Maryland School Assessment-Reading:

Grades 3 through 8

Technical Report:
2007 Administration

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ACKNOWLEDGEMENTS

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INTRODUCTION

The *Maryland School Assessment (MSA)* is a measure of students' reading and mathematics comprehension. The *MSA* fulfills recommendations of the Visionary Panel for Better Schools and meets the federal testing requirements of the *No Child Left Behind Act (NCLB)* of 2001.

New academic standards were designed to inform parents, teachers, and educators of what students actually learned in schools and to make schools accountable for teaching contents measured by the *MSA*. To this end, Maryland State Department of Education (MSDE), in collaboration with hundreds of educators across the state and Harcourt Assessment, Inc. (Harcourt), developed a series of reading tests to measure students' achievement against the new academic standards.

In 2003, the MSA-Reading was introduced in grades 3, 5, and 8 and grades 4, 6, and 7 were added to the program in 2004.

The purpose of the 2007 MSA-Reading *Technical Report* is to provide users and other interested parties with a general overview and statistical results of the MSA-Reading.

The 2007 *Technical Report* is composed of four parts, and the first part contains the following information:

- General overview and purposes of the MSA-Reading
- Development and review of the MSA-Reading
- Test structure of the MSA-Reading
- Test administration
- Scoring procedures
- Operational test analyses
- Field test analyses
- Operational test form construction using *item response theory (IRT*)
- Linking, equating, and scaling
- Score interpretation
- Test validity
- Unidimensionality analyses
- Item bank construction
- Quality assurance

The second part provides the 2007 MSA-Reading results for students in grades 3 through 8. It contains information about the cutoff score and pass rate at each performance level for the 2007 reading tests.

The third part contains statistical summaries for the 2007 MSA-Reading. This part outlines the statistical and psychometric characteristics of the 2007 MSA-Reading.

Four appendices provide additional information related to the 2007 MSA-Reading: Appendix A contains stratified random sampling results; Appendix B contains scale score histograms and Tukey charts; Appendix C contains both classical and *item response theory (IRT*) item parameters; Appendix D contains test blueprints for grades 3 through 8.

1. OVERVIEW OF THE 2007 *MARYLAND SCHOOL ASSESSMENT-READING*

In 2002, the Maryland State Department of Education (MSDE), in order to conform to the requirements of the new Federal program "No Child Left Behind," retired its award-winning *Maryland School Performance Assessment Program* and adopted a testing program known as the *Maryland School Assessment* (*MSA*). The new program, like its predecessor, was based on the *Voluntary State Curriculum*, which set reasonable academic standards for what teachers were expected to teach and for what students were expected to learn in schools.

In 2003, the MSA-Reading was introduced in grades 3, 5, and 8, and grades 4, 6, and 7 were added to the program in 2004. The MSA-Reading included SAT10 as well as Maryland-specific items. SAT10 abbreviated Form A was administered at grades 3 through 8. SAT10 common items aligned to Maryland curriculum played as possible form-to-form and year-to-year linking items. It should be noted that the Rasch difficulty estimates generated in the first year continued to be used in subsequent years' calibration and equating procedures so that all scale scores were on the same scale.

A Bookmark standard setting was conducted in 2003 to set proficiency level cut scores for grades 3, 5, and 8. Because 2004 was the first testing year for grades 4, 6, and 7, a second Bookmark standard setting was held in summer 2004 to set cut scores for these additional grades. The performance level cut scores were used to assign students to three proficiency levels (Basic, Proficient, and Advanced) for AYP reporting under the "No Child Left Behind" act. Information about the Bookmark procedures and results can be found from MSDE. It should be noted that these cut scores have been applied since 2003 (grades 3, 5, and 8) and 2004 (grades 4, 6, and 7).

From March 12 to March 21, 2007, students in grades 3 through 8 took the 2007 *MSA* in reading (MSA-Reading).

1.1 General Overview of the 2007 MSA-Reading

The 2007 MSA-Reading was designed to provide two types of information. First, *norm-referenced* information was provided by the items from the abbreviated form of the *Stanford Achievement Test Series, Tenth Edition (SAT10)*. For third and fourth grades, for example, the *SAT10* consisted of *Word Study*, *Reading Vocabulary*, and *Reading Comprehension* items. For fifth through eighth grades, on the other hand, the *SAT10* consisted of *Reading Vocabulary* and *Reading Comprehension* items. Second, to produce *criterion-referenced* information, additional items, called augmented items, were written for the *Maryland Reading Standards* (*MRS*) in grades 3 through 8 and were organized under the three reading processes: *General Reading, Literary Reading*, and *Informational Reading*.

The 2007 MSA-Reading produced both norm-referenced and criterion-referenced scores for each student. While norm-referenced scores included only the *SAT10* items, both items selected from the *SAT10* and augmented items created for Maryland comprised criterion-referenced scores. Figure 1.1 shows a schematic of the *SAT10* and augmented items that produced these test scores.

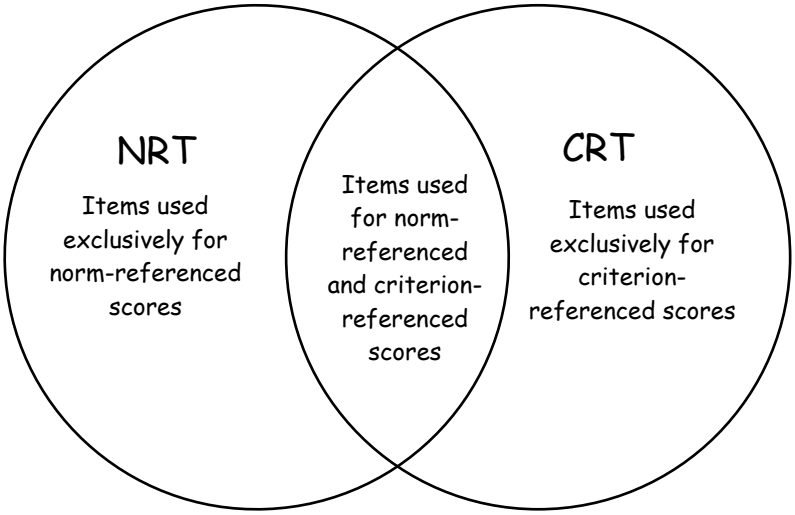


Figure 1.1 Schematic of the 2007 MSA-Reading

1.2 Purposes/Uses of the 2007 MSA-Reading

By measuring students' achievement against the new academic standards, the 2007 MSA-Reading provides two main purposes. First, the MSA-Reading was designed to inform parents, teachers, and educators of what students actually learned in schools by providing specific feedback that can be used to improve the quality of schools, classrooms, and individualized instructional programs and to model effective assessment approaches that can be used in classrooms. Second, the MSA-Reading serves as an accountability tool to measure performance levels of individual students, schools, and districts against the new academic standards.

1.3 The Voluntary State Curriculum

Federal law requires that states align their tests with their state content standards. MSDE worked carefully and rigorously to construct new tests to provide a strong alignment as defined by the U.S. Department of Education.

The *Voluntary State Curriculum* (*VSC*), which defined what students should know and be able to do at each grade level, helped schools understand the standards more clearly, and included more specificity with indicators and objectives. The format of the *VSC* specified standards statements, indicators, and objectives. Standards are broad, measurable statements of what students should know and be able to do. Indicators and objectives provide more specific content knowledge and skills that are unique at each grade level.

While 100% of the standards should be tested, it was not the case that every indicator would necessarily be tested each year. Consequently, the *VSC* specified curricular indicators and objectives that contributed directly to measuring content standards, which were aligned to the *Maryland School Assessment (MSA)*.

1.4 Development and Review of the 2007 MSA-Reading

Developing the 2007 MSA-Reading was a complex process. It required a great deal of involvement from MSDE, Harcourt, and local school systems. In addition, teachers, administrators, and content specialists from all over Maryland were recruited for different test development committees. These individuals reviewed test forms and items to ensure that they measured students' knowledge and skills fairly and without bias. Table 1.1 identifies which groups were responsible for developing the 2007 MSA-Reading.

Table 1.1 The 2007 MSA-Reading Responsibility for Test Development

Development of the 2007 MSA-Reading	Primary Responsibility
Development of Preliminary Blueprints and Item Specifications	Harcourt; MSDE; NPC
Development of Preliminary Brief Constructed Response Rubrics	MSDE
Item Writing	Harcourt
Item Review	Harcourt; MSDE; NPC; Content Review Committee
Bias Review	Harcourt; MSDE; Bias Review Committee
Construction of Field Test Forms	Harcourt; MSDE
Modification of Special Forms	Harcourt; MSDE
Review of Special Forms	MSDE
Pre-Field Test Training Workshops	Harcourt; MSDE; LEAs
Field Test Administrations	MSDE; LEAs
Construction of Operational Test Forms	Harcourt; MSDE; NPC
Review of Operational Test Forms	MSDE
Final Construction of Operational Test Forms	Harcourt; MSDE

National Psychometric Council

The National Psychometric Council (NPC) took a major role in reviewing and recommending to MSDE on the development and implementation of the 2007 MSA-Reading program. For example, they made recommendations to MSDE on issues, such as test blueprints, field test design, item analysis, item selection for scoring purposes, linking, equating and scaling issues, standard setting, and other relevant statistical and psychometric issues. MSDE adopted their guidelines and recommendations.

