

2006 WV APTA

Operational Technical Report

Submitted

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Acronyms and Abbreviations

WV APTA West Virginia Alternate Performance Task Assessment

RLA Reading/Language Arts

MA Mathematics

MC Multiple Choice

CR Constructed Response

WVDE West Virginia Department of Education

SE Standard Error

SEM Standard Error of Measurement

APA American Psychological Association

Overview

This working document describes the Operational West Virginia Alternate Performance Task Assessment (WV APTA) that was administered to students in grades 3-8 and 10 in the spring of 2006 to assess students' skills in Reading/Language Arts (RLA) and Mathematics (MA). The WV APTA is the alternate assessment for students with significant cognitive disabilities unable to participate in the general, on-grade assessment WESTEST.

CE 3.7

Between **May 1 and May 12**, West Virginia students in grades 3 – 8 and 10 who are unable to participate in the WESTEST general academic assessment, even with accommodations, participated in the WV APTA Operational testing program. All eligible students in the state, including those who needed various accommodations participated.

The work involved in the development of the standards, the test forms, administration, scoring, standard setting, and analyses are all important steps in the process of developing a valid assessment system, regardless of the format of the assessment. This document serves to capture a small portion of the enormous amount of time and effort devoted to the APTA in relation to the importance, reliability, and validity of the assessment as part of the WV assessment system. From the *Standards for Educational and Psychological Testing* (1999), guidance is given in Standard 3.6 that is of particular relevance to alternate assessments and the uniqueness of the “intended test takers.” It reads:

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

The APTA process has paid close attention to each of these directions.

In addition to being guided by the *Standards* (1999), guidance from the *Standards and Assessments Peer Review Guidance* (2004) is beneficial. To that end, text boxes are used to flag those areas of this report that respond directly to the Critical Elements (CE) of those standards.

Part 1. Standards

CE 1.1

The Operational 2006 APTA forms consisted of custom multiple-choice (MC) and constructed-response (CR) performance task items that measure skills associated with West Virginia's Extended Content Standards in RLA and MA. The *Extended Academic Content Standards* are on grade level and have been developed from the regular content standards for each grade. These standards were written to be directly aligned to the on-grade WESTEST standards and are further described via performance level descriptors.

Extended Academic Content Standards

A diverse panel of educators including regular educators, special educators, and content specialists from across the state, parents, the Office of Special Education and the Office of Student Assessment Services gathered to determine the essence of the West Virginia Content Standards and Objectives (CSOs) for reading/language arts and mathematics for grades 3-8 and 10. Extended Academic Content Standards and Performance Level Descriptors for grades 3-8 and 10 were developed for students with the most significant cognitive disabilities. Essence of the standard has been defined as “that which conveys the same ideas, skills and content of the Standard, expressed in simpler terms.”

From these essences, extended grade level standards were developed to provide linkage to the fundamental content of the CSOs and to ensure that students with the most significant cognitive disabilities have access to and make progress in, the general curriculum. Dr. Jan Sheinker facilitated the development process during the August 3-5 and August 18-20, 2005 meetings.

CE 1.4, 2.1

The *Extended Academic Content Standards*, West Virginia Board of Education Policy 2520.16: Alternate Academic Achievement Standards for West Virginia Schools was presented to the West Virginia Board of Education for consideration during the September 14-15, 2005 meeting and were placed on public comment for 30 days. The West Virginia Board of Education approved and adopted Policy 2520.16 during the November 9-10, 2005 meeting with an effective date of December 14, 2005. Administrators and special educators were trained by the Office of Special Education on how to teach to the extended academic content standards. Policy 2520.16 was revised based on the findings of the independent, external alignment study of the extended academic content standards/descriptors to the test items. The revised policy was placed on public comment in March 2006 with the comment period ending April 10, 2006. No comments were received. The West Virginia Board of Education approved the revised policy on April 13, 2006.

The Office of Special Education provided statewide teacher training on how to teach with the extended standards during October, 2005.

CE 1.3, 2.1, 2.5, 3.4, 3.5, 3.6, 4.1, 5.1, 5.2, 5.3, 5.5
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Alignment Studies

The pilot and operational forms are designed to align with the extended standards. WVDE conducted two external alignment studies (pre and post alignments) of the *West Virginia Extended Academic Content Standards and Performance Level Descriptors* and APTA assessments in two content areas – reading/language arts and mathematics for grades 3 – 8 and 10. The studies addressed both quantitatively and qualitatively the comprehensiveness of tests in terms of gaps and weaknesses, emphasis and depth of knowledge, as well as thinking skill distributions to ensure the alignment of content and performance descriptors with the assessment.

Background: Alignment is frequently used to describe the state of an education system. For purposes of the study, alignment was defined as the degree to which the *Extended Academic Content Standards and Performance Level Descriptors* and APTA assessments are in agreement and serve in conjunction with one another to guide the education system for WV students towards supporting the instruction of what students are expected to know and do.

The alignment process produced the following information:

- Degree to which the standards and APTA are in agreement on four criteria: categorical concurrence, depth-of-knowledge consistency, range-of-knowledge correspondence, and balance of representation (Webb's alignment model)
- Item coding of depth-of-knowledge and standards by individual reviewers
- Report of the reliability among reviewers
- Explicit statement regarding standards and assessments alignment or lack thereof and required steps to improve the alignment

During Phase 1 or pre-alignment study, a three-day Alignment Analysis Institute, was conducted February 1-3, 2006, using forms from the APTA Pilot Test. Dr. Norman Webb of the Wisconsin Center for Education Research lead the study. Eight nationally recognized content specialists (four per content area) with special education population knowledge provided expertise as external reviewers, participating in the institute. Eight internal West Virginia (four per content) educators provided expertise, understanding, and knowledge of the *West Virginia Extended Academic Content Standards and Performance Level Descriptors*. The internal reviewers represented regular educators, special educators with expertise in working with special populations, county administrative staff, and classroom teachers from all grade spans across the state.

Phase 2 or post-alignment study reviewed all forms based on the recommended revisions of the pre-alignment study. The study was conducted April 18-19, 2006 using six of the same nationally recognized content specialists and six of the same West Virginia educators for each content area.

The studies' reports interpreted the data and results of each study and discussed the quality of the items based on any identification of source of challenge and other comments made by the reviewers. The report identified specific issues and recommended actions needed to reach alignment. The Phase I study was used to revise the standards and the pilot test items. The Office of Special Education reviewed the extended academic standards and adjusted fourteen of the standards. Following the review, a committee consisting of the Office of Special Education, Office of Student Assessment Services, CTB/McGraw-Hill test development specialists and the Alternate Assessment Redesign Steering Committee rewrote and adjusted items that mapped to the refined standards. The revision of items specific to categorical concurrence, range-of-representation, and depth-of-knowledge were also addressed.

The Phase II study/post alignment verifies that the *Extended Academic Content Standards* and the operational APTA are in alignment and meet the Title I requirements.

Part 2. Test Development

The APTA items were written by WV teachers of special education, a select APTA Steering Committee of WVDE Office of Assessment and Office of Special Education staff, and Content Development staff from CTB.

Item Writing Workshops were held over three successive weekends in West Virginia and were conducted by the APTA Steering Committee. During the first workshop, items were written to each standard and performance level. Items were peer reviewed for: match to the standard, appropriateness of content for the grade level, and match to the performance level. In the second workshop, item writing assignments were completed and items were evaluated for both horizontal and vertical articulation. In other words, items were sorted by standard and performance level by grade and then evaluated to see that items appropriately increased in

complexity over the performance levels and among standards. Then items were again sorted by standard and compared by standard across grade levels to evaluate articulation from grade to grade. During the third workshop, the participants simulated a test administration with the items to ensure that instructions were clear and the items could be administered appropriately.

Test Design

CE 3.6. 5.4

The test items appear in one consumable book for each grade, where both RLA and MA are in the same book. Table 1 shows the total number of items and maximum points per content, grade, and standard. It should be noted that when multiple items appeared on the same student page, these analyses treated each item as a separate item, however the original item counts treated such as a single item. Therefore, items are labeled as having item parts that truly represent discrete, unique items. In addition, there were some instances when items were suppressed during scoring. For example, if an item was not directly scorable or flawed in any way, the item did not contribute to the student's final score. There were five items suppressed as shown in Table 1. Further illustration of the breakdown of the number of CR items and the maximum number of score points possible on those items (a reflection of the rubrics and not including suppressed items), appears in Table 2.

Item Review and Test Fairness

CE 4.1

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 teachers 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 operational items. The APTA Steering Committee reviewed all operational items before the operational test administration. The review was lead by WVDE. CTB/McGraw-Hill participated in the review process, under the direction of WVDE, by providing papers for the event and staff from the Project Development Team for instruction and interpretation.

Due to the extremely 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 are described in greater detail below.

CE 4.3

The operational items were further submitted to additional reviews by the American Printing House for the Blind (APH) and CTB Research. The APH review, lead by WVDE, was purposed with attention to needs specific to students of low vision and with an understanding of universal design. The review mostly affected layout and where art and numbers were simplified to assist students with limited vision. Lines were added to separate answer choices on student pages. The size of the art was increased in some instances. The review by CTB Research was specific to universal design and considerations specific to students with significant cognitive disabilities, as well as to insure that items had a correct answer and were not highly interdependent. All of these items were reviewed and approved by the APTA steering committee.

Item Selection

After the item writing workshops were completed, Items were then selected to fulfill the test blueprint. Item selection for APTA was completed by content editors in CTB Development, and reviewed and approved by WVDE. The primary criterion for the selection of items was to meet the content specifications represented by test blueprints. Future operational test item selections will also incorporate the statistical research guidelines and operational analyses results such that selected items will reflect the best content relevant and statistical characteristics. Such characteristics are described in the section on analyses and results.

Part 3. Operational Sample

CE 4.1

It is important to understand the types of students that participated in the APTA, particularly given the eligibility criteria are currently in draft form. It is anticipated that the characteristics of and resulting performance of students who participated will provide clarity about which students benefit the most from the APTA.

All students who participated in the operational administration were scored. However, specific validation and logic rules were applied to the data to assure each student's score is based on a valid set of items scored. The specific set of logics is listed below. Notice that only when a student's test was hand bubbled as "invalid" or if response array included 15% or more items that have been flagged for any of the reasons below, the student did not receive a score. Therefore, a total of 8 and 15 student papers in RLA and MA respectively were found to be invalid and were excluded from the analyses. There were 4 students in common across RLA and MA.

Demographic data on the scored sample were collected and reported upon in Tables 3 – 4. There were between 192 and 232 students who participated. In all grades, there were as much as twice as many boys than girls, and the majority of students were of white ethnicity.

Teachers were required to code their students' primary and secondary disabilities. These can be found in Tables 5 –8. Figures 1 (RLA) and 2 (MA) also capture the data to more easily illustrate the predominant disabilities captured as "primary." Most of the students fall into the Moderate category, followed by those identified as Mild Mental Impairment or Autistic.

Part 4. Test Administration

Each test is administered on an individual student basis where teachers/test administrators mark each student's response, response mode (how the student responded – writing, pointing, eye gazing, signing), and the prompt type or level of assistance provided. Teachers marked actual student raw responses in addition to marking the response and prompt (level of assistance) type in the actual test booklet. Students and teachers were permitted to administer the test over a number of days, as long as each section of the test, which consisted of approximately 4 items, was completed at one sitting. However, a time guide of an hour and a half was suggested based on the results of a pilot teacher survey previously administered and described in detail in the WV APTA Pilot Technical Report, 2006.

CE 2.3.2.e.f, 4.1

Teacher Training

County Test Coordinators and Special Education Directors were convened for a train-the-trainer model of training on the administration of APTA Pilot which was jointly provided by the Office of Student Assessment Services and the Office of Special Education. The APTA Test Procedures Manual for Grades 3-8 and 10 was used as a training resource for the group. The participants were responsible for the training of the APTA test examiners within their counties.

Following the Pilot, an additional training for County Test Coordinators and County Special Education Directors was conducted March 28, 2006, to address operational administration issues and to make counties aware of potential recording problems, which could result in students not being given the best testing opportunities. The presentation materials used during this meeting can be found in at WVDE.

Additional Training

As the results of the pilot and future operational administrations are evaluated, continuous improvements in administration training will be ongoing. The Office of Special Education will continue to provide professional development for teachers on how to teach the extended academic content standards. The Office of Assessment will continue to provide staff development on the operational administration and scoring of APTA.

Part 5. Scoring

This section addresses the Handscoring procedures followed for the Operational 2006 APTA. It explains the development of materials and the Handscoring process.

CE 4.1, 4.3

Scoring Rubrics

A scoring rubric for each item incorporating the level of student independence or assistance received accompanies each item and each score level therein. This type score was developed in an effort to 1) align to and reflect the standards; and 2) recognize and capture how students taking the APTA actually respond. The standards for the APTA are very specific about levels of assistance. Incorporating a rubric which reflects these levels is a logical approach to further support the intent of the standards. This type of scaffolded scoring rubric is also often used in alternate assessments. According to Thompson, et al. (2005), 25 states use a scoring rubric that incorporates level of assistance. In addition, Case and Almond (2004) note that such a scoring approach, where level of assistance (independence) is captured extends beyond scoring accuracy to provide additional and appropriate data for students with significant cognitive disabilities administered performance type assessments.

From a validity perspective, Schafer (2005) notes that on alternate assessments where degree of support is important: “degree of support could be combined with the task descriptions to define individualized achievement targets” (p. 4), such that the interpretations (validity) of the test scores can be accurately reflected (“contextualized”) and not present a misleading interpretation – artificially low or high scores.

Table 9 describes the scoring rubric for all right/wrong responses, such as the MC item types. These are items where students select the correct answer among options, similar to traditional MC items, or where students provide multiple responses. For multiple responses the student received up to three points for each correct and independent response. For example, an item might require the student to correctly identify a set of five numbers. For every number identified correctly the student could earn upwards of three points for a total of 15 points (3 points possible x 5 numbers identified).

CR type items where specific content response data were scored with content specific rubrics where the max score was 6. The 6-point rubric is shown in Table 10.

Scoring Conference

Following the operational administration, the WVDE Office of Student Assessment Services, the Office of Special Education, a steering committee consisting of four content specialists, twenty-four standards committee members and seventy-eight special education teachers participated in

scoring the APTA in West Virginia. In collaboration with CTB Development and Scoring departments, the scoring group reviewed scoring methodologies, finalized scoring guides and completed the selection of anchor papers. (Move the following and place under “Additional Training”: Anchor papers were selected from the pilot responses that exemplified the expected response for each score point for CR items. The group discussed and reached consensus about scoring decisions and maintained scoring consistency. Each document was double read and resolved by a third reader if discrepancies occurred.

According to the Scoring representative who helped to lead the pilot hand scoring conference, virtually the only errors were mechanical human-type errors (intending to write down a 5 and instead writing a 3). Normal scoring errors of interpretation are virtually non-existent in this type of scoring. After a review of literally hundreds of student documents, only a minor number of instances were found where scores were coded incorrectly. The Scoring representative, who has had years of hand scoring training and experience felt the very few instances were below the normal margin of human error in manual scoring.

CE 4.1, 4.2

Rater Reliability

Two scorers review each student’s item by item response that included teacher documentation as described. In cases where ratings are discrepant, a third more experienced rater intervened and provided the final score. The items were not given the mean of scores or the most frequent score as is sometimes the case in other handscoring approaches. The raw scoring by each rater was used to calculate inter-rater reliability statistics, including perfect and adjacent scoring.

Rater reliability or inter-rater reliability describes how consistent or reliable raters are at providing the same (“perfect”) or at minimum adjacent scores across first and second readings of an open ended item. The use of multiple handscorers or raters on all items, even MC items, and the reliability study was conducted to determine the reliability of the scoring and application of the rubric across all items, to inform the state on the accuracy of teacher coding of student responses, and to evaluate the need of handscoring of all versus CR only item types.

Because most of the items were MC, the “scoring” was more of a reflection of hand documentation of the prompt level and accuracy of response. Therefore the items that are of CR type are those for which the inter-rater reliability reflects the traditional understanding thereof. The MC type items’ inter-rater reliabilities reflect the accuracy of the hand codings by the scorers. This is an important distinction when considering the reliabilities listed in Tables 11 - 12. The reliability of the coding is also important when considering topics for teacher administration training.

For APTA, we consider the percent of perfect and adjacent scores, as well as a statistical index as measure of reliability in the handscoring process: the kappa statistic. The percent of perfect and adjacent agreement ratings are listed for each (MC and CR) item in Tables 11-12. The mean percent of perfect agreement was 98.06% across all MA items and 97.73% across all RLA items, where there are more CR items. The tables show the consistency of first and second reads in terms of the kappa statistics. The kappa reliability statistics for MA range from .69 to 1.00 with a mean of .98, and from .81 to 1.00 with a mean of .98 in RLA. Looking specifically at the 6-point items that are more similar to traditional CR items, the kappa statistics for MA (5 items) range from .78 to .94 with a mean of .88 and RLA (11 items) range from .87-.99 with a mean of .94. These indicate an acceptable level of consistency or reliability in the scoring of the items.

Part 6. Analyses and Results

CE 1.3, 4.1, 4.2

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 and because the same test form will be used each year, no equating was or will be conducted on these or future operational APTA items. This requires heavy reliance on raw score and classical test statistics.

Item Level Statistics

Each test was first reviewed in terms of classical raw score statistics. 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) was reviewed.

The frequency distribution for each CR item, where the number of students scored in each score level for all items with 6-point scoring rubrics is found in Table 13. Interestingly, many CR items show a distribution that is quite dichotomous, where the majority of students either received 0 score points or the max (6) score points. (See Figures 3 – 10 for plots by grade/content of the percent of students in each score level.) This is important information to keep in mind when considering the scoring of CR items where a revision of the rubric might be in order; as well as additional data about the students in the APTA sample.

Due to the nature of the rubrics, where level of independence weights each students' score, data analyses were conducted in two working sets: 1 – a polytomous set based on data as received; and 2 – dichotomous based on the transformation of all scores of 0 – 2 as "0" and all 3's as "1" in all MC items and all 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 dichotomizing the data, where the level of independence was stripped away, was to provide information about content only performance apart from prompting or teacher provided assistance.

Typically, p-values range between .30 and .90. Items less than .30 are considered more difficult, as less than 30% of the students are getting the correct answer, while greater than .90 indicates a fairly easy item. Sometimes with a new assessment on new content standards, the lower bound of p-values can drop below .30. Those items must be reviewed in light of content to ensure the difficulty is due only to the newness of content and skill assessed and not due to some illogic within the item. Items that are unduly easy or above .90 should be reviewed in light of content as well and whether or not the item is providing additive information about students' skills. If the items are too easy, they are typically replaced by items that better discriminate between students who do or do not know certain skills. These approaches make for efficient use of test length and administration time.

For this very new assessment, where students are being assessed for the very first time in this manner and for the very first time on the Extended Content Standards, the p-values are remarkably stable across grades and contents for the group as a whole. (Polytomous data are reported first with dichotomous data in parentheses.) The p-values of MA items range from .17 to .90 (.13 – .88). The one item at .17(.13) p-value is in Grade 10 and is an item that measures students' ability to mark a negative and positive number on a number line. Without that item the minimum p-value for all grades is .24 (.20). The mean p-value across all MA items (including the .17(.13)) was .64 (.59) which is a nice middle range average. This indicates the MA items, in general are not too easy or too difficult for the tested population as a whole. In RLA, the range of p-values was from .27 to .95 (.25 – .91), with a mean p-value across all items of .70 (.65). Like MA, the RLA items seem to be well within acceptable ranges of difficulty.

Acceptable point biserial item-test correlations are usually in the range of .30 and above. The range and mean of the MA and RLA point biserials are, respectively, as follows: MA .10 to .77 (.20 to .81) with a mean of .56 (.60); RLA .27 to .83 (.34-.82) with a mean of .60 (.65). These are also within acceptable ranges of correlations. The item with the lowest point biserial and below

the critical cut-off of .15 is in Math grade 7. The item as well as the one just presented just before it (point biserial = .16) measures students' knowledge of the greatest and least fractions, presented as actual numerical fractions. The item was also the most difficult (p -value = .26) for the grade 7 MA. What that means is this item has low discriminating power, such that students with high and low ability may have a similar probability of incorrectly responding to this item (since the p -value is also low).

Detailed lists of p -values and item-test correlations are provided in Tables 14 – 18. A summary of the range of p -values and point biserial item-test correlations by grade/content based on the performance of students in the operational sample is found in Table 16.

Content Standards Level Statistics

CE 1.3, 4.1, 4.2, 5.2

Student performance on individual content standards is reported in terms of the percentage of items within each standard students answered correctly. This proportion can be considered an average p -value across items within a specific standard. The standards' p -values can also be evaluated from the standpoint of balanced difficulty across the standards. To illustrate the level of difficulty by standard, standards at each grade were ranked according to proportion of students responding correctly to items within each standard. This type of analysis is also meant to show the most difficult standards for the tested population. The results of the rankings are found in Table 17-18. As the table indicates, the areas that are difficult for RLA vary by grade, as do the areas for MA. Mean p -values in MA grades 3, 5, and 8 are highest for "Numbers and Operations," where the standard is generally reflective of counting or recognizing whole and fractional numbers. Grades 4, 6, and 7 standards that are the least difficult, on average, are the "Measurement" standards which measure recognition of length, weight, and temperature (grade 4), perimeter (grade 6), and time (grade 7). "Data analysis and Probability" (i.e., organizing and utilizing data with graphs and tables) was the least difficult for grade 10. In RLA, "Reading" 1.1 which is generally recognition of words and vocabulary was the least difficult for grades 3, 7, and 9. Students in grades 6 and 10 performed best on "Reading" 1.2 which is typically in the context of a story. Grade 4's top standard was "Listening, Speaking, and Viewing" 3.1 (listening and responding to stories/information); and grade 5's was "Writing" 2.2 - identification of reference materials. The range of p -values is fairly consistent across all standards in each grade/content area demonstrating a nice balance of difficulty across standards.

Total Test Level Statistics

Student performance is described in different ways, including total raw scores, performance on specific content standards (as mentioned), and proficiency levels (the documentation of which are described in detail in the WV APTA Pilot Standard Setting Technical Report). The maximum number of points per grade and content area varies across grades and across content areas. The number of items and points can be found in Table 2. The raw score performance statistics by grade and content, broken down by gender and ethnicity can be found in Tables 3-4. Typically, boys and girls perform similarly in Math. In RLA, boys outperform girls only in grades 6, 7, and 10. There is no apparent pattern by ethnicity: students in various ethnicities do better depending upon grade and content area.

Cut Score Review

CE 2.1, 2.3.1, 4.1, 5.6

Student performance on the operational assessment will also be described in terms of proficiency levels. The purpose of setting standards on a test is to enhance its validity by increasing the interpretability of test taker's scores. CTB/McGraw-Hill and the WVDE conducted a Standard Setting Workshop for pilot items in grades 3 – 8 and 10 RLA and MA was held in West Virginia **March 24 - 26, 2006**.

Recommended cut scores defining Novice, Partial Mastery, Mastery, and Above Mastery were developed via a Profile Sorting procedure. Pilot APTA data were used and supplemented by simulated data, such that a range of possible student response profiles were created. These

response profiles were sorted into proficiency levels by participants reflecting their judgments on the content specific performance characterized by each profile.

Because the operational tests were slightly different than the pilot test forms, and because the APTA is on the raw score scale, the cut scores set at the Standard Setting for Pilot needed to be re-evaluated in light of the impact data from the operational test administrations. The final operational cut scores represent the points at which the impact on the operational administration mirrored the pilot administration as close as possible. The cut scores were determined by taking the pilot cut scores and the associating percentages of students within each proficiency level and “walking” those cut scores and percentages (the impact data) over to the operational assessment. Through a number of rounds between CTB and the WVDE, final cut scores were approved by WVDE such that they very closely reflect the original cut scores now on the operational scale. The Pilot cut scores and impact data, and the new operational cut scores and impact data are found in Tables 19 – 20.

CE 4.1, 4.2, 4.5, 6.1

Part 7. Summary of Results – Reliability and Validity

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

Student Participation

Given the high-stakes nature of the APTA and the requirements of NCLB and Peer Review Evidence, as well as the need for eligibility criteria data, it is important to note who is included in APTA and how they are assessed. A review of Tables 3-8 reveals the number of students in various subgroups who participated along with each group’s summary scores. It is apparent the need for improved data collection on the part of teachers about students’ primary disability. Given the available data it appears most students fall into the Moderate, Mild, and Autistic categories.

Student Performance

Total raw score results for each grade and content area are found in Tables 3-8 and item level frequency distributions for each CR item is provided in Table 13. Due to requirements by the Peer Review process laid out by the US Department of Education, in addition to the subgroup performance, test reliabilities and standard errors must also be reported. Tables 3-8 also show these data by total operational group and subgroup. Specific details on test reliability and standard errors are further described in the reliability section of Part 8.

Students tend to obtain higher mean raw scores in Math than in RLA across all grades except grade 6, 7, and 10. Students vary in their performances across both ethnicity and gender subgroups. As stated, boys and girls perform similarly in Math, but in n RLA, boys typically outperform girls in grades 6, 7, and 10. There does not appear to be patterns dependent on subgroup membership. Based on the performance levels established by the cut scores, the majority of students (between 61.03% and 68.23% across both Math and RLA) will be considered in the Mastery and Above Mastery categories. The exact percentages of students based solely on the operational data are listed in Tables 19 - 20.

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Reliability

Test scores always contain some amount of measurement error. This kind of error can be random or systematic. Standardization of assessments is meant to minimize random error that occurs because of random factors that affect a student's performance on the test. Systematic errors are inherent to examinees and are typically specific to some subgroup characteristic (i.e., student who need accommodations but are not offered them). Reliability refers to the degree to which students' scores are free from such effects and provides a measure of consistency. In

other words, reliability helps to describe how consistent students' performance would be if given the assessment over multiple occasions.

For the APTA several measures of reliability are available. First, the tests are administered in standard fashion to all students, where teachers administer the assessments to the students in an individualized manner. In addition, students all respond to the same items in the same forms and those who need accommodations are provided such. Providing accommodations ensures that what is standard for the student in daily instruction carries over to and supports the validity of the APTA administration. CTB's policy (CTB/McGraw-Hill, 2004) on accommodations and their use on standardized tests has long stood 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.

In addition, the *Guidelines for Participation of Students with Disabilities in WV Measures of Academic Progress* (WVDE, 2005) states the following (p. 23):

The APTA requires standardized testing conditions. In order for the test results to support valid inferences, each test examiner will adhere to the conditions described in the Examiner's Manual and the *Testing Code of Ethics*. All test administrators should have a signed West Virginia Board of Education *Test Procedures Agreement for Examiners* on file with the school administrator. Proper administration of tests plays an integral part in the testing process and is vital to the accuracy of the test results. Consistency in test administration is crucial to this process. To facilitate student performance during the testing process, the following conditions for testing must exist.

The guidelines then go on to specify training requirements and specific steps for the examiner, student conditions and guides during administration, to include the use of various accommodations, and a section specific to assistive technology. The kinds of clear guidance about administration conditions provided strengthens the reliability and validity of the APTA by

Item specific reliability statistics include inter-rater reliability (kappa) and point biserial correlations. The inter-rater reliability across items in terms of the kappa statistic is one way to measure the consistency of the hand scores. As Tables 11-12 show, the inter-rater reliabilities range .69 to 1.00. Typically, kappa statistics in the range of .80 and above are acceptable and preferred. In this case, only two items fell below the .80 threshold. A grade 4 Math item was responsible for the .69 inter-rater reliability. It is an item that requires the student to copy a pattern of square, rectangle, and circle. The scoring on the items utilized the 3 point rubric. A grade 6 Math item measuring in CR format the student's ability to identify two shapes with right angles had a kappa of .78. Without the items the lower bound of the reliabilities increased to .81. For any items that have reliabilities less than .80, a review of the rubrics and items will be necessary to ensure the item is clear in what it should be measuring, that the rubric adequately and accurately covers the range of possible responses, and that the scorer training on the rubric is clear and consistent.

