23^{42}$ in grade 5 .

[^14]Table 76 illustrates the longitudinal point-biserial statistics and provides results of the differences. The mean point-biserials remain quite stable across administrations with grade 8 illustrating a difference of just $-0.001^{43}$ from 2007-08 to 2008-09; 0.002 for grade 9 from 2008-09 to 2009-10; 0.007 for grade 4 from 2009-10 to 2010-11; 0.001 for grade 8 from 2010-11 to 2011-12; $-0.002^{44}$ for grade 4 from 2011-12 to 2012-13; and -0.0006 for grade 6 from 2012-13 to 2013-14. The largest difference in mean point-biserials between 2007-08 and 2008-09 was -0.019 for grade 6; from 2008-09 to 2009-10 the largest difference was -0.017 for grade 4; from 2009-10 to 2010-11 the largest difference was -0.026 for grade 6 ; from 2010-11 to 2011-12 the largest difference was -0.029 for grade 7 . From 2011-12 to 2012-13 the largest difference was -0.024 for grade 3, and from 2012-13 to 2013-14 it was -0.02 for grade 3. The highest observed point-biserial in 2007-08 was 0.74 in grade 9 ; in 2008-09 it was 0.75 in grade 5 ; in 2009-10 the highest observed pointbiserial was 0.75 in grade 5; and in 2010-11 the highest observed point-biserial was $0.73^{45}$ in grade 6; in 2011-12 the highest observed point-biserial was 0.74 in grade 3; in 2012-13 the highest observed point-biserial was $0.74^{46}$ in grade 9 ; and in 2013-14 it was $0.73^{47}$ in grade 5 . The lowest observed point-biserial was in grade 7, in 2007-08 it was 0.24 ; in 2008-09 it was 0.20 ; in 2009-10 it was 0.16 ; in 2010-11 it was 0.14 . In 2011-12 it was 0.16 in grade 3; in 2012-13 it was $0.19^{48}$ in grade 5; and in 2013-14 it was 0.17 in grade 6 .

Another important trait to examine longitudinally is the impact data and differences over time, presented in Table 79. At the level of Inconclusive from 2007-08 to 2008-09 the largest decrease was $3.55 \%$ for grade 10, and the largest increase at this level was $3.34 \%$ for grade 4. From 200809 to 2009-10 the largest decrease at this level was $1.83 \%$ for grade 6, and the largest increase was $3.61 \%$ for grade 5 . From 2009-10 to 2010-11 the largest decrease at the Inconclusive level was $3.93 \%$ for grade 7 , and the only increase was $1.03 \%$ for grade 6 . From 2010-11 to 2011-12 the largest decrease at this level was $1.96 \%$ for grade 6, and the largest increase was $4.50 \%$ for grade 3. From 2011-12 to 2012-13 the largest decrease at the Inconclusive level was $2.22 \%$ for grade 7 and the largest increase was $2.57 \%$ for grade 4 . From 2012-13 to 2013-14 the largest decrease at the Inconclusive level was $4.25 \%$ grade 4 and the largest increase was $4.22 \%$ at grade 7.
At the Exploring level from 2007-08 to 2008-09 there was a $3.90 \%$ decrease in students at grade 6 , and the largest increase at this level was $3.51 \%$ for grade 8 . From 2008-09 to 2009-10 the largest decrease in Exploring students was $3.50 \%$ for grade 5 and the largest increase was $3.86 \%$ for grade 6. From 2009-10 to 2010-11 the only decrease at this level was $0.17 \%$ for grade 8 and the largest increase was $4.66 \%$ for grade 10. From 2010-11 to 2011-12 the largest decrease in Exploring students was $3.79 \%$ for grade 9 and the largest increase was $4.88 \%$ for grade 5 . From 2011-12 to 2012-13 the largest decrease at the Exploring level was $6.18 \%$ for grade 10 and the largest increase was $2.07 \%$ for grade 7 . From 2012-13 to 2013-14 the largest decrease the Exploring level was $3.00 \%$ at grade 7 and the largest increase was $4.43 \%$ at grade 10.
At the level of Emerging, from 2007-08 to 2008-09 there was a decrease of $4.03 \%$ in students at grade 4, while there was a $6.25 \%$ increase at grade 6 . From 2008-09 to 2009-10, the largest decrease in Emerging students was $3.98 \%$ for grade 6 and the largest increase was $2.53 \%$ for grade 5. From 2009-10 to 2010-11 the largest decrease at this level was $3.85 \%$ for grade 6 and

[^15]the largest increase was $4.53 \%$ for grade 8. From 2010-11 to 2011-12, the largest decrease in Emerging students was $4.83 \%$ for grade 3, and the largest increase was $2.86 \%$ for grade 6. From 2011-12 to 2012-13, at the Emerging level there was an increase for all grades ranging from $0.24 \%$ for grade 6 to $5.50 \%$ for grade 10. From 2012-13 to 2013-14 the largest decrease at the Emerging level was $3.32 \%$ at grade 8 and the largest increase was $2.04 \%$ at grade 3.

At the Developing level, from 2007-08 to 2008-09 there was a 5.32\% decrease in students in grade 9, while there was an increase of $2.79 \%$ in grade 10 . From 2008-09 to 2009-10 there was a $1.58 \%$ decrease in students in grade 4, while there was an increase of $4.58 \%$ in grade 8 . From 2009-10 to 2010-11 the largest decrease in Developing was $1.35 \%$ for grade 3, and the largest increase was $2.09 \%$ for grade 7. From 2010-11 to 2011-12 there was a $2.27 \%$ decrease in students in grade 5, while there was an increase of 1.41\% in grade 9. From 2011-12 to 2012-23 at the Developing level the largest decrease was $3.72 \%$ for grade 4 and the largest increase was $3.12 \%$ for grade 5. From 2012-13 to 2013-14 the largest decrease at the Developing level was $3.11 \%$ at grade 3 and the largest increase was $2.52 \%$ at grade 10.

At the Novice level, from 2007-08 to 2008-09 there was a decrease of $1.35 \%$ of students in grade 6 , with the greatest increase of $2.84 \%$ in grade 10. From 2008-09 to 2009-10 there was a $4.09 \%$ decrease in students in grade 10, while there was an increase of $0.35 \%$ in grade 6 . From 2009-10 to 2010-11 the largest decrease in Novice was $3.12 \%$ for grade 8, and the largest increase was $1.22 \%$ for grade 10. From 2010-11 to 2011-12 there was a 3.18\% decrease in students in grade 5 , while there was an increase of $2.95 \%$ in grade 8 . From 2011-12 to 2012-13 at the Novice level the largest decrease was $2.80 \%$ for grade 8 and the largest increase was $2.20 \%$ for grade 5. From 2012-13 to 2013-14 the largest decrease at the Novice level was $3.22 \%$ at grade 5 and the largest increase was $1.55 \%$ at grade 9 .

From 2007-08 to 2008-09 the percentage of students classified as Developing and Novice combined decreased by $4.42 \%$ in grade 8 and increased by $5.64 \%$ in grade 10. From 2008-09 to 2009-10 the percentage of students in the combined Developing and Novice categories decreased by $5.10 \%$ for grade 10 and increased by $4.62 \%$ for grade 8 . From 2009-10 to 2010-11 the percentage of students in the combined Developing and Novice categories decreased by $3.71 \%$ for grade 8 and increased by $1.65 \%$ for grade 6 . From 2010-11 to 2011-12 the percentage of students in the combined Developing and Novice categories decreased by $5.45 \%$ for grade 5 and increased by $3.18 \%$ for grade 8 . In general, the impact data are relatively stable across the administrations. Finally, from 2011-12 to 2012-13 at the combined Developing and Novice level the largest decrease was $3.82 \%$ for grade 4 and the largest increase was $5.33 \%$ for grade 5 . From 2012-13 to 2013-14 the largest decrease at the combined Developing and Novice level was
$5.45 \%$ at grade 5 and the largest increase was at $3.27 \%$ at grade 9 .

## Writing

Figure 17 illustrates the number of students participating in the CSAPA/CoAlt Writing assessment in 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14. It is illustrated that between 2008 and 2014, there has been a variety of increasing and decreasing trends in the number of students across all grades.
Table 68 illustrates the means and standard deviations at the total group level by grade for Writing. It is seen that the 2007-08 to 2008-09 differences are as small as -0.30 points for grade 9 and as large as 4.08 points for grade 10. It is also seen that the means for grades $3,4,8$, and 9 decreased (from -0.30 to -2.24 points), while the means for grades 5-7 and 10 increased (from 1.15 to 4.08 points). The 2008-09 to 2009-10 differences are as small as -0.35 points for grade 4 and as large as -2.00 points for grade 10. It is also seen that the means for grades $3-5,7,9$, and 10 decreased (from -0.35 to -2.00 points), while the means for grades 6 and 8 increased (from 0.76 to 0.83
points). The 2009-10 to 2010-11 differences are as small as -0.01 points for grade 9 and as large as -3.67 points for grade 4 . It is also seen that the means for grades $3,4,6,9$, and 10 decreased (from -0.01 to -3.67 points), while the means for grades 5,7 , and 8 increased (from 0.19 to 1.50 points). The 2010-11 to 2011-12 differences are as small as 0.60 points for grade 9 and as large as -4.44 points for grade 5 . It is also seen that the means for grades 3,5 , and 7 decreased (from -1.30 to -4.44 points), while the means for grades 4,6 , and $8-10$ increased (from 0.60 to 2.08 points). The 2011-12 to 2012-13 differences are as small as 0.60 points for grade 10 and as large as 4.15 points for grade 5 . It is also seen that the mean scores increased for grades 3,5 , and $7-$ 10, whereas the means decreased for grades 4 and 6 . Between 2012-13 and 2013-14 the differences were as small as -0.10 in grade 6 and as large as -4.04 in grade 5 . Mean scores were seen to increase at grades $3,4,6,9$, and 10 (from 0.10 to 1.34 ) and decrease at grades 5,7 , and 8 (from -1.78 to -4.04 points). This trend is also illustrated in Figure 20 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 71 illustrates the population of students participating in the CSAPA/CoAlt Writing assessment based upon gender and primary disability. The largest change by gender group between 2007-08 and 2008-09 was seen in grade 7 with a $4.98 \%$ decrease in male students, while the smallest difference was observed at grade 5 with a $0.60 \%$ increase in the percentage of female students. For 2008-09 to 2009-10 the largest difference by gender group is observed for grade 8 female students with a $4.02 \%$ increase, while the smallest difference is observed for grade 7 female students with a $0.03 \%$ decrease. For 2009-10 to 2010-11 the largest difference by gender group is observed for grade 9 male students with a $4.37 \%$ decrease, while the smallest difference is observed for grade 7 male students with a $0.39 \%$ increase. For 2010-11 to 2011-12 the largest difference by gender group is observed for grade 10 male students with a $3.28 \%$ decrease, while the smallest difference is observed for grade 6 male students with a $0.25 \%$ increase. For 2011-12 to 2012-13 the largest difference by gender group is seen for grade 6 with a $1.68 \%$ decrease in male students, and the smallest difference is seen in grade 4 with a $0.24 \%$ decrease in male students. Between 2012-13 and 2013-14 the largest difference by gender group is seen in grade 3 with a $3.31 \%$ decrease in female students, and the smallest difference was in grade 6 with a $\pm 0.08$ decrease in male ( + ) and female ( - ) students.
The primary disability classifications have also remained quite stable by grade level as detailed in Table 71 and as illustrated for the overall group in Figure 23, only differences for groups containing students in both administrations are referenced here. The smallest difference in the percentage of students classified with a specific primary disability between 2007-08 and 2008-09 was a zero percent change for the percent of students classified as having "Multiple Disabilities" in grade 3; while from 2008-09 to 2009-10 the smallest difference was a zero percent change for students classified with a "Visual Disability" in grade 7; the smallest difference from 2009-10 to 2010-11 was a $-0.02 \%$ change for students classified with a "Traumatic Brain Injury" in grade 10; the smallest difference from 2010-11 to 2011-12 was a zero percent change for students classified as "Deaf-Blind" in grades 6, 9, and 10; and the smallest difference from 2011-12 to 2012-13 was a $-0.01 \%$ change for students classified as "Visual Disability" in grade 4 and for students with the classification "Hearing Disability" in grade 6. From 2012-13 to 2013-14 there were multiple disability classifications with no change. The largest difference between 2007-08 and 2008-09 was a 6.79\% increase for "Limited Intellectual Capacity" in grade 6; while for 2008-09 to 2009-10 the largest difference was a $5.99 \%$ increase for students classified as "Limited Intellectual Capacity" in grade 7; the largest difference from 2009-10 to 2010-11 was a $5.82 \%$ increase for students classified with "Multiple Disabilities" in grade 4; the largest difference from 2010-11 to 2011-12 was a $5.24 \%$ increase for students classified with "Multiple Disabilities" in grade 7; the largest difference from 2011-12 to 2012-13 was a $5.95 \%$ decrease for students with the
classification "Physical Disability" in grade 6; finally, the largest difference from 2012-13 to 201314 was students classified with "Multiple Disabilities" with a $6.28 \%$ increase.
The $p$-values for 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14 are illustrated in Table 74, providing results of the differences between years. The mean $p$-values remain quite stable across administrations with the smallest difference from 2007-08 to 2008-09 of $-0.003^{49}$ at grade 9 ; the smallest difference from 2008-09 to 2009-10 of -0.006 at grade 7 ; the smallest difference from 2009-10 to 2010-11 of zero at grade 8; the smallest difference from 2010-11 to 2011-12 of 0.006 at grade 9; the smallest difference from 2011-13 to 2012-13 was an increase of 0.003 for grade 10; and the smallest difference between 2012-13 and 2013-14 was 0.003at grade 6. The largest difference observed between 2007-08 and 2008-09 was 0.031 for grade 10; the largest difference from 2008-09 to 2009-10 was -0.018 at grade 10; the largest difference observed between 2009-10 and 2010-11 was -0.029 at grade 4; the largest difference observed between 2010-11 and 2011-12 was -0.040 at grade 5; the largest difference observed between 2011-12 and 2012-13 was 0.039 at grade 5; and the largest difference seen from 201213 to 2013-14 was -0.04 at grade 5 . Equally, the range of $p$-values remained stable. The highest observed $p$-value in 2007-08 was 0.86 in grade 8 ; in 2008-09 it was 0.85 in grade 7 ; in 2009-10 it was 0.86 in grade 6 ; in 2010-11 the highest observed $p$-value was 0.85 in grade 7 ; in 2011-12 the highest observed $p$-value was 0.86 in grade 8 ; in 2012-13 the highest observed $p$-value was 0.86 in grade 7; and in 2013-14 $0.83^{50}$ in grade 8 was the highest observed $p$-value. Historically, the lowest observed $p$-value has always been in grade 10; in 2007-08 was 0.17 ; in 2008-09 it was 0.19 ; in 2009-10 it was 0.16 ; in 2010-11 it was 0.15 ; in 2012-13 it was 0.18 ; and in 2013-14 it was 0.17 . However, in 2011-12, the lowest observed $p$-value is $0.19^{51}$, observed in grade 4 . In 2013-14, the lowest observed $p$-value is 0.17 , observed in grade 10 .

Table 77 illustrates the point-biserial statistics for 2007-08, 2008-09, 2009-10, 2010-11 2011-12, 2012-13, and 2013-14 and provides results of the differences. The mean point-biserials remain quite stable across administrations with grade 3 historically illustrating the smallest differences across most years with a difference of $0.0002^{52}$ from 2007-08 to 2008-09; a difference of 0.002 from 2008-09 to 2009-10; and a difference of 0.000 from 2009-10 to 2010-11. The smallest difference between the mean point-biserials for 2010-11 to 2011-12 is -0.004 and occurred in grade 4, and for 2012-13 it was -0.001 in grade 6 . The smallest difference between the mean point-biserials for 2012-13 to 2013-14 is 0.0003 at grade 4. The largest difference from 2007-08 to 2008-09 was observed at grade 6 with a difference of -0.018 ; for 2008-09 to 2009-10, the largest difference was 0.023 in grade 9 ; from 2009-10 to 2010-11, the largest difference was -0.034 in grade 5; from 2010-11 to 2011-12, the largest difference was 0.037 in grade 7; from 2011-12 to 2012-13, the largest difference was -0.018 in grade 7; and from 2012-13 to 2013-14, the largest difference was -0.02 in grade 3 . Equally, the range of point-biserial values remained stable. The highest observed point-biserial in 2007-08 was 0.86 in grade 7; in 2008-09 it was 0.88 in grade 8 ; in 2009-10 it was 0.87 in grade 8 ; in 2010-11 the highest observed point-biserial was $0.87^{53}$ in grade 6; in 2011-12 the highest observed point-biserial was 0.88 in grade 7; and in 2012-13 the highest observed point-biserial was 0.87 in grade 8; and in 2013-14 it was $0.88^{54}$ in grade 8. The lowest observed point-biserial in 2007-08 was 0.13 in grade 7; in 2008-09 it was 0.17 in grade 9 ; in 2009-10 it was 0.12 in grade 10; and in 2010-11 the lowest observed point-

[^16]biserial was $0.12^{55}$ in grade 7 ; in 2011-12 the lowest observed point-biserial was $0.14^{56}$ in grade 10; in 2012-13 the lowest observed point-biserial was 0.15 in grade 4; and in 2013-14 the lowest was 0.14 in grade 10.

Another important trait to examine over time is the impact data which is presented in Table 80. At the level of Inconclusive from 2007-08 to 2008-09 the largest decrease was $4.33 \%$ for grade 7; for 2008-09 to 2009-10 the largest decrease was 2.41\% for grade 8; from 2009-10 to 2010-11 the largest decrease was $2.37 \%$ for grade 7; from 2010-11 to 2011-12 the largest decrease in Inconclusive students was 4.61\% for grade 8; and from 2011-12 to 2012-13 the largest decrease at the Inconclusive level was $2.90 \%$ for grade 7 . At this level there was a $2.62 \%$ increase in students in grade 8; from 2007-08 to 2008-09, the greatest increase from 2008-09 to 2009-10 was $4.15 \%$ for grade 9; from 2009-10 to 2010-11 the greatest increase was $2.90 \%$ for grade 4; from 2010-11 to 2011-12, the greatest increase in Inconclusive students, of $4.02 \%$, occurred at grade 7; and from 2011-12 to 2012-13 the greatest increase at the Inconclusive level was 1.37\% for grade 10. At the level of Inconclusive from 2012-13 to 2013-14 the largest decrease was $1.86 \%$ in grade 10 and the largest increase was $3.08 \%$ in grade 5.

At the Exploring level there was a 6.75\% decrease at grade 10 from 2007-08 to 2008-09; from 2008-09 to 2009-10 the largest decrease was 1.44\% for grade 7; from 2009-10 to 2010-11 the largest decrease in Exploring students was 5.08\% for grade 8; from 2010-11 to 2011-12 the largest decrease in Exploring students was 2.92\% for grade 10; and from 2011-12 to 2012-13 the largest decrease at the Exploring level was $3.78 \%$ for grade 10. There was an increase in students classified as Exploring from 2007-08 to 2008-09 for grade 3 of 2.30\%; from 2008-09 to 2009-10 the greatest increase was for grade 6 with a $5.77 \%$ increase; from 2009-10 to 2010-11 the greatest increase in Exploring students was for grade 10 with a $3.81 \%$ increase; from 2010-11 to 2011-12 the greatest increase in Exploring students was for grade 5 with a $4.81 \%$ increase; and from 2011-12 to 2012-13 the greatest increase at the Exploring level was $4.58 \%$ for grade 4. At the level of Exploring from 2012-13 to 2013-14 the largest decrease was 4.24 in grade 4 and the largest increase was $1.80 \%$ in grade 3.
From 2007-08 to 2008-09 there was a $2.86 \%$ decrease for grade 5 students classified as Emerging; from 2008-09 to 2009-10 the greatest decrease of $5.53 \%$ was observed for grade 9; from 2009-10 to 2010-11 the greatest decrease in Emerging students, of $6.35 \%$, was observed for grade 10; from 2010-11 to 2011-12 the greatest decrease in Emerging students, of 5.48\%, was observed for grade 7; and from 2011-12 to 2012-13 the greatest decrease at the Emerging level was $2.76 \%$ for grade 6. From 2007-08 to 2008-09 there was a $2.42 \%$ increase in Emerging students at grade 6; from 2008-09 to 2009-10 the greatest increase was $2.11 \%$ for grade 7 ; from 2009-10 to 2010-11 there was a 2.92\% increase in Emerging students for grade 5; from 2010-11 to 2011-12 there was a 4.07\% increase in Emerging students for grade 10; and from 2011-12 to 2012-13 the greatest increase at the Emerging level was 3.06. At the level of Emerging from 2012-13 to 2013-14 the largest decrease was $1.20 \%$ in grade 10 and the largest increase was 4.24 in grade 4.

There was a $4.30 \%$ decrease in students classified as Developing in grade 9 from 2007-08 to 2008-09; from 2008-09 to 2009-10 the greatest decrease of $3.14 \%$ was for grade 7; from 200910 to 2010-11 the greatest decrease in Developing students of $5.83 \%$ was for grade 4 students; from 2010-11 to 2011-12 the greatest decrease in Developing students of $3.55 \%$ was for grade 5 students; and from 2011-12 to 2012-13 the greatest decrease at the Developing level was 5.06\% for grade 4. From 2007-08 to 2008-09 there was a $6.25 \%$ increase at grade 6 in students classified as Developing; from 2008-09 to 2009-10 there was a $2.48 \%$ increase at grade 4; from

[^17]2009-10 to 2010-11 there was a 3.44\% increase in Developing students at grade 9; from 2010-11 to 2011-12 there was a 3.06\% increase in Developing students at grade 10; and from 2011-12 to 2012-13 the greatest increase at the Developing level was $2.95 \%$ for grade 5 . At the level of Developing from 2012-13 to 2013-14 the largest decrease was $6.89 \%$ in grade 5 and the largest increase was $3.96 \%$ in grade 9.
Within the Novice classification there was a $2.89 \%$ decrease at grade 6 (the only decrease evidenced) from 2007-08 to 2008-09; from 2008-09 to 2009-10 the greatest decrease of 4.68\% was observed at grade 10; from 2009-10 to 2010-11 the greatest decrease in Novice students, of $3.36 \%$, occurred at grade 5; from 2010-11 to 2011-12 the greatest decrease in Novice students, of $2.42 \%$, occurred at grade 10; and from 2011-12 to 2012-13 the greatest decrease at the Novice level was $0.64 \%$ for grade 7. From 2007-08 to 2008-09 there was a $4.69 \%$ increase in Novice students at grade 10; from 2008-09 to 2009-10 the largest increase was $4.22 \%$ for grade 6; from 2009-10 to 2010-11 the largest increase in Novice students of $3.44 \%$ was for grade 10; from 2010-11 to 2011-12 the largest increase in Novice students, of $2.20 \%$ was for grade 8; and from 2011-12 to 2012-13 the largest increase at the Novice level was $2.89 \%$ for grade 5 . At the level of Novice from 2012-13 to 2013-14 the largest decrease was $2.86 \%$ in grade 6 and the largest increase was $1.42 \%$ in grade 10.

Within the combined levels of Developing and Novice there were decreases of $1.17 \%$ to $3.77 \%$ in the impact data at grades $3,4,8$, and 9 , and increases of $1.91 \%$ to $4.99 \%$ at grades $5-7$ and 10 from 2007-08 to 2008-09. For 2008-09 to 2009-10 there were decreases of $1.18 \%$ to $2.77 \%$ in the impact data at grades 3,7 , and 10 , and increases of $0.23 \%$ to $1.95 \%$ at grades $4-6,8$, and 9 . For 2009-10 to 2010-11 for the percentage of students classified as Developing and Novice there were decreases of $1.16 \%$ to $6.09 \%$ at grades $3-6$, and increases of $0.45 \%$ to $1.41 \%$ at grades $7-$ 10. For 2010-11 to 2011-12 the percentage of students classified as Developing and Novice category decreased by $4.68 \%$ for grade 5 and increased by $2.27 \%$ for grade 7 . In general, the impact data are relatively stable across the four administrations. From 2011-12 to 2012-13 there were decreases at the Developing and Novice combined levels for grades 3, 4, and 6 ranging from $1.06 \%$ to $4.01 \%$ and increases for grades 5 and $7-10$ ranging from $0.28 \%$ to $5.85 \%$. At the level of Developing and Novice combined from 2012-13 to 2013-14 the largest decrease was in $8.62 \%$ in grade 5 and the largest increase was $3.11 \%$ in grade 9 .

## Mathematics

Figure 18 illustrates the number of students participating in the CSAPA/CoAlt Mathematics assessment in 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, and 201314. It is shown that between 2008 and 2014 there has been a variety of increasing and decreasing trends in the number of students across all grades.
Table 69 illustrates the means and standard deviations at the total group level by grade for Mathematics. It is seen that the 2006-07 versus 2007-08 differences are as small as 0.70 points for grade 6 and as large as 3.65 points for grade 8, and that the means for grades 3-5 and 7 decrease while the means for grades 6 and $8-10$ increase. The 2007-08 versus 2008-09 differences are as small as 0.18 for grade 9 and as large as -4.66 points for grade 8 , and the means for grades 3,4 , and 8 decrease, while the means for grades $5-7,9$, and 10 increase. The 2008-09 versus 2009-10 differences are as small as -0.10 points for grade 7 and as large as -4.20 points for grade 5 , and the means for grades $3,5,7,9$, and 10 decrease, while the means for grades 4,6 , and 8 increase. The 2009-10 versus 2010-11 differences are as small as -0.17 points for grade 9 and as large as -4.13 points for grade 4 , and the means for grades $3,4,6,9$, and 10 decrease, while the means for grades 5, 7, and 8 increase. The 2010-11 versus 2011-12 differences are as small as 0.23 points for grade 4 and as large as -5.20 points for grade 5 , and the means for grades 3,5 , and 7 decrease, while the means for grades 4,6 , and $8-10$ increase.

The 2011-12 versus 2012-13 differences were as small as -0.51 for grade 8 and as large as 5.88 for grade 5 , and the means for grades $3,5,7,9$ and 10 increase while the means for grades 4,6 , and 8 decrease. Between 2012-13 and 2013-14 differences are as small as 0.42 points for grade 3 and as large as 6.17 points for grade 5 . The means for grades $3,4,9$, and 10 increase, while the means for grades 5-8 decrease. This trend is also illustrated in Figure 21 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 72 illustrates the population of students participating in the CSAPA/CoAlt Mathematics assessment based upon gender and primary disability. The largest change by gender group between 2006-07 and 2007-08 was -7.61\% for grade 6 males, while the smallest difference was observed for grade 4 females with a decrease of $0.23 \%$. For 2007-08 to 2008-09 the largest difference by gender group was observed for grade 7 males with a $5.34 \%$ decrease, while the smallest difference was observed for grade 4 females with a $0.11 \%$ decrease. The largest change by gender group between 2008-09 and 2009-10 was a $3.04 \%$ increase in grade 4 males, while the smallest difference was observed at grade 5 with a $0.16 \%$ decrease in female students and a $0.16 \%$ increase in male students. The largest change by gender group between 2009-10 and 2010-11 was a $3.92 \%$ decrease in grade 9 male students, while the smallest difference was observed at grade 4 with a $0.19 \%$ increase in female students. The largest change by gender group between 2010-11 and 2011-12 was a 2.67\% increase in grade 9 male students, while the smallest difference was observed at grade 3 with a $0.01 \%$ decrease in female students. The largest difference by gender from 2011-12 to 2012-13 was observed at grade 9 with a $1.48 \%$ decrease in female students, while the smallest difference was observed at grade 4 with a zero percent change in female students. The largest difference by gender group from 2012-13 to 201314 was seen in grade 3 with a decrease of $4.18 \%$ for female students, and the smallest change was seen in grade 6 with a change of $\pm 0.13$ for male (+) and female ( - ) students.
The primary disability classifications have also remained quite stable as detailed in Table 72, by grade level and as illustrated for the total group in Figure 24, only differences for groups containing students in both administrations are referenced here. The smallest difference in the percentage of students classified with a specific primary disability between 2006-07 and 2007-08 was a 0.01\% change at grade 9 for the students classified as having "Multiple Disabilities;" for 2007-08 to 200809 the smallest difference was a zero percent change for the percent of students classified as having a "Speech/Language Disability" in grade 10; for 2008-09 to 2009-10 the smallest difference was a zero percent change for students classified with "Visual Disability" in grade 7; and for 200910 to 2010-11 the smallest difference was a zero percent change for students classified with a "Traumatic Brain Injury" in grade 10; for 2010-11 to 2011-12 the smallest difference was a zero percent change for students classified as "Deaf-Blind" in grades 6, 9, and 10, for 2011-12 to 201213 the smallest differences were a $-0.01 \%$ change in students with the classification "Visual Disability" in grade 4 and a $-0.01 \%$ change in students with the classification "Traumatic Brain Injury" in grade 9, and for 2012-13 to 2013-14 there were multiple classifications with no change. The largest difference between 2006-07 and 2007-08 was $-5.17 \%$ for grade 3 "Limited Intellectual Capacity;" for 2007-08 to 2008-09 the largest difference was $-6.55 \%$ for grade 6 students classified as having "Multiple Disabilities;" for 2008-09 to 2009-10 the greatest difference was $6.22 \%$ for students in grade 4 classified with "Limited Intellectual Capacity;" for 2009-10 to 201011 the greatest difference was $5.54 \%$ for students in grade 5 classified with "Limited Intellectual Capacity;" for 2010-11 to 2011-12 the greatest difference was $5.71 \%$ for students in grade 7 classified with "Multiple Disabilities;" for 2011-12 to 2012-13 the greatest difference was $-5.85 \%$ in grade 6 students with the classification "Physical Disability;" and between 2012-13 and 2013-14 the greatest difference was $7.65 \%$ in grade 7 for students with the classification "Multiple Disabilities."

The $p$-values for 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, and 201314 are illustrated in Table 75 providing results of the difference between years. The mean $p$-values remain quite stable across administrations with the smallest 2006-07 to 2007-08 difference of $0.007^{57}$ at grade 6; the smallest 2007-08 to 2008-09 difference of 0.000 at grade 7; the smallest 2008-09 to 2009-10 difference of -0.002 at grade 7; the smallest 2009-10 to 2010-11 difference of -0.003 at grade 9 ; the smallest $2009-10$ to 2010-11 difference of 0.001 at grade 4 ; the smallest 2011-12 to 2012-13 difference was $0.007^{58}$ at grades 8 and 9 ; and the smallest 2012-13 to 201314 difference was 0.002 at grade 9 . Grade 8 illustrated the largest difference for 2006-07 to 200708 and 2007-08 to 2008-09 with differences of 0.025 and -0.032, respectively. From 2008-09 to 2009-10 the greatest difference was -0.022 for grade 5 , from 2009-10 to 2010-11 the greatest difference was -0.029 for grade 4 ; from 2009-10 to 2010-11 the greatest difference was -0.035 for grade 5; from 2011-12 to 2012-13 the greatest difference was 0.036 for grade 5; and from $2012-13$ to 2013-14 the greatest difference was -0.04 in grade 5 . Equally the range of $p$-values remained stable. The highest observed $p$-values from 2006-07 through 2009-10 were at grade 4 with values of 0.90 (2006-07); 0.91 (2007-08); 0.89 (2008-09); and 0.89 (2009-10). In 2010-11, the highest observed $p$-value was 0.89 at grade 3; in 2011-12 the highest observed $p$-value was 0.86 at grade 6 ; in 2012-13 the highest observed $p$-value was 0.86 at grade 4 ; and in 2013-14 the highest was 0.88 in grade 3 . The lowest observed $p$-values across all years were at grade 10 with values of 0.08 (2006-07); 0.07 (2007-08); 0.09 (2008-09); 0.08 (2009-10); 0.06 (2010-11); 0.07 (2011-12); and 0.09 (2012-13 and 2013-14).
Table 78 illustrates the point-biserial statistics for 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14 and provides results of the differences. The mean pointbiserials remain quite stable across administrations with grade 9 illustrating the smallest differences of $-0.001^{59}$ for 2006-07 to 2007-08 and -0.005 for 2007-08 to 2008-09, from 2008-09 to 200910 the smallest difference of 0.002 was for grade 8 ; from 2009-10 to 2010-11 the smallest difference in point-biserials was 0.0049 for grade 3; from 2010-11 to 2011-12 the smallest difference in point-biserials was 0.0001 for grade 3; from 2011-12 to 2012-13 the smallest difference was $\pm 0.003$ for grades $3(-)$ and $5(+)$; and from 2013-14 the smallest difference was -0.0001 in grade 8 . Grade 6 illustrated the largest difference in point-biserials of 0.030 from 200607 to 2007-08 and -0.040 from 2007-08 to 2008-09, while from 2008-09 to 2009-10 the largest difference of -0.019 was observed at grade 7 , from 2009-10 to 2010-11 the largest difference in point-biserials of -0.020 was observed at grade 10, and from 2010-11 to 2011-12 the largest difference in point-biserials of 0.021 was observed at grade 7. From 2011-12 to 2012-13 the largest difference in point-biserials was 0.022 for grade 10. From 2012-13 to 2013-14 the largest difference was -0.03 for grade 3 . Equally, the range of point-biserial values remained stable. The highest observed point-biserial in 2006-07 was 0.81 in grade 9 ; in 2007-08 it was 0.82 in grade 6 ; in 2008-09 it was 0.83 in grade 3 ; in 2009-10 it was 0.82 in grade 3 ; in 2010-11 it was 0.82 in grade 3; in 2011-12 the highest observed point-biserial was 0.83 in grade 4; in 2012-13 the highest observed point-biserial was 0.82 in grade 3; and for 2013-14 the highest point-biserial was $0.80^{60}$ in grade 3. The lowest observed point-biserial across previous years was observed in grade 10 with a 2006-07 value of 0.12; a 2007-08 value of 0.09; a 2008-09 value of 0.14; a 2009-10 value of 0.09 ; a 2010-11 value of 0.03 ; and a 2011-12 value of 0.07 . In 2012-13, the lowest

[^18]observed point-biserial was a value of 0.03 in grade 10. In 2013-14, the lowest point-biserial was 0.08 in grade 8.

The impact data for 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, 2013-14 as well as the differences are presented in Table 81. At the level of Inconclusive, from 2006-07 to 2007-08 the largest decrease was 3.65\% for grade 10; from 2007-08 to 2008-09 the greatest decrease was $4.47 \%$ for grade 6; from 2008-09 to 2009-10 the largest decrease was $3.08 \%$ for grade 8; from 2009-10 to 2010-11 the largest decrease was $3.88 \%$ for grade 7; from 2010-11 to 2011-12 the largest decrease was 2.35\% for grade 8; from 2011-12 to 2012-13 the largest decrease was $2.38 \%$ for grade 7; and from 2012-13 to 2013-14 the largest decrease was $1.76 \%$ in grade 10. The largest increase from 2006-07 to 2007-08 was $6.10 \%$ for grade 7 ; from 2007-08 to 2008-09 was $3.73 \%$ for grade 8; from 2008-09 to 2009-10 the largest increase was 2.98\% for grade 5; from 2009-10 to 2010-11 the largest increase was $1.84 \%$ for grade 8; from 2010-11 to 2011-12 the largest increase was $3.58 \%$ for grade 7; from 2011-12 to 2012-13 the largest increase was $1.51 \%$ for grade 10; and from 2012-13 to 2013-14 the largest increase was 2.04\%.

At the Exploring level, from 2006-07 to 2007-08 all values decreased, from $0.02 \%$ for grade 10 to 2.99\% for grade 8; for 2007-08 to 2008-09 the largest decrease was $2.07 \%$ for grade 9 ; from 2008-09 to 2009-10 the largest decrease was $3.03 \%$ for grade 10; from 2009-10 to 2010-11 the largest decrease was $4.18 \%$ for grade 8; from 2010-11 to 2011-12 the largest decrease was 2.37\% for grade 4; from 2011-12 to 2012-13 the largest decrease was $4.53 \%$ for grade 10; and from 2012-13 to 2013-14 the largest decrease was $4.11 \%$ in grade 9. At the Exploring level, the largest increase from 2007-08 to 2008-09 was $3.43 \%$ for grade 5; from 2008-09 to 2009-10 the largest increase was $3.60 \%$ for grade 4; from 2009-10 to 2010-11 the largest increase was $5.77 \%$ for grade 10; from 2010-11 to 2011-12 the largest increase was 4.07\% for grade 3; from 2011-12 to 2012-13 the largest increase was $3.47 \%$ for grade 4; and from 2012-13 to 2013-14 the largest increase was $3.42 \%$ in grade 7 .
At the Emerging level, from 2006-07 to 2007-08 the largest decrease was $4.72 \%$ for grade 8 ; from 2007-08 to 2008-09 it was $7.05 \%$ for grade 5; from 2008-09 to 2009-10 it was $2.51 \%$ for grade 4; and from 2009-10 to 2010-11 the largest decrease was $2.14 \%$ for grade 7; from 2010-11 to 2011-12 the largest decrease was $5.56 \%$ for grade 8 , from 2011-12 to 2012-13 the largest decrease was $6.51 \%$ for grade 3, and from 2012-13 to 2013-14 the largest decrease was 2.96\% in grade 10. The largest increase from 2006-07 to 2007-08 was $2.43 \%$ for grade 10; from 200708 to 2008-09 it was $3.20 \%$ for grade 8; from 2008-09 to 2009-10 the largest increase was $3.39 \%$ for grade 5; from 2009-10 to 2010-11 the largest increase in students at the Emerging level was for grade 6 with a $2.63 \%$ increase; from 2010-11 to 2011-12 the largest increase in students at the Emerging level was for grade 3 with a $2.41 \%$ increase, from 2011-12 to 2012-13 the largest increase was for grade 8 with a $4.80 \%$ increase, and from 2012-13 to 2013-14 the largest increase was $6.04 \%$ in grade 3.
At the Developing level, from 2006-07 to 2007-08 the largest decrease was $5.57 \%$ for grade 7; from 2007-08 to 2008-09 it was 7.00\% for grade 8; from 2008-09 to 2009-10 it was $4.22 \%$ for grade 9; from 2009-10 to 2010-11 the largest decrease was 6.17\% for grade 4; from 2010-11 to 2011-12 the largest decrease was 6.37\% for grade 3; from 2011-12 to 2012-13 the largest decrease was $1.54 \%$ for grade 4; and from 2012-13 to 2013-14 the largest decrease was 5.22\% in grade 8. The largest increase from 2006-07 to 2007-08 was $6.25 \%$ for grade 4; from 2007-08 to 2008-09 it was $5.55 \%$ for grade 6; from 2008-09 to 2009-10 it was $4.08 \%$ for grade 4; from 2009-10 to 2010-11 the largest increase in Developing was for grade 9 with $2.83 \%$; from 2010-11 to 2011-12 the largest increase in Developing was for grade 8 with 3.53\%; from 2011-12 to 201213 the largest increase was $7.15 \%$ for grade 3; and from 2012-13 to 2013-14 and the largest increase was $3.03 \%$ in grade 10.

At the Novice level, from 2006-07 to 2007-08 the largest decrease was $6.11 \%$ for grade 4; from 2007-08 to 2008-09 it was $3.83 \%$ for grade 6; from 2008-09 to 2009-10 it was $3.21 \%$ for grade 4; and from 2009-10 to 2010-11 the largest decrease was $2.86 \%$ for grade 10. In 2010-11 to 201112 there were no decreases in any grade. From 2011-12 to 2012-13 the largest decrease was $6.01 \%$ for grade 6. From 2012-13 to 2013-14 the largest decrease was $3.92 \%$ in grade 5. The largest increase from 2006-07 to 2007-08 was $5.61 \%$ for grade 6; from 2007-08 to 2008-09 it was $2.80 \%$ for grade 10; from 2008-09 to 2009-10 it was $5.50 \%$ for grade 6; from 2009-10 to 2010-11 the largest increase in Novice was 2.47\% for grade 7; from 2010-11 to 2011-12 the largest increase in Novice was $4.12 \%$ for grade 6; from 2011-12 to 2012-13 the largest increase was $2.74 \%$ for grade 5; and from 2012-13 to 2013-14 the largest increase was $1.74 \%$ in grade 6 .

When combining Developing and Novice from 2006-07 to 2007-08 the largest decrease was 2.91\% for grade 7; from 2007-08 to 2008-09 it was 7.29\% for grade 8; from 2008-09 to 2009-10 it was $6.11 \%$ for grade 5; from 2009-10 to 2010-11 the largest decrease was $7.17 \%$ for grade 10; from 2010-11 to 2011-12 the largest decrease was $5.96 \%$ for grade 3; from 2011-12 to 2012-13 the largest decrease was $3.52 \%$ for grade 8; and from 2012-13 to 2013-14 the largest decrease was $8.48 \%$ in grade 5 . The largest increase in the percentage of students classified as Developing and Novice from 2006-07 to 2007-08 was 7.62\% for grade 8; from 2007-08 to 2008-09 it was $6.21 \%$ for grade 5; from 2008-09 to 2009-10 it was $2.17 \%$ for grade 8; from 2009-10 to 2010-11 the largest increase was $4.45 \%$ in grade 7; from 2010-11 to 2011-12 the largest increase in the percentage of students classified as Developing and Novice was $5.19 \%$ in grade 8; from 2011-12 to 2012-13 the largest increase was $7.66 \%$ for grade 3; and from 2012-13 to 2013-14 the largest increase was $3.42 \%$ in grade 4 . In general, the impact data are relatively stable across administrations.

## Conclusion

The 2013-14 CoAlt Operational Technical Report documents the processes and procedures implemented to support the 2013-14 spring CoAlt administration by CTB and the CDE. The Technical Report shows how the applied processes and procedures, as well as the results, relate to the issues of validity and reliability, the Standards for Educational and Psychological Testing (AERA, APA, \& NCME, 1999), and the federal Peer Review process.
The CSAPA/ CoAlt began with the item and test development process. Alternate assessment standards were developed in accordance with NCLB regulations, requiring that the content of alternate assessments be comparable to that of regular state assessments, and that they must show clear linkage to the content standards for the grade in which the student is enrolled. The 2013-14 CoAlt forms consisted of custom MC and CR performance task items measuring skills associated with the Colorado Model Content Standards and associated assessment frameworks for Reading, Writing, and Mathematics. Raw scores incorporating both content knowledge and the level of independence with which the student responds to the item are reported and analyzed at the level of the item, the standard, and the total score for the content area. The reliability and validity of all applied processes, procedures, and the results were evaluated. A brief content summary of the Technical Report is provided below:

## Test Development (Part 2)

> Items for spring 2014 CoAlt were the same as those used in the forms dating back to spring 2008.
> Review of items using classical item statistics yielded no rationale for item scoring suppressions.

## Description of the Population (Part 3)

> Students typically have significant limitations in intellectual functioning, in adaptive behavior, and in academic functioning.
> The student's IEP team determines participation in the TCAP or CoAlt based upon eligibility criteria provided by the CDE.
> Population characteristics

- Participation rate ranged from a minimum of 518 (grade 9 Reading and Writing) and as many as 690 (grade 5 Writing).
- Majority male students, 60\% (grade 8 Mathematics) to 69\% (grade 3 Mathematics)
- Majority White students, $45 \%$ (grade 4 Writing) to $53 \%$ (grade 10 Mathematics)
- Majority Language Proficiency status of Not Applicable, 79\% (grade 6 Reading) to $85 \%$ (grade 10 Mathematics)
- Free/Reduced Price Lunch Program eligibility is largely divided between not eligible and Free Lunch eligible.
- Free lunch eligibility ranges from $40 \%$ (grade 9 Mathematics) to $53 \%$ (grade 4 Writing)
- Not eligible ranges from 39\% (grade 4 Writing) to $48 \%$ (grade 9 Mathematics)
- Most common primary disability of either "Multiple Disabilities," "Limited Intellectual Capacity," or "Autism"
- Most students did not use expanded accommodations, beyond those built into the assessment, such as one-on-one administration with no time limits, in order for them to access the CoAlt items.


## Test Administration (Part 4)

> District and School Assessment Coordinators and Special Education teachers are trained on the administration of the CoAlt, with a train-the-trainer model of training provided by the Unit of Student Assessment within the CDE.
> The test administration window was from February 5, 2014 through March 14, 2014.
> Test items appear in a separate book for each grade level and content area, with the exception of Reading and Writing, which are packaged in a single book, but with a clear differentiation between the sections.
Scoring (Part 5)
> Two scoring rubrics are used to collect student responses and provide item-by-item scores.

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


## Standard Setting (Part 6)

> The profile sorting method of standard setting was utilized in 2007 for the Mathematics, as well as in 2008 for the Reading and Writing forms (all grade levels).
> The 2007 and 2008 cut scores have been implemented again, as was done in 2008-09, 2009-10, and 2010-11 CSAPA, and 2011-12, 2012-13 CoAlt without revision, within the context of the 2013-14 CoAlt administration.

## Analyses and Results (Part 7)

$>$ Item level statistics, including item difficulty ( $p$-value) and item discrimination (pointbiserial correlation), were evaluated both with and without the level of independence with which the student responded to the item included in the calculation of the statistics.

- Including level of independence
- $p$-value minimum $=0.09$ in grade 10 Mathematics
- $p$-value maximum $=0.88$ in grade 3 Mathematics
- Point-biserial minimum $=0.08$ in grade 8 Mathematics
- Point-biserial maximum $=0.88$ in grade 8 Writing
- Not including level of independence
- $p$-value minimum $=0.06$ in grade 10 Mathematics
- $p$-value maximum $=0.86$ in grade 3 Mathematics
- Point-biserial minimum $=0.05$ in grade 8 Mathematics
- Point-biserial maximum $=0.85$ in grade 7 Writing
> Student performance on individual content standards (expanded benchmarks) was reported in terms of the percentage of items within each expanded benchmark students answered correctly (an average $p$-value across the items within each expanded benchmark).
- Over all grade levels and content areas, the least difficult expanded benchmark was for grade 9 Writing, "Demonstrate an understanding that writing communicates a message" with a mean $p$-value $=0.75$.
- Over all grade levels and content areas, the most difficult expanded benchmark was for grade 10 Mathematics, "Identifies, describes, and creates patterns to solve problems" with a mean $p$-value $=0.34$.
> Summary descriptive statistics for the reported raw scores were reported for the total group as well as relevant subgroups such as: gender, race/ethnicity, ELL, Free/Reduced Price Lunch Program eligibility, primary disability, and expanded accommodation.
- Reading total group
- Means range from 50.76 (grade 10, 102 possible points) to 64.00 (grade 6, 105 possible points)
- Standard deviations range from 24.04 (grade 3, 105 possible points) to 27.03 (grade 5, 105 possible points)
- Writing total group
- Means range from 54.19 (grade 3, 105 possible points) to 63.96 (grade 6, 105 possible point)
- Standard deviations range from 27.24 (grade 3,105 possible points) to 30.52 (grade 7, 108 possible points)
- Mathematics total group
- Means range from 71.42 (grade 7, 132 possible points) to 96.02 (grade 5, 171 possible points)
- Standard deviations range from 33.09 (grade 3, 126 possible points) to 46.85 (grade 5, 171 possible points)
> The percentage of students at each performance level was analyzed. The range for each performance level was
- Inconclusive: 6.33\% (grade 4 Mathematics) to 16.89\% (grade 5 Mathematics)
- Exploring: $15.90 \%$ (grade 6 Mathematics) to 29.33\% (grade 10 Reading)
- Emerging: 19.56\% (grade 5 Reading) to $37.01 \%$ (grade 3 Reading)
- Developing: 14.60\% (grade 3 Reading) to 33.74\% (grade 6 Reading)
- Novice: 2.71\% (grade 3 Writing) to 25.84\% (grade 6 Reading)
- Developing and Novice Combined: 18.34\% (grade 3 Reading) to 49.24\% (grade 6 Mathematics)
> Data files containing the demographic information of each student, as well as item responses and raw scores for all content areas, were provided to the CDE.
Summary of Results—Reliability and Validity (Part 8)
> The reliability of the 2013-14 CoAlt was estimated in four ways
- Point-biserial correlation-item specific reliability
- Including level of independence ranges: 0.08 (grade 8 Mathematics) to 0.88 (grade 8 Writing)
- Not including level of independence ranges: 0.05 (grade 10 Mathematics) to 0.85 (grade 7 Writing)
- Internal consistency using Cronbach's alpha-total test reliability ranges
- Reading: 0.91 (grade 10) to 0.94 (grade 6)
- Writing: 0.92 (grade 3 ) to 0.94 (grade 7)
- Mathematics: 0.93 (grade 10) to 0.95 (grade 5)
- Standard error of measurement (SEM) -total test reliability ranges
- Reading: 6.66 (grade 6, 105 possible points) to 7.34 (grade 10, 102 possible points)
- Writing: 7.44 (grade 9, 105 possible points) to 7.80 , (grade 4, 108 possible points)
- Mathematics: 8.13 (grade 3, 126 possible points) to 10.13 (grade 5, 171 possible points)
- Classification consistency and accuracy-total test reliability
- Probability of a correct classification ranges from 0.57 (grade 8 Writing) to 0.70 (grade 6 Reading).
- Probability of accuracy ranges from 0.64 (grade 8 Writing) to 0.79 (grade 6 Reading).
- Kappa ranges from 0.46 (grade 8 Writing) to 0.59 (grade 6 Reading).
> The Technical Report provided detailed documentation concerning the different phases of the testing cycle and highlighted the meaning and significance of the procedures, processes, and results in terms of validity and their relationship to the Standards for Educational and Psychological Testing (AERA, APA, \& NCME, 1999). The final issues in validity were addressed in Part 8.
- Assessment purpose
- Content validity evidence
- Internal structure of the assessment
- Population of students participating in the assessment
- Reliability


## Special Studies (Part 9)

> The Level of Independence was examined across grades by content area across all items in each content area.

- Level 1 ranges: $4.60 \%$ (Reading) to $6.32 \%$ (Mathematics)
- Level 2 ranges: $2.92 \%$ (Writing) to $4.53 \%$ (Mathematics)
- Level 3 ranges: $4.83 \%$ (Reading) to $8.57 \%$ (Mathematics)
- Level 4 ranges: 80.56\% (Mathematics) to 87.62\% (Reading)
$>$ An additional reliability coefficient (KR20) was used to describe the consistency of the levels of independence performed by students and documented by test examiners.
- All coefficients were very high, at 0.95 and above.
> Test examiner coding errors have remained stable in comparison to prior years.
- Indicating Level 1 for Level of Independence, but providing a correct answer ranges: $0.04 \%$ (grade 6 Writing ) to $0.57 \%$ (grade 9 Writing)
- Indicating Levels 2-4 for Level of Independence, but not providing a response ranges: $0.00 \%$ (grade 8 Reading) to $0.33 \%$ (grade 3 Mathematics)
> Range of scores across students-examining the number of students at the ceiling and the floor
- The most students obtained the ceiling in grade 6 Writing (5 students obtained the maximum possible score).
- The most students obtained the floor in grade 4 Reading ( 25 students obtained the minimum possible score).
> Average Level of Independence related to Proficiency Level
- The proficiency level of Novice contains only average Level of Independence of 3.5 to 4.0 for all content areas.
- The combined Proficiency level of Developing and Novice contains either average Level of Independence of 3.5 to 4.0 and 3.0 to 4.0, or average Level of Independence of 3.5 to 4.0 for all content areas.
- The average Level of Independence equal to 1.0 to 1.4 always scores as Inconclusive for all content areas.
Longitudinal Analyses (Part 10)
> Completed for all three content areas
- Reading and Writing (all grades) included 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, and 2013-14 assessment years.
- Mathematics examined 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 201112, 2012-13, and 2013-14.
> Descriptive statistics including
- Number of students participating
- Reading and Writing both 2007-08 to 2008-09:
- increased at grades 3-5, 7, 8, and 10
- decreased at grades 6 and 9
- Reading and Writing both 2008-09 to 2009-10:
- increased at grades 4-7 and 9
- decreased at grades 3, 8, and 10
- Reading and Writing both 2009-10 to 2010-11:
- increased at grades 5, 7, and 10
- decreased at grades 3, 4, 6, 8, and 9
- Reading and Writing both 2010-11 to 2011-12:
- increased at grades $3,4,6,8$, and 10
- decreased at grades 5,7 , and 9
- Reading and Writing both 2011-12 to 2012-13;
- increased at grades 3-7 and 9
- decreased at grades 8 and 10
- Reading 2012-13 to 2013-14;
- increased at grades 4-8 and 10
- decreased at grades 3 and 9
- Writing 2012-13 to 2013-14;
- increased at grades 5-8 and 10
- decreased at grades 3 and 9
- remained the same at grade 4
- Mathematics 2006-07 to 2007-08
- increased at grades 3-7, 9, and 10
- decreased at grade 8
- Mathematics 2007-08 to 2008-09
- increased at grades 3-8 and 10
- decreased at grade 9
- Mathematics 2008-09 to 2009-10
- increased at grades $4-7$ and 9
- decreased at grades 3, 8, and 10
- Mathematics 2009-10 to 2010-11
- increased at grades 5, 7, and 10
- decreased at grades 3, 4, 6, 8, and 9
- Mathematics 2010-11 to 2011-12
- increased at grades $3,4,6,8$, and 10
- decreased at grades 5, 7, and 9
- Mathematics 2011-12 to 2012-13
- increased at grades 3-7 and 9
- decreased at grades 8 and 10
- Mathematics 2012-13 to 2013-14
- increased at 4-8 and 10
- decreased at 3 and 9
- Percentage change over time (largest changes observed)
- Gender
- 2006-07 to 2007-08 Mathematics grade 6, males with a $7.61 \%$ decrease
- 2007-08 to 2008-09 Mathematics grade 7, males with a $5.34 \%$ decrease
- 2008-09 to 2009-10 Writing grade 8 , females with a $4.02 \%$ increase
- 2009-10 to 2010-11 Writing grade 9, males with a $4.37 \%$ decrease
- 2010-11 to 2011-12 Writing grade 10, males with $3.28 \%$ decrease
- 2011-12 to 2012-13 Reading grade 10, males with a $1.88 \%$ increase
- 2012-13 to 2013-14 Mathematics grade 3, females with a $4.18 \%$ decrease
- Primary disability
- 2006-07 to 2007-08 Mathematics grade 3, Limited Intellectual Capacity with a decrease of $5.17 \%$
- 2007-08 to 2008-09 Reading grade 6, Limited Intellectual Capacity with an increase of $7.17 \%$
- 2008-09 to 2009-10 Mathematics grade 4, Limited Intellectual Capacity with an increase of $6.22 \%$
- 2009-10 to 2010-11 Writing grade 4, Multiple Disabilities with an increase of $5.82 \%$
- 2010-11 to 2011-12 grade 7 Mathematics, Multiple Disabilities with an increase of 5.71\%
- 2011-12 to 2012-13 grade 6 Reading, Physical Disability with a decrease of 5.97\%
- 2012-13 to 2013-14 grade 7 Mathematics, Multiple Disabilities with an increase of $7.65 \%$
- Differences in raw score means and standard deviations over time
- Reading 2007-08 to 2008-09
- The mean score increases at grades 5-7 and 10 and decreases at grades $3,4,8$, and 9 .
- The standard deviation increases at grades 3,4 , and 9 and decreases at grades 5-8 and 10.
- Reading 2008-09 to 2009-10
- The mean score increases at grades 6 and 8 and decreases at grades 3-5, 7, 9, and 10.
- The standard deviation increases at grades 5, 6, 8, and 9 and decreases at grades 3, 4, 7, and 10.
- Reading 2009-10 to 2010-11
- The mean score increases at grades 5-7 and decreases at grades 3, 4, and 8-10.
- The standard deviation increases at grades 4 and 6 and decreases at grades 3, 5, and 7-10.
- Reading 2010-11 to 2011-12
- The mean score increases at grades 6, 8, 9, and 10 and decreases at grades $3,4,5$, and 7 .
- The standard deviation increases at grades $3,5,7,8$, and 9 and decreases at grades 4, 6, and 10.
- Reading 2011-12 to 2012-13
- The mean score increases at grades 3,5, and 7-10 and decreases at grades 4 and 6.
- The standard deviation increases at grades 4, 6, and 10 and decreases at grades 3, 5, and 7-9.
- Reading 2012-13 to 2013-14
- The mean score increases at grades 4 and 9 and decreases at grades 3, 5-8, and 10.
- The standard deviation increases at grades 5-9 and decreases at grades 3, 4, and 10.
- Writing 2007-08 to 2008-09
- The mean score increases at grades 5-7 and 10 and decreases at grades $3,4,8$, and 9 .
- The standard deviation increases at grades 3, 4, and 8 and decreases at grades 5-7, 9, and 10.
- Writing 2008-09 to 2009-10
- The mean score increases at grades 6 and 8 and decreases at grades $3-5,7,9$, and 10.
- The standard deviation increases at grades 3,5, and 7-9 and decreases at grades 4, 6, and 10.
- Writing 2009-10 to 2010-11
- The mean score increases at grades 5,7 , and 8 and decreases at grades 3, 4, 6, 9, and 10.
- The standard deviation increases at grades 3, 4, 6, and 10 and decreases at grades 5 and 7-9.
- Writing 2010-11 to 2011-12
- The mean score increases at grades 4, 6, 8, 9, and 10 and decreases at grades 3,5 , and 7.
- The standard deviation increases at grades 5, 7, and 9 and decreases at grades 3, 4, 6, 8, and 10.
- Writing 2011-12 to 2012-13
- The mean score increases at grades 3,5, and 7-10 and decreases at grades 4 and 6 .
- The standard deviation increases at grades 2, 6, and 10 and decreases at grades 3,5, and 7-9.
- Writing 2012-13 to 2013-14
- The mean score increases at grades 3, 4, 6, 9, and 10 and decreases at grades 5,7 , and 8 .
- The standard deviation increases at grades 5 and 7-9 and decreases at grades 3, 4, 6 and 10.
- Mathematics 2006-07 to 2007-08
- The mean score increases at grades 6 and $8-10$ and decreases at grades 3-5 and 7.
- The standard deviation increases at grades 3 and 5-9 and decreases at grades 4 and 10 .
- Mathematics 2007-08 to 2008-09
- The mean score increases at grades 5-7, 9, and 10 and decreases at grades 3,4 , and 8.
- The standard deviation increases at grades 3-5, 8, and 10 and decreases at grades 6, 7, and 9.
- Mathematics 2008-09 to 2009-10
- The mean score increases at grades 4,6 , and 8 and decreases at grades 3, 5, 7, 9, and 10.
- The standard deviation increases at grades 5, 6, and 9 and decreases at grades $3,4,7,8$, and 10.
- Mathematics 2009-10 to 2010-11
- The mean score increases at grades 5,7 , and 8 and decreases at grades 3, 4, 6, 9, and 10.
- The standard deviation increases at grades $3,4,6$, and 8 and decreases at grades 5, 7, 9, and 10.
- Mathematics 2010-11 to 2011-12
- The mean score increases at grades 4, 6, 8, 9, and 10 and decreases at grades 3,5 , and 7 .
- The standard deviation increases at grades $3,4,5,6,7,9$, and 10 and decreases at 8 .
- Mathematics 2011-12 to 2012-13
- The mean score increases at grades $3,5,7,9$, and 10 and decreases at grades 4,6 , and 8.
- The standard deviation increases at grade 10 and decreases at grades 3-9.
- Mathematics 2012-13 to 2013-14
- The mean score increases at grades 3, 4, 9, and 10 and decreases at grades 5-8.
- The standard deviation increases at grade 5-10 and decreases at grades 3 and 4.
- Changes in item statistics (including Level of Independence)
- $P$-values
- High values
- 2006-07 Mathematics ranged from 0.72 in grade 9 to 0.90 in grade 4
- 2007-08 ranged from 0.70 in grade 10 Reading to 0.91 in grade 4 Mathematics
- 2008-09 ranged from 0.76 in grade 10 Reading to 0.89 in grade 5 Science
- 2009-10 ranged from 0.74 in grade 10 Reading to 0.89 in grade 4 Mathematics
- 2010-11 ranged from 0.74 in grade 10 Reading to 0.89 in grade 3 Mathematics
- 2011-12 ranged from 0.75 in grade 10 Reading to 0.89 in grade 6 Reading
- 2012-13 ranged from 0.74 in grade 10 Reading to 0.89 in grade 5 Reading
- 2013-14 ranged from 0.75 in grade 10 Reading to 0.88 in grade 3 Mathematics
- Mean values
- 2006-07 Mathematics ranged from 0.41 in grade 10 to 0.67 in grade 3
- 2007-08 ranged from 0.44 in grade 10 Mathematics to 0.71 in grade 8 Science
- 2008-09 ranged from 0.45 in grade 10 Mathematics to 0.70 in grade 8 Science
- 2009-10 ranged from 0.45 in grade 10 Mathematics to 0.70 in grade 8 Science
- 2010-11 ranged from 0.42 in grade 10 Mathematics to 0.70 in grade 8 Science
- 2011-12 ranged from 0.44 in grade 10 Mathematics to 0.72 in grade 8 Science
- 2012-13 ranged from 0.45 in grade 10 Mathematics to 0.71 in grade 8 Science
- 2013-14 ranged from 0.46 in grade 10 Mathematics to 0.62 in grade 4 Mathematics
- Low values
- 2006-07 Mathematics ranged from 0.08 in grade 10 to 0.39 in grade 3
- 2007-08 ranged from 0.07 in grade 10 Mathematics to 0.42 in grade 5 Science
- 2008-09 ranged from 0.09 in grade 10 Mathematics to 0.41 in grade 5 Science
- 2009-10 ranged from 0.08 in grade 10 Mathematics to 0.39 in grade 5 Science
- 2010-11 ranged from 0.06 in grade 10 Mathematics to 0.41 in grade 5 Science
- 2011-12 ranged from 0.07 in grade 10 Mathematics to 0.37 in grade 5 Science
- 2012-13 ranged from 0.09 in grade 10 Mathematics to 0.40 in grade 5 Science
- 2013-14 ranged from 0.09 in grade 10 Mathematics to 0.37 in grade 3Mathematics
- Point-biserial values
- High values
- 2006-07 Mathematics ranged from 0.74 in grade 7 to 0.81 in grade 9
- 2007-08 ranged from 0.68 in grade 4 Reading to 0.86 in grade 7 Writing
- 2008-09 ranged from 0.68 in grade 10 Reading to 0.88 in grade 8 Writing
- 2009-10 ranged from 0.69 in grade 10 Reading to 0.87 in grade 8 Writing
- 2010-11 ranged from 0.68 in grade 7 Reading to 0.87 in grade 6 Writing
- 2011-12 ranged from 0.68 in grade 10 Reading to 0.88 in grade 7 Writing
- 2012-13 ranged from 0.67 in grade 8 Reading to 0.87 in grade 8 Writing
- 2013-14 ranged from 0.67 in grade 3 Reading to 0.88 in grade 8 Writing
- Mean values
- 2006-07 Mathematics ranged from 0.52 in grade 10 to 0.63 in grade 4
- 2007-08 ranged from 0.49 in grade 10 Mathematics to 0.64 in grade 6 Mathematics
- 2008-09 ranged from 0.52 in grade 10 Reading to 0.65 in grade 3 Mathematics
- 2009-10 ranged from 0.50 in grade 10 Mathematics to 0.66 in grade 8 Science
- 2010-11 ranged from 0.48 in grade 10 Mathematics to 0.66 in grade 8 Science
- 2011-12 ranged from 0.49 in grade 10 Mathematics to 0.65 grade 4 Mathematics
- 2012-13 ranged from 0.51 in grade 10 Reading to 0.64 in grade 3 Mathematics
- 2013-14 ranged from 0.50 in grade 10 Reading to 0.64 in grade 4 Mathematics
- Low values
- 2006-07 Mathematics ranged from 0.12 in grade 10 to 0.36 in grade 3
- 2007-08 ranged from 0.09 in grade 10 Mathematics to 0.42 in grade 5 Science
- 2008-09 ranged from 0.14 in grade 10 Mathematics to 0.38 in grade 5 Mathematics
- 2009-10 ranged from 0.09 in grade 10 Mathematics to 0.43 in grade 5 Science
- 2010-11 ranged from 0.03 in grade 10 Mathematics to 0.39 in grade 5 Mathematics
- 2011-12 ranged from 0.07 in grade 10 Mathematics to 0.40 in grade 3 Mathematics
- 2012-13 ranged from 0.03 in grade 8 Mathematics to 0.36 in grade 5 Mathematics
- 2013-14 ranged from 0.08 in grade 8 Mathematics to 0.39 in grade 3 Mathematics
- Impact Data over time
- Inconclusive
- 2006-07 Mathematics ranged from $6 \%$ in grade 3 to $18 \%$ in grade 10
- 2007-08 ranged from $6 \%$ in grade 4 Mathematics to $17 \%$ in grade 8 Reading
- 2008-09 ranged from $7 \%$ in grade 4 Mathematics to $18 \%$ in grade 8 Writing
- 2009-10 ranged from $6 \%$ in grade 4 Mathematics to $18 \%$ in grade 8 Reading
- 2010-11 ranged from $7 \%$ in grade 4 Mathematics to $19 \%$ in grade 8 Writing
- 2011-12 ranged from $8 \%$ in grade 4 Mathematics to $20 \%$ in grade 3 Reading
- 2012-13 ranged from $7 \%$ in grade 4 Mathematics to $21 \%$ in grade 4 Reading
- 2013-14 ranged from $6 \%$ in grade 4 Mathematics to $17 \%$ in grade 5 Mathematics
- Exploring
- 2006-07 Mathematics ranged from $15 \%$ in grade 5 to $29 \%$ in grade 8
- 2007-08 ranged from $12 \%$ in grade 5 Mathematics to $28 \%$ in grade 10 Reading
- 2008-09 ranged from $14 \%$ in grade 6 Mathematics to $30 \%$ in grade 8 Reading
- 2009-10 ranged from $15 \%$ in grade 6 Mathematics to 29\% in grade 8 Reading
- 2010-11 ranged from $13 \%$ in grade 8 Science to $31 \%$ in grade 10 Reading
- 2011-12 ranged from $16 \%$ in grade 6 Mathematics to $31 \%$ in grade 10 Reading
- 2012-13 ranged from $14 \%$ in grade 5 Mathematics to $29 \%$ in grade 4 Mathematics
- 2013-14 ranged from $16 \%$ in grade 6 Mathematics to $29 \%$ in grade 10 Reading
- Emerging
- 2006-07 Mathematics ranged from $23 \%$ in grade 5 to $36 \%$ in grade 10
- 2007-08 ranged from $17 \%$ in grade 8 Science to $38 \%$ in grade 10 Mathematics
- 2008-09 ranged from $17 \%$ in grade 8 Science to $38 \%$ in grade 10 Writing
- 2009-10 ranged from $18 \%$ in grade 8 Science to $39 \%$ in grade 10 Mathematics
- 2010-11 ranged from $17 \%$ in grade 8 Science to $39 \%$ in grade 10 Mathematics
- 2011-12 ranged from $17 \%$ in grade 8 Science to $38 \%$ in grade 10 Mathematics
- 2012-13 ranged from $19 \%$ in grade 5 Science to $37 \%$ in grade 10 Mathematics
- 2013-14 ranged from $20 \%$ in grade 5 Reading to $37 \%$ in grade 3 Reading
- Developing
- 2006-07 Mathematics ranged from $16 \%$ in grade 10 to $42 \%$ in grade 5
- 2007-08 ranged from $17 \%$ in grade 10 Mathematics to $38 \%$ in grade 5 Mathematics
- 2008-09 ranged from $15 \%$ in grade 10 Science to $43 \%$ in grade 5 Mathematics
- 2009-10 ranged from $16 \%$ in grade 9 Mathematics to $39 \%$ in grade 5 Mathematics
- 2010-11 ranged from $14 \%$ in grade 10 Mathematics to $41 \%$ in grade 5 Mathematics
- 2011-12 ranged from $15 \%$ in grade 10 Science to $35 \%$ in grade 5 Mathematics
- 2012-13 ranged from $14 \%$ in grade 10 Science to $38 \%$ in grade 5 Mathematics
- 2013-14 ranged from 15\% in grade 3 Reading to $34 \%$ in grade 6 Reading
- Novice
- 2006-07 Mathematics ranged from $4 \%$ in grade 10 to $26 \%$ in grade 3
- 2007-08 ranged from $3 \%$ in grade 3 Writing to $33 \%$ in grade 8 Science
- 2008-09 ranged from $3 \%$ in grade 3 Writing to $30 \%$ in grade 8 Science
- 2009-10 ranged from $4 \%$ in grade 3 Writing to $34 \%$ in grade 8 Science
- 2010-11 ranged from $3 \%$ in grade 3 Writing to $29 \%$ in grade 8 Science
- 2011-12 ranged from 3\% in grade 3 Writing to $36 \%$ in grade 8 Science
- 2012-13 ranged from $3 \%$ in grade 3 Writing to $31 \%$ in grade 8 Science
- 2013-14 ranged from $3 \%$ in grade 3 Writing to $26 \%$ in grade 6 Mathematics
- Developing and Novice combined
- 2006-07 Mathematics ranged from $20 \%$ in grade 10 to $53 \%$ in grade 3
- 2007-08 ranged from $22 \%$ in grade 10 Mathematics to $53 \%$ in grade 8 Science
- 2008-09 Mathematics ranged from $26 \%$ in grade 10 to $55 \%$ in grade 5
- 2009-10 ranged from $25 \%$ in grade 3 Reading to $53 \%$ in grade 6 Mathematics
- 2010-11 ranged from 19\% in grade 10 Mathematics to $54 \%$ in grade 8 Science
- 2011-12 ranged from $22 \%$ in grade 10 Mathematics to $55 \%$ in grade 8 Science
- 2012-13 ranged from $21 \%$ in grade 3 Reading to $51 \%$ in grade 8 Science
- 2013-14 ranged from $18 \%$ in grade 3 Reading to $49 \%$ in grade 6 Mathematics