Content Review Committee

Content Review Committee members ensured that the MSA-Reading was appropriately difficult and fair. Committee members were either specialists in reading for test items, or experts in test construction and measurement. They represented all levels of education as well as the ethnic and social diversity of Maryland students. Committee members were from different areas of the state.

The educators' understanding of Maryland curriculum and extensive classroom experience made them a valuable source of information. They reviewed test items and forms and took a holistic view to ensure that tests were fair and balanced across reporting categories.

Bias Review Committee

In addition to the Content Review Committee, a separate Bias Review Committee examined each item on reading tests. They looked for indications of bias that would impact the performance of an identifiable group of students. Committee members discussed and, if necessary, rejected items based on gender, ethnic, religious, or geographical bias.

1.5 Test Structure of the 2007 MSA-Reading

2007 MSA-Reading Test Structure

The 2007 MSA-Reading was composed of the *SAT10* items and augmented (Maryland-specific) operational items. In addition, the uniqueness of the MSA-Reading was to spiral a relatively large number of Maryland field test items into multiple test forms (10 forms) for each grade in test administration.

As can be seen from Table 1.2, the 2007 MSA-Reading produced ten test forms for each grade, and there were 2 operational forms within each grade. This means that Forms 1, 3, 5, 7, and 9 (Form A) are identical, and Forms 2, 4, 6, 8, and 10 (Form B) are identical.

Tables 1.3 and 1.4 provide information concerning the test design of NRT and CRT and the number of operational and field test items included for each test form. Tables 1.5 through 1.10 provide information concerning the number of items that contribute to each strand (e.g., General, Literary, and Informational Reading).

The descriptive statistics of each operational test form can be found in section 1.8, Operational Test Analyses.

Table1.2 The 2007 MSA-Reading Test Structure: Grades 3 through 8

	Operational Item Sets		Field Test Item Sets									
	A	B	1	2	3	4	5	6	7	8	9	10
Form 1	X		X									
Form 2		X		X								
Form 3	X				X							
Form 4		X				X						
Form 5	X						X					
Form 6		X						X				
Form 7	X								X			
Form 8		X								X		
Form 9	X										X	
Form 10		X										X

Note. Total number of operational test items = 37 (33 *SR* + 4 *BCR*) items. Forms 1, 3, 5, 7, and 9 (Form A) are identical, and Forms 2, 4, 6, 8, and 10 (Form B) are identical in terms of operational test items.

Types of Items

The 2007 MSA-Reading contains two types of items: *selected response* (*SR*) and *brief constructed response* (*BCR*) items. *SR* items required students to select a correct answer from several alternatives. For the 2007 MSA-Reading, students selected an answer from four alternatives. Each *SR* item was scored as right or wrong.

BCR items required students to answer a question with a couple of words, a sentence, or a more elaborated way. For the 2007 MSA-Reading, these items were scored on a general rubric with maximum values between 0 and 3. For example, score was the higher of the first and the second readers' scores provided they were adjacent. A resolution reader's score was used of two non-adjacent initial scores were received. That is, the resolution reader's score was used in place of both the first and second readers' scores. Detailed information on BCR scoring procedures and rules can be found in section 1.7, MSA-Reading Scoring Procedures.

Table 1.3 The 2007 MSA-Reading Test Design: Grades 3, 5, and 8

Grade	Strand Title	*SAT10* / Augmented	Item Type	No. of Items of Each Form	
				FA	FB
3	Total NRT	*SAT10*	*SR*	70	70
	Word Study	*SAT10*	*SR*	20	20
	Reading Vocabulary	*SAT10*	*SR*	20	20
	Reading Comprehension	*SAT10*	*SR*	30	30
	Total CRT	*SAT10*, Augmented	*SR*, *BCR*	37 (10)	37 (10)
	General Reading	*SAT10*	*SR*	16	16
	Literary Reading	*SAT10,* Augmented	*SR*, *BCR*	10 (10)	10
	Informational Reading	*SAT10,* Augmented	*SR*, *BCR*	11	11 (10)
5	Total NRT	*SAT10*	*SR*	50	50
	Reading Vocabulary	*SAT10*	*SR*	20	20
	Reading Comprehension	*SAT10*	*SR*	30	30
	Total CRT	*SAT10*, Augmented	*SR*, *BCR*	37 (10)	37 (10)
	General Reading	*SAT10*	*SR*	15	15
	Literary Reading	*SAT10,* Augmented	*SR*, *BCR*	11 (10)	11
	Informational Reading	*SAT10,* Augmented	*SR*, *BCR*	11	11(10)
8	Total NRT	*SAT10*	*SR*	50	50
	Reading Vocabulary	*SAT10*	*SR*	20	20
	Reading Comprehension	*SAT10*	*SR*	30	30
	Total CRT	*SAT10*, Augmented	*SR*, *BCR*	37 (10)	37 (10)
	General Reading	*SAT10*	*SR*	16	16
	Literary Reading	*SAT10,* Augmented	*SR*, *BCR*	10 (10)	10
	Informational Reading	*SAT10,* Augmented	*SR*, *BCR*	11	11 (10)

Note. CRT contains *SAT10* items. *SR* items are selected response items, and *BCR* items are brief constructed response items. The number in parentheses indicates the total number of field test items tested during operational testing. Form A designates the forms 1, 3, 5, 7, and 9. Form B designates the forms 2, 4, 6, 8, and 10.

Table 1.4 The 2007 MSA-Reading Test Design: Grades 4, 6, and 7

Grade	Strand Title	*SAT10* / Augmented	Item Type	No. of Items of Each Form	
				FA	FB
4	Total NRT	*SAT10*	*SR*	70	70
	Word Study	*SAT10*	*SR*	20	20
	Reading Vocabulary	*SAT10*	*SR*	20	20
	Reading Comprehension	*SAT10*	*SR*	30	30
	Total CRT	*SAT10*, Augmented	*SR*, *BCR*	37 (10)	37 (10)
	General Reading	*SAT10*	*SR*	15	15
	Literary Reading	*SAT10,* Augmented	*SR*, *BCR*	11 (10)	11
	Informational Reading	*SAT10,* Augmented	*SR*, *BCR*	11	11 (10)
6	Total NRT	*SAT10*	*SR*	50	50
	Reading Vocabulary	*SAT10*	*SR*	20	20
	Reading Comprehension	*SAT10*	*SR*	30	30
	Total CRT	*SAT10*, Augmented	*SR*, *BCR*	37 (10)	37 (10)
	General Reading	*SAT10*	*SR*	15	15
	Literary Reading	*SAT10,* Augmented	*SR*, *BCR*	11(10)	11
	Informational Reading	*SAT10,* Augmented	*SR*, *BCR*	11	11(10)
7	Total NRT	*SAT10*	*SR*	50	50
	Reading Vocabulary	*SAT10*	*SR*	20	20
	Reading Comprehension	*SAT10*	*SR*	30	30
	Total CRT	*SAT10*, Augmented	*SR*, *BCR*	37 (10)	37 (10)
	General Reading	*SAT10*	*SR*	15	15
	Literary Reading	*SAT10,* Augmented	*SR*, *BCR*	11 (10)	11
	Informational Reading	*SAT10,* Augmented	*SR*, *BCR*	11	11 (10)

Note. CRT contains *SAT10* items. *SR* items are selected response items, and *BCR* items are brief constructed response items. The number in parentheses indicates the total number of field test items tested during operational testing. Form A designates the forms 1, 3, 5, 7, and 9. Form B designates the forms 2, 4, 6, 8, and 10.

Table 1.5 The 2007 MSA-Reading Item Distribution of Each Strand: Grade 3 and 8

	25 Common Items (*SAT10* / Maryland)			Augmented Maryland Items (12 items)								
	GR.	Lit.	Inf.	General Reading			Literary Reading			Informational Reading		
	No. of SR	No. of SR	No. of SR	No. of SR	No. of BCR	No. of Items	No. of SR	No. of *BCR*	No. of Items	No. of SR	No. of *BCR*	No. of Items
A	16	4	5	0	0	0	4	2	6	4	2	6
B	16	4	5	0	0	0	4	2	6	4	2	6

Table 1.6 The 2007 MSA-Reading Item Distribution of Each Strand: Grades 5

	25 Common Items (*SAT10* / Maryland)			Augmented Maryland Items (12 items)								
	GR.	Lit.	Inf.	General Reading			Literary Reading			Informational Reading		
	No. of SR	No. of SR	No. of SR	No. of SR	No. of BCR	No. of Items	No. of SR	No. of *BCR*	No. of Items	No. of SR	No. of *BCR*	No. of Items
A	15	5	5	0	0	0	4	2	6	4	2	6
B	15	5	5	0	0	0	4	2	6	4	2	6

Table 1.7 The 2007 MSA-Reading Item Distribution of Each Strand: Grade 4, 6, and 7