The point biserial, a type of internal consistency measure, is one measure of the correlation between each item and the overall test. This provides a source of how consistent the item measures information similar to the other items. Table 16 summarizes the point biserials (and p-values) and shows the range of point biserials is .10 to as high as .83. As discussed, the very low point biserial item is quite similar to the one presented directly before it and address the concept of least and most in terms of numerical fractions.

Total test reliability measures consider the level of consistency (reliability) of performance over all test questions in a given form, the results of which imply how well the questions measure the content domain and could continue to do so over repeated administrations. Total test reliability coefficients (in this case measured by Cronbach's alpha) 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 in the range of .80 and above. The total test reliabilities of the operational form were evaluated first by Cronbach's α (Cronbach, 1951) index of internal consistency. The specific calculation for Cronbach's α is calculated as

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

Where k is the number of items on the test form, and $\hat{\sigma}_i^2$ is the variance of item i and $\hat{\sigma}_x^2$ is the total test variance. Tables 3-8 show the reliability coefficients for the grades and content areas involved in the Spring 2006 Operational APTA test administration. As is evident in the tables, the coefficients are quite high. Please note that Alpha is not reported for samples sizes of 4 or fewer. At the total group level, the reliabilities ranged between .89 (Grade 4 RLA and Grade 7 MA) and .95 (Grades 7, 10 RLA). Such a range is indicative of high reliability of the APTA pilot tests. Even at the subgroup level, the ranges were quite similar and the lowest reliability (.79) was found for the African American group in MA grade 10. Looking by content, both MA and RLA had average reliabilities of .92 across all grades. All reliabilities are within acceptable ranges.

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

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

where SD_TS is the standard deviation of the total score and $\hat{\alpha}$ is the result of the calculation of Cronbach's α above. The SEMs represent the total standard error of measurement in the raw score metric across all items in a given form. The SEMs for each form are given in Tables 3-8. For RLA, these range from 4.22 (grade 4) to 8.40 (grade 8). In MA, the range is from 3.52 (grade 4) to 7.40 (grade 5). These are within acceptable ranges given this on a raw score scale, particularly since this is the very first operational administration of an assessment of this type to this group of very diverse students.

Validity

Validity refers to the degree to which theory and evidence indicates that the scores of a test have the meaning and use that is intended. Test validation is an on-going process of gathering evidence from many sources to evaluate the soundness of the desired score interpretation or use. This evidence is acquired from studies of the content of the test as well as from studies involving scores produced by the test. Additionally, reliability is a necessary element for validity. A test can not be valid if it is not also reliable.

The American Psychological Association (APA) *Standards for Educational and Psychological Testing* (1999) addressed the concept of validity in testing:

Validity is the most important consideration in test evaluation. The concept refers to the appropriateness, meaningfulness, and usefulness of the specific inferences made from test scores. Test validation is the process for accumulating evidence to support any particular inference. Validity, however, is a unitary concept. Although evidence may be accumulated in many ways, validity always refers to the degree to which that evidence

supports the inferences that are made from the scores. The inferences regarding specific uses of a test are validated, not the test itself (p.9).

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 adequate yearly progress (AYP). WVDE uses various assessment data in reporting AYP and in various programmatic and policy level decisions. Specific to student level outcomes, WV APTA documents student performance in the areas of RLA and MA as defined by the WV Extended Content 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 APA Standards state:

Content-related evidence of validity is a central concern during test development. Expert professional judgment should play an integral part in developing the definition of what is to be measured, such as describing the universe of the content, generating or selecting the content sample, and specifying the item format and scoring system (p.12).

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 APTA, 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 committees, such as the APTA steering committee, routinely review and approve items and those that are candidates for inclusion in an operational test, assuring they assess the content standards and are mapped accordingly. Part 2. Test Development of this report contains more information specific to these reviews. The reviews help to assure fair and unbiased items so that items function similarly for members of different ethnic, gender, or disability groups.

In addition, the APTA has gone through numerous alignment studies under the direction of Dr. Norm Webb, well known for his alignment expertise. As a result of the studies, the standards and test items were revised to improve alignment, per Dr. Webb, resulting in a well aligned, rigorous APTA. (More information about the alignment studies can be found in Dr. Webb's report, available by WVDE.)

Additional evidence that bears on validity is that of the SEMs and cut scores. The low SEMs provide further reliability evidence and hence validity evidence about their use. The cut scores that were originally set via a full Standard Setting study using the pilot APTA were reevaluated and finalized on the operational APTA data. Details about the profile sorting and contrasting groups methods used to set these cut scores are given in the Standard Setting Technical Report for the Pilot APTA 2006.

Empirical studies of the internal structure of the test also provide evidence of validity. For example, high internal consistency like that described by the coefficients above, constitutes evidence of validity. This is because high coefficients imply that the test questions are measuring the same domain of skill, are reliable and consistent. Special studies, which were conducted for the APTA and are described in Part 8. Special Studies of this report, also help to establish various evidences of validity.

Part 8. Special Studies

Special studies, which were conducted for the operational APTA, are meant to inform policy and provide additional evidences about reliability and validity. One study was conducted on the

reliability of the prompt levels and of the response modes of students. This investigation was meant to highlight whether or not students maintain consistency in:

1. Levels of independence/assistance across all items. For example, if a student is “independent,” what is the reliability that the student will respond independently across all items in a given form.
2. Mode of response across all items. If a student responds with sign language, what is the reliability of the student continuing to use sign language as the mode of response across all items.

First, to get a sense of the magnitude of student prompt levels and response modes, the percent of each was evaluated. The percentage of items on which students responded with each level of assistance and with each mode of response was also calculated and analyzed. The total percentages are found in Table 21. Overall, students responded independently to most items (about 80% of students on both RLA and Math), which is likely the reason the dichotomous and polytomous item results are so very similar.

The reliabilities of the prompt levels are shown in Table 22. Prompt levels are highly consistent ranging from .97 to .99 in both MA and RLA. This provides evidence that students are consistent in their needs of assistance or prompting and/or that teachers are consistent in providing such. Given that students tend to respond independently is a good sign that teachers are not over assisting their students on APTA and provides clearer data on the students’ level of content-based understanding. An additional bit of information regarding the prompt level is looking at the number of occurrences where the student received Full prompt (hand-over-hand teacher response) but responded incorrectly to the item. This is believed to be an indication of teacher coding errors more than anything else. The percentages of item responses where this occurred were between .43% and 2.82% in RLA and .76% and 2.25% in MA. These are relatively low and can easily be addressed in administrator training.

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 max 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 max and minimum raw scores is found in Tables 3-8. 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 23-24. It is clear from these that students are fairly evenly spread out across the range of scores, where in almost every case the distribution has a slight negative skew.

Finally, when considering the influence of assistance or prompt level on the scores and content level knowledge, the Tables 23 and 24 also show by asterisk where the max raw score would be if prompt level was not accounted for (which is the same as the maximum raw score for students at the “Full” level of assistance). On average, 86% of students in RLA and 82% of students in Math are responding above the max raw score possible at the full prompt level. This gives a very rough indication of the percentage of students obtaining scores above what would be expected for students participating at the full prompt level, and shows that most students are not only participating in the process but are also providing content level responses.

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Tables 1 - 25

**Table 1
Test Blueprint - Number of Items by Content, Grade, and Standard**

Content	Grade	Standard	Standard Description	Subskill Description	No. Items	Total No. Score Points	Max Score Possible	Final as a Result of Suppressed Items	
								Number of Items Suppressed	Final Max Score Possible
RLA	3	1.1	Reading	categorize pictures that represent words or objects	9	27		-	
		1.2	Reading	recall an event from a story	4	12		-	
		2.1	Writing	copy labels for picture and objects	2	12	84	-	84
		2.2	Writing	recognize that proper names begin with capital letters	5	15		-	
		3.1	Listening/Speaking/Viewing	respond to questions about recent experiences	6	18		-	
	4	1.1	Reading	recognize descriptive vocabulary words	10	30		-	
		1.2	Reading	recognize the sequence of events in text	1	3		1	
		2.1	Writing	copy personal information	3	18	78	-	75
		2.2	Writing	create a picture/word sentence with a period at the end	1	3		-	
		3.1	Listening/Speaking/Viewing	listen to and respond to information	8	24		-	
	5	1.1	Reading	use the root word to identify a new word	6	18		-	
		1.2	Reading	identify main character from text or story	3	9		-	
		1.3	Reading	summarize a simple story	7	21	78	-	78
		2.1	Writing	write a simple sentence using initial capitalization and ending punctuation	3	9		-	
		2.2	Writing	apply information found in basic reference materials	4	12		-	
	6	3.1	Listening/Speaking/Viewing	engage in a conversation with a familiar person	3	9		-	
		1.1	Reading	identify vocabulary words from a variety of sources	6	18		-	
		1.2	Reading	answer questions related to the main idea of a text	5	15		-	
		2.1	Writing	extend a sentence using descriptive words and correct capitalization and punc.	3	9	87	-	87
		2.2	Writing	select and use the correct resource material to complete a task	10	30		-	
7	3.1	Listening/Speaking/Viewing	engage in communication with familiar and unfamiliar people	5	15		-		
	1.1	Reading	recognize and comprehend frequently used sight or common words	9	27		-		
	1.2	Reading	identify three elements of a story	13	39		-		
	2.1	Writing	write two related sentences	3	12	114	-	114	
	2.2	Writing	compare two similar resource materials and determine which is most appropriate	5	15		-		
8	3.1	Listening/Speaking/Viewing	listen and communicate in order to obtain information or perform a task	7	21		-		
	1.1	Reading	use a variety of resources to identify meaning of vocabulary words	4	12		-		
	1.2	Reading	identify details from text needed to make decisions	11	33	102	-	102	
	2.1	Writing	using a resource, compose a paragraph with three related sentences	10	39		-		
10	3.1	Listening/Speaking/Viewing	listen to and communicate with a variety of speakers in order to answer question	5	18		-		
	1.1	Reading	determine word meaning through a variety of strategies	9	27		-		
	1.2	Reading	comprehend and infer meaning from literary materials to make predictions and...	6	18		-		
	1.3	Reading	apply information from a variety of sources	1	3	87	-	81	
	2.1	Writing	produce writing for practical uses with correct punctuation and capitalization	7	27		1		
		3.1	Listening/Speaking/Viewing	listen in order to communicate effectively in different ways and different pu...	4	12		-	

**Table 1
Test Blueprint - Number of Items by Content, Grade, and Standard (continued)**

Content	Grade	Standard	Standards Description	Subskill Description	No. Items	Total No. Score Points	Max Score Possible	Final as a Result of Suppressed Items	
								Number of Items Suppressed	Final Max Score Possible
MA	3	1.1	Numbers and Operations	count and recognize whole numbers to nine	7	21		-	
		1.2	Numbers and Operations	solve single-digit addition problems with sums to nine	5	15		-	
		2.1	Algebra	recognize and complete a two-object pattern	4	12		-	
		3.1	Geometry	classify basic plane geometric shapes including square, circle, triangle and...	8	24	99	-	99
		4.1	Measurement	classify measuring devices according to what they measure (length, weight, te...	3	9		-	
		4.2	Measurement	identify coins as a penny, nickel, dime and quarter	3	9		-	
		5.1	Data Analysis and Probability	use interviews and observations to collect data	3	9		-	
	4	1.1	Numbers and Operations	count and recognize two-digit whole numbers to twenty and halves as two equal...	9	27		-	
		1.2	Numbers and Operations	solve addition problems with sums to 19, and model subtraction	3	9		-	
		2.1	Algebra	recognize and complete a three-object/item pattern	4	12		-	
		3.1	Geometry	classify and model basic geometric shapes including square, circle, triangle...	6	21	96	-	96
		4.1	Measurement	recognize length as long/short, weight as heavy/light, and temperature as hot...	1	3		-	
		4.2	Measurement	recognize time in relationship to a daily schedule	2	6		-	
		4.3	Measurement	identify values of coins and determine their relative values	2	6		-	
	5	5.1	Data Analysis and Probability	develop and interpret picture or object graphs	4	12		-	
		1.1	Numbers and Operations	recognize two-digit whole numbers to 40 and the fractional part 1/2	6	18		-	
		1.2	Numbers and Operations	solve double-digit addition without regrouping and single-digit subtraction	5	15		-	
		2.1	Algebra	recognize and complete a four-object/step pattern	6	24		-	
		3.1	Geometry	classify three dimensional objects (cube, sphere, pyramid)	6	18	114	-	114
		4.1	Measurement	measure length and weight using nonstandard forms of measurement (i.d. paperc..	3	9		-	
		4.2	Measurement	identify time to the hour	4	12		-	
	6	5.1	Data Analysis and Probability	develop bar graphs and interpret data	6	18		-	
		1.1	Numbers and Operations	recognize whole numbers to 60 and fractional parts 1/4 and 1/3	4	12		1	
		1.2	Numbers and Operations	solve two-digit numbers addition with and without regrouping and two-digit su...	5	15		-	
		2.1	Algebra	recognize and complete a pattern	8	24		-	
		3.1	Geometry	recognize and replicate right and obtuse angles	6	21	105	-	96
		4.1	Measurement	determine perimeter or area of an object	2	9		1	
4.2		Measurement	use a ruler to measure length in inches	1	3		-		
7	4.3	Measurement	tell time to the half hour	1	3		-		
	5.1	Data Analysis and Probability	collect, display and read data using appropriate graphs (pictorial, bar and l...	6	18		1		
	1.1	Numbers and Operations	recognize whole numbers to 100 and the difference among 1/2, 1/4 and 1/3	4	12		-		
	1.2	Numbers and Operations	solve two-digit addition and subtract with and without regrouping and single-...	3	9		-		
	2.1	Algebra	recognize and complete counting patterns	4	12		-		
	2.2	Algebra	given two whole numbers identify which is greater than/less than	6	18		-		
	3.1	Geometry	recognize and replicate angles: right, acute, obtuse	5	15	93	-	93	
4.1	Measurement	determine the volume of an object using non-standard measurement	2	6		-			
4.2	Measurement	measure length with a customary ruler and yardstick	1	3		-			
4.3	Measurement	tell time to the nearest five-minute intervals	2	6		-			
5.1	Data Analysis and Probability	organize given data by category, frequency, and range	4	12		-			

Table 1
Test Blueprint - Number of Items by Content, Grade, and Standard (continued)

Content	Grade	Standard	Standards Description	Subskill Description	No. Items	Total No. Score Points	Max Score Possible	Final as a Result of Suppressed Items	
								Number of Items Suppressed	Final Max Score Possible
MA	8	1.1	Numbers and Operations	recognize numbers to 100 including fractional halves, fourths, tenths and the...	4	12		-	
		1.2	Numbers and Operations	apply various strategies and operations to solve practical problems involving...	2	6		-	
		2.1	Algebra	recognize and extend mathematical patterns	6	18		-	
		2.2	Algebra	given fractions one-half, one-third, one-fourth, and decimal .5, .25, .75 ide...	6	18	114	-	114
		3.1	Geometry	identify angles and lines in the environment	7	21		-	
		4.1	Measurement	apply the concepts of area, perimeter and time to real-life situations	7	21		-	
	5.1	Data Analysis and Probability	solve problems to determine possible combinations	6	18		-		
	10	1.1	Numbers and Operations	solve problems with whole numbers, fractions and decimals	9	27		-	
		2.1	Algebra	use algebraic symbols (<,>,<=,>=) to compare two sets	2	6		-	
		2.2	Algebra	use a graph to represent relations in numbers	5	15	90	-	90
		3.1	Geometry	use spatial relationships (geometric shapes, forms and figures, i.e., points,...	5	15		-	
		4.1	Measurement	solve practical problems involving length, weight and capacity	4	12		-	
5.1		Data Analysis and Probability	collect, organize and utilize numerical information and data	5	15		-		

Table 2
Number of CR Items and Max Score Points Possible

Content Area	Grade	Total Number of Items	Number of Items with a Maximum Score of		Max Score
			3	6	
RLA	3	26	24	2	84
	4	22	19	3	75
	5	26	26	-	78
	6	29	29	-	87
	7	37	36	1	114
	8	30	26	4	102
	10	26	25	1	81
MA	3	33	33	-	99
	4	31	30	1	96
	5	36	34	2	114
	6	30	28	2	96
	7	31	31	-	93
	8	38	38	-	114
	10	30	30	-	90

Table 3
Descriptive Statistics by for RLA by Grade, Gender, and Ethnicity

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
					Mean	SD					
RLA	3	Total	195	100.00%	60.06	21.99	10	3	0.94	5.54	
		Female	69	35.38%	64.52	17.70	5	0	0.91	5.37	
		Male	126	64.62%	57.61	23.73	5	3	0.94	5.61	
		African American	14	7.18%	58.57	16.49	0	0	0.85	6.34	
		Asian/ Pacific Islander/American Indian/Alaskan Native	-	-	-	-	-	-	-	-	-
		Hispanic	1	0.51%	23.00	-	0	0	-	-	
		White (not Hispanic)	180	92.31%	60.38	22.28	10	3	0.94	5.48	
		Other	-	-	-	-	-	-	-	-	-
	4	Total	219	100.00%	54.67	17.15	9	1	0.89	5.57	
		Female	81	36.99%	55.16	16.83	3	0	0.89	5.49	
		Male	138	63.01%	54.38	17.38	6	1	0.90	5.60	
		African American	8	3.65%	45.50	21.90	0	0	0.95	4.77	
		Asian/ Pacific Islander/American Indian/Alaskan Native	3	1.37%	68.67	6.66	0	0	-	4.38	
		Hispanic	1	0.46%	61.00	-	0	0	-	-	
		White (not Hispanic)	204	93.15%	54.61	17.02	9	1	0.89	5.63	
		Other	3	1.37%	67.33	6.11	0	0	-	4.22	
	5	Total	197	100.00%	49.05	18.50	4	5	0.91	5.59	
		Female	79	40.10%	47.33	18.91	1	2	0.91	5.63	
		Male	118	59.90%	50.20	18.21	3	3	0.91	5.56	
		African American	15	7.61%	55.80	13.97	1	0	0.82	5.91	
		Asian/ Pacific Islander/American Indian/Alaskan Native	-	-	-	-	-	-	-	-	
		Hispanic	1	0.51%	51.00	-	0	0	-	-	
		White (not Hispanic)	181	91.88%	48.48	18.80	3	5	0.91	5.56	
		Other	-	-	-	-	-	-	-	-	

Table 3
Descriptive Statistics for RLA by Grade, Gender, and Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	6	Total	214	100.00%	66.20	18.73	19	2	0.93	5.09
		Female	74	34.58%	67.32	20.24	10	1	0.94	4.78
		Male	140	65.42%	65.60	17.93	9	1	0.91	5.25
		African American	18	8.41%	70.94	18.23	3	0	0.93	4.79
		Asian/ Pacific Islander/American Indian/Alaskan Native	1	0.47%	75.00	-	0	0	-	-
		Hispanic	2	0.93%	54.50	16.26	0	0	-	5.70
		White (not Hispanic)	193	90.19%	65.83	18.82	16	2	0.93	5.11
		Other	-	-	-	-	-	-	-	-
		Total	232	100.00%	83.72	26.53	10	1	0.95	6.18
	Female	77	33.19%	85.21	26.90	4	1	0.95	6.29	
	Male	155	66.81%	82.99	26.40	6	0	0.95	6.13	
	African American	22	9.48%	87.64	30.73	0	1	0.97	5.46	
	Asian/ Pacific Islander/American Indian/Alaskan Native	1	0.43%	50.00	-	0	0	-	-	
	Hispanic	-	-	-	-	-	-	-	-	
	White (not Hispanic)	208	89.66%	83.74	25.84	10	0	0.94	6.24	
	Other	1	0.43%	28.00	-	0	0	-	-	
	Total	202	100.00%	64.68	23.77	1	2	0.91	7.03	
	Female	72	35.64%	64.79	24.14	0	1	0.92	6.98	
	Male	130	64.36%	64.62	23.67	1	1	0.91	7.06	
	African American	12	5.94%	57.92	28.50	0	1	0.94	6.70	
	Asian/ Pacific Islander/American Indian/Alaskan Native	-	-	-	-	-	-	-	-	
	Hispanic	1	0.50%	73.00	-	0	0	-	-	
	White (not Hispanic)	186	92.08%	65.08	23.56	1	1	0.91	7.05	
	Other	3	1.49%	64.00	26.00	0	0	-	8.40	

Table 3
Descriptive Statistics for RLA by Grade, Gender, and Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		Students at Max Score	Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	10	Total	224	100.00%	57.07	23.82	16	15	0.95	5.18
		Female	72	32.14%	58.53	26.24	12	6	0.97	4.58
		Male	152	67.86%	56.38	22.64	4	9	0.94	5.43
		African American	9	4.02%	58.78	21.68	1	0	0.93	5.80
		Asian/ Pacific Islander/American Indian/Alaskan Native	1	0.45%	26.00	-	0	0	-	-
		Hispanic	1	0.45%	0.00	-	0	1	-	-
		White (not Hispanic)	213	95.09%	57.41	23.64	15	14	0.95	5.17
		Other	-	-	-	-	-	-	-	-

Table 4
Descriptive Statistics by for MA by Grade, Gender, and Ethnicity

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement	
					Mean	SD					
MA	3	Total	192	100.00%	66.95	23.50	4	2	0.94	5.98	
		Female	69	35.94%	69.43	18.75	0	0	0.89	6.10	
		Male	123	64.06%	65.55	25.75	4	2	0.95	5.90	
		African American	14	7.29%	63.29	18.19	0	0	0.86	6.84	
		Asian/ Pacific Islander/American Indian/Alaskan Native	-	-	-	-	-	-	-	-	-
		Hispanic	1	0.52%	29.00		0	0	-	-	
		White (not Hispanic)	177	92.19%	67.45	23.78	4	2	0.94	5.93	
		Other	-	-	-	-	-	-	-	-	
		Total	217	100.00%	65.69	23.73	5	1	0.94	5.94	
	Female	80	36.87%	65.38	23.91	2	0	0.94	5.91		
	Male	137	63.13%	65.88	23.71	3	1	0.94	5.96		
	African American	8	3.69%	51.63	24.06	0	0	0.95	5.43		
	Asian/ Pacific Islander/American Indian/Alaskan Native	3	1.38%	90.67	3.21	0.00	0.00	-	3.52		
	Hispanic	1	0.00	76.00	-	0	0	-	-		
	White (not Hispanic)	202	93.09%	65.69	23.79	5	1	0.94	5.98		
	Other	3	0.01	74.67	3.51	0.00	0.00	-	6.07		
	Total	195	100.00%	74.61	29.15	7	1	0.94	6.98		
	Female	79	40.51%	70.35	29.06	2	0	0.94	7.17		
	Male	116	59.49%	77.50	28.97	5	1	0.94	6.85		
	African American	15	7.69%	82.53	24.44	0	0	0.91	7.40		
	Asian/ Pacific Islander/American Indian/Alaskan Native	-	-	-	-	-	-	-	-		
	Hispanic	1	0.51%	60.00	-	0	0	-	-		
	White (not Hispanic)	179	91.79%	74.02	29.53	7	1	0.95	6.92		
	Other	-	-	-	-	-	-	-	-		

Table 4
Descriptive Statistics for MA by Grade, Gender, and Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	6	Total	215	100.00%	63.49	21.17	3	1	0.90	6.58
		Female	74	34.42%	63.49	22.56	2	1	0.92	6.46
		Male	141	65.58%	63.50	20.49	1	0	0.89	6.64
		African American	18	8.37%	67.39	26.24	2	0	0.95	6.14
		Asian/ Pacific Islander/American Indian/Alaskan Native	1.00	0.00	71.00		0.00	0.00	-	-
		Hispanic	2	0.93%	55.00	31.11	0	0	-	5.26
		White (not Hispanic)	194	90.23%	63.18	20.71	1	1	0.90	6.63
		Other	-	-	-	-	-	-	-	-
		Total	232	100.00%	59.71	18.98	7	1	0.89	6.27
	Female	77	33.19%	59.99	19.58	2	1	0.89	6.45	
	Male	155	66.81%	59.57	18.74	5	0	0.89	6.15	
	African American	21	9.05%	63.24	18.13	0	1	0.89	6.07	
	Asian/ Pacific Islander/American Indian/Alaskan Native	1.00	0.00	40.00	-	0.00	0.00	-	-	
	Hispanic	-	-	-	-	-	-	-	-	
	White (not Hispanic)	209	90.09%	59.60	19.00	7	0	0.89	6.28	
	Other	1	0.43%	29.00	-	0.00	0.00	-	-	
	Total	202	100.00%	70.35	24.70	3	2	0.92	7.03	
	Female	72	35.64%	71.79	23.09	1	1	0.91	6.97	
	Male	130	64.36%	69.55	25.60	2	1	0.92	7.06	
	African American	12	5.94%	67.50	32.09	0	1	0.96	6.67	
	Asian/ Pacific Islander/American Indian/Alaskan Native	-	-	-	-	-	-	-	-	
	Hispanic	1	0.00	57.00	-	0	0	-	-	
	White (not Hispanic)	186	92.08%	70.73	24.33	3	1	0.92	7.05	
	Other	3	1.49%	62.33	25.42	0.00	0.00	-	7.21	

Table 4
Descriptive Statistics for MA by Grade, Gender, and Ethnicity (continued)

Content	Grade	Subgroup	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	10	Total	223	100.00%	46.66	22.21	1	15	0.93	6.04
		Female	72	32.29%	46.58	24.15	0	7	0.94	5.93
		Male	151	67.71%	46.70	21.32	1	8	0.92	6.09
		African American	9	4.04%	44.67	15.03	0	0	0.79	6.86
		Asian/ Pacific Islander/American Indian/Alaskan Native	1.00	0.00	29.00	-	0.00	0.00	-	-
		Hispanic	1	0.00	15.00	-	0	0	-	-
		White (not Hispanic)	212	95.07%	46.98	22.45	1	15	0.93	6.01
		Other	-	-	-	-	-	-	-	-

Table 5
Descriptive Statistics for RLA by Primary Disability

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	3	Autism	35	17.95%	58.83	19.19	0	0	0.90	5.92
		Behavior Disorders	1	0.51%	62.00	-	0	0	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	1	0.51%	59.00	-	0	0	-	-
		Hearing Impaired	3	1.54%	40.00	25.16	0	0	-	4.40
		Mild Mental Impairment	21	10.77%	71.81	18.84	4	1	0.95	4.39
		Moderate Mental Impairment	101	51.79%	65.96	17.22	6	1	0.90	5.55
		Orthopedic Impairment	1	0.51%	18.00	-	0	0	-	-
		Other Health Impairment	12	6.15%	58.67	22.56	0	0	0.93	5.97
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	8	4.10%	26.50	11.12	0	0	0.88	3.81
		Severe Mental Impairment	9	4.62%	25.56	17.95	0	1	0.92	5.12
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	-	-	-	-	-	-	-	-
		Traumatic Brain Injury	3	1.54%	25.67	27.30	0	0	-	5.46
Missing	-	-	-	-	-	-	-	-		
RLA	4	Autism	29	13.24%	48.48	15.70	0	0	0.84	6.21
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.46%	47.00	-	0	0	-	-
		Deaf	1	0.46%	32.00	-	0	0	-	-
		Hearing Impaired	6	2.74%	57.17	19.79	1	0	0.93	5.41
		Mild Mental Impairment	22	10.05%	63.23	11.84	1	0	0.83	4.95
		Moderate Mental Impairment	111	50.68%	59.98	12.24	5	1	0.80	5.46
		Orthopedic Impairment	2	0.91%	73.50	2.12	1	0	-	1.16
		Other Health Impairment	12	5.48%	54.58	16.44	0	0	0.89	5.54
		Partial Sighted	1	0.46%	36.00	-	0	0	-	-
		Profound Mental Impairment	10	4.57%	24.10	13.30	0	0	0.94	3.17
		Severe Mental Impairment	19	8.68%	34.89	17.49	0	0	0.91	5.11
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	4	1.83%	73.25	1.50	1	0	-	2.21
		Traumatic Brain Injury	1	0.46%	61.00	-	0	0	-	-
Missing	-	-	-	-	-	-	-	-		