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## Tables 1-81

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



## Table 1 <br> 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. <br> Score <br> Points | Max Score Possible |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.2 | Demonstrate understanding of symbolic representation | 5 | 15 |  |
|  |  | 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 |  |
|  | 6 | 2.1 | Make connections to reading passages | 5 | 15 | 105 |
|  |  | 2.2 | Identify elements of literature (character, plot, setting) | 5 | 15 |  |
|  |  | 3.1 | Demonstrate knowledge that various texts have different purposes | 5 | 15 |  |
|  |  | 3.2 | Understands informational and functional text | 5 | 15 |  |
|  | 7 | 1.2 | Demonstrate understanding of symbolic representation | 5 | 15 | 105 |
|  |  | 1.3 | Demonstrate understanding of beginning principles of phonics | 5 | 15 |  |
|  |  | 1.4 | Use a variety of strategies to make meaning of text | 5 | 15 |  |
| RD |  | 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 <br> 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 | Total No. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | No. Items | Score <br> 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 |  | Max Score Possible |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.1 | Demonstrate an understanding that writing communicates a message | 5 | 18 |  |
|  |  | 1.2 | Organize writing to create a draft document | 5 | 18 |  |
|  | 3 | 2.1 | Use systematic conventions to make written product understandable by others | 6 | 21 | 105 |
|  |  | 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 |  |
| WR | 4 | 1.1 | Demonstrate an understanding that writing communicates a message | 5 | 18 | 108 |
|  |  | 1.2 | Organize writing to create a draft document | 5 | 18 |  |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 6 | 21 |  |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 7 | 27 |  |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 7 | 24 |  |
|  | 5 | 1.1 | Demonstrate an understanding that writing communicates a message | 5 | 18 | 105 |
|  |  | 1.2 | Organize writing to create a draft document | 5 | 18 |  |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 6 | 21 |  |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 6 | 24 |  |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 7 | 24 |  |
|  | 6 | 1.1 | Demonstrate an understanding that writing communicates a message | 5 | 18 | 105 |
|  |  | 1.2 | Organize writing to create a draft document | 5 | 18 |  |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 6 | 21 |  |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 6 | 24 |  |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 7 | 24 |  |

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

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

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

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

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

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

## Table 4

Test Design: Number of Items by Maximum Item Score

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

Table 5
Reading Descriptive Statistics by Gender and Race/Ethnicity

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 3 | Total | 589 | 100\% | 56.96 | 24.04 | 0 | 11 | 0.92 | 6.96 |
|  |  | Female | 182 | 30.90\% | 58.84 | 23.76 | 0 | 2 | 0.91 | 7.03 |
|  |  | Male | 404 | 68.59\% | 56.12 | 24.16 | 0 | 9 | 0.92 | 6.92 |
|  |  | American Indian/Alaska Native | 5 | 0.85\% | - | - | - | - | - | - |
|  |  | Asian | 14 | 2.38\% | - | - | - | - | - | - |
|  |  | Black/ African American | 44 | 7.47\% | 50.07 | 25.57 | 0 | 3 | 0.93 | 6.78 |
|  |  | Hispanic/ Latino | 219 | 37.18\% | 54.37 | 22.18 | 0 | 2 | 0.89 | 7.19 |
|  |  | White | 280 | 47.54\% | 60.15 | 24.81 | 0 | 4 | 0.92 | 6.82 |
|  |  | Native Hawaiian/ Other Pacific Islander | 6 | 1.02\% | - | - | - | - | - | - |
|  |  | Two or More Races | 19 | 3.23\% | 58.26 | 22.89 | 0 | 0 | 0.91 | 6.80 |
|  | 4 | Total | 689 | 100\% | 57.10 | 25.43 | 1 | 25 | 0.93 | 6.92 |
|  |  | Female | 241 | 34.98\% | 54.78 | 25.87 | 0 | 9 | 0.93 | 6.87 |
|  |  | Male | 447 | 64.88\% | 58.28 | 25.11 | 1 | 16 | 0.92 | 6.95 |
|  |  | American Indian/Alaska Native | 9 | 1.31\% | - | - | - | - | - | - |
|  |  | Asian | 15 | 2.18\% | - | - | - | - | - | - |
|  |  | Black/ African American | 56 | 8.13\% | 55.20 | 26.59 | 0 | 2 | 0.93 | 7.02 |
|  |  | Hispanic/ Latino | 262 | 38.03\% | 56.96 | 24.98 | 0 | 8 | 0.92 | 6.93 |
|  |  | White | 316 | 45.86\% | 58.05 | 25.63 | 1 | 12 | 0.93 | 6.85 |
|  |  | Native Hawaiian/ Other Pacific Islander | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Two or More Races | 27 | 3.92\% | 52.30 | 25.07 | 0 | 1 | 0.92 | 7.25 |

Table 5
Reading Descriptive Statistics by Gender and Race/Ethnicity (continued)

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 5 | Total | 685 | 100\% | 58.44 | 27.03 | 3 | 18 | 0.93 | 6.91 |
|  |  | Female | 247 | 36.06\% | 61.01 | 25.97 | 0 | 5 | 0.93 | 6.90 |
|  |  | Male | 437 | 63.80\% | 56.98 | 27.57 | 3 | 13 | 0.94 | 6.91 |
|  |  | American Indian/Alaska Native | 6 | 0.88\% | - | - | - | - | - | - |
|  |  | Asian | 23 | 3.36\% | 54.74 | 26.26 | 0 | 0 | 0.93 | 6.94 |
|  |  | Black/ African American | 46 | 6.72\% | 63.54 | 24.89 | 0 | 0 | 0.93 | 6.77 |
|  |  | Hispanic/ Latino | 256 | 37.37\% | 56.18 | 27.09 | 0 | 10 | 0.93 | 7.01 |
|  |  | White | 332 | 48.47\% | 59.89 | 26.93 | 3 | 5 | 0.93 | 6.87 |
|  |  | Native Hawaiian/ Other Pacific Islander | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Two or More Races | 18 | 2.63\% | 50.28 | 32.43 | 0 | 3 | 0.96 | 6.65 |
|  | 6 | Total | 655 | 100\% | 64.00 | 26.33 | 4 | 17 | 0.94 | 6.66 |
|  |  | Female | 246 | 37.56\% | 62.36 | 27.69 | 0 | 11 | 0.94 | 6.63 |
|  |  | Male | 406 | 61.98\% | 64.84 | 25.46 | 4 | 6 | 0.93 | 6.67 |
|  |  | American Indian/Alaska Native | 5 | 0.76\% | - | - | - | - | - | - |
|  |  | Asian | 16 | 2.44\% | 56.81 | 28.44 | 0 | 1 | 0.94 | 7.00 |
|  |  | Black/ African American | 42 | 6.41\% | 66.43 | 27.79 | 2 | 2 | 0.95 | 6.46 |
|  |  | Hispanic/ Latino | 256 | 39.08\% | 63.45 | 25.04 | 1 | 3 | 0.93 | 6.75 |
|  |  | White | 304 | 46.41\% | 63.98 | 26.86 | 0 | 9 | 0.94 | 6.61 |
|  |  | Native Hawaiian/ Other Pacific Islander | 2 | 0.31\% | - | - | - | - | - | - |
|  |  | Two or More Races | 28 | 4.27\% | 67.11 | 27.03 | 1 | 1 | 0.94 | 6.53 |

Table 5
Reading Descriptive Statistics by Gender and Race/Ethnicity (continued)

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 7 | Total | 630 | 100\% | 56.03 | 24.47 | 0 | 18 | 0.92 | 7.02 |
|  |  | Female | 240 | 38.10\% | 56.33 | 25.03 | 0 | 6 | 0.92 | 7.03 |
|  |  | Male | 388 | 61.59\% | 55.80 | 24.16 | 0 | 12 | 0.92 | 7.01 |
|  |  | American Indian/Alaska Native | 12 | 1.90\% | - | - | - | - | - | - |
|  |  | Asian | 12 | 1.90\% | - | - | - | - | - | - |
|  |  | Black/ African American | 45 | 7.14\% | 55.29 | 22.70 | 0 | 2 | 0.90 | 7.18 |
|  |  | Hispanic/ Latino | 207 | 32.86\% | 56.70 | 22.98 | 0 | 6 | 0.91 | 7.08 |
|  |  | White | 325 | 51.59\% | 55.29 | 26.23 | 0 | 9 | 0.93 | 6.92 |
|  |  | Native Hawaiian/ Other Pacific Islander | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Two or More Races | 25 | 3.97\% | 60.92 | 20.76 | 0 | 1 | 0.88 | 7.12 |
|  | 8 | Total | 590 | 100\% | 55.10 | 25.94 | 1 | 16 | 0.92 | 7.26 |
|  |  | Female | 231 | 39.15\% | 57.39 | 25.97 | 1 | 8 | 0.92 | 7.19 |
|  |  | Male | 358 | 60.68\% | 53.69 | 25.86 | 0 | 8 | 0.92 | 7.30 |
|  |  | American Indian/Alaska Native | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Asian | 11 | 1.86\% | - | - | - | - | - | - |
|  |  | Black/ African American | 44 | 7.46\% | 54.30 | 26.75 | 0 | 2 | 0.93 | 7.23 |
|  |  | Hispanic/ Latino | 228 | 38.64\% | 54.89 | 24.48 | 0 | 5 | 0.91 | 7.32 |
|  |  | White | 287 | 48.64\% | 55.03 | 27.26 | 0 | 9 | 0.93 | 7.19 |
|  |  | Native Hawaiian/ Other Pacific Islander | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Two or More Races | 13 | 2.20\% | - | - | - | - | - | - |

Table 5
Reading Descriptive Statistics by Gender and Race/Ethnicity (continued)

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 9 | Total | 518 | 100\% | 56.32 | 26.50 | 0 | 18 | 0.93 | 6.92 |
|  |  | Female | 186 | 35.91\% | 53.77 | 27.20 | 0 | 10 | 0.94 | 6.92 |
|  |  | Male | 331 | 63.90\% | 57.72 | 26.07 | 0 | 8 | 0.93 | 6.90 |
|  |  | American Indian/Alaska Native | 10 | 1.93\% | - | - | - | - | - | - |
|  |  | Asian | 10 | 1.93\% | - | - | - | - | - | - |
|  |  | Black/ African American | 32 | 6.18\% | 58.25 | 21.25 | 0 | 0 | 0.88 | 7.32 |
|  |  | Hispanic/ Latino | 177 | 34.17\% | 55.96 | 25.34 | 0 | 7 | 0.92 | 7.01 |
|  |  | White | 270 | 52.12\% | 56.11 | 27.85 | 0 | 8 | 0.94 | 6.81 |
|  |  | Native Hawaiian/ Other Pacific Islander | 0 | 0\% | - | - | - | - | - | - |
|  |  | Two or More Races | 18 | 3.47\% | 55.44 | 29.90 | 0 | 2 | 0.95 | 6.89 |
|  | 10 | Total | 549 | 100\% | 50.76 | 24.30 | 1 | 22 | 0.91 | 7.34 |
|  |  | Female | 202 | 36.79\% | 48.63 | 24.17 | 1 | 11 | 0.91 | 7.39 |
|  |  | Male | 344 | 62.66\% | 52.28 | 24.19 | 0 | 10 | 0.91 | 7.33 |
|  |  | American Indian/Alaska Native | 4 | 0.73\% | - | - | - | - | - | - |
|  |  | Asian | 11 | 2.00\% | - | - | - | - | - | - |
|  |  | Black/ African American | 41 | 7.47\% | 55.32 | 23.37 | 0 | 2 | 0.90 | 7.46 |
|  |  | Hispanic/ Latino | 179 | 32.60\% | 48.54 | 24.07 | 0 | 9 | 0.91 | 7.33 |
|  |  | White | 289 | 52.64\% | 52.20 | 24.51 | 1 | 8 | 0.91 | 7.33 |
|  |  | Native Hawaiian/ Other Pacific Islander | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | Two or More Races | 22 | 4.01\% | 45.64 | 23.68 | 0 | 1 | 0.91 | 7.28 |

## Table 6 <br> Writing Descriptive Statistics by Gender and Race/Ethnicity

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 3 | Total | 590 | 100\% | 54.19 | 27.24 | 1 | 12 | 0.92 | 7.73 |
|  |  | Female | 183 | 31.02\% | 54.63 | 26.91 | 0 | 3 | 0.91 | 7.87 |
|  |  | Male | 404 | 68.47\% | 54.07 | 27.36 | 1 | 8 | 0.92 | 7.67 |
|  |  | American Indian/Alaska Native | 5 | 0.85\% | - | - | - | - | - | - |
|  |  | Asian | 14 | 2.37\% | - | - | - | - | - | - |
|  |  | Black/ African American | 46 | 7.80\% | 49.02 | 28.82 | 0 | 3 | 0.93 | 7.62 |
|  |  | Hispanic/ Latino | 219 | 37.12\% | 51.83 | 26.13 | 0 | 2 | 0.91 | 7.92 |
|  |  | White | 280 | 47.46\% | 56.82 | 27.71 | 1 | 4 | 0.92 | 7.61 |
|  |  | Native Hawaiian/ Other Pacific Islander | 6 | 1.02\% | - | - | - | - | - | - |
|  |  | Two or More Races | 18 | 3.05\% | 55.89 | 21.52 | 0 | 0 | 0.87 | 7.80 |
|  | 4 | Total | 684 | 100\% | 56.63 | 28.76 | 0 | 24 | 0.93 | 7.80 |
|  |  | Female | 242 | 35.38\% | 54.14 | 30.09 | 0 | 11 | 0.93 | 7.83 |
|  |  | Male | 441 | 64.47\% | 57.96 | 27.98 | 0 | 13 | 0.92 | 7.78 |
|  |  | American Indian/Alaska Native | 9 | 1.32\% | - | - | - | - | - | - |
|  |  | Asian | 15 | 2.19\% | - | - | - | - | - | - |
|  |  | Black/ African American | 55 | 8.04\% | 58.55 | 28.88 | 0 | 1 | 0.92 | 8.01 |
|  |  | Hispanic/ Latino | 264 | 38.60\% | 57.78 | 27.84 | 0 | 9 | 0.92 | 7.77 |
|  |  | White | 310 | 45.32\% | 55.59 | 29.56 | 0 | 12 | 0.93 | 7.72 |
|  |  | Native Hawaiian/ Other Pacific Islander | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Two or More Races | 27 | 3.95\% | 51.44 | 28.28 | 0 | 1 | 0.92 | 8.18 |

## Table 6 <br> Writing Descriptive Statistics by Gender and Race/Ethnicity (continued)

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 5 | Total | 690 | 100\% | 59.19 | 28.74 | 1 | 22 | 0.93 | 7.53 |
|  |  | Female | 248 | 35.94\% | 61.60 | 27.59 | 0 | 7 | 0.92 | 7.60 |
|  |  | Male | 441 | 63.91\% | 57.83 | 29.34 | 1 | 15 | 0.93 | 7.48 |
|  |  | American Indian/Alaska Native | 6 | 0.87\% | - | - | - | - | - | - |
|  |  | Asian | 23 | 3.33\% | 49.83 | 32.92 | 0 | 1 | 0.95 | 7.50 |
|  |  | Black/ African American | 46 | 6.67\% | 67.11 | 25.98 | 0 | 1 | 0.92 | 7.14 |
|  |  | Hispanic/ Latino | 259 | 37.54\% | 57.56 | 28.80 | 0 | 11 | 0.93 | 7.69 |
|  |  | White | 334 | 48.41\% | 60.15 | 28.48 | 1 | 6 | 0.93 | 7.47 |
|  |  | Native Hawaiian/ Other Pacific Islander | 3 | 0.43\% | - | - | - | - | - | - |
|  |  | Two or More Races | 18 | 2.61\% | 51.78 | 32.59 | 0 | 3 | 0.95 | 7.54 |
|  | 6 | Total | 650 | 100\% | 63.96 | 28.40 | 5 | 22 | 0.93 | 7.49 |
|  |  | Female | 246 | 37.85\% | 62.52 | 29.98 | 2 | 13 | 0.94 | 7.51 |
|  |  | Male | 401 | 61.69\% | 64.71 | 27.43 | 3 | 9 | 0.93 | 7.49 |
|  |  | American Indian/Alaska Native | 5 | 0.77\% | - | - | - | - | - | - |
|  |  | Asian | 15 | 2.31\% | - | - | - | - | - | - |
|  |  | Black/ African American | 42 | 6.46\% | 66.05 | 29.81 | 2 | 3 | 0.94 | 7.30 |
|  |  | Hispanic/ Latino | 256 | 39.38\% | 63.62 | 27.80 | 1 | 6 | 0.93 | 7.59 |
|  |  | White | 300 | 46.15\% | 63.90 | 28.29 | 0 | 10 | 0.93 | 7.47 |
|  |  | Native Hawaiian/ Other Pacific Islander | 2 | 0.31\% | - | - | - | - | - | - |
|  |  | Two or More Races | 28 | 4.31\% | 65.61 | 28.93 | 1 | 0 | 0.93 | 7.51 |

## Table 6 <br> Writing Descriptive Statistics by Gender and Race/Ethnicity (continued)

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 7 | Total | 626 | 100\% | 62.54 | 30.52 | 1 | 23 | 0.94 | 7.54 |
|  |  | Female | 236 | 37.70\% | 63.47 | 31.31 | 1 | 10 | 0.94 | 7.49 |
|  |  | Male | 388 | 61.98\% | 61.94 | 30.08 | 0 | 13 | 0.94 | 7.56 |
|  |  | American Indian/Alaska Native | 12 | 1.92\% | - | - | - | - | - | - |
|  |  | Asian | 12 | 1.92\% | - | - | - | - | - | - |
|  |  | Black/ African American | 45 | 7.19\% | 64.62 | 26.53 | 0 | 2 | 0.91 | 7.77 |
|  |  | Hispanic/ Latino | 206 | 32.91\% | 65.32 | 29.12 | 0 | 6 | 0.93 | 7.44 |
|  |  | White | 322 | 51.44\% | 60.37 | 32.22 | 1 | 14 | 0.95 | 7.50 |
|  |  | Native Hawaiian/ Other Pacific Islander | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Two or More Races | 25 | 3.99\% | 64.24 | 29.29 | 0 | 1 | 0.93 | 7.84 |
|  | 8 | Total | 589 | 100.00\% | 61.63 | 29.11 | 0 | 20 | 0.93 | 7.57 |
|  |  | Female | 231 | 39.22\% | 65.19 | 28.73 | 0 | 7 | 0.94 | 7.30 |
|  |  | Male | 357 | 60.61\% | 59.34 | 29.20 | 0 | 13 | 0.93 | 7.71 |
|  |  | American Indian/Alaska Native | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Asian | 11 | 1.87\% | - | - | - | - | - | - |
|  |  | Black/ African American | 44 | 7.47\% | 58.91 | 31.08 | 0 | 3 | 0.94 | 7.72 |
|  |  | Hispanic/ Latino | 228 | 38.71\% | 62.69 | 27.68 | 0 | 6 | 0.92 | 7.61 |
|  |  | White | 286 | 48.56\% | 60.46 | 30.39 | 0 | 11 | 0.94 | 7.54 |
|  |  | Native Hawaiian/ Other Pacific Islander | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Two or More Races | 13 | 2.21\% | - | - | - | - | - | - |

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

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 9 | Total | 518 | 100\% | 60.97 | 29.01 | 0 | 22 | 0.93 | 7.44 |
|  |  | Female | 188 | 36.29\% | 58.54 | 30.39 | 0 | 11 | 0.94 | 7.58 |
|  |  | Male | 329 | 63.51\% | 62.28 | 28.16 | 0 | 11 | 0.93 | 7.35 |
|  |  | American Indian/Alaska Native | 10 | 1.93\% | - | - | - | - | - | - |
|  |  | Asian | 10 | 1.93\% | - | - | - | - | - | - |
|  |  | Black/ African American | 33 | 6.37\% | 65.42 | 24.63 | 0 | 0 | 0.91 | 7.52 |
|  |  | Hispanic/ Latino | 176 | 33.98\% | 60.18 | 28.53 | 0 | 11 | 0.93 | 7.50 |
|  |  | White | 270 | 52.12\% | 60.32 | 29.78 | 0 | 8 | 0.94 | 7.41 |
|  |  | Native Hawaiian/ Other Pacific Islander | 0 | 0.00\% | - | - | - | - | - | - |
|  |  | Two or More Races | 18 | 3.47\% | 62.61 | 33.39 | 0 | 2 | 0.95 | 7.25 |
|  | 10 | Total | 546 | 100\% | 61.47 | 27.92 | 0 | 22 | 0.92 | 7.71 |
|  |  | Female | 203 | 37.18\% | 59.83 | 28.55 | 0 | 12 | 0.93 | 7.73 |
|  |  | Male | 340 | 62.27\% | 62.73 | 27.41 | 0 | 9 | 0.92 | 7.68 |
|  |  | American Indian/Alaska Native | 4 | 0.73\% | - | - | - | - | - | - |
|  |  | Asian | 12 | 2.20\% | - | - | - | - | - | - |
|  |  | Black/ African American | 41 | 7.51\% | 67.22 | 27.76 | 0 | 2 | 0.93 | 7.50 |
|  |  | Hispanic/ Latino | 179 | 32.78\% | 60.16 | 28.28 | 0 | 9 | 0.93 | 7.73 |
|  |  | White | 285 | 52.20\% | 62.33 | 27.75 | 0 | 8 | 0.92 | 7.70 |
|  |  | Native Hawaiian/ Other Pacific Islander | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | Two or More Races | 22 | 4.03\% | 51.82 | 26.89 | 0 | 1 | 0.91 | 8.10 |

Table 7
Mathematics Descriptive Statistics by Gender and Race/Ethnicity

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 3 | Total | 583 | 100\% | 78.95 | 33.09 | 1 | 10 | 0.94 | 8.13 |
|  |  | Female | 180 | 30.87\% | 79.57 | 34.41 | 1 | 3 | 0.94 | 8.10 |
|  |  | Male | 400 | 68.61\% | 78.82 | 32.47 | 0 | 7 | 0.94 | 8.14 |
|  |  | American Indian/Alaska Native | 5 | 0.86\% | - | - | - | - | - | - |
|  |  | Asian | 14 | 2.40\% | - | - | - | - | - | - |
|  |  | Black/ African American | 46 | 7.89\% | 74.13 | 36.76 | 0 | 3 | 0.95 | 8.11 |
|  |  | Hispanic/ Latino | 213 | 36.54\% | 78.23 | 30.79 | 1 | 1 | 0.93 | 8.37 |
|  |  | White | 280 | 48.03\% | 80.69 | 33.66 | 0 | 4 | 0.94 | 7.98 |
|  |  | Native Hawaiian/ Other Pacific Islander | 6 | 1.03\% | - | - | - | - | - | - |
|  |  | Two or More Races | 17 | 2.92\% | 78.12 | 33.41 | 0 | 0 | 0.94 | 7.98 |
|  | 4 | Total | 679 | 100\% | 80.56 | 35.88 | 3 | 23 | 0.95 | 8.27 |
|  |  | Female | 239 | 35.20\% | 77.45 | 36.85 | 0 | 8 | 0.95 | 8.28 |
|  |  | Male | 439 | 64.65\% | 82.24 | 35.30 | 3 | 15 | 0.95 | 8.25 |
|  |  | American Indian/Alaska Native | 9 | 1.33\% | - | - | - | - | - | - |
|  |  | Asian | 14 | 2.06\% | - | - | - | - | - | - |
|  |  | Black/ African American | 57 | 8.39\% | 80.60 | 37.10 | 0 | 1 | 0.95 | 8.36 |
|  |  | Hispanic/ Latino | 260 | 38.29\% | 82.46 | 35.12 | 1 | 8 | 0.95 | 8.22 |
|  |  | White | 309 | 45.51\% | 79.20 | 35.92 | 2 | 11 | 0.95 | 8.29 |
|  |  | Native Hawaiian/ Other Pacific Islander | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Two or More Races | 26 | 3.83\% | 79.12 | 38.95 | 0 | 1 | 0.96 | 8.25 |

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

| Content | Grade | Subgroup | Sample Size |  | Raw Score |  | N <br> Students at Max | N <br> Students at Min | Coefficient | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \% | Mean | SD | Score | Score | Alpha |  |
| MA | 5 | Total | 687 | 100\% | 96.02 | 46.85 | 1 | 16 | 0.95 | 10.13 |
|  |  | Female | 248 | 36.10\% | 98.19 | 44.91 | 1 | 5 | 0.95 | 10.23 |
|  |  | Male | 438 | 63.76\% | 94.76 | 47.96 | 0 | 11 | 0.96 | 10.06 |
|  |  | American Indian/Alaska Native | 6 | 0.87\% | - | - | - | - | - | - |
|  |  | Asian | 23 | 3.35\% | 82.39 | 49.75 | 0 | 0 | 0.96 | 10.27 |
|  |  | Black/ African American | 45 | 6.55\% | 101.02 | 44.72 | 0 | 0 | 0.95 | 9.95 |
|  |  | Hispanic/ Latino | 256 | 37.26\% | 95.95 | 48.16 | 0 | 10 | 0.96 | 10.06 |
|  |  | White | 335 | 48.76\% | 96.41 | 45.95 | 1 | 5 | 0.95 | 10.15 |
|  |  | Native Hawaiian/ Other Pacific Islander | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Two or More Races | 18 | 2.62\% | 86.00 | 49.45 | 0 | 1 | 0.95 | 10.51 |
|  | 6 | Total | 654 | 100\% | 81.34 | 37.65 | 1 | 20 | 0.94 | 8.83 |
|  |  | Female | 247 | 37.77\% | 78.74 | 38.61 | 0 | 12 | 0.95 | 8.78 |
|  |  | Male | 404 | 61.77\% | 82.74 | 37.04 | 1 | 8 | 0.94 | 8.87 |
|  |  | American Indian/Alaska Native | 5 | 0.76\% | - | - | - | - | - | - |
|  |  | Asian | 15 | 2.29\% | - | - | - | - | - | - |
|  |  | Black/ African American | 43 | 6.57\% | 80.72 | 39.78 | 0 | 4 | 0.95 | 8.80 |
|  |  | Hispanic/ Latino | 256 | 39.14\% | 83.05 | 37.81 | 0 | 6 | 0.95 | 8.78 |
|  |  | White | 304 | 46.48\% | 80.04 | 37.01 | 1 | 7 | 0.94 | 8.87 |
|  |  | Native Hawaiian/ Other Pacific Islander | 2 | 0.31\% | - | - | - | - | - | - |
|  |  | Two or More Races | 27 | 4.13\% | 84.56 | 35.13 | 0 | 0 | 0.94 | 8.89 |

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

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 7 | Total | 625 | 100\% | 71.42 | 34.99 | 0 | 20 | 0.94 | 8.79 |
|  |  | Female | 236 | 37.76\% | 69.89 | 35.05 | 0 | 6 | 0.94 | 8.92 |
|  |  | Male | 387 | 61.92\% | 72.34 | 35.05 | 0 | 14 | 0.94 | 8.70 |
|  |  | American Indian/Alaska Native | 11 | 1.76\% | - | - | - | - | - | - |
|  |  | Asian | 12 | 1.92\% | - | - | - | - | - | - |
|  |  | Black/ African American | 44 | 7.04\% | 75.59 | 34.37 | 0 | 2 | 0.94 | 8.69 |
|  |  | Hispanic/ Latino | 207 | 33.12\% | 74.34 | 33.11 | 0 | 4 | 0.93 | 8.84 |
|  |  | White | 322 | 51.52\% | 69.39 | 36.58 | 0 | 13 | 0.94 | 8.70 |
|  |  | Native Hawaiian/ Other Pacific Islander | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Two or More Races | 25 | 4.00\% | 68.12 | 35.01 | 0 | 1 | 0.93 | 9.03 |
|  | 8 | Total | 589 | 100\% | 80.94 | 38.60 | 1 | 19 | 0.94 | 9.34 |
|  |  | Female | 232 | 39.39\% | 83.03 | 37.78 | 0 | 7 | 0.94 | 9.26 |
|  |  | Male | 356 | 60.44\% | 79.56 | 39.16 | 1 | 12 | 0.94 | 9.38 |
|  |  | American Indian/Alaska Native | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Asian | 11 | 1.87\% | - | - | - | - | - | - |
|  |  | Black/ African American | 43 | 7.30\% | 76.65 | 38.73 | 1 | 2 | 0.94 | 9.68 |
|  |  | Hispanic/ Latino | 230 | 39.05\% | 82.55 | 37.39 | 0 | 7 | 0.94 | 9.36 |
|  |  | White | 285 | 48.39\% | 79.47 | 40.00 | 0 | 10 | 0.95 | 9.26 |
|  |  | Native Hawaiian/ Other Pacific Islander | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Two or More Races | 13 | 2.21\% | - | - | - | - | - | - |

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

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 9 | Total | 521 | 100\% | 71.86 | 35.84 | 0 | 20 | 0.93 | 9.37 |
|  |  | Female | 188 | 36.08\% | 66.34 | 34.76 | 0 | 10 | 0.93 | 9.45 |
|  |  | Male | 332 | 63.72\% | 74.95 | 36.16 | 0 | 10 | 0.93 | 9.31 |
|  |  | American Indian/Alaska Native | 10 | 1.92\% | - | - | - | - | - | - |
|  |  | Asian | 9 | 1.73\% | - | - | - | - | - | - |
|  |  | Black/ African American | 33 | 6.33\% | 73.67 | 34.09 | 0 | 0 | 0.92 | 9.50 |
|  |  | Hispanic/ Latino | 174 | 33.40\% | 71.92 | 35.34 | 0 | 9 | 0.93 | 9.32 |
|  |  | White | 276 | 52.98\% | 71.38 | 36.19 | 0 | 8 | 0.93 | 9.39 |
|  |  | Native Hawaiian/ Other Pacific Islander | 0 | 0\% | - | - | - | - | - | - |
|  |  | Two or More Races | 18 | 3.45\% | 73.17 | 42.28 | 0 | 2 | 0.96 | 8.96 |
|  | 10 | Total | 551 | 100\% | 76.47 | 37.00 | 0 | 24 | 0.93 | 9.71 |
|  |  | Female | 204 | 37.02\% | 71.00 | 36.19 | 0 | 13 | 0.93 | 9.75 |
|  |  | Male | 344 | 62.43\% | 80.13 | 36.90 | 0 | 10 | 0.93 | 9.66 |
|  |  | American Indian/Alaska Native | 4 | 0.73\% | - | - | - | - | - | - |
|  |  | Asian | 12 | 2.18\% | - | - | - | - | - | - |
|  |  | Black/ African American | 41 | 7.44\% | 84.07 | 37.74 | 0 | 2 | 0.93 | 9.70 |
|  |  | Hispanic/ Latino | 178 | 32.30\% | 74.11 | 37.33 | 0 | 9 | 0.93 | 9.72 |
|  |  | White | 292 | 52.99\% | 77.83 | 36.89 | 0 | 10 | 0.93 | 9.67 |
|  |  | Native Hawaiian/ Other Pacific Islander | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | Two or More Races | 21 | 3.81\% | 67.29 | 36.03 | 0 | 1 | 0.92 | 9.98 |

Table 8
Reading Descriptive Statistics by English Language Proficiency

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 3 | Language Proficiency | Not Applicable | 482 | 81.83\% | 58.68 | 24.33 | 0 | 11 | 0.92 | 6.90 |
|  |  |  | NEP | 97 | 16.47\% | 48.15 | 21.33 | 0 | 0 | 0.88 | 7.27 |
|  |  |  | LEP | 4 | 0.68\% | - | - | - | - | - | - |
|  |  |  | FEP | 3 | 0.51\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 585 | 99.32\% | 56.98 | 24.09 | 0 | 11 | 0.92 | 6.96 |
|  |  |  | Yes | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 484 | 82.17\% | 58.67 | 24.29 | 0 | 11 | 0.92 | 6.90 |
|  |  |  | Yes | 92 | 15.62\% | 48.58 | 21.26 | 0 | 0 | 0.88 | 7.27 |
|  |  |  | Monitored Y1 | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Choice | 7 | 1.19\% | - | - | - | - | - | - |

Table 8
Reading Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 4 | Language Proficiency | Not Applicable | 567 | 82.29\% | 57.98 | 25.40 | 1 | 19 | 0.93 | 6.91 |
|  |  |  | NEP | 100 | 14.51\% | 53.45 | 24.70 | 0 | 4 | 0.92 | 6.97 |
|  |  |  | LEP | 11 | 1.60\% | - | - | - | - | - | - |
|  |  |  | FEP | 7 | 1.02\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 687 | 99.71\% | 57.14 | 25.34 | 1 | 24 | 0.93 | 6.92 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 571 | 82.87\% | 57.88 | 25.43 | 1 | 20 | 0.93 | 6.91 |
|  |  |  | Yes | 108 | 15.67\% | 55.09 | 24.32 | 0 | 4 | 0.92 | 6.97 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 5 | 0.73\% | - | - | - | - | - | - |
|  |  |  | Choice | 3 | 0.44\% | - | - | - | - | - | - |

Table 8
Reading Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  |  | Not Applicable | 554 | 80.88\% | 59.60 | 27.28 | 3 | 15 | 0.94 | 6.85 |
|  |  |  | NEP | 107 | 15.62\% | 52.31 | 25.91 | 0 | 3 | 0.92 | 7.17 |
|  |  | Language | LEP | 13 | 1.90\% | - | - | - | - | - | - |
|  |  | Proficiency | FEP | 7 | 1.02\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 3 | 0.44\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | No | 680 | 99.27\% | 58.44 | 27.05 | 3 | 18 | 0.93 | 6.91 |
|  |  |  | Yes | 2 | 0.29\% | - | - | - | - | - | - |
|  | 5 | ELL Program - | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  | 5 | Bilingual | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | No | 561 | 81.90\% | 59.60 | 27.22 | 3 | 15 | 0.94 | 6.85 |
|  |  |  | Yes | 109 | 15.91\% | 55.52 | 25.27 | 0 | 3 | 0.92 | 7.17 |
|  |  | ELL Program - | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  | ESL | Monitored Y2 | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 4 | 0.58\% | - | - | - | - | - | - |
|  |  |  | Choice | 9 | 1.31\% | - | - | - | - | - | - |

Table 8
Reading Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  |  | Not Applicable | 515 | 78.63\% | 64.46 | 26.60 | 3 | 15 | 0.94 | 6.61 |
|  |  |  | NEP | 105 | 16.03\% | 61.86 | 25.20 | 1 | 2 | 0.93 | 6.82 |
|  |  | Language | LEP | 12 | 1.83\% | - | - | - | - | - | - |
|  |  | Proficiency | FEP | 17 | 2.60\% | 49.82 | 22.72 | 0 | 0 | 0.90 | 7.10 |
|  |  |  | PHLOTE | 2 | 0.31\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | No | 648 | 98.93\% | 63.98 | 26.39 | 4 | 17 | 0.94 | 6.65 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  | 6 | ELL Program - | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  | 6 | Bilingual | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 3 | 0.46\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | No | 520 | 79.39\% | 64.34 | 26.62 | 3 | 15 | 0.94 | 6.61 |
|  |  |  | Yes | 109 | 16.64\% | 64.53 | 23.91 | 1 | 1 | 0.92 | 6.80 |
|  |  | ELL Program - | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  | ESL | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 14 | 2.14\% | - | - | - | - | - | - |
|  |  |  | Choice | 7 | 1.07\% | - | - | - | - | - | - |

Table 8
Reading Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 7 | Language Proficiency | Not Applicable | 522 | 82.86\% | 56.11 | 25.42 | 0 | 18 | 0.92 | 6.97 |
|  |  |  | NEP | 88 | 13.97\% | 55.36 | 17.99 | 0 | 0 | 0.84 | 7.27 |
|  |  |  | LEP | 6 | 0.95\% | - | - | - | - | - | - |
|  |  |  | FEP | 10 | 1.59\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 626 | 99.37\% | 56.04 | 24.50 | 0 | 18 | 0.92 | 7.01 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.16\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 524 | 83.17\% | 56.06 | 25.40 | 0 | 18 | 0.92 | 6.98 |
|  |  |  | Yes | 83 | 13.17\% | 55.33 | 18.01 | 0 | 0 | 0.84 | 7.21 |
|  |  |  | Monitored Y1 | 1 | 0.16\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 3 | 0.48\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 5 | 0.79\% | - | - | - | - | - | - |
|  |  |  | Choice | 11 | 1.75\% | - | - | - | - | - | - |

Table 8
Reading Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 8 | Language Proficiency | Not Applicable | 486 | 82.37\% | 55.45 | 26.70 | 1 | 14 | 0.93 | 7.21 |
|  |  |  | NEP | 85 | 14.41\% | 54.12 | 21.12 | 0 | 1 | 0.87 | 7.59 |
|  |  |  | LEP | 11 | 1.86\% | - | - | - | - | - | - |
|  |  |  | FEP | 5 | 0.85\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.17\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 586 | 99.32\% | 55.16 | 25.93 | 1 | 16 | 0.92 | 7.26 |
|  |  |  | Yes | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 491 | 83.22\% | 55.26 | 26.79 | 1 | 15 | 0.93 | 7.20 |
|  |  |  | Yes | 85 | 14.41\% | 53.64 | 20.94 | 0 | 1 | 0.87 | 7.58 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Choice | 10 | 1.69\% | - | - | - | - | - | - |

Table 8
Reading Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 9 | Language Proficiency | Not Applicable | 427 | 82.43\% | 56.40 | 26.75 | 0 | 13 | 0.93 | 6.89 |
|  |  |  | NEP | 67 | 12.93\% | 54.28 | 25.81 | 0 | 4 | 0.92 | 7.13 |
|  |  |  | LEP | 4 | 0.77\% | - | - | - | - | - | - |
|  |  |  | FEP | 17 | 3.28\% | 52.82 | 24.58 | 0 | 1 | 0.92 | 7.05 |
|  |  |  | PHLOTE | 2 | 0.39\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0.00\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 516 | 99.61\% | 56.36 | 26.51 | 0 | 18 | 0.93 | 6.92 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.19\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 430 | 83.01\% | 56.44 | 26.76 | 0 | 13 | 0.93 | 6.88 |
|  |  |  | Yes | 58 | 11.20\% | 56.64 | 26.15 | 0 | 3 | 0.93 | 7.07 |
|  |  |  | Monitored Y1 | 6 | 1.16\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 2 | 0.39\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 8 | 1.54\% | - | - | - | - | - | - |
|  |  |  | Choice | 13 | 2.51\% | - | - | - | - | - | - |

Table 8
Reading Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 10 | Language Proficiency | Not Applicable | 462 | 84.15\% | 51.27 | 24.51 | 1 | 18 | 0.91 | 7.34 |
|  |  |  | NEP | 61 | 11.11\% | 46.89 | 21.93 | 0 | 3 | 0.88 | 7.49 |
|  |  |  | LEP | 8 | 1.46\% | - | - | - | - | - | - |
|  |  |  | FEP | 13 | 2.37\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 543 | 98.91\% | 51.11 | 24.16 | 1 | 21 | 0.91 | 7.35 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 3 | 0.55\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 467 | 85.06\% | 51.11 | 24.59 | 1 | 18 | 0.91 | 7.33 |
|  |  |  | Yes | 61 | 11.11\% | 48.11 | 22.64 | 0 | 3 | 0.89 | 7.42 |
|  |  |  | Monitored Y1 | 1 | 0.18\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 9 | 1.64\% | - | - | - | - | - | - |
|  |  |  | Choice | 8 | 1.46\% | - | - | - | - | - | - |

## Table 9

Writing Descriptive Statistics by English Language Proficiency

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students <br> at Max <br> Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 3 | Language Proficiency | Not Applicable | 483 | 81.86\% | 55.83 | 27.58 | 1 | 10 | 0.92 | 7.67 |
|  |  |  | NEP | 97 | 16.44\% | 46.40 | 24.41 | 0 | 1 | 0.89 | 8.04 |
|  |  |  | LEP | 4 | 0.68\% | - | - | - | - | - | - |
|  |  |  | FEP | 3 | 0.51\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 586 | 99.32\% | 54.25 | 27.23 | 1 | 11 | 0.92 | 7.74 |
|  |  |  | Yes | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 485 | 82.20\% | 55.80 | 27.54 | 1 | 10 | 0.92 | 7.67 |
|  |  |  | Yes | 92 | 15.59\% | 46.95 | 23.93 | 0 | 0 | 0.89 | 8.09 |
|  |  |  | Monitored Y1 | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Choice | 7 | 1.19\% | - | - | - | - | - | - |

Table 9
Writing Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 4 | Language Proficiency | Not Applicable | 561 | 82.02\% | 56.90 | 28.65 | 0 | 17 | 0.93 | 7.79 |
|  |  |  | NEP | 100 | 14.62\% | 55.59 | 28.62 | 0 | 5 | 0.92 | 7.92 |
|  |  |  | LEP | 12 | 1.75\% | - | - | - | - | - | - |
|  |  |  | FEP | 7 | 1.02\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 682 | 99.71\% | 56.69 | 28.72 | 0 | 23 | 0.93 | 7.80 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 565 | 82.60\% | 56.86 | 28.67 | 0 | 18 | 0.93 | 7.79 |
|  |  |  | Yes | 109 | 15.94\% | 57.71 | 28.35 | 0 | 5 | 0.92 | 7.85 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 5 | 0.73\% | - | - | - | - | - | - |
|  |  |  | Choice | 3 | 0.44\% | - | - | - |  | - | - |

Table 9
Writing Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 5 | Language Proficiency | Not Applicable | 559 | 81.01\% | 60.02 | 29.15 | 1 | 19 | 0.94 | 7.43 |
|  |  |  | NEP | 107 | 15.51\% | 54.40 | 26.68 | 0 | 3 | 0.91 | 7.97 |
|  |  |  | LEP | 13 | 1.88\% | - | - | - | - | - | - |
|  |  |  | FEP | 7 | 1.01\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 3 | 0.43\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 685 | 99.28\% | 59.17 | 28.75 | 1 | 22 | 0.93 | 7.53 |
|  |  |  | Yes | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 566 | 82.03\% | 60.05 | 29.13 | 1 | 19 | 0.93 | 7.43 |
|  |  |  | Yes | 109 | 15.80\% | 57.78 | 25.99 | 0 | 3 | 0.91 | 7.94 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 1 | 0.14\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 4 | 0.58\% | - | - | - | - | - | - |
|  |  |  | Choice | 9 | 1.30\% | - | - | - | - | - | - |

Table 9
Writing Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 6 | Language Proficiency | Not Applicable | 512 | 78.77\% | 63.79 | 28.30 | 3 | 15 | 0.93 | 7.51 |
|  |  |  | NEP | 104 | 16.00\% | 64.24 | 28.31 | 2 | 5 | 0.93 | 7.51 |
|  |  |  | LEP | 12 | 1.85\% | - | - | - | - | - | - |
|  |  |  | FEP | 17 | 2.62\% | 48.41 | 28.77 | 0 | 2 | 0.93 | 7.80 |
|  |  |  | PHLOTE | 2 | 0.31\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 644 | 99.08\% | 63.90 | 28.48 | 5 | 22 | 0.93 | 7.49 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 3 | 0.46\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 517 | 79.54\% | 63.69 | 28.31 | 3 | 15 | 0.93 | 7.51 |
|  |  |  | Yes | 108 | 16.62\% | 67.80 | 26.70 | 2 | 3 | 0.92 | 7.41 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 14 | 2.15\% | - | - | - | - | - | - |
|  |  |  | Choice | 7 | 1.08\% | - | - | - | - | - | - |

Table 9
Writing Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 7 | Language Proficiency | Not Applicable | 520 | 83.07\% | 62.19 | 31.22 | 1 | 23 | 0.94 | 7.51 |
|  |  |  | NEP | 87 | 13.90\% | 64.36 | 25.66 | 0 | 0 | 0.91 | 7.74 |
|  |  |  | LEP | 6 | 0.96\% | - | - | - | - | - | - |
|  |  |  | FEP | 10 | 1.60\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 623 | 99.52\% | 62.59 | 30.51 | 1 | 23 | 0.94 | 7.53 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.16\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 522 | 83.39\% | 62.16 | 31.24 | 1 | 23 | 0.94 | 7.52 |
|  |  |  | Yes | 82 | 13.10\% | 64.95 | 24.83 | 0 | 0 | 0.90 | 7.66 |
|  |  |  | Monitored Y1 | 1 | 0.16\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 3 | 0.48\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 5 | 0.80\% | - | - | - | - | - | - |
|  |  |  | Choice | 11 | 1.76\% | - | - | - | - | - | - |

Table 9
Writing Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 8 | Language Proficiency | Not Applicable | 485 | 82.34\% | 61.33 | 30.00 | 0 | 18 | 0.94 | 7.54 |
|  |  |  | NEP | 85 | 14.43\% | 63.45 | 24.42 | 0 | 1 | 0.90 | 7.66 |
|  |  |  | LEP | 11 | 1.87\% | - | - | - | - | - | - |
|  |  |  | FEP | 5 | 0.85\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.17\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 585 | 99.32\% | 61.61 | 29.18 | 0 | 20 | 0.93 | 7.57 |
|  |  |  | Yes | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 490 | 83.19\% | 61.14 | 30.07 | 0 | 19 | 0.94 | 7.54 |
|  |  |  | Yes | 85 | 14.43\% | 63.19 | 24.38 | 0 | 1 | 0.90 | 7.74 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Choice | 10 | 1.70\% | - | - | - | - | - | - |

Table 9
Writing Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 9 | Language Proficiency | Not Applicable | 427 | 82.43\% | 60.89 | 29.17 | 0 | 15 | 0.94 | 7.44 |
|  |  |  | NEP | 67 | 12.93\% | 59.15 | 28.70 | 0 | 5 | 0.93 | 7.64 |
|  |  |  | LEP | 4 | 0.77\% | - | - | - | - | - | - |
|  |  |  | FEP | 17 | 3.28\% | 58.59 | 27.47 | 0 | 2 | 0.94 | 6.91 |
|  |  |  | PHLOTE | 2 | 0.39\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 516 | 99.61\% | 61.01 | 28.97 | 0 | 22 | 0.93 | 7.43 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.19\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 430 | 83.01\% | 60.95 | 29.25 | 0 | 15 | 0.94 | 7.43 |
|  |  |  | Yes | 58 | 11.20\% | 62.03 | 27.95 | 0 | 3 | 0.93 | 7.64 |
|  |  |  | Monitored Y1 | 6 | 1.16\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 2 | 0.39\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 8 | 1.54\% | - | - | - | - | - | - |
|  |  |  | Choice | 13 | 2.51\% | - | - | - | - | - | - |

Table 9
Writing Descriptive Statistics by English Language Proficiency (continued)

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 10 | Language Proficiency | Not Applicable | 461 | 84.43\% | 61.27 | 28.02 | 0 | 17 | 0.92 | 7.73 |
|  |  |  | NEP | 60 | 10.99\% | 62.03 | 27.12 | 0 | 3 | 0.92 | 7.64 |
|  |  |  | LEP | 8 | 1.47\% | - | - | - | - | - | - |
|  |  |  | FEP | 12 | 2.20\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 540 | 98.90\% | 61.86 | 27.72 | 0 | 20 | 0.92 | 7.70 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 3 | 0.55\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 466 | 85.35\% | 61.11 | 28.15 | 0 | 18 | 0.92 | 7.72 |
|  |  |  | Yes | 60 | 10.99\% | 63.83 | 27.25 | 0 | 3 | 0.92 | 7.49 |
|  |  |  | Monitored Y1 | 1 | 0.18\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 8 | 1.47\% | - | - | - | - | - | - |
|  |  |  | Choice | 8 | 1.47\% | - | - | - | - | - | - |

Table 10
Mathematics Descriptive Statistics by English Language Proficiency

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 3 | Language Proficiency | Not Applicable | 480 | 82.33\% | 80.16 | 33.30 | 0 | 9 | 0.94 | 8.04 |
|  |  |  | NEP | 93 | 15.95\% | 73.23 | 31.89 | 1 | 1 | 0.93 | 8.57 |
|  |  |  | LEP | 4 | 0.69\% | - | - | - | - | - | - |
|  |  |  | FEP | 3 | 0.51\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 579 | 99.31\% | 79.05 | 33.08 | 1 | 10 | 0.94 | 8.13 |
|  |  |  | Yes | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 482 | 82.68\% | 80.13 | 33.24 | 0 | 9 | 0.94 | 8.04 |
|  |  |  | Yes | 88 | 15.09\% | 73.69 | 31.27 | 1 | 0 | 0.92 | 8.59 |
|  |  |  | Monitored Y1 | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Choice | 7 | 1.20\% | - | - | - | - | - | - |

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

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 4 | Language Proficiency | Not Applicable | 557 | 82.03\% | 81.34 | 35.44 | 3 | 17 | 0.95 | 8.27 |
|  |  |  | NEP | 99 | 14.58\% | 78.71 | 37.54 | 0 | 4 | 0.95 | 8.29 |
|  |  |  | LEP | 12 | 1.77\% | - | - | - | - | - | - |
|  |  |  | FEP | 7 | 1.03\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 677 | 99.71\% | 80.67 | 35.79 | 3 | 22 | 0.95 | 8.27 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 561 | 82.62\% | 81.16 | 35.50 | 3 | 18 | 0.95 | 8.27 |
|  |  |  | Yes | 108 | 15.91\% | 80.74 | 36.56 | 0 | 4 | 0.95 | 8.25 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 5 | 0.74\% | - | - | - | - | - | - |
|  |  |  | Choice | 3 | 0.44\% | - | - | - | - | - | - |

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

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students <br> at Max <br> Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 5 | Language Proficiency | Not Applicable | 556 | 80.93\% | 96.56 | 47.20 | 1 | 13 | 0.95 | 10.10 |
|  |  |  | NEP | 107 | 15.57\% | 92.31 | 45.20 | 0 | 3 | 0.95 | 10.29 |
|  |  |  | LEP | 13 | 1.89\% | - | - | - | - | - | - |
|  |  |  | FEP | 7 | 1.02\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 3 | 0.44\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 682 | 99.27\% | 96.02 | 46.87 | 1 | 16 | 0.95 | 10.13 |
|  |  |  | Yes | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 2 | 0.29\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 563 | 81.95\% | 96.53 | 47.16 | 1 | 13 | 0.95 | 10.10 |
|  |  |  | Yes | 109 | 15.87\% | 98.29 | 44.25 | 0 | 3 | 0.95 | 10.24 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 1 | 0.15\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 4 | 0.58\% | - | - | - | - | - | - |
|  |  |  | Choice | 9 | 1.31\% | - | - | - | - | - | - |

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

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students <br> at Max <br> Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 6 | Language Proficiency | Not Applicable | 515 | 78.75\% | 81.48 | 37.39 | 1 | 13 | 0.94 | 8.86 |
|  |  |  | NEP | 104 | 15.90\% | 80.49 | 39.46 | 0 | 5 | 0.95 | 8.71 |
|  |  |  | LEP | 12 | 1.83\% | - | - | - | - | - | - |
|  |  |  | FEP | 17 | 2.60\% | 63.06 | 31.04 | 0 | 1 | 0.91 | 9.56 |
|  |  |  | PHLOTE | 2 | 0.31\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 647 | 98.93\% | 81.34 | 37.73 | 1 | 20 | 0.95 | 8.82 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 3 | 0.46\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 520 | 79.51\% | 81.34 | 37.43 | 1 | 14 | 0.94 | 8.86 |
|  |  |  | Yes | 108 | 16.51\% | 84.19 | 37.42 | 0 | 4 | 0.95 | 8.68 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 14 | 2.14\% | - | - | - | - | - | - |
|  |  |  | Choice | 7 | 1.07\% | - | - | - | - | - | - |

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

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 7 | Language Proficiency | Not Applicable | 519 | 83.04\% | 70.51 | 35.82 | 0 | 20 | 0.94 | 8.77 |
|  |  |  | NEP | 87 | 13.92\% | 76.31 | 29.79 | 0 | 0 | 0.91 | 8.80 |
|  |  |  | LEP | 6 | 0.96\% | - | - | - | - | - | - |
|  |  |  | FEP | 10 | 1.60\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 622 | 99.52\% | 71.51 | 34.98 | 0 | 20 | 0.94 | 8.78 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.16\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 521 | 83.36\% | 70.46 | 35.88 | 0 | 20 | 0.94 | 8.77 |
|  |  |  | Yes | 82 | 13.12\% | 77.11 | 29.05 | 0 | 0 | 0.91 | 8.76 |
|  |  |  | Monitored Y1 | 1 | 0.16\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 3 | 0.48\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 5 | 0.80\% | - | - | - | - | - | - |
|  |  |  | Choice | 11 | 1.76\% | - | - | - | - | - | - |

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

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students <br> at Max <br> Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 8 | Language Proficiency | Not Applicable | 484 | 82.17\% | 80.17 | 39.47 | 1 | 16 | 0.94 | 9.31 |
|  |  |  | NEP | 86 | 14.60\% | 86.00 | 34.24 | 0 | 2 | 0.93 | 9.36 |
|  |  |  | LEP | 11 | 1.87\% | - | - | - | - | - | - |
|  |  |  | FEP | 5 | 0.85\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.17\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 585 | 99.32\% | 80.96 | 38.68 | 1 | 19 | 0.94 | 9.33 |
|  |  |  | Yes | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 489 | 83.02\% | 79.85 | 39.59 | 1 | 17 | 0.94 | 9.31 |
|  |  |  | Yes | 86 | 14.60\% | 84.66 | 33.60 | 0 | 2 | 0.92 | 9.43 |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 2 | 0.34\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.17\% | - | - | - | - | - | - |
|  |  |  | Choice | 10 | 1.70\% | - | - | - | - | - | - |

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

|  |  |  |  | Sample |  | Raw | core | N <br> Students at Max | N <br> Students <br> at Min | Coefficient | Standard Error of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Variable | Subgroup | Size | \% | Mean | SD | Score | Score | Alpha | Measurement |
| MA | 9 | Language Proficiency | Not Applicable | 430 | 82.53\% | 71.64 | 35.78 | 0 | 14 | 0.93 | 9.38 |
|  |  |  | NEP | 67 | 12.86\% | 70.37 | 36.51 | 0 | 4 | 0.93 | 9.34 |
|  |  |  | LEP | 4 | 0.77\% | - | - | - | - | - | - |
|  |  |  | FEP | 17 | 3.26\% | 70.12 | 37.44 | 0 | 2 | 0.94 | 9.47 |
|  |  |  | PHLOTE | 2 | 0.38\% | - | - | - | - | - | - |
|  |  |  | FELL | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 519 | 99.62\% | 71.96 | 35.80 | 0 | 20 | 0.93 | 9.37 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 1 | 0.19\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 433 | 83.11\% | 71.65 | 35.85 | 0 | 14 | 0.93 | 9.37 |
|  |  |  | Yes | 58 | 11.13\% | 71.97 | 36.57 | 0 | 3 | 0.93 | 9.37 |
|  |  |  | Monitored Y1 | 6 | 1.15\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 2 | 0.38\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 8 | 1.54\% | - | - | - | - | - | - |
|  |  |  | Choice | 13 | 2.50\% | - | - | - | - | - | - |

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

| Content | Grade | Variable | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 10 | Language Proficiency | Not Applicable | 467 | 84.75\% | 76.31 | 37.12 | 0 | 20 | 0.93 | 9.69 |
|  |  |  | NEP | 61 | 11.07\% | 76.98 | 35.97 | 0 | 3 | 0.93 | 9.79 |
|  |  |  | LEP | 8 | 1.45\% | - | - | - | - | - | - |
|  |  |  | FEP | 10 | 1.81\% | - | - | - | - | - | - |
|  |  |  | PHLOTE | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | FELL | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | ELL Program Bilingual | No | 545 | 98.91\% | 76.96 | 36.78 | 0 | 23 | 0.93 | 9.70 |
|  |  |  | Yes | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y1 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 3 | 0.54\% | - | - | - | - | - | - |
|  |  |  | Choice | 0 | 0\% | - | - | - | - | - | - |
|  |  | ELL Program ESL | No | 472 | 85.66\% | 76.05 | 37.15 | 0 | 20 | 0.93 | 9.70 |
|  |  |  | Yes | 61 | 11.07\% | 78.89 | 35.23 | 0 | 3 | 0.92 | 9.84 |
|  |  |  | Monitored Y1 | 1 | 0.18\% | - | - | - | - | - | - |
|  |  |  | Monitored Y2 | 0 | 0\% | - | - | - | - | - | - |
|  |  |  | Exited Y3+ | 6 | 1.09\% | - | - | - | - | - | - |
|  |  |  | Choice | 8 | 1.45\% | - | - | - | - | - | - |

Table 11
Reading Descriptive Statistics by Free/Reduced Price Lunch Eligibility

| Content | Grade | Subgroup | Sample <br> Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD | 3 | Free Lunch Eligible | 278 | 47.20\% | 57.32 | 23.07 | 0 | 4 | 0.91 | 7.03 |
|  |  | Reduced Lunch Eligible | 49 | 8.32\% | 57.47 | 22.96 | 0 | 0 | 0.90 | 7.17 |
|  |  | Not Eligible | 253 | 42.95\% | 56.83 | 25.19 | 0 | 7 | 0.93 | 6.88 |
|  | 4 | Free Lunch Eligible | 365 | 52.98\% | 59.51 | 24.92 | 1 | 9 | 0.92 | 6.90 |
|  |  | Reduced Lunch Eligible | 49 | 7.11\% | 51.29 | 28.67 | 0 | 5 | 0.95 | 6.67 |
|  |  | Not Eligible | 272 | 39.48\% | 54.69 | 25.21 | 0 | 11 | 0.92 | 6.98 |
|  | 5 | Free Lunch Eligible | 327 | 47.74\% | 60.01 | 25.82 | 0 | 7 | 0.93 | 6.99 |
|  |  | Reduced Lunch Eligible | 62 | 9.05\% | 58.61 | 30.80 | 1 | 2 | 0.95 | 6.62 |
|  |  | Not Eligible | 289 | 42.19\% | 56.47 | 27.55 | 2 | 9 | 0.94 | 6.90 |
|  | 6 | Free Lunch Eligible | 317 | 48.40\% | 67.09 | 23.65 | 3 | 5 | 0.92 | 6.65 |
|  |  | Reduced Lunch Eligible | 52 | 7.94\% | 58.38 | 29.83 | 0 | 3 | 0.95 | 6.72 |
|  |  | Not Eligible | 274 | 41.83\% | 61.22 | 28.25 | 1 | 9 | 0.94 | 6.63 |
|  | 7 | Free Lunch Eligible | 295 | 46.83\% | 57.37 | 22.82 | 0 | 6 | 0.90 | 7.08 |
|  |  | Reduced Lunch Eligible | 55 | 8.73\% | 56.95 | 24.28 | 0 | 0 | 0.92 | 6.99 |
|  |  | Not Eligible | 276 | 43.81\% | 54.36 | 26.25 | 0 | 12 | 0.93 | 6.93 |
|  | 8 | Free Lunch Eligible | 285 | 48.31\% | 57.02 | 24.43 | 0 | 6 | 0.91 | 7.31 |
|  |  | Reduced Lunch Eligible | 53 | 8.98\% | 52.55 | 28.23 | 1 | 2 | 0.94 | 7.17 |
|  |  | Not Eligible | 250 | 42.37\% | 53.59 | 27.08 | 0 | 8 | 0.93 | 7.20 |
|  | 9 | Free Lunch Eligible | 211 | 40.73\% | 58.67 | 24.50 | 0 | 6 | 0.92 | 7.03 |
|  |  | Reduced Lunch Eligible | 56 | 10.81\% | 57.75 | 27.04 | 0 | 2 | 0.94 | 6.87 |
|  |  | Not Eligible | 249 | 48.07\% | 53.91 | 27.95 | 0 | 10 | 0.94 | 6.84 |
|  | 10 | Free Lunch Eligible | 245 | 44.63\% | 52.74 | 23.24 | 1 | 10 | 0.90 | 7.40 |
|  |  | Reduced Lunch Eligible | 45 | 8.20\% | 49.53 | 21.69 | 0 | 1 | 0.88 | 7.58 |
|  |  | Not Eligible | 253 | 46.08\% | 49.36 | 25.53 | 0 | 10 | 0.92 | 7.25 |