	25 Common Items (*SAT10* / Maryland)			Augmented Maryland Items (12 items)								
	GR.	Lit.	Inf.	General Reading			Literary Reading			Informational Reading		
	No. of SR	No. of SR	No. of SR	No. of SR	No. of BCR	No. of Items	No. of SR	No. of *BCR*	No. of Items	No. of SR	No. of *BCR*	No. of Items
A	15	5	5	0	0	0	4	2	6	4	2	6
B	15	5	5	0	0	0	4	2	6	4	2	6

Table 1.8 The 2007 MSA-Reading Total and Strand Scores: Grade 3 and 8

	Total and Each Cluster Scores			
	General Reading	Literary Reading	Informational Reading	Total Score
Form A	16 (16 MC)	14 (8 MC + 6 BCR)	15 (9 MC + 6 BCR)	45
Form B	16 (16 MC)	14 (8 MC + 6 BCR)	15 (9 MC + 6 BCR)	45

Table 1.9 The 2007 MSA-Reading Total and Strand Scores: Grades 5

	Total and Each Cluster Scores			
	General Reading	Literary Reading	Informational Reading	Total Score
Form A	15 (15 MC)	15 (9 MC + 6 BCR)	15 (9 MC + 6 BCR)	45
Form B	15 (15 MC)	15 (9 MC + 6 BCR)	15 (9 MC + 6 BCR)	45

Table 1.10 The 2007 MSA-Reading Total and Strand Scores: Grade 4, 6, and 7

	Total and Each Cluster Scores			
	General Reading	Literary Reading	Informational Reading	Total Score
Form A	15 (15 MC)	15 (9 MC + 6 BCR)	15 (9 MC + 6 BCR)	45
Form B	15 (15 MC)	15 (9 MC + 6 BCR)	15 (9 MC + 6 BCR)	45

1.6 Test Administration

Test Materials

All test materials had to be stored in a secure location prior to test administration. The School Test Coordinator (STC) provided test administration training and test materials to the test examiners. Pre-test workshops were held in Baltimore for all Local Accountability Coordinators in Maryland. These workshops provided the representatives of all local school divisions with an overview of the test's content, security expectations, and procedures for completing the answer documents. They also considered the receipt, distribution, and return of test materials.

For the test examiner, Harcourt provided the following materials:

- Examiner's Manuals
- Preprinted and generic labels, which were applied to the Test/Answer Books by or under the direct supervision of the STC.
- Scoring Service Identification sheets
- Student Roster

For each student, the following materials were provided by Harcourt:

- Test/Answer Book
- Special accommodations testing materials, if necessary

For each student, the following additional materials were provided by school or student:

- Two No. 2 pencils with erasers
- Scratch paper for pre-writing

Each classroom used for the assessment also needed the following additional materials:

- A sign for the door, "Testing: Do not Disturb"
- A digital clock or a watch, or clock with a second hand
- Copies of the STOP and GO ON sample pages

Two test related examiner's manuals (EM) were developed for the 2007 MSA; one version for reading and the other for mathematics for use in all grades 3-8. Developed in partnership with MSDE, the EMs contained instructions for preparation and administration of the test. In addition to the EMs, one Test Administration and Coordination Manual (TACM) was developed for use by the Local Accountability Coordinators (LAC) and building-level School Test Coordinators (STC). Included in this manual were instructions for preparation of materials for testing, monitoring of testing, and packaging of materials for return to Harcourt for scoring. The TACM was distributed and reviewed during a workshop in January for STCs and LACs with duplicates sent to each school with its testing materials.

Test Administration Schedule

The overall test window for MSA was established by MSDE (March 12-21, 2007, with make-up testing held March 22-27, 2007). However, each Local Education Agency (LEA) set a specific schedule for administration of the MSA within that window for their district. Each LEA schedule was submitted to MSDE in advance and proved for each district by the State. For a given grade and content area, all testing had to take place on the same schedule. In addition, each content area at each grade was tested on two days during the window. For the 2007 MSA-Reading, the primary testing days were as follows:

- Test materials delivered to schools (Examiner's Manuals, Test/Answer Books, and Test Coordiator's Kit) — On or Before February 26, 2007
- Reading Primary Testing Window — March 12 - March 21, 2007
- Make-up Testing Window — March 22 - March 27, 2007

Students and parents should be reminded of the importance of students attending school during the administration of the MSA and the importance of student participation in MSA testing. Maryland was held to the 95% participation requirement under NCLB by the US Department of Education, and schools should do all they could to test all students on MSA or Alt-MSA (as applicable).

If a student was absent on the testing days, a make-up test was administered on any two consecutive days within testing window. If a school had an unscheduled closing or delayed opening that prohibited the administration from occurring on the scheduled testing dates, the STCs were consulted with LACs to determine the testing schedule to be followed.

During the administration of the 2007 MSA-Reading, MSDE had testing monitors in selected schools observing administration procedures and testing conditions. All monitors had identification cards for security purposes. There were no prior notification of which schools would be monitored, but monitors followed local procedures for reporting to the school's main office and giving proper notification that an MSDE monitor was in the building.

Student Participation

All students in grades 3 through 8 had to participate in the 2007 MSA-Reading. The only exception was that students with severe cognitive disabilities were assessed by the *Alternate Maryland School Assessment* (ALT-MSA) instead of the regular MSA-Reading. The criteria that students should need to be tested in the Alt-MSA program instead of the MSA-Reading could be viewed in the section 2, Appendix C of the TACM.

The U.S. Department of Education was developing specific guidance related to Modified Assessment, but that guidance, as yet, had not been issued. Students might have been identified through the Individualized Education Program (IEP) process in the current school year as takers of the Mod-MSA. However, since the Mod-MSA was not available, those students had to be assessed using the regular MSA-Reading.

Testing Accommodations

Testing accommodations for students with disabilities (i.e., students having an Individualized Education Program or a Section 504 Plan) and students for English Language Learners (ELL) had to be approved and documented according to the procedures and requirements outlined in the document entitled "*Maryland Accommodations Manual: A Guide to Selecting, Administrating, and Evaluating the Use of Accommodations for Instruction and Assessment*," (MAM). A copy of the most recent edition of this document is available electronically on the LAC and STC web pages at https://docushare.msde.state.md.us/docushare.

No accommodations might be made for students merely because they were members of an instructional group. Any accommodation had to be based on individual needs and not on a category of disability area, level of instruction, environment, or other group characteristics. Responsibility for confirming the need and appropriateness of an accommodation rested with the LAC and school-based staff involved with each student's instructional program. A master list of all students and their accommodations had to be maintained by the principal and submitted to the LAC, who provided a copy to MSDE upon request. Please refer to Section 1 of the 2007 TACM for further information regarding testing accommodations.

Large-Print and Braille Test Books and Kurzweil™ Test Forms on CD

MSA-Reading was administered to those requiring (1) large-print Student Test/Answer Books or (2) Braille Test Books, or (3) Kurzweil™ Test Forms on CD. For large-print Test/Answer Books, Braille Test Books, and Kurzweil™ Test Forms on CD, student responses were transcribed into the standard-size Test/Answer Book following testing.

The pre-printed student ID label was affixed to the standard-size Test/Answer Book containing the transcribed responses, not to the large-print Test/Answer Book or Braille books.

An eligible Test Examiner (TE) transcribed the student responses into a standard-size Test/Answer Book exactly as given by the student. Any original student Test/Answer Books which were used as source documents for transcription was invalidated by drawing a large slash across the student demographic page with a black permanent marker.

Once the student responses had been transcribed, the transcribed Test/Answer Book was returned for scoring with the standardized materials. Specific packing instructions are provided in the TACM in section 3 and 4.

Verbatim Reading Accommodation and Kurzweil™ Test Forms on CD

Students who had a verbatim reading accommodation documented in their Individual Education Plan (IEP), ELL Plan, or Section 504 Plan and who received that accommodation in regular instruction might receive the accommodation on the 2007 MSA-Reading. The accommodation might be provided by a live reader or through technology. Section 2, Appendix F of TACM provided information on verbatim reading instruction for reading items. Technology was used to provide the verbatim reading accommodation, and the software was Kurzweil reading software. Official, secure electronic copies of the test were ordered through the LAC directly from MSDE. MSDE encouraged the use of Kurzweil™ software to ensure uniformity in the delivery of the verbatim reading accommodation throughout the state.

Students using Kurzweil™ software had to familiarity with its operation prior to the test administration.

Security of Test Materials

The following code of ethnics conforms to the Standards for Educational and Psychological Testing developed by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education (MSDE, 2007):

> It is breach of professional ethics for school personnel to provide verbal or nonverbal clues or answers, teach items on the test, share writing prompts, coach, hint, or in any way influence a student's performance during the testing situation. A breach of ethics may result in invalidation of test results and local education agency (LEA) or MSDE disciplinary action. (p. 9)

The Test/Answer Books for the 2007 MSA-Reading were confidential and kept secure at all times. Unauthorized use, duplication, or reproduction of any or all portions of the assessment was prohibited, which is reflected by the following statement (MSDE, 2007):

> Violation of security can result in prosecution and/or penalties as imposed by the Maryland State Board of Education and/or State Superintendent of Schools in accordance with the COMAR 13A.03.04 and 13A.12.05. (p. 9)

All materials were treated as confidential and placed in locked areas. Secure and non-secure test materials were as follows:

- Secure materials: Test/Answer Books (including large-print and Braille), Kurzweil™ test forms on CD, and used scratch paper
- Non-secure materials: TACM, Examiner's Manuals, unused pre-printed student and generic ID labels, unused FedEx return shipping labels, and unused green/orange shipping labels.