Table 5
Descriptive Statistics for RLA by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	5	Autism	30	15.23%	42.27	18.75	0	1	0.90	6.04
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.51%	42.00	-	0	0	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	28	14.21%	68.14	7.48	3	0	0.65	4.42
		Moderate Mental Impairment	90	45.69%	52.03	14.51	0	1	0.84	5.76
		Orthopedic Impairment	3	1.52%	53.67	21.36	0	0	-	5.93
		Other Health Impairment	13	6.60%	42.31	21.42	1	1	0.92	6.13
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	6	3.05%	24.33	15.40	0	1	0.93	4.00
		Severe Mental Impairment	20	10.15%	35.70	18.27	0	1	0.92	5.26
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	1	0.51%	39.00	-	0	0	-	-
		Traumatic Brain Injury	3	1.52%	22.00	2.00	0	0	-	3.36
Missing	2	1.02%	43.00	1.41	0	0	-	6.76		
RLA	6	Autism	32	14.95%	50.44	19.12	0	1	0.91	5.63
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.47%	43.00	-	0	0	-	-
		Deaf	3	1.40%	57.33	21.83	0	0	-	4.14
		Hearing Impaired	2	0.93%	64.50	10.61	0	0	-	5.05
		Mild Mental Impairment	35	16.36%	78.09	8.07	6	0	0.68	4.56
		Moderate Mental Impairment	116	54.21%	69.75	15.90	11	1	0.90	5.07
		Orthopedic Impairment	1	0.47%	44.00	-	0	0	-	-
		Other Health Impairment	8	3.74%	65.38	24.00	1	0	0.97	4.10
		Partial Sighted	1	0.47%	54.00	-	0	0	-	-
		Profound Mental Impairment	1	0.47%	28.00	-	0	0	-	-
		Severe Mental Impairment	9	4.21%	41.67	20.32	0	0	0.93	5.26
		Specific Learning Disability	1	0.47%	78.00	-	0	0	-	-
		Speech Language Impairment	1	0.47%	69.00	-	0	0	-	-
		Traumatic Brain Injury	2	0.93%	82.50	0.00	1	0	-	3.54
Missing	1	0.47%	48.00	-	0	0	-	-		

Table 5
Descriptive Statistics for RLA by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	7	Autism	21	9.05%	63.43	27.12	0	0	0.94	6.86
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	1	0.43%	87.00	-	0	0	-	-
		Mild Mental Impairment	40	17.24%	101.95	10.63	6	0	0.77	5.10
		Moderate Mental Impairment	130	56.03%	88.09	21.71	4	0	0.92	6.25
		Orthopedic Impairment	2	0.86%	94.00	15.56	0	0	-	5.95
		Other Health Impairment	9	3.88%	87.44	22.25	0	0	0.92	6.18
		Partial Sighted	2	0.86%	105.00	4.24	0	0	-	5.22
		Profound Mental Impairment	6	2.59%	35.83	23.09	0	0	0.96	4.51
		Severe Mental Impairment	14	6.03%	44.00	21.83	0	1	0.91	6.61
		Specific Learning Disability	1	0.43%	96.00	-	0	0	-	-
		Speech Lanuage Impairment	2	0.86%	79.50	26.16	0	0	-	6.88
		Traumatic Brain Injury	3	1.29%	41.00	29.55	0	0	-	6.09
Missing	1	0.43%	81.00	-	0	0	-	-		
RLA	8	Autism	22	10.89%	45.50	22.99	0	0	0.91	7.06
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	2	0.99%	35.50	13.44	0	0	-	5.80
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	17	8.42%	84.94	10.25	0	0	0.63	6.23
		Moderate Mental Impairment	134	66.34%	70.21	19.51	1	2	0.87	6.97
		Orthopedic Impairment	1	0.50%	66.00	-	0	0	-	-
		Other Health Impairment	3	1.49%	82.33	12.10	0	0	-	7.10
		Partial Sighted	1	0.50%	36.00	-	0	0	-	-
		Profound Mental Impairment	8	3.96%	21.63	11.48	0	0	0.80	5.16
		Severe Mental Impairment	11	5.45%	45.64	19.98	0	0	0.89	6.65
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	2	0.99%	54.00	4.24	0	0	-	9.12
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	1	0.50%	9.00	-	0	0	-	-		

Table 5
Descriptive Statistics for RLA by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	10	Autism	17	7.59%	42.88	16.73	0	0	0.85	6.53
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.45%	24.00	-	0	0	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	1	0.45%	48.00	-	0	0	-	-
		Mild Mental Impairment	31	13.84%	53.10	35.08	7	9	0.99	3.51
		Moderate Mental Impairment	137	61.16%	63.66	19.19	8	5	0.93	5.13
		Orthopedic Impairment	-	-	-	-	-	-	-	-
		Other Health Impairment	10	4.46%	59.80	25.35	1	1	0.96	5.17
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	8	3.57%	28.75	10.75	0	0	0.90	3.43
		Severe Mental Impairment	16	7.14%	37.06	15.38	0	0	0.84	6.20
		Specific Learning Disability	1	0.45%	78.00	-	0	0	-	-
		Speech Lanuage Impairment	-	-	-	-	-	-	-	-
		Traumatic Brain Injury	1	0.45%	41.00	-	0	0	-	-
		Missing	1	0.45%	75.00	-	0	0	-	-

Table 6
Descriptive Statistics for MA by Primary Disability

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	3	Autism	35	18.23%	62.69	21.08	0	0	0.91	6.41
		Behavior Disorders	1	0.52%	83.00	-	0	0	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	1	0.52%	54.00	-	0	0	-	-
		Hearing Impaired	3	1.56%	45.33	23.12	0	0	-	4.63
		Mild Mental Impairment	20	10.42%	78.75	21.19	1	1	0.94	5.24
		Moderate Mental Impairment	99	51.56%	73.61	19.03	2	1	0.90	6.05
		Orthopedic Impairment	1	0.52%	42.00	-	0	0	-	-
		Other Health Impairment	12	6.25%	66.75	23.84	1	0	0.93	6.26
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	8	4.17%	35.13	16.22	0	0	0.93	4.17
		Severe Mental Impairment	9	4.69%	33.44	19.70	0	0	0.92	5.55
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	-	-	-	-	-	-	-	-
		Traumatic Brain Injury	3	1.56%	33.33	33.13	0	0	-	6.32
Missing	-	-	-	-	-	-	-	-		
MA	4	Autism	29	13.36%	59.07	23.68	0	0	0.92	6.61
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.46%	39.00	-	0	0	-	-
		Deaf	1	0.46%	42.00	-	0	0	-	-
		Hearing Impaired	6	2.76%	72.67	25.17	1	0	0.94	6.10
		Mild Mental Impairment	21	9.68%	77.90	17.67	0	0	0.90	5.46
		Moderate Mental Impairment	110	50.69%	72.38	17.74	4	1	0.89	5.99
		Orthopedic Impairment	2	0.92%	90.00	4.24	0	0	-	2.95
		Other Health Impairment	12	5.53%	65.08	23.78	0	0	0.94	5.82
		Partial Sighted	1	0.46%	42.00	-	0	0	-	-
		Profound Mental Impairment	10	4.61%	25.50	14.30	0	0	0.97	2.59
		Severe Mental Impairment	19	8.76%	39.42	23.37	0	0	0.95	5.03
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	4	1.84%	90.00	4.24	0	0	0.43	3.20
		Traumatic Brain Injury	1	0.46%	60.00	-	0	0	-	-
Missing	-	-	-	-	-	-	-	-		

Table 6
Descriptive Statistics for MA by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	5	Autism	30	15.38%	66.03	25.04	0	0	0.91	7.57
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.51%	55.00	-	0	0	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	28	14.36%	101.79	13.00	4	0	0.82	5.45
		Moderate Mental Impairment	89	45.64%	81.53	24.62	3	1	0.92	7.06
		Orthopedic Impairment	3	1.54%	75.67	45.74	0	0	-	6.82
		Other Health Impairment	12	6.15%	61.42	34.64	0	0	0.96	7.15
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	6	3.08%	31.83	17.16	0	0	0.93	4.62
		Severe Mental Impairment	20	10.26%	47.65	22.01	0	0	0.90	6.94
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	1	0.51%	50.00	-	0	0	-	-
		Traumatic Brain Injury	3	1.54%	35.00	1.00	0	0	-	4.53
Missing	2	1.03%	71.50	13.44	0	0	-	8.51		
MA	6	Autism	32	14.88%	52.03	21.55	0	0	0.90	6.65
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.47%	27.00	-	0	0	-	-
		Deaf	3	1.40%	68.67	15.89	0	0	-	7.61
		Hearing Impaired	2	0.93%	65.50	3.54	0	0	-	6.36
		Mild Mental Impairment	35	16.28%	76.34	12.97	1	0	0.77	6.26
		Moderate Mental Impairment	117	54.42%	65.82	20.08	2	1	0.89	6.55
		Orthopedic Impairment	1	0.47%	42.00	-	0	0	-	-
		Other Health Impairment	8	3.72%	60.00	22.72	0	0	0.92	6.43
		Partial Sighted	1	0.47%	32.00	-	0	0	-	-
		Profound Mental Impairment	1	0.47%	24.00	-	0	0	-	-
		Severe Mental Impairment	9	4.19%	36.67	14.67	0	0	0.83	6.02
		Specific Learning Disability	1	0.47%	65.00	-	0	0	-	-
		Speech Lanuage Impairment	1	0.47%	70.00	-	0	0	-	-
		Traumatic Brain Injury	2	0.93%	84.00	5.66	0	0	-	5.92
Missing	1	0.47%	38.00	-	0	0	-	-		

Table 6
Descriptive Statistics for MA by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	7	Autism	21	9.05%	47.19	19.92	1	0	0.90	6.42
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	1	0.43%	78.00	-	0	0	-	-
		Mild Mental Impairment	40	17.24%	71.13	12.71	4	0	0.79	5.87
		Moderate Mental Impairment	131	56.47%	62.10	16.69	2	0	0.86	6.26
		Orthopedic Impairment	2	0.86%	76.50	2.12	0	0	-	7.14
		Other Health Impairment	9	3.88%	60.11	20.79	0	0	0.90	6.61
		Partial Sighted	2	0.86%	67.50	6.36	0	0	-	6.36
		Profound Mental Impairment	6	2.59%	33.67	12.04	0	0	0.80	5.40
		Severe Mental Impairment	14	6.03%	32.21	15.20	0	1	0.84	6.03
		Specific Learning Disability	1	0.43%	57.00	-	0	0	-	-
		Speech Language Impairment	2	0.86%	62.50	4.95	0	0	-	5.81
		Traumatic Brain Injury	2	0.86%	46.00	9.90	0	0	-	6.96
Missing	1	0.43%	48.00	-	0	0	-	-		
MA	8	Autism	22	10.89%	56.14	26.41	1	0	0.92	7.24
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	2	0.99%	47.50	13.44	0	0	-	6.63
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	17	8.42%	88.12	9.77	0	0	0.59	6.28
		Moderate Mental Impairment	134	66.34%	74.90	21.73	2	2	0.90	6.98
		Orthopedic Impairment	1	0.50%	56.00	-	0	0	-	-
		Other Health Impairment	3	1.49%	90.00	9.00	0	0	-	6.79
		Partial Sighted	1	0.50%	60.00	-	0	0	-	-
		Profound Mental Impairment	8	3.96%	28.00	17.10	0	0	0.90	5.30
		Severe Mental Impairment	11	5.45%	53.27	22.46	0	0	0.89	7.34
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	2	0.99%	69.50	7.78	0	0	-	8.65
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	1	0.50%	11.00	-	0	0	-	-		

Table 6
Descriptive Statistics for MA by Primary Disability (continued)

Content	Grade	Primary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	10	Autism	17	7.62%	33.24	11.49	0	0	0.70	6.28
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.45%	6.00	-	0	0	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	1	0.45%	21.00	-	0	0	-	-
		Mild Mental Impairment	31	13.90%	43.61	30.61	1	8	0.97	5.54
		Moderate Mental Impairment	136	60.99%	51.51	19.73	0	5	0.90	6.24
		Orthopedic Impairment	10	4.48%	53.80	22.47	0	1	0.92	6.49
		Other Health Impairment	-	-	-	-	-	-	-	-
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	8	3.59%	27.63	7.71	0	0	0.81	3.34
		Severe Mental Impairment	16	7.17%	30.69	14.68	0	1	0.85	5.61
		Specific Learning Disability	1	0.45%	87.00	-	0	0	-	-
		Speech Lanuage Impairment	-	-	-	-	-	-	-	-
		Traumatic Brain Injury	1	0.45%	48.00	-	0	0	-	-
Missing	1	0.45%	72.00	-	0	0	-	-		

Table 7
Descriptive Statistics for RLA by Secondary Disability

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	3	Autism	2	1.03%	30.00	25.46	0	0	-	5.50
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	1	0.51%	5.00	-	0	0	-	-
		Hearing Impaired	2	1.03%	76.50	6.36	0	0	-	4.67
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	7	3.59%	45.29	32.54	0	0	0.98	5.12
		Orthopedic Impairment	4	2.05%	41.75	26.87	0	0	-	5.43
		Other Health Impairment	16	8.21%	37.50	23.05	1	1	0.95	5.01
		Partial Sighted	2	1.03%	34.00	22.63	0	0	-	4.71
		Profound Mental Impairment	1	0.51%	21.00	-	0	0	-	-
		Severe Mental Impairment	3	1.54%	38.33	32.39	0	0	-	5.89
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	81	41.54%	64.53	17.80	5	1	0.91	5.44
		Traumatic Brain Injury	1	0.51%	84.00	-	1	0	-	-
Missing	75	38.46%	65.25	17.93	3	1	0.90	5.60		
RLA	4	Autism	6	2.74%	49.50	16.71	0	0	0.87	6.03
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.46%	30.00	-	0	0	-	-
		Deaf	6	2.74%	19.67	8.66	0	0	0.91	2.59
		Hearing Impaired	1	0.46%	47.00	-	0	0	-	-
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	11	5.02%	53.73	16.94	1	0	0.88	5.86
		Orthopedic Impairment	6	2.74%	45.83	16.34	0	0	0.87	5.83
		Other Health Impairment	11	5.02%	56.36	19.25	1	0	0.93	5.08
		Partial Sighted	4	1.83%	49.00	21.43	0	0	-	6.47
		Profound Mental Impairment	-	-	-	-	-	-	-	-
		Severe Mental Impairment	1	0.46%	45.00	-	0	0	-	-
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	80	36.53%	52.78	16.98	3	1	0.89	5.74
		Traumatic Brain Injury	2	0.91%	60.00	8.49	0	0	-	8.49
Missing	90	41.10%	60.13	14.31	4	0	0.86	5.37		

Table 7
Descriptive Statistics for RLA by Secondary Disability (continued)

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	5	Autism	9	4.57%	29.22	7.90	0	0	0.50	5.62
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.51%	45.00	-	0	0	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	1	0.51%	42.00	-	0	0	-	-
		Moderate Mental Impairment	3	1.52%	47.33	17.16	0	0	-	6.26
		Orthopedic Impairment	6	3.05%	43.67	12.75	0	0	0.81	5.63
		Other Health Impairment	11	5.58%	34.18	24.07	0	2	0.96	4.70
		Partial Sighted	4	2.03%	23.00	4.69	0	0	-	4.80
		Profound Mental Impairment	1	0.51%	25.00	-	0	0	-	-
		Severe Mental Impairment	7	3.55%	25.57	19.67	0	2	0.92	5.62
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	68	34.52%	49.21	16.97	0	0	0.89	5.74
		Traumatic Brain Injury	1	0.51%	38.00	-	0	0	-	-
Missing	85	43.15%	57.09	14.92	4	1	0.87	5.47		
RLA	6	Autism	8	3.74%	67.88	14.44	0	0	0.87	5.22
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	3	1.40%	60.67	33.55	0	0	-	4.46
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	12	5.61%	50.75	23.36	0	1	0.96	4.89
		Orthopedic Impairment	4	1.87%	60.00	19.10	0	0	-	5.36
		Other Health Impairment	17	7.94%	69.06	20.05	1	1	0.94	5.01
		Partial Sighted	1	0.47%	28.00	-	0	0	-	-
		Profound Mental Impairment	1	0.47%	30.00	-	0	0	-	-
		Severe Mental Impairment	1	0.47%	32.00	-	0	0	-	-
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	52	24.30%	60.56	18.07	3	0	0.91	5.57
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	115	53.74%	71.12	16.00	15	0	-	4.90		

Table 7
Descriptive Statistics for RLA by Secondary Disability (continued)

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	7	Autism	6	2.59%	55.50	26.45	0	0	0.92	7.29
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.43%	94.00	-	0	0	-	-
		Deaf	1	0.43%	50.00	-	0	0	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	1	0.43%	93.00	-	0	0	-	-
		Moderate Mental Impairment	4	1.72%	73.00	32.27	0	0	-	7.00
		Orthopedic Impairment	4	1.72%	84.75	13.72	0	0	-	6.74
		Other Health Impairment	12	5.17%	64.42	33.96	0	1	0.96	6.57
		Partial Sighted	4	1.72%	66.75	34.39	0	0	-	6.54
		Profound Mental Impairment	1	0.43%	50.00	-	0	0	-	-
		Severe Mental Impairment	2	0.86%	55.50	27.58	0	0	-	6.87
		Specific Learning Disability	1	0.43%	70.00	-	0	0	-	-
		Speech Lanuage Impairment	46	19.83%	71.15	29.14	2	0	0.95	6.64
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	149	64.22%	91.81	21.45	8	0	0.93	5.81		
RLA	8	Autism	4	1.98%	76.00	17.05	0	0	-	8.18
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	4	1.98%	54.50	11.93	0	0	-	6.84
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	3	1.49%	57.67	15.53	0	0	-	8.77
		Orthopedic Impairment	3	1.49%	65.67	6.66	0	0	-	8.09
		Other Health Impairment	17	8.42%	49.82	28.47	0	0	0.95	6.11
		Partial Sighted	3	1.49%	50.00	31.24	0	0	-	7.08
		Profound Mental Impairment	2	0.99%	32.00	8.49	0	0	-	5.25
		Severe Mental Impairment	5	2.48%	37.80	20.41	0	0	0.87	7.27
		Specific Learning Disability	1	0.50%	63.00	-	0	0	-	-
		Speech Lanuage Impairment	33	16.34%	55.76	22.25	0	0	0.89	7.52
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	127	62.87%	71.02	21.87	1	2	0.90	6.80		

Table 7
Descriptive Statistics for RLA by Secondary Disability (continued)

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
RLA	10	Autism	7	3.13%	41.71	20.07	0	0	0.91	5.85
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.45%	75.00	-	0	0	-	-
		Deaf	2	0.89%	24.00	2.83	0	0	-	2.64
		Hearing Impaired	1	0.45%	38.00	-	0	0	-	-
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	10	4.46%	42.00	21.66	0	1	0.92	6.22
		Orthopedic Impairment	6	2.68%	73.00	3.10	0	0	-1.69	5.08
		Other Health Impairment	10	4.46%	49.40	22.13	0	0	0.93	5.87
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	3	1.34%	48.00	20.52	0	0	-	6.13
		Severe Mental Impairment	6	2.68%	39.50	13.94	0	0	0.80	6.17
		Specific Learning Disability	1	0.45%	68.00	-	0	0	-	-
		Speech Lanuage Impairment	29	12.95%	61.69	21.83	4	1	0.95	4.95
		Traumatic Brain Injury	1	0.45%	78.00	-	0	0	-	-
Missing	147	65.63%	58.93	24.49	12	13	0.96	4.98		

Table 8
Descriptive Statistics for MA by Secondary Disability

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	3	Autism	2	1.04%	37.50	31.82	0	0	-	6.16
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	1	0.52%	6.00	-	0	0	-	-
		Hearing Impaired	2	1.04%	85.50	6.36	0	0	-	6.36
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	7	3.65%	50.29	35.88	0	0	0.98	5.49
		Orthopedic Impairment	4	2.08%	52.75	28.05	0	0	-	4.98
		Other Health Impairment	16	8.33%	50.00	29.31	1	0	0.97	4.80
		Partial Sighted	2	1.04%	49.00	9.90	0	0	-	6.01
		Profound Mental Impairment	1	0.52%	30.00	-	0	0	-	-
		Severe Mental Impairment	3	1.56%	41.33	34.78	0	0	-	6.53
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	80	41.67%	69.88	19.41	1	1	0.90	6.21
		Traumatic Brain Injury	1	0.52%	93.00	-	0	0	-	-
Missing	73	38.02%	72.66	19.71	2	1	0.91	5.91		
MA	4	Autism	6	2.76%	62.17	22.02	0	0	0.91	6.44
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.46%	31.00	-	0	0	-	-
		Deaf	6	2.76%	20.67	13.75	0	0	0.99	1.61
		Hearing Impaired	1	0.46%	47.00	-	0	0	-	-
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	11	5.07%	61.64	26.64	1	0	0.94	6.47
		Orthopedic Impairment	6	2.76%	54.50	22.24	0	0	0.92	6.16
		Other Health Impairment	11	5.07%	63.64	23.09	0	0	0.93	5.93
		Partial Sighted	4	1.84%	51.00	29.81	0	0	-	6.13
		Profound Mental Impairment	-	-	-	-	-	-	-	-
		Severe Mental Impairment	1	0.46%	60.00	-	0	0	-	-
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Lanuage Impairment	80	36.87%	62.75	23.79	1	1	0.93	6.07
		Traumatic Brain Injury	2	0.92%	80.50	9.19	0	0	-	5.91
Missing	88	40.55%	74.20	19.40	3	0	0.91	5.82		

Table 8
Descriptive Statistics for MA by Secondary Disability (continued)

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	5	Autism	9	4.62%	49.11	19.74	0	0	0.88	6.76
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.51%	24.00	-	0	0	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	1	0.51%	55.00	-	0	0	-	-
		Moderate Mental Impairment	3	1.54%	51.33	39.00	0	0	-	7.22
		Orthopedic Impairment	6	3.08%	59.00	26.95	0	0	0.92	7.82
		Other Health Impairment	11	5.64%	48.27	33.09	0	0	0.96	6.29
		Partial Sighted	4	2.05%	36.00	9.83	0	0	-	5.36
		Profound Mental Impairment	1	0.51%	30.00	-	0	0	-	-
		Severe Mental Impairment	7	3.59%	31.86	24.66	0	0	0.93	6.57
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	67	34.36%	75.42	23.80	0	0	0.90	7.46
		Traumatic Brain Injury	1	0.51%	45.00	-	0	0	-	-
Missing	84	43.08%	89.20	22.93	7	1	0.92	6.49		
MA	6	Autism	8	3.72%	60.25	18.15	0	0	0.86	6.80
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	3	1.40%	66.00	33.42	0	0	-	3.86
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	12	5.58%	57.75	23.34	0	0	0.92	6.63
		Orthopedic Impairment	4	1.86%	50.00	20.31	0	0	-	6.17
		Other Health Impairment	18	8.37%	62.44	23.40	0	1	0.92	6.48
		Partial Sighted	1	0.47%	30.00	-	0	0	-	-
		Profound Mental Impairment	1	0.47%	28.00	-	0	0	-	-
		Severe Mental Impairment	1	0.47%	35.00	-	0	0	-	-
		Specific Learning Disability	-	-	-	-	-	-	-	-
		Speech Language Impairment	52	24.19%	57.81	20.51	1	0	0.88	6.98
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	115	53.49%	68.30	19.78	2	0	0.89	6.48		

Table 8
Descriptive Statistics for MA by Secondary Disability (continued)

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	7	Autism	6	2.59%	42.83	22.68	0	0	0.93	6.02
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.43%	63.00	-	0	0	-	-
		Deaf	1	0.43%	50.00	-	0	0	-	-
		Hearing Impaired	-	-	-	-	-	-	-	-
		Mild Mental Impairment	1	0.43%	64.00	-	0	0	-	-
		Moderate Mental Impairment	4	1.72%	55.25	16.68	0	0	-	6.41
		Orthopedic Impairment	4	1.72%	53.00	19.75	0	0	-	7.64
		Other Health Impairment	12	5.17%	45.42	22.35	0	1	0.91	6.60
		Partial Sighted	4	1.72%	42.50	13.96	0	0	-	6.95
		Profound Mental Impairment	1	0.43%	39.00	-	0	0	-	-
		Severe Mental Impairment	2	0.86%	47.00	18.38	0	0	-	6.19
		Specific Learning Disability	1	0.43%	39.00	-	0	0	-	-
		Speech Lanuage Impairment	45	19.40%	54.73	19.15	1	0	0.88	6.52
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	150	64.66%	64.24	17.38	6	0	0.88	6.09		
MA	8	Autism	4	1.98%	82.50	14.48	0	0	-	6.77
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	-	-	-	-	-	-	-	-
		Deaf	-	-	-	-	-	-	-	-
		Hearing Impaired	4	1.98%	55.50	5.20	0	0	-	8.22
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	3	1.49%	59.00	6.25	0	0	-	7.98
		Orthopedic Impairment	3	1.49%	63.00	16.70	0	0	-	7.35
		Other Health Impairment	17	8.42%	53.41	28.34	0	0	0.95	6.32
		Partial Sighted	3	1.49%	53.33	11.15	0	0	-	7.70
		Profound Mental Impairment	2	0.99%	35.50	3.54	0	0	-	5.18
		Severe Mental Impairment	5	2.48%	52.20	25.05	0	0	0.92	7.18
		Specific Learning Disability	1	0.50%	57.00	-	0	0	-	-
		Speech Lanuage Impairment	33	16.34%	61.33	22.10	1	0	0.88	7.61
		Traumatic Brain Injury	-	-	-	-	-	-	-	-
Missing	127	62.87%	77.25	23.45	2	2	0.92	6.77		

Table 8
Descriptive Statistics for MA by Secondary Disability (continued)

Content	Grade	Secondary Disability	Sample Size	%	Raw Score		N Students at Max Score	N Students at Min Score	Coefficient Alpha	Standard Error of Measurement
					Mean	SD				
MA	10	Autism	6	2.69%	29.83	17.24	0	1	0.89	5.82
		Behavior Disorders	-	-	-	-	-	-	-	-
		Blind	1	0.45%	48.00	-	0	0	-	-
		Deaf	2	0.90%	27.50	2.12	0	0	-	1.56
		Hearing Impaired	1	0.45%	35.00	-	0	0	-	-
		Mild Mental Impairment	-	-	-	-	-	-	-	-
		Moderate Mental Impairment	10	4.48%	30.60	20.51	0	1	0.92	5.88
		Orthopedic Impairment	6	2.69%	55.17	15.04	0	0	0.82	6.34
		Other Health Impairment	10	4.48%	42.30	20.56	0	0	0.92	5.70
		Partial Sighted	-	-	-	-	-	-	-	-
		Profound Mental Impairment	3	1.35%	37.33	9.29	0	0	-	5.46
		Severe Mental Impairment	6	2.69%	28.50	8.96	0	0	0.57	5.87
		Specific Learning Disability	1	0.45%	40.00	-	0	0	-	-
		Speech Lanuage Impairment	29	13.00%	52.66	20.23	0	1	0.91	6.07
		Traumatic Brain Injury	1	0.45%	42.00	-	0	0	-	-
		Missing	147	65.92%	48.55	23.06	1	12	0.93	6.09