Table 12
Writing Descriptive Statistics by Free/Reduced Price Lunch Eligibility

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | Score | Alpha |  |
| WR | 3 | Free Lunch Eligible | 280 | 47.46\% | 55.43 | 26.29 | 0 | 3 | 0.91 | 7.80 |
|  |  | Reduced Lunch Eligible | 49 | 8.31\% | 57.22 | 26.52 | 0 | 0 | 0.92 | 7.64 |
|  |  | Not Eligible | 252 | 42.71\% | 52.72 | 28.18 | 1 | 8 | 0.93 | 7.68 |
|  | 4 | Free Lunch Eligible | 364 | 53.22\% | 59.79 | 27.48 | 0 | 11 | 0.92 | 7.73 |
|  |  | Reduced Lunch Eligible | 49 | 7.16\% | 52.16 | 31.06 | 0 | 4 | 0.94 | 7.62 |
|  |  | Not Eligible | 269 | 39.33\% | 53.09 | 29.70 | 0 | 9 | 0.93 | 7.89 |
|  | 5 | Free Lunch Eligible | 332 | 48.12\% | 61.39 | 27.39 | 0 | 7 | 0.92 | 7.56 |
|  |  | Reduced Lunch Eligible | 61 | 8.84\% | 58.07 | 31.37 | 0 | 3 | 0.94 | 7.36 |
|  |  | Not Eligible | 290 | 42.03\% | 56.79 | 29.54 | 1 | 12 | 0.94 | 7.51 |
|  | 6 | Free Lunch Eligible | 317 | 48.77\% | 67.24 | 26.41 | 1 | 8 | 0.92 | 7.41 |
|  |  | Reduced Lunch Eligible | 51 | 7.85\% | 55.90 | 32.28 | 1 | 4 | 0.94 | 7.66 |
|  |  | Not Eligible | 271 | 41.69\% | 61.46 | 29.50 | 3 | 10 | 0.93 | 7.53 |
|  | 7 | Free Lunch Eligible | 294 | 46.96\% | 65.11 | 28.80 | 1 | 6 | 0.93 | 7.45 |
|  |  | Reduced Lunch Eligible | 55 | 8.79\% | 65.65 | 28.66 | 0 | 0 | 0.93 | 7.39 |
|  |  | Not Eligible | 274 | 43.77\% | 59.12 | 32.46 | 0 | 17 | 0.95 | 7.61 |
|  | 8 | Free Lunch Eligible | 284 | 48.22\% | 65.12 | 27.40 | 0 | 6 | 0.93 | 7.49 |
|  |  | Reduced Lunch Eligible | 53 | 9.00\% | 54.64 | 30.55 | 0 | 3 | 0.93 | 7.84 |
|  |  | Not Eligible | 250 | 42.44\% | 59.15 | 30.35 | 0 | 11 | 0.94 | 7.55 |
|  | 9 | Free Lunch Eligible | 210 | 40.54\% | 63.95 | 27.08 | 0 | 7 | 0.92 | 7.47 |
|  |  | Reduced Lunch Eligible | 57 | 11.00\% | 62.16 | 28.78 | 0 | 3 | 0.94 | 7.29 |
|  |  | Not Eligible | 249 | 48.07\% | 57.98 | 30.46 | 0 | 12 | 0.94 | 7.45 |
|  | 10 | Free Lunch Eligible | 244 | 44.69\% | 65.46 | 26.04 | 0 | 8 | 0.92 | 7.53 |
|  |  | Reduced Lunch Eligible | 45 | 8.24\% | 57.82 | 27.85 | 0 | 2 | 0.92 | 7.78 |
|  |  | Not Eligible | 251 | 45.97\% | 58.53 | 29.24 | 0 | 11 | 0.93 | 7.83 |

Table 13
Mathematics Descriptive Statistics by Free/Reduced Price Lunch Eligibility

| Content | Grade | Subgroup | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA | 3 | Free Lunch Eligible | 273 | 46.83\% | 81.70 | 30.91 | 1 | 2 | 0.93 | 8.22 |
|  |  | Reduced Lunch Eligible | 49 | 8.40\% | 84.10 | 31.18 | 0 | 0 | 0.93 | 8.03 |
|  |  | Not Eligible | 252 | 43.22\% | 75.84 | 35.12 | 0 | 8 | 0.95 | 8.06 |
|  | 4 | Free Lunch Eligible | 357 | 52.58\% | 85.81 | 33.81 | 2 | 9 | 0.94 | 8.10 |
|  |  | Reduced Lunch Eligible | 49 | 7.22\% | 72.71 | 39.39 | 0 | 3 | 0.96 | 8.27 |
|  |  | Not Eligible | 270 | 39.76\% | 74.83 | 36.99 | 1 | 11 | 0.95 | 8.41 |
|  | 5 | Free Lunch Eligible | 327 | 47.60\% | 101.17 | 44.52 | 0 | 6 | 0.95 | 10.21 |
|  |  | Reduced Lunch Eligible | 61 | 8.88\% | 94.31 | 52.36 | 0 | 2 | 0.96 | 9.90 |
|  |  | Not Eligible | 292 | 42.50\% | 90.38 | 47.49 | 1 | 8 | 0.95 | 10.09 |
|  | 6 | Free Lunch Eligible | 318 | 48.62\% | 87.39 | 35.55 | 0 | 8 | 0.94 | 8.67 |
|  |  | Reduced Lunch Eligible | 52 | 7.95\% | 71.92 | 42.13 | 0 | 2 | 0.96 | 8.86 |
|  |  | Not Eligible | 272 | 41.59\% | 75.97 | 38.22 | 1 | 10 | 0.95 | 8.95 |
|  | 7 | Free Lunch Eligible | 290 | 46.40\% | 75.26 | 32.71 | 0 | 7 | 0.93 | 8.81 |
|  |  | Reduced Lunch Eligible | 54 | 8.64\% | 76.67 | 31.49 | 0 | 0 | 0.92 | 8.83 |
|  |  | Not Eligible | 278 | 44.48\% | 66.39 | 37.49 | 0 | 13 | 0.95 | 8.69 |
|  | 8 | Free Lunch Eligible | 286 | 48.56\% | 86.00 | 36.94 | 1 | 7 | 0.94 | 9.31 |
|  |  | Reduced Lunch Eligible | 54 | 9.17\% | 74.17 | 39.84 | 0 | 3 | 0.94 | 9.37 |
|  |  | Not Eligible | 247 | 41.94\% | 76.57 | 39.72 | 0 | 9 | 0.94 | 9.33 |
|  | 9 | Free Lunch Eligible | 210 | 40.31\% | 75.27 | 34.74 | 0 | 6 | 0.93 | 9.33 |
|  |  | Reduced Lunch Eligible | 58 | 11.13\% | 74.88 | 33.59 | 0 | 2 | 0.92 | 9.36 |
|  |  | Not Eligible | 251 | 48.18\% | 68.11 | 37.05 | 0 | 12 | 0.94 | 9.38 |
|  | 10 | Free Lunch Eligible | 246 | 44.65\% | 82.00 | 35.37 | 0 | 8 | 0.93 | 9.59 |
|  |  | Reduced Lunch Eligible | 45 | 8.17\% | 73.96 | 35.49 | 0 | 2 | 0.92 | 9.97 |
|  |  | Not Eligible | 254 | 46.10\% | 72.20 | 38.08 | 0 | 13 | 0.93 | 9.73 |

Table 14
Reading Descriptive Statistics by Primary Disability

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students <br> at Max Score | N |  | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | at Min Score | Coefficient Alpha |  |
| RD |  | Autism | 127 | 21.56\% | 54.29 | 24.90 | 0 | 1 | 0.93 | 6.67 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 153 | 25.98\% | 65.72 | 19.17 | 0 | 0 | 0.87 | 6.91 |
|  |  | Multiple Disabilities | 194 | 32.94\% | 48.60 | 23.79 | 0 | 8 | 0.91 | 7.20 |
|  |  | Physical Disability | 69 | 11.71\% | 58.52 | 25.66 | 0 | 2 | 0.93 | 6.85 |
|  | 3 | Specific Learning Disability | 12 | 2.04\% | - | - | - | - | - | - |
|  |  | Speech/Language Disability | 9 | 1.53\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Visual Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 12 | 2.04\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.34\% | - | - | - | - | - | - |

Table 14
Reading Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | Autism | 115 | 16.69\% | 52.98 | 23.25 | 0 | 2 | 0.91 | 6.95 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.29\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 189 | 27.43\% | 69.68 | 21.19 | 0 | 3 | 0.90 | 6.69 |
|  |  | Multiple Disabilities | 269 | 39.04\% | 47.14 | 24.97 | 0 | 16 | 0.92 | 7.01 |
|  |  | Physical Disability | 68 | 9.87\% | 56.35 | 25.24 | 1 | 4 | 0.92 | 7.05 |
|  | 4 | Specific Learning Disability | 22 | 3.19\% | 78.50 | 13.33 | 0 | 0 | 0.75 | 6.65 |
|  |  | Speech/Language Disability | 7 | 1.02\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 8 | 1.16\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 6 | 0.87\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0\% | - | - | - | - | - | - |

Table 14
Reading Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | Autism | 133 | 19.42\% | 57.97 | 25.76 | 1 | 2 | 0.93 | 6.91 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 184 | 26.86\% | 70.87 | 20.59 | 1 | 1 | 0.89 | 6.83 |
|  |  | Multiple Disabilities | 255 | 37.23\% | 48.01 | 27.82 | 0 | 14 | 0.94 | 6.95 |
|  |  | Physical Disability | 54 | 7.88\% | 52.04 | 26.12 | 1 | 1 | 0.93 | 7.08 |
|  | 5 | Specific Learning Disability | 22 | 3.21\% | 77.59 | 14.92 | 0 | 0 | 0.80 | 6.68 |
|  |  | Speech/Language Disability | 9 | 1.31\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 9 | 1.31\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 2 | 0.29\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 11 | 1.61\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.15\% | - | - | - | - | - | - |

Table 14
Reading Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | Autism | 106 | 16.18\% | 64.73 | 23.42 | 2 | 1 | 0.92 | 6.63 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 196 | 29.92\% | 73.90 | 19.46 | 2 | 0 | 0.89 | 6.44 |
|  |  | Multiple Disabilities | 250 | 38.17\% | 52.08 | 28.07 | 0 | 14 | 0.94 | 6.87 |
|  |  | Physical Disability | 53 | 8.09\% | 68.09 | 26.52 | 0 | 1 | 0.94 | 6.48 |
|  | 6 | Specific Learning Disability | 23 | 3.51\% | 85.70 | 9.85 | 0 | 0 | 0.63 | 5.98 |
|  |  | Speech/Language Disability | 4 | 0.61\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 13 | 1.98\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 5 | 0.76\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 3 | 0.46\% | - | - | - | - | - | - |

Table 14
Reading Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | $\begin{gathered} \mathrm{N} \\ \text { Students } \\ \text { at Max } \\ \text { Score } \\ \hline \end{gathered}$ | N <br> Students <br> at Min <br> Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | Autism | 88 | 13.97\% | 50.70 | 21.36 | 0 | 1 | 0.89 | 7.11 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 209 | 33.17\% | 65.86 | 19.93 | 0 | 0 | 0.88 | 6.92 |
|  |  | Multiple Disabilities | 251 | 39.84\% | 46.90 | 25.71 | 0 | 16 | 0.93 | 7.02 |
|  |  | Physical Disability | 43 | 6.83\% | 58.02 | 22.19 | 0 | 0 | 0.89 | 7.20 |
|  | 7 | Specific Learning Disability | 22 | 3.49\% | 75.32 | 13.49 | 0 | 0 | 0.75 | 6.73 |
|  |  | Speech/Language Disability | 3 | 0.48\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 4 | 0.63\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 5 | 0.79\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.32\% | - | - | - | - | - | - |

Table 14
Reading Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | Autism | 89 | 15.08\% | 48.85 | 24.85 | 0 | 0 | 0.91 | 7.39 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 5 | 0.85\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 184 | 31.19\% | 65.28 | 22.39 | 1 | 1 | 0.90 | 7.19 |
|  |  | Multiple Disabilities | 234 | 39.66\% | 46.05 | 24.96 | 0 | 10 | 0.91 | 7.35 |
|  |  | Physical Disability | 47 | 7.97\% | 62.68 | 27.44 | 0 | 4 | 0.94 | 6.94 |
|  | 8 | Specific Learning Disability | 15 | 2.54\% | - | - | - | - | - | - |
|  |  | Speech/Language Disability | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 7 | 1.19\% | - | - | - | - | - | - |
|  |  | Visual Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 4 | 0.68\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.17\% | - | - | - | - | - | - |

Table 14
Reading Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students <br> at Max <br> Score | N <br> Students <br> at Min <br> Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | Autism | 67 | 12.93\% | 47.82 | 23.26 | 0 | 2 | 0.91 | 7.16 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 6 | 1.16\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 164 | 31.66\% | 69.09 | 19.59 | 0 | 0 | 0.88 | 6.86 |
|  |  | Multiple Disabilities | 215 | 41.51\% | 43.62 | 26.19 | 0 | 16 | 0.93 | 6.93 |
|  |  | Physical Disability | 34 | 6.56\% | 69.65 | 25.37 | 0 | 0 | 0.93 | 6.62 |
|  | 9 | Specific Learning Disability | 17 | 3.28\% | 77.18 | 13.44 | 0 | 0 | 0.77 | 6.51 |
|  |  | Speech/Language Disability | 5 | 0.97\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 5 | 0.97\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.19\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 3 | 0.58\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.19\% | - | - | - | - | - | - |

Table 14
Reading Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students <br> at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | Autism | 77 | 14.03\% | 49.19 | 22.13 | 0 | 0 | 0.88 | 7.53 |
|  |  | Deaf-Blind | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 3 | 0.55\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.36\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 192 | 34.97\% | 59.35 | 20.12 | 1 | 1 | 0.86 | 7.45 |
|  |  | Multiple Disabilities | 220 | 40.07\% | 39.17 | 23.02 | 0 | 18 | 0.90 | 7.26 |
|  |  | Physical Disability | 22 | 4.01\% | 65.32 | 23.22 | 0 | 1 | 0.91 | 6.96 |
|  | 10 | Specific Learning Disability | 19 | 3.46\% | 75.58 | 15.26 | 0 | 0 | 0.80 | 6.87 |
|  |  | Speech/Language Disability | 2 | 0.36\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 7 | 1.28\% | - | - | - | - | - | - |
|  |  | Visual Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 2 | 0.36\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.36\% | - | - | - | - | - | - |

Table 15
Writing Descriptive Statistics by Primary Disability

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 127 | 21.53\% | 52.39 | 26.89 | 1 | 0 | 0.92 | 7.56 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 154 | 26.10\% | 65.29 | 21.43 | 0 | 0 | 0.88 | 7.51 |
|  |  | Multiple Disabilities | 192 | 32.54\% | 43.27 | 27.57 | 0 | 9 | 0.92 | 7.81 |
|  |  | Physical Disability | 69 | 11.69\% | 53.41 | 28.36 | 0 | 2 | 0.92 | 7.78 |
|  | 3 | Specific Learning Disability | 13 | 2.20\% | - | - | - | - | - | - |
|  |  | Speech/Language Disability | 9 | 1.53\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Visual Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 12 | 2.03\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.34\% | - | - | - | - | - | - |

## Table 15 <br> Writing Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 114 | 16.67\% | 54.05 | 30.51 | 0 | 3 | 0.94 | 7.68 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.29\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 188 | 27.49\% | 69.59 | 22.45 | 0 | 2 | 0.90 | 7.23 |
|  |  | Multiple Disabilities | 267 | 39.04\% | 44.81 | 27.87 | 0 | 15 | 0.92 | 8.03 |
|  |  | Physical Disability | 67 | 9.80\% | 58.33 | 27.93 | 0 | 4 | 0.92 | 7.82 |
|  | 4 | Specific Learning Disability | 22 | 3.22\% | 81.91 | 12.42 | 0 | 0 | 0.73 | 6.44 |
|  |  | Speech/Language Disability | 7 | 1.02\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 8 | 1.17\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 6 | 0.88\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.15\% | - | - | - | - | - | - |

## Table 15 <br> Writing Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 133 | 19.28\% | 60.89 | 27.92 | 1 | 2 | 0.93 | 7.37 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 4 | 0.58\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 1 | 0.14\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 186 | 26.96\% | 72.82 | 18.66 | 0 | 1 | 0.86 | 7.02 |
|  |  | Multiple Disabilities | 257 | 37.25\% | 46.64 | 30.20 | 0 | 18 | 0.93 | 7.71 |
|  |  | Physical Disability | 54 | 7.83\% | 51.70 | 27.20 | 0 | 1 | 0.92 | 7.82 |
|  | 5 | Specific Learning Disability | 22 | 3.19\% | 78.50 | 16.28 | 0 | 0 | 0.84 | 6.42 |
|  |  | Speech/Language Disability | 9 | 1.30\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 9 | 1.30\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.14\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 2 | 0.29\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 11 | 1.59\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.14\% | - | - | - | - | - | - |

## Table 15 <br> Writing Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 103 | 15.85\% | 67.36 | 26.03 | 2 | 1 | 0.92 | 7.22 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 196 | 30.15\% | 74.93 | 19.93 | 3 | 0 | 0.88 | 7.02 |
|  |  | Multiple Disabilities | 247 | 38.00\% | 50.19 | 30.59 | 0 | 21 | 0.93 | 7.81 |
|  |  | Physical Disability | 54 | 8.31\% | 66.46 | 27.05 | 0 | 0 | 0.92 | 7.55 |
|  | 6 | Specific Learning Disability | 23 | 3.54\% | 85.83 | 10.60 | 0 | 0 | 0.68 | 6.02 |
|  |  | Speech/Language Disability | 4 | 0.62\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 13 | 2.00\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 5 | 0.77\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 3 | 0.46\% | - | - | - | - | - | - |

## Table 15 <br> Writing Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 88 | 14.06\% | 54.68 | 28.53 | 0 | 1 | 0.92 | 7.96 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 206 | 32.91\% | 76.46 | 21.60 | 0 | 0 | 0.90 | 6.79 |
|  |  | Multiple Disabilities | 250 | 39.94\% | 51.29 | 33.14 | 0 | 20 | 0.95 | 7.63 |
|  |  | Physical Disability | 43 | 6.87\% | 59.53 | 27.56 | 0 | 1 | 0.91 | 8.17 |
|  | 7 | Specific Learning Disability | 22 | 3.51\% | 87.68 | 10.00 | 0 | 0 | 0.69 | 5.53 |
|  |  | Speech/Language Disability | 3 | 0.48\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 4 | 0.64\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 5 | 0.80\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.32\% | - | - | - | - | - | - |

## Table 15 <br> Writing Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 90 | 15.28\% | 55.40 | 28.37 | 0 | 1 | 0.92 | 7.97 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 5 | 0.85\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 184 | 31.24\% | 73.27 | 22.97 | 0 | 1 | 0.91 | 6.88 |
|  |  | Multiple Disabilities | 232 | 39.39\% | 50.99 | 29.59 | 0 | 13 | 0.93 | 7.89 |
|  |  | Physical Disability | 47 | 7.98\% | 69.60 | 27.67 | 0 | 5 | 0.94 | 6.80 |
|  | 8 | Specific Learning Disability | 15 | 2.55\% | - | - | - | - | - | - |
|  |  | Speech/Language Disability | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 7 | 1.19\% | - | - | - | - | - | - |
|  |  | Visual Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 4 | 0.68\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.17\% | - | - | - | - | - | - |

## Table 15 <br> Writing Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 65 | 12.55\% | 52.60 | 26.82 | 0 | 3 | 0.92 | 7.55 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 6 | 1.16\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 165 | 31.85\% | 74.12 | 18.37 | 0 | 0 | 0.86 | 6.82 |
|  |  | Multiple Disabilities | 217 | 41.89\% | 47.67 | 31.20 | 0 | 19 | 0.94 | 7.76 |
|  |  | Physical Disability | 33 | 6.37\% | 75.97 | 23.47 | 0 | 0 | 0.92 | 6.55 |
|  | 9 | Specific Learning Disability | 17 | 3.28\% | 85.88 | 9.89 | 0 | 0 | 0.68 | 5.63 |
|  |  | Speech/Language Disability | 5 | 0.97\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 5 | 0.97\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.19\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 3 | 0.58\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.19\% | - | - | - | - | - | - |

## Table 15 <br> Writing Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | Autism | 76 | 13.92\% | 61.75 | 27.15 | 0 | 1 | 0.92 | 7.80 |
|  |  | Deaf-Blind | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 3 | 0.55\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.37\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 191 | 34.98\% | 72.24 | 20.34 | 0 | 0 | 0.87 | 7.20 |
|  |  | Multiple Disabilities | 219 | 40.11\% | 47.61 | 28.43 | 0 | 18 | 0.92 | 8.09 |
|  |  | Physical Disability | 22 | 4.03\% | 73.77 | 27.57 | 0 | 1 | 0.94 | 6.62 |
|  | 10 | Specific Learning Disability | 19 | 3.48\% | 87.16 | 8.74 | 0 | 0 | 0.55 | 5.85 |
|  |  | Speech/Language Disability | 2 | 0.37\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 7 | 1.28\% | - | - | - | - | - | - |
|  |  | Visual Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 2 | 0.37\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.37\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 124 | 21.27\% | 73.81 | 32.03 | 0 | 0 | 0.94 | 8.09 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 151 | 25.90\% | 93.95 | 23.15 | 0 | 0 | 0.89 | 7.59 |
|  |  | Multiple Disabilities | 191 | 32.76\% | 66.37 | 34.56 | 0 | 8 | 0.94 | 8.58 |
|  |  | Physical Disability | 69 | 11.84\% | 77.67 | 35.77 | 1 | 2 | 0.95 | 7.94 |
|  | 3 | Specific Learning Disability | 13 | 2.23\% | - | - | - | - | - | - |
|  |  | Speech/Language Disability | 9 | 1.54\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Visual Disability | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 12 | 2.06\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.34\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 112 | 16.49\% | 71.15 | 36.14 | 1 | 2 | 0.95 | 8.45 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.29\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 187 | 27.54\% | 99.10 | 25.55 | 1 | 3 | 0.91 | 7.54 |
|  |  | Multiple Disabilities | 265 | 39.03\% | 67.91 | 37.07 | 0 | 14 | 0.95 | 8.56 |
|  |  | Physical Disability | 68 | 10.01\% | 79.97 | 33.65 | 1 | 4 | 0.94 | 8.57 |
|  | 4 | Specific Learning Disability | 22 | 3.24\% | 109.68 | 14.43 | 0 | 0 | 0.77 | 6.89 |
|  |  | Speech/Language Disability | 7 | 1.03\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 8 | 1.18\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 5 | 0.74\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.15\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample <br> Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 132 | 19.21\% | 94.36 | 45.25 | 0 | 1 | 0.95 | 9.91 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 4 | 0.58\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 183 | 26.64\% | 118.79 | 31.77 | 0 | 1 | 0.90 | 10.11 |
|  |  | Multiple Disabilities | 256 | 37.26\% | 75.83 | 47.84 | 1 | 13 | 0.95 | 10.18 |
|  |  | Physical Disability | 56 | 8.15\% | 85.96 | 45.57 | 0 | 1 | 0.95 | 10.20 |
|  | 5 | Specific Learning Disability | 22 | 3.20\% | 138.32 | 20.71 | 0 | 0 | 0.81 | 9.11 |
|  |  | Speech/Language Disability | 9 | 1.31\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 9 | 1.31\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 2 | 0.29\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 11 | 1.60\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.15\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students <br> at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 102 | 15.60\% | 81.61 | 35.51 | 0 | 1 | 0.94 | 8.86 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 197 | 30.12\% | 97.31 | 26.91 | 1 | 0 | 0.90 | 8.45 |
|  |  | Multiple Disabilities | 249 | 38.07\% | 63.35 | 39.58 | 0 | 19 | 0.95 | 8.96 |
|  |  | Physical Disability | 55 | 8.41\% | 83.51 | 34.92 | 0 | 0 | 0.93 | 8.99 |
|  | 6 | Specific Learning Disability | 23 | 3.52\% | 114.96 | 12.67 | 0 | 0 | 0.66 | 7.34 |
|  |  | Speech/Language Disability | 5 | 0.76\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 13 | 1.99\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 5 | 0.76\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 3 | 0.46\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 87 | 13.92\% | 63.78 | 33.31 | 0 | 1 | 0.93 | 8.91 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 205 | 32.80\% | 87.42 | 26.28 | 0 | 0 | 0.89 | 8.53 |
|  |  | Multiple Disabilities | 252 | 40.32\% | 58.98 | 36.96 | 0 | 18 | 0.94 | 8.76 |
|  |  | Physical Disability | 43 | 6.88\% | 65.86 | 32.67 | 0 | 0 | 0.92 | 9.12 |
|  | 7 | Specific Learning Disability | 21 | 3.36\% | 101.95 | 18.99 | 0 | 0 | 0.84 | 7.53 |
|  |  | Speech/Language Disability | 3 | 0.48\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 4 | 0.64\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 5 | 0.80\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.32\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 87 | 14.77\% | 70.85 | 36.50 | 0 | 0 | 0.93 | 9.64 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 5 | 0.85\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 185 | 31.41\% | 96.17 | 30.75 | 0 | 0 | 0.91 | 9.03 |
|  |  | Multiple Disabilities | 232 | 39.39\% | 66.28 | 38.43 | 0 | 15 | 0.94 | 9.46 |
|  |  | Physical Disability | 47 | 7.98\% | 93.47 | 38.46 | 0 | 4 | 0.95 | 8.80 |
|  | 8 | Specific Learning Disability | 16 | 2.72\% | 114.63 | 21.57 | 0 | 0 | 0.86 | 8.18 |
|  |  | Speech/Language Disability | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 8 | 1.36\% | - | - | - | - | - | - |
|  |  | Visual Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 4 | 0.68\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.17\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample <br> Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 64 | 12.28\% | 63.77 | 34.27 | 0 | 2 | 0.92 | 9.54 |
|  |  | Deaf-Blind | 0 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 7 | 1.34\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 167 | 32.05\% | 87.66 | 26.20 | 0 | 0 | 0.88 | 9.12 |
|  |  | Multiple Disabilities | 216 | 41.46\% | 54.66 | 35.89 | 0 | 18 | 0.93 | 9.19 |
|  |  | Physical Disability | 34 | 6.53\% | 87.24 | 29.06 | 0 | 0 | 0.89 | 9.46 |
|  | 9 | Specific Learning Disability | 18 | 3.45\% | 104.50 | 23.82 | 0 | 0 | 0.88 | 8.24 |
|  |  | Speech/Language Disability | 5 | 0.96\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 5 | 0.96\% | - | - | - | - | - | - |
|  |  | Visual Disability | 1 | 0.19\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 3 | 0.58\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 1 | 0.19\% | - | - | - | - | - | - |

Table 16
Mathematics Descriptive Statistics by Primary Disability (continued)

| Content | Grade | Primary Disability | Sample <br> Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| MA |  | Autism | 75 | 13.61\% | 77.41 | 36.12 | 0 | 1 | 0.93 | 9.73 |
|  |  | Deaf-Blind | 1 | 0\% | - | - | - | - | - | - |
|  |  | Emotional Disability | 3 | 0.54\% | - | - | - | - | - | - |
|  |  | Hearing Disability | 2 | 0.36\% | - | - | - | - | - | - |
|  |  | Limited Intellectual Capacity | 193 | 35.03\% | 90.20 | 27.52 | 0 | 1 | 0.88 | 9.55 |
|  |  | Multiple Disabilities | 222 | 40.29\% | 58.35 | 37.32 | 0 | 19 | 0.93 | 9.63 |
|  |  | Physical Disability | 21 | 3.81\% | 86.14 | 36.06 | 0 | 1 | 0.93 | 9.51 |
|  | 10 | Specific Learning Disability | 19 | 3.45\% | 108.26 | 19.21 | 0 | 0 | 0.80 | 8.68 |
|  |  | Speech/Language Disability | 3 | 0.54\% | - | - | - | - | - | - |
|  |  | Traumatic Brain Injury | 8 | 1.45\% | - | - | - | - | - | - |
|  |  | Visual Disability | 0 | 0\% | - | - | - | - | - | - |
|  |  | Orthopedic Impairment | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other Health Impairment | 2 | 0.36\% | - | - | - | - | - | - |
|  |  | None | 0 | 0\% | - | - | - | - | - | - |
|  |  | Missing | 2 | 0.36\% | - | - | - | - | - | - |

Table 17
Reading Descriptive Statistics by Expanded Accommodation

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students <br> at Min <br> Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | None | 524 | 88.96\% | 58.98 | 22.94 | 0 | 7 | 0.91 | 6.98 |
|  |  | Assistive Technology | 10 | 1.70\% | - | - | - | - | - | - |
|  |  | Braille | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 12 | 2.04\% | - | - | - | - | - | - |
|  | 3 | Modified Picture Symbols | 14 | 2.38\% | - | - | - | - | - | - |
|  |  | Objects | 6 | 1.02\% | - | - | - | - | - | - |
|  |  | Sign Language | 5 | 0.85\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 14 | 2.38\% | - | - | - | - | - | - |
|  |  | None | 604 | 87.66\% | 60.02 | 24.41 | 1 | 18 | 0.92 | 6.92 |
|  |  | Assistive Technology | 17 | 2.47\% | 41.06 | 20.30 | 0 | 1 | 0.88 | 7.13 |
|  |  | Braille | 4 | 0.58\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 21 | 3.05\% | 21.81 | 19.75 | 0 | 4 | 0.92 | 5.56 |
|  | 4 | Modified Picture Symbols | 14 | 2.03\% | - | - | - | - | - | - |
|  |  | Objects | 8 | 1.16\% | - | - | - | - | - | - |
|  |  | Sign Language | 17 | 2.47\% | 38.24 | 24.34 | 0 | 1 | 0.92 | 6.98 |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 9 | 1.31\% | - | - | - | - | - | - |

## Table 17 <br> Reading Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max | N <br> Students at Min | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD | Score | Score | Alpha |  |
| RD |  | None | 580 | 84.67\% | 62.45 | 25.56 | 2 | 11 | 0.93 | 6.91 |
|  |  | Assistive Technology | 31 | 4.53\% | 36.71 | 19.05 | 0 | 1 | 0.85 | 7.31 |
|  |  | Braille | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 20 | 2.92\% | 19.45 | 17.80 | 0 | 1 | 0.92 | 5.07 |
|  | 5 | Modified Picture Symbols | 10 | 1.46\% | - | - | - | - | - | - |
|  |  | Objects | 9 | 1.31\% | - | - | - | - | - | - |
|  |  | Sign Language | 5 | 0.73\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 20 | 2.92\% | 29.55 | 20.61 | 0 | 2 | 0.89 | 6.80 |
|  |  | None | 589 | 89.92\% | 66.55 | 25.04 | 4 | 11 | 0.93 | 6.62 |
|  |  | Assistive Technology | 13 | 1.98\% | - | - | - | - | - | - |
|  |  | Braille | 3 | 0.46\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 13 | 1.98\% | - | - | - | - | - | - |
|  | 6 | Modified Picture Symbols | 14 | 2.14\% | - | - | - | - | - | - |
|  |  | Objects | 10 | 1.53\% | - | - | - | - | - | - |
|  |  | Sign Language | 4 | 0.61\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 18 | 2.75\% | 35.89 | 28.01 | 0 | 3 | 0.95 | 6.37 |

## Table 17 <br> Reading Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample <br> Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students at Min | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | Score | Alpha |  |
| RD |  | None | 559 | 88.73\% | 58.03 | 23.51 | 0 | 12 | 0.91 | 7.04 |
|  |  | Assistive Technology | 24 | 3.81\% | 34.33 | 23.25 | 0 | 1 | 0.91 | 6.94 |
|  |  | Braille | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 11 | 1.75\% | - | - | - | - | - | - |
|  | 7 | Modified Picture Symbols | 12 | 1.90\% | - | - | - | - | - | - |
|  |  | Objects | 7 | 1.11\% | - | - | - | - | - | - |
|  |  | Sign Language | 5 | 0.79\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 9 | 1.43\% | - | - | - | - | - | - |
|  |  | None | 537 | 91.02\% | 57.39 | 25.09 | 1 | 12 | 0.92 | 7.31 |
|  |  | Assistive Technology | 14 | 2.37\% | - | - | - | - | - | - |
|  |  | Braille | 1 | 0.17\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 9 | 1.53\% | - | - | - | - | - | - |
|  | 8 | Modified Picture Symbols | 16 | 2.71\% | 30.88 | 15.77 | 0 | 0 | 0.80 | 7.13 |
|  |  | Objects | 7 | 1.19\% | - | - | - | - | - | - |
|  |  | Sign Language | 4 | 0.68\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 7 | 1.19\% | - | - | - | - | - | - |

## Table 17 <br> Reading Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N Students at Max Score | N <br> Students <br> at Min <br> Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| RD |  | None | 464 | 89.58\% | 59.27 | 25.25 | 0 | 13 | 0.92 | 6.95 |
|  |  | Assistive Technology | 20 | 3.86\% | 19.25 | 15.62 | 0 | 3 | 0.86 | 5.74 |
|  |  | Braille | 0 | 0\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 8 | 1.54\% | - | - | - | - | - | - |
|  | 9 | Modified Picture Symbols | 9 | 1.74\% | - | - | - | - | - | - |
|  |  | Objects | 5 | 0.97\% | - | - | - | - | - | - |
|  |  | Sign Language | 3 | 0.58\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 14 | 2.70\% | - | - | - | - | - | - |
|  |  | None | 497 | 90.53\% | 52.60 | 23.89 | 1 | 17 | 0.91 | 7.36 |
|  |  | Assistive Technology | 13 | 2.37\% | - | - | - | - | - | - |
|  |  | Braille | 2 | 0.36\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 9 | 1.64\% | - | - | - | - | - | - |
|  | 10 | Modified Picture Symbols | 5 | 0.91\% | - | - | - | - | - | - |
|  |  | Objects | 3 | 0.55\% | - | - | - | - | - | - |
|  |  | Sign Language | 3 | 0.55\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 11 | 2.00\% | - | - | - | - | - | - |

Table 18
Writing Descriptive Statistics by Expanded Accommodation

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | N <br> Students <br> at Min <br> Score | Coefficient Alpha | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR |  | None | 522 | 88.47\% | 56.45 | 26.13 | 1 | 6 | 0.91 | 7.75 |
|  |  | Assistive Technology | 16 | 2.71\% | 33.69 | 27.24 | 0 | 0 | 0.92 | 7.76 |
|  |  | Braille | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 12 | 2.03\% | - | - | - | - | - | - |
|  | 3 | Modified Picture Symbols | 10 | 1.69\% | - | - | - | - | - | - |
|  |  | Objects | 6 | 1.02\% | - | - | - | - | - | - |
|  |  | Sign Language | 7 | 1.19\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Other | 14 | 2.37\% | - | - | - | - | - | - |
|  |  | None | 599 | 87.57\% | 59.94 | 27.61 | 0 | 16 | 0.92 | 7.76 |
|  |  | Assistive Technology | 25 | 3.65\% | 35.92 | 23.34 | 0 | 2 | 0.89 | 7.84 |
|  |  | Braille | 5 | 0.73\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 21 | 3.07\% | 17.86 | 18.22 | 0 | 4 | 0.90 | 5.86 |
|  | 4 | Modified Picture Symbols | 14 | 2.05\% | - | - | - | - | - | - |
|  |  | Objects | 9 | 1.32\% | - | - | - | - | - | - |
|  |  | Sign Language | 18 | 2.63\% | 36.39 | 25.87 | 0 | 1 | 0.91 | 7.96 |
|  |  | Translation Into Native Language | 2 | 0.29\% | - | - | - | - | - | - |
|  |  | Other | 12 | 1.75\% | - | - | - | - | - | - |

Table 18
Writing Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample <br> Size | \% | Raw Score |  | N N |  |  | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Students at Max Score | Students at Min Score | Coefficient Alpha |  |
|  |  |  |  |  | Mean | SD |  |  |  |  |
| WR | 5 | None | 581 | 84.20\% | 63.55 | 26.78 | 1 | 13 | 0.92 | 7.41 |
|  |  | Assistive Technology | 37 | 5.36\% | 34.89 | 20.22 | 0 | 1 | 0.84 | 8.04 |
|  |  | Braille | 3 | 0.43\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 20 | 2.90\% | 12.95 | 18.58 | 0 | 3 | 0.94 | 4.47 |
|  |  | Modified Picture Symbols | 8 | 1.16\% | - | - | - | - | - | - |
|  |  | Objects | 8 | 1.16\% | - | - | - | - | - | - |
|  |  | Sign Language | 5 | 0.72\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 23 | 3.33\% | 32.30 | 25.60 | 0 | 2 | 0.92 | 7.46 |
|  | 6 | None | 582 | 89.54\% | 66.62 | 26.98 | 5 | 15 | 0.92 | 7.41 |
|  |  | Assistive Technology | 22 | 3.38\% | 42.77 | 27.12 | 0 | 1 | 0.91 | 8.12 |
|  |  | Braille | 3 | 0.46\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 13 | 2.00\% | - | - | - | - | - | - |
|  |  | Modified Picture Symbols | 11 | 1.69\% | - | - | - | - | - | - |
|  |  | Objects | 8 | 1.23\% | - | - | - | - | - | - |
|  |  | Sign Language | 4 | 0.62\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 2 | 0.31\% | - | - | - | - | - | - |
|  |  | Other | 18 | 2.77\% | 32.44 | 31.77 | 0 | 4 | 0.95 | 7.07 |

Table 18
Writing Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | $\begin{gathered} \mathrm{N} \\ \text { Students } \\ \text { at Min } \end{gathered}$ | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | Score | Alpha |  |
| WR |  | None | 552 | 88.18\% | 65.24 | 29.46 | 1 | 16 | 0.94 | 7.47 |
|  |  | Assistive Technology | 31 | 4.95\% | 41.35 | 28.57 | 0 | 3 | 0.92 | 8.07 |
|  |  | Braille | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 11 | 1.76\% | - | - | - | - | - | - |
|  | 7 | Modified Picture Symbols | 12 | 1.92\% | - | - | - | - | - | - |
|  |  | Objects | 5 | 0.80\% | - | - | - | - | - | - |
|  |  | Sign Language | 5 | 0.80\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 3 | 0.48\% | - | - | - | - | - | - |
|  |  | Other | 8 | 1.28\% | - | - | - | - | - | - |
|  |  | None | 526 | 89.30\% | 64.16 | 27.93 | 0 | 14 | 0.93 | 7.51 |
|  |  | Assistive Technology | 25 | 4.24\% | 49.28 | 26.10 | 0 | 1 | 0.90 | 8.16 |
|  |  | Braille | 1 | 0.17\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 8 | 1.36\% | - | - | - | - | - | - |
|  | 8 | Modified Picture Symbols | 13 | 2.21\% | - | - | - | - | - | - |
|  |  | Objects | 5 | 0.85\% | - | - | - | - | - | - |
|  |  | Sign Language | 4 | 0.68\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Other | 5 | 0.85\% | - | - | - | - | - | - |

Table 18
Writing Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample <br> Size | \% | $N$ N |  |  |  |  | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Raw Score |  | Students at Max | Students at Min | Coefficient |  |
|  |  |  |  |  | Mean | SD | Score | Score | Alpha |  |
| WR | 9 | None | 459 | 88.61\% | 64.58 | 27.13 | 0 | 15 | 0.93 | 7.31 |
|  |  | Assistive Technology | 21 | 4.05\% | 19.00 | 17.24 | 0 | 4 | 0.86 | 6.52 |
|  |  | Braille | 1 | 0.19\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 9 | 1.74\% | - | - | - | - | - | - |
|  |  | Modified Picture Symbols | 8 | 1.54\% | - | - | - | - | - | - |
|  |  | Objects | 5 | 0.97\% | - | - | - | - | - | - |
|  |  | Sign Language | 3 | 0.58\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 16 | 3.09\% | 42.06 | 32.00 | 0 | 1 | 0.94 | 7.92 |
|  | 10 | None | 488 | 89.38\% | 63.90 | 26.95 | 0 | 17 | 0.92 | 7.59 |
|  |  | Assistive Technology | 19 | 3.48\% | 31.68 | 21.18 | 0 | 1 | 0.85 | 8.19 |
|  |  | Braille | 2 | 0.37\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 8 | 1.47\% | - | - | - | - | - | - |
|  |  | Modified Picture Symbols | 5 | 0.92\% | - | - | - | - | - | - |
|  |  | Objects | 4 | 0.73\% | - | - | - | - | - | - |
|  |  | Sign Language | 3 | 0.55\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | Other | 11 | 2.01\% | - | - | - |  | - | - |

Table 19
Mathematics Descriptive Statistics by Expanded Accommodation

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | $\begin{gathered} \mathrm{N} \\ \text { Students } \\ \text { at Min } \end{gathered}$ | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | Score | Alpha |  |
| MA |  | None | 503 | 86.28\% | 82.51 | 30.79 | 1 | 4 | 0.93 | 8.09 |
|  |  | Assistive Technology | 15 | 2.57\% | - | - | - | - | - | - |
|  |  | Braille | 3 | 0.51\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 12 | 2.06\% | - | - | - | - | - | - |
|  | 3 | Modified Picture Symbols | 8 | 1.37\% | - | - | - | - | - | - |
|  |  | Objects | 20 | 3.43\% | 58.60 | 33.40 | 0 | 1 | 0.93 | 8.70 |
|  |  | Sign Language | 7 | 1.20\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 1 | 0.17\% | - | - | - | - | - | - |
|  |  | Other | 13 | 2.23\% | - | - | - | - | - | - |
|  |  | None | 583 | 85.86\% | 85.65 | 33.80 | 3 | 15 | 0.94 | 8.16 |
|  |  | Assistive Technology | 26 | 3.83\% | 42.19 | 24.43 | 0 | 1 | 0.87 | 8.71 |
|  |  | Braille | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 21 | 3.09\% | 25.62 | 22.84 | 0 | 4 | 0.90 | 7.37 |
|  | 4 | Modified Picture Symbols | 10 | 1.47\% | - | - | - | - | - | - |
|  |  | Objects | 27 | 3.98\% | 47.81 | 36.60 | 0 | 3 | 0.95 | 7.87 |
|  |  | Sign Language | 17 | 2.50\% | 51.82 | 29.12 | 0 | 1 | 0.91 | 8.62 |
|  |  | Translation Into Native Language | 1 | 0.15\% | - | - | - | - | - | - |
|  |  | Other | 11 | 1.62\% | - | - | - | - | - | - |

Table 19
Mathematics Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | $\begin{gathered} \mathrm{N} \\ \text { Students } \\ \text { at Min } \end{gathered}$ | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | Score | Alpha |  |
| MA |  | None | 565 | 82.24\% | 104.29 | 43.17 | 1 | 8 | 0.94 | 10.14 |
|  |  | Assistive Technology | 40 | 5.82\% | 48.93 | 32.07 | 0 | 2 | 0.91 | 9.80 |
|  |  | Braille | 3 | 0.44\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 20 | 2.91\% | 19.60 | 30.23 | 0 | 2 | 0.96 | 6.05 |
|  | 5 | Modified Picture Symbols | 9 | 1.31\% | - | - | - | - | - | - |
|  |  | Objects | 25 | 3.64\% | 45.44 | 42.37 | 0 | 2 | 0.96 | 8.79 |
|  |  | Sign Language | 6 | 0.87\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 22 | 3.20\% | 45.18 | 36.08 | 0 | 2 | 0.93 | 9.27 |
|  |  | None | 573 | 87.61\% | 85.72 | 35.28 | 1 | 12 | 0.94 | 8.79 |
|  |  | Assistive Technology | 23 | 3.52\% | 40.65 | 29.10 | 0 | 0 | 0.91 | 8.82 |
|  |  | Braille | 3 | 0.46\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 14 | 2.14\% | - | - | - | - | - | - |
|  | 6 | Modified Picture Symbols | 12 | 1.83\% | - | - | - | - | - | - |
|  |  | Objects | 19 | 2.91\% | 62.47 | 39.74 | 0 | 1 | 0.95 | 8.93 |
|  |  | Sign Language | 3 | 0.46\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 2 | 0.31\% | - | - | - | - | - | - |
|  |  | Other | 22 | 3.36\% | 48.73 | 39.25 | 0 | 4 | 0.95 | 8.54 |

Table 19
Mathematics Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | $\begin{gathered} \mathrm{N} \\ \text { Students } \\ \text { at Min } \end{gathered}$ | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | Score | Alpha |  |
| MA |  | None | 540 | 86.40\% | 74.69 | 33.85 | 0 | 13 | 0.93 | 8.75 |
|  |  | Assistive Technology | 32 | 5.12\% | 40.03 | 26.77 | 0 | 1 | 0.89 | 8.86 |
|  |  | Braille | 1 | 0.16\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 10 | 1.60\% | - | - | - | - | - | - |
|  | 7 | Modified Picture Symbols | 10 | 1.60\% | - | - | - | - | - | - |
|  |  | Objects | 25 | 4.00\% | 62.20 | 35.44 | 0 | 1 | 0.94 | 9.03 |
|  |  | Sign Language | 4 | 0.64\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 3 | 0.48\% | - | - | - | - | - | - |
|  |  | Other | 13 | 2.08\% | - | - | - | - | - | - |
|  |  | None | 516 | 87.61\% | 84.75 | 36.77 | 1 | 13 | 0.94 | 9.33 |
|  |  | Assistive Technology | 28 | 4.75\% | 50.29 | 27.96 | 0 | 0 | 0.90 | 9.03 |
|  |  | Braille | 1 | 0.17\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 8 | 1.36\% | - | - | - | - | - | - |
|  | 8 | Modified Picture Symbols | 14 | 2.38\% | - | - | - | - | - | - |
|  |  | Objects | 16 | 2.72\% | 78.63 | 45.81 | 0 | 1 | 0.96 | 8.73 |
|  |  | Sign Language | 4 | 0.68\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 2 | 0.34\% | - | - | - | - | - | - |
|  |  | Other | 13 | 2.21\% | - | - | - | - | - | - |

Table 19
Mathematics Descriptive Statistics by Expanded Accommodation (continued)

| Content | Grade | Expanded Accommodation | Sample Size | \% | Raw Score |  | N <br> Students at Max Score | $\begin{gathered} \mathrm{N} \\ \text { Students } \\ \text { at Min } \end{gathered}$ | Coefficient | Standard Error of <br> Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean | SD |  | Score | Alpha |  |
| MA |  | None | 463 | 88.87\% | 75.61 | 34.42 | 0 | 14 | 0.93 | 9.38 |
|  |  | Assistive Technology | 21 | 4.03\% | 23.81 | 20.15 | 0 | 4 | 0.87 | 7.14 |
|  |  | Braille | 0 | 0\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 8 | 1.54\% | - | - | - | - | - | - |
|  | 9 | Modified Picture Symbols | 6 | 1.15\% | - | - | - | - | - | - |
|  |  | Objects | 12 | 2.30\% | - | - | - | - | - | - |
|  |  | Sign Language | 3 | 0.58\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 0 | 0\% | - | - | - | - | - | - |
|  |  | Other | 14 | 2.69\% | - | - | - | - | - | - |
|  |  | None | 486 | 88.20\% | 80.25 | 35.66 | 0 | 18 | 0.93 | 9.64 |
|  |  | Assistive Technology | 23 | 4.17\% | 32.91 | 24.86 | 0 | 3 | 0.88 | 8.74 |
|  |  | Braille | 2 | 0.36\% | - | - | - | - | - | - |
|  |  | Eye Gaze | 8 | 1.45\% | - | - | - | - | - | - |
|  | 10 | Modified Picture Symbols | 6 | 1.09\% | - | - | - | - | - | - |
|  |  | Objects | 7 | 1.27\% | - | - | - | - | - | - |
|  |  | Sign Language | 3 | 0.54\% | - | - | - | - | - | - |
|  |  | Translation Into Native Language | 1 | 0.18\% | - | - | - | - | - | - |
|  |  | Other | 12 | 2.18\% | - | - | - | - | - | - |

Table 20
Scoring Rubric for Multiple-Choice Item Types

| Total <br> 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 |
|  | Incorrect | Further coded: |
|  | or - Independent and incorrect |  |
| 0 | No Response | 3 - Partial and incorrect |
|  | 2 - Limited and incorrect |  |
|  |  |  |

## Table 21 <br> 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 |  | 4 - Independent and incorrect |
| 0 | No response | 3 - Partial and incorrect |
|  |  |  |

## Table 22 <br> Summary of Invalidations

| Content | Grade | Total \% Invalid | Source of Invalid |  | Total \% Valid |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 15\% | Bubble |  |
| RD | 3 | 5.00\% | 2.74\% | 2.26\% | 95.00\% |
|  | 4 | 4.31\% | 3.06\% | 1.25\% | 95.69\% |
|  | 5 | 4.20\% | 2.66\% | 1.54\% | 95.80\% |
|  | 6 | 5.76\% | 4.60\% | 1.15\% | 94.24\% |
|  | 7 | 4.55\% | 4.09\% | 0.45\% | 95.45\% |
|  | 8 | 6.05\% | 5.41\% | 0.64\% | 93.95\% |
|  | 9 | 8.16\% | 5.67\% | 2.48\% | 91.84\% |
|  | 10 | 7.42\% | 5.90\% | 1.52\% | 92.58\% |
| WR | 3 | 4.84\% | 2.74\% | 2.10\% | 95.16\% |
|  | 4 | 5.00\% | 3.47\% | 1.53\% | 95.00\% |
|  | 5 | 3.50\% | 2.52\% | 0.98\% | 96.50\% |
|  | 6 | 6.47\% | 4.75\% | 1.73\% | 93.53\% |
|  | 7 | 5.15\% | 4.24\% | 0.91\% | 94.85\% |
|  | 8 | 6.21\% | 5.41\% | 0.80\% | 93.79\% |
|  | 9 | 8.16\% | 5.85\% | 2.30\% | 91.84\% |
|  | 10 | 7.93\% | 5.73\% | 2.19\% | 92.07\% |
| MA | 3 | 5.97\% | 2.90\% | 3.06\% | 94.03\% |
|  | 4 | 5.69\% | 3.75\% | 1.94\% | 94.31\% |
|  | 5 | 3.92\% | 2.10\% | 1.82\% | 96.08\% |
|  | 6 | 5.90\% | 4.46\% | 1.44\% | 94.10\% |
|  | 7 | 5.30\% | 3.94\% | 1.36\% | 94.70\% |
|  | 8 | 6.21\% | 5.41\% | 0.80\% | 93.79\% |
|  | 9 | 7.62\% | 5.14\% | 2.48\% | 92.38\% |
|  | 10 | 7.08\% | 5.06\% | 2.02\% | 92.92\% |

Table 23
Breakdown of Invalidations Due to Test Examiners Marking Bubbles on Answer Document

|  |  | Invalidation Bubbles Available on Answer Document |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Student Tested All Activities |  | Parental <br> Refusal |  | Test Not Completed |  | Student Withdrew Before Completion |  | Misadministration |  | Taking TCAP Assessment |  | District Ed. Services |  | Missing |  |
| Content | Grade | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
|  | 3 | 599 | 96.61\% | 3 | 0.48\% | 6 | 0.97\% | 1 | 0.16\% | 0 | 0\% | 2 | 0\% | 5 | 0.81\% | 4 | 0.65\% |
|  | 4 | 695 | 96.53\% | 6 | 0.83\% | 3 | 0.42\% | 1 | 0.14\% | 4 | 0.56\% | 2 | 0.28\% | 6 | 0.83\% | 3 | 0.42\% |
|  | 5 | 694 | 97.06\% | 3 | 0.42\% | 6 | 0.84\% | 0 | 0\% | 3 | 0.42\% | 5 | 0.70\% | 2 | 0.28\% | 2 | 0.28\% |
| RD | 6 | 660 | 94.96\% | 11 | 1.58\% | 11 | 1.58\% | 2 | 0.29\% | 0 | 0\% | 5 | 0.72\% | 3 | 0.43\% | 3 | 0.43\% |
| RD | 7 | 629 | 95.30\% | 7 | 1.06\% | 8 | 1.21\% | 4 | 0.61\% | 0 | 0\% | 5 | 0.76\% | 3 | 0.45\% | 4 | 0.61\% |
|  | 8 | 591 | 94.11\% | 4 | 0.64\% | 8 | 1.27\% | 7 | 1.11\% | 1 | 0.16\% | 5 | 0.80\% | 9 | 1.43\% | 3 | 0.48\% |
|  | 9 | 530 | 93.97\% | 3 | 0.53\% | 13 | 2.30\% | 2 | 0.35\% | 2 | 0.35\% | 6 | 1.06\% | 6 | 1.06\% | 2 | 0.35\% |
|  | 10 | 555 | 93.59\% | 9 | 1.52\% | 9 | 1.52\% | 2 | 0.34\% | 3 | 0.51\% | 10 | 1.69\% | 2 | 0.34\% | 3 | 0.51\% |
|  | 3 | 599 | 96.61\% | 3 | 0.48\% | 7 | 1.13\% | 1 | 0.16\% | 0 | 0\% | 1 | 0.16\% | 5 | 0.81\% | 4 | 0.65\% |
|  | 4 | 692 | 96.11\% | 6 | 0.83\% | 6 | 0.83\% | 1 | 0.14\% | 4 | 0.56\% | 2 | 0.28\% | 6 | 0.83\% | 3 | 0.42\% |
|  | 5 | 695 | 97.20\% | 3 | 0.42\% | 6 | 0.84\% | 0 | 0\% | 2 | 0.28\% | 5 | 0.70\% | 2 | 0.28\% | 2 | 0.28\% |
|  | 6 | 659 | 94.82\% | 11 | 1.58\% | 12 | 1.73\% | 2 | 0.29\% | 0 | 0\% | 5 | 0.72\% | 3 | 0.43\% | 3 | 0.43\% |
| WR | 7 | 629 | 95.30\% | 7 | 1.06\% | 10 | 1.52\% | 4 | 0.61\% | 0 | 0\% | 4 | 0.61\% | 3 | 0.45\% | 3 | 0.45\% |
|  | 8 | 591 | 94.11\% | 4 | 0.64\% | 8 | 1.27\% | 7 | 1.11\% | 1 | 0.16\% | 5 | 0.80\% | 9 | 1.43\% | 3 | 0.48\% |
|  | 9 | 529 | 93.79\% | 4 | 0.71\% | 14 | 2.48\% | 2 | 0.35\% | 1 | 0.18\% | 6 | 1.06\% | 6 | 1.06\% | 2 | 0.35\% |
|  | 10 | 556 | 93.76\% | 9 | 1.52\% | 11 | 1.85\% | 2 | 0.34\% | 0 | 0\% | 10 | 1.69\% | 2 | 0.34\% | 3 | 0.51\% |

Table 23
Breakdown of Invalidations Due to Test Examiners Marking Bubbles on Answer Document (continued)

| Invalidation Bubbles Available on Answer Document |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Student Tested All Activities |  | Parental Refusal |  | Test Not Completed |  | Student <br> Withdrew Before Completion |  | Misadministration |  | Taking TCAP Assessment |  | District Ed. Services |  | Missing |  |
| Content | Grade | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| MA | 3 | 598 | 96.45\% | 3 | 0.48\% | 8 | 1.29\% | 1 | 0.16\% | 0 | 0\% | 1 | 0.16\% | 5 | 0.81\% | 4 | 0.65\% |
|  | 4 | 689 | 95.69\% | 5 | 0.69\% | 7 | 0.97\% | 1 | 0.14\% | 3 | 0.42\% | 5 | 0.69\% | 6 | 0.83\% | 4 | 0.56\% |
|  | 5 | 698 | 97.62\% | 3 | 0.42\% | 5 | 0.70\% | 0 | 0\% | 2 | 0.28\% | 3 | 0.42\% | 2 | 0.28\% | 2 | 0.28\% |
|  | 6 | 661 | 95.11\% | 11 | 1.58\% | 10 | 1.44\% | 3 | 0.43\% | 0 | 0\% | 4 | 0.58\% | 3 | 0.43\% | 3 | 0.43\% |
|  | 7 | 631 | 95.61\% | 7 | 1.06\% | 11 | 1.67\% | 4 | 0.61\% | 1 | 0.15\% | 0 | 0\% | 3 | 0.45\% | 3 | 0.45\% |
|  | 8 | 591 | 94.11\% | 4 | 0.64\% | 8 | 1.27\% | 7 | 1.11\% | 1 | 0.16\% | 5 | 0.80\% | 9 | 1.43\% | 3 | 0.48\% |
|  | 9 | 533 | 94.50\% | 3 | 0.53\% | 14 | 2.48\% | 2 | 0.35\% | 1 | 0.18\% | 3 | 0.53\% | 6 | 1.06\% | 2 | 0.35\% |
|  | 10 | 560 | 94.44\% | 9 | 1.52\% | 12 | 2.02\% | 2 | 0.34\% | 0 | 0\% | 5 | 0.84\% | 2 | 0.34\% | 3 | 0.51\% |

Table 24
Writing Frequency Distributions of CR (6-Point) Items

| Content | Grade | Item Number | \% of Students Obtaining Score Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|  | 3 | 5 | 20.37\% | 0.34\% | 0.51\% | 0.68\% | 2.55\% | 5.43\% | 70.12\% |
|  |  | 10 | 46.86\% | 0.85\% | 0.68\% | 3.06\% | 2.89\% | 14.60\% | 31.07\% |
|  |  | 15 | 23.94\% | - | 0.51\% | 0.85\% | 2.21\% | 8.32\% | 64.18\% |
|  |  | 20 | 49.24\% | 2.04\% | 0.34\% | 4.58\% | 0.51\% | 36.16\% | 7.13\% |
|  |  | 24 | 48.05\% | 1.87\% | 0.17\% | 4.41\% | 0.17\% | 35.82\% | 9.51\% |
|  |  | 29 | 27.50\% | 0.85\% | 0.17\% | 1.53\% | 1.36\% | 17.66\% | 50.93\% |
| WR | 4 | 5 | 18.51\% | 0.15\% | 0.58\% | 0.73\% | 2.33\% | 4.52\% | 73.18\% |
|  |  | 10 | 43.73\% | 0.73\% | 0.29\% | 1.60\% | 2.04\% | 12.10\% | 39.50\% |
|  |  | 15 | 24.05\% | 0.15\% | 0.58\% | 0.73\% | 1.46\% | 7.87\% | 65.16\% |
|  |  | 20 | 42.13\% | 1.60\% | - | 4.37\% | 0.73\% | 35.86\% | 15.31\% |
|  |  | 25 | 43.29\% | 0.87\% | 0.15\% | 1.75\% | 0.87\% | 37.17\% | 15.89\% |
|  |  | 30 | 25.22\% | - | - | 0.44\% | 0.87\% | 12.83\% | 60.64\% |
|  | 5 | 5 | 17.54\% | 0.14\% | 0.29\% | 0.14\% | 2.46\% | 4.20\% | 75.22\% |
|  |  | 10 | 39.42\% | 0.29\% | 0.72\% | 2.61\% | 1.59\% | 12.90\% | 42.46\% |
|  |  | 15 | 20.73\% | 0.14\% | 0.43\% | 0.87\% | 0.43\% | 5.94\% | 71.45\% |
|  |  | 20 | 38.41\% | 1.16\% | 0.29\% | 2.61\% | 0.87\% | 35.51\% | 21.16\% |
|  |  | 24 | 37.83\% | 1.16\% | 0.14\% | 2.46\% | 0.72\% | 36.09\% | 21.59\% |
|  |  | 29 | 25.22\% | 0.14\% | 0.29\% | 0.72\% | 1.16\% | 9.71\% | 62.75\% |
|  | 6 | 5 | 15.08\% | 0.15\% | 1.08\% | 0.15\% | 2.31\% | 3.39\% | 77.85\% |
|  |  | 10 | 32.31\% | 0.46\% | 0.62\% | 2.00\% | 1.85\% | 7.39\% | 55.39\% |
|  |  | 15 | 20.15\% | - | 0.77\% | 0.31\% | 0.77\% | 8.77\% | 69.23\% |
|  |  | 20 | 34.92\% | 0.92\% | 0.31\% | 2.92\% | 1.08\% | 32.15\% | 27.69\% |
|  |  | 24 | 32.00\% | 0.46\% | 0.31\% | 3.38\% | 1.54\% | 38.31\% | 24.00\% |
|  |  | 29 | 21.69\% | 0.15\% | 0.62\% | 0.77\% | 1.38\% | 13.23\% | 62.15\% |

Table 24
Writing Frequency Distributions of CR (6-Point) Items (continued)

| Content Area | Grade | Item <br> Number | \% of Students Obtaining Score Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| WR | 7 | 5 | 15.68\% | 0.16\% | 1.12\% | 0.32\% | 0.96\% | 2.56\% | 79.20\% |
|  |  | 10 | 34.08\% | 0.96\% | 0.96\% | 1.44\% | 2.40\% | 8.32\% | 51.84\% |
|  |  | 15 | 19.52\% | 0.16\% | 1.28\% | 0.32\% | 0.48\% | 3.52\% | 74.72\% |
|  |  | 20 | 34.40\% | 1.12\% | 0.48\% | 2.56\% | 1.44\% | 31.36\% | 28.64\% |
|  |  | 25 | 33.60\% | 1.76\% | 0.96\% | 2.56\% | 1.44\% | 38.08\% | 21.60\% |
|  |  | 30 | 30.56\% | 0.32\% | 1.12\% | 0.80\% | 2.08\% | 6.24\% | 58.88\% |
|  | 8 | 5 | 15.62\% | 0.17\% | - | 0.34\% | 1.19\% | 2.04\% | 80.65\% |
|  |  | 10 | 35.14\% | - | 0.85\% | 2.21\% | 2.21\% | 11.21\% | 48.39\% |
|  |  | 15 | 17.83\% | - | 0.34\% | 0.34\% | 0.85\% | 4.41\% | 76.23\% |
|  |  | 20 | 29.20\% | 0.68\% | 0.34\% | 2.89\% | 1.02\% | 33.96\% | 31.92\% |
|  |  | 25 | 28.69\% | 0.85\% | 0.51\% | 3.57\% | 1.19\% | 37.01\% | 28.18\% |
|  |  | 30 | 26.83\% | 0.34\% | 0.68\% | 1.36\% | 2.38\% | 10.36\% | 58.07\% |
|  | 9 | 5 | 16.76\% | 0.19\% | 0.39\% | 0.96\% | 1.35\% | 4.82\% | 75.53\% |
|  |  | 10 | 27.75\% | 1.16\% | 0.77\% | 1.54\% | 2.12\% | 8.09\% | 58.57\% |
|  |  | 15 | 17.92\% | - | 0.58\% | 0.77\% | 0.77\% | 3.28\% | 76.69\% |
|  |  | 20 | 27.55\% | 1.93\% | 0.58\% | 2.31\% | 1.35\% | 32.76\% | 33.53\% |
|  |  | 24 | 27.94\% | 1.73\% | 0.96\% | 3.47\% | 2.31\% | 35.65\% | 27.94\% |
|  |  | 29 | 25.43\% | 0.58\% | 1.73\% | 1.16\% | 2.50\% | 9.25\% | 59.35\% |
|  | 10 | 5 | 15.85\% | 0.36\% | - | 0.36\% | 1.64\% | 4.55\% | 77.23\% |
|  |  | 10 | 29.33\% | 1.46\% | 1.28\% | 0.91\% | 2.73\% | 7.47\% | 56.83\% |
|  |  | 15 | 19.49\% | 0.36\% | 0.36\% | 0.36\% | 1.64\% | 6.38\% | 71.40\% |
|  |  | 20 | 27.14\% | 1.28\% | 0.73\% | 2.00\% | 1.46\% | 34.97\% | 32.42\% |
|  |  | 25 | 27.51\% | 0.73\% | 0.18\% | 3.10\% | 2.55\% | 39.71\% | 26.23\% |
|  |  | 30 | 23.68\% | - | 1.64\% | 0.73\% | 3.10\% | 14.03\% | 56.83\% |

## Table 25

Mathematics Frequency Distributions of CR (6-Point) Items

|  |  | Item | $\%$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Number | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|  |  | 2 | $15.73 \%$ | $1.37 \%$ | $1.88 \%$ | $2.05 \%$ | $3.59 \%$ | $11.11 \%$ | $64.27 \%$ |
|  |  | 4 | $32.14 \%$ | $1.88 \%$ | $1.71 \%$ | $4.44 \%$ | $4.44 \%$ | $18.63 \%$ | $36.75 \%$ |
|  |  | 5 | $19.66 \%$ | $1.03 \%$ | $0.68 \%$ | $1.71 \%$ | $2.05 \%$ | $7.69 \%$ | $67.18 \%$ |
|  |  | 9 | $23.08 \%$ | $1.88 \%$ | $1.88 \%$ | $2.91 \%$ | $3.42 \%$ | $14.02 \%$ | $52.82 \%$ |
|  | 3 | 12 | $34.19 \%$ | $1.54 \%$ | $2.05 \%$ | $6.32 \%$ | $5.30 \%$ | $34.36 \%$ | $16.24 \%$ |
|  |  | 13 | $29.92 \%$ | $1.88 \%$ | $3.25 \%$ | $2.56 \%$ | $6.50 \%$ | $8.38 \%$ | $47.52 \%$ |
|  |  | 17 | $33.50 \%$ | $0.68 \%$ | $1.88 \%$ | $1.71 \%$ | $3.76 \%$ | $9.06 \%$ | $49.40 \%$ |
|  |  | 23 | $8.89 \%$ | $0.85 \%$ | $1.71 \%$ | $1.20 \%$ | $6.15 \%$ | $3.42 \%$ | $77.78 \%$ |
|  |  | 24 | $38.46 \%$ | $2.74 \%$ | $1.88 \%$ | $5.81 \%$ | $1.03 \%$ | $36.58 \%$ | $13.50 \%$ |
|  |  | 26 | $25.64 \%$ | $2.22 \%$ | $4.27 \%$ | $9.06 \%$ | $2.91 \%$ | $47.35 \%$ | $8.55 \%$ |