Test Format

In 2007, there were 10 forms of MSA-Reading. Different test forms were administered to students in each classroom participating in reading tests, and each test form was identified by color and form number/letter. All forms of the MSA Test/Answer Books for each grade had the same grade designation and picture on the front cover.

The Test/Answer Books were spiraled within a classroom, and each student used a combined Test/Answer Book. Since the Test/Answer Books were scanned for scoring, students were encouraged not to use highlights in any part of the book. Although students might be accustomed to using highlighters in daily instruction, highlighting in the Test/Answer Book could obliterate information in a student's book when it was scanned for scoring. As an alternative to highlighting, students were allowed to lightly circle or underline information in test items or perform calculations to help them in responding, as long as markings did not interfere with the bubbled answer choice area and/or the track marks along the outside margins of each page.

1.7 MSA-Reading Scoring Procedures

Students' responses to *SR* items were machine-scored, and their responses to *BCR* items were individually read and scored by Harcourt.

Once received by Harcourt, Test/Answer Books were scanned into an electronic imaging system so that the information necessary to score responses was captured and converted into an electronic format. Students' identification and demographic information, school information, and answers to *SR* items were converted to alphanumeric format; hand-written responses were captured in digital image format.

Machine-Scored Items

After students' responses to *SR* items were converted to text format, the scoring key was applied to the captured item responses. Correct answers were assigned a score of one point. Incorrect answers, blank responses (omits), and responses with multiple marks were also assigned a score of zero.

Hand-Scored Items

Test/Answer Books were scanned into the electronic imaging system, allowing scorers to score these responses online at all scoring sites while maintaining the live documents at the contractor's facility. The imaging system randomly distributed responses, ensuring no one scorer scored a disproportionate number of responses from any one school. This online scoring system maintained a database of actual student responses and the scores associated with those responses. An off-site backup of all images and scores was maintained as well to guard against potential loss of data and images due to system failure. The system also provided continuous, up-to-date monitoring of all scoring activities. Detailed information on MSA scoring specification can be found in a document, Performance Assessment Scoring Center: Spring 2007 Scoring Specification for MSA-Reading and Math which is available from MSDE.

Scoring Staff

The MSDE had one Room Director (RD) dedicated for each grade level, domain (Reading), and site. The RD worked closely with the PASC Training Supervisor and the PASC Language Arts. The PASC Training Supervisor, Language Arts Specialist, and RDs participated in the anchor-pulling sessions in Maryland. The Room Director/Training Team Leader was responsible for maintaining annotations and meeting minutes from all sessions. These notes were a record of the comments and decisions made by the MSDE personnel and members of the Maryland teacher committee. These notes were utilized by the RD responsible for training the Team Leaders (TLs) and Readers for the respective Maryland prompts. For MSDE scoring projects, PASC had qualified alternate RDs available at the beginning of the project to ensure a timely start of training in the event that the primary RD was unavailable to start as scheduled. The alternate RD acted as a TL unless the RD couldn't fulfill his/her duties.

1) Reader/Scorer

A graduate of a four-year accredited college or university who had successfully passed the PASC new reader exam and new reader training. The readers were eligible to score custom programs for which they have been trained and successfully qualify.

2) Team Leader (TL)

An experienced reader who directly monitored the scoring of a team of readers and retrains as needed. The reader had successfully completed the PASC TL training program.

3) Room Director (RD)

A knowledgeable team leader who had been selected to work with team leaders and the training supervisor to oversee the scoring of several teams. An RD's main duty was to rule on validity of questionable papers and to maintain consistency in scoring decisions. RDs also served as trainers.

4) Reader's Aide (RA)

PASC storeroom personnel whose main responsibilities during scoring were to do copying and printing for the PASC materials center. During anchor pulling, RA responsibility might include duplicating student papers. They might also be assigned a variety of clerical duties.

5) Developers

An experienced PASC reader that was responsible for selecting a wide variety of student responses for such activities as benchmarking, anchor pulling range finding, and training materials. Selected papers were then submitted to MSDE for comment and approval. Developers remained on the project as anchor pulling participants and trainers whenever possible.

6) Trainers

Experienced personnel who were TLs or RDs and selected by the Training Supervisor to train and qualify readers for Maryland. Additionally these experienced personnel might also train new readers and do domain specific training.

Reader Recruitment and Qualifications

All Readers for MSDE had to provide Harcourt's staffing vendor their resume and documentation of a four-year, college degree. As part of the initial screening process for recruiting Readers into Harcourt's general pool, applicants had to respond to an open-ended prompt. This writing sample ensured that all applicants were able to perform the kinds of tasks they would assess. The writing sample was intended to screen out those who couldn't write standard, idiomatically correct English or who couldn't organize their thoughts clearly. The writing prompt was scored by a qualified PASC staff member. If successful on the preliminary screening, applicants then participated in a one-day general introductory training workshop presented by a PASC staff member. These workshops allowed Harcourt to eliminate potential Readers who might seem qualified according to their educational and professional experience but who couldn't learn to score to a scale consistently or who were otherwise unsuitable for assignment to large-scale scoring projects. The PASC staff member who presented the workshop evaluated each potential Reader and submitted these evaluations to the Training Supervisor/Site Supervisor with his/her recommendations. Those who successfully completed the workshop were to Harcourt's general pool of Readers who were potential scorers of Reading assessments. This addition to the general pool did not necessarily qualify these Readers for scoring the MSDE program.

Team Leader Selection and Qualification

The training for new TLs consisted of a two day course focusing on the duties and responsibilities necessary to successfully manage a team of Readers. The workshop was led by two PASC Training Supervisors. The instruction included a review of PASC policies and procedures, sessions on use of the Reader monitoring reports to track a Reader's speed and accuracy, practice annotating anchors and simulated training of the annotated papers, role playing activities which explored various situations that could occur with Readers during the scoring of a project, and Reader counseling and retraining guidelines. Hands-on training on the various TL computer applications were also covered in the work shop. Upon completion of the workshop, the two PASC Training Supervisors reviewed each participant's performance making sure that each had a complete understanding of the TL role and its responsibilities. Any participant they found who had not performed to their satisfaction was not added to the qualified TL list.

Team Leader Project Training

Project-specific TL training for MSDE was conducted in the days immediately preceding scoring and Reader training. This training begun with the RD reading the rubrics aloud and answering any questions the TL or assistant RD might have regarding the rubric. The RD then read each anchor paper aloud to the TLs. Each response in the anchor set was thoroughly explained including the notes and comments of the anchor-pulling committee. Training set A was reviewed next. The TLs scored the training set individually, recorded the scores on the answer sheet and then waited for all TLs to complete the scoring. When everyone had completed scoring the training set, the RD discussed the answers one-by-one, focusing on why it was that score and not another. The RD reviewed with the group the reason for assigning each score point and discussed each paper in its entirety. The TLs were then ready to score Training set B. Training set B was scored and reviewed exactly as Training set A.

Having thoroughly discussed both training sets with the group, the RD explained that in order for a participant to qualify as a TL, it was required that the TL should score at least an 80% perfect match on both of the qualifying sets (Qualification Rules, Attachment M). The TLs scored the first qualifying set individually and recorded their scores on the appropriate answer sheet. As each TL finished scoring, he/she brought the answer sheet to the RD for grading. Each answer was reviewed and any questions the TL had were addressed before the TL attempted the next qualifying set; the TL followed the same procedure with Qualifying set 2. Upon completing the second qualifying set, the TL submitted the answer sheet to the RD for grading. The TL had to achieve at least an 80% perfect match on two of the three Reading sets as specified in the qualification rules or they would be released from the MSDE project.

After the qualification process, the RD continued the training process with the decision set. This set was read aloud and each paper thoroughly explained and discussed. By following these procedures, the RD ensured that the anchor-pulling committees' notes and comments were completely understood.

Team Leader Duties

TLs were responsible for monitoring the training and qualifying of the Readers assigned to their team. The TLs assisted the RD, if requested, during the training of the Readers. The TL was responsible for grading the Readers' qualifying sets and discussing the results with the Readers so everyone received the same direction. The TL certified to the RD and Training Supervisor

that the Reader was qualified and recorded the scores under Qualification scores on the Reader evaluation form. The TL was also responsible for monitoring each Reader's assignment of scores to the responses. Additionally, the TL reviewed the daily Reader statistical reports with each individual on the team. The TL consulted the RD regarding variations by the team members from the acceptable standards (80% perfect match for Reading). The TL had the initial responsibility to see that the Reader maintained the set standards through individual retraining. The RD monitored the TL by reviewing team statistics and working one on one with the TL.