Table 9
Scoring Rubric for MC Item Types

Total Score	Content Score	Level of Assistance
3	Correct	INDEPENDENT — Performs task without assistance
2	Correct	PARTIAL — Partial physical, verbal, or gestural prompt
1	Correct	FULL — Full physical prompt
		Further coded:
0	Incorrect or No response	I – Independent and incorrect P – Partial and incorrect F – Full and incorrect

Table 10
Scoring Rubric for CR Item Types

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

Table 11
Inter-rater Reliabilities for RLA

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepent	Kappa
RLA	3	1	3	193	2.79	100.00%	-	0.00%	1.00
		2	3	193	2.52	96.89%	2.07%	1.04%	0.95
		3	3	193	2.37	99.48%	-	0.52%	0.99
		4	3	194	2.15	98.97%	-	1.03%	0.98
		5	3	194	1.77	96.39%	0.52%	3.09%	0.94
		6	3	192	2.18	98.96%	0.52%	0.52%	0.99
		7	3	193	2.13	100.00%	-	0.00%	1.00
		8	3	194	2.15	97.42%	1.03%	1.55%	0.97
		9	3	194	2.26	99.48%	-	0.52%	0.99
		10	3	194	2.63	97.42%	2.58%	0.00%	0.99
		11	3	193	2.20	97.41%	1.04%	1.55%	0.97
		12	6	192	4.42	77.60%	14.58%	7.81%	0.90
		13	3	193	2.02	98.45%	-	1.55%	0.97
		14	3	193	2.10	96.89%	-	3.11%	0.94
		15	3	194	2.16	98.97%	0.52%	0.52%	0.99
		16	3	193	2.22	98.96%	-	1.04%	0.98
		17	3	193	2.25	100.00%	-	0.00%	1.00
		18	3	190	2.46	100.00%	-	0.00%	1.00
		19	3	192	1.83	98.44%	0.52%	1.04%	0.99
		20	3	194	2.56	98.97%	1.03%	0.00%	1.00
		21	6	193	4.18	78.76%	12.95%	8.29%	0.91
		22	3	193	1.43	95.34%	3.63%	1.04%	0.98
		23	3	194	2.74	98.45%	1.55%	0.00%	0.99
		24	3	192	1.77	98.96%	0.52%	0.52%	0.99
		25	3	192	1.52	97.40%	1.56%	1.04%	0.98
		26	3	186	2.46	90.32%	0.54%	9.14%	0.81

Table 11
Inter-rater Reliabilities for RLA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
RLA	4	1	3	218	2.58	100.00%	-	0.00%	1.00
		2	3	218	2.75	99.08%	0.46%	0.46%	0.97
		3	3	218	2.32	100.00%	-	0.00%	1.00
		4	3	218	2.12	97.71%	0.92%	1.38%	0.97
		5	3	217	1.95	99.54%	-	0.46%	0.99
		6	3	218	2.29	99.54%	-	0.46%	0.99
		7	3	218	2.68	98.17%	-	1.83%	0.93
		8	3	218	1.76	99.08%	0.46%	0.46%	0.99
		9	3	217	1.61	96.31%	0.46%	3.23%	0.95
		10	3	218	1.59	96.79%	1.38%	1.83%	0.97
		11	3	216	2.56	99.07%	0.46%	0.46%	0.98
		12	6	218	3.80	76.15%	8.26%	15.60%	0.90
		13	3	215	2.70	98.14%	-	1.86%	0.93
		14	3	218	2.71	99.54%	0.46%	0.00%	1.00
		15	3	218	1.86	99.54%	0.46%	0.00%	1.00
		16	6	217	4.02	76.50%	15.67%	7.83%	0.87
		17	3	218	2.07	98.17%	0.46%	1.38%	0.98
		18	3	218	2.57	99.54%	-	0.46%	0.99
		19	3	218	2.62	98.62%	0.46%	0.92%	0.97
		20	3	218	1.92	97.71%	0.92%	1.38%	0.97
		21	6	218	4.38	83.03%	11.01%	5.96%	0.95
		22	3	217	1.96	95.85%	0.92%	3.23%	0.94

Table 11
Inter-rater Reliabilities for RLA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepent	Kappa
RLA	5	1	3	197	1.99	99.49%	0.51%	0.00%	1.00
		2	3	197	2.39	100.00%	-	0.00%	1.00
		3	3	197	1.97	98.98%	-	1.02%	0.98
		4	3	197	2.33	99.49%	-	0.51%	0.99
		5	3	197	1.54	97.46%	0.51%	2.03%	0.97
		6	3	196	1.09	98.98%	-	1.02%	0.99
		7	3	197	1.58	98.98%	-	1.02%	0.99
		8	3	197	2.64	98.48%	-	1.52%	0.94
		9	3	196	2.39	97.45%	0.51%	2.04%	0.94
		10	3	197	2.19	96.45%	1.02%	2.54%	0.95
		11	3	195	2.03	97.95%	0.51%	1.54%	0.98
		12	3	196	2.02	96.43%	0.51%	3.06%	0.95
		13	3	196	2.52	98.98%	-	1.02%	0.97
		14	3	195	2.32	99.49%	-	0.51%	0.99
		15	3	197	1.93	98.98%	-	1.02%	0.99
		16	3	197	2.08	98.48%	0.51%	1.02%	0.98
		17	3	197	2.04	98.48%	0.51%	1.02%	0.98
		18	3	196	1.10	97.45%	1.02%	1.53%	0.98
		19	3	197	1.88	99.49%	-	0.51%	0.99
		20	3	197	2.21	95.94%	2.03%	2.03%	0.96
		21	3	197	1.46	97.97%	0.51%	1.52%	0.97
		22	3	196	1.87	97.45%	-	2.55%	0.97
		23	3	197	1.91	97.97%	0.51%	1.52%	0.98
		24	3	194	1.11	97.42%	-	2.58%	0.95
		25	3	197	1.22	97.46%	-	2.54%	0.96
		26	3	197	1.83	96.95%	0.51%	2.54%	0.95

Table 11
Inter-rater Reliabilities for RLA (continued)

Content	Grade	Item Number	Item		Second Read Rater Reliability				
			Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepent	Kappa
RLA	6	1	3	213	2.60	99.06%	-	0.94%	0.98
		2	3	213	2.20	99.53%	-	0.47%	0.99
		3	3	213	1.85	98.59%	0.94%	0.47%	0.99
		4	3	213	2.69	100.00%	-	0.00%	1.00
		5	3	213	2.68	100.00%	-	0.00%	1.00
		6	3	213	2.08	97.65%	1.41%	0.94%	0.98
		7	3	213	2.56	99.06%	-	0.94%	0.97
		8	3	213	2.37	99.53%	-	0.47%	1.00
		9	3	213	2.12	99.06%	0.47%	0.47%	0.99
		10	3	213	2.57	100.00%	-	0.00%	1.00
		11	3	212	2.62	99.06%	0.94%	0.00%	1.00
		12	3	211	2.40	99.05%	0.95%	0.00%	1.00
		13	3	213	1.64	97.65%	0.94%	1.41%	0.98
		14	3	213	1.81	99.06%	0.47%	0.47%	1.00
		15	3	212	2.70	100.00%	-	0.00%	1.00
		16	3	213	2.55	100.00%	-	0.00%	1.00
		17	3	213	2.68	99.53%	0.47%	0.00%	1.00
		18	3	213	2.31	99.06%	0.47%	0.47%	0.99
		19	3	212	2.11	98.58%	0.94%	0.47%	0.99
		20	3	213	2.16	99.06%	0.94%	0.00%	1.00
		21	3	213	2.84	100.00%	-	0.00%	1.00
		22	3	213	2.56	100.00%	-	0.00%	1.00
		23	3	213	1.94	100.00%	-	0.00%	1.00
		24	3	212	2.11	98.58%	-	1.42%	0.97
		25	3	214	1.54	98.13%	0.47%	1.40%	0.98
		26	3	213	2.15	100.00%	-	0.00%	1.00
		27	3	213	2.30	99.06%	0.47%	0.47%	0.99
		28	3	213	2.25	98.12%	0.47%	1.41%	0.97
		29	3	212	2.11	99.53%	-	0.47%	0.99

Table 11
Inter-rater Reliabilities for RLA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepent	Kappa
		1	3	228	2.69	99.56%	-	0.44%	0.98
		2	3	228	2.43	99.12%	-	0.88%	0.98
		3	3	228	2.33	99.56%	-	0.44%	0.99
		4	3	228	2.56	98.68%	0.44%	0.88%	0.98
		5	3	228	2.65	98.68%	0.44%	0.88%	0.97
		6	3	228	1.94	100.00%	-	0.00%	1.00
		7	3	228	2.75	100.00%	-	0.00%	1.00
		8	3	228	2.49	99.12%	-	0.88%	0.97
		9	3	228	2.46	98.25%	0.44%	1.32%	0.97
		10	3	227	2.38	98.24%	0.44%	1.32%	0.98
		11	3	227	2.45	98.68%	0.44%	0.88%	0.98
		12	3	227	2.31	97.80%	0.44%	1.76%	0.96
		13	3	228	2.36	98.68%	1.32%	0.00%	1.00
		14	3	227	2.50	97.80%	1.32%	0.88%	0.97
		15	3	228	2.50	100.00%	-	0.00%	1.00
		16	3	228	1.87	99.12%	-	0.88%	0.99
		17	3	228	2.60	97.81%	0.44%	1.75%	0.94
		18	3	228	1.84	92.98%	-	7.02%	0.88
RLA	7	19	3	228	2.12	99.56%	-	0.44%	0.99
		20	3	228	2.37	98.68%	0.44%	0.88%	0.98
		21	3	228	2.51	98.25%	0.44%	1.32%	0.97
		22	3	228	2.36	96.93%	0.88%	2.19%	0.95
		23	3	228	2.40	99.12%	-	0.88%	0.98
		24	3	228	2.11	99.56%	-	0.44%	0.99
		25	3	228	2.10	98.25%	0.88%	0.88%	0.98
		26	6	230	4.73	84.35%	10.43%	5.22%	0.93
		27	3	228	2.08	98.25%	0.88%	0.88%	0.98
		28	3	228	2.37	99.12%	0.88%	0.00%	1.00
		29	3	228	2.19	98.25%	0.88%	0.88%	0.98
		30	3	228	1.93	98.68%	0.44%	0.88%	0.98
		31	3	228	1.44	99.12%	-	0.88%	0.99
		32	3	226	1.54	97.79%	0.88%	1.33%	0.98
		33	3	228	1.33	97.81%	0.44%	1.75%	0.97
		34	3	227	1.51	97.36%	1.32%	1.32%	0.98
		35	3	227	2.20	99.12%	0.44%	0.44%	0.99
		36	3	227	2.27	99.12%	-	0.88%	0.98
		37	3	227	1.34	98.68%	0.44%	0.88%	0.98

Table 11
Inter-rater Reliabilities for RLA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
RLA	8	1	3	202	2.71	100.00%	-	0.00%	1.00
		2	3	202	2.02	100.00%	-	0.00%	1.00
		3	3	202	2.42	99.50%	-	0.50%	0.99
		4	3	201	1.56	99.50%	-	0.50%	0.99
		5	3	202	2.74	99.01%	-	0.99%	0.96
		6	3	202	2.40	100.00%	-	0.00%	1.00
		7	3	202	1.76	99.01%	-	0.99%	0.98
		8	3	202	2.58	98.51%	-	1.49%	0.95
		9	3	201	2.56	99.50%	-	0.50%	0.98
		10	6	202	3.98	95.05%	3.47%	1.49%	0.99
		11	3	202	2.51	99.01%	0.50%	0.50%	0.98
		12	3	202	2.04	99.01%	-	0.99%	0.98
		13	3	202	2.68	99.01%	0.99%	0.00%	1.00
		14	3	202	1.25	97.03%	0.99%	1.98%	0.97
		15	3	202	0.94	98.51%	0.50%	0.99%	0.98
		16	3	202	1.13	97.52%	0.50%	1.98%	0.97
		17	3	202	1.49	97.03%	0.50%	2.48%	0.96
		18	3	202	2.25	100.00%	-	0.00%	1.00
		19	3	202	1.46	98.51%	-	1.49%	0.98
		20	3	202	1.43	99.01%	-	0.99%	0.98
		21	3	202	1.81	98.02%	0.99%	0.99%	0.98
		22	3	202	2.53	99.50%	-	0.50%	0.99
		23	6	202	3.10	91.58%	6.44%	1.98%	0.97
		24	3	202	2.72	99.50%	0.50%	0.00%	1.00
		25	3	202	2.47	99.01%	-	0.99%	0.97
		26	6	202	2.02	97.03%	-	2.97%	0.98
		27	3	202	2.20	98.51%	0.50%	0.99%	0.98
		28	3	202	1.36	98.51%	-	1.49%	0.97
		29	6	202	4.02	92.08%	4.95%	2.97%	0.98
		30	3	202	0.83	98.51%	-	1.49%	0.93

Table 11
Inter-rater Reliabilities for RLA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
RLA	10	1	3	223	2.64	99.55%	-	0.45%	0.98
		2	3	222	2.48	99.55%	0.45%	0.00%	1.00
		3	3	222	1.99	99.55%	-	0.45%	0.99
		4	3	222	2.46	99.10%	0.45%	0.45%	0.99
		5	3	222	1.80	98.20%	0.45%	1.35%	0.98
		6	3	223	2.36	98.65%	-	1.35%	0.97
		7	6	223	4.45	86.10%	7.17%	6.73%	0.94
		8	3	221	2.45	99.10%	0.45%	0.45%	0.99
		9	3	223	2.09	100.00%	-	0.00%	1.00
		10	3	222	2.20	99.55%	0.45%	0.00%	1.00
		11	3	223	1.99	95.96%	0.45%	3.59%	0.94
		12	3	223	2.08	96.86%	0.45%	2.69%	0.95
		13	3	223	2.50	100.00%	-	0.00%	1.00
		14	3	223	2.14	96.86%	-	3.14%	0.94
		15	3	222	2.10	97.75%	-	2.25%	0.95
		16	3	223	2.05	97.76%	-	2.24%	0.95
		17	3	223	1.94	98.21%	-	1.79%	0.97
		18	3	223	1.86	97.76%	-	2.24%	0.96
		19	3	223	2.04	99.55%	-	0.45%	1.00
		20	3	222	1.48	97.30%	0.90%	1.80%	0.97
		21	3	222	2.34	98.65%	-	1.35%	0.97
		22	3	223	1.84	99.55%	-	0.45%	0.99
		23	3	223	2.15	97.76%	-	2.24%	0.95
		24	3	223	1.99	99.55%	-	0.45%	0.99
		25	3	223	2.08	99.55%	-	0.45%	0.99
		26	3	219	1.66	94.52%	0.91%	4.57%	0.92

Table 12
Inter-rater Reliabilities for MA

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
MA	3	1	3	191	2.62	100.00%	-	0.00%	1.00
		2	3	189	2.07	92.06%	1.59%	6.35%	0.90
		3	3	188	2.04	90.96%	2.66%	6.38%	0.88
		4	3	191	2.02	94.76%	0.52%	4.71%	0.92
		5	3	191	2.30	98.95%	-	1.05%	0.98
		6	3	191	2.19	97.91%	1.05%	1.05%	0.98
		7	3	189	1.92	99.47%	-	0.53%	0.99
		8	3	189	0.73	98.94%	0.53%	0.53%	0.99
		9	3	191	2.42	96.86%	2.09%	1.05%	0.97
		10	3	191	2.36	97.91%	2.09%	0.00%	0.99
		11	3	191	2.17	98.95%	0.52%	0.52%	0.99
		12	3	191	2.53	100.00%	-	0.00%	1.00
		13	3	189	2.10	99.47%	0.53%	0.00%	1.00
		14	3	191	1.73	96.86%	0.52%	2.62%	0.95
		15	3	190	2.25	98.95%	0.53%	0.53%	0.99
		16	3	191	2.45	100.00%	-	0.00%	1.00
		17	3	188	2.48	98.94%	0.53%	0.53%	0.98
		18	3	191	2.27	99.48%	-	0.52%	0.99
		19	3	191	1.28	98.95%	1.05%	0.00%	1.00
		20	3	189	2.30	98.94%	0.53%	0.53%	0.99
		21	3	191	2.66	93.72%	1.05%	5.24%	0.83
		22	3	189	1.12	99.47%	-	0.53%	1.00
		23	3	191	2.06	94.76%	2.62%	2.62%	0.93
		24	3	191	2.09	97.91%	0.52%	1.57%	0.97
		25	3	189	2.05	97.88%	-	2.12%	0.97
		26	3	190	2.29	98.95%	0.53%	0.53%	0.99
		27	3	191	2.36	97.38%	1.05%	1.57%	0.96
		28	3	190	2.37	96.84%	1.05%	2.11%	0.95
		29	3	189	1.20	97.88%	1.06%	1.06%	0.98
		30	3	188	2.18	97.34%	0.53%	2.13%	0.95
		31	3	188	1.33	94.68%	0.53%	4.79%	0.91
		32	3	190	2.59	97.89%	1.58%	0.53%	0.98
		33	3	187	1.85	98.93%	-	1.07%	0.98

Table 12
Inter-rater Reliabilities for MA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
MA	4	1	3	215	2.66	100.00%	-	0.00%	1.00
		2	3	216	2.43	99.07%	-	0.93%	0.98
		3	6	216	3.98	84.72%	10.19%	5.09%	0.94
		4	3	216	1.94	98.61%	0.46%	0.93%	0.99
		5	3	216	2.37	99.07%	-	0.93%	0.98
		6	3	216	2.45	100.00%	-	0.00%	1.00
		7	3	216	2.11	99.07%	-	0.93%	0.98
		8	3	215	1.89	97.67%	0.93%	1.40%	0.97
		9	3	216	2.16	99.07%	-	0.93%	0.98
		10	3	216	1.87	97.69%	-	2.31%	0.97
		11	3	215	2.22	99.53%	0.47%	0.00%	1.00
		12	3	214	2.00	99.07%	0.47%	0.47%	0.99
		13	3	216	2.05	99.07%	0.93%	0.00%	1.00
		14	3	214	2.54	100.00%	-	0.00%	1.00
		15	3	215	2.36	100.00%	-	0.00%	1.00
		16	3	216	2.22	100.00%	-	0.00%	1.00
		17	3	216	2.39	99.54%	0.46%	0.00%	1.00
		18	3	216	2.30	99.54%	-	0.46%	0.99
		19	3	216	1.88	100.00%	-	0.00%	1.00
		20	3	216	1.46	99.54%	-	0.46%	0.99
		21	3	213	2.40	99.06%	-	0.94%	0.98
		22	3	215	2.05	85.58%	5.58%	8.84%	0.85
		23	3	216	2.02	99.07%	-	0.93%	0.98
		24	3	216	1.92	97.22%	-	2.78%	0.96
		25	3	215	2.54	100.00%	-	0.00%	1.00
		26	3	216	2.42	99.07%	-	0.93%	0.98
		27	3	216	0.79	97.22%	-	2.78%	0.95
		28	3	214	1.42	96.73%	0.93%	2.34%	0.97
		29	3	215	2.14	79.53%	4.65%	15.81%	0.69
		30	3	216	1.90	98.15%	1.39%	0.46%	0.99
		31	3	215	1.76	95.81%	1.40%	2.79%	0.95

Table 12
Inter-rater Reliabilities for MA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
		1	3	195	1.53	92.31%	1.03%	6.67%	0.89
		2	3	195	2.03	99.49%	-	0.51%	0.99
		3	3	195	1.97	97.95%	1.03%	1.03%	0.98
		4	3	194	2.38	100.00%	-	0.00%	1.00
		5	3	194	2.06	97.42%	0.52%	2.06%	0.96
		6	3	195	1.45	97.44%	0.51%	2.05%	0.97
		7	3	195	1.74	99.49%	0.51%	0.00%	1.00
		8	3	195	1.86	98.97%	0.51%	0.51%	0.99
		9	3	194	2.60	99.48%	-	0.52%	0.98
		10	3	192	2.26	93.75%	2.08%	4.17%	0.91
		11	6	195	3.27	85.13%	1.54%	13.33%	0.85
		12	3	195	2.33	98.46%	-	1.54%	0.98
		13	3	195	2.17	97.95%	0.51%	1.54%	0.97
		14	3	195	1.66	99.49%	-	0.51%	1.00
		15	3	193	2.07	97.93%	-	2.07%	0.97
		16	3	195	2.36	98.97%	-	1.03%	0.98
		17	3	194	2.26	100.00%	-	0.00%	1.00
MA	5	18	3	195	2.31	97.95%	0.51%	1.54%	0.97
		19	6	195	3.68	86.15%	5.64%	8.21%	0.92
		20	3	195	2.34	98.97%	-	1.03%	0.98
		21	3	195	1.76	98.97%	1.03%	0.00%	1.00
		22	3	193	1.60	97.93%	1.04%	1.04%	0.98
		23	3	195	2.34	98.46%	1.03%	0.51%	0.98
		24	3	194	2.09	99.48%	-	0.52%	0.99
		25	3	195	2.21	99.49%	-	0.51%	0.99
		26	3	195	2.25	97.95%	0.51%	1.54%	0.96
		27	3	195	1.40	99.49%	-	0.51%	0.99
		28	3	195	1.86	98.97%	-	1.03%	0.98
		29	3	195	1.95	98.46%	0.51%	1.03%	0.98
		30	3	195	2.03	98.46%	0.51%	1.03%	0.98
		31	3	195	1.98	99.49%	-	0.51%	0.99
		32	3	195	1.89	100.00%	-	0.00%	1.00
		33	3	195	2.11	98.97%	0.51%	0.51%	0.99
		34	3	195	1.57	97.95%	0.51%	1.54%	0.98
		35	3	195	2.08	98.46%	1.03%	0.51%	0.99
		36	3	195	1.84	98.46%	0.51%	1.03%	0.98

Table 12
Inter-rater Reliabilities for MA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepent	Kappa
MA	6	1	3	214	2.48	99.53%	-	0.47%	0.99
		2	3	214	2.65	99.53%	-	0.47%	0.98
		3	3	213	1.37	97.65%	0.47%	1.88%	0.97
		4	3	214	1.82	89.72%	0.93%	9.35%	0.84
		5	6	214	3.58	77.10%	7.48%	15.42%	0.78
		6	3	214	2.37	99.53%	-	0.47%	0.99
		7	3	214	1.70	99.07%	-	0.93%	0.98
		8	3	214	2.31	99.07%	0.47%	0.47%	0.99
		9	3	214	2.17	99.53%	-	0.47%	0.99
		10	3	214	2.32	99.07%	0.93%	0.00%	1.00
		11	3	214	2.21	100.00%	-	0.00%	1.00
		13	3	215	1.88	90.23%	1.86%	7.91%	0.87
		14	3	214	2.16	100.00%	-	0.00%	1.00
		15	3	213	2.12	98.59%	-	1.41%	0.98
		16	3	212	1.98	99.06%	-	0.94%	0.99
		17	3	214	2.32	99.53%	-	0.47%	0.99
		18	3	214	2.09	99.53%	0.47%	0.00%	1.00
		19	3	214	1.96	98.13%	-	1.87%	0.97
		20	3	213	1.33	93.90%	1.41%	4.69%	0.91
		21	3	213	1.88	100.00%	-	0.00%	1.00
		22	3	213	1.42	94.84%	2.35%	2.82%	0.95
		23	3	213	1.66	99.06%	-	0.94%	0.99
		24	3	213	1.64	98.12%	0.47%	1.41%	0.98
		25	3	214	2.39	98.13%	0.47%	1.40%	0.97
		26	3	214	2.32	99.53%	-	0.47%	0.99
		27	3	213	2.24	99.06%	-	0.94%	0.99
		28	3	214	2.18	99.53%	-	0.47%	0.99
		30	6	212	3.77	76.89%	11.79%	11.32%	0.89
		31	3	210	1.82	98.10%	-	1.90%	0.97
		32	3	211	1.35	99.53%	-	0.47%	0.99

Table 12
Inter-rater Reliabilities for MA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
MA	7	1	3	228	2.61	99.12%	0.44%	0.44%	0.98
		2	3	228	2.12	99.12%	0.44%	0.44%	0.99
		3	3	228	1.85	98.25%	-	1.75%	0.97
		4	3	228	2.52	97.81%	-	2.19%	0.94
		5	3	227	2.04	98.68%	0.44%	0.88%	0.98
		6	3	228	2.25	99.12%	-	0.88%	0.98
		7	3	227	2.58	99.56%	-	0.44%	0.99
		8	3	228	2.56	100.00%	-	0.00%	1.00
		9	3	228	1.72	99.56%	0.44%	0.00%	1.00
		10	3	228	1.24	100.00%	-	0.00%	1.00
		11	3	228	2.60	99.56%	-	0.44%	0.98
		12	3	228	1.80	97.81%	0.44%	1.75%	0.97
		13	3	228	1.52	99.12%	-	0.88%	0.98
		14	3	228	1.62	99.12%	-	0.88%	0.98
		15	3	228	2.46	100.00%	-	0.00%	1.00
		16	3	228	2.37	99.56%	0.44%	0.00%	1.00
		17	3	228	2.28	100.00%	-	0.00%	1.00
		18	3	228	2.00	99.12%	-	0.88%	0.98
		19	3	228	1.36	99.12%	-	0.88%	0.99
		20	3	228	1.70	99.56%	-	0.44%	1.00
		21	3	228	1.82	99.56%	-	0.44%	0.99
		22	3	228	1.21	98.68%	0.44%	0.88%	0.98
		23	3	228	1.38	99.12%	0.44%	0.44%	0.99
		24	3	228	1.68	97.37%	0.44%	2.19%	0.96
		25	3	228	1.91	99.12%	-	0.88%	0.98
		26	3	227	2.60	100.00%	-	0.00%	1.00
		27	3	228	2.54	99.56%	-	0.44%	0.99
		28	3	228	1.11	99.56%	-	0.44%	0.99
		29	3	228	0.78	99.12%	-	0.88%	0.98
		30	3	228	1.30	99.12%	0.44%	0.44%	0.99
		31	3	228	2.34	99.12%	0.44%	0.44%	0.99

Table 12
Inter-rater Reliabilities for MA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepant	Kappa
		1	3	202	1.91	100.00%	-	0.00%	1.00
		2	3	202	2.70	99.50%	-	0.50%	0.98
		3	3	202	2.51	99.50%	-	0.50%	0.98
		4	3	202	1.74	98.51%	-	1.49%	0.98
		5	3	202	1.81	99.01%	-	0.99%	0.99
		6	3	202	2.33	99.50%	-	0.50%	0.99
		7	3	202	1.58	99.50%	-	0.50%	0.99
		8	3	202	0.87	99.50%	0.50%	0.00%	1.00
		9	3	202	2.04	98.51%	0.99%	0.50%	0.99
		10	3	202	1.75	100.00%	-	0.00%	1.00
		11	3	202	1.28	99.50%	0.50%	0.00%	1.00
		12	3	202	1.66	99.50%	-	0.50%	0.99
		13	3	202	2.12	98.51%	0.99%	0.50%	0.99
		14	3	202	2.09	98.02%	0.50%	1.49%	0.97
		15	3	202	2.14	97.52%	0.99%	1.49%	0.97
		16	3	202	1.72	98.02%	0.99%	0.99%	0.98
		17	3	202	1.37	100.00%	-	0.00%	1.00
MA	8	18	3	202	1.26	100.00%	-	0.00%	1.00
		19	3	202	1.37	99.01%	-	0.99%	0.99
		20	3	202	1.24	99.01%	0.50%	0.50%	0.99
		21	3	202	1.08	99.50%	-	0.50%	0.99
		22	3	202	1.94	100.00%	-	0.00%	1.00
		23	3	201	1.58	100.00%	-	0.00%	1.00
		24	3	202	1.72	100.00%	-	0.00%	1.00
		25	3	202	2.46	98.02%	0.50%	1.49%	0.95
		26	3	202	2.46	99.01%	0.50%	0.50%	0.98
		27	3	202	2.52	99.01%	0.50%	0.50%	0.98
		28	3	202	2.63	100.00%	-	0.00%	1.00
		29	3	202	0.92	98.51%	0.50%	0.99%	0.98
		30	3	201	1.59	99.50%	0.50%	0.00%	1.00
		31	3	202	2.44	99.01%	0.50%	0.50%	0.98
		32	3	202	1.85	99.01%	0.99%	0.00%	1.00
		33	3	202	2.34	99.01%	0.50%	0.50%	0.99
		34	3	202	1.44	99.50%	0.50%	0.00%	1.00
		35	3	202	2.42	99.01%	0.50%	0.50%	0.98
		36	3	202	2.03	99.01%	0.99%	0.00%	1.00
		37	3	202	1.13	98.51%	0.99%	0.50%	0.99
		38	3	201	2.46	97.01%	1.49%	1.49%	0.95