Table 25
Mathematics Frequency Distributions of CR (6-Point) Items (continued)

| Content | Grade | Item <br> Number | \% of Students Obtaining Score Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| MA | 5 | 3 | 31.44\% | 0.87\% | 1.02\% | 5.82\% | 4.51\% | 21.98\% | 34.35\% |
|  |  | 4 | 21.40\% | 0.87\% | 1.02\% | 3.35\% | 1.60\% | 17.76\% | 54.00\% |
|  |  | 5 | 37.85\% | 0.58\% | 2.62\% | 2.62\% | 7.13\% | 16.59\% | 32.61\% |
|  |  | 6 | 52.84\% | 0.87\% | 1.02\% | 3.06\% | 2.62\% | 16.59\% | 23.00\% |
|  |  | 9 | 19.21\% | 0.44\% | 0.44\% | 1.31\% | 0.58\% | 12.08\% | 65.94\% |
|  |  | 12 | 27.37\% | 1.31\% | 1.02\% | 1.60\% | 3.20\% | 9.46\% | 56.04\% |
|  |  | 13 | 33.77\% | 1.16\% | 0.87\% | 3.20\% | 2.18\% | 14.99\% | 43.81\% |
|  |  | 17 | 48.18\% | 0.87\% | 1.31\% | 4.37\% | 1.89\% | 30.42\% | 12.96\% |
|  |  | 18 | 61.72\% | 0.73\% | 1.02\% | 2.33\% | 1.16\% | 8.59\% | 24.45\% |
|  |  | 22 | 11.06\% | 1.60\% | 0.87\% | 2.47\% | 1.31\% | 7.28\% | 75.40\% |
|  |  | 23 | 18.78\% | 2.33\% | 2.18\% | 2.47\% | 3.64\% | 13.10\% | 57.50\% |
|  |  | 25 | 39.74\% | 2.18\% | 2.47\% | 3.64\% | 5.39\% | 9.03\% | 37.56\% |
|  |  | 26 | 36.83\% | 1.31\% | 2.91\% | 6.26\% | 4.08\% | 26.49\% | 22.13\% |
|  |  | 27 | 44.69\% | 1.89\% | 3.49\% | 4.66\% | 3.20\% | 20.52\% | 21.54\% |
|  |  | 28 | 66.96\% | 0.15\% | 1.46\% | 1.60\% | 3.35\% | 9.17\% | 17.32\% |
|  |  | 29 | 42.50\% | 2.33\% | 3.06\% | 4.66\% | 4.95\% | 12.81\% | 29.69\% |
|  |  | 31 | 22.13\% | 0.44\% | 1.31\% | 0.15\% | 3.06\% | 5.24\% | 67.69\% |
|  | 6 | 1 | 24.96\% | 1.23\% | 1.07\% | 5.05\% | 3.52\% | 25.42\% | 38.74\% |
|  |  | 2 | 22.36\% | 1.07\% | 1.07\% | 2.76\% | 2.30\% | 14.70\% | 55.74\% |
|  |  | 3 | 15.01\% | 0.46\% | 0.46\% | 2.30\% | 1.53\% | 11.95\% | 68.30\% |
|  |  | 4 | 32.31\% | 0.31\% | 2.76\% | 2.14\% | 9.65\% | 14.09\% | 38.74\% |
|  |  | 6 | 25.42\% | 0.77\% | 0.92\% | 2.30\% | 3.37\% | 12.25\% | 54.98\% |
|  |  | 12 | 27.57\% | 1.99\% | 1.53\% | 6.28\% | 3.98\% | 35.84\% | 22.82\% |
|  |  | 15 | 29.40\% | 0.31\% | 2.45\% | 2.60\% | 7.66\% | 8.58\% | 49.01\% |
|  |  | 19 | 17.46\% | 1.23\% | 1.38\% | 4.75\% | 6.74\% | 6.43\% | 62.02\% |
|  |  | 20 | 45.48\% | 1.38\% | 2.45\% | 3.68\% | 6.59\% | 6.28\% | 34.15\% |
|  |  | 29 | 26.19\% | 1.53\% | 1.99\% | 4.90\% | 4.90\% | 24.04\% | 36.45\% |
|  |  | 30 | 60.34\% | 0.77\% | 1.23\% | 2.30\% | 1.68\% | 18.07\% | 15.62\% |
|  |  | 31 | 34.30\% | 0.92\% | 2.76\% | 3.22\% | 6.43\% | 9.95\% | 42.42\% |

Table 25
Mathematics Frequency Distributions of CR (6-Point) Items (continued)

| Content | Grade | Item <br> Number | \% of Students Obtaining Score Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| MA | 7 | 1 | 24.68\% | 1.12\% | 0.80\% | 7.37\% | 2.40\% | 42.63\% | 20.99\% |
|  |  | 2 | 21.15\% | 1.12\% | 0.96\% | 2.88\% | 2.40\% | 17.63\% | 53.85\% |
|  |  | 3 | 15.55\% | 0.80\% | 1.28\% | 1.92\% | 1.92\% | 10.90\% | 67.63\% |
|  |  | 4 | 28.85\% | 0.48\% | 3.37\% | 1.60\% | 8.97\% | 11.38\% | 45.35\% |
|  |  | 6 | 23.72\% | 0.96\% | 1.28\% | 2.56\% | 4.65\% | 12.18\% | 54.65\% |
|  |  | 16 | 47.92\% | 1.28\% | 2.40\% | 1.76\% | 4.01\% | 8.97\% | 33.65\% |
|  |  | 17 | 15.06\% | 2.72\% | 2.40\% | 2.08\% | 6.57\% | 5.29\% | 65.87\% |
|  |  | 20 | 44.07\% | 0.80\% | 2.56\% | 2.56\% | 6.41\% | 17.47\% | 26.12\% |
|  |  | 26 | 29.81\% | 0.32\% | 1.92\% | 4.17\% | 3.21\% | 30.61\% | 29.97\% |
|  |  | 27 | 26.44\% | 1.12\% | 1.60\% | 4.65\% | 4.49\% | 21.96\% | 39.74\% |
|  |  | 29 | 54.81\% | 0.64\% | 1.76\% | 1.60\% | 4.17\% | 8.65\% | 28.37\% |
|  | 8 | 1 | 26.78\% | 0.51\% | 1.02\% | 5.93\% | 1.19\% | 42.88\% | 21.70\% |
|  |  | 2 | 21.19\% | 0.51\% | 0.68\% | 2.54\% | 1.69\% | 22.20\% | 51.19\% |
|  |  | 3 | 32.03\% | 0.51\% | 2.37\% | 1.36\% | 7.12\% | 13.56\% | 43.05\% |
|  |  | 4 | 47.12\% | 0.17\% | 2.03\% | 0.34\% | 6.78\% | 5.09\% | 38.48\% |
|  |  | 6 | 19.32\% | 0.68\% | 1.02\% | 2.37\% | 2.03\% | 29.15\% | 45.42\% |
|  |  | 7 | 32.37\% | 0.68\% | 2.37\% | 3.39\% | 7.97\% | 9.32\% | 43.90\% |
|  |  | 18 | 34.41\% | 2.54\% | 1.36\% | 2.54\% | 6.44\% | 6.95\% | 45.76\% |
|  |  | 21 | 18.64\% | 2.54\% | 1.86\% | 1.86\% | 4.07\% | 7.29\% | 63.73\% |
|  |  | 29 | 33.05\% | 1.02\% | 2.20\% | 3.56\% | 2.37\% | 34.75\% | 23.05\% |
|  |  | 30 | 25.93\% | 1.53\% | 2.88\% | 2.88\% | 4.92\% | 32.37\% | 29.49\% |
|  |  | 31 | 49.15\% | 0.68\% | 2.03\% | 2.71\% | 3.73\% | 10.34\% | 31.36\% |

Table 25
Mathematics Frequency Distributions of CR (6-Point) Items (continued)

|  |  | Item | $\%$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|  |  |  | $20.42 \%$ | $0.76 \%$ | $2.67 \%$ | $4.58 \%$ | $2.67 \%$ | $22.14 \%$ | $46.76 \%$ |
|  |  |  | $21.76 \%$ | $1.15 \%$ | $0.95 \%$ | $2.86 \%$ | $0.76 \%$ | $16.99 \%$ | $55.53 \%$ |
|  |  |  | $32.25 \%$ | $1.34 \%$ | $2.67 \%$ | $0.95 \%$ | $7.63 \%$ | $9.35 \%$ | $45.80 \%$ |
|  |  |  | $19.08 \%$ | $0.95 \%$ | $0.95 \%$ | $2.67 \%$ | $1.53 \%$ | $26.53 \%$ | $48.28 \%$ |
|  |  |  | $46.76 \%$ | $1.72 \%$ | $2.67 \%$ | $4.01 \%$ | $7.63 \%$ | $9.54 \%$ | $27.67 \%$ |
|  |  |  | $32.25 \%$ | $2.10 \%$ | $2.48 \%$ | $5.92 \%$ | $5.92 \%$ | $18.13 \%$ | $33.21 \%$ |
|  |  | 15 | $34.35 \%$ | $1.72 \%$ | $4.58 \%$ | $3.05 \%$ | $3.82 \%$ | $7.25 \%$ | $45.23 \%$ |
|  |  | 25 | $36.64 \%$ | $1.15 \%$ | $1.15 \%$ | $3.44 \%$ | $4.20 \%$ | $18.89 \%$ | $34.54 \%$ |
|  |  | 28 | $30.34 \%$ | $0.19 \%$ | $1.53 \%$ | $3.24 \%$ | $4.01 \%$ | $25.95 \%$ | $34.73 \%$ |
|  |  | 29 | $46.76 \%$ | $1.15 \%$ | $1.15 \%$ | $0.76 \%$ | $3.82 \%$ | $16.99 \%$ | $29.39 \%$ |

Table 26
Reading Item Level Statistics With and Without Level of Independence

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 3 | 0.70 | 0.64 | 1 | 0.67 | 0.63 |
|  |  | 2 | 3 | 0.48 | 0.48 | 1 | 0.45 | 0.50 |
|  |  | 3 | 3 | 0.35 | 0.44 | 1 | 0.32 | 0.46 |
|  |  | 4 | 3 | 0.23 | 0.26 | 1 | 0.21 | 0.27 |
|  |  | 5 | 3 | 0.24 | 0.31 | 1 | 0.22 | 0.34 |
|  |  | 6 | 3 | 0.52 | 0.46 | 1 | 0.48 | 0.49 |
|  |  | 7 | 3 | 0.62 | 0.51 | 1 | 0.56 | 0.53 |
|  |  | 8 | 3 | 0.68 | 0.47 | 1 | 0.64 | 0.50 |
|  |  | 9 | 3 | 0.42 | 0.28 | 1 | 0.39 | 0.30 |
|  |  | 10 | 3 | 0.30 | 0.39 | 1 | 0.27 | 0.39 |
|  |  | 11 | 3 | 0.66 | 0.47 | 1 | 0.63 | 0.49 |
|  |  | 12 | 3 | 0.72 | 0.59 | 1 | 0.67 | 0.60 |
|  |  | 13 | 3 | 0.84 | 0.65 | 1 | 0.81 | 0.66 |
|  |  | 14 | 3 | 0.87 | 0.60 | 1 | 0.85 | 0.61 |
|  |  | 15 | 3 | 0.74 | 0.64 | 1 | 0.71 | 0.67 |
|  |  | 16 | 3 | 0.75 | 0.67 | 1 | 0.72 | 0.70 |
|  |  | 17 | 3 | 0.80 | 0.67 | 1 | 0.78 | 0.69 |
| RD | 3 | 18 | 3 | 0.32 | 0.35 | 1 | 0.30 | 0.33 |
|  |  | 19 | 3 | 0.78 | 0.63 | 1 | 0.75 | 0.65 |
|  |  | 20 | 3 | 0.26 | 0.24 | 1 | 0.23 | 0.26 |
|  |  | 21 | 3 | 0.70 | 0.61 | 1 | 0.66 | 0.62 |
|  |  | 22 | 3 | 0.76 | 0.66 | 1 | 0.74 | 0.68 |
|  |  | 23 | 3 | 0.59 | 0.62 | 1 | 0.55 | 0.63 |
|  |  | 24 | 3 | 0.72 | 0.65 | 1 | 0.70 | 0.65 |
|  |  | 25 | 3 | 0.42 | 0.57 | 1 | 0.38 | 0.58 |
|  |  | 26 | 3 | 0.56 | 0.64 | 1 | 0.52 | 0.66 |
|  |  | 27 | 3 | 0.53 | 0.50 | 1 | 0.51 | 0.51 |
|  |  | 28 | 3 | 0.48 | 0.52 | 1 | 0.45 | 0.54 |
|  |  | 29 | 3 | 0.54 | 0.58 | 1 | 0.52 | 0.59 |
|  |  | 30 | 3 | 0.36 | 0.46 | 1 | 0.33 | 0.47 |
|  |  | 31 | 3 | 0.58 | 0.59 | 1 | 0.56 | 0.58 |
|  |  | 32 | 3 | 0.34 | 0.41 | 1 | 0.31 | 0.43 |
|  |  | 33 | 3 | 0.34 | 0.48 | 1 | 0.31 | 0.48 |
|  |  | 34 | 3 | 0.38 | 0.30 | 1 | 0.35 | 0.31 |
|  |  | 35 | 3 | 0.46 | 0.63 | 1 | 0.43 | 0.62 |

Table 26
Reading Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 3 | 0.59 | 0.57 | 1 | 0.55 | 0.57 |
|  |  | 2 | 3 | 0.28 | 0.35 | 1 | 0.25 | 0.37 |
|  |  | 3 | 3 | 0.24 | 0.35 | 1 | 0.21 | 0.36 |
|  |  | 4 | 3 | 0.52 | 0.60 | 1 | 0.49 | 0.61 |
|  |  | 5 | 3 | 0.39 | 0.52 | 1 | 0.37 | 0.53 |
|  |  | 6 | 3 | 0.60 | 0.66 | 1 | 0.57 | 0.65 |
|  |  | 7 | 3 | 0.64 | 0.57 | 1 | 0.61 | 0.59 |
|  |  | 8 | 3 | 0.59 | 0.63 | 1 | 0.57 | 0.64 |
|  |  | 9 | 3 | 0.50 | 0.50 | 1 | 0.49 | 0.51 |
|  |  | 10 | 3 | 0.39 | 0.49 | 1 | 0.36 | 0.49 |
|  |  | 11 | 3 | 0.84 | 0.65 | 1 | 0.82 | 0.66 |
|  |  | 12 | 3 | 0.84 | 0.63 | 1 | 0.83 | 0.65 |
|  |  | 13 | 3 | 0.80 | 0.57 | 1 | 0.78 | 0.59 |
|  |  | 14 | 3 | 0.71 | 0.69 | 1 | 0.68 | 0.69 |
|  |  | 15 | 3 | 0.71 | 0.60 | 1 | 0.69 | 0.60 |
|  |  | 16 | 3 | 0.78 | 0.67 | 1 | 0.76 | 0.67 |
|  |  | 17 | 3 | 0.79 | 0.63 | 1 | 0.77 | 0.64 |
| RD | 4 | 18 | 3 | 0.82 | 0.67 | 1 | 0.81 | 0.68 |
|  |  | 19 | 3 | 0.28 | 0.34 | 1 | 0.26 | 0.37 |
|  |  | 20 | 3 | 0.43 | 0.36 | 1 | 0.40 | 0.37 |
|  |  | 21 | 3 | 0.59 | 0.61 | 1 | 0.56 | 0.64 |
|  |  | 22 | 3 | 0.32 | 0.35 | 1 | 0.30 | 0.34 |
|  |  | 23 | 3 | 0.72 | 0.66 | 1 | 0.70 | 0.67 |
|  |  | 24 | 3 | 0.69 | 0.65 | 1 | 0.67 | 0.65 |
|  |  | 25 | 3 | 0.62 | 0.60 | 1 | 0.59 | 0.61 |
|  |  | 26 | 3 | 0.53 | 0.55 | 1 | 0.50 | 0.55 |
|  |  | 27 | 3 | 0.42 | 0.45 | 1 | 0.39 | 0.46 |
|  |  | 28 | 3 | 0.33 | 0.48 | 1 | 0.31 | 0.49 |
|  |  | 29 | 3 | 0.29 | 0.45 | 1 | 0.26 | 0.47 |
|  |  | 30 | 3 | 0.47 | 0.39 | 1 | 0.45 | 0.41 |
|  |  | 31 | 3 | 0.53 | 0.54 | 1 | 0.51 | 0.56 |
|  |  | 32 | 3 | 0.43 | 0.44 | 1 | 0.40 | 0.46 |
|  |  | 33 | 3 | 0.58 | 0.50 | 1 | 0.54 | 0.51 |
|  |  | 34 | 3 | 0.42 | 0.53 | 1 | 0.39 | 0.54 |
|  |  | 35 | 3 | 0.37 | 0.55 | 1 | 0.36 | 0.55 |

Table 26
Reading Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 3 | 0.65 | 0.63 | 1 | 0.63 | 0.65 |
|  |  | 2 | 3 | 0.75 | 0.65 | 1 | 0.73 | 0.66 |
|  |  | 3 | 3 | 0.36 | 0.41 | 1 | 0.33 | 0.43 |
|  |  | 4 | 3 | 0.51 | 0.54 | 1 | 0.48 | 0.56 |
|  |  | 5 | 3 | 0.46 | 0.50 | 1 | 0.43 | 0.50 |
|  |  | 6 | 3 | 0.43 | 0.53 | 1 | 0.41 | 0.53 |
|  |  | 7 | 3 | 0.40 | 0.46 | 1 | 0.38 | 0.47 |
|  |  | 8 | 3 | 0.45 | 0.47 | 1 | 0.41 | 0.50 |
|  |  | 9 | 3 | 0.45 | 0.62 | 1 | 0.43 | 0.62 |
|  |  | 10 | 3 | 0.53 | 0.41 | 1 | 0.51 | 0.43 |
|  |  | 11 | 3 | 0.74 | 0.71 | 1 | 0.72 | 0.71 |
|  |  | 12 | 3 | 0.85 | 0.63 | 1 | 0.84 | 0.64 |
|  |  | 13 | 3 | 0.83 | 0.64 | 1 | 0.81 | 0.66 |
|  |  | 14 | 3 | 0.71 | 0.63 | 1 | 0.69 | 0.64 |
|  |  | 15 | 3 | 0.74 | 0.65 | 1 | 0.72 | 0.64 |
|  |  | 16 | 3 | 0.81 | 0.66 | 1 | 0.80 | 0.66 |
|  |  | 17 | 3 | 0.40 | 0.41 | 1 | 0.38 | 0.42 |
| RD | 5 | 18 | 3 | 0.23 | 0.21 | 1 | 0.21 | 0.23 |
|  |  | 19 | 3 | 0.48 | 0.58 | 1 | 0.45 | 0.60 |
|  |  | 20 | 3 | 0.45 | 0.56 | 1 | 0.42 | 0.55 |
|  |  | 21 | 3 | 0.70 | 0.73 | 1 | 0.67 | 0.73 |
|  |  | 22 | 3 | 0.53 | 0.55 | 1 | 0.50 | 0.55 |
|  |  | 23 | 3 | 0.58 | 0.58 | 1 | 0.55 | 0.59 |
|  |  | 24 | 3 | 0.36 | 0.25 | 1 | 0.34 | 0.25 |
|  |  | 25 | 3 | 0.69 | 0.68 | 1 | 0.68 | 0.68 |
|  |  | 26 | 3 | 0.46 | 0.53 | 1 | 0.44 | 0.53 |
|  |  | 27 | 3 | 0.38 | 0.51 | 1 | 0.36 | 0.51 |
|  |  | 28 | 3 | 0.60 | 0.61 | 1 | 0.57 | 0.62 |
|  |  | 29 | 3 | 0.61 | 0.71 | 1 | 0.59 | 0.72 |
|  |  | 30 | 3 | 0.63 | 0.69 | 1 | 0.60 | 0.70 |
|  |  | 31 | 3 | 0.67 | 0.66 | 1 | 0.64 | 0.67 |
|  |  | 32 | 3 | 0.40 | 0.52 | 1 | 0.38 | 0.54 |
|  |  | 33 | 3 | 0.48 | 0.66 | 1 | 0.46 | 0.66 |
|  |  | 34 | 3 | 0.45 | 0.45 | 1 | 0.43 | 0.47 |
|  |  | 35 | 3 | 0.68 | 0.70 | 1 | 0.64 | 0.72 |

Table 26
Reading Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 3 | 0.26 | 0.37 | 1 | 0.23 | 0.36 |
|  |  | 2 | 3 | 0.77 | 0.61 | 1 | 0.75 | 0.62 |
|  |  | 3 | 3 | 0.45 | 0.54 | 1 | 0.44 | 0.55 |
|  |  | 4 | 3 | 0.74 | 0.55 | 1 | 0.73 | 0.56 |
|  |  | 5 | 3 | 0.60 | 0.61 | 1 | 0.58 | 0.62 |
|  |  | 6 | 3 | 0.34 | 0.50 | 1 | 0.33 | 0.52 |
|  |  | 7 | 3 | 0.34 | 0.17 | 1 | 0.32 | 0.19 |
|  |  | 8 | 3 | 0.25 | 0.34 | 1 | 0.25 | 0.33 |
|  |  | 9 | 3 | 0.74 | 0.62 | 1 | 0.72 | 0.64 |
|  |  | 10 | 3 | 0.39 | 0.44 | 1 | 0.37 | 0.45 |
|  |  | 11 | 3 | 0.87 | 0.67 | 1 | 0.85 | 0.68 |
|  |  | 12 | 3 | 0.83 | 0.70 | 1 | 0.82 | 0.71 |
|  |  | 13 | 3 | 0.85 | 0.67 | 1 | 0.84 | 0.69 |
|  |  | 14 | 3 | 0.71 | 0.53 | 1 | 0.69 | 0.52 |
|  |  | 15 | 3 | 0.76 | 0.57 | 1 | 0.74 | 0.60 |
|  |  | 16 | 3 | 0.81 | 0.71 | 1 | 0.80 | 0.72 |
|  |  | 17 | 3 | 0.80 | 0.68 | 1 | 0.79 | 0.68 |
| RD | 6 | 18 | 3 | 0.58 | 0.67 | 1 | 0.57 | 0.66 |
|  |  | 19 | 3 | 0.50 | 0.54 | 1 | 0.48 | 0.54 |
|  |  | 20 | 3 | 0.65 | 0.68 | 1 | 0.63 | 0.70 |
|  |  | 21 | 3 | 0.70 | 0.68 | 1 | 0.68 | 0.68 |
|  |  | 22 | 3 | 0.78 | 0.61 | 1 | 0.76 | 0.60 |
|  |  | 23 | 3 | 0.49 | 0.60 | 1 | 0.47 | 0.60 |
|  |  | 24 | 3 | 0.52 | 0.60 | 1 | 0.50 | 0.61 |
|  |  | 25 | 3 | 0.50 | 0.49 | 1 | 0.49 | 0.51 |
|  |  | 26 | 3 | 0.51 | 0.55 | 1 | 0.49 | 0.56 |
|  |  | 27 | 3 | 0.40 | 0.47 | 1 | 0.40 | 0.49 |
|  |  | 28 | 3 | 0.56 | 0.63 | 1 | 0.55 | 0.65 |
|  |  | 29 | 3 | 0.84 | 0.64 | 1 | 0.83 | 0.64 |
|  |  | 30 | 3 | 0.71 | 0.66 | 1 | 0.70 | 0.67 |
|  |  | 31 | 3 | 0.75 | 0.58 | 1 | 0.73 | 0.60 |
|  |  | 32 | 3 | 0.47 | 0.57 | 1 | 0.45 | 0.57 |
|  |  | 33 | 3 | 0.66 | 0.66 | 1 | 0.64 | 0.65 |
|  |  | 34 | 3 | 0.44 | 0.42 | 1 | 0.42 | 0.43 |
|  |  | 35 | 3 | 0.82 | 0.55 | 1 | 0.81 | 0.56 |

Table 26
Reading Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 3 | 0.62 | 0.60 | 1 | 0.61 | 0.61 |
|  |  | 2 | 3 | 0.35 | 0.35 | 1 | 0.33 | 0.36 |
|  |  | 3 | 3 | 0.43 | 0.38 | 1 | 0.41 | 0.41 |
|  |  | 4 | 3 | 0.53 | 0.51 | 1 | 0.52 | 0.53 |
|  |  | 5 | 3 | 0.34 | 0.30 | 1 | 0.31 | 0.32 |
|  |  | 6 | 3 | 0.45 | 0.43 | 1 | 0.42 | 0.44 |
|  |  | 7 | 3 | 0.43 | 0.53 | 1 | 0.42 | 0.53 |
|  |  | 8 | 3 | 0.36 | 0.52 | 1 | 0.34 | 0.52 |
|  |  | 9 | 3 | 0.23 | 0.36 | 1 | 0.22 | 0.37 |
|  |  | 10 | 3 | 0.26 | 0.24 | 1 | 0.25 | 0.26 |
|  |  | 11 | 3 | 0.27 | 0.31 | 1 | 0.26 | 0.32 |
|  |  | 12 | 3 | 0.62 | 0.64 | 1 | 0.60 | 0.65 |
|  |  | 13 | 3 | 0.85 | 0.65 | 1 | 0.84 | 0.67 |
|  |  | 14 | 3 | 0.66 | 0.63 | 1 | 0.64 | 0.65 |
|  |  | 15 | 3 | 0.82 | 0.66 | 1 | 0.80 | 0.68 |
|  |  | 16 | 3 | 0.84 | 0.67 | 1 | 0.82 | 0.69 |
|  |  | 17 | 3 | 0.80 | 0.69 | 1 | 0.78 | 0.71 |
| RD | 7 | 18 | 3 | 0.80 | 0.70 | 1 | 0.78 | 0.72 |
|  |  | 19 | 3 | 0.57 | 0.56 | 1 | 0.54 | 0.57 |
|  |  | 20 | 3 | 0.64 | 0.60 | 1 | 0.63 | 0.62 |
|  |  | 21 | 3 | 0.81 | 0.69 | 1 | 0.79 | 0.69 |
|  |  | 22 | 3 | 0.68 | 0.69 | 1 | 0.66 | 0.71 |
|  |  | 23 | 3 | 0.46 | 0.43 | 1 | 0.45 | 0.43 |
|  |  | 24 | 3 | 0.78 | 0.61 | 1 | 0.76 | 0.63 |
|  |  | 25 | 3 | 0.42 | 0.60 | 1 | 0.41 | 0.60 |
|  |  | 26 | 3 | 0.27 | 0.38 | 1 | 0.26 | 0.39 |
|  |  | 27 | 3 | 0.45 | 0.56 | 1 | 0.43 | 0.56 |
|  |  | 28 | 3 | 0.56 | 0.64 | 1 | 0.54 | 0.65 |
|  |  | 29 | 3 | 0.34 | 0.42 | 1 | 0.32 | 0.43 |
|  |  | 30 | 3 | 0.61 | 0.60 | 1 | 0.60 | 0.61 |
|  |  | 31 | 3 | 0.39 | 0.23 | 1 | 0.37 | 0.24 |
|  |  | 32 | 3 | 0.25 | 0.46 | 1 | 0.23 | 0.47 |
|  |  | 33 | 3 | 0.61 | 0.36 | 1 | 0.59 | 0.39 |
|  |  | 34 | 3 | 0.71 | 0.66 | 1 | 0.69 | 0.67 |
|  |  | 35 | 3 | 0.49 | 0.53 | 1 | 0.48 | 0.54 |

Table 26
Reading Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 3 | 0.35 | 0.46 | 1 | 0.34 | 0.46 |
|  |  | 2 | 3 | 0.48 | 0.54 | 1 | 0.45 | 0.55 |
|  |  | 3 | 3 | 0.31 | 0.38 | 1 | 0.29 | 0.38 |
|  |  | 4 | 3 | 0.33 | 0.33 | 1 | 0.31 | 0.33 |
|  |  | 5 | 3 | 0.42 | 0.54 | 1 | 0.41 | 0.54 |
|  |  | 6 | 3 | 0.38 | 0.34 | 1 | 0.37 | 0.35 |
|  |  | 7 | 3 | 0.39 | 0.46 | 1 | 0.38 | 0.46 |
|  |  | 8 | 3 | 0.52 | 0.56 | 1 | 0.51 | 0.56 |
|  |  | 9 | 3 | 0.39 | 0.54 | 1 | 0.37 | 0.55 |
|  |  | 10 | 3 | 0.37 | 0.46 | 1 | 0.36 | 0.45 |
|  |  | 11 | 3 | 0.68 | 0.62 | 1 | 0.67 | 0.62 |
|  |  | 12 | 3 | 0.84 | 0.61 | 1 | 0.83 | 0.63 |
|  |  | 13 | 3 | 0.50 | 0.48 | 1 | 0.49 | 0.48 |
|  |  | 14 | 3 | 0.81 | 0.63 | 1 | 0.81 | 0.64 |
|  |  | 15 | 3 | 0.75 | 0.68 | 1 | 0.74 | 0.68 |
|  |  | 16 | 3 | 0.72 | 0.69 | 1 | 0.70 | 0.68 |
|  |  | 17 | 3 | 0.69 | 0.68 | 1 | 0.68 | 0.69 |
| RD | 8 | 18 | 3 | 0.73 | 0.65 | 1 | 0.72 | 0.64 |
|  |  | 19 | 3 | 0.43 | 0.53 | 1 | 0.41 | 0.52 |
|  |  | 20 | 3 | 0.75 | 0.63 | 1 | 0.73 | 0.62 |
|  |  | 21 | 3 | 0.37 | 0.35 | 1 | 0.36 | 0.34 |
|  |  | 22 | 3 | 0.47 | 0.56 | 1 | 0.45 | 0.56 |
|  |  | 23 | 3 | 0.57 | 0.57 | 1 | 0.55 | 0.57 |
|  |  | 24 | 3 | 0.63 | 0.58 | 1 | 0.61 | 0.58 |
|  |  | 25 | 3 | 0.56 | 0.53 | 1 | 0.54 | 0.53 |
|  |  | 26 | 3 | 0.52 | 0.49 | 1 | 0.51 | 0.48 |
|  |  | 27 | 3 | 0.49 | 0.52 | 1 | 0.48 | 0.52 |
|  |  | 28 | 3 | 0.52 | 0.52 | 1 | 0.52 | 0.52 |
|  |  | 29 | 3 | 0.40 | 0.53 | 1 | 0.39 | 0.52 |
|  |  | 30 | 3 | 0.54 | 0.49 | 1 | 0.53 | 0.49 |
|  |  | 31 | 3 | 0.35 | 0.34 | 1 | 0.34 | 0.34 |
|  |  | 32 | 3 | 0.50 | 0.54 | 1 | 0.48 | 0.54 |
|  |  | 33 | 3 | 0.48 | 0.42 | 1 | 0.47 | 0.43 |
|  |  | 34 | 3 | 0.51 | 0.56 | 1 | 0.49 | 0.57 |
|  |  | 35 | 3 | 0.62 | 0.63 | 1 | 0.61 | 0.63 |

Table 26
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 <br> Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
| RD | 9 | 1 | 3 | 0.41 | 0.45 | 1 | 0.40 | 0.46 |
|  |  | 2 | 3 | 0.46 | 0.56 | 1 | 0.45 | 0.57 |
|  |  | 3 | 3 | 0.50 | 0.58 | 1 | 0.49 | 0.59 |
|  |  | 4 | 3 | 0.48 | 0.61 | 1 | 0.47 | 0.61 |
|  |  | 5 | 3 | 0.50 | 0.58 | 1 | 0.49 | 0.60 |
|  |  | 6 | 3 | 0.47 | 0.61 | 1 | 0.46 | 0.62 |
|  |  | 7 | 3 | 0.48 | 0.47 | 1 | 0.46 | 0.48 |
|  |  | 8 | 3 | 0.50 | 0.58 | 1 | 0.48 | 0.57 |
|  |  | 9 | 3 | 0.29 | 0.40 | 1 | 0.26 | 0.40 |
|  |  | 10 | 3 | 0.60 | 0.41 | 1 | 0.57 | 0.41 |
|  |  | 11 | 3 | 0.66 | 0.63 | 1 | 0.64 | 0.63 |
|  |  | 12 | 3 | 0.64 | 0.63 | 1 | 0.63 | 0.63 |
|  |  | 13 | 3 | 0.83 | 0.63 | 1 | 0.82 | 0.65 |
|  |  | 14 | 3 | 0.85 | 0.60 | 1 | 0.84 | 0.63 |
|  |  | 15 | 3 | 0.70 | 0.64 | 1 | 0.69 | 0.64 |
|  |  | 16 | 3 | 0.71 | 0.67 | 1 | 0.69 | 0.68 |
|  |  | 17 | 3 | 0.77 | 0.68 | 1 | 0.76 | 0.69 |
|  |  | 18 | 3 | 0.73 | 0.64 | 1 | 0.71 | 0.65 |
|  |  | 19 | 3 | 0.76 | 0.64 | 1 | 0.74 | 0.66 |
|  |  | 20 | 3 | 0.48 | 0.52 | 1 | 0.46 | 0.54 |
|  |  | 21 | 3 | 0.39 | 0.43 | 1 | 0.36 | 0.42 |
|  |  | 22 | 3 | 0.68 | 0.68 | 1 | 0.67 | 0.69 |
|  |  | 23 | 3 | 0.66 | 0.63 | 1 | 0.63 | 0.65 |
|  |  | 24 | 3 | 0.46 | 0.50 | 1 | 0.44 | 0.51 |
|  |  | 25 | 3 | 0.52 | 0.62 | 1 | 0.50 | 0.64 |
|  |  | 26 | 3 | 0.56 | 0.62 | 1 | 0.54 | 0.63 |
|  |  | 27 | 3 | 0.42 | 0.44 | 1 | 0.40 | 0.45 |
|  |  | 28 | 3 | 0.54 | 0.48 | 1 | 0.52 | 0.50 |
|  |  | 29 | 3 | 0.31 | 0.27 | 1 | 0.30 | 0.27 |
|  |  | 30 | 3 | 0.59 | 0.73 | 1 | 0.58 | 0.74 |
|  |  | 31 | 3 | 0.52 | 0.64 | 1 | 0.50 | 0.65 |
|  |  | 32 | 3 | 0.29 | 0.37 | 1 | 0.27 | 0.37 |
|  |  | 33 | 3 | 0.53 | 0.57 | 1 | 0.51 | 0.56 |
|  |  | 34 | 3 | 0.44 | 0.50 | 1 | 0.41 | 0.47 |

Table 26
Reading Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
|  |  | 1 | 3 | 0.55 | 0.53 | 1 | 0.53 | 0.53 |
|  |  | 2 | 3 | 0.40 | 0.38 | 1 | 0.38 | 0.39 |
|  |  | 3 | 3 | 0.26 | 0.37 | 1 | 0.24 | 0.37 |
|  |  | 4 | 3 | 0.41 | 0.30 | 1 | 0.38 | 0.33 |
|  |  | 5 | 3 | 0.42 | 0.40 | 1 | 0.40 | 0.41 |
|  |  | 6 | 3 | 0.47 | 0.41 | 1 | 0.45 | 0.43 |
|  |  | 7 | 3 | 0.32 | 0.34 | 1 | 0.30 | 0.34 |
|  |  | 8 | 3 | 0.59 | 0.61 | 1 | 0.57 | 0.59 |
|  |  | 9 | 3 | 0.38 | 0.46 | 1 | 0.35 | 0.45 |
|  |  | 10 | 3 | 0.60 | 0.44 | 1 | 0.58 | 0.44 |
|  |  | 11 | 3 | 0.69 | 0.37 | 1 | 0.67 | 0.38 |
|  |  | 12 | 3 | 0.50 | 0.49 | 1 | 0.48 | 0.50 |
|  |  | 13 | 3 | 0.71 | 0.60 | 1 | 0.70 | 0.61 |
|  |  | 14 | 3 | 0.45 | 0.31 | 1 | 0.43 | 0.31 |
|  |  | 15 | 3 | 0.75 | 0.61 | 1 | 0.73 | 0.60 |
|  |  | 16 | 3 | 0.56 | 0.58 | 1 | 0.54 | 0.58 |
| RD | 10 | 17 | 3 | 0.31 | 0.38 | 1 | 0.29 | 0.36 |
|  |  | 18 | 3 | 0.51 | 0.54 | 1 | 0.50 | 0.53 |
|  |  | 19 | 3 | 0.53 | 0.53 | 1 | 0.50 | 0.54 |
|  |  | 20 | 3 | 0.47 | 0.44 | 1 | 0.46 | 0.44 |
|  |  | 21 | 3 | 0.43 | 0.50 | 1 | 0.40 | 0.49 |
|  |  | 22 | 3 | 0.44 | 0.51 | 1 | 0.43 | 0.51 |
|  |  | 23 | 3 | 0.62 | 0.67 | 1 | 0.61 | 0.67 |
|  |  | 24 | 3 | 0.45 | 0.40 | 1 | 0.43 | 0.40 |
|  |  | 25 | 3 | 0.57 | 0.61 | 1 | 0.54 | 0.61 |
|  |  | 26 | 3 | 0.28 | 0.34 | 1 | 0.27 | 0.33 |
|  |  | 27 | 3 | 0.37 | 0.45 | 1 | 0.36 | 0.46 |
|  |  | 28 | 3 | 0.50 | 0.62 | 1 | 0.48 | 0.62 |
|  |  | 29 | 3 | 0.63 | 0.63 | 1 | 0.61 | 0.64 |
|  |  | 30 | 3 | 0.70 | 0.66 | 1 | 0.69 | 0.66 |
|  |  | 31 | 3 | 0.48 | 0.59 | 1 | 0.46 | 0.58 |
|  |  | 32 | 3 | 0.60 | 0.65 | 1 | 0.59 | 0.66 |
|  |  | 33 | 3 | 0.59 | 0.69 | 1 | 0.57 | 0.69 |
|  |  | 34 | 3 | 0.38 | 0.55 | 1 | 0.37 | 0.54 |

Table 27
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 |
|  |  | 1 | 3 | 0.30 | 0.25 | 1 | 0.26 | 0.25 |
|  |  | 2 | 3 | 0.60 | 0.61 | 1 | 0.54 | 0.62 |
|  |  | 3 | 3 | 0.75 | 0.67 | 1 | 0.73 | 0.66 |
|  |  | 4 | 3 | 0.69 | 0.65 | 1 | 0.67 | 0.65 |
|  |  | 5 | 6 | 0.77 | 0.73 | 2 | 0.73 | 0.73 |
|  |  | 6 | 3 | 0.49 | 0.51 | 1 | 0.44 | 0.51 |
|  |  | 7 | 3 | 0.49 | 0.57 | 1 | 0.45 | 0.60 |
|  |  | 8 | 3 | 0.75 | 0.62 | 1 | 0.72 | 0.63 |
|  |  | 9 | 3 | 0.81 | 0.56 | 1 | 0.80 | 0.56 |
|  |  | 10 | 6 | 0.47 | 0.80 | 2 | 0.38 | 0.76 |
|  |  | 11 | 3 | 0.72 | 0.67 | 1 | 0.69 | 0.68 |
|  |  | 12 | 3 | 0.51 | 0.65 | 1 | 0.50 | 0.65 |
|  |  | 13 | 3 | 0.41 | 0.50 | 1 | 0.38 | 0.50 |
|  |  | 14 | 3 | 0.49 | 0.47 | 1 | 0.45 | 0.47 |
| WR | 3 | 15 | 6 | 0.73 | 0.74 | 2 | 0.68 | 0.71 |
|  |  | 16 | 3 | 0.47 | 0.57 | 1 | 0.45 | 0.58 |
|  |  | 17 | 3 | 0.38 | 0.38 | 1 | 0.36 | 0.41 |
|  |  | 18 | 3 | 0.49 | 0.45 | 1 | 0.45 | 0.47 |
|  |  | 19 | 3 | 0.33 | 0.26 | 1 | 0.30 | 0.26 |
|  |  | 20 | 6 | 0.40 | 0.80 | 2 | 0.25 | 0.72 |
|  |  | 21 | 3 | 0.27 | 0.29 | 1 | 0.24 | 0.30 |
|  |  | 22 | 3 | 0.41 | 0.54 | 1 | 0.37 | 0.56 |
|  |  | 23 | 3 | 0.48 | 0.50 | 1 | 0.45 | 0.51 |
|  |  | 24 | 6 | 0.42 | 0.81 | 2 | 0.27 | 0.75 |
|  |  | 25 | 3 | 0.29 | 0.28 | 1 | 0.27 | 0.29 |
|  |  | 26 | 3 | 0.33 | 0.29 | 1 | 0.31 | 0.30 |
|  |  | 27 | 3 | 0.47 | 0.51 | 1 | 0.43 | 0.51 |
|  |  | 28 | 3 | 0.28 | 0.26 | 1 | 0.24 | 0.28 |
|  |  | 29 | 6 | 0.68 | 0.78 | 2 | 0.60 | 0.77 |

Table 27
Writing Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
|  |  | 1 | 3 | 0.32 | 0.34 | 1 | 0.27 | 0.34 |
|  |  | 2 | 3 | 0.39 | 0.48 | 1 | 0.36 | 0.48 |
|  |  | 3 | 3 | 0.68 | 0.67 | 1 | 0.65 | 0.65 |
|  |  | 4 | 3 | 0.62 | 0.59 | 1 | 0.59 | 0.60 |
|  |  | 5 | 6 | 0.79 | 0.75 | 2 | 0.75 | 0.76 |
|  |  | 6 | 3 | 0.32 | 0.24 | 1 | 0.30 | 0.26 |
|  |  | 7 | 3 | 0.50 | 0.57 | 1 | 0.48 | 0.60 |
|  |  | 8 | 3 | 0.70 | 0.58 | 1 | 0.67 | 0.59 |
|  |  | 9 | 3 | 0.63 | 0.71 | 1 | 0.59 | 0.71 |
|  |  | 10 | 6 | 0.52 | 0.82 | 2 | 0.46 | 0.81 |
|  |  | 11 | 3 | 0.74 | 0.70 | 1 | 0.71 | 0.70 |
|  |  | 12 | 3 | 0.69 | 0.67 | 1 | 0.66 | 0.69 |
|  |  | 13 | 3 | 0.26 | 0.41 | 1 | 0.24 | 0.42 |
|  |  | 14 | 3 | 0.55 | 0.64 | 1 | 0.53 | 0.64 |
| WR | 4 | 15 | 6 | 0.73 | 0.78 | 2 | 0.69 | 0.77 |
|  | 4 | 16 | 3 | 0.49 | 0.49 | 1 | 0.48 | 0.51 |
|  |  | 17 | 3 | 0.27 | 0.42 | 1 | 0.25 | 0.46 |
|  |  | 18 | 3 | 0.52 | 0.51 | 1 | 0.49 | 0.53 |
|  |  | 19 | 3 | 0.34 | 0.28 | 1 | 0.31 | 0.29 |
|  |  | 20 | 6 | 0.48 | 0.82 | 2 | 0.33 | 0.77 |
|  |  | 21 | 3 | 0.18 | 0.17 | 1 | 0.16 | 0.19 |
|  |  | 22 | 3 | 0.49 | 0.47 | 1 | 0.48 | 0.48 |
|  |  | 23 | 3 | 0.52 | 0.57 | 1 | 0.49 | 0.59 |
|  |  | 24 | 3 | 0.48 | 0.57 | 1 | 0.47 | 0.60 |
|  |  | 25 | 6 | 0.49 | 0.83 | 2 | 0.35 | 0.79 |
|  |  | 26 | 3 | 0.43 | 0.46 | 1 | 0.41 | 0.49 |
|  |  | 27 | 3 | 0.36 | 0.32 | 1 | 0.35 | 0.34 |
|  |  | 28 | 3 | 0.53 | 0.52 | 1 | 0.49 | 0.52 |
|  |  | 29 | 3 | 0.35 | 0.41 | 1 | 0.32 | 0.43 |
|  |  | 30 | 6 | 0.73 | 0.78 | 2 | 0.67 | 0.77 |

Table 27
Writing Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
|  |  | 1 | 3 | 0.42 | 0.42 | 1 | 0.38 | 0.44 |
|  |  | 2 | 3 | 0.71 | 0.63 | 1 | 0.69 | 0.64 |
|  |  | 3 | 3 | 0.75 | 0.65 | 1 | 0.73 | 0.64 |
|  |  | 4 | 3 | 0.72 | 0.69 | 1 | 0.70 | 0.68 |
|  |  | 5 | 6 | 0.81 | 0.76 | 2 | 0.77 | 0.75 |
|  |  | 6 | 3 | 0.29 | 0.38 | 1 | 0.27 | 0.39 |
|  |  | 7 | 3 | 0.47 | 0.51 | 1 | 0.45 | 0.52 |
|  |  | 8 | 3 | 0.73 | 0.61 | 1 | 0.71 | 0.63 |
|  |  | 9 | 3 | 0.70 | 0.60 | 1 | 0.67 | 0.61 |
|  |  | 10 | 6 | 0.56 | 0.85 | 2 | 0.49 | 0.82 |
|  |  | 11 | 3 | 0.73 | 0.67 | 1 | 0.70 | 0.68 |
|  |  | 12 | 3 | 0.70 | 0.70 | 1 | 0.68 | 0.70 |
|  |  | 13 | 3 | 0.33 | 0.39 | 1 | 0.31 | 0.41 |
|  |  | 14 | 3 | 0.60 | 0.59 | 1 | 0.58 | 0.61 |
| WR | 5 | 15 | 6 | 0.77 | 0.77 | 2 | 0.75 | 0.77 |
|  |  | 16 | 3 | 0.61 | 0.53 | 1 | 0.59 | 0.56 |
|  |  | 17 | 3 | 0.47 | 0.54 | 1 | 0.45 | 0.56 |
|  |  | 18 | 3 | 0.53 | 0.54 | 1 | 0.50 | 0.55 |
|  |  | 19 | 3 | 0.26 | 0.28 | 1 | 0.24 | 0.29 |
|  |  | 20 | 6 | 0.53 | 0.85 | 2 | 0.39 | 0.80 |
|  |  | 21 | 3 | 0.36 | 0.45 | 1 | 0.35 | 0.47 |
|  |  | 22 | 3 | 0.57 | 0.60 | 1 | 0.55 | 0.60 |
|  |  | 23 | 3 | 0.22 | 0.28 | 1 | 0.20 | 0.30 |
|  |  | 24 | 6 | 0.54 | 0.86 | 2 | 0.40 | 0.81 |
|  |  | 25 | 3 | 0.36 | 0.40 | 1 | 0.35 | 0.42 |
|  |  | 26 | 3 | 0.42 | 0.36 | 1 | 0.40 | 0.38 |
|  |  | 27 | 3 | 0.44 | 0.48 | 1 | 0.41 | 0.52 |
|  |  | 28 | 3 | 0.50 | 0.50 | 1 | 0.48 | 0.50 |
|  |  | 29 | 6 | 0.73 | 0.82 | 2 | 0.68 | 0.80 |

Table 27
Writing Item Level Statistics With and Without Level of Independence (continued)

|  |  | With Level of Independence |  | Without Level of Independence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade Item | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
| 1 | 3 | 0.69 | 0.61 | 1 | 0.66 | 0.61 |  |
|  | 2 | 3 | 0.71 | 0.65 | 1 | 0.69 | 0.65 |
|  | 3 | 3 | 0.73 | 0.70 | 1 | 0.70 | 0.68 |
|  | 4 | 3 | 0.76 | 0.69 | 1 | 0.74 | 0.69 |
|  | 5 | 6 | 0.83 | 0.77 | 2 | 0.80 | 0.76 |
|  | 6 | 3 | 0.73 | 0.71 | 1 | 0.72 | 0.70 |
|  | 7 | 3 | 0.49 | 0.38 | 1 | 0.48 | 0.40 |
|  | 8 | 3 | 0.72 | 0.74 | 1 | 0.70 | 0.74 |
|  | 9 | 3 | 0.66 | 0.66 | 1 | 0.64 | 0.66 |
|  | 10 | 6 | 0.64 | 0.84 | 2 | 0.59 | 0.82 |
|  | 11 | 3 | 0.73 | 0.68 | 1 | 0.70 | 0.69 |
|  | 12 | 3 | 0.78 | 0.69 | 1 | 0.77 | 0.69 |
|  | 13 | 3 | 0.50 | 0.45 | 1 | 0.49 | 0.48 |
|  | 14 | 3 | 0.49 | 0.40 | 1 | 0.47 | 0.42 |
|  | 15 | 6 | 0.77 | 0.78 | 2 | 0.74 | 0.76 |
|  | 16 | 3 | 0.72 | 0.67 | 1 | 0.71 | 0.67 |
|  | 17 | 3 | 0.45 | 0.46 | 1 | 0.43 | 0.49 |
|  | 18 | 3 | 0.47 | 0.47 | 1 | 0.45 | 0.46 |
|  | 19 | 3 | 0.35 | 0.20 | 1 | 0.33 | 0.21 |
|  | 20 | 6 | 0.57 | 0.82 | 2 | 0.44 | 0.78 |
|  | 21 | 3 | 0.43 | 0.38 | 1 | 0.42 | 0.39 |
|  | 22 | 3 | 0.52 | 0.39 | 1 | 0.50 | 0.41 |
|  | 23 | 3 | 0.38 | 0.31 | 1 | 0.37 | 0.32 |
|  | 24 | 6 | 0.59 | 0.83 | 2 | 0.43 | 0.77 |
| 25 | 3 | 0.47 | 0.45 | 1 | 0.45 | 0.46 |  |
|  | 26 | 3 | 0.36 | 0.29 | 1 | 0.35 | 0.32 |
| 27 | 3 | 0.44 | 0.45 | 1 | 0.40 | 0.45 |  |
|  | 28 | 3 | 0.44 | 0.43 | 1 | 0.42 | 0.46 |
| 29 | 6 | 0.75 | 0.80 | 2 | 0.69 | 0.78 |  |

Table 27
Writing Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
| WR |  | 1 | 3 | 0.74 | 0.60 | 1 | 0.71 | 0.62 |
|  |  | 2 | 3 | 0.47 | 0.62 | 1 | 0.46 | 0.64 |
|  |  | 3 | 3 | 0.75 | 0.71 | 1 | 0.72 | 0.68 |
|  |  | 4 | 3 | 0.77 | 0.68 | 1 | 0.75 | 0.69 |
|  |  | 5 | 6 | 0.83 | 0.74 | 2 | 0.80 | 0.73 |
|  |  | 6 | 3 | 0.52 | 0.55 | 1 | 0.50 | 0.56 |
|  |  | 7 | 3 | 0.54 | 0.62 | 1 | 0.51 | 0.63 |
|  |  | 8 | 3 | 0.66 | 0.72 | 1 | 0.64 | 0.73 |
|  |  | 9 | 3 | 0.65 | 0.66 | 1 | 0.63 | 0.68 |
|  |  | 10 | 6 | 0.62 | 0.86 | 2 | 0.56 | 0.85 |
|  |  | 11 | 3 | 0.74 | 0.72 | 1 | 0.72 | 0.73 |
|  |  | 12 | 3 | 0.29 | 0.32 | 1 | 0.29 | 0.35 |
|  |  | 13 | 3 | 0.45 | 0.52 | 1 | 0.44 | 0.54 |
|  |  | 14 | 3 | 0.69 | 0.67 | 1 | 0.67 | 0.69 |
|  | 7 | 15 | 6 | 0.79 | 0.77 | 2 | 0.76 | 0.77 |
|  |  | 16 | 3 | 0.50 | 0.53 | 1 | 0.47 | 0.52 |
|  |  | 17 | 3 | 0.38 | 0.50 | 1 | 0.36 | 0.53 |
|  |  | 18 | 3 | 0.67 | 0.65 | 1 | 0.66 | 0.67 |
|  |  | 19 | 3 | 0.31 | 0.21 | 1 | 0.29 | 0.21 |
|  |  | 20 | 6 | 0.57 | 0.88 | 2 | 0.44 | 0.83 |
|  |  | 21 | 3 | 0.38 | 0.36 | 1 | 0.35 | 0.38 |
|  |  | 22 | 3 | 0.42 | 0.39 | 1 | 0.41 | 0.40 |
|  |  | 23 | 3 | 0.60 | 0.52 | 1 | 0.59 | 0.53 |
|  |  | 24 | 3 | 0.41 | 0.43 | 1 | 0.40 | 0.43 |
|  |  | 25 | 6 | 0.56 | 0.85 | 2 | 0.41 | 0.79 |
|  |  | 26 | 3 | 0.21 | 0.27 | 1 | 0.20 | 0.28 |
|  |  | 27 | 3 | 0.62 | 0.59 | 1 | 0.61 | 0.61 |
|  |  | 28 | 3 | 0.49 | 0.59 | 1 | 0.47 | 0.59 |
|  |  | 29 | 3 | 0.53 | 0.46 | 1 | 0.50 | 0.48 |
|  |  | 30 | 6 | 0.67 | 0.84 | 2 | 0.63 | 0.84 |

Table 27
Writing Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
|  |  | 1 | 3 | 0.70 | 0.67 | 1 | 0.68 | 0.67 |
|  |  | 2 | 3 | 0.71 | 0.69 | 1 | 0.70 | 0.71 |
|  |  | 3 | 3 | 0.74 | 0.76 | 1 | 0.72 | 0.75 |
|  |  | 4 | 3 | 0.77 | 0.70 | 1 | 0.75 | 0.70 |
|  |  | 5 | 6 | 0.83 | 0.74 | 2 | 0.82 | 0.73 |
|  |  | 6 | 3 | 0.61 | 0.69 | 1 | 0.60 | 0.71 |
|  |  | 7 | 3 | 0.73 | 0.61 | 1 | 0.72 | 0.61 |
|  |  | 8 | 3 | 0.66 | 0.70 | 1 | 0.65 | 0.69 |
|  |  | 9 | 3 | 0.63 | 0.69 | 1 | 0.62 | 0.69 |
|  |  | 10 | 6 | 0.61 | 0.85 | 2 | 0.54 | 0.83 |
|  |  | 11 | 3 | 0.40 | 0.36 | 1 | 0.38 | 0.38 |
|  |  | 12 | 3 | 0.38 | 0.29 | 1 | 0.37 | 0.31 |
|  |  | 13 | 3 | 0.31 | 0.24 | 1 | 0.30 | 0.25 |
|  |  | 14 | 3 | 0.73 | 0.71 | 1 | 0.72 | 0.69 |
| WR | 8 | 15 | 6 | 0.81 | 0.75 | 2 | 0.79 | 0.75 |
|  | 8 | 16 | 3 | 0.36 | 0.41 | 1 | 0.35 | 0.42 |
|  |  | 17 | 3 | 0.37 | 0.41 | 1 | 0.36 | 0.42 |
|  |  | 18 | 3 | 0.35 | 0.36 | 1 | 0.33 | 0.39 |
|  |  | 19 | 3 | 0.27 | 0.18 | 1 | 0.25 | 0.20 |
|  |  | 20 | 6 | 0.63 | 0.88 | 2 | 0.49 | 0.83 |
|  |  | 21 | 3 | 0.32 | 0.33 | 1 | 0.31 | 0.33 |
|  |  | 22 | 3 | 0.31 | 0.39 | 1 | 0.30 | 0.39 |
|  |  | 23 | 3 | 0.43 | 0.52 | 1 | 0.42 | 0.53 |
|  |  | 24 | 3 | 0.64 | 0.68 | 1 | 0.63 | 0.67 |
|  |  | 25 | 6 | 0.62 | 0.84 | 2 | 0.47 | 0.79 |
|  |  | 26 | 3 | 0.43 | 0.44 | 1 | 0.42 | 0.45 |
|  |  | 27 | 3 | 0.30 | 0.26 | 1 | 0.29 | 0.27 |
|  |  | 28 | 3 | 0.59 | 0.59 | 1 | 0.58 | 0.61 |
|  |  | 29 | 3 | 0.45 | 0.49 | 1 | 0.44 | 0.50 |
|  |  | 30 | 6 | 0.70 | 0.85 | 2 | 0.64 | 0.83 |

Table 27
Writing Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
|  |  | 1 | 3 | 0.70 | 0.71 | 1 | 0.68 | 0.70 |
|  |  | 2 | 3 | 0.73 | 0.59 | 1 | 0.71 | 0.61 |
|  |  | 3 | 3 | 0.75 | 0.75 | 1 | 0.73 | 0.75 |
|  |  | 4 | 3 | 0.78 | 0.71 | 1 | 0.77 | 0.72 |
|  |  | 5 | 6 | 0.81 | 0.78 | 2 | 0.78 | 0.78 |
|  |  | 6 | 3 | 0.55 | 0.46 | 1 | 0.53 | 0.47 |
|  |  | 7 | 3 | 0.54 | 0.63 | 1 | 0.53 | 0.64 |
|  |  | 8 | 3 | 0.43 | 0.46 | 1 | 0.41 | 0.49 |
|  |  | 9 | 3 | 0.46 | 0.43 | 1 | 0.44 | 0.43 |
|  |  | 10 | 6 | 0.68 | 0.87 | 2 | 0.63 | 0.85 |
|  |  | 11 | 3 | 0.71 | 0.68 | 1 | 0.70 | 0.69 |
|  |  | 12 | 3 | 0.68 | 0.74 | 1 | 0.66 | 0.74 |
|  |  | 13 | 3 | 0.44 | 0.54 | 1 | 0.42 | 0.54 |
|  |  | 14 | 3 | 0.48 | 0.59 | 1 | 0.46 | 0.62 |
| WR | 9 | 15 | 6 | 0.81 | 0.77 | 2 | 0.78 | 0.77 |
|  |  | 16 | 3 | 0.40 | 0.37 | 1 | 0.38 | 0.39 |
|  |  | 17 | 3 | 0.32 | 0.39 | 1 | 0.30 | 0.42 |
|  |  | 18 | 3 | 0.53 | 0.63 | 1 | 0.51 | 0.64 |
|  |  | 19 | 3 | 0.35 | 0.18 | 1 | 0.34 | 0.17 |
|  |  | 20 | 6 | 0.63 | 0.87 | 2 | 0.50 | 0.81 |
|  |  | 21 | 3 | 0.44 | 0.49 | 1 | 0.43 | 0.50 |
|  |  | 22 | 3 | 0.43 | 0.45 | 1 | 0.42 | 0.45 |
|  |  | 23 | 3 | 0.60 | 0.55 | 1 | 0.58 | 0.56 |
|  |  | 24 | 6 | 0.62 | 0.85 | 2 | 0.46 | 0.78 |
|  |  | 25 | 3 | 0.30 | 0.35 | 1 | 0.29 | 0.36 |
|  |  | 26 | 3 | 0.30 | 0.30 | 1 | 0.29 | 0.31 |
|  |  | 27 | 3 | 0.50 | 0.57 | 1 | 0.49 | 0.58 |
|  |  | 28 | 3 | 0.43 | 0.39 | 1 | 0.42 | 0.41 |
|  |  | 29 | 6 | 0.70 | 0.82 | 2 | 0.64 | 0.82 |

Table 27
Writing Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
| WR | 10 | 1 | 3 | 0.71 | 0.69 | 1 | 0.68 | 0.68 |
|  |  | 2 | 3 | 0.54 | 0.58 | 1 | 0.52 | 0.59 |
|  |  | 3 | 3 | 0.77 | 0.70 | 1 | 0.75 | 0.68 |
|  |  | 4 | 3 | 0.77 | 0.65 | 1 | 0.75 | 0.66 |
|  |  | 5 | 6 | 0.83 | 0.77 | 2 | 0.80 | 0.76 |
|  |  | 6 | 3 | 0.63 | 0.61 | 1 | 0.62 | 0.63 |
|  |  | 7 | 3 | 0.59 | 0.58 | 1 | 0.57 | 0.59 |
|  |  | 8 | 3 | 0.47 | 0.57 | 1 | 0.46 | 0.56 |
|  |  | 9 | 3 | 0.49 | 0.51 | 1 | 0.47 | 0.54 |
|  |  | 10 | 6 | 0.66 | 0.86 | 2 | 0.61 | 0.84 |
|  |  | 11 | 3 | 0.53 | 0.59 | 1 | 0.52 | 0.59 |
|  |  | 12 | 3 | 0.26 | 0.29 | 1 | 0.24 | 0.30 |
|  |  | 13 | 3 | 0.28 | 0.32 | 1 | 0.26 | 0.31 |
|  |  | 14 | 3 | 0.49 | 0.46 | 1 | 0.47 | 0.47 |
|  |  | 15 | 6 | 0.78 | 0.70 | 2 | 0.75 | 0.68 |
|  |  | 16 | 3 | 0.38 | 0.38 | 1 | 0.36 | 0.38 |
|  |  | 17 | 3 | 0.56 | 0.54 | 1 | 0.53 | 0.54 |
|  |  | 18 | 3 | 0.51 | 0.37 | 1 | 0.49 | 0.38 |
|  |  | 19 | 3 | 0.41 | 0.37 | 1 | 0.39 | 0.35 |
|  |  | 20 | 6 | 0.64 | 0.85 | 2 | 0.50 | 0.81 |
|  |  | 21 | 3 | 0.29 | 0.26 | 1 | 0.28 | 0.25 |
|  |  | 22 | 3 | 0.46 | 0.32 | 1 | 0.44 | 0.32 |
|  |  | 23 | 3 | 0.53 | 0.64 | 1 | 0.52 | 0.66 |
|  |  | 24 | 3 | 0.49 | 0.50 | 1 | 0.48 | 0.50 |
|  |  | 25 | 6 | 0.63 | 0.83 | 2 | 0.46 | 0.76 |
|  |  | 26 | 3 | 0.48 | 0.45 | 1 | 0.46 | 0.45 |
|  |  | 27 | 3 | 0.17 | 0.14 | 1 | 0.16 | 0.16 |
|  |  | 28 | 3 | 0.63 | 0.62 | 1 | 0.61 | 0.60 |
|  |  | 29 | 3 | 0.45 | 0.41 | 1 | 0.43 | 0.41 |
|  |  | 30 | 6 | 0.72 | 0.82 | 2 | 0.64 | 0.80 |

Table 28
Mathematics Item Level Statistics With and Without Level of Independence


Table 28
Mathematics Item Level Statistics With and Without Level of Independence (continued)


Table 28
Mathematics Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 3 | 0.81 | 0.71 | 1 | 0.79 | 0.68 |
|  |  | 2 | 3 | 0.67 | 0.66 | 1 | 0.63 | 0.69 |
|  |  | 3 | 6 | 0.59 | 0.68 | 2 | 0.45 | 0.68 |
|  |  | 4 | 6 | 0.72 | 0.70 | 2 | 0.63 | 0.74 |
|  |  | 5 | 6 | 0.53 | 0.66 | 2 | 0.41 | 0.62 |
|  |  | 6 | 6 | 0.41 | 0.59 | 2 | 0.31 | 0.58 |
|  |  | 7 | 3 | 0.78 | 0.66 | 1 | 0.77 | 0.64 |
|  |  | 8 | 3 | 0.51 | 0.72 | 1 | 0.49 | 0.72 |
|  |  | 9 | 6 | 0.77 | 0.76 | 2 | 0.72 | 0.77 |
|  |  | 10 | 3 | 0.56 | 0.56 | 1 | 0.54 | 0.58 |
|  |  | 11 | 3 | 0.36 | 0.35 | 1 | 0.32 | 0.36 |
|  |  | 12 | 6 | 0.67 | 0.77 | 2 | 0.61 | 0.76 |
|  |  | 13 | 6 | 0.60 | 0.63 | 2 | 0.51 | 0.62 |
|  |  | 14 | 3 | 0.51 | 0.52 | 1 | 0.48 | 0.55 |
|  |  | 15 | 3 | 0.59 | 0.63 | 1 | 0.57 | 0.64 |
|  |  | 16 | 3 | 0.33 | 0.42 | 1 | 0.29 | 0.40 |
|  |  | 17 | 6 | 0.42 | 0.53 | 2 | 0.28 | 0.53 |
| MA | 5 | 18 | 6 | 0.34 | 0.57 | 2 | 0.29 | 0.55 |
|  |  | 19 | 3 | 0.64 | 0.71 | 1 | 0.60 | 0.72 |
|  |  | 20 | 3 | 0.46 | 0.54 | 1 | 0.43 | 0.56 |
|  |  | 21 | 3 | 0.62 | 0.59 | 1 | 0.59 | 0.60 |
|  |  | 22 | 6 | 0.84 | 0.71 | 2 | 0.79 | 0.70 |
|  |  | 23 | 6 | 0.73 | 0.77 | 2 | 0.64 | 0.76 |
|  |  | 24 | 3 | 0.35 | 0.61 | 1 | 0.30 | 0.60 |
|  |  | 25 | 6 | 0.52 | 0.76 | 2 | 0.42 | 0.73 |
|  |  | 26 | 6 | 0.51 | 0.63 | 2 | 0.35 | 0.56 |
|  |  | 27 | 6 | 0.45 | 0.56 | 2 | 0.32 | 0.57 |
|  |  | 28 | 6 | 0.29 | 0.54 | 2 | 0.22 | 0.51 |
|  |  | 29 | 6 | 0.47 | 0.59 | 2 | 0.36 | 0.57 |
|  |  | 30 | 3 | 0.56 | 0.46 | 1 | 0.54 | 0.48 |
|  |  | 31 | 6 | 0.75 | 0.65 | 2 | 0.70 | 0.64 |
|  |  | 32 | 3 | 0.65 | 0.70 | 1 | 0.62 | 0.70 |
|  |  | 33 | 3 | 0.55 | 0.51 | 1 | 0.52 | 0.52 |
|  |  | 34 | 3 | 0.58 | 0.73 | 1 | 0.56 | 0.74 |
|  |  | 35 | 3 | 0.47 | 0.57 | 1 | 0.44 | 0.56 |

## Table 28

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

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
| MA | 5 | 36 | 3 | 0.64 | 0.47 | 1 | 0.61 | 0.45 |
|  |  | 37 | 3 | 0.77 | 0.68 | 1 | 0.76 | 0.67 |
|  |  | 38 | 3 | 0.61 | 0.69 | 1 | 0.56 | 0.68 |
|  |  | 39 | 3 | 0.33 | 0.40 | 1 | 0.30 | 0.42 |
|  |  | 40 | 3 | 0.37 | 0.62 | 1 | 0.34 | 0.62 |