Room Director Selection and Qualification

The candidates for RD had been recommended by the PASC Managers or Training Supervisors. The recommendations were based upon the evaluations the candidates received as Readers and TLs and were part of their personnel file. The Training Supervisors met as a group to discuss who might be considered for the position of RD. The Training Supervisor group reviewed the evaluations and the duties that the potential RDs had performed. The candidates generally had been TLs on large-scale projects for multiple teams, and/or they had served as TLs on small-scale projects where TLs trained their individual teams. They had been evaluated on their ability to train Readers as well as their ability to monitor the scoring accuracy and consistency of Readers. These evaluations were submitted in writing at the end of each scoring project by the Readers and RDs that had observed the work of the RD candidates.

Room Director Project Training

The RDs familiarized themselves with the rubric. Any questions regarding the rubric were addressed by the PASC Language Arts, or MSDE. The next step was for the RD/TTL to prepare the anchors by annotating each response to all score points in the Anchor Set utilizing the notes from the anchor-pulling session. The MSDE approved the anchor-pulling notes and the Training Supervisor confirmed that the RD had accurately added the anchor-pulling notes to the training materials. The RD continued the process by annotating the training sets and decision sets with all notes and comments from the anchor-pulling session. Additionally, the RDs became familiar with the wording of all of the other prompts for the administration on which they are assigned.

Room Director Duties

The RD's job was to conduct the training of the TLs and Readers, oversee the actual scoring of the papers, monitor the work of the TL, and act as the decision maker for situations or questions that may arise during the scoring process. For example, all invalid (foreign language, off-topic, off-mode, etc.) responses were reviewed by the RD, who had to confirm any such decision and ensure consistency of decisions (Blanks were confirmed at the TL level and did not require RD confirmation). Additionally the RD and TL (after approval of Training Supervisor) conducted all resolution readings. Responses for which scores were non-matching or non-adjacent were automatically routed to the RD for an independent resolution scoring. The resolution score became the reported score.

The RD was familiar with all prompts and trained the TLs and Readers to recognize these alternate prompts. Thus, should the student place his/her answer in the wrong place, the answer was recognized by the RD, who could electronically move the response to the appropriate space for scoring by a Reader qualified on the appropriate prompt. The RD also reviewed any potential questionable content responses and forwarded those to the Training Supervisor to consult with the MSDE before processing.

The RD was also responsible for daily statistical review and analysis of all monitoring reports to ensure the quality of the scoring within the room. Review of the data allowed the RD not only to monitor the Reader but also to provide the TL with additional input. Available data included 1) individual Reader agreement rates between two independent scorings; 2) score point distributions by Reader and trend review; 3) prompt statistics for agreement rates and score point distributions; 4) Resolution data.

Project Scoring Parameters

MSDE had a long-standing history of implementing assessments that were composed of multiple item types: selected response (SR), brief constructed response (BCR), extended constructed response (ECR), and gridded or student-produced response (SPR). The MSA contained all such item types for operational scoring and each of the 10 forms per grade/subject also contained field-test items of each of these types. Open-ended items were scored using a generic rubric as follows:

- Reading items were scored on a 0-3 scale (BCRs only in Reading)

All MSA response documents were image scanned at Harcourt's scoring center in San Antonio, Texas. The image scanner captured document identification (ID), demographic information, SR responses, and creates a bi-tonal image of the entire document, allowing images of the BCR responses to be distributed to readers for human scoring while images of the SR, SPR and all other data were made available to Scoring Editing for human review.

All constructed responses were scored by Harcourt's Performance Assessment Scoring Center (PASC). The PASC mission was to provide accurate, reliable, on-time scores for all student responses entrusted to our care. PASC maintained large pools of qualified, trained, professional readers who were well-experienced in scoring a wide range of writing assessments and open-ended assessments in reading, mathematics, science, social science, and other subjects, at each of our scoring sites.

Reader Project Training

Reader training was lead by the RD/TTL and was conducted utilizing our central scoring model. There was one RD responsible for each site, grade and Domain (Reading). After all student responses were scored for the first item, the RD reconvened the group and trained the second item. Training began with the definition and an overview of holistic scoring. Training continued with a reading and discussion of the generic rubric and then the student responses in the anchor set were read and discussed. In the anchor set the scores had been recorded on the student responses and were arranged in ascending point-scale order. Each annotated anchor response was read aloud and discussed thoroughly. Emphasis was placed on the Readers' understanding of how the responses differed from one another in incremental quality and how each response reflected the description of its score point as generalized in the scoring rubric and how each reflected the MSDE's standard for application of each score point.

Once Readers had all their questions answered and the discussion of the anchor set was finished, the Readers began to score the first training set. Each Reader independently read and scored the responses in the training set. The trainer scored and recorded each reader's responses on a training record form. The correct scores were then read to the group when everyone had completed the scoring. In addition, each training paper was discussed as to reasons for applying each given score. At this point, Readers interacted with the RD in discussing the characteristics of each response that earned the assigned score point. The same format was followed for each

training set. During this process, the job of the Reader was to internalize the scoring scale and adjust his or her individual scoring to conform to that scale. Once all training papers had been scored and fully discussed, Readers began the qualifying process.

For MSDE, there were three qualifying sets. MSDE informed PASC in writing for each specific administration how many qualifying sets were approved and were available to the Readers. Readers must score at least 80% match on two of three qualifying sets for Reading.

Inter-Rater Agreement

Harcourt's scoring system generated many kinds of internal monitoring reports that enabled the project leadership to monitor the accuracy and consistency of MSDE scoring. These reports were compiled by prompt, listed the entire prompt's Readers and provided the results of their scoring for each day. Information on these reports included the number of responses read by the Readers during the period, the number and percent of invalid responses and the number of responses for which there had been a second reading. The number of responses with second readings provided data that allowed for reporting of the number and percent of responses with perfect agreement; the number and percent of responses on which the first Reader was a point lower than the second Reader; the number and percent of responses on which the first Reader was a point higher than the second Reader (Adjacent) and the number and percent of responses differing by more than one score point (Non-Adjacent/Non-Perfect). The Training Supervisor also reviewed the daily statistical reports to identify individuals or teams who might need retraining in order to provide continuous scoring consistency on the project. MSDE received data summary reports. Statistical summaries of inter-rater reliability can be found in section 3.4, *inter-rater reliability*.

Reader Retraining

When a Reader's performance fell below acceptable parameters for a project, the Reader was retrained. Retraining was the process by which the RD or TL utilized a number of methods such as individual tutoring on problem score points, individual review of selected responses and anchor and rubric review to get a Reader back on track with the guidelines provided by a specific program. Group retraining was conducted by the RD every Monday (or following any extended break) during the scoring project. In addition, daily retraining occurred as deemed necessary by the MSDE representative and Training Supervisor.

Read Behinds

Harcourt's system allowed TLs and/or RDs to conduct read behinds as an additional monitoring method. When conducting read behinds, the TL or RD received images of student responses and the scores assigned by the Reader. Responses selected for read behinds might be randomly selected or might be targeted read behinds (i.e., responses receiving specific scores, etc.). These read behinds were very useful in tracking specific areas of confusion for a given Reader or group of Readers and assisted the TL and RD in knowing just how to direct retraining activities for individual Readers or teams. The initial read behind percentage was set at 50%. This percentage might be adjusted either higher or lower by the TL based upon the performance of the Reader.

Retrain Readers with <80% Agreement rates

It was the responsibility of the Team Leader ("TL") to not only address questions and provide guidance to the Readers, but to also monitor and manage performance; this included Calibrations, Read Behinds, Agreement rates and Resolution rates. At times, TLs could become easily side-tracked and spend more time acting as a resource for Readers more so than managing performance. PASC had identified this issue and planed to allocate additional TLs whose primary job responsibility was to manage/monitor performance. This level of staffing allowed us to monitor each Reader daily and provided retraining when the level of acceptable performance had not been met.

Pre-"Live" training on Field Test prompts

For 2007, PASC used scored student responses from the appropriate field test administration. This allowed the Readers to build familiarity with the program prior to live scoring.

Trainers Earlier and Longer

In addition to increasing the number of TLs dedicated to the program, PASC also felt it more effective to expedite and extend the time the Trainers were onsite. PASC trained a qualified individual at each site to act as the remote Trainer once the primary left. This individual was responsible for re-training Readers as needed.

Technology

PASC utilized the Student Response Window ("SRW") application supplemented with the PASC Performance Monitoring ("PPM") system that provided the Reader and/or client a "real-time" look into the scoring of each item. This system allowed the viewer to filter the information to provide detail down to the prompt, item, domain, site, Reader, etc. level. This helped in reporting results and creating a custom view of the program. The most important attribute of the application was its security features. Even though Readers in the same room could access the SRW application, each Reader could be setup to view different information within a program. This allowed segregation per domain or even grade within a partitioned room. This system greatly enhanced the quality and timeliness of reporting.