Table 12
Inter-rater Reliabilities for MA (continued)

Content	Grade	Item			Second Read Rater Reliability				
		Number	Max Score	Case Count	Mean Score	Perfect	Adjacent	Discrepent	Kappa
MA	10	1	3	221	2.37	99.55%	0.45%	0.00%	1.00
		2	3	222	1.11	99.10%	0.45%	0.45%	0.99
		3	3	222	1.88	99.55%	-	0.45%	0.99
		4	3	220	1.49	98.64%	0.45%	0.91%	0.98
		5	3	222	2.22	98.65%	0.90%	0.45%	0.99
		6	3	221	2.29	98.19%	0.90%	0.90%	0.98
		7	3	222	1.05	99.55%	0.45%	0.00%	1.00
		8	3	222	1.71	99.10%	-	0.90%	0.98
		9	3	222	0.81	97.75%	0.45%	1.80%	0.96
		10	3	222	1.70	92.79%	-	7.21%	0.88
		11	3	222	1.82	99.10%	-	0.90%	0.99
		12	3	222	2.34	100.00%	-	0.00%	1.00
		13	3	221	1.69	97.74%	0.45%	1.81%	0.97
		14	3	222	2.01	99.55%	0.45%	0.00%	1.00
		15	3	222	2.10	99.10%	0.90%	0.00%	1.00
		16	3	222	2.50	99.55%	0.45%	0.00%	1.00
		17	3	221	2.42	98.64%	-	1.36%	0.96
		18	3	221	0.84	98.64%	-	1.36%	0.97
		19	3	221	0.70	97.74%	0.45%	1.81%	0.96
		20	3	221	0.72	98.64%	-	1.36%	0.97
		21	3	222	0.93	97.75%	-	2.25%	0.97
		22	3	221	1.53	99.55%	-	0.45%	0.99
		23	3	221	0.92	97.74%	.	2.26%	0.96
		24	3	221	1.55	99.55%	0.45%	0.00%	1.00
		25	3	222	1.26	99.10%	-	0.90%	0.98
		26	3	221	1.37	99.10%	-	0.90%	0.99
		27	3	222	1.99	99.55%	-	0.45%	0.99
		28	3	222	0.55	96.85%	-	3.15%	0.93
		29	3	222	0.87	98.65%	-	1.35%	0.97
		30	3	221	2.18	99.55%	-	0.45%	0.99

Table 13
6 Point CR Item Frequency Distribution

Content Area	Grade	Item Number	% of Students Obtaining Score Level						
			0	1	2	3	4	5	6
RLA	3	12	15.90%	3.59%	5.64%	1.03%	2.56%	17.95%	53.33%
		21	20.00%	4.10%	6.15%	2.05%	2.05%	12.31%	53.33%
	4	12	21.46%	5.94%	8.68%	0.91%	0.46%	11.42%	51.14%
		16	22.83%	4.11%	5.02%	2.28%	1.37%	21.00%	43.38%
		21	15.98%	2.28%	6.85%	0.91%	3.65%	13.70%	56.62%
	5	-	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	-
	7	26	13.79%	3.45%	2.59%	1.72%	2.16%	7.33%	68.97%
	8	10	24.26%	1.98%	3.47%	1.98%	2.48%	19.31%	46.53%
		23	40.10%	2.48%	2.48%	1.49%	0.99%	22.28%	30.20%
		26	66.34%	1.49%	-	-	-	-	32.18%
		29	25.25%	2.48%	2.48%	-	1.49%	19.31%	49.01%
	10	7	20.09%	3.13%	0.89%	-	2.23%	8.48%	65.18%
MA	3	-	-	-	-	-	-	-	
	4	3	20.28%	6.45%	5.99%	2.30%	0.92%	17.51%	46.54%
	5	11	33.33%	1.54%	0.51%	6.15%	1.03%	29.23%	28.21%
		19	28.72%	1.54%	9.74%	0.51%	4.62%	4.62%	50.26%
	6	5	18.60%	2.79%	4.19%	5.12%	2.33%	53.95%	13.02%
		30	24.19%	3.72%	6.05%	0.47%	5.12%	16.74%	43.72%
	7	-	-	-	-	-	-	-	
	8	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	-	

Table 14
RLA Item Statistics

		Polytomous			Dichotomous			
Grade	Item	Max	Item	Item-Test	Item	Max	Item	Item-Test
		Score				Points		
		Points	Difficulty	Correlation		Points	Difficulty	Correlation
3	1	3	0.92	0.60	1	1	0.91	0.61
	2	3	0.82	0.74	2	1	0.74	0.73
	3	3	0.78	0.58	3	1	0.75	0.63
	4	3	0.71	0.60	4	1	0.67	0.66
	5	3	0.58	0.40	5	1	0.55	0.46
	6	3	0.69	0.67	6	1	0.65	0.70
	7	3	0.69	0.57	7	1	0.66	0.65
	8	3	0.70	0.68	8	1	0.66	0.72
	9	3	0.75	0.52	9	1	0.72	0.54
	10	3	0.87	0.68	10	1	0.84	0.71
	11	3	0.70	0.71	11	1	0.66	0.71
	12	6	0.73	0.83	12	2	0.62	0.81
	13	3	0.66	0.70	13	1	0.63	0.72
	14	3	0.69	0.68	14	1	0.65	0.70
	15	3	0.71	0.64	15	1	0.66	0.70
	16	3	0.73	0.61	16	1	0.69	0.65
	17	3	0.74	0.72	17	1	0.71	0.73
	18	3	0.80	0.61	18	1	0.77	0.68
	19	3	0.60	0.56	19	1	0.54	0.59
	20	3	0.85	0.68	20	1	0.81	0.74
	21	6	0.69	0.78	21	2	0.59	0.77
	22	3	0.45	0.52	22	1	0.37	0.55
	23	3	0.91	0.72	23	1	0.87	0.73
	24	3	0.58	0.60	24	1	0.53	0.66
	25	3	0.49	0.59	25	1	0.46	0.64
	26	3	0.75	0.70	26	1	0.72	0.67

Table 14
RLA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
4	1	3	0.86	0.60	1	1	0.82	0.69
	2	3	0.91	0.58	2	1	0.89	0.64
	3	3	0.77	0.64	3	1	0.74	0.70
	4	3	0.71	0.51	4	1	0.64	0.58
	5	3	0.65	0.62	5	1	0.59	0.69
	6	3	0.76	0.75	6	1	0.70	0.77
	7	3	0.89	0.46	7	1	0.84	0.55
	8	3	0.58	0.35	8	1	0.53	0.45
	9	3	0.52	0.46	9	1	0.45	0.52
	10	3	0.53	0.41	10	1	0.45	0.47
	11	3	0.85	0.63	11	1	0.81	0.73
	12	6	0.65	0.71	12	2	0.57	0.73
	13	3	0.90	0.57	13	1	0.84	0.66
	14	3	0.90	0.57	14	1	0.86	0.67
	15	3	0.61	0.45	15	1	0.55	0.53
	16	6	0.65	0.77	16	2	0.54	0.74
	17	3	0.68	0.66	17	1	0.62	0.71
	18	3	0.86	0.54	18	1	0.80	0.65
	19	3	0.87	0.68	19	1	0.82	0.75
	20	3	0.63	0.63	20	1	0.58	0.68
	21	6	0.74	0.69	21	2	0.63	0.75
	22	3	0.64	0.61	22	1	0.58	0.67

Table 14
RLA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
5	1	3	0.66	0.55	1	1	0.63	0.55
	2	3	0.80	0.55	2	1	0.76	0.60
	3	3	0.65	0.61	3	1	0.60	0.64
	4	3	0.76	0.56	4	1	0.73	0.64
	5	3	0.51	0.60	5	1	0.41	0.64
	6	3	0.36	0.45	6	1	0.28	0.55
	7	3	0.53	0.61	7	1	0.45	0.67
	8	3	0.85	0.57	8	1	0.83	0.62
	9	3	0.79	0.58	9	1	0.75	0.64
	10	3	0.73	0.65	10	1	0.62	0.69
	11	3	0.67	0.66	11	1	0.58	0.70
	12	3	0.66	0.70	12	1	0.57	0.74
	13	3	0.84	0.64	13	1	0.80	0.69
	14	3	0.77	0.64	14	1	0.71	0.68
	15	3	0.64	0.64	15	1	0.59	0.68
	16	3	0.69	0.45	16	1	0.65	0.52
	17	3	0.68	0.44	17	1	0.62	0.50
	18	3	0.36	0.62	18	1	0.29	0.60
	19	3	0.63	0.59	19	1	0.59	0.63
	20	3	0.69	0.66	20	1	0.59	0.70
	21	3	0.47	0.40	21	1	0.41	0.50
	22	3	0.62	0.58	22	1	0.59	0.58
	23	3	0.63	0.72	23	1	0.54	0.74
	24	3	0.36	0.29	24	1	0.32	0.34
	25	3	0.39	0.27	25	1	0.36	0.36
	26	3	0.61	0.61	26	1	0.58	0.63

Table 14
RLA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
6	1	3	0.86	0.59	1	1	0.79	0.69
	2	3	0.74	0.65	2	1	0.69	0.67
	3	3	0.61	0.48	3	1	0.53	0.57
	4	3	0.90	0.67	4	1	0.84	0.74
	5	3	0.89	0.55	5	1	0.86	0.61
	6	3	0.68	0.56	6	1	0.63	0.60
	7	3	0.85	0.52	7	1	0.80	0.67
	8	3	0.79	0.65	8	1	0.71	0.72
	9	3	0.71	0.53	9	1	0.59	0.56
	10	3	0.86	0.62	10	1	0.78	0.72
	11	3	0.87	0.65	11	1	0.80	0.73
	12	3	0.80	0.67	12	1	0.72	0.74
	13	3	0.54	0.54	13	1	0.49	0.56
	14	3	0.60	0.56	14	1	0.54	0.62
	15	3	0.90	0.62	15	1	0.86	0.72
	16	3	0.85	0.61	16	1	0.82	0.67
	17	3	0.89	0.65	17	1	0.85	0.75
	18	3	0.77	0.69	18	1	0.71	0.74
	19	3	0.69	0.58	19	1	0.63	0.63
	20	3	0.72	0.58	20	1	0.67	0.64
	21	3	0.95	0.57	21	1	0.91	0.64
	22	3	0.85	0.59	22	1	0.80	0.70
	23	3	0.64	0.55	23	1	0.57	0.61
	24	3	0.70	0.68	24	1	0.63	0.72
	25	3	0.50	0.56	25	1	0.45	0.62
	26	3	0.71	0.54	26	1	0.64	0.65
	27	3	0.75	0.66	27	1	0.69	0.72
	28	3	0.74	0.57	28	1	0.69	0.69
	29	3	0.70	0.50	29	1	0.64	0.61

Table 14
RLA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
7	1	3	0.90	0.60	1	1	0.85	0.70
	2	3	0.81	0.69	2	1	0.77	0.71
	3	3	0.78	0.65	3	1	0.75	0.64
	4	3	0.86	0.62	4	1	0.81	0.69
	5	3	0.88	0.52	5	1	0.86	0.54
	6	3	0.65	0.52	6	1	0.60	0.57
	7	3	0.92	0.54	7	1	0.89	0.61
	8	3	0.82	0.65	8	1	0.80	0.70
	9	3	0.82	0.59	9	1	0.78	0.66
	10	3	0.79	0.57	10	1	0.75	0.65
	11	3	0.81	0.54	11	1	0.78	0.58
	12	3	0.76	0.56	12	1	0.72	0.62
	13	3	0.79	0.75	13	1	0.72	0.77
	14	3	0.83	0.67	14	1	0.77	0.72
	15	3	0.83	0.64	15	1	0.81	0.70
	16	3	0.63	0.67	16	1	0.58	0.68
	17	3	0.86	0.58	17	1	0.82	0.64
	18	3	0.61	0.62	18	1	0.56	0.61
	19	3	0.71	0.43	19	1	0.64	0.52
	20	3	0.79	0.58	20	1	0.72	0.68
	21	3	0.84	0.65	21	1	0.78	0.72
	22	3	0.78	0.68	22	1	0.72	0.75
	23	3	0.80	0.75	23	1	0.72	0.77
	24	3	0.70	0.61	24	1	0.64	0.70
	25	3	0.70	0.53	25	1	0.64	0.60
	26	6	0.79	0.63	26	2	0.73	0.69
	27	3	0.70	0.70	27	1	0.68	0.73
	28	3	0.78	0.71	28	1	0.72	0.74
	29	3	0.73	0.61	29	1	0.69	0.68
	30	3	0.65	0.57	30	1	0.60	0.64
	31	3	0.47	0.39	31	1	0.41	0.46
	32	3	0.50	0.50	32	1	0.42	0.53
	33	3	0.44	0.55	33	1	0.37	0.57
	34	3	0.49	0.57	34	1	0.42	0.59
	35	3	0.73	0.49	35	1	0.66	0.56
	36	3	0.74	0.58	36	1	0.69	0.66
	37	3	0.44	0.59	37	1	0.41	0.56

Table 14
RLA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
8	1	3	0.90	0.48	1	1	0.89	0.51
	2	3	0.67	0.58	2	1	0.60	0.62
	3	3	0.80	0.60	3	1	0.75	0.68
	4	3	0.51	0.39	4	1	0.44	0.40
	5	3	0.92	0.53	5	1	0.89	0.59
	6	3	0.79	0.46	6	1	0.76	0.55
	7	3	0.58	0.63	7	1	0.52	0.65
	8	3	0.86	0.59	8	1	0.83	0.66
	9	3	0.86	0.67	9	1	0.82	0.71
	10	6	0.67	0.81	10	2	0.56	0.79
	11	3	0.83	0.61	11	1	0.78	0.70
	12	3	0.68	0.69	12	1	0.64	0.72
	13	3	0.89	0.66	13	1	0.85	0.68
	14	3	0.40	0.29	14	1	0.36	0.35
	15	3	0.31	0.40	15	1	0.26	0.42
	16	3	0.38	0.41	16	1	0.33	0.45
	17	3	0.49	0.52	17	1	0.45	0.54
	18	3	0.75	0.55	18	1	0.68	0.59
	19	3	0.49	0.51	19	1	0.43	0.53
	20	3	0.47	0.57	20	1	0.42	0.60
	21	3	0.60	0.47	21	1	0.55	0.54
	22	3	0.84	0.59	22	1	0.80	0.64
	23	6	0.51	0.73	23	2	0.41	0.69
	24	3	0.91	0.58	24	1	0.87	0.65
	25	3	0.82	0.51	25	1	0.79	0.60
	26	6	0.32	0.52	26	2	0.32	0.52
	27	3	0.72	0.59	27	1	0.67	0.63
	28	3	0.46	0.59	28	1	0.42	0.58
	29	6	0.67	0.71	29	2	0.59	0.71
	30	3	0.27	0.46	30	1	0.25	0.48

Table 14
RLA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
10	1	3	0.88	0.78	1	1	0.84	0.78
	2	3	0.82	0.77	2	1	0.79	0.80
	3	3	0.67	0.67	3	1	0.63	0.71
	4	3	0.82	0.74	4	1	0.79	0.77
	5	3	0.59	0.69	5	1	0.54	0.69
	6	3	0.79	0.74	6	1	0.75	0.75
	7	6	0.75	0.76	7	2	0.69	0.78
	8	3	0.81	0.71	8	1	0.78	0.74
	9	3	0.70	0.74	9	1	0.67	0.77
	10	3	0.73	0.71	10	1	0.70	0.73
	11	3	0.66	0.57	11	1	0.60	0.62
	12	3	0.69	0.76	12	1	0.65	0.79
	13	3	0.83	0.72	13	1	0.81	0.77
	14	3	0.71	0.80	14	1	0.68	0.81
	15	3	0.70	0.80	15	1	0.68	0.82
	16	3	0.68	0.75	16	1	0.65	0.78
	17	3	0.64	0.75	17	1	0.61	0.78
	18	3	0.61	0.55	18	1	0.57	0.62
	19	3	0.68	0.72	19	1	0.64	0.76
	20	3	0.48	0.44	20	1	0.44	0.50
	21	3	0.77	0.77	21	1	0.74	0.78
	22	3	0.61	0.50	22	1	0.58	0.57
	23	3	0.73	0.67	23	1	0.69	0.71
	24	3	0.67	0.61	24	1	0.62	0.65
	25	3	0.69	0.73	25	1	0.66	0.77
	26	3	0.55	0.66	26	1	0.50	0.61

Table 15
MA Item Statistics

		Polytomous			Dichotomous			
Grade	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
3	1	3	0.87	0.67	1	1	0.83	0.71
	2	3	0.64	0.67	2	1	0.58	0.68
	3	3	0.63	0.65	3	1	0.58	0.68
	4	3	0.64	0.51	4	1	0.59	0.56
	5	3	0.77	0.55	5	1	0.73	0.61
	6	3	0.72	0.59	6	1	0.68	0.66
	7	3	0.63	0.50	7	1	0.60	0.57
	8	3	0.24	0.27	8	1	0.20	0.34
	9	3	0.80	0.72	9	1	0.72	0.71
	10	3	0.78	0.67	10	1	0.72	0.71
	11	3	0.71	0.59	11	1	0.68	0.61
	12	3	0.84	0.69	12	1	0.81	0.71
	13	3	0.69	0.52	13	1	0.65	0.60
	14	3	0.57	0.52	14	1	0.51	0.57
	15	3	0.74	0.58	15	1	0.69	0.61
	16	3	0.81	0.76	16	1	0.77	0.79
	17	3	0.81	0.70	17	1	0.78	0.75
	18	3	0.74	0.66	18	1	0.68	0.70
	19	3	0.41	0.36	19	1	0.36	0.39
	20	3	0.76	0.70	20	1	0.70	0.74
	21	3	0.85	0.64	21	1	0.82	0.68
	22	3	0.36	0.34	22	1	0.31	0.43
	23	3	0.68	0.52	23	1	0.64	0.59
	24	3	0.69	0.61	24	1	0.62	0.65
	25	3	0.67	0.55	25	1	0.62	0.60
	26	3	0.76	0.61	26	1	0.71	0.68
	27	3	0.78	0.60	27	1	0.74	0.68
	28	3	0.79	0.66	28	1	0.74	0.75
	29	3	0.39	0.42	29	1	0.36	0.48
	30	3	0.70	0.69	30	1	0.68	0.73
	31	3	0.40	0.52	31	1	0.38	0.54
	32	3	0.85	0.70	32	1	0.80	0.74
	33	3	0.60	0.54	33	1	0.55	0.61

Table 15
MA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
4	1	3	0.87	0.61	1	1	0.83	0.71
	2	3	0.81	0.61	2	1	0.75	0.69
	3	6	0.66	0.74	3	2	0.55	0.74
	4	3	0.64	0.59	4	1	0.56	0.61
	5	3	0.78	0.57	5	1	0.74	0.65
	6	3	0.82	0.58	6	1	0.76	0.69
	7	3	0.69	0.50	7	1	0.62	0.59
	8	3	0.62	0.45	8	1	0.57	0.56
	9	3	0.71	0.60	9	1	0.65	0.67
	10	3	0.61	0.58	10	1	0.53	0.64
	11	3	0.74	0.61	11	1	0.69	0.69
	12	3	0.66	0.52	12	1	0.62	0.58
	13	3	0.68	0.71	13	1	0.61	0.74
	14	3	0.84	0.66	14	1	0.78	0.71
	15	3	0.79	0.76	15	1	0.75	0.80
	16	3	0.74	0.73	16	1	0.71	0.77
	17	3	0.79	0.75	17	1	0.76	0.79
	18	3	0.76	0.72	18	1	0.73	0.75
	19	3	0.63	0.59	19	1	0.57	0.66
	20	3	0.49	0.17	20	1	0.43	0.27
	21	3	0.79	0.69	21	1	0.74	0.76
	22	3	0.62	0.72	22	1	0.58	0.73
	23	3	0.65	0.61	23	1	0.58	0.67
	24	3	0.63	0.56	24	1	0.57	0.65
	25	3	0.85	0.66	25	1	0.81	0.74
	26	3	0.81	0.68	26	1	0.76	0.75
	27	3	0.26	0.34	27	1	0.20	0.41
	28	3	0.46	0.47	28	1	0.38	0.55
	29	3	0.64	0.67	29	1	0.57	0.70
	30	3	0.63	0.71	30	1	0.55	0.72
	31	3	0.59	0.68	31	1	0.51	0.69

Table 15
MA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
5	1	3	0.51	0.66	1	1	0.44	0.69
	2	3	0.66	0.47	2	1	0.59	0.60
	3	3	0.64	0.48	3	1	0.56	0.54
	4	3	0.78	0.51	4	1	0.73	0.57
	5	3	0.66	0.52	5	1	0.63	0.59
	6	3	0.47	0.62	6	1	0.38	0.64
	7	3	0.57	0.56	7	1	0.49	0.62
	8	3	0.61	0.57	8	1	0.53	0.63
	9	3	0.86	0.54	9	1	0.83	0.60
	10	3	0.73	0.77	10	1	0.66	0.77
	11	6	0.57	0.74	11	2	0.43	0.72
	12	3	0.77	0.50	12	1	0.71	0.56
	13	3	0.72	0.70	13	1	0.67	0.72
	14	3	0.55	0.60	14	1	0.49	0.64
	15	3	0.68	0.56	15	1	0.62	0.61
	16	3	0.78	0.67	16	1	0.73	0.71
	17	3	0.74	0.71	17	1	0.70	0.73
	18	3	0.75	0.59	18	1	0.72	0.66
	19	6	0.61	0.63	19	2	0.53	0.68
	20	3	0.78	0.55	20	1	0.74	0.60
	21	3	0.58	0.48	21	1	0.51	0.54
	22	3	0.52	0.43	22	1	0.47	0.50
	23	3	0.78	0.64	23	1	0.73	0.68
	24	3	0.69	0.77	24	1	0.65	0.81
	25	3	0.73	0.73	25	1	0.70	0.76
	26	3	0.76	0.68	26	1	0.72	0.74
	27	3	0.46	0.53	27	1	0.41	0.58
	28	3	0.62	0.57	28	1	0.58	0.63
	29	3	0.64	0.50	29	1	0.59	0.59
	30	3	0.68	0.58	30	1	0.63	0.64
	31	3	0.66	0.55	31	1	0.62	0.62
	32	3	0.62	0.56	32	1	0.56	0.58
	33	3	0.70	0.69	33	1	0.66	0.73
	34	3	0.51	0.63	34	1	0.43	0.66
	35	3	0.69	0.60	35	1	0.61	0.62
	36	3	0.59	0.52	36	1	0.55	0.59

Table 15
MA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
6	1	3	0.82	0.49	1	1	0.79	0.56
	2	3	0.87	0.57	2	1	0.84	0.67
	3	3	0.45	0.38	3	1	0.40	0.45
	4	3	0.58	0.63	4	1	0.54	0.65
	5	6	0.64	0.51	5	2	0.40	0.56
	6	3	0.78	0.62	6	1	0.74	0.69
	7	3	0.56	0.28	7	1	0.52	0.36
	8	3	0.77	0.72	8	1	0.73	0.79
	9	3	0.72	0.71	9	1	0.69	0.75
	10	3	0.78	0.70	10	1	0.73	0.77
	11	3	0.73	0.54	11	1	0.70	0.63
	13	3	0.65	0.57	13	1	0.57	0.63
	14	3	0.72	0.59	14	1	0.67	0.66
	15	3	0.71	0.58	15	1	0.65	0.67
	16	3	0.65	0.67	16	1	0.57	0.72
	17	3	0.77	0.65	17	1	0.70	0.73
	18	3	0.69	0.55	18	1	0.64	0.63
	19	3	0.65	0.66	19	1	0.61	0.73
	20	3	0.44	0.38	20	1	0.34	0.47
	21	3	0.62	0.48	21	1	0.51	0.57
	22	3	0.47	0.56	22	1	0.40	0.60
	23	3	0.54	0.30	23	1	0.45	0.43
	24	3	0.53	0.37	24	1	0.47	0.47
	25	3	0.80	0.51	25	1	0.75	0.63
	26	3	0.77	0.60	26	1	0.72	0.68
	27	3	0.74	0.59	27	1	0.70	0.69
	28	3	0.72	0.72	28	1	0.68	0.78
	30	6	0.64	0.50	30	2	0.52	0.53
	31	3	0.61	0.23	31	1	0.55	0.35
	32	3	0.45	0.35	32	1	0.40	0.42

Table 15
MA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
7	1	3	0.87	0.56	1	1	0.81	0.65
	2	3	0.71	0.40	2	1	0.66	0.47
	3	3	0.62	0.56	3	1	0.59	0.62
	4	3	0.85	0.58	4	1	0.81	0.68
	5	3	0.68	0.51	5	1	0.65	0.59
	6	3	0.75	0.44	6	1	0.73	0.52
	7	3	0.86	0.60	7	1	0.81	0.68
	8	3	0.86	0.59	8	1	0.81	0.69
	9	3	0.57	0.59	9	1	0.50	0.62
	10	3	0.42	0.39	10	1	0.37	0.42
	11	3	0.86	0.53	11	1	0.84	0.58
	12	3	0.60	0.60	12	1	0.52	0.63
	13	3	0.50	0.44	13	1	0.45	0.46
	14	3	0.54	0.52	14	1	0.50	0.53
	15	3	0.82	0.59	15	1	0.78	0.64
	16	3	0.79	0.56	16	1	0.75	0.62
	17	3	0.76	0.58	17	1	0.71	0.65
	18	3	0.68	0.63	18	1	0.63	0.66
	19	3	0.45	0.59	19	1	0.39	0.59
	20	3	0.57	0.48	20	1	0.47	0.53
	21	3	0.61	0.49	21	1	0.50	0.57
	22	3	0.39	0.43	22	1	0.34	0.47
	23	3	0.44	0.50	23	1	0.39	0.52
	24	3	0.56	0.37	24	1	0.49	0.44
	25	3	0.63	0.61	25	1	0.56	0.63
	26	3	0.86	0.59	26	1	0.83	0.65
	27	3	0.85	0.51	27	1	0.80	0.59
	28	3	0.37	0.16	28	1	0.33	0.16
	29	3	0.26	0.10	29	1	0.22	0.15
	30	3	0.42	0.35	30	1	0.34	0.38
	31	3	0.77	0.59	31	1	0.73	0.65