Table 28
Mathematics Item Level Statistics With and Without Level of Independence (continued)


Table 28
Mathematics Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 6 | 0.62 | 0.71 | 2 | 0.42 | 0.67 |
|  |  | 2 | 6 | 0.72 | 0.69 | 2 | 0.63 | 0.74 |
|  |  | 3 | 6 | 0.80 | 0.76 | 2 | 0.73 | 0.77 |
|  |  | 4 | 6 | 0.63 | 0.71 | 2 | 0.51 | 0.69 |
|  |  | 5 | 3 | 0.52 | 0.50 | 1 | 0.47 | 0.51 |
|  |  | 6 | 6 | 0.70 | 0.76 | 2 | 0.61 | 0.76 |
|  |  | 7 | 3 | 0.44 | 0.56 | 1 | 0.42 | 0.57 |
|  |  | 8 | 3 | 0.34 | 0.40 | 1 | 0.30 | 0.42 |
|  |  | 9 | 3 | 0.51 | 0.52 | 1 | 0.49 | 0.53 |
|  |  | 10 | 3 | 0.43 | 0.48 | 1 | 0.42 | 0.50 |
|  |  | 11 | 3 | 0.28 | 0.34 | 1 | 0.25 | 0.36 |
|  |  | 12 | 3 | 0.36 | 0.51 | 1 | 0.34 | 0.52 |
|  |  | 13 | 3 | 0.55 | 0.61 | 1 | 0.54 | 0.63 |
|  |  | 14 | 3 | 0.27 | 0.33 | 1 | 0.25 | 0.34 |
|  |  | 15 | 3 | 0.51 | 0.52 | 1 | 0.48 | 0.52 |
|  |  | 16 | 6 | 0.46 | 0.72 | 2 | 0.38 | 0.71 |
| MA | 7 | 17 | 6 | 0.77 | 0.71 | 2 | 0.69 | 0.69 |
|  |  | 18 | 3 | 0.74 | 0.69 | 1 | 0.71 | 0.68 |
|  |  | 19 | 3 | 0.33 | 0.46 | 1 | 0.30 | 0.47 |
|  |  | 20 | 6 | 0.47 | 0.63 | 2 | 0.35 | 0.58 |
|  |  | 21 | 3 | 0.54 | 0.49 | 1 | 0.52 | 0.50 |
|  |  | 22 | 3 | 0.73 | 0.64 | 1 | 0.72 | 0.63 |
|  |  | 23 | 3 | 0.65 | 0.64 | 1 | 0.63 | 0.65 |
|  |  | 24 | 3 | 0.36 | 0.35 | 1 | 0.34 | 0.36 |
|  |  | 25 | 3 | 0.59 | 0.57 | 1 | 0.57 | 0.59 |
|  |  | 26 | 6 | 0.60 | 0.71 | 2 | 0.45 | 0.65 |
|  |  | 27 | 6 | 0.64 | 0.73 | 2 | 0.51 | 0.70 |
|  |  | 28 | 3 | 0.53 | 0.56 | 1 | 0.50 | 0.58 |
|  |  | 29 | 6 | 0.40 | 0.70 | 2 | 0.33 | 0.68 |
|  |  | 30 | 3 | 0.13 | 0.43 | 1 | 0.09 | 0.39 |
|  |  | 31 | 3 | 0.53 | 0.61 | 1 | 0.50 | 0.60 |
|  |  | 32 | 3 | 0.39 | 0.40 | 1 | 0.36 | 0.43 |
|  |  | 33 | 3 | 0.46 | 0.50 | 1 | 0.43 | 0.52 |

Table 28
Mathematics Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 6 | 0.62 | 0.65 | 2 | 0.43 | 0.60 |
|  |  | 2 | 6 | 0.72 | 0.68 | 2 | 0.62 | 0.73 |
|  |  | 3 | 6 | 0.61 | 0.72 | 2 | 0.50 | 0.72 |
|  |  | 4 | 6 | 0.48 | 0.68 | 2 | 0.41 | 0.65 |
|  |  | 5 | 3 | 0.45 | 0.36 | 1 | 0.41 | 0.40 |
|  |  | 6 | 6 | 0.73 | 0.73 | 2 | 0.60 | 0.76 |
|  |  | 7 | 6 | 0.60 | 0.69 | 2 | 0.49 | 0.64 |
|  |  | 8 | 3 | 0.58 | 0.45 | 1 | 0.56 | 0.43 |
|  |  | 9 | 3 | 0.34 | 0.34 | 1 | 0.32 | 0.35 |
|  |  | 10 | 3 | 0.51 | 0.60 | 1 | 0.49 | 0.60 |
|  |  | 11 | 3 | 0.38 | 0.30 | 1 | 0.37 | 0.31 |
|  |  | 12 | 3 | 0.51 | 0.34 | 1 | 0.47 | 0.36 |
|  |  | 13 | 3 | 0.34 | 0.39 | 1 | 0.33 | 0.38 |
|  |  | 14 | 3 | 0.34 | 0.44 | 1 | 0.32 | 0.46 |
|  |  | 15 | 3 | 0.46 | 0.67 | 1 | 0.42 | 0.69 |
|  |  | 16 | 3 | 0.49 | 0.65 | 1 | 0.44 | 0.65 |
|  |  | 17 | 3 | 0.67 | 0.55 | 1 | 0.61 | 0.50 |
| MA | 8 | 18 | 6 | 0.58 | 0.80 | 2 | 0.49 | 0.77 |
|  |  | 19 | 3 | 0.50 | 0.65 | 1 | 0.47 | 0.65 |
|  |  | 20 | 3 | 0.65 | 0.72 | 1 | 0.61 | 0.71 |
|  |  | 21 | 6 | 0.74 | 0.73 | 2 | 0.67 | 0.69 |
|  |  | 22 | 3 | 0.78 | 0.60 | 1 | 0.76 | 0.58 |
|  |  | 23 | 3 | 0.81 | 0.53 | 1 | 0.79 | 0.52 |
|  |  | 24 | 3 | 0.55 | 0.59 | 1 | 0.53 | 0.58 |
|  |  | 25 | 3 | 0.46 | 0.66 | 1 | 0.41 | 0.66 |
|  |  | 26 | 3 | 0.76 | 0.65 | 1 | 0.75 | 0.63 |
|  |  | 27 | 3 | 0.52 | 0.57 | 1 | 0.51 | 0.56 |
|  |  | 28 | 3 | 0.57 | 0.54 | 1 | 0.52 | 0.57 |
|  |  | 29 | 6 | 0.56 | 0.64 | 2 | 0.40 | 0.60 |
|  |  | 30 | 6 | 0.62 | 0.66 | 2 | 0.46 | 0.58 |
|  |  | 31 | 6 | 0.45 | 0.70 | 2 | 0.37 | 0.67 |
|  |  | 32 | 3 | 0.23 | 0.55 | 1 | 0.18 | 0.52 |
|  |  | 33 | 3 | 0.25 | 0.08 | 1 | 0.22 | 0.05 |
|  |  | 34 | 3 | 0.38 | 0.29 | 1 | 0.36 | 0.28 |
|  |  | 35 | 3 | 0.63 | 0.67 | 1 | 0.61 | 0.66 |

## Table 28

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

|  |  | With Level of Independence |  |  | Without Level of Independence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score | Item | Item-Test | Max Score | Item | Item-Test |
| Content | Grade | Item | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
| MA | 36 | 3 | 0.58 | 0.65 | 1 | 0.55 | 0.63 |  |
|  | 8 | 37 | 3 | 0.31 | 0.34 | 1 | 0.29 | 0.35 |
|  |  | 38 | 3 | 0.49 | 0.50 | 1 | 0.46 | 0.50 |

Table 28
Mathematics Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 6 | 0.70 | 0.76 | 2 | 0.58 | 0.72 |
|  |  | 2 | 6 | 0.72 | 0.75 | 2 | 0.64 | 0.77 |
|  |  | 3 | 6 | 0.60 | 0.76 | 2 | 0.50 | 0.73 |
|  |  | 4 | 3 | 0.50 | 0.43 | 1 | 0.47 | 0.47 |
|  |  | 5 | 6 | 0.73 | 0.74 | 2 | 0.62 | 0.77 |
|  |  | 6 | 6 | 0.44 | 0.63 | 2 | 0.32 | 0.57 |
|  |  | 7 | 3 | 0.63 | 0.66 | 1 | 0.60 | 0.67 |
|  |  | 8 | 3 | 0.54 | 0.57 | 1 | 0.53 | 0.57 |
|  |  | 9 | 3 | 0.43 | 0.45 | 1 | 0.42 | 0.46 |
|  |  | 10 | 3 | 0.46 | 0.36 | 1 | 0.44 | 0.36 |
|  |  | 11 | 3 | 0.32 | 0.33 | 1 | 0.30 | 0.34 |
|  |  | 12 | 3 | 0.31 | 0.38 | 1 | 0.30 | 0.39 |
|  |  | 13 | 6 | 0.56 | 0.79 | 2 | 0.42 | 0.74 |
|  |  | 14 | 3 | 0.37 | 0.64 | 1 | 0.34 | 0.64 |
|  |  | 15 | 6 | 0.57 | 0.80 | 2 | 0.49 | 0.77 |
|  |  | 16 | 3 | 0.45 | 0.43 | 1 | 0.39 | 0.37 |
|  |  | 17 | 3 | 0.35 | 0.58 | 1 | 0.30 | 0.59 |
| MA | 9 | 18 | 3 | 0.18 | 0.20 | 1 | 0.15 | 0.21 |
|  |  | 19 | 3 | 0.36 | 0.54 | 1 | 0.32 | 0.55 |
|  |  | 20 | 3 | 0.76 | 0.57 | 1 | 0.72 | 0.54 |
|  |  | 21 | 3 | 0.27 | 0.24 | 1 | 0.25 | 0.23 |
|  |  | 22 | 3 | 0.39 | 0.33 | 1 | 0.35 | 0.30 |
|  |  | 23 | 3 | 0.66 | 0.62 | 1 | 0.64 | 0.63 |
|  |  | 24 | 3 | 0.66 | 0.46 | 1 | 0.63 | 0.45 |
|  |  | 25 | 6 | 0.55 | 0.62 | 2 | 0.44 | 0.59 |
|  |  | 26 | 3 | 0.66 | 0.63 | 1 | 0.64 | 0.62 |
|  |  | 27 | 3 | 0.53 | 0.64 | 1 | 0.50 | 0.65 |
|  |  | 28 | 6 | 0.61 | 0.71 | 2 | 0.48 | 0.68 |
|  |  | 29 | 6 | 0.47 | 0.74 | 2 | 0.38 | 0.71 |
|  |  | 30 | 3 | 0.23 | 0.52 | 1 | 0.17 | 0.46 |
|  |  | 31 | 3 | 0.28 | 0.27 | 1 | 0.25 | 0.24 |
|  |  | 32 | 3 | 0.26 | 0.25 | 1 | 0.23 | 0.24 |
|  |  | 33 | 3 | 0.37 | 0.38 | 1 | 0.34 | 0.38 |
|  |  | 34 | 3 | 0.48 | 0.54 | 1 | 0.47 | 0.53 |
|  |  | 35 | 3 | 0.22 | 0.09 | 1 | 0.20 | 0.11 |

## Table 28

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

|  |  | With Level of Independence |  | Without Level of Independence |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score | Item | Item-Test | Max Score | Item | Item-Test |
| Content | Grade | Item | Points | Difficulty | Correlation | Points | Difficulty | Correlation |
| MA | 36 | 3 | 0.39 | 0.34 | 1 | 0.36 | 0.33 |  |
|  | 9 | 37 | 3 | 0.52 | 0.59 | 1 | 0.49 | 0.59 |
|  |  | 38 | 3 | 0.34 | 0.41 | 1 | 0.31 | 0.43 |

Table 28
Mathematics Item Level Statistics With and Without Level of Independence (continued)

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
|  |  | 1 | 6 | 0.65 | 0.73 | 2 | 0.53 | 0.69 |
|  |  | 2 | 6 | 0.74 | 0.68 | 2 | 0.64 | 0.70 |
|  |  | 3 | 6 | 0.60 | 0.71 | 2 | 0.51 | 0.70 |
|  |  | 4 | 6 | 0.54 | 0.62 | 2 | 0.44 | 0.63 |
|  |  | 5 | 3 | 0.33 | 0.50 | 1 | 0.28 | 0.50 |
|  |  | 6 | 6 | 0.74 | 0.72 | 2 | 0.63 | 0.73 |
|  |  | 7 | 3 | 0.68 | 0.64 | 1 | 0.66 | 0.62 |
|  |  | 8 | 3 | 0.52 | 0.47 | 1 | 0.51 | 0.48 |
|  |  | 9 | 3 | 0.42 | 0.43 | 1 | 0.39 | 0.44 |
|  |  | 10 | 3 | 0.33 | 0.31 | 1 | 0.30 | 0.30 |
|  |  | 11 | 3 | 0.20 | 0.10 | 1 | 0.18 | 0.05 |
|  |  | 12 | 3 | 0.28 | 0.39 | 1 | 0.26 | 0.37 |
|  |  | 13 | 3 | 0.33 | 0.21 | 1 | 0.30 | 0.18 |
|  |  | 14 | 3 | 0.31 | 0.30 | 1 | 0.28 | 0.28 |
|  |  | 15 | 6 | 0.66 | 0.72 | 2 | 0.55 | 0.71 |
|  |  | 16 | 3 | 0.66 | 0.66 | 1 | 0.61 | 0.63 |
|  |  | 17 | 3 | 0.71 | 0.59 | 1 | 0.67 | 0.60 |
| MA | 10 | 18 | 3 | 0.20 | 0.37 | 1 | 0.16 | 0.32 |
|  |  | 19 | 6 | 0.46 | 0.71 | 2 | 0.35 | 0.66 |
|  |  | 20 | 3 | 0.37 | 0.42 | 1 | 0.32 | 0.39 |
|  |  | 21 | 3 | 0.31 | 0.53 | 1 | 0.28 | 0.52 |
|  |  | 22 | 3 | 0.37 | 0.29 | 1 | 0.35 | 0.25 |
|  |  | 23 | 3 | 0.61 | 0.58 | 1 | 0.59 | 0.58 |
|  |  | 24 | 6 | 0.81 | 0.71 | 2 | 0.75 | 0.69 |
|  |  | 25 | 3 | 0.24 | 0.45 | 1 | 0.21 | 0.44 |
|  |  | 26 | 3 | 0.58 | 0.72 | 1 | 0.54 | 0.72 |
|  |  | 27 | 3 | 0.62 | 0.63 | 1 | 0.60 | 0.64 |
|  |  | 28 | 6 | 0.58 | 0.59 | 2 | 0.43 | 0.55 |
|  |  | 29 | 6 | 0.59 | 0.63 | 2 | 0.39 | 0.60 |
|  |  | 30 | 6 | 0.41 | 0.70 | 2 | 0.29 | 0.64 |
|  |  | 31 | 3 | 0.09 | 0.37 | 1 | 0.06 | 0.31 |
|  |  | 32 | 3 | 0.31 | 0.23 | 1 | 0.27 | 0.20 |
|  |  | 33 | 3 | 0.19 | 0.12 | 1 | 0.17 | 0.11 |
|  |  | 34 | 3 | 0.19 | 0.27 | 1 | 0.16 | 0.25 |
|  |  | 35 | 3 | 0.35 | 0.54 | 1 | 0.32 | 0.54 |

## Table 28

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

| Content | Grade | Item | With Level of Independence |  |  | Without Level of Independence |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max Score Points | Item Difficulty | Item-Test Correlation | Max Score Points | Item Difficulty | Item-Test Correlation |
| MA | 10 | 36 | 6 | 0.39 | 0.61 | 2 | 0.27 | 0.57 |
|  |  | 37 | 3 | 0.47 | 0.58 | 1 | 0.45 | 0.59 |
|  |  | 38 | 3 | 0.58 | 0.60 | 1 | 0.57 | 0.59 |
|  |  | 39 | 3 | 0.57 | 0.59 | 1 | 0.55 | 0.58 |
|  |  | 40 | 3 | 0.30 | 0.37 | 1 | 0.28 | 0.36 |

Table 29
Summary of $P$-values and Point-Biserial by Grade and Content Area Including Level of Independence

|  |  | $P$-value |  |  | Point Biserial |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | High | Mean | Low | High | Mean | Low |
| RD | 3 | 0.87 | 0.54 | 0.23 | 0.67 | 0.51 | 0.24 |
|  | 4 | 0.84 | 0.54 | 0.24 | 0.69 | 0.54 | 0.34 |
|  | 5 | 0.85 | 0.56 | 0.23 | 0.73 | 0.56 | 0.21 |
|  | 6 | 0.87 | 0.61 | 0.25 | 0.71 | 0.57 | 0.17 |
|  | 7 | 0.85 | 0.53 | 0.23 | 0.70 | 0.52 | 0.23 |
|  | 8 | 0.84 | 0.52 | 0.31 | 0.69 | 0.53 | 0.33 |
|  | 9 | 0.85 | 0.55 | 0.29 | 0.73 | 0.56 | 0.27 |
|  | 10 | 0.75 | 0.50 | 0.26 | 0.69 | 0.50 | 0.30 |
|  | 3 | 0.81 | 0.51 | 0.27 | 0.81 | 0.54 | 0.25 |
|  | 4 | 0.79 | 0.50 | 0.18 | 0.83 | 0.55 | 0.17 |
|  | 5 | 0.81 | 0.55 | 0.22 | 0.86 | 0.58 | 0.28 |
|  | 6 | 0.83 | 0.59 | 0.35 | 0.84 | 0.58 | 0.20 |
| WR | 7 | 0.83 | 0.56 | 0.21 | 0.88 | 0.59 | 0.21 |
|  | 8 | 0.83 | 0.55 | 0.27 | 0.88 | 0.57 | 0.18 |
|  | 9 | 0.81 | 0.56 | 0.30 | 0.87 | 0.58 | 0.18 |
|  | 10 | 0.83 | 0.54 | 0.17 | 0.86 | 0.55 | 0.14 |
|  | 3 | 0.88 | 0.62 | 0.37 | 0.80 | 0.61 | 0.39 |
|  | 4 | 0.87 | 0.62 | 0.12 | 0.80 | 0.64 | 0.25 |
|  | 5 | 0.84 | 0.56 | 0.29 | 0.77 | 0.62 | 0.35 |
|  | 6 | 0.82 | 0.58 | 0.27 | 0.79 | 0.60 | 0.15 |
|  | 7 | 0.80 | 0.52 | 0.13 | 0.76 | 0.57 | 0.33 |
| MA | 8 | 0.81 | 0.53 | 0.23 | 0.80 | 0.56 | 0.08 |
|  | 9 | 0.76 | 0.47 | 0.18 | 0.80 | 0.52 | 0.09 |
|  | 10 | 0.81 | 0.46 | 0.09 | 0.73 | 0.51 | 0.10 |

Table 30
Summary of $P$-values and Point-Biserial by Grade and Content Area Without Including Level of Independence

|  |  | $P$-value |  |  | Point Biserial |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | High | Mean | Low | High | Mean | Low |
| RD | 3 | 0.85 | 0.51 | 0.21 | 0.70 | 0.53 | 0.26 |
|  | 4 | 0.83 | 0.52 | 0.21 | 0.69 | 0.55 | 0.34 |
|  | 5 | 0.84 | 0.53 | 0.21 | 0.73 | 0.57 | 0.23 |
|  | 6 | 0.85 | 0.60 | 0.23 | 0.72 | 0.58 | 0.19 |
|  | 7 | 0.84 | 0.52 | 0.22 | 0.72 | 0.53 | 0.24 |
|  | 8 | 0.83 | 0.51 | 0.29 | 0.69 | 0.53 | 0.33 |
|  | 9 | 0.84 | 0.53 | 0.26 | 0.74 | 0.57 | 0.27 |
|  | 10 | 0.73 | 0.48 | 0.24 | 0.69 | 0.50 | 0.31 |
|  | 3 | 0.80 | 0.46 | 0.24 | 0.77 | 0.54 | 0.25 |
|  | 4 | 0.75 | 0.47 | 0.16 | 0.81 | 0.56 | 0.19 |
|  | 5 | 0.77 | 0.51 | 0.20 | 0.82 | 0.58 | 0.29 |
| WR | 6 | 0.80 | 0.56 | 0.33 | 0.82 | 0.58 | 0.21 |
|  | 7 | 0.80 | 0.53 | 0.20 | 0.85 | 0.60 | 0.21 |
|  | 8 | 0.82 | 0.52 | 0.25 | 0.83 | 0.57 | 0.20 |
|  | 9 | 0.78 | 0.53 | 0.29 | 0.85 | 0.59 | 0.17 |
|  | 10 | 0.80 | 0.51 | 0.16 | 0.84 | 0.54 | 0.16 |
|  | 3 | 0.86 | 0.55 | 0.29 | 0.79 | 0.60 | 0.35 |
|  | 4 | 0.85 | 0.57 | 0.09 | 0.81 | 0.63 | 0.26 |
|  | 5 | 0.79 | 0.50 | 0.22 | 0.77 | 0.61 | 0.36 |
|  | 6 | 0.81 | 0.52 | 0.24 | 0.80 | 0.59 | 0.17 |
|  | 7 | 0.73 | 0.46 | 0.09 | 0.77 | 0.57 | 0.34 |
| MA | 8 | 0.79 | 0.48 | 0.18 | 0.77 | 0.55 | 0.05 |
|  | 9 | 0.72 | 0.42 | 0.15 | 0.77 | 0.51 | 0.11 |
|  | 10 | 0.75 | 0.40 | 0.06 | 0.73 | 0.49 | 0.05 |

Table 31
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value)


## Table 31 <br> Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value) (continued)

| Expanded |  |  | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Benchmark |  | High | Mean | Low | SD | High | Mean | Low | SD |
| RD | 5 | 1.2 | Demonstrate understanding of symbolic representation | 0.85 | 0.70 | 0.53 | 0.14 | 0.64 | 0.60 | 0.55 | 0.04 |
|  |  | 1.4 | Use a variety of strategies to make meaning of text | 0.74 | 0.61 | 0.46 | 0.13 | 0.73 | 0.64 | 0.50 | 0.10 |
|  |  | 2.1 | Make connections to reading passages | 0.75 | 0.56 | 0.36 | 0.18 | 0.69 | 0.58 | 0.41 | 0.12 |
|  |  | 1.3 | Demonstrate understanding of beginning principles of phonics | 0.81 | 0.53 | 0.23 | 0.24 | 0.66 | 0.50 | 0.21 | 0.19 |
|  |  | 3.2 | Understand informational text | 0.65 | 0.52 | 0.45 | 0.08 | 0.63 | 0.53 | 0.41 | 0.10 |
|  |  | 2.2 | Identify elements of literature (character, plot, setting) | 0.61 | 0.50 | 0.40 | 0.10 | 0.71 | 0.58 | 0.52 | 0.08 |
|  |  | 3.1 | Demonstrate knowledge that various texts have different purposes | 0.68 | 0.47 | 0.36 | 0.12 | 0.70 | 0.50 | 0.25 | 0.19 |
|  | 6 | 1.3 | Demonstrate understanding of beginning principles of phonics | 0.87 | 0.74 | 0.44 | 0.18 | 0.70 | 0.60 | 0.42 | 0.12 |
|  |  | 1.2 | Demonstrate understanding of symbolic representation | 0.78 | 0.69 | 0.58 | 0.08 | 0.68 | 0.64 | 0.57 | 0.05 |
|  |  | 1.4 | Use a variety of strategies to make meaning of text | 0.82 | 0.68 | 0.47 | 0.18 | 0.71 | 0.61 | 0.54 | 0.08 |
|  |  | 2.1 | Make connections to reading passages | 0.74 | 0.60 | 0.51 | 0.10 | 0.66 | 0.61 | 0.55 | 0.04 |
|  |  | 3.2 | Understand informational text | 0.77 | 0.54 | 0.34 | 0.20 | 0.61 | 0.46 | 0.17 | 0.17 |
|  |  | 2.2 | Identify elements of literature (character, plot, setting) | 0.71 | 0.53 | 0.40 | 0.12 | 0.66 | 0.57 | 0.47 | 0.08 |
|  |  | 3.1 | Demonstrate knowledge that various texts have different purposes | 0.84 | 0.49 | 0.25 | 0.29 | 0.64 | 0.49 | 0.34 | 0.13 |

## Table 31 <br> Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value) (continued)

| Content | Grade | Expanded Benchmark | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Mean | Low | SD | High | Mean | Low | SD |
| RD | 7 | 1.3 | Demonstrate understanding of beginning principles of phonics | 0.85 | 0.73 | 0.46 | 0.17 | 0.67 | 0.61 | 0.43 | 0.10 |
|  |  | 1.2 | Demonstrate understanding of symbolic representation | 0.81 | 0.71 | 0.62 | 0.09 | 0.69 | 0.65 | 0.60 | 0.04 |
|  |  | 1.4 | Use a variety of strategies to make meaning of text | 0.80 | 0.60 | 0.34 | 0.20 | 0.70 | 0.58 | 0.42 | 0.11 |
|  |  | 3.2 | Understand informational text | 0.62 | 0.48 | 0.35 | 0.11 | 0.60 | 0.48 | 0.35 | 0.09 |
|  |  | 2.1 | Make connections to reading passages | 0.71 | 0.45 | 0.23 | 0.20 | 0.66 | 0.49 | 0.30 | 0.15 |
|  |  | 2.2 | Identify elements of literature (character, plot, setting) | 0.56 | 0.43 | 0.27 | 0.10 | 0.64 | 0.51 | 0.38 | 0.12 |
|  |  | 3.1 | Demonstrate knowledge that various texts have different purposes | 0.61 | 0.36 | 0.25 | 0.15 | 0.46 | 0.32 | 0.23 | 0.09 |
|  | 8 | 1.3 | Demonstrate understanding of beginning principles of phonics | 0.84 | 0.67 | 0.50 | 0.16 | 0.63 | 0.57 | 0.48 | 0.07 |
|  |  | 1.2 | Demonstrate understanding of symbolic representation | 0.75 | 0.63 | 0.43 | 0.14 | 0.68 | 0.60 | 0.53 | 0.07 |
|  |  | 1.4 | Use a variety of strategies to make meaning of text | 0.75 | 0.51 | 0.31 | 0.21 | 0.69 | 0.55 | 0.38 | 0.14 |
|  |  | 3.2 | Understand informational text | 0.63 | 0.49 | 0.35 | 0.12 | 0.58 | 0.50 | 0.34 | 0.10 |
|  |  | 3.1 | Demonstrate knowledge that various texts have different purposes | 0.62 | 0.48 | 0.37 | 0.09 | 0.63 | 0.52 | 0.35 | 0.10 |
|  |  | 2.1 | Make connections to reading passages | 0.54 | 0.47 | 0.33 | 0.08 | 0.56 | 0.47 | 0.33 | 0.10 |
|  |  | 2.2 | Identify elements of literature (character, plot, setting) | 0.52 | 0.43 | 0.35 | 0.07 | 0.53 | 0.47 | 0.34 | 0.08 |

Table 31
Reading Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value) (continued)

| Expanded |  |  | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Benchmark |  | High | Mean | Low | SD | High | Mean | Low | SD |
| RD | 9 | 1.3 | Demonstrate understanding of beginning principles of phonics | 0.85 | 0.69 | 0.48 | 0.15 | 0.63 | 0.60 | 0.52 | 0.05 |
|  |  | 1.2 | Demonstrate understanding of symbolic representation | 0.76 | 0.65 | 0.44 | 0.15 | 0.68 | 0.61 | 0.50 | 0.08 |
|  |  | 1.4 | Use a variety of strategies to make meaning of text | 0.77 | 0.60 | 0.29 | 0.20 | 0.68 | 0.59 | 0.40 | 0.12 |
|  |  | 3.2 | Understand informational text | 0.66 | 0.54 | 0.46 | 0.08 | 0.63 | 0.52 | 0.41 | 0.09 |
|  |  | 2.2 | Identify elements of literature (character, plot, setting) | 0.59 | 0.50 | 0.31 | 0.11 | 0.73 | 0.54 | 0.27 | 0.17 |
|  |  | 2.1 | Make connections to reading passages | 0.50 | 0.46 | 0.41 | 0.04 | 0.61 | 0.53 | 0.44 | 0.08 |
|  |  | 3.1 | Demonstrate knowledge that various texts have different purposes | 0.52 | 0.44 | 0.29 | 0.10 | 0.64 | 0.52 | 0.37 | 0.12 |
|  | 10 | 1.3 | Demonstrate understanding of beginning principles of phonics | 0.69 | 0.55 | 0.38 | 0.11 | 0.61 | 0.47 | 0.37 | 0.09 |
|  |  | 1.2 | Demonstrate understanding of symbolic representation | 0.75 | 0.54 | 0.31 | 0.17 | 0.67 | 0.53 | 0.38 | 0.13 |
|  |  | 2.2 | Identify elements of literature (character, plot, setting) | 0.70 | 0.52 | 0.28 | 0.18 | 0.66 | 0.55 | 0.34 | 0.15 |
|  |  | 1.4 | Use a variety of strategies to make meaning of text | 0.71 | 0.52 | 0.41 | 0.13 | 0.62 | 0.46 | 0.30 | 0.17 |
|  |  | 3.2 | Understand informational text | 0.59 | 0.49 | 0.43 | 0.07 | 0.61 | 0.51 | 0.41 | 0.07 |
|  |  | 2.1 | Make connections to reading passages | 0.59 | 0.48 | 0.38 | 0.08 | 0.69 | 0.55 | 0.40 | 0.11 |
|  |  | 3.1 | Demonstrate knowledge that various texts have different purposes | 0.53 | 0.40 | 0.26 | 0.11 | 0.53 | 0.41 | 0.34 | 0.08 |

## Table 32 <br> Writing Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value)

| Expanded |  |  | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Benchmark |  | High | Mean | Low | SD | High | Mean | Low | SD |
| WR | 3 | 1.1 | Demonstrate an understanding that writing communicates a message | 0.77 | 0.62 | 0.30 | 0.19 | 0.73 | 0.58 | 0.25 | 0.19 |
|  |  | 1.2 | Organize writing to create a draft document | 0.81 | 0.60 | 0.47 | 0.17 | 0.80 | 0.61 | 0.51 | 0.11 |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 0.73 | 0.56 | 0.41 | 0.14 | 0.74 | 0.60 | 0.47 | 0.10 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.68 | 0.42 | 0.28 | 0.14 | 0.78 | 0.45 | 0.26 | 0.19 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.49 | 0.38 | 0.27 | 0.08 | 0.81 | 0.50 | 0.26 | 0.25 |
|  | 4 | 2.1 | Use systematic conventions to make written product understandable by others | 0.74 | 0.58 | 0.26 | 0.18 | 0.78 | 0.61 | 0.41 | 0.14 |
|  |  | 1.1 | Demonstrate an understanding that writing communicates a message | 0.79 | 0.56 | 0.32 | 0.20 | 0.75 | 0.57 | 0.34 | 0.16 |
|  |  | 1.2 | Organize writing to create a draft document | 0.70 | 0.54 | 0.32 | 0.14 | 0.82 | 0.59 | 0.24 | 0.22 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.73 | 0.48 | 0.35 | 0.13 | 0.78 | 0.52 | 0.32 | 0.15 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.52 | 0.40 | 0.18 | 0.13 | 0.83 | 0.50 | 0.17 | 0.25 |
|  | 5 | 1.1 | Demonstrate an understanding that writing communicates a message | 0.81 | 0.68 | 0.42 | 0.15 | 0.76 | 0.63 | 0.42 | 0.13 |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 0.77 | 0.62 | 0.33 | 0.16 | 0.77 | 0.61 | 0.39 | 0.14 |
|  |  | 1.2 | Organize writing to create a draft document | 0.73 | 0.55 | 0.29 | 0.18 | 0.85 | 0.59 | 0.38 | 0.17 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.73 | 0.46 | 0.22 | 0.16 | 0.82 | 0.49 | 0.28 | 0.18 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.54 | 0.45 | 0.26 | 0.11 | 0.86 | 0.59 | 0.28 | 0.23 |

Table 32
Writing Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value) (continued)

| Expanded |  |  | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Benchmark |  | High | Mean | Low | SD | High | Mean | Low | SD |
| WR | 6 | 1.1 | Demonstrate an understanding that writing communicates a message | 0.83 | 0.74 | 0.69 | 0.05 | 0.77 | 0.68 | 0.61 | 0.06 |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 0.78 | 0.67 | 0.49 | 0.13 | 0.78 | 0.61 | 0.40 | 0.15 |
|  |  | 1.2 | Organize writing to create a draft document | 0.73 | 0.65 | 0.49 | 0.10 | 0.84 | 0.67 | 0.38 | 0.17 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.75 | 0.48 | 0.36 | 0.13 | 0.80 | 0.45 | 0.29 | 0.17 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.59 | 0.48 | 0.35 | 0.09 | 0.83 | 0.53 | 0.20 | 0.25 |
|  | 7 | 1.1 | Demonstrate an understanding that writing communicates a message | 0.83 | 0.70 | 0.47 | 0.13 | 0.84 | 0.70 | 0.60 | 0.09 |
|  |  | 1.2 | Organize writing to create a draft document | 0.66 | 0.60 | 0.52 | 0.06 | 0.86 | 0.68 | 0.55 | 0.12 |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 0.79 | 0.58 | 0.29 | 0.19 | 0.77 | 0.59 | 0.32 | 0.16 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.62 | 0.48 | 0.21 | 0.15 | 0.59 | 0.48 | 0.27 | 0.12 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.67 | 0.47 | 0.31 | 0.13 | 0.88 | 0.55 | 0.21 | 0.26 |
|  | 8 | 1.1 | Demonstrate an understanding that writing communicates a message | 0.83 | 0.74 | 0.70 | 0.05 | 0.85 | 0.74 | 0.67 | 0.06 |
|  |  | 1.2 | Organize writing to create a draft document | 0.73 | 0.65 | 0.61 | 0.05 | 0.85 | 0.71 | 0.61 | 0.09 |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 0.81 | 0.50 | 0.31 | 0.22 | 0.75 | 0.46 | 0.24 | 0.22 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.64 | 0.47 | 0.30 | 0.12 | 0.68 | 0.50 | 0.26 | 0.14 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.63 | 0.41 | 0.27 | 0.15 | 0.88 | 0.49 | 0.18 | 0.27 |

Table 32
Writing Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value) (continued)

| Content | Grade | Expanded Benchmark | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Mean | Low | SD | High | Mean | Low | SD |
| WR | 9 | 1.1 | Demonstrate an understanding that writing communicates a message | 0.81 | 0.75 | 0.70 | 0.04 | 0.82 | 0.73 | 0.59 | 0.08 |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 0.81 | 0.59 | 0.40 | 0.17 | 0.77 | 0.61 | 0.37 | 0.15 |
|  |  | 1.2 | Organize writing to create a draft document | 0.68 | 0.53 | 0.43 | 0.10 | 0.87 | 0.57 | 0.43 | 0.19 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.63 | 0.48 | 0.32 | 0.13 | 0.87 | 0.57 | 0.18 | 0.27 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.60 | 0.43 | 0.30 | 0.11 | 0.57 | 0.44 | 0.30 | 0.11 |
|  | 10 | 1.1 | Demonstrate an understanding that writing communicates a message | 0.83 | 0.72 | 0.54 | 0.10 | 0.82 | 0.70 | 0.58 | 0.08 |
|  |  | 1.2 | Organize writing to create a draft document | 0.66 | 0.57 | 0.47 | 0.08 | 0.86 | 0.63 | 0.51 | 0.13 |
|  |  | 2.2 | Apply elements of writing through appropriate word usage | 0.64 | 0.50 | 0.29 | 0.12 | 0.85 | 0.51 | 0.26 | 0.24 |
|  |  | 2.3 | Edit a written product using legible handwriting/word processor for publication | 0.63 | 0.46 | 0.17 | 0.16 | 0.64 | 0.46 | 0.14 | 0.18 |
|  |  | 2.1 | Use systematic conventions to make written product understandable by others | 0.78 | 0.45 | 0.26 | 0.19 | 0.70 | 0.46 | 0.29 | 0.16 |

Table 33
Mathematics Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value)

| Content GradeExpanded <br> Benchmark |  |  | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | High | Mean | Low | SD | High | Mean | Low | SD |
|  |  | 4 |  | Identifies, sorts, and matches geometric shapes | 0.88 | 0.72 | 0.37 | 0.19 | 0.68 | 0.58 | 0.39 | 0.10 |
|  |  | 1 | Counts, represents quantities, reads and writes numbers | 0.87 | 0.70 | 0.44 | 0.14 | 0.77 | 0.66 | 0.47 | 0.10 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.69 | 0.59 | 0.53 | 0.08 | 0.61 | 0.57 | 0.53 | 0.04 |
|  | 3 | 3 | Displays and analyzes data | 0.67 | 0.56 | 0.37 | 0.12 | 0.80 | 0.67 | 0.51 | 0.13 |
|  |  | 6 | Uses calculation strategies to compute problems | 0.69 | 0.54 | 0.42 | 0.12 | 0.69 | 0.63 | 0.50 | 0.09 |
|  |  | 5 | Applies a variety of measurement skills | 0.64 | 0.53 | 0.46 | 0.07 | 0.64 | 0.53 | 0.40 | 0.09 |
|  |  | 1 | Counts, represents quantities, reads and writes numbers | 0.87 | 0.72 | 0.57 | 0.10 | 0.80 | 0.67 | 0.58 | 0.07 |
|  |  | 4 | Identifies, sorts, and matches geometric shapes | 0.85 | 0.69 | 0.52 | 0.12 | 0.78 | 0.65 | 0.46 | 0.11 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.70 | 0.59 | 0.51 | 0.09 | 0.69 | 0.61 | 0.49 | 0.09 |
| MA | 4 | 5 | Applies a variety of measurement skills | 0.70 | 0.55 | 0.37 | 0.13 | 0.66 | 0.61 | 0.56 | 0.04 |
|  |  | 6 | Uses calculation strategies to compute problems | 0.64 | 0.55 | 0.38 | 0.12 | 0.77 | 0.67 | 0.59 | 0.09 |
|  |  | 3 | Displays and analyzes data | 0.77 | 0.55 | 0.12 | 0.25 | 0.74 | 0.61 | 0.25 | 0.20 |
|  |  | 4 | Identifies, sorts, and matches geometric shapes | 0.84 | 0.65 | 0.47 | 0.13 | 0.71 | 0.62 | 0.46 | 0.09 |
|  |  | 1 | Counts, represents quantities, reads and writes numbers | 0.81 | 0.62 | 0.36 | 0.15 | 0.77 | 0.65 | 0.35 | 0.11 |
|  | 5 | 3 | Displays and analyzes data | 0.73 | 0.54 | 0.35 | 0.15 | 0.77 | 0.68 | 0.54 | 0.10 |
|  | 5 | 6 | Uses calculation strategies to compute problems | 0.77 | 0.52 | 0.33 | 0.21 | 0.69 | 0.60 | 0.40 | 0.14 |
|  |  | 5 | Applies a variety of measurement skills | 0.64 | 0.50 | 0.29 | 0.11 | 0.73 | 0.57 | 0.47 | 0.09 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.60 | 0.47 | 0.33 | 0.12 | 0.63 | 0.55 | 0.42 | 0.08 |

Table 33
Mathematics Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value) (continued)

| Content | Grade | Expanded Benchmark | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Mean | Low | SD | High | Mean | Low | SD |
| MA | 6 | 1 | Counts, represents quantities, reads and writes numbers | 0.81 | 0.66 | 0.49 | 0.11 | 0.79 | 0.67 | 0.54 | 0.10 |
|  |  | 4 | Identifies, sorts, and matches geometric shapes | 0.82 | 0.65 | 0.32 | 0.20 | 0.73 | 0.54 | 0.23 | 0.20 |
|  |  | 3 | Displays and analyzes data | 0.75 | 0.57 | 0.36 | 0.14 | 0.75 | 0.66 | 0.57 | 0.08 |
|  |  | 6 | Uses calculation strategies to compute problems | 0.78 | 0.53 | 0.29 | 0.21 | 0.68 | 0.58 | 0.45 | 0.11 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.62 | 0.52 | 0.43 | 0.09 | 0.72 | 0.57 | 0.48 | 0.10 |
|  |  | 5 | Applies a variety of measurement skills | 0.67 | 0.51 | 0.27 | 0.16 | 0.70 | 0.54 | 0.15 | 0.21 |
|  | 7 | 1 | Counts, represents quantities, reads and writes numbers | 0.80 | 0.63 | 0.44 | 0.12 | 0.76 | 0.67 | 0.50 | 0.10 |
|  |  | 4 | Identifies, sorts, and matches geometric shapes | 0.73 | 0.57 | 0.36 | 0.16 | 0.64 | 0.53 | 0.35 | 0.14 |
|  |  | 3 | Displays and analyzes data | 0.77 | 0.56 | 0.33 | 0.19 | 0.72 | 0.64 | 0.46 | 0.11 |
|  |  | 5 | Applies a variety of measurement skills | 0.64 | 0.48 | 0.13 | 0.19 | 0.73 | 0.62 | 0.43 | 0.12 |
|  |  | 6 | Uses calculation strategies to compute problems | 0.53 | 0.43 | 0.34 | 0.08 | 0.61 | 0.48 | 0.40 | 0.10 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.55 | 0.42 | 0.27 | 0.12 | 0.61 | 0.47 | 0.33 | 0.10 |
|  | 8 | 4 | Identifies, sorts, and matches geometric shapes | 0.81 | 0.67 | 0.46 | 0.16 | 0.66 | 0.61 | 0.53 | 0.05 |
|  |  | 3 | Displays and analyzes data | 0.74 | 0.61 | 0.49 | 0.10 | 0.80 | 0.68 | 0.55 | 0.09 |
|  |  | 1 | Counts, represents quantities, reads and writes numbers | 0.73 | 0.60 | 0.45 | 0.10 | 0.73 | 0.62 | 0.36 | 0.13 |
|  |  | 6 | Uses calculation strategies to compute problems | 0.63 | 0.47 | 0.31 | 0.14 | 0.67 | 0.50 | 0.34 | 0.16 |
|  |  | 5 | Applies a variety of measurement skills | 0.62 | 0.45 | 0.23 | 0.15 | 0.70 | 0.50 | 0.08 | 0.21 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.51 | 0.42 | 0.34 | 0.08 | 0.67 | 0.46 | 0.30 | 0.15 |

Table 33
Mathematics Expanded Benchmark Level Statistics, Ordered by Mean Difficulty ( $P$-value) (continued)

| Content | Grade | Expanded <br> Benchmark | Critical Concept | $P$-value |  |  |  | Point Biserial |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | High | Mean | Low | SD | High | Mean | Low | SD |
| MA | 9 | 1 | Counts, represents quantities, reads and writes numbers | 0.73 | 0.62 | 0.44 | 0.11 | 0.76 | 0.67 | 0.43 | 0.12 |
|  |  | 4 | Identifies, sorts, and matches geometric shapes | 0.76 | 0.55 | 0.27 | 0.21 | 0.62 | 0.44 | 0.24 | 0.16 |
|  |  | 5 | Applies a variety of measurement skills | 0.66 | 0.45 | 0.23 | 0.17 | 0.74 | 0.55 | 0.25 | 0.19 |
|  |  | 3 | Displays and analyzes data | 0.57 | 0.41 | 0.18 | 0.15 | 0.80 | 0.56 | 0.20 | 0.23 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.54 | 0.41 | 0.31 | 0.09 | 0.64 | 0.45 | 0.33 | 0.13 |
|  |  | 6 | Uses calculation strategies to compute problems | 0.52 | 0.38 | 0.22 | 0.11 | 0.59 | 0.39 | 0.09 | 0.18 |
|  | 10 | 1 | Counts, represents quantities, reads and writes numbers | 0.74 | 0.58 | 0.33 | 0.15 | 0.73 | 0.65 | 0.50 | 0.08 |
|  |  | 3 | Displays and analyzes data | 0.71 | 0.51 | 0.20 | 0.20 | 0.72 | 0.58 | 0.37 | 0.15 |
|  |  | 4 | Identifies, sorts, and matches geometric shapes | 0.81 | 0.47 | 0.24 | 0.24 | 0.71 | 0.51 | 0.29 | 0.16 |
|  |  | 5 | Applies a variety of measurement skills | 0.62 | 0.42 | 0.09 | 0.20 | 0.72 | 0.50 | 0.12 | 0.23 |
|  |  | 6 | Uses calculation strategies to compute problems | 0.58 | 0.41 | 0.19 | 0.16 | 0.60 | 0.49 | 0.27 | 0.14 |
|  |  | 2 | Identifies, describes, and creates patterns to solve problems | 0.52 | 0.34 | 0.20 | 0.10 | 0.47 | 0.31 | 0.10 | 0.13 |

## Table 34 <br> Reading Grade 3 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 34 <br> Reading Grade 3 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 34 <br> Reading Grade 3 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 34

Reading Grade 3 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 102 | 4 | 589 | $0.68 \%$ | $100 \%$ |
| RD | 3 | 103 | 0 | 589 | $0 \%$ | $100 \%$ |
|  |  | 104 | 0 | 589 | $0 \%$ | $100 \%$ |
|  |  | 105 | 0 | 589 | $0 \%$ | $100 \%$ |

## Table 35 <br> Reading Grade 4 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 35 <br> Reading Grade 4 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 35 <br> Reading Grade 4 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 35

Reading Grade 4 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 102 | 5 | 688 | $0.73 \%$ | $99.85 \%$ |
| RD | 4 | 103 | 0 | 688 | $0 \%$ | $99.85 \%$ |
|  |  | 104 | 0 | 688 | $0 \%$ | $99.85 \%$ |
|  |  | 105 | 1 | 689 | $0.15 \%$ | $100 \%$ |

## Table 36 <br> Reading Grade 5 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 36 <br> Reading Grade 5 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 36 <br> Reading Grade 5 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 36

Reading Grade 5 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 102 | 5 | 682 | $0.73 \%$ | $99.56 \%$ |
| RD | 5 | 103 | 0 | 682 | $0 \%$ | $99.56 \%$ |
|  |  | 104 | 0 | 682 | $0 \%$ | $99.56 \%$ |
|  |  | 105 | 3 | 685 | $0.44 \%$ | $100 \%$ |

## Table 37 <br> Reading Grade 6 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 37 <br> Reading Grade 6 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 37 <br> Reading Grade 6 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 37

Reading Grade 6 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 102 | 6 | 651 | $0.92 \%$ | $99.39 \%$ |
| RD | 6 | 103 | 0 | 651 | $0 \%$ | $99.39 \%$ |
|  |  | 104 | 0 | 651 | $0 \%$ | $99.39 \%$ |
|  |  | 105 | 4 | 655 | $0.61 \%$ | $100 \%$ |

## Table 38 <br> Reading Grade 7 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 38 <br> Reading Grade 7 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw Score | Frequency | Cumulative Frequency | Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RD | 7 | 34 | 4 | 126 | 0.63\% | 20.00\% |
|  |  | 35 | 4 | 130 | 0.63\% | 20.63\% |
|  |  | 36 | 10 | 140 | 1.59\% | 22.22\% |
|  |  | 37 | 3 | 143 | 0.48\% | 22.70\% |
|  |  | 38 | 5 | 148 | 0.79\% | 23.49\% |
|  |  | 39 | 12 | 160 | 1.90\% | 25.40\% |
|  |  | 40 | 2 | 162 | 0.32\% | 25.71\% |
|  |  | 41 | 4 | 166 | 0.63\% | 26.35\% |
|  |  | 42 | 13 | 179 | 2.06\% | 28.41\% |
|  |  | 43 | 4 | 183 | 0.63\% | 29.05\% |
|  |  | 44 | 0 | 183 | 0\% | 29.05\% |
|  |  | 45 | 20 | 203 | 3.17\% | 32.22\% |
|  |  | 46 | 1 | 204 | 0.16\% | 32.38\% |
|  |  | 47 | 5 | 209 | 0.79\% | 33.17\% |
|  |  | 48 | 21 | 230 | 3.33\% | 36.51\% |
|  |  | 49 | 1 | 231 | 0.16\% | 36.67\% |
|  |  | 50 | 5 | 236 | 0.79\% | 37.46\% |
|  |  | 51 | 19 | 255 | 3.02\% | 40.48\% |
|  |  | 52 | 1 | 256 | 0.16\% | 40.63\% |
|  |  | 53 | 4 | 260 | 0.63\% | 41.27\% |
|  |  | 54 | 23 | 283 | 3.65\% | 44.92\% |
|  |  | 55 | 4 | 287 | 0.63\% | 45.56\% |
|  |  | 56 | 5 | 292 | 0.79\% | 46.35\% |
|  |  | 57 | 21 | 313 | 3.33\% | 49.68\% |
|  |  | 58 | 1 | 314 | 0.16\% | 49.84\% |
|  |  | 59 | 5 | 319 | 0.79\% | 50.63\% |
|  |  | 60 | 20 | 339 | 3.17\% | 53.81\% |
|  |  | 61 | 1 | 340 | 0.16\% | 53.97\% |
|  |  | 62 | 3 | 343 | 0.48\% | 54.44\% |
|  |  | 63 | 13 | 356 | 2.06\% | 56.51\% |
|  |  | 64 | 1 | 357 | 0.16\% | 56.67\% |
|  |  | 65 | 5 | 362 | 0.79\% | 57.46\% |
|  |  | 66 | 20 | 382 | 3.17\% | 60.63\% |
|  |  | 67 | 1 | 383 | 0.16\% | 60.79\% |

## Table 38 <br> Reading Grade 7 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 38

Reading Grade 7 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 102 | 2 | 630 | $0.32 \%$ | $100 \%$ |
| RD | 7 | 103 | 0 | 630 | $0 \%$ | $100 \%$ |
|  |  | 104 | 0 | 630 | $0 \%$ | $100 \%$ |
|  |  | 105 | 0 | 630 | $0 \%$ | $100 \%$ |

## Table 39 <br> Reading Grade 8 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 39 <br> Reading Grade 8 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 39 <br> Reading Grade 8 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 39

Reading Grade 8 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 102 | 3 | 589 | $0.51 \%$ | $99.83 \%$ |
| RD | 8 | 103 | 0 | 589 | $0 \%$ | $99.83 \%$ |
|  |  | 104 | 0 | 589 | $0 \%$ | $99.83 \%$ |
|  |  | 105 | 1 | 590 | $0.17 \%$ | $100 \%$ |

## Table 40 <br> Reading Grade 9 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 40 <br> Reading Grade 9 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 40 <br> Reading Grade 9 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 41 <br> Reading Grade 10 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 41 Reading Grade 10 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 41 <br> Reading Grade 10 Raw Score Frequency Distributions (continued)

| Content | Grade | $\begin{array}{c}\text { Raw } \\ \text { Score }\end{array}$ | Frequency | $\begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array}$ | Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | \(\left.\begin{array}{c}Cumulative <br>

Percent\end{array}\right]\)

## Table 42 <br> Writing Grade 3 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 42 <br> Writing Grade 3 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 42 <br> Writing Grade 3 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 42

Writing Grade 3 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR |  |  |  |  |  |  |
|  |  | 102 | 0 | 589 | $0 \%$ | $100 \%$ |
|  |  | 103 | 0 | 589 | $0 \%$ | $100 \%$ |
|  |  | 104 | 0 | 589 | $0 \%$ | $100 \%$ |

## Table 43 <br> Writing Grade 4 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 43 <br> Writing Grade 4 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 43 <br> Writing Grade 4 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 43

Writing Grade 4 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR | 102 | 4 | 679 | $0.58 \%$ | $99.27 \%$ |  |
|  | 103 | 2 | 681 | $0.29 \%$ | $99.56 \%$ |  |
|  | 4 | 104 | 0 | 681 | $0 \%$ | $99.56 \%$ |
|  |  | 105 | 2 | 683 | $0.29 \%$ | $99.85 \%$ |
|  | 106 | 1 | 684 | $0.15 \%$ | $100 \%$ |  |
|  | 107 | 0 | 684 | $0 \%$ | $100 \%$ |  |
|  | 108 | 0 | 684 | $0 \%$ | $100 \%$ |  |

## Table 44 <br> Writing Grade 5 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 44 <br> Writing Grade 5 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 44 <br> Writing Grade 5 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 44
Writing Grade 5 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR |  | 102 | 9 | 688 | $1.30 \%$ | $100 \%$ |
|  |  | 103 | 0 | 688 | $0 \%$ | $100 \%$ |
|  |  | 104 | 1 | 689 | $0.14 \%$ | $100 \%$ |
|  | 105 | 1 | 690 | $0.14 \%$ | $100 \%$ |  |

## Table 45 <br> Writing Grade 6 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 45 <br> Writing Grade 6 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 45 <br> Writing Grade 6 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 45
Writing Grade 6 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR |  | 102 | 2 | 644 | $0.31 \%$ | $99.08 \%$ |
|  |  | 103 | 1 | 645 | $0.15 \%$ | $99.23 \%$ |
|  |  | 104 | 0 | 645 | $0 \%$ | $99.23 \%$ |
|  |  | 5 | 650 | $0.77 \%$ | $100 \%$ |  |

## Table 46 <br> Writing Grade 7 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 46 <br> Writing Grade 7 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 46 <br> Writing Grade 7 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 46

Writing Grade 7 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 102 | 6 | 609 | $0.96 \%$ | $97.28 \%$ |
|  | 103 | 2 | 611 | $0.32 \%$ | $97.60 \%$ |  |
| WR | 7 | 104 | 3 | 614 | $0.48 \%$ | $98.08 \%$ |
|  |  | 105 | 8 | 622 | $1.28 \%$ | $99.36 \%$ |
|  | 106 | 2 | 624 | $0.32 \%$ | $99.68 \%$ |  |
|  |  | 107 | 1 | 625 | $0.16 \%$ | $100 \%$ |
|  | 108 | 1 | 626 | $0.16 \%$ | $100 \%$ |  |

## Table 47 <br> Writing Grade 8 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 47 <br> Writing Grade 8 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 47 <br> Writing Grade 8 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 47
Writing Grade 8 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR | 102 | 5 | 583 | $0.85 \%$ | $98.98 \%$ |  |
|  |  | 103 | 0 | 583 | $0 \%$ | $98.98 \%$ |
|  | 8 | 104 | 1 | 584 | $0.17 \%$ | $99.15 \%$ |
|  |  | 105 | 2 | 586 | $0.34 \%$ | $99.49 \%$ |
|  | 106 | 1 | 587 | $0.17 \%$ | $100 \%$ |  |
|  | 107 | 2 | 589 | $0.34 \%$ | $100 \%$ |  |
|  | 108 | 0 | 589 | $0 \%$ | $100 \%$ |  |

## Table 48

Writing Grade 9 Raw Score Frequency Distributions
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 48 <br> Writing Grade 9 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 48 <br> Writing Grade 9 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 48

Writing Grade 9 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR |  |  |  |  |  |  |
|  |  | 102 | 1 | 518 | $0.19 \%$ | $100 \%$ |
|  |  | 103 | 0 | 518 | $0 \%$ | $100 \%$ |
|  |  | 104 | 0 | 518 | $0 \%$ | $100 \%$ |
|  |  | 0 | 518 | $0 \%$ | $100 \%$ |  |

## Table 49 <br> Writing Grade 10 Raw Score Frequency Distributions

| Content | Grade | Raw Score | Frequency | Cumulative Frequency | Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR |  | 0 | 22 | 22 | 4.03\% | 4.03\% |
|  |  | 1 | 1 | 23 | 0.18\% | 4.21\% |
|  |  | 2 | 1 | 24 | 0.18\% | 4.40\% |
|  |  | 3 | 2 | 26 | 0.37\% | 4.76\% |
|  |  | 4 | 0 | 26 | 0\% | 4.76\% |
|  |  | 5 | 2 | 28 | 0.37\% | 5.13\% |
|  |  | 6 | 1 | 29 | 0.18\% | 5.31\% |
|  |  | 7 | 1 | 30 | 0.18\% | 5.49\% |
|  |  | 8 | 1 | 31 | 0.18\% | 5.68\% |
|  |  | 9 | 2 | 33 | 0.37\% | 6.04\% |
|  |  | 10 | 1 | 34 | 0.18\% | 6.23\% |
|  |  | 11 | 0 | 34 | 0 | 6.23\% |
|  |  | 12 | 7 | 41 | 1.28\% | 7.51\% |
|  |  | 13 | 0 | 41 | 0.00\% | 7.51\% |
|  |  | 14 | 5 | 46 | 0.92\% | 8.42\% |
|  |  | 15 | 6 | 52 | 1.10\% | 9.52\% |
|  | 10 | 16 | 0 | 52 | 0\% | 9.52\% |
|  |  | 17 | 1 | 53 | 0.18\% | 9.71\% |
|  |  | 18 | 4 | 57 | 0.73\% | 10.44\% |
|  |  | 19 | 1 | 58 | 0.18\% | 10.62\% |
|  |  | 20 | 2 | 60 | 0.37\% | 10.99\% |
|  |  | 21 | 12 | 72 | 2.20\% | 13.19\% |
|  |  | 22 | 1 | 73 | 0.18\% | 13.37\% |
|  |  | 23 | 1 | 74 | 0.18\% | 13.55\% |
|  |  | 24 | 7 | 81 | 1.28\% | 14.84\% |
|  |  | 25 | 4 | 85 | 0.73\% | 15.57\% |
|  |  | 26 | 3 | 88 | 0.55\% | 16.12\% |
|  |  | 27 | 2 | 90 | 0.37\% | 16.48\% |
|  |  | 28 | 3 | 93 | 0.55\% | 17.03\% |
|  |  | 29 | 1 | 94 | 0.18\% | 17.22\% |
|  |  | 30 | 1 | 95 | 0.18\% | 17.40\% |
|  |  | 31 | 6 | 101 | 1.10\% | 18.50\% |
|  |  | 32 | 0 | 101 | 0\% | 18.50\% |
|  |  | 33 | 5 | 106 | 0.92\% | 19.41\% |

## Table 49 <br> Writing Grade 10 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 49 <br> Writing Grade 10 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 49

Writing Grade 10 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR | 102 | 3 | 543 | $0.55 \%$ | $99.45 \%$ |  |
|  | 103 | 0 | 543 | $0 \%$ | $99.45 \%$ |  |
|  | 10 | 104 | 0 | 543 | $0 \%$ | $99.45 \%$ |
|  |  | 106 | 3 | 546 | $0.55 \%$ | $100 \%$ |
|  |  | 0 | 546 | $0 \%$ | $100 \%$ |  |
|  | 107 | 0 | 546 | $0 \%$ | $100 \%$ |  |
|  | 108 | 0 | 546 | $0 \%$ | $100 \%$ |  |

Table 50
Mathematics Grade 3 Raw Score Frequency Distributions
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 50
Mathematics Grade 3 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 50
Mathematics Grade 3 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 50
Mathematics Grade 3 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 51 <br> Mathematics Grade 4 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 51
Mathematics Grade 4 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 51
Mathematics Grade 4 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 51
Mathematics Grade 4 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 52 <br> Mathematics Grade 5 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 52 <br> Mathematics Grade 5 Raw Score Frequency Distributions (continued)

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 52

Mathematics Grade 5 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 52
Mathematics Grade 5 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 52

Mathematics Grade 5 Raw Score Frequency Distributions (continued)

| Content | Grade | $\begin{array}{c}\text { Raw } \\ \text { Score }\end{array}$ | Frequency | $\begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array}$ | Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | \(\left.\begin{array}{c}Cumulative <br>

Percent\end{array}\right]\)

## Table 52

Mathematics Grade 5 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MA | 5 | 170 | 1 | 686 | $0.15 \%$ | $99.85 \%$ |
|  |  | 171 | 1 | 687 | $0.15 \%$ | $100 \%$ |

## Table 53 <br> Mathematics Grade 6 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 53
Mathematics Grade 6 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 53
Mathematics Grade 6 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 53
Mathematics Grade 6 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 53

Mathematics Grade 6 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MA |  | 136 | 0 | 653 | $0 \%$ | $99.85 \%$ |
|  |  | 137 | 0 | 653 | $0 \%$ | $99.85 \%$ |

Table 54
Mathematics Grade 7 Raw Score Frequency Distributions
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 54
Mathematics Grade 7 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 54
Mathematics Grade 7 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 54
Mathematics Grade 7 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 55 <br> Mathematics Grade 8 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 55
Mathematics Grade 8 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 55
Mathematics Grade 8 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 55
Mathematics Grade 8 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 55

Mathematics Grade 8 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MA | 136 | 8 | 576 | $1.36 \%$ | $97.79 \%$ |  |
|  |  | 137 | 6 | 582 | $1.02 \%$ | $98.81 \%$ |
|  |  | 138 | 2 | 584 | $0.34 \%$ | $99.15 \%$ |
|  |  | 139 | 1 | 585 | $0.17 \%$ | $99.32 \%$ |
|  | 140 | 3 | 588 | $0.51 \%$ | $99.83 \%$ |  |
|  |  | 141 | 0 | 588 | $0 \%$ | $100 \%$ |
|  | 142 | 0 | 588 | $0 \%$ | $100 \%$ |  |
|  | 143 | 0 | 588 | $0 \%$ | $100 \%$ |  |
|  | 144 | 0 | 588 | $0 \%$ | $100 \%$ |  |
|  | 145 | 0 | 588 | $0 \%$ | $100 \%$ |  |
|  | 146 | 0 | 588 | $0 \%$ | $100 \%$ |  |
|  | 147 | 1 | 589 | $0 \%$ | $100 \%$ |  |

## Table 56 <br> Mathematics Grade 9 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 56
Mathematics Grade 9 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 56
Mathematics Grade 9 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 56
Mathematics Grade 9 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

## Table 56

Mathematics Grade 9 Raw Score Frequency Distributions (continued)

| Content | Grade | Raw <br> Score | Frequency | Cumulative <br> Frequency | Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 136 | 0 | 519 | $0 \%$ | $99.62 \%$ |  |
|  | 137 | 1 | 520 | $0.19 \%$ | $99.81 \%$ |  |
| MA | 138 | 1 | 521 | $0.19 \%$ | $100 \%$ |  |
|  | 9 | 139 | 0 | 521 | $0 \%$ | $100 \%$ |
|  | 140 | 0 | 521 | $0 \%$ | $100 \%$ |  |
|  | 141 | 0 | 521 | $0 \%$ | $100 \%$ |  |
|  | 142 | 0 | 521 | $0 \%$ | $100 \%$ |  |
|  | 143 | 0 | 521 | $0 \%$ | $100 \%$ |  |
|  | 144 | 0 | 521 | $0 \%$ | $100 \%$ |  |

## Table 57 <br> Mathematics Grade 10 Raw Score Frequency Distributions

$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 57
Mathematics Grade 10 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 57
Mathematics Grade 10 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 57
Mathematics Grade 10 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 57
Mathematics Grade 10 Raw Score Frequency Distributions (continued)
$\left.\begin{array}{cccccc}\hline \text { Content } & \text { Grade } & \begin{array}{c}\text { Raw } \\ \text { Score }\end{array} & \text { Frequency } & \begin{array}{c}\text { Cumulative } \\ \text { Frequency }\end{array} & \text { Percent }\end{array} \begin{array}{c}\text { Cumulative } \\ \text { Percent }\end{array}\right]$

Table 58
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 | 589 | 31 | 56 | 79 | 95 | 15.45\% | 29.20\% | 37.01\% | 14.60\% | 3.74\% | 18.34\% |
|  | 4 | 689 | 32 | 53 | 76 | 93 | 16.55\% | 26.12\% | 31.06\% | 18.58\% | 7.69\% | 26.27\% |
|  | 5 | 685 | 26 | 52 | 72 | 93 | 12.55\% | 27.30\% | 19.56\% | 31.09\% | 9.49\% | 40.58\% |
|  | 6 | 655 | 25 | 53 | 78 | 97 | 10.08\% | 21.53\% | 29.47\% | 33.74\% | 5.19\% | 38.93\% |
|  | 7 | 630 | 27 | 50 | 68 | 88 | 13.49\% | 23.17\% | 24.13\% | 32.38\% | 6.83\% | 39.21\% |
|  | 8 | 590 | 29 | 53 | 70 | 91 | 16.44\% | 27.63\% | 22.37\% | 26.61\% | 6.95\% | 33.56\% |
|  | 9 | 518 | 24 | 48 | 71 | 89 | 12.36\% | 23.94\% | 27.22\% | 24.90\% | 11.58\% | 36.49\% |
|  | 10 | 549 | 23 | 43 | 64 | 80 | 11.11\% | 29.33\% | 26.05\% | 20.77\% | 12.75\% | 33.52\% |
| WR | 3 | 590 | 18 | 48 | 78 | 96 | 12.88\% | 27.29\% | 35.59\% | 21.53\% | 2.71\% | 24.24\% |
|  | 4 | 684 | 19 | 46 | 78 | 94 | 13.16\% | 21.20\% | 36.99\% | 21.64\% | 7.02\% | 28.65\% |
|  | 5 | 690 | 19 | 50 | 78 | 93 | 13.33\% | 21.01\% | 31.74\% | 24.64\% | 9.28\% | 33.91\% |
|  | 6 | 650 | 18 | 51 | 78 | 93 | 10.46\% | 18.31\% | 27.23\% | 32.00\% | 12.00\% | 44.00\% |
|  | 7 | 626 | 23 | 57 | 80 | 94 | 14.22\% | 23.80\% | 22.52\% | 25.24\% | 14.22\% | 39.46\% |
|  | 8 | 589 | 27 | 62 | 80 | 90 | 16.13\% | 24.11\% | 22.58\% | 22.07\% | 15.11\% | 37.18\% |
|  | 9 | 518 | 21 | 60 | 79 | 91 | 13.13\% | 25.10\% | 24.13\% | 25.48\% | 12.16\% | 37.64\% |
|  | 10 | 546 | 21 | 56 | 81 | 93 | 10.99\% | 23.63\% | 33.70\% | 21.06\% | 10.62\% | 31.68\% |