Scoring rules for MSA-Reading

The following scoring rules were applied to MSA-Reading BCR items:

- Reading BCR items were scored:

  0, 1, 2, 3 with two readings

- Score were the higher of the 1st and 2nd Readers' scores provided they were adjacent. If they are equal that was the score.
- The score result from adjacent reads was a decimal numeric; round this up to the nearest whole number.
- For example:

1st Reader	2nd Reader	Final Score
1	2	2
2	3	3

- A resolution reader was used if two non-adjacent initial scores were received.
- The resolution reader's score was used in place of both the 1st and 2nd Readers' scores.
- For example:

1st Reader	2nd Reader	Resolution Reader	Final Score
0	2	1	1
0	3	2	2
1	3	3	3
2	0	1	1
3	0	2	2

Development Procedures for Anchor Pulling

For a given reading prompt, the PASC Developers had the following responsibilities (A developer was a PASC Reader who was selected by the PASC Training Supervisor to prepare sets of papers for client approval. These experienced Readers were judged by the Training Supervisor for their ability to recognize and assemble a wide variety of responses. A Material Development Evaluation was completed by the Language Arts Specialist for review by the Training Supervisor. This evaluation was part of the developer's personnel file. The developer also participated with the clients as a facilitator during the anchor-pulling session in order to make notes and be prepared to assemble the finished sets to the client's specifications. In the case of the MSDE, the developer was also the RD):

1) To know the prompt and the rubric thoroughly

2) To read responses

- Looked for responses that seemed to represent the full range of quality as described in the rubric.
- Searched all orders for responses, with particular emphasis on the state's high performing districts.
- Included not only papers that were homogeneous in their level of quality but also papers that differed in quality from variable to variable but which could be given an overall classification of High, Medium, and Low.
- Marked High, Medium, and Low papers—marked especially good ones that might be the potentially top scores.
- Identified and flagged problem papers—off-topic, off-task, verbatim copying, strange, potential teacher interference, etc.
- Marked the flag with score range or the nature of the problem and paper ID.

3) To sort copies

- Copies were sorted into piles, reflecting the nature of the flag—all potential high papers were together, all potential medium papers were together, etc., with all problem papers grouped together.
- For problem or decision papers, duplicates of types of problems were culled. The best example of each problem type was retained; the rest were set aside for possible future use.

4) To develop sets for anchor pulling

- Decided which particular papers from the sorted piles should go into which set for anchor pulling. Each paper selected went into only one set.
- Used the following guidelines in deciding for which set a paper was most appropriate.

  A. ***Anchor set***: At least three examples of each score point, depending upon the score scale (no invalids). These had to be clean papers but should illustrate different types of the same score point, if there were such clear differences. Once completed, this set was submitted to the Training Supervisor and to MSDE for review and approval.

B. ***Decision set***: This had to be a set of whatever size necessary to illustrate the various kinds of problems that might arise with this prompt or item. If the number of such responses was small, these might be incorporated into the first training set instead of being grouped into a separate additional set.

C. ***Training sets***: These were at least two sets of up to 20 papers each (again, this varied according to the score point scale). They had to contain a range of responses including clean papers, line papers, and problem papers. The responses had to be in random order of quality and unmarked.

D. ***Qualifying sets***: There were three sets of these. Generally there were 10 responses per set, but could be fewer, depending upon the score scale. These had to consist heavily of clean papers but not exclusively so. One of the sets might include an example of an invalid response, but it should be clearly so.

E. ***Calibration sets (validity sets)***: These were composed of five responses of mixed quality, arranged in random order. Harcourt created as many different sets as there were expected to be scoring days on a single prompt or group of items—minus one or two for the training day and the initial scoring day.

Comprehensive notes concerning the specific problems presented in these papers (and the solutions as decided by the committee during the anchor-pulling session) were to be recorded by the Harcourt representatives (developers and Training Specialists) and were to be discussed with the Readers during training. Any subsequent notes or communication from MSDE were incorporated into the training material as well.

Anchor Pulling Procedures

The objective of anchor pulling was for the team members to arrive at a consensus as to the score of each paper in the proposed training materials. These sessions were attended by Maryland educators, MSDE and from PASC the Language Arts Specialists, Manager, Training Supervisor and the developers who selected and prepared all of the papers that would be reviewed. These papers and their corresponding scores formed the basis of selecting final Anchor Sets, Decision Sets Training Sets and Qualifying Sets. Discussions among the team members were important, as they revealed what kinds of qualities characterized certain score points. The most difficult aspects involved balancing widely discrepant qualities found in the same paper and defining the line between adjacent scores.

During formal anchor pulling, the procedure for assigning scores to the papers in each set was as follows:

- Papers were read aloud and discussed by the anchor-pulling panel. Reading aloud focused attention on the ideas presented—or what the student had to say—allowing the panel members to divorce themselves from how the paper looked or how well it had been edited.
- After each response was read, each panel member independently assigned a score. An overall tentative score was assigned to each response on which there seemed to be consensus. However, all assigned scores at this point, even those on responses for which there were complete agreement, were provisional and subject to change based on later considerations.

- Each subsequent set was read and scored by each panel member, using the tentative scores on the previous sets as guidelines. After each set had been read, the results were recorded on a consensus sheet and discussed.

The responses in which score points were not in perfect agreement were discussed starting with the lowest, but least controversial, score point. The papers that had the widest discrepancies of assigned scores around this lowest score point were discussed next before moving to the papers whose assigned scores were in the next higher range. There might be frequent reference to previous sets to make sure that decisions on score points were consistent.

This iterative process of reading, charting, and discussing successive sets had three goals:

- It established scores on papers for which there was virtual agreement.
- It identified papers that were on the line between two adjacent scores, forcing the clarification of that line.
- It contributed to understanding the rationale behind scoring decisions.

During this process, the tentative scores assigned to papers in earlier sets became firm.

1.8 Classical Analyses with SAT10 Form-to Form Linking Common Items

The main purpose of this analysis was to check that the groups taking the two operational forms were essentially equivalent. Descriptive statistics, such as mean (*M*), standard deviation (*SD*) were calculated for the *SAT10* common items (e.g., 25 items included in the operational test forms). The statistical results of the two test forms were almost identical across all grades, as can be seen from Table 1.11.

Table 1.11 Descriptive Statistics for the 2007 MSA-Reading Form-to-Form Common Items

Grade	Form	No. of Items	*N*	*M*	*SD*
3	A	25	29,732	18.05	4.79
	B	25	29,675	18.09	4.78
4	A	25	30,174	19.66	3.97
	B	25	29,955	19.71	3.92
5	A	25	30,883	17.76	4.60
	B	25	30,693	17.74	4.58
6	A	25	31,339	18.27	4.85
	B	25	31,128	18.35	4.82
7	A	25	32,114	17.43	4.79
	B	25	31,846	17.45	4.80
8	A	25	32,609	17.08	4.47
	B	25	32,452	17.14	4.43

Note. Form A designates the operational portion of Forms 1, 3, 5, 7, and 9, which is identical. Form B designates the operational portion of Forms 2, 4, 6, 8, and 10, which is identical.
Note. Analyses were conducted with a whole population.

1.9 P-Value Check with SAT10 Year-to-Year Linking Common Items

Tables 1.12 through 1.17 provide information about how much the p-value of each *SAT10* common item changed in consecutive years. It should be noted that these analyses conducted with a whole population. The general conclusion could be drawn from the results that most of the p-values in Year 2007 were pretty much the same as those in Year 2006 across all grades.

Table 1.12 Year 2006 vs. Year 2007 Linking Common Item P-Value Comparison: Grade 3

Item Number	Item Type	Y06 FA	Y06 FB	Y07 FA	Y07 FB
2	SR	0.94	0.94	0.93	0.93
5	SR	0.90	0.91	0.88	0.89
6	SR	0.69	0.70	0.66	0.67
9	SR	0.87	0.87	0.85	0.86
11	SR	0.70	0.70	0.68	0.68
15	SR	0.85	0.85	0.83	0.83
18	SR	0.74	0.73	0.71	0.71
20	SR	0.43	0.43	0.40	0.41
23	SR	0.68	0.68	0.67	0.67
30	SR	0.50	0.51	0.52	0.52
31	SR	0.74	0.74	0.72	0.72
32	SR	0.72	0.71	0.69	0.69
34	SR	0.79	0.78	0.76	0.76
41	SR	0.78	0.78	0.75	0.75
44	SR	0.92	0.92	0.91	0.91
49	SR	0.67	0.66	0.66	0.66
55	SR	0.68	0.68	0.65	0.65
56	SR	0.48	0.48	0.46	0.47
57	SR	0.83	0.82	0.82	0.82
58	SR	0.91	0.91	0.90	0.90
59	SR	0.85	0.85	0.83	0.83
61	SR	0.56	0.56	0.55	0.56
68	SR	0.78	0.78	0.77	0.76
69	SR	0.81	0.81	0.81	0.81
70	SR	0.65	0.65	0.62	0.62

Note. Analyses were conducted with a whole population.