Table 15
MA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
8	1	3	0.63	0.38	1	1	0.59	0.42
	2	3	0.90	0.51	2	1	0.88	0.57
	3	3	0.84	0.46	3	1	0.82	0.52
	4	3	0.57	0.33	4	1	0.55	0.34
	5	3	0.61	0.49	5	1	0.54	0.50
	6	3	0.78	0.63	6	1	0.72	0.68
	7	3	0.52	0.60	7	1	0.46	0.61
	8	3	0.29	0.17	8	1	0.23	0.22
	9	3	0.68	0.61	9	1	0.64	0.65
	10	3	0.58	0.44	10	1	0.55	0.47
	11	3	0.42	0.51	11	1	0.36	0.50
	12	3	0.55	0.31	12	1	0.50	0.34
	13	3	0.70	0.66	13	1	0.65	0.72
	14	3	0.68	0.65	14	1	0.64	0.70
	15	3	0.71	0.54	15	1	0.67	0.59
	16	3	0.57	0.37	16	1	0.52	0.41
	17	3	0.46	0.66	17	1	0.39	0.65
	18	3	0.42	0.65	18	1	0.37	0.65
	19	3	0.46	0.67	19	1	0.40	0.66
	20	3	0.41	0.65	20	1	0.36	0.64
	21	3	0.36	0.34	21	1	0.28	0.36
	22	3	0.65	0.48	22	1	0.59	0.49
	23	3	0.53	0.51	23	1	0.48	0.52
	24	3	0.57	0.42	24	1	0.51	0.48
	25	3	0.82	0.64	25	1	0.81	0.68
	26	3	0.82	0.67	26	1	0.80	0.71
	27	3	0.84	0.58	27	1	0.82	0.64
	28	3	0.88	0.61	28	1	0.85	0.64
	29	3	0.30	0.56	29	1	0.21	0.49
	30	3	0.53	0.52	30	1	0.47	0.54
	31	3	0.81	0.59	31	1	0.80	0.60
	32	3	0.62	0.56	32	1	0.57	0.55
	33	3	0.78	0.56	33	1	0.73	0.61
	34	3	0.48	0.21	34	1	0.43	0.24
	35	3	0.80	0.55	35	1	0.78	0.61
	36	3	0.67	0.45	36	1	0.63	0.52
	37	3	0.38	0.24	37	1	0.33	0.32
	38	3	0.81	0.61	38	1	0.76	0.66

Table 15
MA Item Statistics (continued)

Grade	Polytomous				Dichotomous			
	Item	Max Score Points	Item Difficulty	Item-Test Correlation	Item	Max Score Points	Item Difficulty	Item-Test Correlation
10	1	3	0.79	0.65	1	1	0.75	0.68
	2	3	0.36	0.39	2	1	0.30	0.46
	3	3	0.63	0.64	3	1	0.59	0.68
	4	3	0.49	0.59	4	1	0.44	0.62
	5	3	0.74	0.54	5	1	0.70	0.60
	6	3	0.76	0.59	6	1	0.72	0.67
	7	3	0.34	0.45	7	1	0.28	0.46
	8	3	0.57	0.70	8	1	0.53	0.72
	9	3	0.27	0.53	9	1	0.23	0.53
	10	3	0.58	0.62	10	1	0.56	0.65
	11	3	0.61	0.68	11	1	0.57	0.70
	12	3	0.78	0.63	12	1	0.73	0.70
	13	3	0.54	0.54	13	1	0.48	0.59
	14	3	0.67	0.73	14	1	0.63	0.77
	15	3	0.70	0.60	15	1	0.65	0.68
	16	3	0.83	0.70	16	1	0.79	0.76
	17	3	0.80	0.66	17	1	0.78	0.70
	18	3	0.28	0.48	18	1	0.26	0.47
	19	3	0.22	0.48	19	1	0.20	0.49
	20	3	0.24	0.50	20	1	0.21	0.50
	21	3	0.31	0.55	21	1	0.26	0.56
	22	3	0.51	0.64	22	1	0.47	0.67
	23	3	0.30	0.31	23	1	0.26	0.35
	24	3	0.52	0.73	24	1	0.48	0.73
	25	3	0.42	0.47	25	1	0.35	0.50
	26	3	0.46	0.47	26	1	0.39	0.53
	27	3	0.66	0.52	27	1	0.62	0.58
	28	3	0.17	0.46	28	1	0.13	0.45
	29	3	0.29	0.46	29	1	0.26	0.43
	30	3	0.72	0.71	30	1	0.69	0.74

Table 16
Summary of P-Values and Point Biseriails by Content and Grade

Content	Grade	P-value			Point Biserial		
		High	Mean	Low	High	Mean	Low
RLA	3	0.92	0.72	0.45	0.83	0.64	0.40
	4	0.91	0.74	0.52	0.77	0.59	0.35
	5	0.85	0.63	0.36	0.72	0.56	0.27
	6	0.95	0.76	0.50	0.69	0.59	0.48
	7	0.92	0.73	0.44	0.75	0.60	0.39
	8	0.92	0.65	0.27	0.81	0.56	0.29
	10	0.88	0.70	0.48	0.80	0.70	0.44
MA	3	0.87	0.68	0.24	0.76	0.59	0.27
	4	0.87	0.69	0.26	0.76	0.61	0.17
	5	0.86	0.66	0.46	0.77	0.59	0.43
	6	0.87	0.66	0.44	0.72	0.53	0.23
	7	0.87	0.64	0.26	0.63	0.50	0.10
	8	0.90	0.62	0.29	0.67	0.51	0.17
	10	0.83	0.52	0.17	0.73	0.57	0.31

Table 17
RLA P-Value and Point Biserial by Standard

Content	Grade	Standard	Standard Description	P-value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
RLA	3	1.2	Reading	0.74	0.69	0.60	0.06	0.71	0.63	0.56	0.06
		2.2	Writing	0.78	0.71	0.59	0.07	0.60	0.53	0.40	0.08
		2.1	Writing	0.73	0.71	0.69	0.03	0.83	0.80	0.78	0.03
		3.1	Listening/Speaking/Viewing	0.91	0.71	0.49	0.15	0.72	0.66	0.59	0.06
		1.1	Reading	0.92	0.75	0.46	0.14	0.74	0.66	0.52	0.06
	4	2.2	Writing	0.59	0.59	0.59	-	0.35	0.35	0.35	-
		2.1	Writing	0.74	0.68	0.65	0.05	0.77	0.72	0.69	0.04
		1.1	Reading	0.90	0.74	0.53	0.14	0.75	0.59	0.41	0.11
		3.1	Listening/Speaking/Viewing	0.91	0.78	0.64	0.13	0.63	0.56	0.46	0.06
	5	1.1	Reading	0.80	0.55	0.36	0.17	0.64	0.46	0.27	0.16
		1.3	Reading	0.72	0.57	0.36	0.16	0.70	0.59	0.45	0.10
		1.2	Reading	0.73	0.63	0.53	0.10	0.72	0.66	0.61	0.06
		3.1	Listening/Speaking/Viewing	0.79	0.68	0.61	0.10	0.61	0.59	0.58	0.02
		2.1	Writing	0.89	0.73	0.63	0.14	0.59	0.53	0.44	0.08
		2.2	Writing	0.85	0.76	0.66	0.07	0.64	0.60	0.55	0.05
	6	3.1	Listening/Speaking/Viewing	0.95	0.70	0.54	0.16	0.65	0.57	0.54	0.04
		2.1	Writing	0.89	0.73	0.61	0.14	0.65	0.55	0.48	0.09
		2.2	Writing	0.90	0.74	0.50	0.11	0.68	0.59	0.53	0.05
		1.1	Reading	0.90	0.81	0.70	0.09	0.69	0.60	0.52	0.07
		1.2	Reading	0.87	0.84	0.79	0.04	0.67	0.64	0.59	0.03
7	3.1	Listening/Speaking/Viewing	0.88	0.69	0.44	0.14	0.71	0.62	0.52	0.07	
	1.2	Reading	0.86	0.69	0.44	0.16	0.75	0.60	0.39	0.10	
	2.1	Writing	0.79	0.75	0.73	0.03	0.63	0.56	0.49	0.07	
	2.2	Writing	0.92	0.79	0.65	0.11	0.65	0.54	0.43	0.08	
	1.1	Reading	0.90	0.81	0.66	0.07	0.69	0.61	0.54	0.05	
8	3.1	Listening/Speaking/Viewing	0.86	0.48	0.27	0.23	0.67	0.53	0.39	0.11	
	2.1	Writing	0.75	0.52	0.31	0.14	0.81	0.55	0.29	0.16	
	1.2	Reading	0.91	0.77	0.59	0.11	0.69	0.58	0.46	0.07	
	1.1	Reading	0.92	0.85	0.72	0.09	0.59	0.55	0.48	0.05	
10	2.1	Writing	0.75	0.63	0.48	0.09	0.76	0.64	0.44	0.12	
	1.3	Reading	0.70	0.70	0.70	-	0.73	0.73	0.73	-	
	1.1	Reading	0.82	0.72	0.62	0.07	0.80	0.72	0.50	0.09	
	3.1	Listening/Speaking/Viewing	0.88	0.73	0.55	0.15	0.78	0.69	0.61	0.07	
	1.2	Reading	0.83	0.75	0.67	0.06	0.77	0.71	0.57	0.07	

Table 18
MA P-Value and Point Biserial by Standard

Content	Grade	Standard	Standard Description	P-value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
MA	3	4.2	Measurement	0.64	0.41	0.24	0.20	0.50	0.37	0.27	0.12
		1.2	Numbers and Operations	0.78	0.67	0.42	0.14	0.70	0.58	0.36	0.14
		3.1	Geometry	0.86	0.67	0.39	0.17	0.69	0.57	0.42	0.08
		2.1	Algebra	0.80	0.69	0.57	0.10	0.72	0.60	0.51	0.10
		4.1	Measurement	0.76	0.72	0.69	0.03	0.61	0.57	0.52	0.04
		5.1	Data Analysis and Probability	0.85	0.73	0.60	0.13	0.70	0.61	0.54	0.08
		1.1	Numbers and Operations	0.87	0.78	0.64	0.09	0.76	0.69	0.65	0.04
	4	4.3	Measurement	0.49	0.37	0.26	0.16	0.34	0.26	0.17	0.12
		4.2	Measurement	0.72	0.60	0.47	0.18	0.60	0.54	0.47	0.09
		5.1	Data Analysis and Probability	0.69	0.64	0.59	0.04	0.71	0.62	0.50	0.10
		1.2	Numbers and Operations	0.68	0.66	0.64	0.02	0.71	0.63	0.56	0.07
		2.1	Algebra	0.81	0.67	0.62	0.09	0.67	0.58	0.45	0.09
		3.1	Geometry	0.80	0.71	0.62	0.08	0.74	0.64	0.52	0.09
		1.1	Numbers and Operations	0.89	0.79	0.63	0.08	0.76	0.68	0.59	0.06
	5	4.1	Measurement	0.82	0.82	0.82	-	0.58	0.58	0.58	-
		1.2	Numbers and Operations	0.61	0.57	0.53	0.03	0.60	0.53	0.43	0.07
		2.1	Algebra	0.72	0.62	0.51	0.08	0.74	0.61	0.47	0.11
		4.2	Measurement	0.78	0.63	0.46	0.13	0.64	0.56	0.50	0.06
		5.1	Data Analysis and Probability	0.77	0.63	0.47	0.11	0.66	0.58	0.50	0.05
		4.1	Measurement	0.70	0.64	0.60	0.05	0.69	0.59	0.52	0.09
		3.1	Geometry	0.79	0.74	0.68	0.05	0.77	0.60	0.51	0.10
	6	1.1	Numbers and Operations	0.86	0.77	0.70	0.05	0.77	0.67	0.54	0.09
		4.2	Measurement	0.47	0.47	0.47	-	0.56	0.56	0.56	-
		3.1	Geometry	0.81	0.56	0.44	0.15	0.51	0.40	0.28	0.09
		1.1	Numbers and Operations	0.61	0.56	0.53	0.04	0.37	0.30	0.23	0.07
		4.1	Measurement	0.64	0.64	0.64	-	0.50	0.50	0.50	-
		1.2	Numbers and Operations	0.77	0.69	0.58	0.07	0.65	0.60	0.55	0.04
		5.1	Data Analysis and Probability	0.83	0.71	0.62	0.09	0.67	0.57	0.48	0.08
7	2.1	Algebra	0.78	0.74	0.65	0.04	0.72	0.65	0.54	0.07	
	4.3	Measurement	0.88	0.88	0.88	-	0.57	0.57	0.57	-	
	1.1	Numbers and Operations	0.54	0.42	0.26	0.13	0.52	0.31	0.10	0.20	
	4.2	Measurement	0.57	0.57	0.57	-	0.59	0.59	0.59	-	
	1.2	Numbers and Operations	0.76	0.62	0.43	0.18	0.63	0.52	0.35	0.15	
	3.1	Geometry	0.87	0.63	0.40	0.22	0.60	0.50	0.37	0.10	
	2.2	Algebra	0.87	0.66	0.42	0.19	0.59	0.52	0.39	0.09	
8	4.3	Measurement	0.71	0.67	0.63	0.06	0.56	0.48	0.40	0.12	
	2.1	Algebra	0.83	0.71	0.60	0.11	0.61	0.59	0.56	0.02	
	5.1	Data Analysis and Probability	0.87	0.73	0.57	0.16	0.59	0.53	0.48	0.05	
	4.1	Measurement	0.87	0.86	0.85	0.01	0.53	0.52	0.51	0.01	
	2.1	Algebra	0.68	0.48	0.41	0.10	0.67	0.62	0.51	0.06	
	5.1	Data Analysis and Probability	0.63	0.52	0.30	0.11	0.60	0.45	0.31	0.13	
	4.1	Measurement	0.90	0.55	0.29	0.24	0.56	0.36	0.17	0.16	
8	2.2	Algebra	0.71	0.64	0.53	0.07	0.66	0.54	0.42	0.10	
	1.2	Numbers and Operations	0.78	0.69	0.61	0.12	0.63	0.56	0.49	0.10	
	3.1	Geometry	0.81	0.72	0.57	0.11	0.61	0.51	0.37	0.09	
	1.1	Numbers and Operations	0.88	0.84	0.82	0.03	0.67	0.63	0.58	0.04	

Table 18
MA P-Value and Point Biserial by Standard (continued)

Content	Grade	Standard	Standard Description	P-value				Point Biserial			
				High	Mean	Low	SD	High	Mean	Low	SD
MA	10	2.2	Algebra	0.61	0.30	0.17	0.17	0.68	0.52	0.46	0.09
		1.1	Numbers and Operations	0.58	0.39	0.27	0.12	0.73	0.52	0.31	0.13
		2.1	Algebra	0.46	0.44	0.42	0.03	0.47	0.47	0.47	0.00
		4.1	Measurement	0.75	0.65	0.49	0.11	0.73	0.61	0.54	0.08
		3.1	Geometry	0.84	0.71	0.55	0.11	0.71	0.62	0.52	0.09
		5.1	Data Analysis and Probability	0.81	0.72	0.58	0.11	0.70	0.64	0.59	0.04

Table 19
RLA Cut Scores and Associated Impact Data

Content	Grade	N	Cut Scores			Associated Impact Data				
			Partial Mastery	Mastery	Above Mastery	Novice	Partial Mastery	Mastery	Above Mastery	Mastery & Above
RLA	3	195	23	59	75	8.73%	23.08%	37.96%	30.27%	68.23%
	4	219	23	54	69	5.96%	28.33%	40.65%	25.12%	65.77%
	5	197	23	44	62	7.64%	27.43%	31.48%	33.50%	64.98%
	6	214	29	66	76	6.08%	27.56%	28.51%	37.86%	66.37%
	7	232	29	76	98	3.87%	28.83%	25.85%	41.37%	67.22%
	8	202	27	57	78	6.96%	26.34%	29.25%	37.68%	66.93%
	10	224	22	55	75	9.84%	23.24%	35.28%	31.70%	66.98%

Table 20
MA Cut Scores and Associated Impact Data

Content	Grade	N	Cut Scores			Associated Impact Data				
			Partial Mastery	Mastery	Above Mastery	Novice	Partial Mastery	Mastery	Above Mastery	Mastery & Above
MA	3	192	11	63	83	3.64%	29.12%	38.52%	28.64%	67.16%
	4	217	22	60	82	3.68%	29.44%	35.91%	30.86%	66.77%
	5	195	24	62	84	4.09%	28.74%	22.06%	45.13%	67.19%
	6	215	24	59	78	4.22%	30.78%	35.85%	29.33%	65.18%
	7	232	27	56	73	5.16%	30.56%	37.49%	26.72%	64.21%
	8	202	31	61	82	5.96%	29.79%	26.30%	38.16%	64.46%
	10	223	19	42	72	9.88%	29.16%	47.12%	13.91%	61.03%

Table 21
Prompt Type Frequency Distributions for RLA and MA

Content	Prompt Type	Frequency	%
RLA	No Response	1897	4.50
	Full	3460	8.21
	Independent	34182	81.14
	Partial	2588	6.14
	Total	42127	100.00
MA	No Response	2285	4.69
	Full	4061	8.33
	Independent	39123	80.28
	Partial	3266	6.70
	Total	48735	100.00

Table 22
Prompt Type Reliabilities for RLA and MA

Content	Grade	Prompt Type Reliability
RLA	3	0.98
	4	0.97
	5	0.97
	6	0.98
	7	0.98
	8	0.97
	10	0.99
MA	3	0.99
	4	0.98
	5	0.99
	6	0.98
	7	0.97
	10	0.99

Table 23
Raw Score Frequency Distributions for RLA

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	3	1.54	3	1.54
		1	2	1.03	5	2.56
		5	1	0.51	6	3.08
		6	2	1.03	8	4.10
		11	1	0.51	9	4.62
		12	1	0.51	10	5.13
		16	2	1.03	12	6.15
		18	2	1.03	14	7.18
		21	3	1.54	17	8.72
		23	2	1.03	19	9.74
		24	1	0.51	20	10.26
		25	1	0.51	21	10.77
		27	4	2.05	25	12.82
		28	1	0.51	26	13.33
		29	2	1.03	28	14.36
		30*	2	1.03	30	15.38
		32	3	1.54	33	16.92
		36	1	0.51	34	17.44
		39	1	0.51	35	17.95
		41	1	0.51	36	18.46
		42	3	1.54	39	20.00
		44	4	2.05	43	22.05
		45	2	1.03	45	23.08
		48	2	1.03	47	24.10
		49	1	0.51	48	24.62
		50	4	2.05	52	26.67
		51	2	1.03	54	27.69
RLA	3	55	3	1.54	57	29.23
		56	1	0.51	58	29.74
		57	3	1.54	61	31.28
		58	1	0.51	62	31.79
		59	3	1.54	65	33.33
		60	6	3.08	71	36.41
		61	2	1.03	73	37.44
		62	4	2.05	77	39.49
		63	3	1.54	80	41.03
		64	4	2.05	84	43.08
		65	4	2.05	88	45.13
		66	4	2.05	92	47.18
		67	3	1.54	95	48.72
		68	3	1.54	98	50.26
		69	11	5.64	109	55.90
		70	3	1.54	112	57.44
		71	4	2.05	116	59.49
		72	10	5.13	126	64.62
		73	4	2.05	130	66.67
		74	6	3.08	136	69.74
		75	10	5.13	146	74.87
		76	1	0.51	147	75.38
		77	2	1.03	149	76.41
		78	11	5.64	160	82.05
		79	3	1.54	163	83.59
		80	3	1.54	166	85.13
		81	17	8.72	183	93.85
		83	2	1.03	185	94.87
		84	10	5.13	195	100.00
		Total Percent at or above Mastery		68.23		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	1	0.46	1	0.46
		3	1	0.46	2	0.91
		9	1	0.46	3	1.37
		15	1	0.46	4	1.83
		18	1	0.46	5	2.28
		19	3	1.37	8	3.65
		20	1	0.46	9	4.11
		21	1	0.46	10	4.57
		22	3	1.37	13	5.94
		23	2	0.91	15	6.85
		24	2	0.91	17	7.76
		25	4	1.83	21	9.59
		26	3	1.37	24	10.96
		27	1	0.46	25	11.42
		28	1	0.46	26	11.87
		29*	1	0.46	27	12.33
		30	4	1.83	31	14.16
		31	1	0.46	32	14.61
		32	1	0.46	33	15.07
		33	3	1.37	36	16.44
		34	3	1.37	39	17.81
		36	1	0.46	40	18.26
		37	1	0.46	41	18.72
		38	2	0.91	43	19.63
		39	2	0.91	45	20.55
		40	2	0.91	47	21.46
		42	2	0.91	49	22.37
		43	1	0.46	50	22.83
RLA	4	44	4	1.83	54	24.66
		45	3	1.37	57	26.03
		47	3	1.37	60	27.40
		48	4	1.83	64	29.22
		49	3	1.37	67	30.59
		50	1	0.46	68	31.05
		51	5	2.28	73	33.33
		52	2	0.91	75	34.25
		54	8	3.65	83	37.90
		55	6	2.74	89	40.64
		56	4	1.83	93	42.47
		57	7	3.20	100	45.66
		58	3	1.37	103	47.03
		59	3	1.37	106	48.40
		60	9	4.11	115	52.51
		61	6	2.74	121	55.25
		62	5	2.28	126	57.53
		63	8	3.65	134	61.19
		64	4	1.83	138	63.01
		65	9	4.11	147	67.12
		66	10	4.57	157	71.69
		67	1	0.46	158	72.15
		68	6	2.74	164	74.89
		69	13	5.94	177	80.82
		70	4	1.83	181	82.65
		71	2	0.91	183	83.56
		72	16	7.31	199	90.87
		73	2	0.91	201	91.78
		74	9	4.11	210	95.89
		75	9	4.11	219	100.00
Total Percent at or above Mastery				65.77		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	5	2.54	5	2.54
		6	1	0.51	6	3.05
		10	2	1.02	8	4.06
		16	2	1.02	10	5.08
		18	1	0.51	11	5.58
		19	2	1.02	13	6.60
		20	1	0.51	14	7.11
		22	1	0.51	15	7.61
		23	2	1.02	17	8.63
		24	1	0.51	18	9.14
		25	4	2.03	22	11.17
		26*	4	2.03	26	13.20
		27	2	1.02	28	14.21
		28	2	1.02	30	15.23
		29	1	0.51	31	15.74
		30	4	2.03	35	17.77
		31	1	0.51	36	18.27
		32	3	1.52	39	19.80
		33	3	1.52	42	21.32
		35	2	1.02	44	22.34
		36	7	3.55	51	25.89
		37	2	1.02	53	26.90
		38	1	0.51	54	27.41
		39	4	2.03	58	29.44
		40	2	1.02	60	30.46
		41	3	1.52	63	31.98
		42	3	1.52	66	33.50
RLA	5	43	3	1.52	69	35.03
		44	7	3.55	76	38.58
		45	9	4.57	85	43.15
		46	1	0.51	86	43.65
		47	3	1.52	89	45.18
		48	5	2.54	94	47.72
		50	3	1.52	97	49.24
		51	10	5.08	107	54.31
		53	1	0.51	108	54.82
		54	3	1.52	111	56.35
		57	11	5.58	122	61.93
		58	1	0.51	123	62.44
		59	1	0.51	124	62.94
		60	6	3.05	130	65.99
		61	1	0.51	131	66.50
		62	3	1.52	134	68.02
		63	11	5.58	145	73.60
		65	3	1.52	148	75.13
		66	11	5.58	159	80.71
		67	3	1.52	162	82.23
		68	2	1.02	164	83.25
		69	11	5.58	175	88.83
		70	1	0.51	176	89.34
		71	2	1.02	178	90.36
		72	9	4.57	187	94.92
		75	5	2.54	192	97.46
		77	1	0.51	193	97.97
		78	4	2.03	197	100.00
Total Percent at or above Mastery				64.98		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	2	0.93	2	0.93
		19	1	0.47	3	1.40
		22	1	0.47	4	1.87
		23	1	0.47	5	2.34
		26	1	0.47	6	2.80
		27	1	0.47	7	3.27
		28	6	2.80	13	6.07
		29*	1	0.47	14	6.54
		30	2	0.93	16	7.48
		32	4	1.87	20	9.35
		33	1	0.47	21	9.81
		35	1	0.47	22	10.28
		36	1	0.47	23	10.75
		38	1	0.47	24	11.21
		39	1	0.47	25	11.68
		40	1	0.47	26	12.15
		41	1	0.47	27	12.62
		42	1	0.47	28	13.08
		43	3	1.40	31	14.49
		44	3	1.40	34	15.89
		45	2	0.93	36	16.82
		46	2	0.93	38	17.76
		47	2	0.93	40	18.69
		48	3	1.40	43	20.09
		49	1	0.47	44	20.56
		51	2	0.93	46	21.50
		53	1	0.47	47	21.96
RLA	6	54	3	1.40	50	23.36
		55	2	0.93	52	24.30
		57	5	2.34	57	26.64
		59	1	0.47	58	27.10
		60	6	2.80	64	29.91
		61	1	0.47	65	30.37
		63	3	1.40	68	31.78
		64	2	0.93	70	32.71
		65	2	0.93	72	33.64
		66	11	5.14	83	38.79
		67	1	0.47	84	39.25
		68	2	0.93	86	40.19
		69	9	4.21	95	44.39
		70	4	1.87	99	46.26
		71	3	1.40	102	47.66
		72	12	5.61	114	53.27
		73	3	1.40	117	54.67
		74	4	1.87	121	56.54
		75	12	5.61	133	62.15
		76	1	0.47	134	62.62
		77	3	1.40	137	64.02
		78	15	7.01	152	71.03
		79	1	0.47	153	71.50
		80	3	1.40	156	72.90
		81	18	8.41	174	81.31
		82	1	0.47	175	81.78
		83	1	0.47	176	82.24
		84	18	8.41	194	90.65
		85	1	0.47	195	91.12
		87	19	8.88	214	100.00
Total Percent at or above Mastery				66.37		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	1	0.43	1	0.43
		1	1	0.43	2	0.86
		8	1	0.43	3	1.29
		14	1	0.43	4	1.72
		16	1	0.43	5	2.16
		26	1	0.43	6	2.59
		27	1	0.43	7	3.02
		28	2	0.86	9	3.88
		31	1	0.43	10	4.31
		32	2	0.86	12	5.17
		35	1	0.43	13	5.60
		36	6	2.59	19	8.19
		38	1	0.43	20	8.62
		39*	1	0.43	21	9.05
		40	1	0.43	22	9.48
		41	1	0.43	23	9.91
		42	2	0.86	25	10.78
		43	2	0.86	27	11.64
		45	1	0.43	28	12.07
		49	2	0.86	30	12.93
		50	3	1.29	33	14.22
		51	1	0.43	34	14.66
		52	2	0.86	36	15.52
RLA	7	53	2	0.86	38	16.38
		54	1	0.43	39	16.81
		56	3	1.29	42	18.10
		58	2	0.86	44	18.97
		59	3	1.29	47	20.26
		60	1	0.43	48	20.69
		61	3	1.29	51	21.98
		62	2	0.86	53	22.84
		63	1	0.43	54	23.28
		65	4	1.72	58	25.00
		66	2	0.86	60	25.86
		68	1	0.43	61	26.29
		70	1	0.43	62	26.72
		72	3	1.29	65	28.02
		73	2	0.86	67	28.88
		74	3	1.29	70	30.17
		75	6	2.59	76	32.76
		76	1	0.43	77	33.19
		77	1	0.43	78	33.62
		78	5	2.16	83	35.78
		80	2	0.86	85	36.64
		81	4	1.72	89	38.36
		83	2	0.86	91	39.22
		84	2	0.86	93	40.09
		85	1	0.43	94	40.52