Table 58
Cut Scores and Percent of Students in Each Proficiency Level (continued)

| Content | Grade | N | Cut Scores |  |  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Exploring | Emerging | Developing | Novice | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 583 | 19 | 63 | 93 | 108 | 6.69\% | 23.16\% | 26.07\% | 20.93\% | 23.16\% | 44.08\% |
|  | 4 | 679 | 13 | 72 | 99 | 119 | 6.33\% | 27.98\% | 23.71\% | 30.63\% | 11.34\% | 41.97\% |
|  | 5 | 687 | 41 | 82 | 115 | 150 | 16.89\% | 17.03\% | 23.29\% | 33.48\% | 9.32\% | 42.79\% |
|  | 6 | 654 | 28 | 60 | 92 | 113 | 11.93\% | 15.90\% | 22.94\% | 23.39\% | 25.84\% | 49.24\% |
|  | 7 | 625 | 29 | 61 | 89 | 110 | 13.92\% | 22.40\% | 25.92\% | 23.20\% | 14.56\% | 37.76\% |
|  | 8 | 589 | 30 | 76 | 107 | 129 | 13.07\% | 26.49\% | 29.88\% | 22.07\% | 8.49\% | 30.56\% |
|  | 9 | 521 | 29 | 63 | 97 | 116 | 15.55\% | 21.69\% | 33.97\% | 19.58\% | 9.21\% | 28.79\% |
|  | 10 | 551 | 29 | 67 | 104 | 125 | 12.70\% | 23.96\% | 34.48\% | 20.69\% | 8.17\% | 28.86\% |

## Table 59

Total Group Statistics, Including Reliability

| Content | Grade | SampleSize | Raw Score |  | N Students at Max Score | $N$ Students at Min Score | Coefficient Alpha | Standard Error of Measurement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Mean | SD |  |  |  |  |
| RD | 3 | 589 | 56.96 | 24.04 | 0 | 11 | 0.92 | 6.96 |
|  | 4 | 689 | 57.10 | 25.43 | 1 | 25 | 0.93 | 6.92 |
|  | 5 | 685 | 58.44 | 27.03 | 3 | 18 | 0.93 | 6.91 |
|  | 6 | 655 | 64.00 | 26.33 | 4 | 17 | 0.94 | 6.66 |
|  | 7 | 630 | 56.03 | 24.47 | 0 | 18 | 0.92 | 7.02 |
|  | 8 | 590 | 55.10 | 25.94 | 1 | 16 | 0.92 | 7.26 |
|  | 9 | 518 | 56.32 | 26.50 | 0 | 18 | 0.93 | 6.92 |
|  | 10 | 549 | 50.76 | 24.30 | 1 | 22 | 0.91 | 7.34 |
| WR | 3 | 590 | 54.19 | 27.24 | 1 | 12 | 0.92 | 7.73 |
|  | 4 | 684 | 56.63 | 28.76 | 0 | 24 | 0.93 | 7.80 |
|  | 5 | 690 | 59.19 | 28.74 | 1 | 22 | 0.93 | 7.53 |
|  | 6 | 650 | 63.96 | 28.40 | 5 | 22 | 0.93 | 7.49 |
|  | 7 | 626 | 62.54 | 30.52 | 1 | 23 | 0.94 | 7.54 |
|  | 8 | 589 | 61.63 | 29.11 | 0 | 20 | 0.93 | 7.57 |
|  | 9 | 518 | 60.97 | 29.01 | 0 | 22 | 0.93 | 7.44 |
|  | 10 | 546 | 61.47 | 27.92 | 0 | 22 | 0.92 | 7.71 |
| MA | 3 | 583 | 78.95 | 33.09 | 1 | 10 | 0.94 | 8.13 |
|  | 4 | 679 | 80.56 | 35.88 | 3 | 23 | 0.95 | 8.27 |
|  | 5 | 687 | 96.02 | 46.85 | 1 | 16 | 0.95 | 10.13 |
|  | 6 | 654 | 81.34 | 37.65 | 1 | 20 | 0.94 | 8.83 |
|  | 7 | 625 | 71.42 | 34.99 | 0 | 20 | 0.94 | 8.79 |
|  | 8 | 589 | 80.94 | 38.60 | 1 | 19 | 0.94 | 9.34 |
|  | 9 | 521 | 71.86 | 35.84 | 0 | 20 | 0.93 | 9.37 |
|  | 10 | 551 | 76.47 | 37.00 | 0 | 24 | 0.93 | 9.71 |

Table 60
Classification Consistency and Accuracy

| Content | Grade | Consistency |  |  |  | Accuracy |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Prob of Correct Classification (PC) | Prob of Correct Classification By Chance (Chance) | Kappa | Prob of Misclassification (PM) | Prob of Accuracy (PA) | Prob of False Positive Error (FP) | Prob of False Negative Error (FN) |
| RD | 3 | 0.67 | 0.26 | 0.56 | 0.33 | 0.77 | 0.12 | 0.11 |
|  | 4 | 0.65 | 0.24 | 0.55 | 0.35 | 0.75 | 0.14 | 0.12 |
|  | 5 | 0.66 | 0.23 | 0.55 | 0.34 | 0.75 | 0.15 | 0.11 |
|  | 6 | 0.70 | 0.27 | 0.59 | 0.30 | 0.79 | 0.11 | 0.10 |
|  | 7 | 0.64 | 0.24 | 0.52 | 0.36 | 0.74 | 0.15 | 0.10 |
|  | 8 | 0.64 | 0.23 | 0.53 | 0.36 | 0.73 | 0.16 | 0.11 |
|  | 9 | 0.64 | 0.22 | 0.54 | 0.36 | 0.74 | 0.14 | 0.13 |
|  | 10 | 0.60 | 0.21 | 0.50 | 0.40 | 0.71 | 0.15 | 0.15 |
| WR | 3 | 0.68 | 0.27 | 0.56 | 0.32 | 0.77 | 0.11 | 0.12 |
|  | 4 | 0.64 | 0.24 | 0.53 | 0.36 | 0.74 | 0.15 | 0.11 |
|  | 5 | 0.63 | 0.24 | 0.52 | 0.37 | 0.74 | 0.16 | 0.11 |
|  | 6 | 0.61 | 0.24 | 0.49 | 0.39 | 0.72 | 0.17 | 0.11 |
|  | 7 | 0.61 | 0.21 | 0.50 | 0.39 | 0.69 | 0.20 | 0.11 |
|  | 8 | 0.57 | 0.21 | 0.46 | 0.43 | 0.64 | 0.23 | 0.13 |
|  | 9 | 0.59 | 0.22 | 0.47 | 0.41 | 0.69 | 0.18 | 0.12 |
|  | 10 | 0.60 | 0.24 | 0.47 | 0.40 | 0.70 | 0.16 | 0.14 |
| MA | 3 | 0.63 | 0.22 | 0.53 | 0.37 | 0.73 | 0.13 | 0.14 |
|  | 4 | 0.67 | 0.26 | 0.55 | 0.33 | 0.77 | 0.15 | 0.08 |
|  | 5 | 0.68 | 0.24 | 0.58 | 0.32 | 0.77 | 0.15 | 0.08 |
|  | 6 | 0.64 | 0.21 | 0.54 | 0.36 | 0.74 | 0.11 | 0.15 |
|  | 7 | 0.63 | 0.21 | 0.53 | 0.37 | 0.72 | 0.13 | 0.15 |
|  | 8 | 0.67 | 0.24 | 0.57 | 0.33 | 0.77 | 0.13 | 0.10 |
|  | 9 | 0.63 | 0.23 | 0.53 | 0.37 | 0.73 | 0.16 | 0.11 |
|  | 10 | 0.65 | 0.24 | 0.54 | 0.35 | 0.75 | 0.15 | 0.10 |

## Table 61

Level of Independence-Total Percentage by Level across All Items

|  | Total | Level of Independence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Content |  | 1 | 2 | 3 | 4 |
| RD |  | $4.60 \%$ | $2.93 \%$ | $4.83 \%$ | $87.62 \%$ |
| WR |  | $4.98 \%$ | $2.92 \%$ | $5.08 \%$ | $87.00 \%$ |
| MA |  | $6.32 \%$ | $4.53 \%$ | $8.57 \%$ | $80.56 \%$ |

## Table 62

Reliability of Levels of Independence

|  | Independent <br> versus |  |  |
| :---: | :---: | :---: | :---: |
| Content | Grade | All Levels of <br> Not Independent | Independence |
|  | 3 | 0.97 | 0.98 |
|  | 4 | 0.98 | 0.99 |
|  | 5 | 0.98 | 0.99 |
| RD | 6 | 0.98 | 0.99 |
|  | 7 | 0.99 | 0.99 |
|  | 8 | 0.98 | 0.99 |
|  | 9 | 0.98 | 0.99 |
|  | 10 | 0.98 | 0.99 |
|  | 3 | 0.96 | 0.98 |
|  | 4 | 0.97 | 0.99 |
|  | 5 | 0.98 | 0.99 |
|  | 6 | 0.97 | 0.99 |
|  | 7 | 0.98 | 0.99 |
|  | 8 | 0.98 | 0.99 |
|  | 9 | 0.98 | 0.99 |
|  | 10 | 0.97 | 0.99 |
|  | 3 | 0.95 | 0.97 |
|  | 4 | 0.97 | 0.98 |
|  | 5 | 0.97 | 0.99 |
|  | 6 | 0.97 | 0.98 |
| MA | 7 | 0.97 | 0.99 |
|  | 8 | 0.97 | 0.99 |
|  | 9 | 0.97 | 0.99 |
|  | 10 | 0.97 | 0.99 |
|  |  |  |  |

## Table 63 <br> Percentages of Test Administrator Coding Errors

| Content | Grade | Level 1 and <br> correct answer | Levels 2 - 4 and <br> no response |
| :---: | :---: | :---: | :---: |
|  | 3 | $0.41 \%$ | $0.24 \%$ |
|  | 4 | $0.17 \%$ | $0.16 \%$ |
|  | 5 | $0.14 \%$ | $0.07 \%$ |
| RD | 6 | $0.05 \%$ | $0.06 \%$ |
|  | 7 | $0.11 \%$ | $0.02 \%$ |
|  | 8 | $0.07 \%$ | $0.00 \%$ |
|  | 9 | $0.53 \%$ | $0.21 \%$ |
|  | 10 | $0.48 \%$ | $0.18 \%$ |
|  | 3 | $0.30 \%$ | $0.24 \%$ |
|  | 4 | $0.16 \%$ | $0.25 \%$ |
|  | 5 | $0.11 \%$ | $0.04 \%$ |
| WR | 6 | $0.04 \%$ | $0.16 \%$ |
|  | 7 | $0.16 \%$ | $0.03 \%$ |
|  | 8 | $0.04 \%$ | $0.03 \%$ |
|  | 9 | $0.57 \%$ | $0.20 \%$ |
|  | 10 | $0.40 \%$ | $0.20 \%$ |
|  | 3 | $0.35 \%$ | $0.33 \%$ |
|  | 4 | $0.19 \%$ | $0.24 \%$ |
|  | 5 | $0.13 \%$ | $0.18 \%$ |
|  | 6 | $0.04 \%$ | $0.10 \%$ |
| MA | 7 | $0.14 \%$ | $0.07 \%$ |
|  | 8 | $0.06 \%$ | $0.09 \%$ |
|  | 9 | $0.42 \%$ | $0.29 \%$ |
|  | 10 | $0.39 \%$ | $0.24 \%$ |

Table 64
Reading Average Level of Independence and Earned Proficiency Level

| Content | Grade | Average Level of Independence | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing and Novice |
|  | 3 | 3.5-4.0 | 7.57\% | 29.28\% | 41.83\% | 16.93\% | 4.38\% | 21.31\% |
|  |  | 3.0-3.4 | 31.71\% | 48.78\% | 17.07\% | 2.44\% | 0\% | 2.44\% |
|  |  | 2.5-2.9 | 78.95\% | 15.79\% | 5.26\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 77.78\% | 22.22\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  | 4 | 3.5-4.0 | 8.05\% | 26.17\% | 35.40\% | 21.48\% | 8.89\% | 30.37\% |
|  |  | 3.0-3.4 | 44.12\% | 47.06\% | 8.82\% | 0\% | 0\% | 0\% |
|  |  | 2.5-2.9 | 63.16\% | 36.84\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 88.89\% | 11.11\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| $\begin{array}{r}5 \\ \text { RD } \\ \hline\end{array}$ |  | 3.5-4.0 | 4.77\% | 26.41\% | 21.81\% | 35.95\% | 11.07\% | 47.02\% |
|  |  | 3.0-3.4 | 25.64\% | 53.85\% | 15.38\% | 5.13\% | 0\% | 5.13\% |
|  |  | 2.5-2.9 | 46.67\% | 53.33\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 75.00\% | 25.00\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| RD | 6 | 3.5-4.0 | 2.56\% | 21.67\% | 32.25\% | 37.71\% | 5.80\% | 43.51\% |
|  |  | 3.0-3.4 | 45.00\% | 40.00\% | 15.00\% | 0\% | 0\% | 0\% |
|  |  | 2.5-2.9 | 56.25\% | 37.50\% | 6.25\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  | 7 | 3.5-4.0 | 5.37\% | 23.97\% | 26.65\% | 36.31\% | 7.69\% | 44.00\% |
|  |  | 3.0-3.4 | 55.56\% | 22.22\% | 16.67\% | 5.56\% | 0\% | 5.56\% |
|  |  | 2.5-2.9 | 50.00\% | 50.00\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 66.67\% | 33.33\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  | 8 | 3.5-4.0 | 9.31\% | 29.42\% | 24.39\% | 29.24\% | 7.64\% | 36.88\% |
|  |  | 3.0-3.4 | 54.55\% | 36.36\% | 9.09\% | 0\% | 0\% | 0\% |
|  |  | 2.5-2.9 | 90.00\% | 10.00\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |

Table 64
Reading Average Level of Independence and Earned Proficiency Level (continued)

|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content Grade | Average Level of | Independence | Inconclusive | Exploring | Emerging | Developing | Novice | \(\left.\begin{array}{c}Developing <br>

and Novice\end{array}\right]\)

Table 65
Writing Average Level of Independence and Earned Proficiency Level


## Table 65

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

|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content Grade | Average Level of | Independence | Inconclusive | Exploring | Emerging | Developing | Novice | \(\left.\begin{array}{c}Developing <br>

and Novice\end{array}\right]\)

Table 66
Mathematics Average Level of Independence and Earned Proficiency Level

| Content | Grade | Average Level of Independence | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing and Novice |
|  | 3 | 3.5-4.0 | 0.43\% | 14.87\% | 29.31\% | 26.29\% | 29.09\% | 55.38\% |
|  |  | 3.0-3.4 | 7.14\% | 66.07\% | 26.79\% | 0\% | 0\% | 0\% |
|  |  | 2.5-2.9 | 16.67\% | 79.17\% | 4.17\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 52.63\% | 47.37\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 88.89\% | 11.11\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  | 4 | 3.5-4.0 | 0.18\% | 20.68\% | 28.06\% | 37.23\% | 13.85\% | 51.08\% |
|  |  | 3.0-3.4 | 6.25\% | 81.25\% | 10.42\% | 2.08\% | 0\% | 2.08\% |
|  |  | 2.5-2.9 | 14.29\% | 85.71\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 25.00\% | 75.00\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 72.73\% | 27.27\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| MA |  | 3.5-4.0 | 4.35\% | 16.49\% | 26.45\% | 41.12\% | 11.59\% | 52.71\% |
|  |  | 3.0-3.4 | 40.00\% | 32.00\% | 22.00\% | 6.00\% | 0\% | 6.00\% |
|  |  | 2.5-2.9 | 61.76\% | 29.41\% | 8.82\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| MA | 6 | 3.5-4.0 | 2.25\% | 12.36\% | 25.09\% | 28.65\% | 31.65\% | 60.30\% |
|  |  | 3.0-3.4 | 21.43\% | 50.00\% | 28.57\% | 0\% | 0\% | 0\% |
|  |  | 2.5-2.9 | 52.63\% | 47.37\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 93\% | 7\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  | 7 | 3.5-4.0 | 3.05\% | 22.52\% | 29.58\% | 27.48\% | 17.37\% | 44.85\% |
|  |  | 3.0-3.4 | 27.27\% | 48.48\% | 21.21\% | 3.03\% | 0\% | 3.03\% |
|  |  | 2.5-2.9 | 75.00\% | 25.00\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 88.89\% | 11.11\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  | 8 | 3.5-4.0 | 2.82\% | 25.75\% | 35.21\% | 26.16\% | 10.06\% | 36.22\% |
|  |  | 3.0-3.4 | 34.29\% | 62.86\% | 2.86\% | 0\% | 0\% | 0\% |
|  |  | 2.5-2.9 | 64.29\% | 35.71\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 2.0-2.4 | 87.50\% | 12.50\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.5-1.9 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |
|  |  | 1.0-1.4 | 100\% | 0\% | 0\% | 0\% | 0\% | 0\% |

Table 66
Mathematics Average Level of Independence and Earned Proficiency Level (continued)

|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content Grade | Average Level of | Independence | Inconclusive | Exploring | Emerging | Developing | Novice | \(\left.\begin{array}{c}Developing <br>

and Novice\end{array}\right]\)

Table 67
Reading Longitudinal Total Group Means and Standard Deviations

| Content | Grade | $2014$ <br> Raw Score |  | $2013$ <br> Raw Score |  | $2012$ <br> Raw Score |  | $2011$ <br> Raw Score |  | $2010$ <br> Raw Score |  | $2009$ <br> Raw Score |  | $2008$ <br> Raw Score |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| RD | 3 | 56.96 | 24.04 | 57.07 | 25.07 | 56.59 | 26.37 | 58.83 | 25.41 | 58.92 | 25.97 | 60.54 | 26.14 | 61.69 | 25.59 |
|  | 4 | 57.10 | 25.43 | 55.59 | 26.44 | 57.73 | 26.26 | 58.76 | 26.29 | 59.55 | 25.60 | 60.72 | 26.58 | 61.14 | 25.52 |
|  | 5 | 58.44 | 27.03 | 62.15 | 26.51 | 58.70 | 27.92 | 62.59 | 26.96 | 61.85 | 27.76 | 63.22 | 27.18 | 61.51 | 27.30 |
|  | 6 | 64.00 | 26.33 | 65.00 | 25.77 | 65.35 | 25.71 | 64.66 | 27.01 | 64.60 | 26.74 | 64.54 | 26.59 | 63.25 | 28.20 |
|  | 7 | 56.03 | 24.47 | 58.17 | 23.33 | 57.51 | 24.34 | 58.17 | 22.72 | 56.25 | 24.50 | 56.28 | 24.86 | 55.20 | 25.07 |
|  | 8 | 55.10 | 25.94 | 56.79 | 24.76 | 56.62 | 26.07 | 53.72 | 26.06 | 54.60 | 27.09 | 54.03 | 26.31 | 56.31 | 26.35 |
|  | 9 | 56.32 | 26.50 | 54.67 | 26.49 | 53.98 | 26.71 | 53.68 | 26.51 | 54.29 | 27.29 | 54.39 | 27.07 | 55.39 | 26.70 |
|  | 10 | 50.76 | 24.30 | 51.18 | 24.31 | 50.62 | 24.03 | 49.32 | 24.48 | 49.87 | 24.74 | 52.53 | 24.85 | 48.80 | 24.97 |


| Content | Grade | Difference 2014-2013 <br> Raw Score |  | Difference 2013-2012 <br> Raw Score |  | Difference 2012-2011 <br> Raw Score |  | Difference 2011-2010 <br> Raw Score |  | Difference 2010-2009 <br> Raw Score |  | Difference 2009-2008 <br> Raw Score |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| RD | 3 | -0.11 | -1.03 | 0.49 | -1.31 | -2.25 | 0.96 | -0.09 | -0.56 | -1.62 | -0.16 | -1.14 | 0.55 |
|  | 4 | 1.51 | -1.01 | -2.14 | 0.18 | -1.03 | -0.03 | -0.80 | 0.69 | -1.17 | -0.98 | -0.42 | 1.06 |
|  | 5 | -3.71 | 0.53 | 3.45 | -1.41 | -3.89 | 0.96 | 0.74 | -0.80 | -1.37 | 0.58 | 1.71 | -0.12 |
|  | 6 | -1.01 | 0.56 | -0.35 | 0.06 | 0.70 | -1.30 | 0.06 | 0.27 | 0.06 | 0.15 | 1.29 | -1.61 |
|  | 7 | -2.15 | 1.13 | 0.66 | -1.01 | -0.66 | 1.62 | 1.93 | -1.78 | -0.04 | -0.36 | 1.08 | -0.21 |
|  | 8 | -1.69 | 1.18 | 0.17 | -1.31 | 2.90 | 0 | -0.88 | -1.03 | 0.57 | 0.78 | -2.28 | -0.04 |
|  | 9 | 1.64 | 0.01 | 0.70 | -0.21 | 0.30 | 0.20 | -0.61 | -0.79 | -0.10 | 0.23 | -1.00 | 0.37 |
|  | 10 | -0.42 | -0.01 | 0.56 | 0.28 | 1.30 | -0.45 | -0.55 | -0.26 | -2.67 | -0.12 | 3.73 | -0.12 |

Table 68
Writing Longitudinal Total Group Means and Standard Deviations

| Content | Grade | $2014$ <br> Raw Score |  | $2013$ <br> Raw Score |  | $2012$ <br> Raw Score |  | $2011$ <br> Raw Score |  | $2010$ <br> Raw Score |  | $2009$ <br> Raw Score |  | $2008$ <br> Raw Score |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| WR | 3 | 54.19 | 27.24 | 53.88 | 28.20 | 53.11 | 28.47 | 55.56 | 28.67 | 57.11 | 28.44 | 58.34 | 27.93 | 60.05 | 27.69 |
|  | 4 | 56.63 | 28.76 | 55.29 | 28.88 | 57.81 | 28.88 | 57.11 | 29.04 | 60.78 | 27.82 | 61.13 | 28.85 | 61.92 | 27.87 |
|  | 5 | 59.19 | 28.74 | 63.24 | 27.94 | 59.09 | 28.96 | 63.52 | 27.43 | 63.27 | 29.23 | 64.20 | 27.91 | 63.05 | 28.11 |
|  | 6 | 63.96 | 28.40 | 63.86 | 28.75 | 65.05 | 28.19 | 63.46 | 29.28 | 65.27 | 28.18 | 64.44 | 28.51 | 62.65 | 29.81 |
|  | 7 | 62.54 | 30.52 | 65.47 | 28.93 | 63.88 | 30.49 | 65.17 | 28.40 | 63.67 | 30.16 | 64.58 | 29.31 | 61.57 | 31.16 |
|  | 8 | 61.63 | 29.11 | 63.41 | 27.84 | 62.67 | 28.26 | 60.59 | 29.51 | 60.40 | 29.56 | 59.63 | 29.38 | 61.87 | 28.34 |
|  | 9 | 60.97 | 29.01 | 60.21 | 28.86 | 58.86 | 29.09 | 58.25 | 28.52 | 58.26 | 29.68 | 60.19 | 27.87 | 60.50 | 28.04 |
|  | 10 | 61.47 | 27.92 | 60.69 | 28.07 | 60.09 | 27.45 | 58.76 | 28.49 | 60.23 | 27.54 | 62.23 | 27.60 | 58.15 | 27.71 |


| Content | Grade | Difference 2014-2013 Raw Score |  | Difference 2013-2012 <br> Raw Score |  | Difference 2012-2011 <br> Raw Score |  | Difference 2011-2010 Raw Score |  | Difference 2010-2009 Raw Score |  | Difference 2009-2008 Raw Score |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| WR | 3 | 0.32 | -0.97 | 0.77 | -0.27 | -2.45 | -0.19 | -1.55 | 0.23 | -1.23 | 0.51 | -1.71 | 0.24 |
|  | 4 | 1.34 | -0.12 | -2.52 | 0.00 | 0.70 | -0.16 | -3.67 | 1.22 | -0.35 | -1.03 | -0.79 | 0.97 |
|  | 5 | -4.04 | 0.80 | 4.15 | -1.01 | -4.44 | 1.53 | 0.25 | -1.80 | -0.93 | 1.33 | 1.15 | -0.20 |
|  | 6 | 0.10 | -0.35 | -1.19 | 0.55 | 1.58 | -1.08 | -1.81 | 1.10 | 0.83 | -0.34 | 1.78 | -1.30 |
|  | 7 | -2.93 | 1.58 | 1.59 | -1.55 | -1.30 | 2.09 | 1.50 | -1.76 | -0.91 | 0.84 | 3.01 | -1.84 |
|  | 8 | -1.78 | 1.26 | 0.74 | -0.42 | 2.08 | -1.25 | 0.19 | -0.04 | 0.76 | 0.18 | -2.24 | 1.04 |
|  | 9 | 0.76 | 0.15 | 1.35 | -0.24 | 0.60 | 0.57 | -0.01 | -1.16 | -1.93 | 1.81 | -0.30 | -0.17 |
|  | 10 | 0.78 | -0.15 | 0.60 | 0.62 | 1.33 | -1.04 | -1.47 | 0.96 | -2.00 | -0.06 | 4.08 | -0.11 |

Table 69
Mathematics Longitudinal Total Group Means and Standard Deviations

| Content | Grade | $2014$ <br> Raw Score |  | $2013$ <br> Raw Score |  | $2012$ <br> Raw Score |  | 2011 <br> Raw Score |  | $2010$ <br> Raw Score |  | $2009$ <br> Raw Score |  | 2008 <br> Raw Score |  | $\begin{gathered} 2007 \\ \text { Raw Score } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| MA | 3 | 78.95 | 33.09 | 78.53 | 35.39 | 75.91 | 35.63 | 78.47 | 35.22 | 80.27 | 34.65 | 81.33 | 34.79 | 82.14 | 33.75 | 84.24 | 31.56 |
|  | 4 | 80.56 | 35.88 | 78.31 | 36.28 | 79.26 | 36.48 | 79.03 | 36.37 | 83.16 | 34.66 | 82.98 | 35.91 | 84.97 | 34.87 | 85.88 | 35.50 |
|  | 5 | 96.02 | 46.85 | 102.19 | 46.65 | 96.31 | 46.92 | 101.52 | 45.57 | 100.69 | 46.51 | 104.89 | 45.69 | 100.95 | 45.42 | 102.30 | 42.79 |
|  | 6 | 81.34 | 37.65 | 82.13 | 36.63 | 84.20 | 37.89 | 81.64 | 37.47 | 83.66 | 37.12 | 81.96 | 36.76 | 79.99 | 40.58 | 79.28 | 38.15 |
|  | 7 | 71.42 | 34.99 | 76.40 | 33.90 | 74.03 | 35.56 | 76.31 | 33.46 | 73.06 | 34.76 | 73.16 | 35.38 | 72.11 | 37.24 | 75.18 | 33.78 |
|  | 8 | 80.94 | 38.60 | 84.02 | 37.67 | 84.53 | 39.31 | 82.15 | 39.69 | 80.52 | 39.55 | 78.28 | 39.66 | 82.94 | 39.03 | 79.29 | 37.54 |
|  | 9 | 71.86 | 35.84 | 71.00 | 35.77 | 70.45 | 36.19 | 69.34 | 35.87 | 69.52 | 36.46 | 71.98 | 35.41 | 71.80 | 35.54 | 68.76 | 35.54 |
|  | 10 | 76.47 | 37.00 | 75.15 | 37.00 | 73.35 | 35.56 | 71.42 | 35.03 | 75.12 | 36.21 | 76.23 | 36.83 | 72.23 | 35.80 | 69.47 | 37.11 |


| Content | Grade | Difference 2014-2013 <br> Raw Score |  | Difference 2013-2012Raw Score |  | $\begin{gathered} \text { Difference 2012-2011 } \\ \text { Raw Score } \\ \hline \end{gathered}$ |  | Difference 2011-2010 <br> Raw Score |  | Difference 2010-2009Raw Score |  | Difference 2009-2008Raw Score |  | Difference 2008-2007Raw Score |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| MA | 3 | 0.42 | -2.30 | 2.62 | -0.24 | -2.56 | 0.42 | -1.81 | 0.56 | -1.05 | -0.14 | -0.81 | 1.04 | -2.10 | 2.19 |
|  | 4 | 2.25 | -0.40 | -0.95 | -0.20 | 0.23 | 0.11 | -4.13 | 1.71 | 0.18 | -1.25 | -1.98 | 1.04 | -0.92 | -0.63 |
|  | 5 | -6.17 | 0.19 | 5.88 | -0.26 | -5.20 | 1.35 | 0.83 | -0.94 | -4.20 | 0.81 | 3.94 | 0.28 | -1.35 | 2.63 |
|  | 6 | -0.79 | 1.02 | -2.07 | -1.26 | 2.56 | 0.42 | -2.02 | 0.35 | 1.70 | 0.36 | 1.97 | -3.82 | 0.70 | 2.43 |
|  | 7 | -4.98 | 1.09 | 2.36 | -1.66 | -2.28 | 2.10 | 3.26 | -1.30 | -0.10 | -0.63 | 1.05 | -1.86 | -3.08 | 3.46 |
|  | 8 | -3.08 | 0.92 | -0.51 | -1.64 | 2.38 | -0.38 | 1.63 | 0.14 | 2.24 | -0.11 | -4.66 | 0.63 | 3.65 | 1.49 |
|  | 9 | 0.86 | 0.06 | 0.56 | -0.42 | 1.10 | 0.32 | -0.17 | -0.59 | -2.47 | 1.05 | 0.18 | -0.13 | 3.05 | 0 |
|  | 10 | 1.32 | 0.00 | 1.80 | 1.44 | 1.92 | 0.53 | -3.70 | -1.18 | -1.11 | -0.62 | 4.00 | 1.03 | 2.76 | -1.32 |

Table 70
Reading Longitudinal Subgroup Participation


Table 70
Reading Longitudinal Subgroup Participation (continued)


Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
|  | Gender | Female | 34.98\% | 36.73\% | 35.97\% | 35.32\% | 34.10\% | 36.80\% | 37.76\% |
|  | Gender | Male | 64.88\% | 63.27\% | 63.71\% | 64.36\% | 65.90\% | 62.89\% | 61.77\% |
|  |  | Autism | 16.69\% | 21.09\% | 17.12\% | 16.61\% | 15.14\% | 12.42\% | 10.11\% |
|  |  | Deaf-Blind | 0\% | 0\% | 0.32\% | 0\% | 0.15\% | 0\% | 0.16\% |
|  |  | Emotional Disability | 0.15\% | 0.59\% | 0\% | 2.42\% | 0.15\% | 1.40\% | 2.37\% |
|  |  | Hearing Disability | 0.29\% | 0.29\% | 0.16\% | 0.32\% | 1.38\% | 1.40\% | 1.26\% |
|  |  | Limited Intellectual Capacity | 27.43\% | 27.43\% | 26.31\% | 26.61\% | 29.36\% | 23.45\% | 25.59\% |
|  |  | Multiple Disabilities | 39.04\% | 33.19\% | 32.49\% | 31.61\% | 25.84\% | 27.48\% | 28.91\% |
|  | Primary <br> Disability | Physical Disability | 9.87\% | 10.18\% | 14.58\% | 11.94\% | 13.61\% | 12.73\% | 11.37\% |
|  |  | Specific Learning Disability | 3.19\% | 3.39\% | 5.39\% | 6.94\% | 9.48\% | 13.20\% | 13.90\% |
| RD |  | Speech/Language Disability | 1.02\% | 2.65\% | 2.06\% | 1.77\% | 3.67\% | 6.52\% | 4.58\% |
| RD |  | Traumatic Brain Injury | 1.16\% | 1.03\% | 1.11\% | 1.13\% | 1.07\% | 0.93\% | 0.95\% |
|  |  | Visual Disability | 0.15\% | 0.15\% | 0.16\% | 0.48\% | 0.15\% | 0.31\% | 0.32\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - |
|  |  | Other health impairment | 0.87\% | - | - | - | - | - | - |
|  |  | Amencantmaran/ATaska | 1.31\% | 1.33\% | 1.11\% | 1.45\% | - | - | - |
|  |  | Asian | 2.18\% | 3.69\% | 2.22\% | 2.58\% | - | - | - |
|  |  | Black/ African American | 8.13\% | 6.49\% | 6.02\% | 5.97\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 38.03\% | 37.02\% | 36.29\% | 35.00\% | - | - | - |
|  |  | White | 45.86\% | 48.23\% | 50.08\% | 51.77\% | - | - | - |
|  |  | Pacific Islander | 0.44\% | 0.15\% | 0.16\% | 0.16\% | - | - | - |
|  |  | Two or More Races | 3.92\% | 3.10\% | 3.80\% | 2.90\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  | Gender | Female | -1.75\% | 0.76\% | 0.65\% | 1.23\% | -2.70\% | -0.96\% |
|  | Gender | Male | 1.61\% | -0.44\% | -0.64\% | -1.55\% | 3.01\% | 1.12\% |
|  |  | Autism | -4.40\% | 3.97\% | 0.51\% | 1.48\% | 2.72\% | 2.31\% |
|  |  | Deaf-Blind | 0\% | -0.32\% | 0.32\% | -0.15\% | 0.15\% | -0.16\% |
|  |  | Emotional Disability | -0.44\% | 0.59\% | -2.42\% | 2.27\% | -1.25\% | -0.97\% |
|  |  | Hearing Disability | 0\% | 0.13\% | -0.16\% | -1.05\% | -0.02\% | 0.13\% |
|  |  | Limited Intellectual Capacity | 0\% | 1.12\% | -0.30\% | -2.75\% | 5.91\% | -2.15\% |
|  |  | Multiple Disabilities | 5.85\% | 0.70\% | 0.88\% | 5.77\% | -1.64\% | -1.43\% |
|  | Primary Disability | Physical Disability | -0.31\% | -4.40\% | 2.65\% | -1.67\% | 0.88\% | 1.36\% |
|  |  | Specific Learning Disability | -0.20\% | -2.00\% | -1.55\% | -2.55\% | -3.72\% | -0.70\% |
| RD |  | Speech/Language Disability | -1.63\% | 0.59\% | 0.29\% | -1.90\% | -2.85\% | 1.94\% |
|  |  | Traumatic Brain Injury | 0.13\% | -0.08\% | -0.02\% | 0.06\% | 0.14\% | -0.02\% |
|  |  | Visual Disability | 0\% | -0.01\% | -0.32\% | 0.33\% | -0.16\% | -0.01\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  |  | -0.02\% | 0.22\% | -0.34\% | - | - | - |
|  |  | Asian | -1.51\% | 1.47\% | -0.36\% | - | - | - |
|  |  | Black/ African American | 1.64\% | 0.47\% | 0.05\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 1.01\% | 0.73\% | 1.29\% | - | - | - |
|  |  | White | -2.37\% | -1.85\% | -1.69\% | - | - | - |
|  |  | Pacific Islander | 0.29\% | -0.01\% | 0\% | - | - | - |
|  |  | Two or More Races | 0.82\% | -0.70\% | 0.90\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 5 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| Gender |  | Female | 36.06\% | 37.37\% | 37.64\% | 35.94\% | 39.10\% | 39.71\% | 38.95\% |
|  |  | Male | 63.80\% | 62.48\% | 61.87\% | 63.61\% | 60.58\% | 59.97\% | 61.05\% |
| RD | Primary Disability | Autism | 19.42\% | 16.29\% | 16.64\% | 14.59\% | 12.28\% | 11.44\% | 8.07\% |
|  |  | Deaf-Blind | 0\% | 0.15\% | 0\% | 0.15\% | 0\% | 0.16\% | 0.35\% |
|  |  | Emotional Disability | 0.44\% | 0.45\% | 0.48\% | 0.60\% | 1.13\% | 2.12\% | 1.58\% |
|  |  | Hearing Disability | 0.15\% | 0.15\% | 0.32\% | 0.75\% | 1.62\% | 1.47\% | 1.75\% |
|  |  | Limited Intellectual Capacity | 26.86\% | 30.19\% | 30.53\% | 31.13\% | 26.33\% | 28.43\% | 31.75\% |
|  |  | Multiple Disabilities | 37.23\% | 33.48\% | 32.79\% | 30.38\% | 29.08\% | 28.27\% | 29.12\% |
|  |  | Physical Disability | 7.88\% | 11.06\% | 11.15\% | 11.88\% | 11.79\% | 10.62\% | 9.30\% |
|  |  | Specific Learning Disability | 3.21\% | 5.08\% | 5.01\% | 7.37\% | 11.15\% | 11.60\% | 12.63\% |
|  |  | Speech/Language Disability | 1.31\% | 1.20\% | 1.62\% | 1.96\% | 5.49\% | 3.76\% | 4.39\% |
|  |  | Traumatic Brain Injury | 1.31\% | 1.79\% | 0.65\% | 0.90\% | 0.65\% | 1.14\% | 1.05\% |
|  |  | Visual Disability | 0.15\% | 0.15\% | 0.48\% | 0\% | 0.16\% | 0.65\% | 0\% |
|  |  | Orthopedic impairment | 0.29\% | - | - | - | - | - | - |
|  |  | Other health impairment | 1.61\% | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.88\% | 1.35\% | 1.29\% | 0.90\% | - | - | - |
|  |  | Asian | 3.36\% | 2.39\% | 1.78\% | 2.11\% | - | - | - |
|  |  | Black/ African American | 6.72\% | 5.68\% | 6.62\% | 7.97\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 37.37\% | 37.82\% | 32.47\% | 37.29\% | - | - | - |
|  |  | White | 48.47\% | 49.18\% | 53.80\% | 48.72\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.44\% | 0\% | 0.16\% | 0.30\% | - | - | - |
|  |  | Two or More Races | 2.63\% | 3.59\% | 3.39\% | 2.26\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 5 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2011-2010 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2010-2009 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \\ & \hline \end{aligned}$ |
|  |  | Female | -1.31\% | -0.27\% | 1.70\% | -3.16\% | -0.61\% | 0.76\% |
|  |  | Male | 1.32\% | 0.61\% | -1.74\% | 3.03\% | 0.61\% | -1.09\% |
|  |  | Autism | 3.13\% | -0.35\% | 2.05\% | 2.31\% | 0.84\% | 3.37\% |
|  |  | Deaf-Blind | -0.15\% | 0.15\% | -0.15\% | 0.15\% | -0.16\% | -0.19\% |
|  |  | Emotional Disability | -0.01\% | -0.03\% | -0.12\% | -0.53\% | -0.99\% | 0.55\% |
|  |  | Hearing Disability | 0\% | -0.17\% | -0.43\% | -0.86\% | 0.15\% | -0.28\% |
|  |  | Limited Intellectual Capacity | -3.33\% | -0.34\% | -0.60\% | 4.80\% | -2.10\% | -3.32\% |
|  |  | Multiple Disabilities | 3.75\% | 0.69\% | 2.41\% | 1.30\% | 0.81\% | -0.86\% |
|  | Primary <br> Disability | Physical Disability | -3.18\% | -0.09\% | -0.73\% | 0.09\% | 1.17\% | 1.32\% |
|  |  | Specific Learning Disability | -1.87\% | 0.07\% | -2.36\% | -3.78\% | -0.45\% | -1.03\% |
|  |  | Speech/Language Disability | 0.11\% | -0.42\% | -0.34\% | -3.54\% | 1.74\% | -0.63\% |
| RD |  | Traumatic Brain Injury | -0.48\% | 1.14\% | -0.25\% | 0.26\% | -0.50\% | 0.09\% |
|  |  | Visual Disability | 0\% | -0.33\% | 0.48\% | -0.16\% | -0.49\% | 0.65\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -0.47\% | 0.06\% | 0.39\% | - | - | - |
|  |  | Asian | 0.97\% | 0.61\% | -0.33\% | - | - | - |
|  |  | Black/ African American | 1.04\% | -0.94\% | -1.35\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | -0.45\% | 5.35\% | -4.82\% | - | - | - |
|  |  | White | -0.71\% | -4.62\% | 5.08\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.44\% | -0.16\% | -0.14\% | - | - | - |
|  |  | Two or More Races | -0.96\% | 0.20\% | 1.13\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)


Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 6 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2011-2010 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2010-2009 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \\ & \hline \end{aligned}$ |
|  |  | Female | -0.62\% | 1.63\% | -0.55\% | -1.87\% | 0.94\% | -2.33\% |
|  |  | Male | 0.62\% | -1.76\% | 0.22\% | 1.87\% | -0.58\% | 2.69\% |
|  |  | Autism | -0.05\% | 2.38\% | -0.84\% | 0.72\% | 3.36\% | 1.41\% |
|  |  | Deaf-Blind | -0.15\% | 0.15\% | 0\% | -0.35\% | -0.02\% | 0.19\% |
|  |  | Emotional Disability | -0.93\% | 0.45\% | -0.84\% | 0.80\% | -0.76\% | 0.02\% |
|  |  | Hearing Disability | -0.16\% | -0.01\% | 0.13\% | -1.02\% | -0.99\% | 0.93\% |
|  |  | Limited Intellectual Capacity | -3.93\% | 0.84\% | 0.62\% | 1.70\% | -3.86\% | 7.17\% |
|  |  | Multiple Disabilities | 4.32\% | 1.32\% | 0.51\% | 0.64\% | 1.95\% | -4.98\% |
|  | Primary <br> Disability | Physical Disability | 0.21\% | -5.97\% | 2.93\% | 2.48\% | 1.50\% | -1.70\% |
|  |  | Specific Learning Disability | -0.35\% | 0.32\% | -1.36\% | -4.59\% | -0.76\% | -2.92\% |
|  |  | Speech/Language Disability | -0.94\% | 0.58\% | -1.48\% | 0.55\% | -0.48\% | -0.51\% |
| RD |  | Traumatic Brain Injury | 1.21\% | -0.20\% | -0.16\% | -0.25\% | -0.08\% | 0.56\% |
|  |  | Visual Disability | -0.47\% | 0.46\% | 0.16\% | -0.69\% | 0.51\% | 0\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -0.63\% | 0.42\% | -0.16\% | - | - | - |
|  |  | Asian | 0.74\% | -0.07\% | 0.26\% | - | - | - |
|  |  | Black/ African American | -1.16\% | 1.13\% | -1.47\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 6.78\% | -4.74\% | 3.14\% | - | - | - |
|  |  | White | -6.14\% | 2.47\% | -3.03\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.16\% | -0.17\% | -0.06\% | - | - | - |
|  |  | Two or More Races | 0.56\% | 0.65\% | 0.99\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)


Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | S | Difference 2014-2013 | Difference 2013-2012 | Difference 2012-2011 | Difference 2011-2010 | Difference 2010-2009 | Difference 2009-2008 |
|  | Gender | Female | 0.38\% | 0.62\% | -1.84\% | -0.69\% | 0.34\% | 3.74\% |
|  |  | Male | -0.04\% | -1.27\% | 2.19\% | 0.52\% | 0.22\% | -4.49\% |
|  |  | Autism | -1.15\% | -1.08\% | 1.51\% | 4.88\% | -0.71\% | 1.21\% |
|  |  | Deaf-Blind | -0.16\% | -0.03\% | -0.16\% | 0.35\% | -0.19\% | 0.19\% |
|  |  | Emotional Disability | -0.33\% | -0.26\% | 0.04\% | 0.15\% | -0.57\% | -0.01\% |
|  |  | Hearing Disability | -0.33\% | 0.33\% | -0.35\% | -1.87\% | 0.91\% | -0.02\% |
|  |  | Limited Intellectual Capacity | -1.46\% | 3.18\% | -3.06\% | -1.41\% | 5.66\% | -0.16\% |
|  |  | Multiple Disabilities | 6.18\% | -3.44\% | 5.24\% | -1.11\% | -3.13\% | 0.16\% |
|  | Primary | Physical Disability | -4.23\% | 3.53\% | -0.61\% | -0.01\% | -0.12\% | -0.85\% |
|  | Disability | Specific Learning Disability | 1.21\% | -2.43\% | -1.66\% | -1.22\% | -1.99\% | -0.49\% |
|  |  | Speech/Language Disability | -0.01\% | -0.26\% | -0.31\% | -0.23\% | -0.58\% | 0.93\% |
| RD |  | Traumatic Brain Injury | -0.67\% | -0.02\% | 0.08\% | -0.06\% | 0.73\% | -1.15\% |
|  |  | Visual Disability | 0.16\% | 0.00\% | -0.53\% | 0.35\% | 0\% | 0.19\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.76\% | -0.18\% | 0.08\% | - | - | - |
|  |  | Asian | 0.27\% | 0.12\% | -0.79\% | - | - | - |
|  |  | Black/ African American | -0.34\% | -0.43\% | -0.23\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | -4.21\% | 4.49\% | -1.23\% | - | - | - |
|  |  | White | 2.32\% | -4.78\% | 2.37\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | -0.17\% | -0.05\% | 0.20\% | - | - | - |
|  |  | Two or More Races | 1.53\% | 0.18\% | -0.04\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)


Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 8 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2011-2010 } \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  | Gender | Female | 1.01\% | -0.08\% | -2.42\% | 0.91\% | 3.51\% | -2.72\% |
|  | Gender | Male | -1.18\% | 0.08\% | 2.42\% | -0.52\% | -3.54\% | 2.35\% |
|  |  | Autism | 1.05\% | -1.01\% | 4.48\% | 0.48\% | -0.40\% | 1.39\% |
|  |  | Deaf-Blind | -0.20\% | -0.16\% | 0.16\% | 0.20\% | -0.19\% | 0.19\% |
|  |  | Emotional Disability | 0.06\% | 0.25\% | 0.34\% | -0.39\% | -0.33\% | -0.46\% |
|  |  | Hearing Disability | 0.34\% | -0.36\% | -0.64\% | -0.39\% | -0.09\% | 0.09\% |
|  |  | Limited Intellectual Capacity | -2.41\% | -2.81\% | 0.95\% | 3.25\% | 1.33\% | -2.72\% |
|  |  | Multiple Disabilities | 0.33\% | 5.45\% | -2.97\% | -4.06\% | 3.59\% | 1.15\% |
|  | Primary | Physical Disability | 0.46\% | -0.28\% | -0.58\% | 0.66\% | -0.56\% | 2.34\% |
|  | Disability | Specific Learning Disability | -0.42\% | -0.48\% | -1.34\% | 0.24\% | -2.81\% | -1.74\% |
|  |  | Speech/Language Disability | -0.25\% | 0.05\% | -0.06\% | -1.18\% | -0.06\% | -0.53\% |
| RD |  | Traumatic Brain Injury | 0.40\% | -0.48\% | -0.32\% | 1.00\% | -0.88\% | 1.08\% |
|  |  | Visual Disability | -0.20\% | -0.16\% | -0.04\% | 0.20\% | 0.20\% | -0.59\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -1.27\% | 0.87\% | -0.48\% | - | - | - |
|  |  | Asian | 0.08\% | -0.39\% | -1.42\% | - | - | - |
|  |  | Black/ African American | 0.15\% | -0.30\% | 0.44\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 5.04\% | 0.99\% | -1.26\% | - | - | - |
|  |  | White | -4.52\% | -1.37\% | 1.94\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0\% | 0\% | 0\% | - | - | - |
|  |  | Two or More Races | -0.17\% | 0.20\% | 0.78\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)


Table 70
Reading Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 9 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  |  | Female | -1.13\% | -1.07\% | -2.42\% | 4.29\% | -2.19\% | -2.21\% |
|  | ende | Male | 1.13\% | 1.09\% | 2.40\% | -4.29\% | 2.20\% | 2.00\% |
|  |  | Autism | -2.58\% | 3.83\% | 1.26\% | 0.75\% | -0.19\% | 1.91\% |
|  |  | Deaf-Blind | 0\% | 0\% | 0\% | -0.19\% | 0.19\% | -0.18\% |
|  |  | Emotional Disability | 0.61\% | -0.27\% | 0.44\% | -0.92\% | 0.70\% | -0.46\% |
|  |  | Hearing Disability | -0.18\% | -1.05\% | 1.04\% | -1.11\% | 0.09\% | 0.32\% |
|  |  | Limited Intellectual Capacity | -4.84\% | 0.84\% | 1.19\% | -0.10\% | -1.65\% | -1.24\% |
|  |  | Multiple Disabilities | 5.56\% | -0.94\% | -4.97\% | 3.57\% | 2.88\% | 0.96\% |
|  | Primary | Physical Disability | 1.09\% | -2.52\% | 2.12\% | -1.19\% | 0.02\% | 1.57\% |
|  | Disability | Specific Learning Disability | -0.92\% | 1.54\% | -1.70\% | -1.03\% | -0.85\% | -3.83\% |
|  |  | Speech/Language Disability | 0.79\% | -0.84\% | 0.07\% | -0.17\% | -0.90\% | 0.60\% |
| RD |  | Traumatic Brain Injury | -0.12\% | -0.34\% | 0.29\% | 0.21\% | 0.33\% | -0.10\% |
|  |  | Visual Disability | 0.01\% | $-0.23 \%$ | 0.22\% | 0.19\% | -0.40\% | 0.05\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 1.02\% | -0.52\% | 0.29\% | - | - | - |
|  |  | Asian | 0.11\% | -2.28\% | 1.26\% | - | - | - |
|  |  | Black/ African American | -0.75\% | 0.17\% | -2.14\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 1.32\% | -1.37\% | 2.59\% | - | - | - |
|  |  | White | -2.08\% | 2.97\% | -0.85\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0\% | 0\% | -0.19\% | - | - | - |
|  |  | Two or More Races | 0.37\% | 1.05\% | -0.98\% | - | - | - |

Table 70
Reading Longitudinal Subgroup Participation (continued)


Table 70
Reading Longitudinal Subgroup Participation (continued)


## Table 71 Writing Longitudinal Subgroup Participation



## Table 71 Writing Longitudinal Subgroup Participation (continued)



## Table 71 Writing Longitudinal Subgroup Participation (continued)



## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2010-2009 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \\ & \hline \end{aligned}$ |
|  | Gend | Female | -1.32\% | 0.55\% | 0.81\% | 1.20\% | -2.85\% | -0.71\% |
|  | nder | Male | 1.17\% | -0.24\% | -0.79\% | -1.53\% | 3.16\% | 0.87\% |
|  |  | Autism | -4.53\% | 3.84\% | 0.42\% | 1.61\% | 2.94\% | 2.16\% |
|  |  | Deaf-Blind | 0\% | -0.32\% | 0.32\% | -0.15\% | 0.15\% | -0.16\% |
|  |  | Emotional Disability | -0.43\% | 0.58\% | -2.28\% | 2.13\% | -1.26\% | -0.83\% |
|  |  | Hearing Disability | 0\% | 0.13\% | -0.17\% | -1.04\% | -0.04\% | -0.03\% |
|  |  | Limited Intellectual Capacity | 0\% | 1.06\% | -0.12\% | -2.59\% | 5.47\% | -2.37\% |
|  |  | Multiple Disabilities | 5.71\% | 1.01\% | 0.40\% | 5.82\% | -1.33\% | -1.33\% |
|  | Disability | Physical Disability | -0.29\% | -4.40\% | 2.44\% | -1.30\% | 0.66\% | 1.67\% |
|  |  | Specific Learning Disability | 0\% | -2.03\% | -1.43\% | -2.58\% | -3.75\% | -0.73\% |
|  |  | Speech/Language Disability | -1.61\% | 0.56\% | 0.44\% | -2.32\% | -2.64\% | 1.95\% |
| WR |  | Traumatic Brain Injury | 0.15\% | -0.09\% | 0.13\% | -0.09\% | 0.12\% | -0.02\% |
|  |  | Visual Disability | 0\% | -0.01\% | -0.33\% | 0.34\% | -0.16\% | -0.01\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0\% | 0.21\% | -0.36\% | - | - | - |
|  |  | Asian | -1.46\% | 1.42\% | -0.38\% | - | - | - |
|  |  | Black/ African American | 1.61\% | 0.38\% | -0.14\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 1.76\% | 0.69\% | 1.79\% | - | - | - |
|  |  | White | -3.22\% | -1.62\% | -1.96\% | - | - | - |
|  |  | Pacific Islander | 0.29\% | -0.01\% | 0.00\% | - | - | - |
|  |  | Two or More Races | 0.88\% | -0.75\% | 0.89\% | - | - | - |

## Table 71 Writing Longitudinal Subgroup Participation (continued)

| Content | Variable | Subgroup | Grade 5 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2011-2010 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2010-2009 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \\ & \hline \end{aligned}$ |
|  | Gender | Female | -1.16\% | -0.72\% | 1.91\% | -3.21\% | -0.39\% | 0.60\% |
|  |  | Male | 1.16\% | 1.06\% | -1.95\% | 3.08\% | 0.39\% | -0.93\% |
| WR | Primary Disability | Autism | 0.23\% | -0.12\% | 2.02\% | 1.78\% | 1.36\% | 3.31\% |
|  |  | Deaf-Blind | -0.15\% | 0.15\% | -0.15\% | 0.15\% | -0.17\% | -0.19\% |
|  |  | Emotional Disability | -0.30\% | -0.04\% | -0.12\% | -0.54\% | -1.00\% | 0.56\% |
|  |  | Hearing Disability | 0.14\% | -0.17\% | -0.44\% | -0.88\% | 0.15\% | -0.27\% |
|  |  | Limited Intellectual Capacity | -3.28\% | 0.25\% | -0.54\% | 4.71\% | -2.08\% | -3.44\% |
|  |  | Multiple Disabilities | 6.01\% | -0.25\% | 2.67\% | 1.96\% | 0.21\% | -0.62\% |
|  |  | Physical Disability | -1.21\% | 0.13\% | -0.94\% | 0.03\% | 0.87\% | 1.58\% |
|  |  | Specific Learning Disability | -1.61\% | -0.04\% | -2.40\% | -3.69\% | -0.11\% | -1.43\% |
|  |  | Speech/Language Disability | -0.19\% | -0.41\% | -0.35\% | -3.60\% | 1.76\% | -0.60\% |
|  |  | Traumatic Brain Injury | -0.64\% | 1.16\% | -0.26\% | 0.25\% | -0.50\% | 0.10\% |
|  |  | Visual Disability | 0\% | -0.34\% | 0.49\% | -0.16\% | -0.50\% | 0.66\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  | Ethnicity | American Indian/Alaska Native | -0.49\% | 0.06\% | 0.39\% | - | - | - |
|  |  | Asian | 0.92\% | 0.62\% | -0.18\% | - | - | - |
|  |  | Black/ African American | 1.09\% | -1.08\% | -1.37\% | - | - | - |
|  |  | Hispanic/ Latino | -0.32\% | 5.55\% | -4.81\% | - | - | - |
|  |  | White | -0.76\% | -4.73\% | 4.96\% | - | - | - |
|  |  | Pacific Islander | 0.43\% | -0.16\% | -0.14\% | - | - | - |
|  |  | Two or More Races | -1.01\% | 0.21\% | 1.14\% | - | - | - |

## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 5 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{gathered} \hline \text { Difference } \\ 2014-2013 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2010-2009 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  | Gender | Female | -1.16\% | -0.72\% | 1.91\% | -3.21\% | -0.39\% | 0.60\% |
|  | nder | Male | 1.16\% | 1.06\% | -1.95\% | 3.08\% | 0.39\% | -0.93\% |
|  |  | Autism | 0.23\% | -0.12\% | 2.02\% | 1.78\% | 1.36\% | 3.31\% |
|  |  | Deaf-Blind | -0.15\% | 0.15\% | -0.15\% | 0.15\% | -0.17\% | -0.19\% |
|  |  | Emotional Disability | -0.30\% | -0.04\% | -0.12\% | -0.54\% | -1.00\% | 0.56\% |
|  |  | Hearing Disability | 0.14\% | -0.17\% | -0.44\% | -0.88\% | 0.15\% | -0.27\% |
|  |  | Limited Intellectual Capacity | -3.28\% | 0.25\% | -0.54\% | 4.71\% | -2.08\% | -3.44\% |
|  |  | Multiple Disabilities | 6.01\% | -0.25\% | 2.67\% | 1.96\% | 0.21\% | -0.62\% |
|  | Primary | Physical Disability | -1.21\% | 0.13\% | -0.94\% | 0.03\% | 0.87\% | 1.58\% |
|  |  | Specific Learning Disability | -1.61\% | -0.04\% | -2.40\% | -3.69\% | -0.11\% | -1.43\% |
|  |  | Speech/Language Disability | -0.19\% | -0.41\% | -0.35\% | -3.60\% | 1.76\% | -0.60\% |
| WR |  | Traumatic Brain Injury | -0.64\% | 1.16\% | -0.26\% | 0.25\% | -0.50\% | 0.10\% |
|  |  | Visual Disability | 0.00\% | -0.34\% | 0.49\% | -0.16\% | -0.50\% | 0.66\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -0.49\% | 0.06\% | 0.39\% | - | - | - |
|  |  | Asian | 0.92\% | 0.62\% | -0.18\% | - | - | - |
|  | Ethnicity | Black/ African American | 1.09\% | -1.08\% | -1.37\% | - | - | - |
|  | E | Hispanic/ Latino | -0.32\% | 5.55\% | -4.81\% | - | - | - |
|  |  | White | -0.76\% | -4.73\% | 4.96\% | - | - | - |
|  |  | Pacific Islander | 0.43\% | -0.16\% | -0.14\% | - | - | - |
|  |  | Two or More Races | -1.01\% | 0.21\% | 1.14\% | - | - | - |

## Table 71 Writing Longitudinal Subgroup Participation (continued)



## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 6 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{gathered} \hline \text { Difference } \\ 2014-2013 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2010-2009 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  | Gender | Female | -0.08\% | 1.54\% | -0.57\% | -2.00\% | 0.52\% | -1.93\% |
|  | nder | Male | 0.08\% | -1.68\% | 0.25\% | 2.00\% | -0.16\% | 2.29\% |
|  |  | Autism | -0.40\% | 2.40\% | -0.97\% | 0.91\% | 3.17\% | 1.47\% |
|  |  | Deaf-Blind | -0.15\% | 0.15\% | 0\% | -0.35\% | -0.02\% | 0.18\% |
|  |  | Emotional Disability | -0.93\% | 0.45\% | -0.83\% | 0.79\% | -0.75\% | 0\% |
|  |  | Hearing Disability | -0.16\% | -0.01\% | 0.13\% | -1.03\% | -1.15\% | 1.10\% |
|  |  | Limited Intellectual Capacity | -3.60\% | 0.90\% | 0.58\% | 1.49\% | -3.64\% | 6.79\% |
|  |  | Multiple Disabilities | 3.94\% | 1.21\% | 0.58\% | 0.97\% | 2.16\% | -5.40\% |
|  | Primary | Physical Disability | 0.57\% | -5.95\% | 3.00\% | 2.35\% | 1.43\% | -1.44\% |
|  |  | Specific Learning Disability | -0.33\% | 0.33\% | -1.34\% | -4.69\% | -0.63\% | -2.53\% |
|  |  | Speech/Language Disability | -0.93\% | 0.58\% | -1.47\% | 0.53\% | -0.64\% | -0.36\% |
| WR |  | Traumatic Brain Injury | 1.23\% | -0.20\% | -0.16\% | -0.27\% | -0.07\% | 0.55\% |
|  |  | Visual Disability | -0.47\% | 0.46\% | 0.16\% | -0.70\% | 0.51\% | -0.18\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -0.62\% | 0.42\% | -0.16\% | - | - | - |
|  |  | Asian | 0.76\% | -0.06\% | 0.11\% | - | - | - |
|  | E | Black/ African American | -1.13\% | 1.15\% | -1.25\% | - | - | - |
|  | E | Hispanic/ Latino | 7.18\% | -4.35\% | 2.59\% | - | - | - |
|  |  | White | -6.79\% | 2.22\% | -2.56\% | - | - | - |
|  |  | Pacific Islander | 0.16\% | -0.17\% | -0.06\% | - | - | - |
|  |  | Two or More Races | 0.75\% | 0.50\% | 1.00\% | - | - | - |

## Table 71 Writing Longitudinal Subgroup Participation (continued)



## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | Difference 2014-2013 | $\begin{aligned} & \text { Difference } \\ & 2013-2012 \end{aligned}$ | Difference 2012-2011 | Difference 2011-2010 | $\begin{aligned} & \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  |  | Female | 0.45\% | 0.54\% | -1.72\% | -0.56\% | -0.03\% | 4.23\% |
|  |  | Male | -0.11\% | -1.20\% | 2.08\% | 0.39\% | 0.60\% | -4.98\% |
|  |  | Autism | -1.30\% | -0.70\% | 1.11\% | 4.87\% | -0.43\% | 0.81\% |
|  |  | Deaf-Blind | -0.16\% | -0.03\% | -0.17\% | 0.36\% | -0.19\% | 0.19\% |
|  |  | Emotional Disability | -0.33\% | -0.27\% | 0.05\% | 0.15\% | -0.75\% | 0.17\% |
|  |  | Hearing Disability | -0.33\% | 0.33\% | -0.36\% | -1.88\% | 0.93\% | -0.02\% |
|  |  | Limited Intellectual Capacity | -2.06\% | 3.42\% | -2.79\% | -1.67\% | 5.99\% | 0.17\% |
|  |  | Multiple Disabilities | 6.28\% | -3.43\% | 5.24\% | -0.98\% | -3.19\% | 0.09\% |
|  | Primary | Physical Disability | -3.59\% | 3.00\% | -0.55\% | 0.17\% | -0.42\% | -0.87\% |
|  | Disability | Specific Learning Disability | 1.22\% | -2.49\% | -1.63\% | -1.06\% | -2.11\% | -0.51\% |
|  |  | Speech/Language Disability | -0.01\% | -0.27\% | -0.31\% | -0.43\% | -0.57\% | 1.11\% |
| WR |  | Traumatic Brain Injury | -0.67\% | -0.03\% | 0.09\% | -0.06\% | 0.74\% | -1.34\% |
|  |  | Visual Disability | 0.16\% | 0\% | -0.53\% | 0.35\% | 0\% | 0.19\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.78\% | -0.01\% | -0.10\% | - | - | - |
|  |  | Asian | 0.29\% | 0.29\% | -0.80\% | - | - | - |
|  |  | Black/ African American | -0.33\% | -0.32\% | -0.35\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | -4.34\% | 4.55\% | -1.29\% | - | - | - |
|  |  | White | 2.42\% | -5.28\% | 2.70\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | -0.17\% | -0.05\% | 0.20\% | - | - | - |
|  |  | Two or More Races | 1.54\% | 0.16\% | -0.02\% | - | - | - |

## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 8 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
|  | Gen | Female | 39.22\% | 37.90\% | 38.25\% | 41.08\% | 40.00\% | 35.98\% | 39.28\% |
|  | Gender | Male | 60.61\% | 62.10\% | 61.75\% | 58.92\% | 59.80\% | 63.65\% | 60.72\% |
|  |  | Autism | 15.28\% | 14.09\% | 14.94\% | 10.82\% | 10.10\% | 10.70\% | 9.22\% |
|  |  | Deaf-Blind | 0\% | 0.20\% | 0.36\% | 0.20\% | 0\% | 0\% | 0\% |
|  |  | Emotional Disability | 0.85\% | 0.79\% | 0.55\% | 0.20\% | 0.59\% | 0.92\% | 1.60\% |
|  |  | Hearing Disability | 0.34\% | 0\% | 0.36\% | 1.00\% | 1.39\% | 1.48\% | 1.40\% |
|  |  | Limited Intellectual Capacity | 31.24\% | 33.73\% | 36.61\% | 35.27\% | 32.08\% | 30.63\% | 33.27\% |
|  |  | Multiple Disabilities | 39.39\% | 39.09\% | 33.88\% | 36.87\% | 40.79\% | 37.27\% | 35.87\% |
|  | Primary | Physical Disability | 7.98\% | 7.54\% | 7.65\% | 8.22\% | 7.92\% | 8.30\% | 6.01\% |
|  | Disability | Specific Learning Disability | 2.55\% | 2.98\% | 3.46\% | 4.81\% | 4.55\% | 7.38\% | 9.62\% |
|  |  | Speech/Language Disability | 0.34\% | 0.60\% | 0.55\% | 0.60\% | 1.78\% | 1.85\% | 2.00\% |
| WR |  | Traumatic Brain Injury | 1.19\% | 0.79\% | 1.28\% | 1.60\% | 0.59\% | 1.48\% | 0.40\% |
|  |  | Visual Disability | 0\% | 0.20\% | 0.36\% | 0.40\% | 0.20\% | 0\% | 0.60\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - |
|  |  | Other health impairment | 0.68\% | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.51\% | 1.79\% | 0.91\% | 1.40\% | - | - | - |
|  |  | Asian | 1.87\% | 1.98\% | 2.19\% | 3.61\% | - | - | - |
|  |  | Black/ African American | 7.47\% | 7.34\% | 7.47\% | 7.01\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 38.71\% | 33.53\% | 32.60\% | 34.07\% | - | - | - |
|  |  | White | 48.56\% | 52.98\% | 54.64\% | 52.51\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.34\% | 0\% | 0\% | 0\% | - | - | - |
|  |  | Two or More Races | 2.21\% | 2.38\% | 2.19\% | 1.40\% | - | - | - |