Descriptive Statistics for Year-to-Year Linking Common Items: Grade 3

Grade	Form	No. of Items	*M*	*SD*
3	Y06 FA	25	0.74	0.14
	Y06 FB	25	0.74	0.14
	Y07 FA	25	0.72	0.14
	Y07 FB	25	0.72	0.14

Table 1.13 Year 2006 vs. Year 2007 Linking Common Item P-Value Comparison: Grade 4

Item Number	Item Type	Y06 FA	Y06 FB	Y07 FA	Y07 FB
1	SR	0.99	0.99	0.99	0.99
4	SR	0.94	0.94	0.95	0.95
9	SR	0.84	0.83	0.84	0.84
10	SR	0.89	0.89	0.90	0.90
18	SR	0.79	0.80	0.78	0.78
23	SR	0.86	0.86	0.86	0.86
24	SR	0.81	0.81	0.80	0.80
29	SR	0.91	0.92	0.94	0.94
35	SR	0.83	0.83	0.86	0.86
38	SR	0.71	0.72	0.73	0.73
41	SR	0.83	0.83	0.82	0.82
42	SR	0.76	0.76	0.73	0.73
43	SR	0.86	0.86	0.85	0.85
44	SR	0.82	0.82	0.82	0.81
45	SR	0.45	0.45	0.43	0.44
46	SR	0.95	0.95	0.95	0.95
47	SR	0.82	0.82	0.82	0.82
50	SR	0.84	0.83	0.82	0.82
51	SR	0.94	0.94	0.95	0.96
52	SR	0.62	0.62	0.62	0.62
53	SR	0.51	0.51	0.51	0.51
54	SR	0.38	0.38	0.37	0.36
55	SR	0.92	0.92	0.92	0.92
62	SR	0.79	0.78	0.79	0.79
64	SR	0.66	0.66	0.64	0.65

Note. Analyses were conducted with a whole population.

Descriptive Statistics for Year-to-Year Linking Common Items: Grade 4

Grade	Form	No. of Items	*M*	*SD*
4	Y06 FA	25	0.79	0.16
	Y06 FB	25	0.79	0.16
	Y07 FA	25	0.79	0.16
	Y07 FB	25	0.79	0.16

Table 1.14 Year 2006 vs. Year 2007 Linking Common Item P-Value Comparison: Grade 5

Item Number	Item Type	Y06 FA	Y06 FB	Y07 FA	Y07 FB
4	SR	0.61	0.62	0.60	0.59
5	SR	0.57	0.57	0.57	0.56
6	SR	0.64	0.63	0.63	0.64
9	SR	0.91	0.91	0.93	0.93
10	SR	0.91	0.91	0.90	0.90
11	SR	0.84	0.85	0.84	0.84
13	SR	0.85	0.84	0.86	0.86
16	SR	0.83	0.83	0.84	0.85
17	SR	0.80	0.80	0.80	0.80
19	SR	0.75	0.75	0.75	0.75
21	SR	0.82	0.82	0.82	0.82
23	SR	0.59	0.59	0.57	0.57
25	SR	0.73	0.73	0.72	0.72
26	SR	0.70	0.70	0.72	0.72
28	SR	0.54	0.55	0.54	0.54
31	SR	0.60	0.59	0.58	0.58
32	SR	0.70	0.70	0.69	0.70
33	SR	0.81	0.81	0.81	0.81
34	SR	0.44	0.43	0.39	0.39
35	SR	0.67	0.68	0.69	0.68
37	SR	0.68	0.68	0.63	0.63
41	SR	0.77	0.77	0.78	0.78
44	SR	0.66	0.66	0.67	0.66
45	SR	0.57	0.57	0.57	0.56
49	SR	0.85	0.85	0.87	0.87

Descriptive Statistics for Year-to-Year Linking Common Items: Grade 5

Grade	Form	No. of Items	*M*	*SD*
5	Y06 FA	25	0.71	0.12
	Y06 FB	25	0.71	0.13
	Y07 FA	25	0.71	0.14
	Y07 FB	25	0.71	0.14

Table 1.15 Year 2006 vs. Year 2007 Linking Common Item P-Value Comparison: Grade 6

Item Number	Item Type	Y06 FA	Y06 FB	Y07 FA	Y07 FB
1	SR	0.79	0.79	0.77	0.77
5	SR	0.54	0.54	0.51	0.51
8	SR	0.63	0.63	0.59	0.60
9	SR	0.92	0.92	0.94	0.94
10	SR	0.75	0.75	0.74	0.74
14	SR	0.76	0.76	0.77	0.78
16	SR	0.81	0.81	0.79	0.80
18	SR	0.84	0.84	0.83	0.84
21	SR	0.89	0.88	0.88	0.89
22	SR	0.78	0.78	0.78	0.78
23	SR	0.70	0.71	0.69	0.70
24	SR	0.71	0.71	0.69	0.70
25	SR	0.68	0.68	0.68	0.69
28	SR	0.80	0.80	0.79	0.79
29	SR	0.66	0.66	0.63	0.63
30	SR	0.69	0.69	0.69	0.69
32	SR	0.86	0.86	0.86	0.86
33	SR	0.34	0.33	0.32	0.32
34	SR	0.83	0.83	0.81	0.82
35	SR	0.64	0.63	0.64	0.65
36	SR	0.79	0.79	0.79	0.79
37	SR	0.82	0.82	0.82	0.82
38	SR	0.61	0.61	0.58	0.58
39	SR	0.87	0.87	0.88	0.88
40	SR	0.77	0.76	0.78	0.78

Descriptive Statistics for Year-to-Year Linking Common Items: Grade 6

Grade	Form	No. of Items	*M*	*SD*
6	Y06 FA	25	0.74	0.13
	Y06 FB	25	0.74	0.13
	Y07 FA	25	0.74	0.13
	Y07 FB	25	0.74	0.13

Table 1.16 Year 2006 vs. Year 2007 Linking Common Item P-Value Comparison: Grade 7

Item Number	Item Type	Y06 FA	Y06 FB	Y07 FA	Y07 FB
1	SR	0.90	0.90	0.89	0.89
3	SR	0.85	0.85	0.85	0.85
6	SR	0.49	0.49	0.47	0.48
8	SR	0.41	0.41	0.37	0.37
10	SR	0.61	0.62	0.62	0.62
14	SR	0.70	0.70	0.69	0.69
16	SR	0.66	0.65	0.65	0.64
20	SR	0.84	0.84	0.82	0.83
22	SR	0.88	0.88	0.87	0.87
23	SR	0.53	0.54	0.55	0.54
26	SR	0.77	0.77	0.77	0.77
27	SR	0.53	0.53	0.52	0.51
28	SR	0.65	0.65	0.63	0.63
31	SR	0.57	0.57	0.58	0.58
32	SR	0.87	0.87	0.86	0.85
33	SR	0.63	0.62	0.61	0.61
36	SR	0.90	0.90	0.89	0.90
37	SR	0.73	0.73	0.71	0.71
38	SR	0.76	0.76	0.73	0.74
39	SR	0.65	0.65	0.63	0.63
40	SR	0.88	0.88	0.87	0.87
41	SR	0.78	0.77	0.77	0.77
42	SR	0.73	0.73	0.70	0.71
43	SR	0.74	0.74	0.71	0.71
44	SR	0.69	0.69	0.68	0.68

Descriptive Statistics for Year-to-Year Linking Common Items: Grade 7

Grade	Form	No. of Items	*M*	*SD*
7	Y06 FA	25	0.71	0.14
	Y06 FB	25	0.71	0.14
	Y07 FA	25	0.70	0.14
	Y07 FB	25	0.70	0.14

Table 1.17 Year 2006 vs. Year 2007 Linking Common Item P-Value Comparison: Grade 8

Item Number	Item Type	Y06 FA	Y06 FB	Y07 FA	Y07 FB
3	SR	0.66	0.66	0.62	0.63
6	SR	0.54	0.54	0.53	0.53
8	SR	0.56	0.57	0.54	0.54
9	SR	0.93	0.94	0.93	0.93
22	SR	0.97	0.97	0.98	0.98
23	SR	0.56	0.56	0.55	0.55
24	SR	0.59	0.59	0.58	0.58
25	SR	0.82	0.82	0.81	0.81
26	SR	0.63	0.63	0.62	0.63
29	SR	0.74	0.74	0.71	0.72
30	SR	0.62	0.61	0.62	0.61
31	SR	0.65	0.64	0.61	0.62
32	SR	0.49	0.50	0.52	0.52
33	SR	0.65	0.64	0.62	0.62
35	SR	0.78	0.79	0.76	0.76
36	SR	0.53	0.53	0.53	0.53
37	SR	0.73	0.73	0.74	0.74
38	SR	0.75	0.75	0.75	0.75
39	SR	0.53	0.53	0.52	0.52
41	SR	0.84	0.84	0.85	0.85
44	SR	0.74	0.75	0.73	0.73
46	SR	0.79	0.80	0.80	0.80
48	SR	0.73	0.73	0.70	0.70
49	SR	0.74	0.74	0.74	0.75
50	SR	0.74	0.75	0.73	0.74

Descriptive Statistics for Year-to-Year Linking Common Items: Grade 8

Grade	Form	No. of Items	*M*	*SD*
8	Y06 FA	25	0.69	0.13
	Y06 FB	25	0.69	0.13
	Y07 FA	25	0.69	0.13
	Y07 FB	25	0.69	0.13

1.10 Validation Check with Augmented Items

To collect information about how much the same items that appeared on the test forms in consecutive years changed in terms of item difficulty, difficulty indices such as p-value and Rasch difficulty were calculated.