continued

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		86	1	0.43	95	40.95
		87	8	3.45	103	44.40
		88	1	0.43	104	44.83
		89	1	0.43	105	45.26
		90	6	2.59	111	47.84
		91	2	0.86	113	48.71
		92	2	0.86	115	49.57
		93	5	2.16	120	51.72
		94	3	1.29	123	53.02
		95	3	1.29	126	54.31
		96	8	3.45	134	57.76
		97	2	0.86	136	58.62
RLA	7	98	4	1.72	140	60.34
		99	7	3.02	147	63.36
		101	4	1.72	151	65.09
		102	12	5.17	163	70.26
		104	1	0.43	164	70.69
		105	16	6.90	180	77.59
		106	1	0.43	181	78.02
		108	20	8.62	201	86.64
		109	1	0.43	202	87.07
		110	2	0.86	204	87.93
		111	16	6.90	220	94.83
		113	2	0.86	222	95.69
		114	10	4.31	232	100.00
Total Percent at or above Mastery				67.22		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	2	0.99	2	0.99
		6	2	0.99	4	1.98
		9	2	0.99	6	2.97
		12	1	0.50	7	3.47
		16	1	0.50	8	3.96
		19	1	0.50	9	4.46
		21	1	0.50	10	4.95
		23	1	0.50	11	5.45
		25	2	0.99	13	6.44
		26	1	0.50	14	6.93
		27	1	0.50	15	7.43
		28	3	1.49	18	8.91
		29	1	0.50	19	9.41
		30	1	0.50	20	9.90
		31	1	0.50	21	10.40
		32	1	0.50	22	10.89
		33	2	0.99	24	11.88
		34	3	1.49	27	13.37
		35	3	1.49	30	14.85
		36	3	1.49	33	16.34
		37	1	0.50	34	16.83
		38*	2	0.99	36	17.82
		40	1	0.50	37	18.32
		42	2	0.99	39	19.31
		43	2	0.99	41	20.30
		44	3	1.49	44	21.78
		45	3	1.49	47	23.27
RLA	8	46	2	0.99	49	24.26
		47	1	0.50	50	24.75
		48	1	0.50	51	25.25
		49	1	0.50	52	25.74
		50	2	0.99	54	26.73
		51	7	3.47	61	30.20
		52	1	0.50	62	30.69
		53	1	0.50	63	31.19
		54	1	0.50	64	31.68
		56	3	1.49	67	33.17
		57	4	1.98	71	35.15
		58	1	0.50	72	35.64
		59	5	2.48	77	38.12
		60	2	0.99	79	39.11
		61	1	0.50	80	39.60
		62	1	0.50	81	40.10
		63	2	0.99	83	41.09
		64	2	0.99	85	42.08
		65	4	1.98	89	44.06
		66	3	1.49	92	45.54
		67	2	0.99	94	46.53
		68	2	0.99	96	47.52
		69	4	1.98	100	49.50
		70	2	0.99	102	50.50
		71	3	1.49	105	51.98
		72	2	0.99	107	52.97
		73	6	2.97	113	55.94
		74	4	1.98	117	57.92

continued

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		75	5	2.48	122	60.40
		76	1	0.50	123	60.89
		77	3	1.49	126	62.38
		78	5	2.48	131	64.85
		79	4	1.98	135	66.83
		80	2	0.99	137	67.82
		81	6	2.97	143	70.79
		82	4	1.98	147	72.77
		83	2	0.99	149	73.76
		84	6	2.97	155	76.73
		85	1	0.50	156	77.23
		86	9	4.46	165	81.68
RLA	8	87	3	1.49	168	83.17
		88	1	0.50	169	83.66
		89	3	1.49	172	85.15
		90	7	3.47	179	88.61
		92	5	2.48	184	91.09
		93	6	2.97	190	94.06
		94	1	0.50	191	94.55
		95	2	0.99	193	95.54
		96	2	0.99	195	96.53
		98	2	0.99	197	97.52
		99	1	0.50	198	98.02
		101	3	1.49	201	99.50
		102	1	0.50	202	100.00
Total Percent at or above Mastery				66.93		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	15	6.70	15	6.70
		2	1	0.45	16	7.14
		9	1	0.45	17	7.59
		15	1	0.45	18	8.04
		18	1	0.45	19	8.48
		20	1	0.45	20	8.93
		21	2	0.89	22	9.82
		22	2	0.89	24	10.71
		23	3	1.34	27	12.05
		24	5	2.23	32	14.29
		25	1	0.45	33	14.73
		26	2	0.89	35	15.63
		27	3	1.34	38	16.96
		31*	1	0.45	39	17.41
		33	3	1.34	42	18.75
		34	2	0.89	44	19.64
		36	1	0.45	45	20.09
		37	1	0.45	46	20.54
		38	1	0.45	47	20.98
		39	4	1.79	51	22.77
		41	3	1.34	54	24.11
		42	2	0.89	56	25.00
RLA	10	43	1	0.45	57	25.45
		44	1	0.45	58	25.89
		45	3	1.34	61	27.23
		46	1	0.45	62	27.68
		47	1	0.45	63	28.12
		48	2	0.89	65	29.02
		49	1	0.45	66	29.46
		50	1	0.45	67	29.91
		51	2	0.89	69	30.80
		53	2	0.89	71	31.70
		54	3	1.34	74	33.04
		55	2	0.89	76	33.93
		56	1	0.45	77	34.37
		57	6	2.68	83	37.05
		59	3	1.34	86	38.39
		60	7	3.13	93	41.52
		61	2	0.89	95	42.41
		62	1	0.45	96	42.86
		63	8	3.57	104	46.43
		65	2	0.89	106	47.32
		66	4	1.79	110	49.11
		67	3	1.34	113	50.45
		68	3	1.34	116	51.79
		69	13	5.80	129	57.59

continued

Table 23
Raw Score Frequency Distributions for RLA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		70	1	0.45	130	58.04
		71	2	0.89	132	58.93
		72	18	8.04	150	66.96
		73	2	0.89	152	67.86
		74	1	0.45	153	68.30
RLA	10	75	23	10.27	176	78.57
		77	3	1.34	179	79.91
		78	27	12.05	206	91.96
		79	1	0.45	207	92.41
		80	1	0.45	208	92.86
		81	16	7.14	224	100.00
Total Percent at or above Mastery				66.98		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 24
Raw Score Frequency Distributions for MA

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	2	1.04	2	1.04
		2	1	0.52	3	1.56
		3	1	0.52	4	2.08
		6	3	1.56	7	3.65
		11	1	0.52	8	4.17
		15	2	1.04	10	5.21
		20	1	0.52	11	5.73
		28	2	1.04	13	6.77
		29	1	0.52	14	7.29
		30	2	1.04	16	8.33
		31	1	0.52	17	8.85
		32	2	1.04	19	9.90
		33*	3	1.56	22	11.46
		36	1	0.52	23	11.98
		37	3	1.56	26	13.54
		38	4	2.08	30	15.63
		39	1	0.52	31	16.15
		40	1	0.52	32	16.67
		42	2	1.04	34	17.71
		43	2	1.04	36	18.75
		45	1	0.52	37	19.27
MA	3	46	1	0.52	38	19.79
		47	1	0.52	39	20.31
		48	1	0.52	40	20.83
		49	1	0.52	41	21.35
		50	1	0.52	42	21.87
		51	2	1.04	44	22.92
		53	1	0.52	45	23.44
		54	3	1.56	48	25.00
		56	4	2.08	52	27.08
		57	5	2.60	57	29.69
		59	1	0.52	58	30.21
		60	5	2.60	63	32.81
		63	5	2.60	68	35.42
		66	2	1.04	70	36.46
		67	3	1.56	73	38.02
		68	5	2.60	78	40.62
		69	5	2.60	83	43.23
		70	2	1.04	85	44.27
		71	2	1.04	87	45.31
		72	8	4.17	95	49.48
		73	1	0.52	96	50.00
		74	4	2.08	100	52.08
		75	10	5.21	110	57.29

continued

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		76	2	1.04	112	58.33
		77	1	0.52	113	58.85
		78	9	4.69	122	63.54
		79	1	0.52	123	64.06
		80	1	0.52	124	64.58
		81	13	6.77	137	71.35
		83	1	0.52	138	71.87
		84	5	2.60	143	74.48
MA	3	85	2	1.04	145	75.52
		86	1	0.52	146	76.04
		87	14	7.29	160	83.33
		89	1	0.52	161	83.85
		90	11	5.73	172	89.58
		93	9	4.69	181	94.27
		95	1	0.52	182	94.79
		96	6	3.13	188	97.92
		99	4	2.08	192	100.00
Total Percent at or above Mastery				67.16		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	1	0.46	1	0.46
		1	1	0.46	2	0.92
		5	1	0.46	3	1.38
		9	2	0.92	5	2.30
		15	1	0.46	6	2.76
		20	1	0.46	7	3.23
		21	1	0.46	8	3.69
		22	2	0.92	10	4.61
		24	3	1.38	13	5.99
		25	1	0.46	14	6.45
		26	3	1.38	17	7.83
		27	3	1.38	20	9.22
		29	5	2.30	25	11.52
		30	4	1.84	29	13.36
		31	3	1.38	32	14.75
		32	2	0.92	34	15.67
		33*	1	0.46	35	16.13
		35	1	0.46	36	16.59
		36	3	1.38	39	17.97
		37	1	0.46	40	18.43
		38	1	0.46	41	18.89
		39	2	0.92	43	19.82
MA	4	42	4	1.84	47	21.66
		43	2	0.92	49	22.58
		45	1	0.46	50	23.04
		47	1	0.46	51	23.50
		50	3	1.38	54	24.88
		51	4	1.84	58	26.73
		52	2	0.92	60	27.65
		54	4	1.84	64	29.49
		56	5	2.30	69	31.80
		57	1	0.46	70	32.26
		59	2	0.92	72	33.18
		60	6	2.76	78	35.94
		62	2	0.92	80	36.87
		63	1	0.46	81	37.33
		64	1	0.46	82	37.79
		65	2	0.92	84	38.71
		66	4	1.84	88	40.55
		68	5	2.30	93	42.86
		69	1	0.46	94	43.32
		71	6	2.76	100	46.08
		72	3	1.38	103	47.47
		73	1	0.46	104	47.93
		74	6	2.76	110	50.69
		75	7	3.23	117	53.92

continued

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		76	2	0.92	119	54.84
		77	2	0.92	121	55.76
		78	11	5.07	132	60.83
		80	5	2.30	137	63.13
		81	13	5.99	150	69.12
		82	1	0.46	151	69.59
		83	2	0.92	153	70.51
		84	12	5.53	165	76.04
MA	4	85	2	0.92	167	76.96
		86	6	2.76	173	79.72
		87	10	4.61	183	84.33
		88	2	0.92	185	85.25
		89	5	2.30	190	87.56
		90	8	3.69	198	91.24
		92	1	0.46	199	91.71
		93	13	5.99	212	97.70
		96	5	2.30	217	100.00
Total Percent at or above Mastery				66.77		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	1	0.51	1	0.51
		1	1	0.51	2	1.03
		2	1	0.51	3	1.54
		3	1	0.51	4	2.05
		5	1	0.51	5	2.56
		20	2	1.03	7	3.59
		23	1	0.51	8	4.10
		24	2	1.03	10	5.13
		28	1	0.51	11	5.64
		30	1	0.51	12	6.15
		32	2	1.03	14	7.18
		33	3	1.54	17	8.72
		34	4	2.05	21	10.77
		35	3	1.54	24	12.31
		36	2	1.03	26	13.33
		38	4	2.05	30	15.38
		39	2	1.03	32	16.41
		40*	2	1.03	34	17.44
		41	2	1.03	36	18.46
		42	1	0.51	37	18.97
		43	1	0.51	38	19.49
		44	1	0.51	39	20.00
MA	5	45	3	1.54	42	21.54
		48	2	1.03	44	22.56
		49	2	1.03	46	23.59
		50	2	1.03	48	24.62
		52	1	0.51	49	25.13
		53	1	0.51	50	25.64
		54	3	1.54	53	27.18
		55	1	0.51	54	27.69
		56	4	2.05	58	29.74
		57	2	1.03	60	30.77
		59	1	0.51	61	31.28
		60	2	1.03	63	32.31
		61	1	0.51	64	32.82
		62	1	0.51	65	33.33
		63	1	0.51	66	33.85
		64	1	0.51	67	34.36
		65	4	2.05	71	36.41
		66	3	1.54	74	37.95
		68	2	1.03	76	38.97
		69	2	1.03	78	40.00
		71	5	2.56	83	42.56
		73	3	1.54	86	44.10
		75	2	1.03	88	45.13

continued

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		76	1	0.51	89	45.64
		77	3	1.54	92	47.18
		78	2	1.03	94	48.21
		79	2	1.03	96	49.23
		80	4	2.05	100	51.28
		81	3	1.54	103	52.82
		82	1	0.51	104	53.33
		83	3	1.54	107	54.87
		84	3	1.54	110	56.41
		85	1	0.51	111	56.92
		86	3	1.54	114	58.46
		87	1	0.51	115	58.97
		88	2	1.03	117	60.00
		89	2	1.03	119	61.03
		90	3	1.54	122	62.56
		91	1	0.51	123	63.08
		92	4	2.05	127	65.13
MA	5	93	6	3.08	133	68.21
		96	7	3.59	140	71.79
		97	1	0.51	141	72.31
		98	2	1.03	143	73.33
		99	2	1.03	145	74.36
		101	1	0.51	146	74.87
		102	5	2.56	151	77.44
		103	1	0.51	152	77.95
		104	5	2.56	157	80.51
		105	5	2.56	162	83.08
		106	1	0.51	163	83.59
		107	2	1.03	165	84.62
		108	9	4.62	174	89.23
		109	2	1.03	176	90.26
		110	6	3.08	182	93.33
		111	4	2.05	186	95.38
		112	1	0.51	187	95.90
		113	1	0.51	188	96.41
		114	7	3.59	195	100.00
Total Percent at or above Mastery				67.19		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	1	0.47	1	0.47
		15	1	0.47	2	0.93
		17	1	0.47	3	1.40
		18	1	0.47	4	1.86
		19	1	0.47	5	2.33
		20	3	1.40	8	3.72
		21	1	0.47	9	4.19
		24	2	0.93	11	5.12
		25	1	0.47	12	5.58
		27	2	0.93	14	6.51
		28	2	0.93	16	7.44
		29	4	1.86	20	9.30
		30	3	1.40	23	10.70
		32	2	0.93	25	11.63
		33	2	0.93	27	12.56
		34	1	0.47	28	13.02
		35	3	1.40	31	14.42
		36	3	1.40	34	15.81
		37*	1	0.47	35	16.28
		38	3	1.40	38	17.67
		39	1	0.47	39	18.14
		42	4	1.86	43	20.00
		43	3	1.40	46	21.40
		44	1	0.47	47	21.86
		45	1	0.47	48	22.33
		46	1	0.47	49	22.79
MA	6	47	2	0.93	51	23.72
		48	1	0.47	52	24.19
		49	1	0.47	53	24.65
		50	4	1.86	57	26.51
		51	1	0.47	58	26.98
		52	4	1.86	62	28.84
		53	1	0.47	63	29.30
		54	2	0.93	65	30.23
		55	2	0.93	67	31.16
		56	5	2.33	72	33.49
		57	3	1.40	75	34.88
		59	3	1.40	78	36.28
		60	4	1.86	82	38.14
		61	2	0.93	84	39.07
		62	5	2.33	89	41.40
		63	2	0.93	91	42.33
		64	1	0.47	92	42.79
		65	6	2.79	98	45.58
		66	3	1.40	101	46.98
		67	2	0.93	103	47.91
		68	4	1.86	107	49.77
		69	3	1.40	110	51.16
		70	4	1.86	114	53.02
		71	10	4.65	124	57.67
		72	5	2.33	129	60.00
		74	6	2.79	135	62.79
		75	3	1.40	138	64.19

continued

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		76	3	1.40	141	65.58
		77	11	5.12	152	70.70
		78	1	0.47	153	71.16
		79	2	0.93	155	72.09
		80	4	1.86	159	73.95
		81	10	4.65	169	78.60
		82	1	0.47	170	79.07
		83	8	3.72	178	82.79
		84	2	0.93	180	83.72
MA	6	85	4	1.86	184	85.58
		86	8	3.72	192	89.30
		87	4	1.86	196	91.16
		88	1	0.47	197	91.63
		89	2	0.93	199	92.56
		90	2	0.93	201	93.49
		92	7	3.26	208	96.74
		93	3	1.40	211	98.14
		94	1	0.47	212	98.60
		96	3	1.40	215	100.00
Total Percent at or above Mastery				65.18		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	1	0.43	1	0.43
		10	1	0.43	2	0.86
		14	2	0.86	4	1.72
		15	1	0.43	5	2.16
		17	1	0.43	6	2.59
		18	1	0.43	7	3.02
		19	1	0.43	8	3.45
		20	1	0.43	9	3.88
		21	1	0.43	10	4.31
		22	1	0.43	11	4.74
		24	1	0.43	12	5.17
		27	2	0.86	14	6.03
		28	1	0.43	15	6.47
		29	3	1.29	18	7.76
		30	3	1.29	21	9.05
		31*	2	0.86	23	9.91
		32	1	0.43	24	10.34
		33	1	0.43	25	10.78
		34	3	1.29	28	12.07
		36	3	1.29	31	13.36
		37	1	0.43	32	13.79
		38	4	1.72	36	15.52
		39	4	1.72	40	17.24
		40	1	0.43	41	17.67
MA	7	41	1	0.43	42	18.10
		42	4	1.72	46	19.83
		43	1	0.43	47	20.26
		44	1	0.43	48	20.69
		45	8	3.45	56	24.14
		46	1	0.43	57	24.57
		47	4	1.72	61	26.29
		48	1	0.43	62	26.72
		49	3	1.29	65	28.02
		50	2	0.86	67	28.88
		51	7	3.02	74	31.90
		53	2	0.86	76	32.76
		54	6	2.59	82	35.34
		55	1	0.43	83	35.78
		56	2	0.86	85	36.64
		57	9	3.88	94	40.52
		59	3	1.29	97	41.81
		60	8	3.45	105	45.26
		61	2	0.86	107	46.12
		62	3	1.29	110	47.41
		63	10	4.31	120	51.72
		64	2	0.86	122	52.59
		65	5	2.16	127	54.74
		66	12	5.17	139	59.91
		67	1	0.43	140	60.34
		69	12	5.17	152	65.52

continued

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		71	2	0.86	154	66.38
		72	16	6.90	170	73.28
		73	2	0.86	172	74.14
		74	5	2.16	177	76.29
		75	13	5.60	190	81.90
		78	9	3.88	199	85.78
		79	2	0.86	201	86.64
		80	3	1.29	204	87.93
MA	7	81	7	3.02	211	90.95
		82	2	0.86	213	91.81
		83	2	0.86	215	92.67
		84	5	2.16	220	94.83
		85	1	0.43	221	95.26
		86	1	0.43	222	95.69
		87	1	0.43	223	96.12
		90	2	0.86	225	96.98
		93	7	3.02	232	100.00
Total Percent at or above Mastery				64.21		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	2	0.99	2	0.99
		1	2	0.99	4	1.98
		9	1	0.50	5	2.48
		11	1	0.50	6	2.97
		21	2	0.99	8	3.96
		26	1	0.50	9	4.46
		28	1	0.50	10	4.95
		30	2	0.99	12	5.94
		31	1	0.50	13	6.44
		33	2	0.99	15	7.43
		35	1	0.50	16	7.92
		36	4	1.98	20	9.90
		37	3	1.49	23	11.39
		38*	1	0.50	24	11.88
		39	1	0.50	25	12.38
		40	1	0.50	26	12.87
		42	1	0.50	27	13.37
		43	1	0.50	28	13.86
		44	2	0.99	30	14.85
MA	8	45	1	0.50	31	15.35
		46	1	0.50	32	15.84
		48	5	2.48	37	18.32
		49	2	0.99	39	19.31
		50	1	0.50	40	19.80
		51	4	1.98	44	21.78
		52	1	0.50	45	22.28
		53	1	0.50	46	22.77
		54	3	1.49	49	24.26
		56	3	1.49	52	25.74
		57	11	5.45	63	31.19
		59	2	0.99	65	32.18
		60	7	3.47	72	35.64
		61	2	0.99	74	36.63
		63	5	2.48	79	39.11
		64	1	0.50	80	39.60
		65	1	0.50	81	40.10
		66	7	3.47	88	43.56
		67	1	0.50	89	44.06
		68	3	1.49	92	45.54
		69	3	1.49	95	47.03

continued

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		71	3	1.49	98	48.51
		72	7	3.47	105	51.98
		73	2	0.99	107	52.97
		75	7	3.47	114	56.44
		76	1	0.50	115	56.93
		77	1	0.50	116	57.43
		78	4	1.98	120	59.41
		81	5	2.48	125	61.88
		84	7	3.47	132	65.35
		85	2	0.99	134	66.34
		87	7	3.47	141	69.80
		89	4	1.98	145	71.78
		90	10	4.95	155	76.73
		92	2	0.99	157	77.72
MA	8	93	10	4.95	167	82.67
		94	1	0.50	168	83.17
		95	2	0.99	170	84.16
		96	5	2.48	175	86.63
		98	2	0.99	177	87.62
		99	6	2.97	183	90.59
		101	2	0.99	185	91.58
		102	3	1.49	188	93.07
		104	1	0.50	189	93.56
		105	3	1.49	192	95.05
		106	2	0.99	194	96.04
		107	1	0.50	195	96.53
		109	2	0.99	197	97.52
		110	2	0.99	199	98.51
		111	3	1.49	202	100.00
Total Percent at or above Mastery				64.46		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		0	15	6.73	15	6.73
		5	1	0.45	16	7.17
		6	1	0.45	17	7.62
		12	1	0.45	18	8.07
		15	1	0.45	19	8.52
		16	1	0.45	20	8.97
		17	1	0.45	21	9.42
		18	1	0.45	22	9.87
		19	6	2.69	28	12.56
		21	4	1.79	32	14.35
		22	1	0.45	33	14.80
		23	2	0.90	35	15.70
		24	5	2.24	40	17.94
		26	5	2.24	45	20.18
		27	1	0.45	46	20.63
		28	2	0.90	48	21.52
		29	3	1.35	51	22.87
		30*	6	2.69	57	25.56
		31	3	1.35	60	26.91
		33	4	1.79	64	28.70
MA	10	35	2	0.90	66	29.60
		36	5	2.24	71	31.84
		37	1	0.45	72	32.29
		38	4	1.79	76	34.08
		39	6	2.69	82	36.77
		40	2	0.90	84	37.67
		41	3	1.35	87	39.01
		42	9	4.04	96	43.05
		43	3	1.35	99	44.39
		44	1	0.45	100	44.84
		45	9	4.04	109	48.88
		46	1	0.45	110	49.33
		48	6	2.69	116	52.02
		51	7	3.14	123	55.16
		53	1	0.45	124	55.61
		54	3	1.35	127	56.95
		55	1	0.45	128	57.40
		56	1	0.45	129	57.85
		57	4	1.79	133	59.64
		59	1	0.45	134	60.09
		60	14	6.28	148	66.37

continued

Table 24
Raw Score Frequency Distributions for MA (continued)

Content	Grade	Raw Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
		61	2	0.90	150	67.26
		62	6	2.69	156	69.96
		63	10	4.48	166	74.44
		66	13	5.83	179	80.27
		67	1	0.45	180	80.72
		68	3	1.35	183	82.06
		69	7	3.14	190	85.20
		70	2	0.90	192	86.10
MA	10	72	10	4.48	202	90.58
		74	3	1.35	205	91.93
		75	4	1.79	209	93.72
		76	2	0.90	211	94.62
		78	6	2.69	217	97.31
		82	2	0.90	219	98.21
		84	1	0.45	220	98.65
		87	2	0.90	222	99.55
		90	1	0.45	223	100.00
Total Percent at or above Mastery				61.03		