Table 71 Writing Longitudinal Subgroup Participation (continued)


## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 9 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
|  | Gen | Female | 36.29\% | 37.07\% | 38.33\% | 40.42\% | 36.25\% | 38.15\% | 40.60\% |
|  | Gender | Male | 63.51\% | 62.75\% | 61.67\% | 59.20\% | 63.57\% | 61.65\% | 59.40\% |
|  |  | Autism | 12.55\% | 15.37\% | 11.88\% | 10.63\% | 9.67\% | 10.04\% | 7.73\% |
|  |  | Deaf-Blind | 0\% | 0\% | 0\% | 0\% | 0.19\% | 0\% | 0.18\% |
|  |  | Emotional Disability | 1.16\% | 0.54\% | 0.63\% | 0.38\% | 1.30\% | 0.60\% | 1.05\% |
|  |  | Hearing Disability | 0\% | 0.18\% | 1.25\% | 0.19\% | 1.30\% | 1.21\% | 0.88\% |
|  |  | Limited Intellectual Capacity | 31.85\% | 35.99\% | 35.63\% | 34.54\% | 34.39\% | 36.35\% | 37.43\% |
|  |  | Multiple Disabilities | 41.89\% | 36.53\% | 37.08\% | 41.75\% | 38.85\% | 35.14\% | 34.80\% |
|  | Primary | Physical Disability | 6.37\% | 5.42\% | 7.92\% | 5.88\% | 6.88\% | 7.03\% | 5.62\% |
|  | Disability | Specific Learning Disability | 3.28\% | 4.16\% | 2.71\% | 4.18\% | 5.20\% | 6.23\% | 9.84\% |
|  |  | Speech/Language Disability | 0.97\% | 0.18\% | 1.04\% | 0.95\% | 1.12\% | 2.01\% | 1.41\% |
| WR |  | Traumatic Brain Injury | 0.97\% | 1.27\% | 1.46\% | 1.14\% | 0.93\% | 0.60\% | 0.70\% |
|  |  | Visual Disability | 0.19\% | 0.18\% | 0.42\% | 0.19\% | 0\% | 0.40\% | 0.35\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - |
|  |  | Other health impairment | 0.58\% | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 1.93\% | 0.90\% | 1.46\% | 1.14\% | - | - | - |
|  |  | Asian | 1.93\% | 1.81\% | 3.75\% | 2.85\% | - | - | - |
|  |  | Black/ African American | 6.37\% | 7.05\% | 6.67\% | 8.73\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 33.98\% | 32.73\% | 34.38\% | 31.50\% | - | - | - |
|  |  | White | 52.12\% | 54.25\% | 51.88\% | 52.37\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0\% | 0\% | 0\% | 0.19\% | - | - | - |
|  |  | Two or More Races | 3.47\% | 3.07\% | 1.88\% | 2.85\% | - | - | - |

## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 9 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2011-2010 } \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  | Gender | Female | -0.78\% | -1.26\% | -2.09\% | 4.17\% | -1.91\% | -2.45\% |
|  | Gender | Male | 0.76\% | 1.08\% | 2.47\% | -4.37\% | 1.92\% | 2.25\% |
|  |  | Autism | -2.82\% | 3.49\% | 1.25\% | 0.96\% | -0.38\% | 2.31\% |
|  |  | Deaf-Blind | 0\% | 0\% | 0\% | -0.19\% | 0.19\% | -0.18\% |
|  |  | Emotional Disability | 0.62\% | -0.09\% | 0.25\% | -0.92\% | 0.70\% | -0.45\% |
|  |  | Hearing Disability | -0.18\% | -1.07\% | 1.06\% | -1.11\% | 0.10\% | 0.33\% |
|  |  | Limited Intellectual Capacity | -4.14\% | 0.36\% | 1.10\% | 0.15\% | -1.96\% | -1.09\% |
|  |  | Multiple Disabilities | 5.36\% | -0.55\% | -4.67\% | 2.90\% | 3.71\% | 0.34\% |
|  | Primary | Physical Disability | 0.95\% | -2.50\% | 2.04\% | -1.00\% | -0.15\% | 1.40\% |
|  | Disability | Specific Learning Disability | -0.88\% | 1.45\% | -1.47\% | -1.03\% | -1.02\% | -3.62\% |
|  |  | Speech/Language Disability | 0.79\% | -0.86\% | 0.09\% | -0.17\% | -0.89\% | 0.60\% |
| WR |  | Traumatic Brain Injury | -0.30\% | -0.19\% | 0.32\% | 0.21\% | 0.33\% | -0.10\% |
|  |  | Visual Disability | 0.01\% | -0.24\% | 0.23\% | 0.19\% | -0.40\% | 0.05\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 1.03\% | -0.56\% | 0.32\% | - | - | - |
|  |  | Asian | 0.12\% | -1.94\% | 0.90\% | - | - | - |
|  |  | Black/ African American | -0.68\% | 0.38\% | -2.06\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 1.25\% | -1.65\% | 2.88\% | - | - | - |
|  |  | White | -2.13\% | 2.37\% | -0.49\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0\% | 0\% | -0.19\% | - | - | - |
|  |  | Two or More Races | 0.40\% | 1.19\% | -0.97\% | - | - | - |

## Table 71 Writing Longitudinal Subgroup Participation (continued)



## Table 71 Writing Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 10 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2011-2010 } \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2010-2009 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2009-2008 \end{aligned}$ |
|  | Gender | Female | -2.86\% | -1.21\% | 3.09\% | -1.37\% | -0.43\% | 0.75\% |
|  | Gender | Male | 2.53\% | 1.18\% | -3.28\% | 1.58\% | 0.40\% | -0.93\% |
|  |  | Autism | 1.71\% | 0.93\% | 0.67\% | 0.04\% | 2.32\% | 2.16\% |
|  |  | Deaf-Blind | 0.18\% | 0\% | 0\% | 0\% | 0\% | -0.22\% |
|  |  | Emotional Disability | -0.52\% | 0.29\% | -0.24\% | 0.39\% | -0.12\% | -0.56\% |
|  |  | Hearing Disability | -1.13\% | 1.31\% | -0.22\% | -0.44\% | -0.28\% | -1.71\% |
|  |  | Limited Intellectual Capacity | 1.79\% | -0.27\% | -1.85\% | -1.06\% | -1.72\% | 1.49\% |
|  |  | Multiple Disabilities | -0.79\% | -2.68\% | 1.54\% | 3.14\% | 2.69\% | -1.48\% |
|  | Primary | Physical Disability | -3.04\% | 1.62\% | -0.47\% | 0.63\% | -0.34\% | -2.65\% |
|  | Disability | Specific Learning Disability | 2.20\% | -1.44\% | -0.75\% | -1.61\% | -1.49\% | 1.56\% |
|  |  | Speech/Language Disability | -0.49\% | -0.11\% | 0.36\% | -0.66\% | 0.14\% | 0.26\% |
| WR |  | Traumatic Brain Injury | -0.65\% | 0.57\% | 0.75\% | -0.02\% | -0.87\% | 0.41\% |
|  |  | Visual Disability | 0\% | -0.19\% | 0.19\% | -0.21\% | -0.35\% | 0.56\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -0.55\% | -0.28\% | -0.69\% | - | - | - |
|  |  | Asian | -1.23\% | 0.51\% | 1.29\% | - | - | - |
|  |  | Black/ African American | -1.48\% | 0.82\% | 0.82\% | - | - | - |
|  | Ethnicity | Hispanic/ Latino | -1.70\% | 3.35\% | -0.30\% | - | - | - |
|  |  | White | 2.74\% | -3.46\% | -2.59\% | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | -0.03\% | 0.02\% | 0.19\% | - | - | - |
|  |  | Two or More Races | 1.89\% | -0.78\% | 1.29\% | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation

|  |  |  | Grade 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| Gender |  | Female | 30.87\% | 35.05\% | 36.42\% | 36.44\% | 35.54\% | 33.03\% | 35.52\% | 39.29\% |
|  |  | Male | 68.61\% | 64.64\% | 63.43\% | 63.41\% | 64.47\% | 66.52\% | 64.48\% | 60.71\% |
| MA | Primary Disability | Autism | 21.27\% | 16.69\% | 20.22\% | 17.98\% | 16.82\% | 14.09\% | 12.24\% | 8.57\% |
|  |  | Deaf-Blind | 0\% | 0\% | 0\% | 0.16\% | 0.00\% | 0.30\% | 0\% | 0.37\% |
|  |  | Emotional Disability | 0.51\% | 0.30\% | 0.62\% | 0.95\% | 1.73\% | 0.61\% | 1.72\% | 2.24\% |
|  |  | Hearing Disability | 0.51\% | 0.30\% | 0.46\% | 0\% | 1.10\% | 0.61\% | 1.55\% | 0.75\% |
|  |  | Limited Intellectual Capacity | 25.90\% | 25.80\% | 25.93\% | 24.61\% | 24.37\% | 28.03\% | 22.76\% | 27.93\% |
|  |  | Multiple Disabilities | 32.76\% | 36.87\% | 31.79\% | 26.97\% | 29.09\% | 25.00\% | 26.21\% | 26.63\% |
|  |  | Physical Disability | 11.84\% | 11.84\% | 12.50\% | 17.51\% | 12.74\% | 14.55\% | 13.62\% | 12.10\% |
|  |  | Specific Learning Disability | 2.23\% | 3.79\% | 3.86\% | 5.52\% | 6.76\% | 8.33\% | 12.41\% | 12.10\% |
|  |  | Speech/Language Disability | 1.54\% | 2.88\% | 3.70\% | 4.57\% | 5.98\% | 7.42\% | 8.62\% | 8.19\% |
|  |  | Traumatic Brain Injury | 0.51\% | 1.37\% | 0.77\% | 1.58\% | 0.79\% | 1.06\% | 0.52\% | 0.56\% |
|  |  | Visual Disability | 0.51\% | 0\% | 0\% | 0.16\% | 0.63\% | 0\% | 0.35\% | 0.37\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 2.06\% | - | - | - | - | - | - | - |
|  | Ethnicity | American Indian/Alaska Native | 0.86\% | 0.76\% | 1.08\% | 1.26\% | - | - | - | - |
|  |  | Asian | 2.40\% | 1.82\% | 3.70\% | 2.21\% | - | - | - | - |
|  |  | Black/ African American | 7.89\% | 7.44\% | 5.71\% | 6.15\% | - | - | - | - |
|  |  | Hispanic/ Latino | 36.54\% | 38.39\% | 35.96\% | 37.07\% | - | - | - | - |
|  |  | White | 48.03\% | 46.13\% | 49.69\% | 49.37\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacifi | 1.03\% | 0.30\% | 0.15\% | 0\% | - | - | - | - |
|  |  | Two or More Races | 2.92\% | 4.86\% | 3.55\% | 3.94\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)


Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 4 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| Gender |  | Female | 35.20\% | 36.48\% | 36.48\% | 35.36\% | 35.17\% | 38.05\% | 38.16\% | 38.39\% |
|  |  | Male | 64.65\% | 63.52\% | 63.20\% | 64.47\% | 64.83\% | 61.79\% | 61.33\% | 61.02\% |
| MA | Primary Disability | Autism | 16.49\% | 21.42\% | 17.60\% | 16.45\% | 14.98\% | 12.36\% | 11.07\% | 8.47\% |
|  |  | Deaf-Blind | 0\% | 0\% | 0.32\% | 0\% | 0.16\% | 0\% | 0.17\% | 0.20\% |
|  |  | Emotional Disability | 0.15\% | 0.59\% | 0\% | 1.97\% | 0.16\% | 1.30\% | 2.39\% | 1.38\% |
|  |  | Hearing Disability | 0.29\% | 0.30\% | 0.16\% | 0.33\% | 0.79\% | 0.65\% | 1.19\% | 1.97\% |
|  |  | Limited Intellectual Capacity | 27.54\% | 27.33\% | 26.56\% | 26.97\% | 30.28\% | 24.07\% | 27.09\% | 30.51\% |
|  |  | Multiple Disabilities | 39.03\% | 32.94\% | 32.16\% | 32.07\% | 26.81\% | 28.46\% | 30.66\% | 28.15\% |
|  |  | Physical Disability | 10.01\% | 10.34\% | 14.72\% | 12.34\% | 13.88\% | 13.17\% | 10.56\% | 11.22\% |
|  |  | Specific Learning Disability | 3.24\% | 3.25\% | 4.80\% | 6.41\% | 7.73\% | 12.20\% | 10.73\% | 10.83\% |
|  |  | Speech/Language Disability | 1.03\% | 2.66\% | 2.08\% | 1.81\% | 3.94\% | 6.34\% | 4.26\% | 5.32\% |
|  |  | Traumatic Brain Injury | 1.18\% | 1.03\% | 1.12\% | 0.99\% | 1.10\% | 0.98\% | 1.02\% | 1.18\% |
|  |  | Visual Disability | 0.15\% | 0.15\% | 0.16\% | 0.49\% | 0.16\% | 0.33\% | 0.34\% | 0.39\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 0.74\% | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 1.33\% | 1.33\% | 1.12\% | 1.48\% | - | - | - | - |
|  |  | Asian | 2.06\% | 3.69\% | 2.24\% | 2.63\% | - | - | - | - |
|  |  | Black/ African American | 8.39\% | 6.50\% | 6.24\% | 6.09\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 38.29\% | 36.63\% | 35.52\% | 34.21\% | - | - | - | - |
|  |  | White | 45.51\% | 48.60\% | 50.40\% | 52.47\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.44\% | 0.15\% | 0.16\% | 0.16\% | - | - | - | - |
|  |  | Two or More Races | 3.83\% | 3.10\% | 4.00\% | 2.80\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

| Content | Variable | Subgroup | Grade 4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2010-2009 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2008-2007 } \end{aligned}$ |
|  | Gender | Female | -1\% | 0\% | 1.12\% | 0.19\% | -2.88\% | -0.11\% | -0.23\% |
|  |  | Male | 1.13\% | 0.32\% | -1.27\% | -0.35\% | 3.04\% | 0.46\% | 0.31\% |
| MA | Primary Disability | Autism | -4.93\% | 3.82\% | 1.15\% | 1.46\% | 2.63\% | 1.29\% | 2.60\% |
|  |  | Deaf-Blind | 0\% | -0.32\% | 0.32\% | -0.16\% | 0.16\% | -0.17\% | -0.03\% |
|  |  | Emotional Disability | -0.44\% | 0.59\% | -1.97\% | 1.82\% | -1.14\% | -1.08\% | 1.01\% |
|  |  | Hearing Disability | -0.01\% | 0.14\% | -0.17\% | -0.46\% | 0.14\% | -0.54\% | -0.78\% |
|  |  | Limited Intellectual Capacity | 0.21\% | 0.77\% | -0.41\% | -3.31\% | 6.22\% | -3.02\% | -3.42\% |
|  |  | Multiple Disabilities | 6.09\% | 0.78\% | 0.09\% | 5.26\% | -1.64\% | -2.21\% | 2.51\% |
|  |  | Physical Disability | -0.33\% | -4.38\% | 2.38\% | -1.54\% | 0.71\% | 2.61\% | -0.66\% |
|  |  | Specific Learning Disability | -0.01\% | -1.55\% | -1.61\% | -1.32\% | -4.47\% | 1.46\% | -0.10\% |
|  |  | Speech/Language Disability | -1.63\% | 0.58\% | 0.27\% | -2.13\% | -2.40\% | 2.08\% | -1.06\% |
|  |  | Traumatic Brain Injury | 0.15\% | -0.09\% | 0.13\% | -0.12\% | 0.13\% | -0.05\% | -0.16\% |
|  |  | Visual Disability | 0\% | -0.01\% | -0.33\% | 0.34\% | -0.17\% | -0.02\% | -0.05\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -0.27\% | -0.27\% | -0.47\% | - | - | - | - |
|  |  | Asian | 0.50\% | 0.50\% | 1.28\% | - | - | - | - |
|  |  | Black/ African American | 0.82\% | 0.82\% | 0.65\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 3.54\% | 3.54\% | -0.17\% | - | - | - | - |
|  |  | White | -3.43\% | -3.43\% | -2.76\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | -0.19\% | -0.19\% | 0.19\% | - | - | - | - |
|  |  | Two or More Races | -0.77\% | -0.77\% | 1.28\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 5 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| Gender |  | Female | 36.10\% | 37.74\% | 37.87\% | 36.03\% | 39.30\% | 39.46\% | 38.91\% | 40.51\% |
|  |  | Male | 63.76\% | 62.11\% | 61.64\% | 63.51\% | 60.37\% | 60.20\% | 61.09\% | 59.28\% |
| MA | Primary Disability | Autism | 19.21\% | 16.54\% | 16.23\% | 14.75\% | 12.71\% | 11.91\% | 8.84\% | 9.07\% |
|  |  | Deaf-Blind | 0\% | 0.15\% | 0\% | 0.16\% | 0\% | 0.34\% | 0.19\% | 0.21\% |
|  |  | Emotional Disability | 0.58\% | 0.45\% | 0.49\% | 0.62\% | 1.17\% | 2.04\% | 1.50\% | 1.48\% |
|  |  | Hearing Disability | 0.15\% | 0.15\% | 0.33\% | 0.31\% | 0.67\% | 0.85\% | 1.32\% | 0.84\% |
|  |  | Limited Intellectual Capacity | 26.64\% | 30.53\% | 30.49\% | 32.30\% | 26.76\% | 29.25\% | 34.02\% | 31.86\% |
|  |  | Multiple Disabilities | 37.26\% | 32.78\% | 32.95\% | 30.28\% | 29.77\% | 29.42\% | 30.08\% | 31.65\% |
|  |  | Physical Disability | 8.15\% | 11.43\% | 11.64\% | 12.27\% | 11.71\% | 11.22\% | 9.21\% | 10.34\% |
|  |  | Specific Learning Disability | 3.20\% | 4.51\% | 4.92\% | 6.06\% | 10.70\% | 8.84\% | 9.59\% | 9.49\% |
|  |  | Speech/Language Disability | 1.31\% | 1.35\% | 1.48\% | 2.02\% | 5.35\% | 3.91\% | 4.32\% | 4.01\% |
|  |  | Traumatic Brain Injury | 1.31\% | 1.95\% | 0.66\% | 0.93\% | 0.67\% | 1.19\% | 0.94\% | 0.21\% |
|  |  | Visual Disability | 0.15\% | 0.15\% | 0.49\% | 0\% | 0.17\% | 0.68\% | 0\% | 0.21\% |
|  |  | Orthopedic impairment | 0.29\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 1.60\% | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.87\% | 1.35\% | 1.31\% | 1.48\% | - | - | - | - |
|  |  | Asian | 3.35\% | 2.41\% | 1.80\% | 2.63\% | - | - | - | - |
|  |  | Black/ African American | 6.55\% | 5.56\% | 6.56\% | 6.09\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 37.26\% | 37.74\% | 31.97\% | 34.21\% | - | - | - | - |
|  |  | White | 48.76\% | 49.17\% | 54.43\% | 52.47\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.44\% | 0\% | 0.16\% | 0.16\% | - | - | - | - |
|  |  | Two or More Races | 2.62\% | 3.76\% | 3.28\% | 2.80\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

| Content | Variable | Subgroup | Grade 5 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2012-2011 } \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2009-2008 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2008-2007 \end{aligned}$ |
|  | Gender | Female | -1.64\% | -0.13\% | 1.85\% | -3.27\% | -0.16\% | 0.55\% | -1.60\% |
|  |  | Male | 1.65\% | 0.47\% | -1.87\% | 3.14\% | 0.16\% | -0.89\% | 1.81\% |
| MA | Primary Disability | Autism | 2.67\% | 0.31\% | 1.48\% | 2.04\% | 0.80\% | 3.07\% | -0.24\% |
|  |  | Deaf-Blind | -0.15\% | 0.15\% | -0.16\% | 0.16\% | -0.34\% | 0.15\% | -0.02\% |
|  |  | Emotional Disability | 0.13\% | -0.04\% | -0.13\% | -0.55\% | -0.87\% | 0.54\% | 0.02\% |
|  |  | Hearing Disability | 0\% | -0.18\% | 0.02\% | -0.36\% | -0.18\% | -0.47\% | 0.48\% |
|  |  | Limited Intellectual Capacity | -3.89\% | 0.04\% | -1.81\% | 5.54\% | -2.50\% | -4.77\% | 2.16\% |
|  |  | Multiple Disabilities | 4.48\% | -0.17\% | 2.67\% | 0.51\% | 0.34\% | -0.65\% | -1.58\% |
|  |  | Physical Disability | -3.28\% | -0.21\% | -0.63\% | 0.56\% | 0.48\% | 2.01\% | -1.13\% |
|  |  | Specific Learning Disability | -1.31\% | -0.41\% | -1.14\% | -4.65\% | 1.86\% | -0.74\% | 0.10\% |
|  |  | Speech/Language Disability | -0.04\% | -0.13\% | -0.54\% | -3.33\% | 1.44\% | -0.41\% | 0.31\% |
|  |  | Traumatic Brain Injury | -0.64\% | 1.29\% | -0.27\% | 0.26\% | -0.52\% | 0.25\% | 0.73\% |
|  |  | Visual Disability | 0\% | -0.34\% | 0.49\% | -0.17\% | -0.51\% | 0.68\% | -0.21\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - | - |
|  | Ethnicity | American Indian/Alaska Native | -0.48\% | 0.04\% | -0.17\% | - | - | - | - |
|  |  | Asian | 0.94\% | 0.61\% | -0.83\% | - | - | - | - |
|  |  | Black/ African American | 0.99\% | -1.00\% | 0.47\% | - | - | - | - |
|  |  | Hispanic/ Latino | -0.48\% | 5.77\% | -2.24\% | - | - | - | - |
|  |  | White | -0.41\% | -5.26\% | 1.96\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.44\% | -0.16\% | 0\% | - | - | - | - |
|  |  | Two or More Races | -1.14\% | 0.48\% | 0.48\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 6 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|  | Gen | Female | 37.77\% | 37.64\% | 36.45\% | 37.48\% | 39.55\% | 37.68\% | 40.83\% | 33.78\% |
|  | Gender | Male | 61.77\% | 61.90\% | 63.23\% | 62.52\% | 60.45\% | 61.96\% | 58.41\% | 66.02\% |
|  |  | Autism | 15.60\% | 16.17\% | 14.10\% | 14.69\% | 14.34\% | 11.23\% | 9.07\% | 8.30\% |
|  |  | Deaf-Blind | 0\% | 0.16\% | 0\% | 0\% | 0.52\% | 0.36\% | 0.19\% | 0\% |
|  |  | Emotional Disability | 0\% | 0.93\% | 0.48\% | 1.13\% | 0.69\% | 1.27\% | 1.51\% | 1.35\% |
|  |  | Hearing Disability | 0.15\% | 0.31\% | 0.32\% | 0.19\% | 0.86\% | 1.81\% | 1.13\% | 1.54\% |
|  |  | Limited Intellectual Capacity | 30.12\% | 34.21\% | 33.12\% | 32.39\% | 30.57\% | 34.24\% | 28.36\% | 31.47\% |
|  |  | Multiple Disabilities | 38.07\% | 34.06\% | 32.33\% | 32.39\% | 30.92\% | 28.80\% | 35.35\% | 33.40\% |
|  | Disability | Physical Disability | 8.41\% | 7.62\% | 13.47\% | 10.55\% | 8.64\% | 7.07\% | 8.51\% | 10.43\% |
|  |  | Specific Learning Disability | 3.52\% | 3.73\% | 3.80\% | 5.09\% | 8.98\% | 10.51\% | 11.34\% | 9.07\% |
|  |  | Speech/Language Disability | 0.76\% | 1.56\% | 0.95\% | 2.45\% | 2.59\% | 2.72\% | 2.84\% | 2.90\% |
| MA |  | Traumatic Brain Injury | 1.99\% | 0.62\% | 0.95\% | 1.13\% | 1.21\% | 1.45\% | 0.76\% | 0.97\% |
|  |  | Visual Disability | 0.15\% | 0.62\% | 0.16\% | 0\% | 0.69\% | 0.18\% | 0.38\% | 0.19\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 0.76\% | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.76\% | 1.24\% | 0.95\% | 1.48\% | - | - | - | - |
|  |  | Asian | 2.29\% | 1.71\% | 1.74\% | 2.63\% | - | - | - | - |
|  |  | Black/ African American | 6.57\% | 7.00\% | 6.81\% | 6.09\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 39.14\% | 32.50\% | 36.29\% | 34.21\% | - | - | - | - |
|  |  | White | 46.48\% | 53.19\% | 50.55\% | 52.47\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.31\% | 0.16\% | 0.32\% | 0.16\% | - | - | - | - |
|  |  | Two or More Races | 4.13\% | 3.58\% | 3.01\% | 2.80\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

| Content | Variable | Subgroup | Grade 6 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2012-2011 } \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2008-2007 \end{aligned}$ |
|  | Gender | Female | 0.13\% | 1.19\% | -1.03\% | -2.08\% | 1.87\% | -3.15\% | 7.05\% |
|  |  | Male | -0.13\% | -1.33\% | 0.71\% | 2.08\% | -1.51\% | 3.55\% | -7.61\% |
| MA | Primary Disability | Autism | -0.57\% | 2.07\% | -0.59\% | 0.35\% | 3.10\% | 2.16\% | 0.77\% |
|  |  | Deaf-Blind | -0.16\% | 0.16\% | 0\% | -0.52\% | 0.16\% | 0.17\% | 0.19\% |
|  |  | Emotional Disability | -0.93\% | 0.45\% | -0.65\% | 0.44\% | -0.58\% | -0.24\% | 0.16\% |
|  |  | Hearing Disability | -0.16\% | -0.01\% | 0.13\% | -0.68\% | -0.95\% | 0.68\% | -0.41\% |
|  |  | Limited Intellectual Capacity | -4.09\% | 1.09\% | 0.73\% | 1.82\% | -3.67\% | 5.88\% | -3.12\% |
|  |  | Multiple Disabilities | 4.01\% | 1.73\% | -0.06\% | 1.48\% | 2.11\% | -6.55\% | 1.95\% |
|  |  | Physical Disability | 0.79\% | -5.85\% | 2.92\% | 1.91\% | 1.57\% | -1.44\% | -1.92\% |
|  |  | Specific Learning Disability | -0.21\% | -0.07\% | -1.29\% | -3.90\% | -1.53\% | -0.84\% | 2.27\% |
|  |  | Speech/Language Disability | -0.80\% | 0.61\% | -1.50\% | -0.14\% | -0.13\% | -0.12\% | -0.06\% |
|  |  | Traumatic Brain Injury | 1.37\% | -0.33\% | -0.18\% | -0.08\% | -0.24\% | 0.69\% | -0.21\% |
|  |  | Visual Disability | -0.47\% | 0.46\% | 0.16\% | -0.69\% | 0.51\% | -0.20\% | 0.19\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - | - |
|  | Ethnicity | American Indian/Alaska Native | -0.27\% | -0.27\% | -0.47\% | - | - | - | - |
|  |  | Asian | 0.50\% | 0.50\% | 1.28\% | - | - | - | - |
|  |  | Black/ African American | 0.82\% | 0.82\% | 0.65\% | - | - | - | - |
|  |  | Hispanic/ Latino | 3.54\% | 3.54\% | -0.17\% | - | - | - | - |
|  |  | White | -3.43\% | -3.43\% | -2.76\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | -0.19\% | -0.19\% | 0.19\% | - | - | - | - |
|  |  | Two or More Races | -0.77\% | -0.77\% | 1.28\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  |  |  | Grade 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|  | Gender | Female | 37.76\% | 37.13\% | 36.99\% | 39.15\% | 38.75\% | 40.23\% | 35.65\% | 38.17\% |
|  | Gender | Male | 61.92\% | 62.38\% | 63.01\% | 60.50\% | 61.06\% | 59.01\% | 64.36\% | 61.41\% |
|  |  | Autism | 13.92\% | 15.51\% | 15.61\% | 14.59\% | 10.40\% | 10.63\% | 8.86\% | 8.74\% |
|  |  | Deaf-Blind | 0\% | 0.17\% | 0.19\% | 0.53\% | 0\% | 0.19\% | 0\% | 0\% |
|  |  | Emotional Disability | 0.16\% | 0.50\% | 0.58\% | 0.53\% | 0.76\% | 1.52\% | 1.35\% | 0.85\% |
|  |  | Hearing Disability | 0\% | 0.33\% | 0.00\% | 0.36\% | 1.70\% | 0.95\% | 1.35\% | 1.07\% |
|  |  | Limited Intellectual Capacity | 32.80\% | 35.31\% | 31.98\% | 33.99\% | 36.11\% | 30.36\% | 30.44\% | 34.54\% |
|  |  | Multiple Disabilities | 40.32\% | 32.67\% | 37.38\% | 31.67\% | 32.89\% | 36.43\% | 36.42\% | 32.41\% |
|  | Primary <br> Disability | Physical Disability | 6.88\% | 10.56\% | 7.13\% | 8.54\% | 8.32\% | 8.16\% | 8.67\% | 7.25\% |
|  |  | Specific Learning Disability | 3.36\% | 2.48\% | 5.20\% | 6.58\% | 6.81\% | 8.16\% | 9.83\% | 11.94\% |
|  |  | Speech/Language Disability | 0.48\% | 0.50\% | 0.58\% | 1.25\% | 1.51\% | 2.66\% | 0.96\% | 1.71\% |
| MA |  | Traumatic Brain Injury | 0.64\% | 1.49\% | 1.35\% | 1.25\% | 1.32\% | 0.76\% | 2.12\% | 0.64\% |
|  |  | Visual Disability | 0.16\% | 0\% | 0\% | 0.53\% | 0.19\% | 0.19\% | 0\% | 0.21\% |
|  |  | Orthopedic impairment | 0.16\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 0.80\% | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 1.76\% | 1.16\% | 0.96\% | 0.71\% | - | - | - | - |
|  |  | Asian | 1.92\% | 1.82\% | 1.35\% | 2.31\% | - | - | - | - |
|  |  | Black/ African American | 7.04\% | 7.26\% | 7.71\% | 8.01\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 33.12\% | 36.96\% | 32.76\% | 33.81\% | - | - | - | - |
|  |  | White | 51.52\% | 49.50\% | 54.53\% | 52.14\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.16\% | 0.33\% | 0.39\% | 0.18\% | - | - | - | - |
|  |  | Two or More Races | 4.00\% | 2.48\% | 2.31\% | 2.49\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)


Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 8 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|  |  | Female | 39.39\% | 38.45\% | 38.46\% | 40.91\% | 40.08\% | 37.64\% | 39.53\% | 39.96\% |
|  |  | Male | 60.44\% | 61.55\% | 61.54\% | 59.09\% | 59.54\% | 62.18\% | 60.47\% | 59.67\% |
|  |  | Autism | 14.77\% | 14.34\% | 14.47\% | 11.27\% | 10.31\% | 10.33\% | 9.20\% | 9.31\% |
|  |  | Deaf-Blind | 0\% | 0.20\% | 0.55\% | 0.20\% | 0\% | 0\% | 0\% | 0.18\% |
|  |  | Emotional Disability | 0.85\% | 0.80\% | 0.37\% | 0.40\% | 0.76\% | 1.11\% | 1.76\% | 0.73\% |
|  |  | Hearing Disability | 0.34\% | 0\% | 0.37\% | 0.99\% | 0.95\% | 1.48\% | 1.37\% | 0.73\% |
|  |  | Limited Intellectual Capacity | 31.41\% | 34.06\% | 36.26\% | 34.98\% | 32.25\% | 31.00\% | 33.46\% | 36.13\% |
|  |  | Multiple Disabilities | 39.39\% | 39.04\% | 33.70\% | 36.96\% | 39.70\% | 38.01\% | 35.81\% | 35.95\% |
|  | Primary Disability | Physical Disability | 7.98\% | 7.17\% | 8.42\% | 8.10\% | 8.40\% | 8.30\% | 6.07\% | 5.66\% |
|  |  | Specific Learning Disability | 2.72\% | 2.99\% | 3.48\% | 4.55\% | 4.58\% | 6.83\% | 9.20\% | 6.02\% |
|  |  | Speech/Language Disability | 0.34\% | 0.60\% | 0.55\% | 0.59\% | 2.10\% | 1.66\% | 1.96\% | 2.19\% |
| MA |  | Traumatic Brain Injury | 1.36\% | 0.60\% | 1.47\% | 1.58\% | 0.76\% | 1.29\% | 0.59\% | 1.64\% |
|  |  | Visual Disability | 0\% | 0.20\% | 0.37\% | 0.40\% | 0.19\% | 0\% | 0.59\% | 0.37\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 0.68\% | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.51\% | 1.79\% | 0.55\% | 1.38\% | - | - | - | - |
|  |  | Asian | 1.87\% | 1.99\% | 2.20\% | 3.76\% | - | - | - | - |
|  |  | Black/ African American | 7.30\% | 7.57\% | 7.51\% | 7.12\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 39.05\% | 33.07\% | 32.60\% | 33.20\% | - | - | - | - |
|  |  | White | 48.39\% | 53.39\% | 54.76\% | 53.16\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.34\% | 0\% | 0\% | 0\% | - | - | - | - |
|  |  | Two or More Races | 2.21\% | 2.19\% | 2.38\% | 1.38\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

| Content | Variable | Subgroup | Grade 8 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2011-2010 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2010-2009 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2009-2008 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2008-2007 \\ & \hline \end{aligned}$ |
|  | Gender | Female | 0.94\% | -0.01\% | -2.45\% | 0.83\% | 2.44\% | -1.89\% | -0.43\% |
|  |  | Male | -1.11\% | 0.01\% | 2.45\% | -0.45\% | -2.64\% | 1.71\% | 0.80\% |
| MA | Primary Disability | Autism | 0.43\% | -0.13\% | 3.21\% | 0.96\% | -0.03\% | 1.13\% | -0.11\% |
|  |  | Deaf-Blind | -0.20\% | -0.35\% | 0.35\% | 0.20\% | 0\% | 0\% | -0.18\% |
|  |  | Emotional Disability | 0.05\% | 0.43\% | -0.03\% | -0.37\% | -0.34\% | -0.65\% | 1.03\% |
|  |  | Hearing Disability | 0.34\% | -0.37\% | -0.62\% | 0.03\% | -0.52\% | 0.11\% | 0.64\% |
|  |  | Limited Intellectual Capacity | -2.65\% | -2.20\% | 1.28\% | 2.73\% | 1.26\% | -2.47\% | -2.67\% |
|  |  | Multiple Disabilities | 0.35\% | 5.34\% | -3.26\% | -2.74\% | 1.69\% | 2.20\% | -0.14\% |
|  |  | Physical Disability | 0.81\% | -1.25\% | 0.32\% | -0.29\% | 0.09\% | 2.24\% | 0.41\% |
|  |  | Specific Learning Disability | -0.27\% | -0.49\% | -1.07\% | -0.04\% | -2.25\% | -2.37\% | 3.18\% |
|  |  | Speech/Language Disability | -0.26\% | 0.05\% | -0.04\% | -1.51\% | 0.44\% | -0.30\% | -0.23\% |
|  |  | Traumatic Brain Injury | 0.76\% | -0.87\% | -0.11\% | 0.82\% | -0.53\% | 0.71\% | -1.05\% |
|  |  | Visual Disability | -0.20\% | -0.17\% | -0.03\% | 0.20\% | 0.19\% | -0.59\% | 0.22\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - | - |
|  | Ethnicity | American Indian/Alaska Native | -1.28\% | 1.24\% | -0.83\% | - | - | - | - |
|  |  | Asian | -0.12\% | -0.21\% | -1.56\% | - | - | - | - |
|  |  | Black/ African American | -0.27\% | 0.06\% | 0.40\% | - | - | - | - |
|  |  | Hispanic/ Latino | 5.98\% | 0.47\% | -0.60\% | - | - | - | - |
|  |  | White | -5.00\% | -1.37\% | 1.60\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.34\% | 0\% | 0\% | - | - | - | - |
|  |  | Two or More Races | 0.02\% | -0.19\% | 1.00\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 9 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|  |  | Female | 36.08\% | 37.01\% | 38.49\% | 40.79\% | 37.06\% | 39.21\% | 41.03\% | 39.50\% |
|  |  | Male | 63.72\% | 62.81\% | 61.51\% | 58.84\% | 62.75\% | 60.59\% | 58.97\% | 60.29\% |
|  |  | Autism | 12.28\% | 15.12\% | 11.41\% | 10.90\% | 9.17\% | 10.10\% | 8.17\% | 6.30\% |
|  |  | Deaf-Blind | 0\% | 0.18\% | 0\% | 0\% | 0.18\% | 0\% | 0.18\% | 0.42\% |
|  |  | Emotional Disability | 1.34\% | 0.53\% | 0.61\% | 0.56\% | 1.65\% | 0.59\% | 1.07\% | 1.05\% |
|  |  | Hearing Disability | 0\% | 0.18\% | 1.22\% | 0.19\% | 1.65\% | 1.19\% | 0.53\% | 2.94\% |
|  |  | Limited Intellectual Capacity | 32.05\% | 35.59\% | 35.44\% | 34.02\% | 33.95\% | 35.84\% | 37.83\% | 38.66\% |
|  |  | Multiple Disabilities | 41.46\% | 36.48\% | 36.86\% | 41.17\% | 38.53\% | 34.06\% | 34.46\% | 34.45\% |
|  | Primary <br> Disability | Physical Disability | 6.53\% | 5.52\% | 8.35\% | 6.39\% | 6.79\% | 7.72\% | 5.51\% | 7.98\% |
|  |  | Specific Learning Disability | 3.45\% | 4.09\% | 2.85\% | 4.32\% | 5.87\% | 6.73\% | 9.59\% | 5.25\% |
|  |  | Speech/Language Disability | 0.96\% | 0.53\% | 1.43\% | 0.94\% | 0.92\% | 2.18\% | 1.60\% | 1.26\% |
| MA |  | Traumatic Brain Injury | 0.96\% | 1.42\% | 1.43\% | 1.13\% | 1.10\% | 0.79\% | 0.71\% | 1.26\% |
|  |  | Visual Disability | 0.19\% | 0.18\% | 0.41\% | 0.19\% | 0\% | 0.40\% | 0.36\% | 0.21\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 0.58\% | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 1.92\% | 0.89\% | 1.43\% | 1.32\% | - | - | - | - |
|  |  | Asian | 1.73\% | 1.78\% | 4.07\% | 2.82\% | - | - | - | - |
|  |  | Black/ African American | 6.33\% | 6.94\% | 6.72\% | 8.65\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 33.40\% | 32.38\% | 34.42\% | 31.02\% | - | - | - | - |
|  |  | White | 52.98\% | 54.80\% | 51.53\% | 52.63\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0\% | 0\% | 0\% | 0.19\% | - | - | - | - |
|  |  | Two or More Races | 3.45\% | 3.02\% | 1.83\% | 3.01\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)


Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 10 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|  | Gender | Female | 37.02\% | 40.21\% | 41.20\% | 38.79\% | 40.57\% | 40.30\% | 39.53\% | 36.91\% |
|  | Gender | Male | 62.43\% | 59.57\% | 58.61\% | 61.21\% | 59.23\% | 59.52\% | 60.48\% | 62.86\% |
|  |  | Autism | 13.61\% | 11.70\% | 11.03\% | 10.10\% | 10.95\% | 8.87\% | 5.83\% | 6.04\% |
|  |  | Deaf-Blind | 0.18\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0.22\% | 0\% |
|  |  | Emotional Disability | 0.54\% | 1.06\% | 0.97\% | 1.01\% | 0.61\% | 0.92\% | 1.30\% | 1.57\% |
|  |  | Hearing Disability | 0.36\% | 1.28\% | 0.19\% | 0.40\% | 0.81\% | 0.92\% | 3.02\% | 1.57\% |
|  |  | Limited Intellectual Capacity | 35.03\% | 32.98\% | 33.66\% | 35.35\% | 35.70\% | 37.89\% | 37.37\% | 33.33\% |
|  |  | Multiple Disabilities | 40.29\% | 40.43\% | 43.52\% | 41.82\% | 37.53\% | 35.86\% | 36.72\% | 41.61\% |
|  | Disability | Physical Disability | 3.81\% | 7.45\% | 5.61\% | 5.86\% | 6.29\% | 5.55\% | 8.21\% | 8.28\% |
|  |  | Specific Learning Disability | 3.45\% | 1.91\% | 2.51\% | 4.04\% | 5.68\% | 6.65\% | 4.97\% | 5.15\% |
|  |  | Speech/Language Disability | 0.54\% | 1.28\% | 0.97\% | 0.61\% | 1.22\% | 1.29\% | 1.30\% | 2.01\% |
| MA |  | Traumatic Brain Injury | 1.45\% | 1.91\% | 1.35\% | 0.81\% | 0.81\% | 1.29\% | 1.08\% | 0.45\% |
|  |  | Visual Disability | 0\% | 0\% | 0.19\% | 0\% | 0.20\% | 0.56\% | 0\% | 0\% |
|  |  | Orthopedic impairment | 0\% | - | - | - | - | - | - | - |
|  |  | Other health impairment | 0.36\% | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | 0.73\% | 1.28\% | 1.55\% | 2.02\% | - | - | - | - |
|  |  | Asian | 2.18\% | 3.40\% | 2.90\% | 1.62\% | - | - | - | - |
|  |  | Black/ African American | 7.44\% | 8.94\% | 8.12\% | 7.48\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | 32.30\% | 34.68\% | 31.14\% | 31.31\% | - | - | - | - |
|  |  | White | 52.99\% | 49.57\% | 53.00\% | 55.76\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.18\% | 0\% | 0.19\% | 0\% | - | - | - | - |
|  |  | Two or More Races | 3.81\% | 2.13\% | 2.90\% | 1.62\% | - | - | - | - |

Table 72
Mathematics Longitudinal Subgroup Participation (continued)

|  |  |  | Grade 10 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Variable | Subgroup | $\begin{aligned} & \hline \text { Difference } \\ & 2014-2013 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \text { Difference } \\ & \text { 2012-2011 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2011-2010 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2010-2009 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2008-2007 \end{aligned}$ |
|  |  | Female | -3.19\% | -0.99\% | 2.41\% | -1.78\% | 0.27\% | 0.77\% | 2.61\% |
|  |  | Male | 2.86\% | 0.96\% | -2.60\% | 1.98\% | -0.29\% | -0.96\% | -2.39\% |
|  |  | Autism | 1.91\% | 0.67\% | 0.93\% | -0.85\% | 2.08\% | 3.04\% | -0.21\% |
|  |  | Deaf-Blind | 0.18\% | 0\% | 0\% | 0\% | 0\% | -0.22\% | 0.22\% |
|  |  | Emotional Disability | -0.52\% | 0.09\% | -0.04\% | 0.40\% | -0.32\% | -0.37\% | -0.27\% |
|  |  | Hearing Disability | -0.92\% | 1.09\% | -0.21\% | -0.41\% | -0.11\% | -2.10\% | 1.45\% |
|  |  | Limited Intellectual Capacity | 2.05\% | -0.68\% | -1.69\% | -0.35\% | -2.19\% | 0.53\% | 4.04\% |
|  |  | Multiple Disabilities | -0.14\% | -3.09\% | 1.70\% | 4.29\% | 1.67\% | -0.86\% | -4.89\% |
|  | Primary <br> Disability | Physical Disability | -3.64\% | 1.84\% | -0.25\% | -0.43\% | 0.74\% | -2.66\% | -0.07\% |
|  |  | Specific Learning Disability | 1.54\% | -0.60\% | -1.53\% | -1.64\% | -0.97\% | 1.69\% | -0.18\% |
|  |  | Speech/Language Disability | -0.74\% | 0.31\% | 0.36\% | -0.61\% | -0.08\% | 0\% | -0.71\% |
| MA |  | Traumatic Brain Injury | -0.46\% | 0.56\% | 0.54\% | 0\% | -0.48\% | 0.21\% | 0.63\% |
|  |  | Visual Disability | 0\% | -0.19\% | 0.19\% | -0.20\% | -0.35\% | 0.56\% | 0\% |
|  |  | Orthopedic impairment | - | - | - | - | - | - | - |
|  |  | Other health impairment | - | - | - | - | - | - | - |
|  |  | American Indian/Alaska Native | -0.55\% | -0.27\% | -0.47\% | - | - | - | - |
|  |  | Asian | -1.22\% | 0.50\% | 1.28\% | - | - | - | - |
|  |  | Black/ African American | -1.50\% | 0.82\% | 0.65\% | - | - | - | - |
|  | Ethnicity | Hispanic/ Latino | -2.38\% | 3.54\% | -0.17\% | - | - | - | - |
|  |  | White | 3.42\% | -3.43\% | -2.76\% | - | - | - | - |
|  |  | Native Hawaiian/ Other Pacific Islander | 0.18\% | -0.19\% | 0.19\% | - | - | - | - |
|  |  | Two or More Races | 「 1.68\% | -0.77\% | 1.28\% | - | - | - | - |

Table 73
Reading Longitudinal Summary of $P$-values

| Content | Grade | High $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| RD | 3 | 0.87 | 0.85 | 0.84 | 0.86 | 0.85 | 0.85 | 0.87 |
|  | 4 | 0.84 | 0.83 | 0.84 | 0.86 | 0.86 | 0.86 | 0.88 |
|  | 5 | 0.85 | 0.89 | 0.86 | 0.87 | 0.86 | 0.89 | 0.87 |
|  | 6 | 0.87 | 0.87 | 0.89 | 0.84 | 0.88 | 0.86 | 0.85 |
|  | 7 | 0.85 | 0.87 | 0.85 | 0.87 | 0.84 | 0.85 | 0.85 |
|  | 8 | 0.84 | 0.87 | 0.86 | 0.83 | 0.84 | 0.81 | 0.87 |
|  | 9 | 0.85 | 0.84 | 0.82 | 0.82 | 0.83 | 0.80 | 0.85 |
|  | 10 | 0.75 | 0.74 | 0.75 | 0.74 | 0.74 | 0.76 | 0.70 |


| Content | Grade | Mean $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| RD | 3 | 0.54 | 0.54 | 0.54 | 0.56 | 0.56 | 0.57 | 0.59 |
|  | 4 | 0.54 | 0.53 | 0.55 | 0.56 | 0.57 | 0.58 | 0.58 |
|  | 5 | 0.56 | 0.59 | 0.56 | 0.60 | 0.59 | 0.60 | 0.59 |
|  | 6 | 0.61 | 0.62 | 0.62 | 0.61 | 0.62 | 0.61 | 0.61 |
|  | 7 | 0.53 | 0.55 | 0.55 | 0.55 | 0.54 | 0.53 | 0.53 |
|  | 8 | 0.52 | 0.54 | 0.54 | 0.51 | 0.52 | 0.51 | 0.54 |
|  | 9 | 0.55 | 0.54 | 0.53 | 0.52 | 0.53 | 0.53 | 0.54 |
|  | 10 | 0.50 | 0.50 | 0.50 | 0.48 | 0.49 | 0.51 | 0.48 |


|  |  | Low $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |  |
|  | 3 | 0.23 | 0.24 | 0.24 | 0.28 | 0.27 | 0.25 |  |
|  | 4 | 0.24 | 0.23 | 0.25 | 0.27 | 0.24 | 0.26 |  |
|  | 0.23 | 0.26 | 0.24 | 0.25 | 0.24 | 0.25 | 0.27 |  |
|  | 5 | 0.25 | 0.23 | 0.23 | 0.21 | 0.24 | 0.23 |  |
|  | 0.23 | 0.23 | 0.25 | 0.26 | 0.25 | 0.23 | 0.18 |  |
|  | 7 | 0.31 | 0.32 | 0.34 | 0.30 | 0.30 | 0.29 |  |

Table 73
Reading Longitudinal Summary of $P$-values (continued)

| Content | Grade | High $P$-value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference 2014-2013 | $\begin{gathered} \hline \text { Difference } \\ 2013-2012 \end{gathered}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | Difference 2011-2010 | $\begin{gathered} \hline \text { Difference } \\ \text { 2010-2009 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2009-2008 } \end{gathered}$ |
| RD | 3 | 0.02 | 0.01 | -0.02 | 0.02 | 0.00 | -0.02 |
|  | 4 | 0.02 | -0.02 | -0.02 | 0.00 | 0.00 | -0.02 |
|  | 5 | -0.03 | 0.03 | -0.02 | 0.01 | -0.03 | 0.02 |
|  | 6 | -0.01 | -0.02 | 0.05 | -0.03 | 0.01 | 0.01 |
|  | 7 | -0.02 | 0.02 | -0.02 | 0.03 | -0.01 | 0.00 |
|  | 8 | -0.03 | 0.02 | 0.03 | -0.01 | 0.03 | -0.06 |
|  | 9 | 0.01 | 0.02 | 0.00 | -0.01 | 0.03 | -0.05 |
|  | 10 | 0.01 | -0.01 | 0.01 | 0.01 | -0.02 | 0.06 |


| Content | Grade | Mean $P$-value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \text { Difference } \\ 2014-2013 \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ 2013-2012 \end{gathered}$ | $\begin{gathered} \text { Difference } \\ \text { 2012-2011 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2011-2010 } \end{gathered}$ | $\begin{gathered} \text { Difference } \\ \text { 2010-2009 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ 2009-2008 \end{gathered}$ |
| RD | 3 | 0.00 | 0.01 | -0.02 | 0.00 | -0.01 | -0.02 |
|  | 4 | 0.01 | -0.02 | -0.01 | -0.01 | -0.01 | 0.00 |
|  | 5 | -0.04 | 0.03 | -0.04 | 0.01 | -0.01 | 0.01 |
|  | 6 | -0.01 | -0.01 | 0.01 | -0.01 | 0.01 | 0.01 |
|  | 7 | -0.02 | 0.01 | -0.01 | 0.02 | 0.00 | 0.01 |
|  | 8 | -0.01 | 0.00 | 0.03 | -0.01 | 0.01 | -0.02 |
|  | 9 | 0.02 | 0.01 | 0.00 | -0.01 | 0.00 | -0.01 |
|  | 10 | 0.00 | 0.00 | 0.01 | -0.01 | -0.03 | 0.04 |


|  |  | Low $P$-value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Difference | Difference | Difference | Difference | Difference | Difference |  |
|  | Grade | $2014-2013$ | $2013-2012$ | $2012-2011$ | $2011-2010$ | $2010-2009$ |  | 2009-2008

Table 74
Writing Longitudinal Summary of $P$-values

|  |  | High $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| WR | 0.81 | 0.80 | 0.79 | 0.79 | 0.81 | 0.81 | 0.83 |  |
|  | 4 | 0.79 | 0.79 | 0.78 | 0.79 | 0.82 | 0.81 | 0.84 |
|  | 5 | 0.81 | 0.83 | 0.80 | 0.84 | 0.82 | 0.84 | 0.83 |
|  | 7 | 0.83 | 0.83 | 0.85 | 0.82 | 0.86 | 0.82 | 0.83 |
|  | 0 | 0.83 | 0.86 | 0.82 | 0.85 | 0.83 | 0.85 | 0.81 |
|  | 9 | 0.81 | 0.84 | 0.86 | 0.81 | 0.85 | 0.82 | 0.86 |
|  | 0 | 0.83 | 0.81 | 0.79 | 0.81 | 0.80 | 0.83 | 0.84 |
|  | 10 | 0.83 | 0.80 | 0.82 | 0.84 | 0.82 |  |  |


|  |  | Mean $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| WR | 0.51 | 0.50 | 0.49 | 0.52 | 0.53 | 0.54 | 0.55 |  |
|  | 4 | 0.50 | 0.49 | 0.52 | 0.51 | 0.54 | 0.54 | 0.55 |
|  | 5 | 0.55 | 0.58 | 0.54 | 0.58 | 0.58 | 0.59 | 0.58 |
|  | 7 | 0.59 | 0.59 | 0.60 | 0.59 | 0.61 | 0.59 | 0.58 |
|  | 0 | 0.56 | 0.58 | 0.57 | 0.58 | 0.57 | 0.57 | 0.55 |
|  | 9 | 0.56 | 0.56 | 0.55 | 0.54 | 0.54 | 0.53 | 0.55 |
|  | 0 | 0.54 | 0.53 | 0.53 | 0.53 | 0.53 | 0.54 | 0.55 |
|  | 10 | 0.53 | 0.51 | 0.52 | 0.54 | 0.51 |  |  |


|  |  | Low $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |  |
| WR | 3 | 0.27 | 0.26 | 0.25 | 0.25 | 0.24 | 0.26 |  |
|  | 4 | 0.18 | 0.20 | 0.19 | 0.20 | 0.19 | 0.22 |  |
|  | 5 | 0.22 | 0.25 | 0.22 | 0.23 | 0.25 | 0.23 |  |
|  | 6 | 0.35 | 0.36 | 0.34 | 0.36 | 0.37 | 0.32 |  |
|  | 7 | 0.21 | 0.23 | 0.23 | 0.21 | 0.22 | 0.24 |  |
|  | 8 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.25 |  |

Table 74
Writing Longitudinal Summary of $P$-values (continued)

| Content | Grade | High $P$-value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference 2014-2013 | $\begin{gathered} \hline \text { Difference } \\ 2013-2012 \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2012-2011 } \end{gathered}$ | Difference 2011-2010 | $\begin{gathered} \hline \text { Difference } \\ \text { 2010-2009 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2009-2008 } \end{gathered}$ |
| WR | 3 | 0.02 | 0.01 | 0.00 | -0.02 | 0.00 | -0.02 |
|  | 4 | 0.00 | 0.00 | -0.01 | -0.03 | 0.01 | -0.03 |
|  | 5 | -0.02 | 0.04 | -0.04 | 0.01 | -0.02 | 0.01 |
|  | 6 | -0.01 | -0.02 | 0.03 | -0.04 | 0.03 | -0.01 |
|  | 7 | -0.03 | 0.03 | -0.02 | 0.01 | -0.02 | 0.03 |
|  | 8 | -0.01 | -0.01 | 0.05 | -0.04 | 0.03 | -0.04 |
|  | 9 | 0.00 | 0.03 | -0.02 | 0.01 | -0.04 | 0.00 |
|  | 10 | 0.02 | -0.02 | 0.04 | -0.03 | -0.02 | 0.02 |


| Content | Grade | Mean $P$-value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \text { Difference } \\ 2014-2013 \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2013-2012 } \end{gathered}$ | Difference | Difference 2011-2010 | Difference 2010-2009 | Difference 2009-2008 |
| WR | 3 | 0.01 | 0.01 | -0.02 | -0.01 | -0.01 | -0.02 |
|  | 4 | 0.01 | -0.02 | 0.01 | -0.03 | -0.01 | 0.00 |
|  | 5 | -0.04 | 0.04 | -0.04 | 0.00 | -0.01 | 0.01 |
|  | 6 | 0.00 | -0.01 | 0.01 | -0.02 | 0.01 | 0.02 |
|  | 7 | -0.02 | 0.01 | -0.01 | 0.02 | -0.01 | 0.02 |
|  | 8 | -0.01 | 0.01 | 0.02 | 0.00 | 0.01 | -0.02 |
|  | 9 | 0.01 | 0.01 | 0.01 | 0.00 | -0.01 | 0.00 |
|  | 10 | 0.01 | 0.00 | 0.02 | -0.01 | -0.02 | 0.03 |


| Content | Grade | Low $P$-value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference 2014-2013 | Difference 2013-2012 | Difference 2012-2011 | Difference 2011-2010 | Difference 2010-2009 | Difference 2009-2008 |
| WR | 3 | 0.01 | 0.01 | 0.00 | 0.01 | -0.01 | -0.04 |
|  | 4 | -0.01 | 0.01 | -0.02 | 0.02 | -0.04 | 0.02 |
|  | 5 | -0.04 | 0.04 | -0.01 | -0.02 | 0.02 | -0.02 |
|  | 6 | -0.01 | 0.02 | -0.02 | -0.01 | 0.05 | -0.01 |
|  | 7 | -0.02 | -0.01 | 0.02 | -0.01 | -0.01 | 0.02 |
|  | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 |
|  | 9 | 0.01 | 0.03 | 0.01 | -0.01 | -0.01 | 0.04 |
|  | 10 | -0.01 | -0.01 | 0.04 | -0.01 | -0.03 | 0.02 |

Table 75
Mathematics Longitudinal Summary of $P$-values

| Content | Grade |  | High $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| MA | 3 | 0.88 | 0.85 | 0.86 | 0.89 | 0.87 | 0.87 | 0.88 | 0.90 |
|  | 4 | 0.87 | 0.86 | 0.86 | 0.87 | 0.89 | 0.89 | 0.91 | 0.90 |
|  | 5 | 0.84 | 0.85 | 0.84 | 0.86 | 0.84 | 0.86 | 0.86 | 0.87 |
|  | 6 | 0.82 | 0.85 | 0.86 | 0.84 | 0.83 | 0.81 | 0.79 | 0.79 |
|  | 7 | 0.80 | 0.82 | 0.81 | 0.81 | 0.80 | 0.81 | 0.78 | 0.82 |
|  | 8 | 0.81 | 0.84 | 0.81 | 0.80 | 0.81 | 0.80 | 0.81 | 0.81 |
|  | 9 | 0.76 | 0.76 | 0.76 | 0.78 | 0.76 | 0.76 | 0.77 | 0.72 |
|  | 10 | 0.81 | 0.82 | 0.79 | 0.79 | 0.83 | 0.82 | 0.83 | 0.81 |


| Content | Grade | Mean $P$-value |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| MA | 3 | 0.62 | 0.62 | 0.60 | 0.62 | 0.63 | 0.64 | 0.65 | 0.67 |
|  | 4 | 0.62 | 0.60 | 0.61 | 0.61 | 0.64 | 0.64 | 0.66 | 0.63 |
|  | 5 | 0.56 | 0.59 | 0.56 | 0.59 | 0.59 | 0.61 | 0.59 | 0.60 |
|  | 6 | 0.58 | 0.58 | 0.60 | 0.58 | 0.60 | 0.58 | 0.57 | 0.57 |
|  | 7 | 0.52 | 0.55 | 0.54 | 0.55 | 0.53 | 0.53 | 0.53 | 0.55 |
|  | 8 | 0.53 | 0.55 | 0.56 | 0.54 | 0.53 | 0.52 | 0.55 | 0.52 |
|  | 9 | 0.47 | 0.47 | 0.46 | 0.46 | 0.46 | 0.47 | 0.47 | 0.45 |
|  | 10 | 0.46 | 0.45 | 0.44 | 0.42 | 0.45 | 0.45 | 0.44 | 0.41 |


| Content | Grade | Low $P$-value |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| MA | 3 | 0.37 | 0.35 | 0.35 | 0.34 | 0.34 | 0.37 | 0.34 | 0.39 |
|  | 4 | 0.12 | 0.10 | 0.10 | 0.13 | 0.12 | 0.16 | 0.14 | 0.16 |
|  | 5 | 0.29 | 0.28 | 0.30 | 0.32 | 0.29 | 0.33 | 0.33 | 0.31 |
|  | 6 | 0.27 | 0.30 | 0.32 | 0.30 | 0.27 | 0.27 | 0.30 | 0.26 |
|  | 7 | 0.13 | 0.14 | 0.14 | 0.15 | 0.15 | 0.16 | 0.19 | 0.21 |
|  | 8 | 0.23 | 0.21 | 0.25 | 0.25 | 0.22 | 0.23 | 0.23 | 0.23 |
|  | 9 | 0.18 | 0.20 | 0.21 | 0.21 | 0.16 | 0.19 | 0.19 | 0.17 |
|  | 10 | 0.09 | 0.09 | 0.07 | 0.06 | 0.08 | 0.09 | 0.07 | 0.08 |

Table 75
Mathematics Longitudinal Summary of $P$-values (continued)

|  |  | High $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference 2014-2013 | $\begin{aligned} & \hline \text { Difference } \\ & 2013-2012 \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2012-2011 \end{aligned}$ | $\begin{gathered} \hline \text { Difference } \\ 2011-2010 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2010-2009 } \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2008-2007 \end{aligned}$ |
| MA | 3 | 0.03 | -0.01 | -0.03 | 0.01 | 0.00 | -0.01 | -0.01 |
|  | 4 | 0.01 | 0.00 | -0.02 | -0.02 | 0.01 | -0.02 | 0.00 |
|  | 5 | -0.01 | 0.01 | -0.02 | 0.01 | -0.02 | 0.00 | -0.01 |
|  | 6 | -0.03 | -0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 |
|  | 7 | -0.02 | 0.02 | 0.00 | 0.01 | -0.01 | 0.03 | -0.04 |
|  | 8 | -0.03 | 0.02 | 0.02 | -0.01 | 0.00 | -0.01 | 0.00 |
|  | 9 | 0.00 | 0.00 | -0.02 | 0.02 | 0.00 | 0.00 | 0.04 |
|  | 10 | -0.01 | 0.03 | 0.00 | -0.04 | 0.01 | -0.01 | 0.02 |


|  |  | Mean $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference | Difference | Difference | Difference | Difference | Difference | Difference |
|  | $2014-2013$ | $2013-2012$ | $2012-2011$ | $2011-2010$ | $2010-2009$ | $2009-2008$ | $2008-2007$ |  |
| MA | 0.00 | 0.02 | -0.02 | -0.02 | 0.00 | -0.01 | -0.02 |  |
|  | 4 | 0.02 | -0.01 | 0.00 | -0.03 | 0.00 | -0.02 | 0.02 |
|  | 5 | -0.04 | 0.04 | -0.03 | 0.01 | -0.02 | 0.02 | -0.01 |
|  | 6 | 0.00 | -0.02 | 0.02 | -0.01 | 0.02 | 0.00 | 0.01 |
|  | -0.03 | 0.01 | -0.02 | 0.03 | 0.00 | 0.00 | -0.02 |  |
|  | 8 | -0.02 | -0.01 | 0.02 | 0.00 | 0.01 | -0.03 | 0.03 |
|  | 9 | 0.00 | 0.01 | 0.01 | 0.00 | -0.01 | 0.00 | 0.02 |
|  | 0.01 | 0.01 | 0.02 | -0.02 | -0.01 | 0.02 | 0.02 |  |


|  |  | Low $P$-value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \text { Difference } \\ 2014-2013 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ 2013-2012 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ 2012-2011 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2011-2010 } \end{gathered}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2010-2009 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & 2009-2008 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2008-2007 } \\ & \hline \end{aligned}$ |
| MA | 3 | 0.02 | 0.00 | 0.01 | 0.00 | -0.03 | 0.02 | -0.05 |
|  | 4 | 0.02 | 0.00 | -0.03 | 0.01 | -0.05 | 0.02 | -0.02 |
|  | 5 | 0.00 | -0.01 | -0.02 | 0.03 | -0.03 | 0.00 | 0.02 |
|  | 6 | -0.02 | -0.02 | 0.02 | 0.03 | 0.00 | -0.03 | 0.04 |
|  | 7 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | -0.03 | -0.02 |
|  | 8 | 0.02 | -0.04 | 0.01 | 0.03 | -0.01 | -0.01 | 0.00 |
|  | 9 | -0.02 | 0.00 | 0.00 | 0.04 | -0.02 | 0.00 | 0.02 |
|  | 10 | 0.00 | 0.02 | 0.00 | -0.02 | 0.00 | 0.01 | -0.01 |

Table 76
Reading Longitudinal Summary of Point-Biserials

| Content | Grade | High Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| RD | 3 | 0.67 | 0.72 | 0.74 | 0.73 | 0.73 | 0.73 | 0.72 |
|  | 4 | 0.69 | 0.71 | 0.70 | 0.72 | 0.71 | 0.72 | 0.68 |
|  | 5 | 0.73 | 0.74 | 0.73 | 0.73 | 0.75 | 0.75 | 0.74 |
|  | 6 | 0.71 | 0.69 | 0.69 | 0.73 | 0.71 | 0.74 | 0.72 |
|  | 7 | 0.70 | 0.68 | 0.71 | 0.68 | 0.72 | 0.71 | 0.71 |
|  | 8 | 0.69 | 0.67 | 0.69 | 0.72 | 0.72 | 0.69 | 0.70 |
|  | 9 | 0.73 | 0.74 | 0.71 | 0.72 | 0.72 | 0.71 | 0.74 |
|  | 10 | 0.69 | 0.70 | 0.68 | 0.70 | 0.69 | 0.68 | 0.68 |


|  |  | Mean Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |  |
| RD | 0.51 | 0.53 | 0.56 | 0.55 | 0.55 | 0.57 | 0.55 |  |
|  | 4 | 0.54 | 0.55 | 0.55 | 0.56 | 0.55 | 0.57 |  |
|  | 5 | 0.56 | 0.56 | 0.58 | 0.57 | 0.59 | 0.58 |  |
|  | 6 | 0.57 | 0.57 | 0.56 | 0.59 | 0.57 | 0.59 |  |
|  | 7 | 0.52 | 0.51 | 0.52 | 0.49 | 0.52 | 0.53 |  |
|  | 0 | 0.53 | 0.51 | 0.53 | 0.53 | 0.55 | 0.54 |  |
|  | 0.56 | 0.56 | 0.56 | 0.56 | 0.57 | 0.57 | 0.53 |  |
|  | 0 | 0.50 | 0.51 | 0.50 | 0.50 | 0.51 | 0.52 |  |


| Content | Grade | Low Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| RD | 3 | 0.24 | 0.24 | 0.31 | 0.28 | 0.26 | 0.29 | 0.31 |
|  | 4 | 0.34 | 0.30 | 0.31 | 0.29 | 0.28 | 0.35 | 0.36 |
|  | 5 | 0.21 | 0.19 | 0.19 | 0.21 | 0.16 | 0.24 | 0.28 |
|  | 6 | 0.17 | 0.22 | 0.16 | 0.24 | 0.28 | 0.31 | 0.35 |
|  | 7 | 0.23 | 0.19 | 0.22 | 0.14 | 0.16 | 0.20 | 0.24 |
|  | 8 | 0.33 | 0.27 | 0.32 | 0.28 | 0.35 | 0.32 | 0.31 |
|  | 9 | 0.27 | 0.33 | 0.37 | 0.35 | 0.40 | 0.37 | 0.37 |
|  | 10 | 0.30 | 0.33 | 0.28 | 0.27 | 0.33 | 0.33 | 0.36 |

Table 76
Reading Longitudinal Summary of Point-Biserials (continued)

| Content | Grade | High Point Biserial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference 2014-2013 | Difference <br> 2013-2012 | Difference 2012-2011 | Difference 2011-2010 | Difference <br> 2010-2009 | $\begin{gathered} \hline \text { Difference } \\ 2009-2008 \end{gathered}$ |
| RD | 3 | -0.04 | -0.02 | 0.01 | 0.00 | 0.00 | 0.00 |
|  | 4 | -0.02 | 0.01 | -0.02 | 0.01 | -0.01 | 0.04 |
|  | 5 | 0.00 | 0.01 | 0.00 | -0.02 | 0.00 | 0.01 |
|  | 6 | 0.02 | 0.01 | -0.04 | 0.02 | -0.03 | 0.01 |
|  | 7 | 0.01 | -0.02 | 0.02 | -0.03 | 0.01 | 0.00 |
|  | 8 | 0.01 | -0.02 | -0.02 | -0.01 | 0.03 | -0.01 |
|  | 9 | -0.01 | 0.03 | -0.02 | 0.00 | 0.01 | -0.03 |
|  | 10 | 0.00 | 0.02 | -0.02 | 0.01 | 0.01 | -0.01 |


| Content | Grade | Mean Point Biserial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference | Difference | Difference | Difference | Difference | Difference |
|  |  | 2014-2013 | 2013-2012 | 2012-2011 | 2011-2010 | 2010-2009 | 2009-2008 |
| RD | 3 | -0.02 | -0.02 | 0.01 | -0.01 | -0.01 | 0.02 |
|  | 4 | -0.01 | 0.00 | 0.00 | 0.01 | -0.02 | 0.02 |
|  | 5 | 0.00 | -0.02 | 0.00 | -0.01 | 0.00 | 0.01 |
|  | 6 | 0.00 | 0.00 | -0.03 | 0.02 | -0.01 | -0.02 |
|  | 7 | 0.01 | -0.01 | 0.03 | -0.03 | -0.01 | 0.00 |
|  | 8 | 0.01 | -0.02 | 0.00 | -0.02 | 0.01 | 0.00 |
|  | 9 | 0.00 | 0.00 | 0.00 | -0.02 | 0.00 | 0.00 |
|  | 10 | -0.01 | 0.01 | -0.01 | -0.01 | -0.01 | 0.00 |


| Content | Grade | Low Point Biserial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference | Difference 2013-2012 | Difference | Difference | Difference 2010-2009 | Difference 2009-2008 |
| RD | 3 | 0.00 | -0.08 | 0.03 | 0.02 | -0.03 | -0.02 |
|  | 4 | 0.05 | -0.01 | 0.01 | 0.01 | -0.07 | -0.01 |
|  | 5 | 0.02 | 0.00 | -0.02 | 0.04 | -0.08 | -0.04 |
|  | 6 | -0.05 | 0.06 | -0.08 | -0.04 | -0.04 | -0.03 |
|  | 7 | 0.04 | -0.03 | 0.08 | -0.02 | -0.04 | -0.04 |
|  | 8 | 0.05 | -0.05 | 0.03 | -0.06 | 0.03 | 0.01 |
|  | 9 | -0.06 | -0.04 | 0.02 | -0.05 | 0.03 | 0.00 |
|  | 10 | -0.03 | 0.05 | 0.01 | -0.06 | 0.00 | -0.03 |

Table 77
Writing Longitudinal Summary of Point-Biserials

|  |  | High Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |  |
| WR | 0.81 | 0.82 | 0.82 | 0.83 | 0.82 | 0.83 | 0.82 |  |
|  | 4 | 0.83 | 0.84 | 0.84 | 0.84 | 0.82 | 0.84 |  |
|  | 5 | 0.86 | 0.84 | 0.86 | 0.84 | 0.85 | 0.85 |  |
|  | 6 | 0.84 | 0.85 | 0.85 | 0.87 | 0.85 | 0.83 |  |
|  | 7 | 0.88 | 0.85 | 0.88 | 0.85 | 0.84 | 0.84 |  |
|  | 8 | 0.88 | 0.87 | 0.87 | 0.87 | 0.87 | 0.88 |  |
|  | 9 | 0.87 | 0.86 | 0.86 | 0.85 | 0.87 | 0.84 |  |
|  | 10 | 0.86 | 0.85 | 0.83 | 0.85 | 0.86 | 0.85 |  |


|  |  | Mean Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |  |
|  | 3 | 0.54 | 0.56 | 0.57 | 0.58 | 0.58 | 0.58 |  |
|  | 4 | 0.55 | 0.55 | 0.56 | 0.57 | 0.56 | 0.57 |  |
|  | 5 | 0.58 | 0.57 | 0.58 | 0.57 | 0.60 | 0.58 |  |
| WR | 6 | 0.58 | 0.59 | 0.59 | 0.60 | 0.58 | 0.59 |  |
|  | 7 | 0.59 | 0.58 | 0.60 | 0.56 | 0.60 | 0.59 |  |
|  | 8 | 0.57 | 0.56 | 0.57 | 0.58 | 0.58 | 0.58 |  |
|  | 9 | 0.58 | 0.58 | 0.58 | 0.57 | 0.59 | 0.58 |  |
|  | 10 | 0.55 | 0.54 | 0.53 | 0.54 | 0.54 | 0.55 |  |


|  |  | Low Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |  |
| WR | 3 | 0.25 | 0.24 | 0.25 | 0.21 | 0.23 | 0.25 |  |
|  | 4 | 0.17 | 0.15 | 0.21 | 0.16 | 0.12 | 0.21 |  |
|  | 5 | 0.28 | 0.21 | 0.17 | 0.20 | 0.21 | 0.18 |  |
|  | 6 | 0.20 | 0.20 | 0.20 | 0.27 | 0.20 | 0.23 |  |
|  | 7 | 0.21 | 0.17 | 0.15 | 0.12 | 0.21 | 0.20 |  |
|  | 8 | 0.18 | 0.18 | 0.14 | 0.18 | 0.17 | 0.20 |  |
|  | 9 | 0.18 | 0.22 | 0.19 | 0.20 | 0.22 | 0.17 |  |
|  | 10 | 0.14 | 0.17 | 0.14 | 0.12 | 0.12 | 0.21 |  |

Table 77
Writing Longitudinal Summary of Point-Biserials (continued)

| Content | Grade | High Point Biserial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference 2014-2013 | $\begin{aligned} & \hline \text { Difference } \\ & \text { 2013-2012 } \end{aligned}$ | Difference 2012-2011 | $\begin{gathered} \hline \text { Difference } \\ \text { 2011-2010 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2010-2009 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ 2009-2008 \end{gathered}$ |
| WR | 3 | -0.01 | 0.00 | -0.01 | 0.01 | -0.01 | 0.01 |
|  | 4 | -0.02 | 0.01 | -0.01 | 0.02 | -0.02 | 0.01 |
|  | 5 | 0.02 | -0.01 | 0.02 | -0.01 | 0.00 | 0.01 |
|  | 6 | -0.01 | 0.00 | -0.02 | 0.02 | 0.02 | -0.02 |
|  | 7 | 0.03 | -0.03 | 0.02 | 0.01 | 0.00 | -0.02 |
|  | 8 | 0.01 | 0.00 | 0.00 | -0.01 | 0.00 | 0.02 |
|  | 9 | 0.01 | -0.01 | 0.02 | -0.02 | 0.03 | -0.02 |
|  | 10 | 0.01 | 0.02 | -0.02 | -0.01 | 0.01 | 0.01 |


| Content | Grade | Mean Point Biserial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline \text { Difference } \\ \text { 2014-2013 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ 2013-2012 \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2012-2011 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2011-2010 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2010-2009 } \end{gathered}$ | $\begin{gathered} \hline \text { Difference } \\ \text { 2009-2008 } \end{gathered}$ |
| WR | 3 | -0.02 | -0.01 | -0.01 | 0.00 | 0.00 | 0.00 |
|  | 4 | 0.00 | -0.01 | 0.00 | 0.01 | -0.01 | 0.01 |
|  | 5 | 0.00 | 0.00 | 0.01 | -0.03 | 0.02 | 0.01 |
|  | 6 | -0.01 | 0.00 | -0.01 | 0.02 | -0.01 | -0.02 |
|  | 7 | 0.01 | -0.02 | 0.04 | -0.03 | 0.00 | -0.01 |
|  | 8 | 0.01 | -0.01 | -0.02 | 0.00 | 0.00 | 0.01 |
|  | 9 | 0.00 | 0.00 | 0.01 | -0.02 | 0.02 | -0.01 |
|  | 10 | 0.00 | 0.01 | -0.02 | 0.00 | -0.01 | 0.01 |


| Content | Grade | Low Point Biserial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference | Difference | Difference | Difference | Difference | Difference |
|  |  | 2014-2013 | 2013-2012 | 2012-2011 | 2011-2010 | 2010-2009 | 2009-2008 |
| WR | 3 | 0.01 | -0.01 | 0.04 | -0.02 | -0.02 | 0.01 |
|  | 4 | 0.01 | -0.06 | 0.05 | 0.03 | -0.08 | 0.00 |
|  | 5 | 0.07 | 0.05 | -0.04 | -0.01 | 0.03 | -0.02 |
|  | 6 | 0.00 | 0.00 | -0.07 | 0.07 | -0.03 | -0.06 |
|  | 7 | 0.04 | 0.02 | 0.03 | -0.09 | 0.00 | 0.08 |
|  | 8 | 0.00 | 0.04 | -0.04 | 0.01 | -0.03 | -0.01 |
|  | 9 | -0.04 | 0.03 | -0.01 | -0.02 | 0.05 | -0.02 |
|  | 10 | -0.03 | 0.03 | 0.02 | 0.00 | -0.09 | 0.01 |

Table 78
Mathematics Longitudinal Summary of Point-Biserials

| Content | Grade |  | High Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| MA | 3 | 0.80 | 0.82 | 0.82 | 0.82 | 0.82 | 0.83 | 0.81 | 0.80 |
|  | 4 | 0.80 | 0.79 | 0.83 | 0.79 | 0.78 | 0.80 | 0.78 | 0.77 |
|  | 5 | 0.77 | 0.80 | 0.79 | 0.80 | 0.79 | 0.81 | 0.78 | 0.77 |
|  | 6 | 0.79 | 0.77 | 0.78 | 0.76 | 0.77 | 0.79 | 0.82 | 0.79 |
|  | 7 | 0.76 | 0.75 | 0.77 | 0.73 | 0.76 | 0.77 | 0.78 | 0.74 |
|  | 8 | 0.80 | 0.81 | 0.81 | 0.81 | 0.79 | 0.80 | 0.79 | 0.79 |
|  | 9 | 0.80 | 0.80 | 0.77 | 0.77 | 0.79 | 0.76 | 0.80 | 0.81 |
|  | 10 | 0.73 | 0.75 | 0.75 | 0.76 | 0.75 | 0.73 | 0.73 | 0.74 |


| Content | Grade | Mean Point Biserial |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| MA | 3 | 0.61 | 0.64 | 0.65 | 0.65 | 0.64 | 0.65 | 0.63 | 0.62 |
|  | 4 | 0.64 | 0.64 | 0.65 | 0.65 | 0.63 | 0.65 | 0.64 | 0.63 |
|  | 5 | 0.62 | 0.63 | 0.62 | 0.62 | 0.63 | 0.63 | 0.61 | 0.59 |
|  | 6 | 0.60 | 0.59 | 0.62 | 0.61 | 0.60 | 0.60 | 0.64 | 0.61 |
|  | 7 | 0.57 | 0.57 | 0.59 | 0.56 | 0.57 | 0.59 | 0.61 | 0.58 |
|  | 8 | 0.56 | 0.56 | 0.58 | 0.59 | 0.58 | 0.58 | 0.58 | 0.56 |
|  | 9 | 0.52 | 0.52 | 0.53 | 0.53 | 0.54 | 0.52 | 0.53 | 0.53 |
|  | 10 | 0.51 | 0.51 | 0.49 | 0.48 | 0.50 | 0.52 | 0.49 | 0.52 |


| Content | Grade | Low Point Biserial |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
| MA | 3 | 0.39 | 0.35 | 0.40 | 0.38 | 0.36 | 0.35 | 0.28 | 0.36 |
|  | 4 | 0.25 | 0.26 | 0.17 | 0.26 | 0.20 | 0.29 | 0.25 | 0.25 |
|  | 5 | 0.35 | 0.36 | 0.36 | 0.39 | 0.34 | 0.38 | 0.36 | 0.35 |
|  | 6 | 0.15 | 0.18 | 0.19 | 0.18 | 0.15 | 0.18 | 0.27 | 0.25 |
|  | 7 | 0.33 | 0.27 | 0.27 | 0.27 | 0.32 | 0.34 | 0.33 | 0.27 |
|  | 8 | 0.08 | 0.03 | 0.18 | 0.13 | 0.21 | 0.14 | 0.10 | 0.16 |
|  | 9 | 0.09 | 0.18 | 0.25 | 0.21 | 0.20 | 0.19 | 0.17 | 0.21 |
|  | 10 | 0.10 | 0.10 | 0.07 | 0.03 | 0.09 | 0.14 | 0.09 | 0.12 |

Table 78 Mathematics Longitudinal Summary of Point-Biserials (continued)

|  |  | High Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Difference | Difference | Difference | Difference | Difference | Difference | Difference |
| MA | 2013 | $2013-2012$ | $2012-2011$ | $2011-2010$ | $2010-2009$ | $2009-2008$ | $2008-2007$ |  |
|  | 3 | -0.02 | 0.00 | 0.00 | 0.00 | -0.01 | 0.02 | 0.01 |
|  | 4 | 0.01 | -0.04 | 0.04 | 0.01 | -0.01 | 0.01 | 0.01 |
|  | 5 | -0.03 | 0.01 | -0.01 | 0.00 | -0.02 | 0.03 | 0.01 |
|  | 6 | 0.02 | -0.01 | 0.02 | -0.01 | -0.02 | -0.03 | 0.03 |
|  | 7 | 0.01 | -0.02 | 0.03 | -0.02 | -0.01 | -0.01 | 0.04 |
|  | -0.01 | 0.00 | 0.00 | 0.02 | -0.01 | 0.01 | -0.01 |  |
|  | 0 | 0.00 | 0.04 | -0.01 | -0.02 | 0.03 | -0.04 | -0.01 |
|  | -0.03 | 0.01 | -0.01 | 0.02 | 0.02 | -0.01 | -0.01 |  |


|  |  | Median Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | $2014-2013$ | Difference | Difference | Difference | Difference | Difference | Difference | Difference


| Content | Grade | Low Point Biserial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Difference | Difference | Difference | Difference | Difference | Difference | Difference |
|  |  | 2014-2013 | 2013-2012 | 2012-2011 | 2011-2010 | 2010-2009 | 2009-2008 | 2008-2007 |
| MA | 3 | 0.05 | -0.05 | 0.02 | 0.02 | 0.01 | 0.07 | -0.08 |
|  | 4 | -0.01 | 0.09 | -0.08 | 0.05 | -0.08 | 0.03 | 0.00 |
|  | 5 | -0.01 | 0.00 | -0.03 | 0.05 | -0.04 | 0.02 | 0.01 |
|  | 6 | -0.03 | -0.01 | 0.01 | 0.03 | -0.03 | -0.09 | 0.02 |
|  | 7 | 0.06 | 0.00 | 0.01 | -0.05 | -0.02 | 0.00 | 0.06 |
|  | 8 | 0.05 | -0.15 | 0.05 | -0.08 | 0.08 | 0.04 | -0.06 |
|  | 9 | -0.09 | -0.07 | 0.04 | 0.01 | 0.01 | 0.02 | -0.05 |
|  | 10 | 0.00 | 0.03 | 0.04 | -0.07 | -0.04 | 0.05 | -0.03 |

Table 79
Reading Longitudinal Summary of Impact Data

| Content | Grade | 2014 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| RD | 3 | 15.45\% | 29.20\% | 37.01\% | 14.60\% | 3.74\% | 18.34\% |
|  | 4 | 16.55\% | 26.12\% | 31.06\% | 18.58\% | 7.69\% | 26.27\% |
|  | 5 | 12.55\% | 27.30\% | 19.56\% | 31.09\% | 9.49\% | 40.58\% |
|  | 6 | 10.08\% | 21.53\% | 29.47\% | 33.74\% | 5.19\% | 38.93\% |
|  | 7 | 13.49\% | 23.17\% | 24.13\% | 32.38\% | 6.83\% | 39.21\% |
|  | 8 | 16.44\% | 27.63\% | 22.37\% | 26.61\% | 6.95\% | 33.56\% |
|  | 9 | 12.36\% | 23.94\% | 27.22\% | 24.90\% | 11.58\% | 36.49\% |
|  | 10 | 11.11\% | 29.33\% | 26.05\% | 20.77\% | 12.75\% | 33.52\% |
|  |  | 2013 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| RD | 3 | 17.86\% | 26.04\% | 34.97\% | 17.71\% | 3.42\% | 21.13\% |
|  | 4 | 20.80\% | 21.98\% | 31.42\% | 17.99\% | 7.82\% | 25.81\% |
|  | 5 | 11.21\% | 23.32\% | 19.43\% | 33.33\% | 12.71\% | 46.04\% |
|  | 6 | 8.66\% | 20.87\% | 28.90\% | 34.62\% | 6.96\% | 41.58\% |
|  | 7 | 9.27\% | 26.18\% | 23.58\% | 34.47\% | 6.50\% | 40.98\% |
|  | 8 | 14.62\% | 26.28\% | 25.69\% | 27.87\% | 5.53\% | 33.40\% |
|  | 9 | 12.77\% | 24.82\% | 29.20\% | 23.18\% | 10.04\% | 33.21\% |
|  | 10 | 13.09\% | 24.89\% | 29.18\% | 18.24\% | 14.59\% | 32.83\% |
|  |  | 2012 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| RD | 3 | 19.79\% | 25.27\% | 31.05\% | 19.79\% | 4.11\% | 23.90\% |
|  | 4 | 18.23\% | 21.39\% | 30.74\% | 21.71\% | 7.92\% | 29.64\% |
|  | 5 | 13.09\% | 27.14\% | 19.06\% | 30.21\% | 10.50\% | 40.71\% |
|  | 6 | 8.21\% | 22.71\% | 28.66\% | 33.49\% | 6.92\% | 40.42\% |
|  | 7 | 11.49\% | 24.11\% | 22.22\% | 34.27\% | 7.91\% | 42.18\% |
|  | 8 | 15.94\% | 27.17\% | 22.83\% | 25.72\% | 8.33\% | 34.06\% |
|  | 9 | 14.14\% | 25.00\% | 28.28\% | 23.57\% | 9.02\% | 32.58\% |
|  | 10 | 11.26\% | 31.07\% | 23.69\% | 19.42\% | 14.56\% | 33.98\% |

Table 79
Reading Longitudinal Summary of Impact Data (continued)

|  |  | 2011 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  | |  |
| :---: |
| Novice Combined |

## Table 79 Reading Longitudinal Summary of Impact Data (continued)

|  |  | 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percent of Students in Each Proficiency Level |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  <br> Novice Combined |
|  | 3 | $13.24 \%$ | $20.25 \%$ | $37.85 \%$ | $24.14 \%$ | $4.52 \%$ | $28.66 \%$ |
|  | 4 | $13.27 \%$ | $19.43 \%$ | $35.70 \%$ | $21.64 \%$ | $9.95 \%$ | $31.60 \%$ |
|  | 5 | $12.46 \%$ | $20.70 \%$ | $23.33 \%$ | $30.18 \%$ | $13.33 \%$ | $43.51 \%$ |
| RD | 6 | $11.53 \%$ | $20.90 \%$ | $27.39 \%$ | $32.79 \%$ | $7.39 \%$ | $40.18 \%$ |
|  | 7 | $13.69 \%$ | $24.71 \%$ | $25.86 \%$ | $29.28 \%$ | $6.46 \%$ | $35.74 \%$ |
|  | 8 | $16.80 \%$ | $26.09 \%$ | $22.73 \%$ | $25.89 \%$ | $8.50 \%$ | $34.39 \%$ |
|  | 9 | $13.96 \%$ | $22.79 \%$ | $28.27 \%$ | $25.44 \%$ | $9.54 \%$ | $34.98 \%$ |
|  | 10 | $15.18 \%$ | $28.42 \%$ | $24.51 \%$ | $18.22 \%$ | $13.67 \%$ | $31.89 \%$ |

Table 79
Reading Longitudinal Summary of Impact Data (continued)

|  |  | Difference between 2014 and 2013 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Dercent of Students in Each Proficiency Level |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  <br> Novice Combined |
| 3 | $-2.41 \%$ | $3.16 \%$ | $2.04 \%$ | $-3.11 \%$ | $0.31 \%$ | $-2.79 \%$ |  |
|  | 4 | $-4.25 \%$ | $4.15 \%$ | $-0.36 \%$ | $0.58 \%$ | $-0.12 \%$ | $0.46 \%$ |
|  | 5 | $1.34 \%$ | $3.98 \%$ | $0.13 \%$ | $-2.24 \%$ | $-3.22 \%$ | $-5.45 \%$ |
| RD | 6 | $1.42 \%$ | $0.66 \%$ | $0.56 \%$ | $-0.88 \%$ | $-1.76 \%$ | $-2.65 \%$ |
|  | 7 | $4.22 \%$ | $-3.00 \%$ | $0.55 \%$ | $-2.09 \%$ | $0.32 \%$ | $-1.77 \%$ |
|  | 8 | $1.82 \%$ | $1.34 \%$ | $-3.32 \%$ | $-1.26 \%$ | $1.42 \%$ | $0.16 \%$ |
|  | 9 | $-0.42 \%$ | $-0.88 \%$ | $-1.98 \%$ | $1.73 \%$ | $1.55 \%$ | $3.27 \%$ |
|  | 10 | $-1.98 \%$ | $4.43 \%$ | $-3.14 \%$ | $2.52 \%$ | $-1.84 \%$ | $0.68 \%$ |


|  |  | Difference between 2013 and 2012 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Percent of Students in Each Proficiency Level |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  <br> Novice Combined |
| 6 | $-1.93 \%$ | $0.78 \%$ | $3.92 \%$ | $-2.08 \%$ | $-0.69 \%$ | $-2.77 \%$ |  |
|  | 4 | $2.57 \%$ | $0.58 \%$ | $0.67 \%$ | $-3.72 \%$ | $-0.11 \%$ | $-3.82 \%$ |
|  | 5 | $-1.87 \%$ | $-3.82 \%$ | $0.37 \%$ | $3.12 \%$ | $2.20 \%$ | $5.33 \%$ |
| RD | 6 | $0.44 \%$ | $-1.84 \%$ | $0.24 \%$ | $1.13 \%$ | $0.03 \%$ | $1.16 \%$ |
|  | 7 | $-2.22 \%$ | $2.07 \%$ | $1.36 \%$ | $0.20 \%$ | $-1.41 \%$ | $-1.21 \%$ |
|  | 8 | $-1.32 \%$ | $-0.89 \%$ | $2.87 \%$ | $2.14 \%$ | $-2.80 \%$ | $-0.66 \%$ |
|  | 9 | $-1.37 \%$ | $-0.18 \%$ | $0.92 \%$ | $-0.39 \%$ | $1.02 \%$ | $0.63 \%$ |
|  | 10 | $1.83 \%$ | $-6.18 \%$ | $5.50 \%$ | $-1.18 \%$ | $0.03 \%$ | $-1.15 \%$ |


| Content | Grade | Difference between 2012 and 2011 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| RD | 3 | 4.50\% | 1.24\% | -4.83\% | 0.13\% | -1.04\% | -0.91\% |
|  | 4 | 1.77\% | 0.10\% | -1.03\% | 0.74\% | -1.59\% | -0.85\% |
|  | 5 | 2.11\% | 4.88\% | -1.54\% | -2.27\% | -3.18\% | -5.45\% |
|  | 6 | -1.96\% | 0.67\% | 2.86\% | -2.10\% | 0.52\% | -1.58\% |
|  | 7 | 2.64\% | -0.85\% | -3.09\% | -0.59\% | 1.89\% | 1.30\% |
|  | 8 | -1.39\% | -1.31\% | -0.48\% | 0.23\% | 2.95\% | 3.18\% |
|  | 9 | 0.88\% | -3.79\% | 2.14\% | 1.41\% | -0.64\% | 0.76\% |
|  | 10 | -1.77\% | 0.52\% | -0.34\% | 0.68\% | 0.92\% | 1.60\% |

Table 79
Reading Longitudinal Summary of Impact Data (continued)

| Content | Grade | Difference between 2011 and 2010 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| RD | 3 | -0.24\% | 1.54\% | -1.10\% | -1.35\% | 1.15\% | -0.20\% |
|  | 4 | -0.06\% | 2.02\% | -1.71\% | -0.74\% | 0.49\% | -0.25\% |
|  | 5 | -2.11\% | 2.22\% | -1.37\% | 1.79\% | -0.53\% | 1.25\% |
|  | 6 | 1.03\% | 1.17\% | -3.85\% | 1.63\% | 0.02\% | 1.65\% |
|  | 7 | -3.93\% | 1.25\% | 1.24\% | 2.09\% | -0.65\% | 1.44\% |
|  | 8 | -0.65\% | -0.17\% | 4.53\% | -0.59\% | -3.12\% | -3.71\% |
|  | 9 | -1.24\% | 1.84\% | 1.04\% | -0.70\% | -0.94\% | -1.64\% |
|  | 10 | -1.07\% | 4.66\% | -3.55\% | -1.26\% | 1.22\% | -0.04\% |
|  |  |  |  |  |  |  |  |
|  |  | Difference between 2010 and 2009 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| RD | 3 | -0.65\% | 3.41\% | 0.13\% | -0.38\% | -2.51\% | -2.89\% |
|  | 4 | -0.10\% | 1.41\% | 1.81\% | -1.58\% | -1.54\% | -3.12\% |
|  | 5 | 3.61\% | -3.50\% | 2.53\% | -1.49\% | -1.14\% | -2.64\% |
|  | 6 | -1.83\% | 3.86\% | -3.98\% | 1.61\% | 0.35\% | 1.95\% |
|  | 7 | 0.18\% | -1.67\% | 0.95\% | 1.95\% | -1.42\% | 0.53\% |
|  | 8 | -0.40\% | -0.94\% | -3.28\% | 4.58\% | 0.04\% | 4.62\% |
|  | 9 | 0.61\% | 1.80\% | -3.48\% | 2.74\% | -1.68\% | 1.06\% |
|  | 10 | 2.47\% | 0.94\% | 1.69\% | -1.01\% | -4.09\% | -5.10\% |
|  |  |  |  |  |  |  |  |
|  |  | Difference between 2009 and 2008 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| RD | 3 | 2.95\% | -1.17\% | -1.00\% | -2.76\% | 1.99\% | -0.77\% |
|  | 4 | 3.34\% | -1.57\% | -4.03\% | 1.65\% | 0.61\% | 2.26\% |
|  | 5 | -2.98\% | 2.83\% | -3.89\% | 2.01\% | 2.03\% | 4.04\% |
|  | 6 | -0.56\% | -3.90\% | 6.25\% | -0.43\% | -1.35\% | -1.79\% |
|  | 7 | -1.09\% | 0.66\% | -2.74\% | 1.55\% | 1.62\% | 3.17\% |
|  | 8 | 1.58\% | 3.51\% | -0.67\% | -4.38\% | -0.04\% | -4.42\% |
|  | 9 | -0.07\% | 2.36\% | 0.30\% | -5.32\% | 2.73\% | -2.59\% |
|  | 10 | -3.55\% | -3.46\% | 1.38\% | 2.79\% | 2.84\% | 5.64\% |

Table 80
Writing Longitudinal Summary of Impact Data

| Content | Grade | 2014 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| WR | 3 | 12.88\% | 27.29\% | 35.59\% | 21.53\% | 2.71\% | 24.24\% |
|  | 4 | 13.16\% | 21.20\% | 36.99\% | 21.64\% | 7.02\% | 28.65\% |
|  | 5 | 13.33\% | 21.01\% | 31.74\% | 24.64\% | 9.28\% | 33.91\% |
|  | 6 | 10.46\% | 18.31\% | 27.23\% | 32.00\% | 12.00\% | 44.00\% |
|  | 7 | 14.22\% | 23.80\% | 22.52\% | 25.24\% | 14.22\% | 39.46\% |
|  | 8 | 16.13\% | 24.11\% | 22.58\% | 22.07\% | 15.11\% | 37.18\% |
|  | 9 | 13.13\% | 25.10\% | 24.13\% | 25.48\% | 12.16\% | 37.64\% |
|  | 10 | 10.99\% | 23.63\% | 33.70\% | 21.06\% | 10.62\% | 31.68\% |
|  |  | 2013 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| WR | 3 | 13.94\% | 25.49\% | 35.53\% | 22.34\% | 2.70\% | 25.04\% |
|  | 4 | 12.87\% | 25.44\% | 32.75\% | 21.05\% | 7.89\% | 28.95\% |
|  | 5 | 10.26\% | 19.61\% | 27.60\% | 31.52\% | 11.01\% | 42.53\% |
|  | 6 | 9.44\% | 22.14\% | 24.46\% | 29.10\% | 14.86\% | 43.96\% |
|  | 7 | 11.44\% | 22.06\% | 23.20\% | 29.41\% | 13.89\% | 43.30\% |
|  | 8 | 14.68\% | 22.82\% | 23.61\% | 23.41\% | 15.48\% | 38.89\% |
|  | 9 | 13.56\% | 26.94\% | 24.95\% | 21.52\% | 13.02\% | 34.54\% |
|  | 10 | 12.85\% | 22.48\% | 34.90\% | 20.56\% | 9.21\% | 29.76\% |
|  |  | 2012 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| WR | 3 | 16.24\% | 25.19\% | 32.47\% | 23.52\% | 2.58\% | 26.10\% |
|  | 4 | 13.69\% | 20.86\% | 32.48\% | 26.11\% | 6.85\% | 32.96\% |
|  | 5 | 12.50\% | 22.08\% | 28.73\% | 28.57\% | 8.12\% | 36.69\% |
|  | 6 | 9.82\% | 17.87\% | 27.21\% | 31.08\% | 14.01\% | 45.09\% |
|  | 7 | 14.34\% | 21.61\% | 21.03\% | 28.49\% | 14.53\% | 43.02\% |
|  | 8 | 14.03\% | 25.68\% | 22.40\% | 21.86\% | 16.03\% | 37.89\% |
|  | 9 | 15.21\% | 27.50\% | 24.17\% | 22.29\% | 10.83\% | 33.13\% |
|  | 10 | 11.48\% | 26.26\% | 33.66\% | 20.82\% | 7.78\% | 28.60\% |

Table 80
Writing Longitudinal Summary of Impact Data (continued)

|  |  | 2011 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  | |  |
| :---: |
| Novice Combined |

Table 80
Writing Longitudinal Summary of Impact Data (continued)

|  |  | 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percent of Students in Each Proficiency Level |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  <br> Novice Combined |
| WR | 3 | $10.92 \%$ | $17.09 \%$ | $37.03 \%$ | $31.80 \%$ | $3.16 \%$ | $34.97 \%$ |
|  | 4 | $10.70 \%$ | $15.81 \%$ | $36.10 \%$ | $29.23 \%$ | $8.15 \%$ | $37.38 \%$ |
|  | 5 | $11.62 \%$ | $14.96 \%$ | $33.27 \%$ | $29.75 \%$ | $10.39 \%$ | $40.14 \%$ |
|  | 6 | $12.18 \%$ | $19.09 \%$ | $26.73 \%$ | $28.55 \%$ | $13.45 \%$ | $42.00 \%$ |
|  | 7 | $15.21 \%$ | $22.81 \%$ | $21.67 \%$ | $26.62 \%$ | $13.69 \%$ | $40.30 \%$ |
|  | $15.83 \%$ | $23.05 \%$ | $25.65 \%$ | $21.84 \%$ | $13.63 \%$ | $35.47 \%$ |  |
|  | 10 | $13.01 \%$ | $25.13 \%$ | $29.53 \%$ | $23.37 \%$ | $8.96 \%$ | $32.34 \%$ |
|  | $12.42 \%$ | $27.02 \%$ | $35.73 \%$ | $18.08 \%$ | $6.75 \%$ | $24.84 \%$ |  |

Table 80
Writing Longitudinal Summary of Impact Data (continued)

| Content | Grade | Difference between 2014 and 2013 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| WR | 3 | -1.06\% | 1.80\% | 0.06\% | -0.81\% | 0.01\% | -0.80\% |
|  | 4 | 0.29\% | -4.24\% | 4.24\% | 0.58\% | -0.88\% | -0.29\% |
|  | 5 | 3.08\% | 1.41\% | 4.14\% | -6.89\% | -1.74\% | -8.62\% |
|  | 6 | 1.02\% | -3.83\% | 2.77\% | 2.90\% | -2.86\% | 0.04\% |
|  | 7 | 2.78\% | 1.74\% | -0.68\% | -4.17\% | 0.33\% | -3.84\% |
|  | 8 | 1.45\% | 1.29\% | -1.03\% | -1.34\% | -0.37\% | -1.71\% |
|  | 9 | -0.43\% | -1.85\% | -0.82\% | 3.96\% | -0.86\% | 3.11\% |
|  | 10 | -1.86\% | 1.14\% | -1.20\% | 0.51\% | 1.42\% | 1.92\% |
|  |  | Difference between 2013 and 2012 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| WR | 3 | -2.29\% | 0.30\% | 3.06\% | -1.18\% | 0.12\% | -1.06\% |
|  | 4 | -0.83\% | 4.58\% | 0.26\% | -5.06\% | 1.05\% | -4.01\% |
|  | 5 | -2.24\% | -2.47\% | -1.13\% | 2.95\% | 2.89\% | 5.85\% |
|  | 6 | -0.38\% | 4.26\% | -2.76\% | -1.98\% | 0.85\% | -1.13\% |
|  | 7 | -2.90\% | 0.45\% | 2.17\% | 0.92\% | -0.64\% | 0.28\% |
|  | 8 | 0.66\% | -2.87\% | 1.21\% | 1.55\% | -0.55\% | 1.00\% |
|  | 9 | -1.65\% | -0.56\% | 0.79\% | -0.77\% | 2.19\% | 1.41\% |
|  | 10 | 1.37\% | -3.78\% | 1.25\% | -0.26\% | 1.43\% | 1.17\% |
|  |  | Difference between 2012 and 2011 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| WR | 3 | 2.66\% | 1.42\% | -1.32\% | -1.94\% | -0.82\% | -2.76\% |
|  | 4 | 0.18\% | -0.80\% | -1.56\% | 2.66\% | -0.48\% | 2.18\% |
|  | 5 | 2.05\% | 4.81\% | -2.18\% | -3.55\% | -1.13\% | -4.68\% |
|  | 6 | -0.68\% | -2.58\% | 1.51\% | 1.25\% | 0.50\% | 1.75\% |
|  | 7 | 4.02\% | -0.81\% | -5.48\% | 1.62\% | 0.65\% | 2.27\% |
|  | 8 | -4.61\% | 3.44\% | -1.04\% | 0.01\% | 2.20\% | 2.22\% |
|  | 9 | 0.79\% | -1.91\% | -0.69\% | -0.29\% | 2.10\% | 1.82\% |
|  | 10 | -1.79\% | -2.92\% | 4.07\% | 3.06\% | -2.42\% | 0.64\% |

Table 80
Writing Longitudinal Summary of Impact Data (continued)

|  |  | Difference between 2011 and 2010 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| WR | 3 | 0.61\% | 2.20\% | -1.65\% | -0.63\% | -0.53\% | -1.16\% |
|  | 4 | 2.90\% | 3.15\% | 0.05\% | -5.83\% | -0.26\% | -6.09\% |
|  | 5 | -0.67\% | -0.57\% | 2.92\% | 1.68\% | -3.36\% | -1.68\% |
|  | 6 | 1.98\% | -0.07\% | 2.05\% | -2.69\% | -1.27\% | -3.96\% |
|  | 7 | -2.37\% | 0.03\% | 1.33\% | 1.68\% | -0.67\% | 1.01\% |
|  | 8 | 2.60\% | -5.08\% | 1.07\% | 3.23\% | -1.82\% | 1.41\% |
|  | 9 | -1.38\% | 2.46\% | -1.54\% | 3.44\% | -2.98\% | 0.45\% |
|  | 10 | 1.64\% | 3.81\% | -6.35\% | -2.54\% | 3.44\% | 0.90\% |
|  |  | Difference between 2010 and 2009 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  |
| WR | 3 | 0.87\% | 2.18\% | -1.87\% | -1.60\% | 0.42\% | -1.18\% |
|  | 4 | -1.76\% | 2.84\% | -1.75\% | 2.48\% | -1.82\% | 0.67\% |
|  | 5 | 0.72\% | 1.48\% | -2.43\% | -1.79\% | 2.02\% | 0.23\% |
|  | 6 | -2.23\% | 5.77\% | -5.49\% | -2.27\% | 4.22\% | 1.95\% |
|  | 7 | 1.80\% | -1.44\% | 2.11\% | -3.14\% | 0.67\% | -2.48\% |
|  | 8 | -2.41\% | 4.45\% | -2.53\% | -1.31\% | 1.81\% | 0.49\% |
|  | 9 | 4.15\% | 0.65\% | -5.53\% | 0.07\% | 0.67\% | $0.73 \%$ |
|  | 10 | -0.75\% | 5.11\% | -1.58\% | 1.91\% | -4.68\% | -2.77\% |
|  |  |  |  |  |  |  |  |
|  |  | Difference between 2009 and 2008 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  |
| 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 81
Mathematics Longitudinal Summary of Impact Data

| Content | Grade | 2014 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 6.69\% | 23.16\% | 26.07\% | 20.93\% | 23.16\% | 44.08\% |
|  | 4 | 6.33\% | 27.98\% | 23.71\% | 30.63\% | 11.34\% | 41.97\% |
|  | 5 | 16.89\% | 17.03\% | 23.29\% | 33.48\% | 9.32\% | 42.79\% |
|  | 6 | 11.93\% | 15.90\% | 22.94\% | 23.39\% | 25.84\% | 49.24\% |
|  | 7 | 13.92\% | 22.40\% | 25.92\% | 23.20\% | 14.56\% | 37.76\% |
|  | 8 | 13.07\% | 26.49\% | 29.88\% | 22.07\% | 8.49\% | 30.56\% |
|  | 9 | 15.55\% | 21.69\% | 33.97\% | 19.58\% | 9.21\% | 28.79\% |
|  | 10 | 12.70\% | 23.96\% | 34.48\% | 20.69\% | 8.17\% | 28.86\% |
|  |  | 2013 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 8.35\% | 22.61\% | 20.03\% | 24.28\% | 24.73\% | 49.01\% |
|  | 4 | 7.09\% | 29.39\% | 24.96\% | 28.06\% | 10.49\% | 38.55\% |
|  | 5 | 14.89\% | 14.44\% | 19.40\% | 38.05\% | 13.23\% | 51.28\% |
|  | 6 | 11.51\% | 15.24\% | 23.17\% | 25.97\% | 24.11\% | 50.08\% |
|  | 7 | 11.88\% | 18.98\% | 24.75\% | 26.57\% | 17.82\% | 44.39\% |
|  | 8 | 11.35\% | 25.10\% | 27.69\% | 27.29\% | 8.57\% | 35.86\% |
|  | 9 | 13.52\% | 25.80\% | 32.21\% | 18.33\% | 10.14\% | 28.47\% |
|  | 10 | 14.47\% | 22.55\% | 37.45\% | 17.66\% | 7.87\% | 25.53\% |
|  |  | 2012 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 9.41\% | 22.69\% | 26.54\% | 17.13\% | 24.23\% | 41.36\% |
|  | 4 | 7.68\% | 25.92\% | 26.88\% | 29.60\% | 9.92\% | 39.52\% |
|  | 5 | 16.56\% | 17.70\% | 20.33\% | 34.92\% | 10.49\% | 45.41\% |
|  | 6 | 11.73\% | 16.01\% | 19.65\% | 22.50\% | 30.11\% | 52.61\% |
|  | 7 | 14.26\% | 20.23\% | 23.51\% | 22.74\% | 19.27\% | 42.00\% |
|  | 8 | 12.27\% | 25.46\% | 22.89\% | 27.84\% | 11.54\% | 39.38\% |
|  | 9 | 15.27\% | 25.87\% | 30.35\% | 18.74\% | 9.78\% | 28.51\% |
|  | 10 | 12.96\% | 27.08\% | 38.10\% | 15.86\% | 6.00\% | 21.86\% |

Table 81
Mathematics Longitudinal Summary of Impact Data (continued)

| Content | Grade | 2011 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 9.94\% | 18.61\% | 24.13\% | 23.50\% | 23.82\% | 47.32\% |
|  | 4 | 6.91\% | 28.29\% | 24.67\% | 30.26\% | 9.87\% | 40.13\% |
|  | 5 | 14.75\% | 14.13\% | 19.88\% | 40.99\% | 10.25\% | 51.24\% |
|  | 6 | 11.49\% | 16.38\% | 23.35\% | 22.79\% | 25.99\% | 48.78\% |
|  | 7 | 10.68\% | 20.28\% | 25.27\% | 25.80\% | 17.97\% | 43.77\% |
|  | 8 | 14.62\% | 22.73\% | 28.46\% | 24.31\% | 9.88\% | 34.19\% |
|  | 9 | 15.60\% | 25.75\% | 31.39\% | 18.61\% | 8.65\% | 27.26\% |
|  | 10 | 14.75\% | 27.88\% | 38.79\% | 14.34\% | 4.24\% | 18.59\% |
|  |  | 2010 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 8.65\% | 17.92\% | 22.64\% | 26.26\% | 24.53\% | 50.79\% |
|  | 4 | 5.52\% | 25.55\% | 23.19\% | 36.44\% | 9.31\% | 45.74\% |
|  | 5 | 15.05\% | 15.38\% | 20.40\% | 38.80\% | 10.37\% | 49.16\% |
|  | 6 | 10.71\% | 15.37\% | 20.73\% | 24.87\% | 28.32\% | 53.20\% |
|  | 7 | 14.56\% | 18.71\% | 27.41\% | 23.82\% | 15.50\% | 39.32\% |
|  | 8 | 12.79\% | 26.91\% | 28.24\% | 22.90\% | 9.16\% | 32.06\% |
|  | 9 | 15.78\% | 26.06\% | 31.01\% | 15.78\% | 11.38\% | 27.16\% |
|  | 10 | 13.18\% | 22.11\% | 38.95\% | 18.66\% | 7.10\% | 25.76\% |
|  |  | 2009 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 8.33\% | 17.73\% | 22.58\% | 24.39\% | 26.97\% | 51.36\% |
|  | 4 | 7.48\% | 21.95\% | 25.69\% | 32.36\% | 12.52\% | 44.88\% |
|  | 5 | 12.07\% | 15.65\% | 17.01\% | 42.86\% | 12.42\% | 55.27\% |
|  | 6 | 11.41\% | 14.49\% | 22.46\% | 28.80\% | 22.83\% | 51.63\% |
|  | 7 | 13.66\% | 21.06\% | 24.29\% | 24.86\% | 16.13\% | 40.99\% |
|  | 8 | 15.87\% | 26.38\% | 27.86\% | 21.77\% | 8.12\% | 29.89\% |
|  | 9 | 13.86\% | 24.75\% | 31.49\% | 20.00\% | 9.90\% | 29.90\% |
|  | 10 | 12.94\% | 25.14\% | 35.86\% | 18.30\% | 7.76\% | 26.06\% |

Table 81
Mathematics Longitudinal Summary of Impact Data (continued)

| Content | Grade | 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 8.45\% | 15.17\% | 25.52\% | 24.66\% | 26.21\% | 50.86\% |
|  | 4 | 6.30\% | 20.61\% | 25.89\% | 35.78\% | 11.41\% | 47.19\% |
|  | 5 | 14.66\% | 12.22\% | 24.06\% | 37.97\% | 11.09\% | 49.06\% |
|  | 6 | 15.88\% | 13.42\% | 20.79\% | 23.25\% | 26.65\% | 49.91\% |
|  | 7 | 16.76\% | 18.88\% | 25.05\% | 20.23\% | 19.08\% | 39.31\% |
|  | 8 | 12.13\% | 26.03\% | 24.66\% | 28.77\% | 8.41\% | 37.18\% |
|  | 9 | 13.50\% | 26.82\% | 30.55\% | 17.76\% | 11.37\% | 29.13\% |
|  | 10 | 14.47\% | 25.49\% | 38.44\% | 16.63\% | 4.97\% | 21.60\% |
|  |  | 2007 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | 5.59\% | 16.76\% | 24.21\% | 27.56\% | 25.88\% | 53.45\% |
|  | 4 | 5.91\% | 22.24\% | 24.80\% | 29.53\% | 17.52\% | 47.05\% |
|  | 5 | 12.03\% | 14.98\% | 22.78\% | 41.77\% | 8.44\% | 50.21\% |
|  | 6 | 13.13\% | 15.83\% | 23.17\% | 26.83\% | 21.04\% | 47.88\% |
|  | 7 | 10.66\% | 19.40\% | 27.72\% | 25.80\% | 16.42\% | 42.22\% |
|  | 8 | 12.04\% | 29.01\% | 29.38\% | 23.18\% | 6.39\% | 29.56\% |
|  | 9 | 14.92\% | 27.52\% | 32.14\% | 17.44\% | 7.98\% | 25.42\% |
|  | 10 | 18.12\% | 25.50\% | 36.02\% | 16.11\% | 4.25\% | 20.36\% |

Table 81
Mathematics Longitudinal Summary of Impact Data (continued)

| Content | Grade | Difference between 2014 and 2013 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | -1.66\% | 0.55\% | 6.04\% | -3.35\% | -1.58\% | -4.93\% |
|  | 4 | -0.76\% | -1.41\% | -1.25\% | 2.57\% | 0.85\% | 3.42\% |
|  | 5 | 2.00\% | 2.59\% | 3.89\% | -4.57\% | -3.92\% | -8.48\% |
|  | 6 | 0.42\% | 0.66\% | -0.24\% | -2.58\% | 1.74\% | -0.84\% |
|  | 7 | 2.04\% | 3.42\% | 1.17\% | -3.37\% | -3.26\% | -6.63\% |
|  | 8 | 1.72\% | 1.39\% | 2.19\% | -5.22\% | -0.08\% | -5.30\% |
|  | 9 | 2.02\% | -4.11\% | 1.77\% | 1.25\% | -0.93\% | 0.32\% |
|  | 10 | -1.76\% | 1.40\% | -2.96\% | 3.03\% | 0.29\% | 3.32\% |
|  |  | Difference between 2013 and 2012 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | -1.07\% | -0.08\% | -6.51\% | 7.15\% | 0.51\% | 7.66\% |
|  | 4 | -0.59\% | 3.47\% | -1.92\% | -1.54\% | 0.57\% | -0.97\% |
|  | 5 | -1.67\% | -3.27\% | -0.93\% | 3.13\% | 2.74\% | 5.87\% |
|  | 6 | -0.22\% | -0.77\% | 3.52\% | 3.47\% | -6.01\% | -2.54\% |
|  | 7 | -2.38\% | -1.25\% | 1.25\% | 3.83\% | -1.45\% | 2.39\% |
|  | 8 | -0.92\% | -0.36\% | 4.80\% | -0.55\% | -2.97\% | -3.52\% |
|  | 9 | -1.75\% | -0.06\% | 1.86\% | -0.41\% | 0.37\% | -0.04\% |
|  | 10 | 1.51\% | -4.53\% | -0.66\% | 1.80\% | 1.88\% | 3.68\% |
|  |  | Difference between 2012 and 2011 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice | Developing \& Novice Combined |
| MA | 3 | -0.52\% | 4.07\% | 2.41\% | -6.37\% | 0.41\% | -5.96\% |
|  | 4 | 0.77\% | -2.37\% | 2.21\% | -0.66\% | 0.05\% | -0.61\% |
|  | 5 | 1.81\% | 3.57\% | 0.45\% | -6.08\% | 0.24\% | -5.83\% |
|  | 6 | 0.24\% | -0.38\% | -3.70\% | -0.28\% | 4.12\% | 3.84\% |
|  | 7 | 3.58\% | -0.05\% | -1.76\% | -3.06\% | 1.30\% | -1.77\% |
|  | 8 | -2.35\% | 2.73\% | -5.56\% | 3.53\% | 1.66\% | 5.19\% |
|  | 9 | -0.33\% | 0.11\% | -1.04\% | 0.13\% | 1.13\% | 1.26\% |
|  | 10 | -1.79\% | -0.80\% | -0.68\% | 1.52\% | 1.75\% | 3.27\% |

Table 81
Mathematics Longitudinal Summary of Impact Data (continued)

| Content | Grade | Difference between 2011 and 2010 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  |  | Inconclusive | Exploring | Emerging | Developing | Novice |  |
| MA | 3 | 1.29\% | 0.69\% | 1.49\% | -2.76\% | -0.71\% | -3.47\% |
|  | 4 | 1.39\% | 2.74\% | 1.49\% | -6.17\% | 0.56\% | -5.61\% |
|  | 5 | -0.30\% | -1.25\% | -0.53\% | 2.20\% | -0.12\% | 2.08\% |
|  | 6 | 0.78\% | 1.01\% | 2.63\% | -2.08\% | -2.34\% | -4.42\% |
|  | 7 | -3.88\% | 1.57\% | -2.14\% | 1.98\% | 2.47\% | 4.45\% |
|  | 8 | 1.84\% | -4.18\% | 0.21\% | 1.41\% | 0.72\% | 2.13\% |
|  | 9 | -0.18\% | -0.30\% | 0.38\% | 2.83\% | -2.73\% | 0.10\% |
|  | 10 | 1.56\% | 5.77\% | -0.16\% | -4.32\% | -2.86\% | -7.17\% |
|  |  | Difference between 2010 and 2009 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  |
| MA | 3 | 0.31\% | 0.20\% | 0.07\% | 1.86\% | -2.44\% | -0.58\% |
|  | 4 | -1.96\% | 3.60\% | -2.51\% | 4.08\% | -3.21\% | 0.86\% |
|  | 5 | 2.98\% | -0.26\% | 3.39\% | -4.06\% | -2.05\% | -6.11\% |
|  | 6 | -0.70\% | 0.88\% | -1.74\% | -3.93\% | 5.50\% | 1.56\% |
|  | 7 | 0.89\% | -2.35\% | 3.12\% | -1.04\% | -0.63\% | -1.67\% |
|  | 8 | -3.08\% | 0.52\% | 0.38\% | 1.13\% | 1.04\% | 2.17\% |
|  | 9 | 1.92\% | 1.30\% | -0.48\% | -4.22\% | 1.48\% | -2.75\% |
|  | 10 | 0.25\% | -3.03\% | 3.09\% | 0.36\% | -0.66\% | -0.30\% |
|  |  | Difference between 2009 and 2008 |  |  |  |  |  |
|  |  | Percent of Students in Each Proficiency Level |  |  |  |  |  |
| Content | Grade | Inconclusive | Exploring | Emerging | Developing | Novice |  |
| MA | 3 | -0.12\% | 2.55\% | -2.94\% | -0.26\% | 0.76\% | 0.50\% |
|  | 4 | 1.18\% | 1.34\% | -0.20\% | -3.42\% | 1.11\% | -2.31\% |
|  | 5 | -2.59\% | 3.43\% | -7.05\% | 4.89\% | 1.32\% | 6.21\% |
|  | 6 | -4.47\% | 1.07\% | 1.67\% | 5.55\% | -3.83\% | 1.72\% |
|  | 7 | -3.10\% | 2.18\% | -0.76\% | 4.63\% | -2.95\% | 1.68\% |
|  | 8 | 3.73\% | 0.36\% | 3.20\% | -7.00\% | -0.30\% | -7.29\% |
|  | 9 | 0.36\% | -2.07\% | 0.93\% | 2.24\% | -1.47\% | 0.77\% |
|  | 10 | -1.53\% | -0.35\% | -2.59\% | 1.67\% | 2.80\% | 4.46\% |

Table 81
Mathematics Longitudinal Summary of Impact Data (continued)

|  |  | Difference between 2008 and 2007 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Content | Grade | Percent of Students in Each Proficiency Level |  |  |  |  |  |
|  | Inconclusive | Exploring | Emerging | Developing | Novice |  |  |
| MA | 3 | $2.86 \%$ | $-1.59 \%$ | $1.31 \%$ | $-2.91 \%$ | $0.32 \%$ | $-2.58 \%$ |
|  | 4 | $0.40 \%$ | $-1.63 \%$ | $1.09 \%$ | $6.25 \%$ | $-6.11 \%$ | $0.14 \%$ |
|  | 5 | $2.64 \%$ | $-2.76 \%$ | $1.28 \%$ | $-3.80 \%$ | $2.65 \%$ | $-1.15 \%$ |
|  | 6 | $2.75 \%$ | $-2.41 \%$ | $-2.37 \%$ | $-3.58 \%$ | $5.61 \%$ | $2.03 \%$ |
|  | 7 | $6.10 \%$ | $-0.52 \%$ | $-2.67 \%$ | $-5.57 \%$ | $2.66 \%$ | $-2.91 \%$ |
|  | 0 | $0.09 \%$ | $-2.99 \%$ | $-4.72 \%$ | $5.59 \%$ | $2.03 \%$ | $7.62 \%$ |
|  | 10 | $-1.42 \%$ | $-0.70 \%$ | $-1.59 \%$ | $0.33 \%$ | $3.38 \%$ | $3.71 \%$ |
|  | $-3.65 \%$ | $-0.02 \%$ | $2.43 \%$ | $0.52 \%$ | $0.72 \%$ | $1.24 \%$ |  |

Figures 1-24

Figure 1
Total Number of Students Participating in CoAlt 2013-14 by Grade and Content

Total Number of Students Participating in CoAlt 2013-14 by Grade and Content


- Reading

■Writing
$\square$ Mathematics

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
Reading Mean Percent of Total Possible Score by Gender


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


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


Figure 9
Reading Mean as Percent of Total Possible Score by Race/Ethnicity


Figure 10
Writing Mean as Percent of Total Possible Score by Race/Ethnicity


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


Figure 12
Reading Impact Data


Figure 13
Writing Impact Data


Figure 14
Mathematics Impact Data


Figure 15
Impact Data—Developing and Novice Combined


Figure 16
Total Number of Students Participating in CoAlt Reading 2008, 2009, 2010, 2011, 2012, 2013, and 2014


Figure 17
Total Number of Students Participating in CoAlt Writing 2008, 2009, 2010, 2011, 2012, 2013, and 2014

Total Number of Students Participating in CoAlt Longitudinally for Writing


Figure 18
Total Number of Students Participating in CoAlt Mathematics 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014

Total Number of Students Participating in CoAlt
Longitudinally for Mathematics



Figure 19
Mean Score as Percent of Total for Reading 2008, 2009, 2010, 2011, 2012, 2013, and 2014


Figure 20
Mean Score as Percent of Total for Writing 2008, 2009, 2010, 2011, 2012, 2013, and 2014


Figure 21
Mean Score as Percent of Total for Mathematics 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014


Figure 22
Percent of Participating Students by Coded Disability Longitudinally for Reading


Figure 23
Percent of Participating Students by Coded Disability Longitudinally for Writing


Figure 24
Percent of Participating Students by Coded Disability Longitudinally for Mathematics


## Appendix A: Location of Information for Peer Review Critical Elements

## Peer Review Chapter 1

1. Overview, Part 1: Standards, and Part 8: Summary of Results—Reliability and Validity
2. Overview, Part 1: Standards, and Part 8: Summary of Results—Reliability and Validity
3. Part 1: Standards and Part 7: Analyses and Results
4. Overview, Part 1: Standards, and Part 8: Summary of Results—Reliability and Validity

## Peer Review Chapter 2

1. Overview, Part 1: Standards, Part 2: Test Development, Part 6: Standard Setting, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
2. Overview, Part 1: Standards, Part 2: Test Development, Part 6: Standard Setting, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
3. Overview, Part 1: Standards, Part 6: Standard Setting, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, Part 9: Special Studies, and Part 10: Longitudinal Analyses
4. None
5. Part 1: Standards and Part 2: Test Development
6. Part 1: Standards, Part 2: Test Development, and Part 6: Standard Setting

## Peer Review Chapter 3

1. None
2. None
3. None
4. Part 1: Standards, Part 2: Test Development, Part 3: Description of the Population, Part 4: Test Administration, Part 6: Standard Setting, and Part 8: Summary of Results—Reliability and Validity
5. None
6. Part 2: Test Development, Part 7: Analyses and Results, and Part 9: Special Studies
7. Overview, Part 1: Standards, Part 2: Test Development, Part 3: Description of the Population, Part 4: Test Administration, and Part 10: Longitudinal Analyses

## Peer Review Chapter 5

1. Part 1: Standards, Part 2: Test Development, Part 6: Standard Setting, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, and Part 10: Longitudinal Analyses
2. Part 1: Standards, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
3. Part 1: Standards, Part 2: Test Development, and Part 8: Summary of Results—Reliability and Validity
4. Part 2: Test Development and Part 8: Summary of Results—Reliability and Validity
5. Part 2: Test Development, Part 8: Summary of Results—Reliability and Validity, and Part 9: Special Studies
6. Part 7: Analyses and Results and Part 8: Summary of Results—Reliability and Validity
7. Part 2: Test Development

## Peer Review Chapter 6

1. Part 3: Description of the Population, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, and Part 10: Longitudinal Analyses
2. Overview, Part 3: Description of the Population, Part 4: Test Administration, Part 7: Analyses and Results, Part 8: Summary of Results—Reliability and Validity, and Part 10: Longitudinal Analyses
3. Part 3: Description of the Population, Part 4: Test Administration,

Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity
4. Part 3: Description of the Population, Part 7: Analyses and Results, and Part 8: Summary of Results—Reliability and Validity


[^0]:    ${ }^{1}$ Across all grade levels and content areas, no items were suppressed from scoring for the 2013-14 CoAlt administration.

[^1]:    ${ }^{2}$ The CDE refers to the accommodations used within the context of the CoAlt as expanded accommodations, due to the fact that the CoAlt already has some accommodations built into the administration (such as unlimited time and individual administration). The term expanded accommodations is used here and throughout CDE references to the CoAlt accommodations in order to differentiate the CoAlt accommodations from those used with the TCAP assessment.

[^2]:    ${ }^{3}$ Subgroups with fewer than 16 students have only sample sizes reported (no statistics are calculated or reported) in accordance with Family Education Rights \& Privacy Act (FERPA) and CO state regulations. This rule is instituted throughout all tables, figures, and reporting.

[^3]:    ${ }^{4}$ The CoAlt test books are referred to as Test Protocols. The Test Protocol contains information for the test examiner to utilize during the assessment administration, such as: directions for item administration and preparation required a copy of the item as viewed by the student in the student materials, item protocols, and an area to mark both student response and the level of independence with which the student answered the item.
    ${ }^{5}$ More information regarding scoring, marking student responses, and determining level of independence can be found in Part 5 of this report.

[^4]:    ${ }^{6}$ Due to modifications to the Performance Level Descriptors, the cut scores for Science grade 10 were reviewed and revised within the context of the 2008 standard setting. For more information please see the 2008 standard setting technical report, available from the CDE.
    ${ }^{7}$ Valid cases were defined previously in Part 5: Scoring-Score Validation.

[^5]:    ${ }^{8}$ There are no 6-point CR items in Reading as illustrated in Table 4.

[^6]:    ${ }^{9}$ There are two values of 0.62 ; however, the grade 3 value of 0.619 is lower.
    ${ }^{10}$ There are three values of 0.23 ; however, the grade 5 value of 0.231 is the lowest.
    ${ }^{11}$ There are two values of 0.87 ; however, the grade 6 value of 0.869 is higher.
    ${ }^{12}$ There are four values of 0.83 ; however, the grade 10 value of 0.83 is the highest.
    ${ }^{13}$ There is one item with a rounded $p$-value of 0.25 ; however, the unrounded $p$-value is 0.2497 .

[^7]:    ${ }^{14}$ There are two values of 0.62 ; however, the grade 4 value of 0.623 is higher.
    ${ }^{15}$ There are three values of 0.21 ; however, the grade 4 value of 0.207 is the lowest.
    ${ }^{16}$ There are two values of 0.85 ; however, the grade 6 value of 0.855 is higher.
    ${ }^{17}$ There are two values of 0.16 ; however, the grade 4 value of 0.160 is lower.

[^8]:    ${ }^{18}$ There are two values of 0.73 ; however, the grade 5 value of 0.732 is higher.
    ${ }^{19}$ There are two values of 0.88 ; however, the grade 8 value of 0.881 is higher.
    ${ }^{20}$ There are four values of 0.80 ; however, the grade 3 value of 0.804 is the highest.
    ${ }^{21}$ One item has a rounded point-biserial value of 0.15 ; however, the unrounded value is 0.146 .
    ${ }^{22}$ There are two values of 0.85 ; however, the grade 7 value of 0.854 is higher.
    ${ }^{23}$ There are two values of 0.05 ; however, the grade 8 value of 0.050 is lower.

[^9]:    ${ }^{24}$ There are two values of 0.72 ; however, the grade 4 value of 0.718 is higher.

[^10]:    ${ }^{25}$ There are two values of 0.92 ; however, the grade 3 value of 0.919 is lower.
    ${ }^{26}$ There are three values of 0.93 ; however the grade 10 value of 0.931 is the lowest.

[^11]:    ${ }^{27}$ There are two values of 0.95 ; however the grade 5 value of 0.953 is higher.
    ${ }^{28}$ There are several values of 0.91 ; however, the grade 10 value of 0.906 is lowest.
    ${ }^{29}$ Threre are several values of 0.95 ; however the grade 5 value of 0.964 is the highest.
    ${ }^{30}$ There are several values of .95 ; however, the Mathematics grade 5 value of 0.954 is the highest.
    ${ }^{31}$ There are several values of 0.96 ; however, the Mathematics grade 5 value of 0.963 is the highest.

[^12]:    ${ }^{32}$ There are three values of 0.63 ; however, the grade 7 value of 0.627 is the lowest.
    ${ }^{33}$ There are two values of 0.21 ; however, the grade 6 value of 0.205 is lower.
    ${ }^{34}$ There are two values of 0.21 ; however, the grade 7 value of 0.209 is lower.

[^13]:    ${ }^{35}$ There are three values of 0.53 ; however, the grade 9 value of 0.527 is the lowest.
    ${ }^{36}$ There are two values of 0.77 ; however, the grade 5 value of 0.769 is higher.

[^14]:    ${ }^{37}$ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.
    ${ }^{38}$ There are two values of 0.87 ; however, the 0.874 grade 5 value is higher.
    ${ }^{39}$ There are two values of 0.87 ; however, the grade 6 value of 0.869 is higher.
    ${ }^{40}$ There are two values of 0.23 ; however, the 0.228 grade 6 value is lower.
    ${ }^{41}$ There are three values of 0.23 ; however, the 0.233 grade 4 value is the lowest.

[^15]:    ${ }^{42}$ There are three values of 0.23 ; however, the grade 5 value of 0.231 is the lowest.
    ${ }^{43}$ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.
    ${ }^{44}$ There are two values of $\pm 0.002$; however, the -0.0017 grade 4 value is a smaller difference.
    ${ }^{45}$ There are three values of 0.73 ; however, the 0.729 grade 6 value is the highest.
    ${ }^{46}$ There are two values of 0.74 ; however the grade 9 value of 0.737 is higher.
    ${ }^{47}$ There are two values of 0.73 ; however, the grade 5 value of 0.731 is higher.
    ${ }^{48}$ There are two values of 0.19 ; however, the grade 5 value of 0.193 is lower.

[^16]:    ${ }^{49}$ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.
    ${ }^{50}$ There are four values of 0.83 ; however the grade 8 value of 0.833 is the highest.
    ${ }^{51}$ There are two values of 0.19 ; however, the 0.1857 grade 4 value is lower.
    ${ }^{52}$ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.
    ${ }^{53}$ There are two values of 0.87 ; however, the 0.868 grade 6 value is higher.
    ${ }^{54}$ There are two values of 0.88 ; however, the grade 8 value of 0.881 is higher.

[^17]:    ${ }^{55}$ There are two values of 0.12 ; however, the 0.118 grade 7 value is lower.
    ${ }^{56}$ There are two values of 0.14 ; however, the 0.139 grade 10 value is lower.

[^18]:    ${ }^{57}$ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.
    ${ }^{58}$ There are five values of $\pm 0.01$; however the grades $8(-)$ and $9(+)$ values of $\pm 0.007$ are the smallest differences.
    ${ }^{59}$ Difference values are expanded here to additional decimal places, as rounding to fewer digits would obscure differences.
    ${ }^{60}$ There are four values of 0.80 ; however, the grade 3 value of 0.804 is the highest.