*Total Raw Score at Full Prompt or without accounting for level of prompting

Figure 1. Percent of Participating Students in RLA by Coded Disability

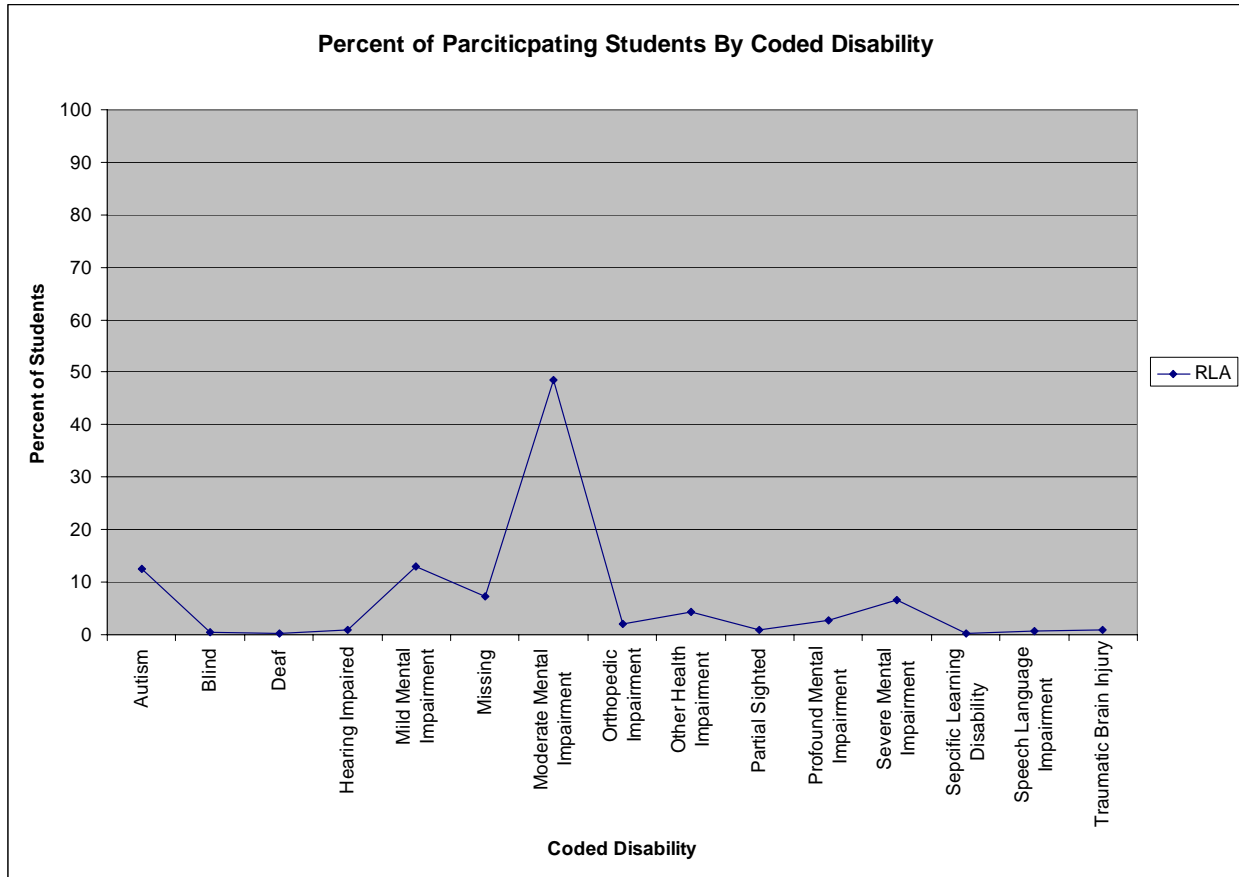


Figure 2. Percent of Participating Students in MA by Coded Disability

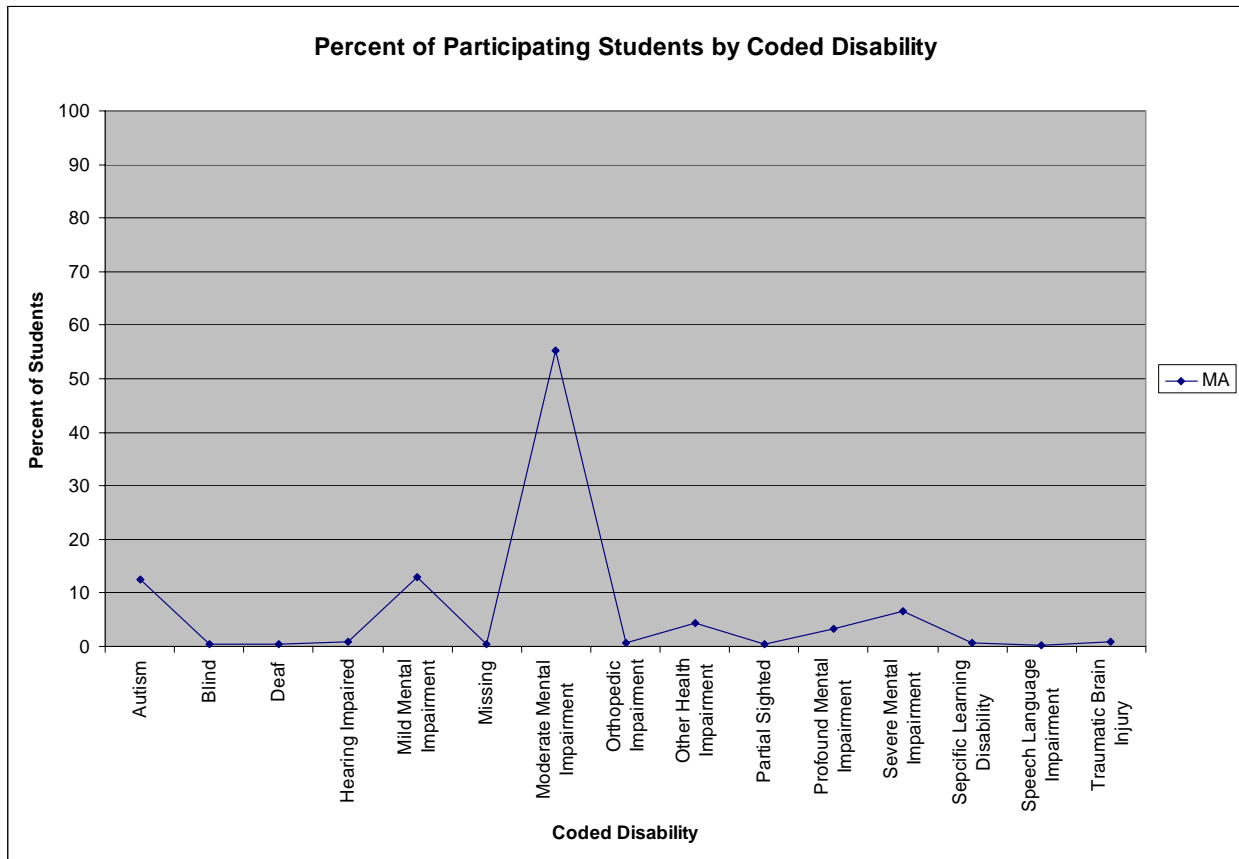


Figure 3. Frequency Distribution Plots of CR Items RLA Grade 3

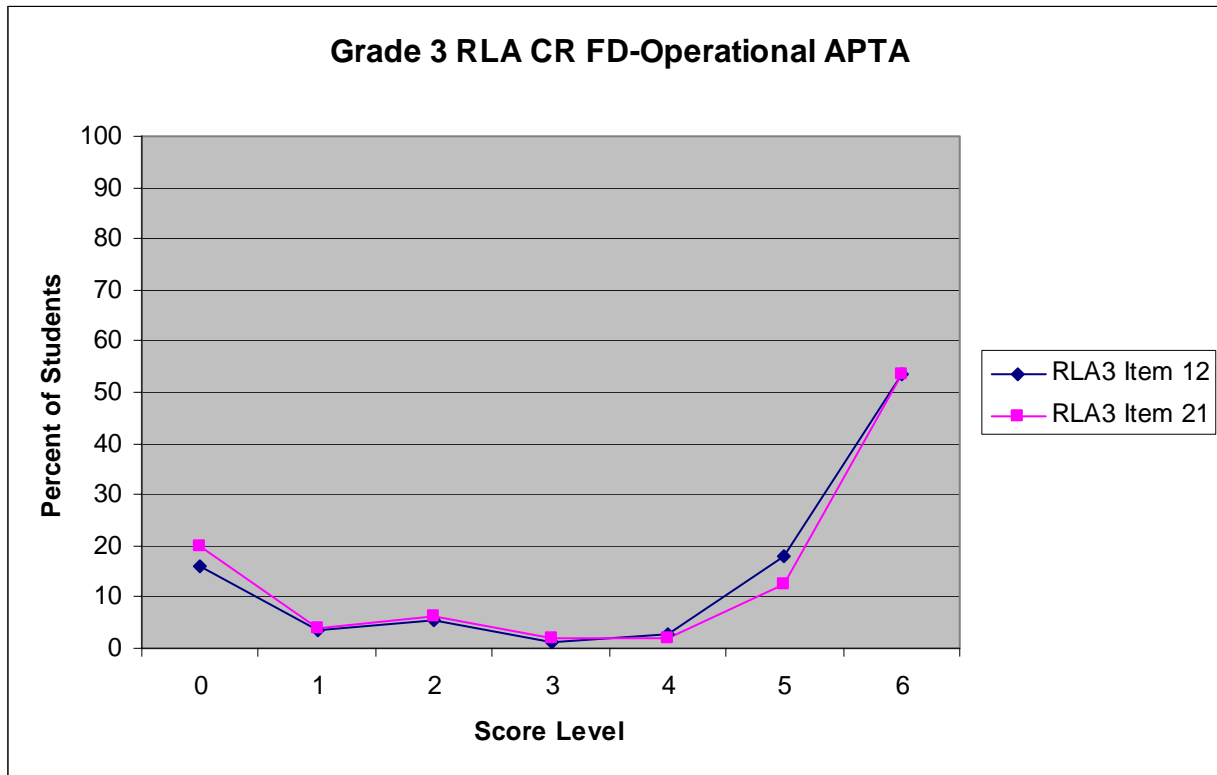


Figure 4. Frequency Distribution Plots of CR Items RLA Grade 4

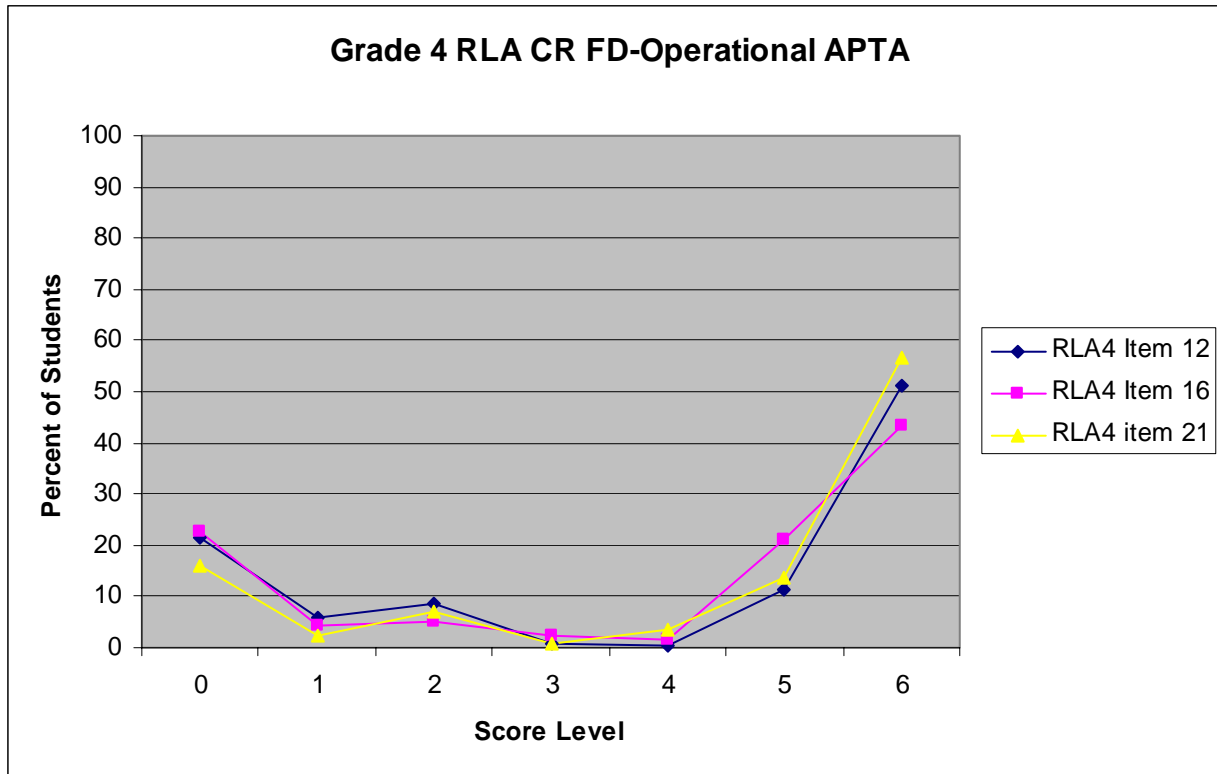


Figure 5. Frequency Distribution Plots of CR Items RLA Grade 7

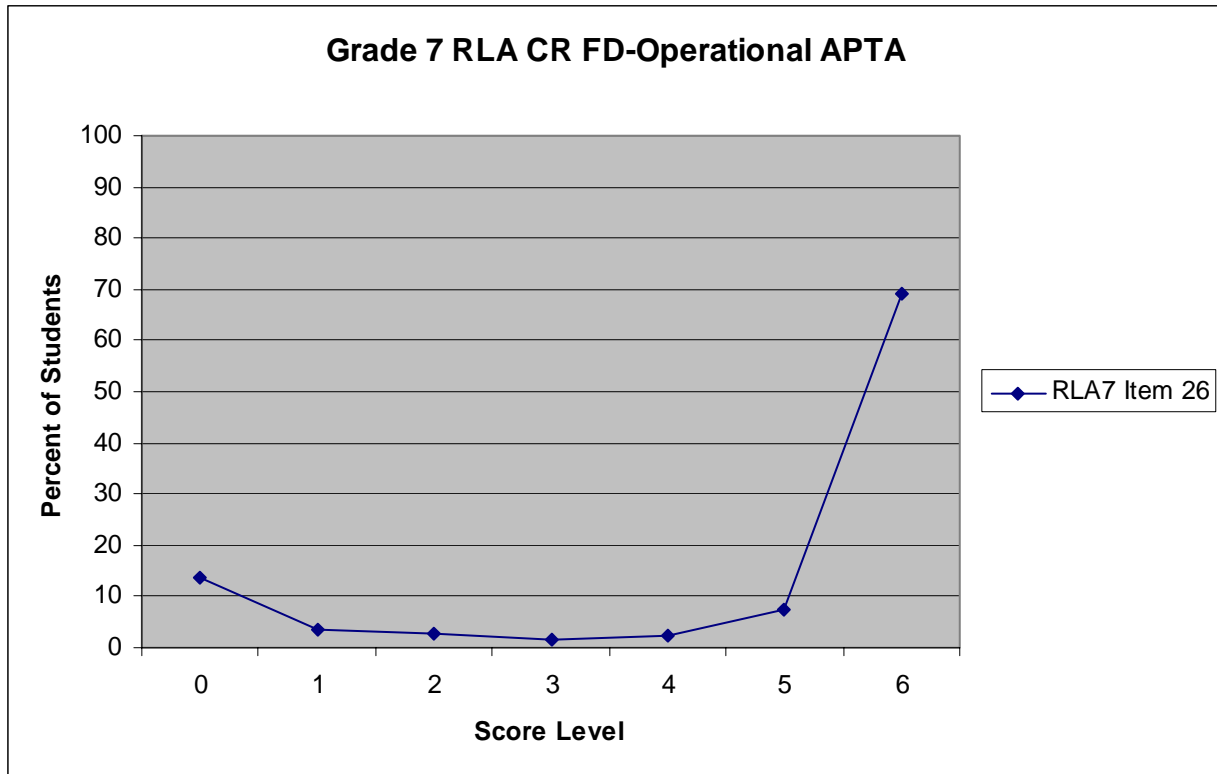


Figure 6. Frequency Distribution Plots of CR Items RLA Grade 8

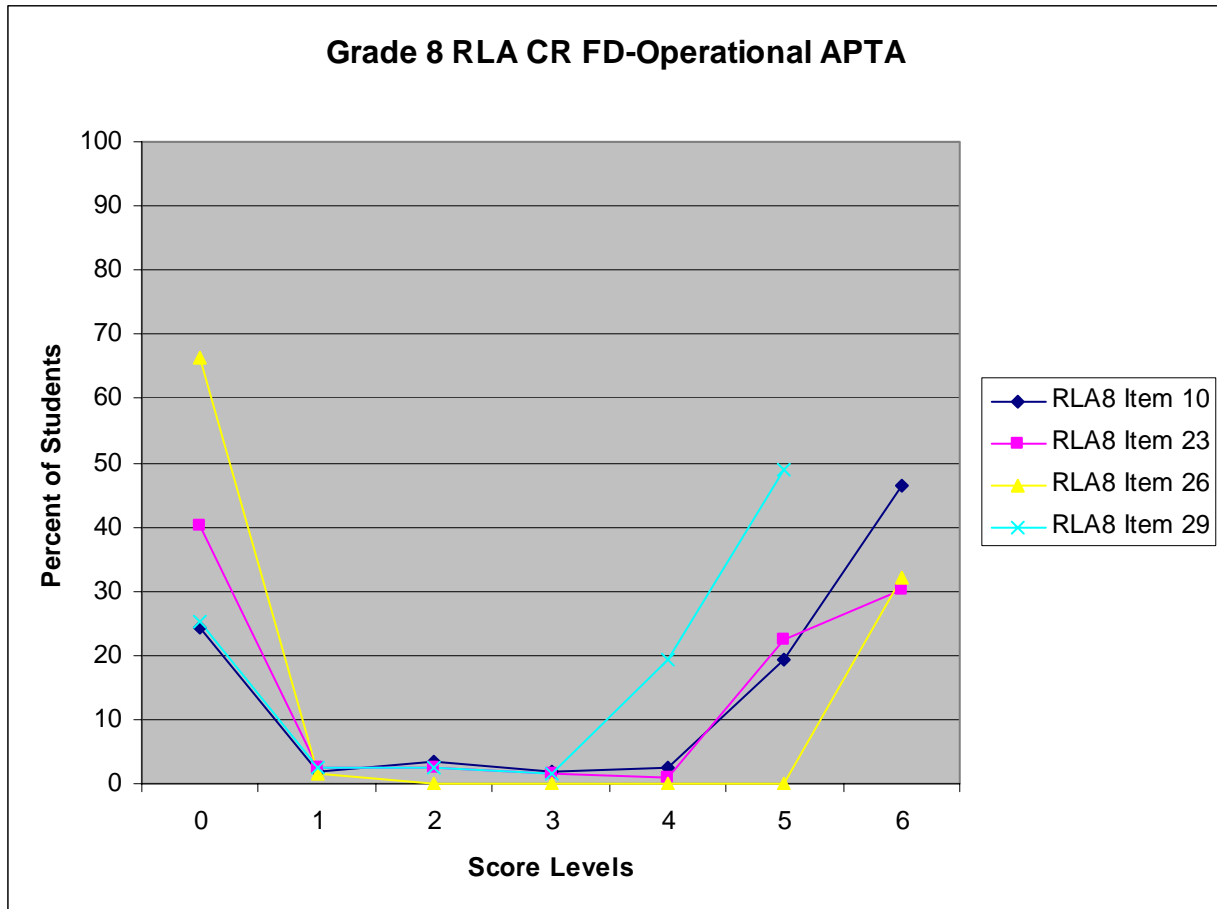


Figure 7. Frequency Distribution Plots of CR Items RLA Grade 10

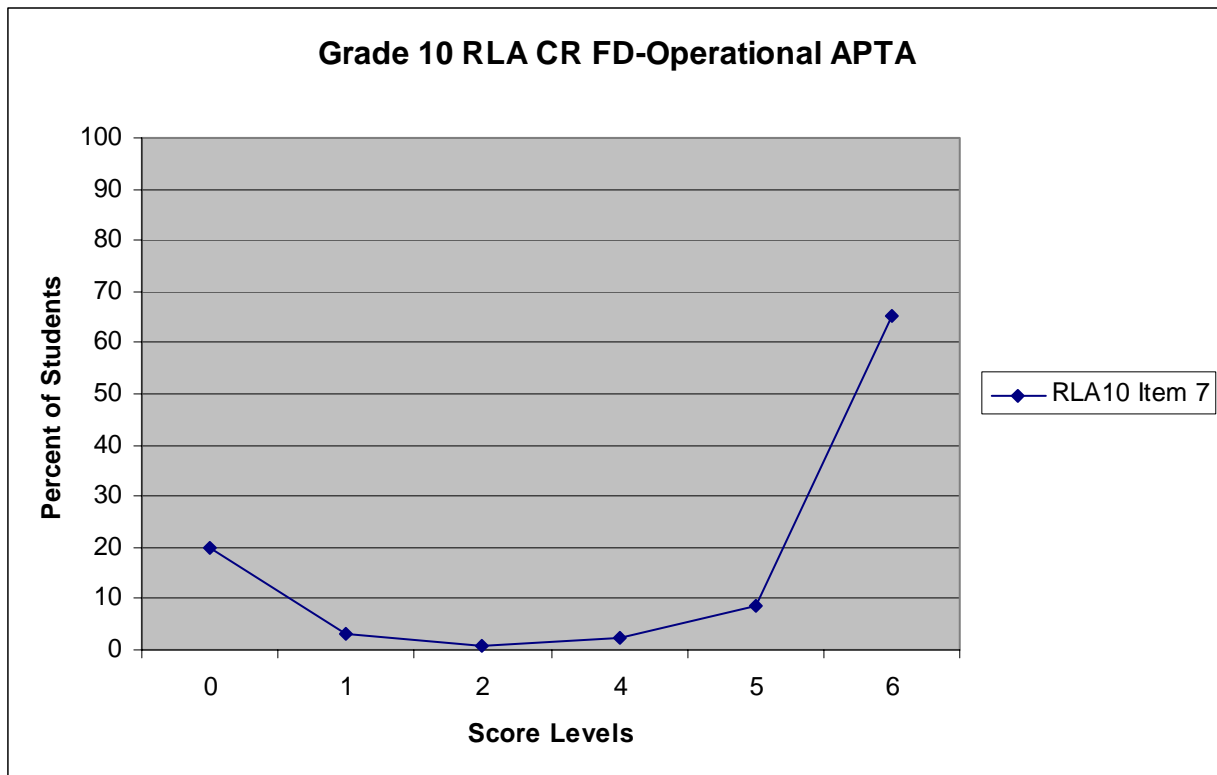


Figure 8. Frequency Distribution Plots of CR Items MA Grade 4

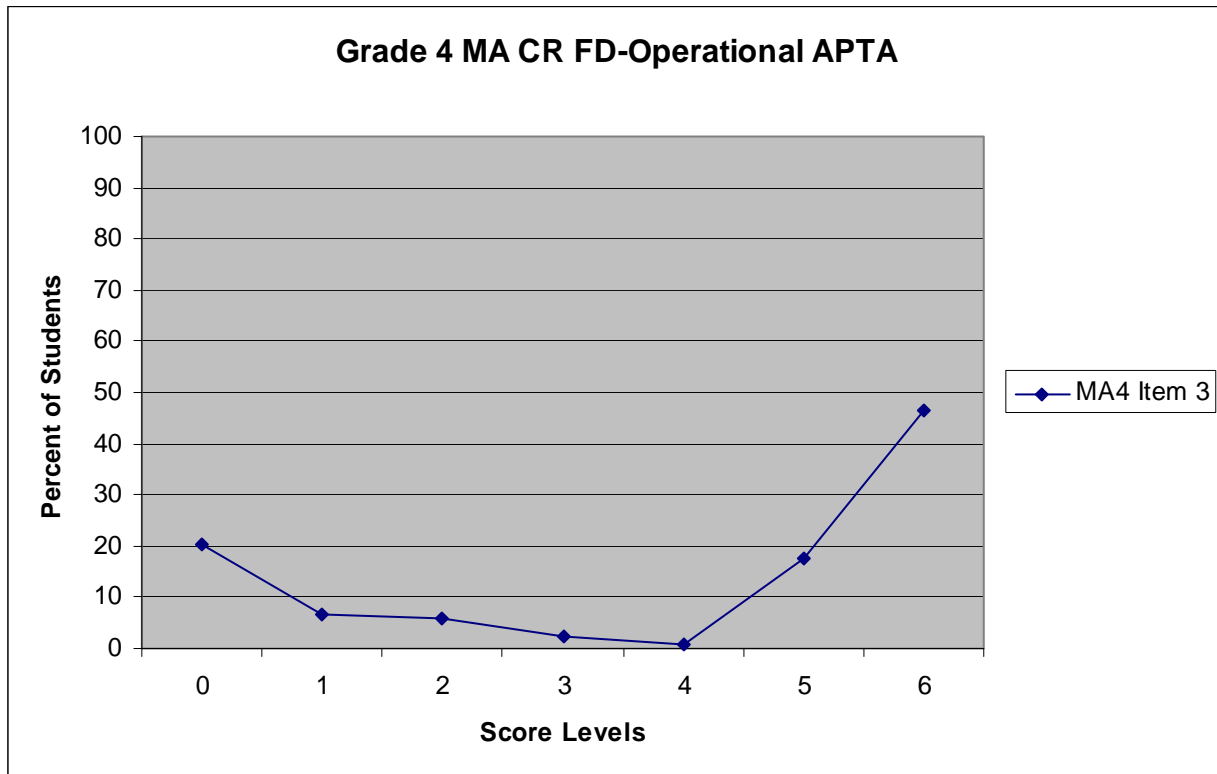


Figure 9. Frequency Distribution Plots of CR Items MA Grade 5

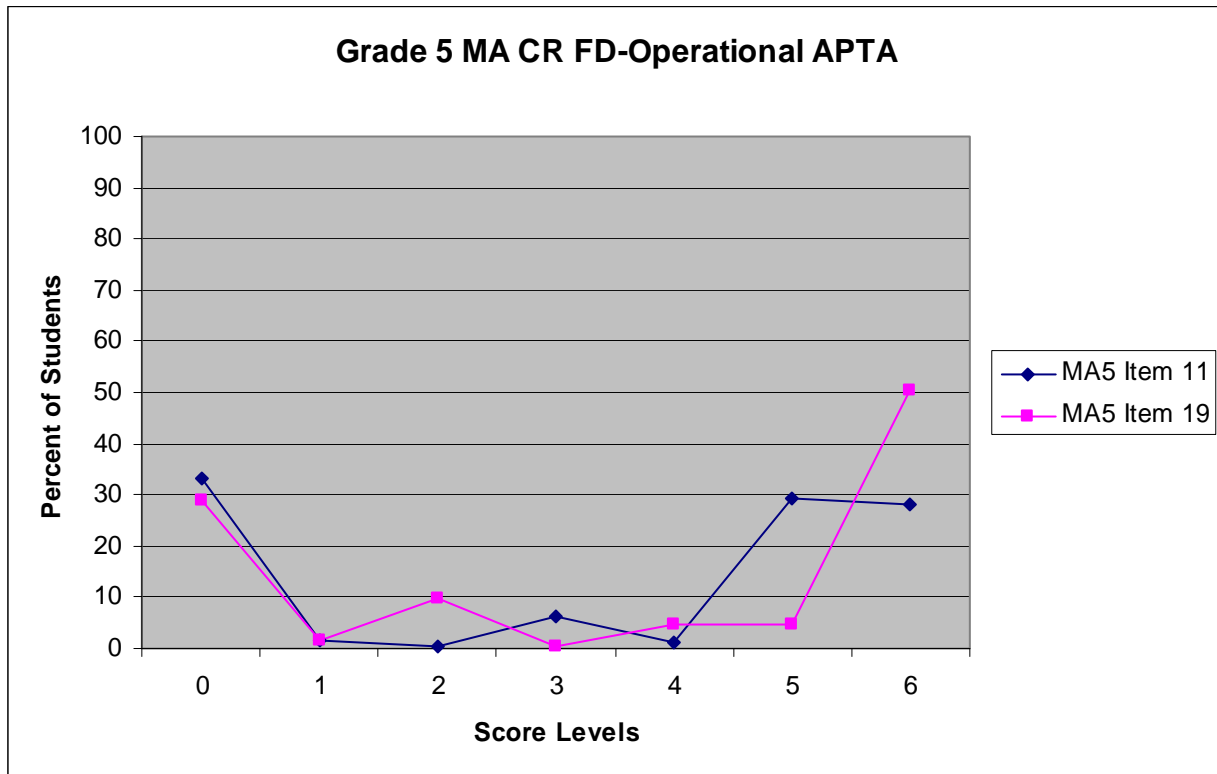


Figure 10. Frequency Distribution Plots of CR Items MA Grade 6

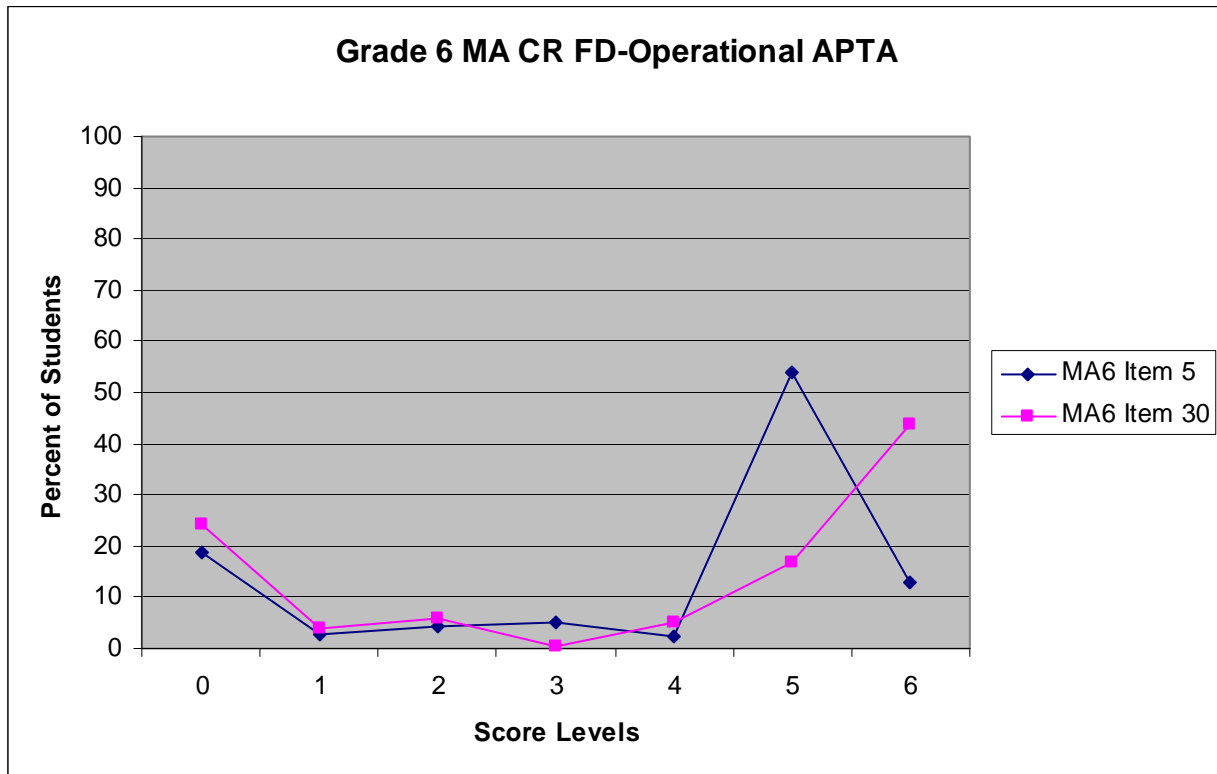


Figure 11. RLA and MA Mean Raw Score by Grade