First, it should be noted these items were at first augmented as field test items in Year 2005 and appeared as operational test items in Year 2007 as seen from Table 1.18. Second, Year 2007 Forms 1, 3, 5, 7, and 9 are the same, and Year 2007 Forms 2, 4, 6, 8, and 10 are the same except for the field test portion. Third, in Tables 1.19 through 1.54, item numbers were given by those of Year 2007. Detailed information about the specific test design and construction of Year 2007 can be obtained from section 1.5, Test Structure of the 2007 MSA-Reading.

First of all, it should be noted that Year 2005 p-value was calculated with a field-tested sample and Year 2007 p-value was calculated with a whole population. P-value of BCR item was the item mean score divided by the item score range. In addition, the numbers in "Omits" in each table were very substantial and included students who did not responded at all. Item p-value (easiness) results indicated that in general, most of the p-values in Year 2007 increased somewhat compared to those in Year 2005 for grades 3 through 7. However, most of p-values were much the same as those in Year 2005 for grade 8.

With respect to Rasch difficulty analysis, most of the items in Year 2007 became easier compared to those in Year 2005 for grades 3 though 7. For grade 8, most of the item difficulties in Year 2007 were much the same as those in Year 2005. It should be noted that Rasch difficulties were based on the same scale (e.g., linked to Year 2003 or Year 2004).

In conclusion, both p-value and Rasch difficulty results reflected the same phenomenon, indicating that most of the items became easier.

Table 1.18 Form Identification for Items Appearing Year 2005 and Year 2007: Grades 3 through 8

Grade	Year 2005	Year 2007
3	Form 1, 3 Forms 2 and 4 /1 and 3	Form A (1, 3, 5, 7, 9) Form B (2, 4, 6, 8, 10)
4	Form 1, 3 Form 2, 4	Form A (1, 3, 5, 7, 9) Form B (2, 4, 6, 8, 10)
5	Form 1, 3 Form 2, 4	Form A (1, 3, 5, 7, 9) Form B (2, 4, 6, 8, 10)
6	Form 2, 1 Form 4, 3	Form A (1, 3, 5, 7, 9) Form B (2, 4, 6, 8, 10)
7	Form 1, 3 Form 2, 4	Form A (1, 3, 5, 7, 9) Form B (2, 4, 6, 8, 10)
8	Form 1, 3 Form 2, 3	Form A (1, 3, 5, 7, 9) Form B (2, 4, 6, 8, 10)

Table 1.19 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 3 Form A

Item Number	Item Type	Year 05	Year 07
71	SR	0.75	0.80
72	BCR	0.45	0.55
73	SR	0.85	0.87
74	SR	0.64	0.70
75	BCR	0.51	0.51
76	SR	0.51	0.57
77	SR	0.56	0.57
78	BCR	0.34	0.38
79	SR	0.48	0.45
80	SR	0.33	0.37
81	BCR	0.32	0.36
82	SR	0.56	0.66

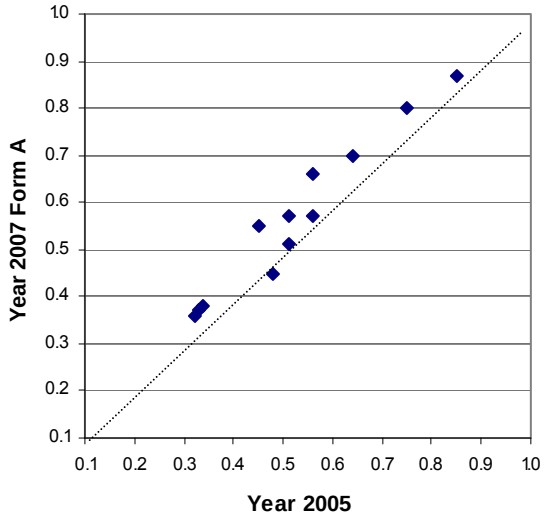


Table 1.20 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 3 Form A

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	72	BCR	2,199	1.36	0.65	5.00	53.00	37.00	3.00	1.00
2005	75	BCR	2,199	1.52	0.67	5.00	40.00	49.00	4.00	1.00
2005	78	BCR	2,308	1.03	0.77	25.00	47.00	25.00	2.00	1.00
2005	81	BCR	2,308	0.97	0.67	22.00	56.00	19.00	1.00	2.00
2007	72	BCR	29,732	1.66	0.66	1.94	36.40	52.76	8.13	0.77
2007	75	BCR	29,732	1.53	0.59	2.20	42.13	53.14	1.57	0.95
2007	78	BCR	29,732	1.15	0.77	20.82	44.24	32.23	2.05	0.66
2007	81	BCR	29,732	1.08	0.68	18.02	55.10	25.00	0.81	1.07

Table 1.21 Augmented IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 3 Form A

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	71	SR	-0.3692			
2005	72	BCR	1.4454	-3.4971	0.1538	3.3433
2005	73	SR	-1.0949			
2005	74	SR	0.3514			
2005	75	BCR	1.1364	-3.1808	-0.2633	3.4441
2005	76	SR	0.9950			
2005	77	SR	0.7788			
2005	78	BCR	2.3113	-2.2846	-0.2140	2.4986
2005	79	SR	1.1558			
2005	80	SR	1.9304			
2005	81	BCR	2.8046	-3.0911	-0.1739	3.2650
2005	82	SR	0.6826			
2007	71	SR	-0.6027			
2007	72	BCR	0.6767	-3.7457	-0.1823	3.9279
2007	73	SR	-1.3357			
2007	74	SR	0.0066			
2007	75	BCR	1.3267	-4.1588	-0.2494	4.4082
2007	76	SR	0.8172			
2007	77	SR	0.7501			
2007	78	BCR	2.1952	-2.4813	-0.5270	3.0083
2007	79	SR	1.4026			
2007	80	SR	1.8600			
2007	81	BCR	2.7146	-3.1880	-0.2086	3.3966
2007	82	SR	0.1785			

Note. These Rasch difficulties were based on a common scale.

Figure 1.2 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 3 Form A

Table 1.22 Augmented Item P-Value Comparison for Year 2005/2004 vs. Year 2007: Grade 3 Form B

Item Number	Item Type	Year 05/04	Year 07
71	SR	0.79	0.80
72	BCR	0.48	0.56
73	SR	0.77	0.79
74	SR	0.77	0.78
75	BCR	0.56	0.54
76	SR	0.50	0.48
77	SR	0.55	0.54
78	BCR	0.43	0.51
79	SR	0.56	0.58
80	SR	0.44	0.40
81	BCR	0.42	0.50
82	SR	0.58	0.65

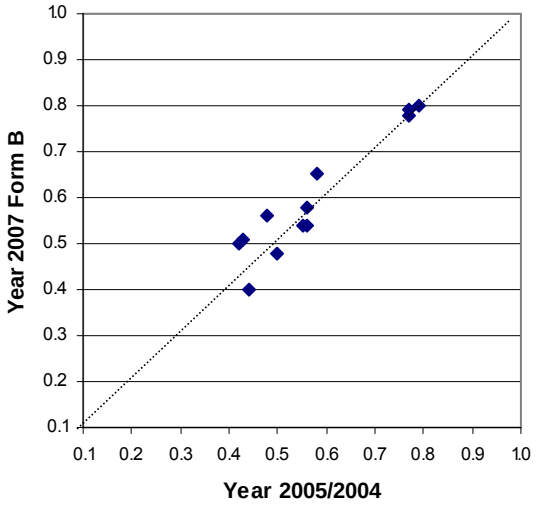


Table 1.23 BCR Item Score-Point Distribution Comparison for Year 2005/04 vs. Year 2007: Grade 3 Form B

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	72	BCR	27,592	1.43	0.89	20.00	23.00	50.00	7.00	0.00
2005	75	BCR	27,592	1.67	0.78	3.00	40.00	41.00	15.00	1.00
2004	78	BCR	28,301	1.29	0.73	10.00	51.00	32.00	4.00	2.00
2004	81	BCR	28,301	1.27	0.70	11.00	52.00	33.00	3.00	1.00
2007	72	BCR	29,675	1.68	0.84	13.60	14.07	61.23	10.45	0.65
2007	75	BCR	29,675	1.61	0.81	4.97	41.12	37.75	14.64	1.52
2007	78	BCR	29,675	1.54	0.76	5.56	43.29	40.36	9.91	0.88
2007	81	BCR	29,675	1.49	0.71	5.18	44.99	42.23	6.52	1.08

Table 1.24 Augment IRT Item Difficulty Comparison for Year 2005/2004 vs. Year 2007: Grade 3 Form B

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	71	SR	-0.5402			
2005	72	BCR	1.4353	-1.2373	-1.1211	2.3583
2005	73	SR	-0.4450			
2005	74	SR	-0.4370			
2005	75	BCR	0.4477	-2.9007	0.4904	2.4104
2005	76	SR	1.1262			
2004	77	SR	0.6985			
2004	78	BCR	1.4359	-2.8478	0.1608	2.6870
2004	79	SR	0.6020			
2004	80	SR	1.2637			
2004	81	BCR	1.3251	-2.8354	-0.0638	2.8993
2004	82	SR	0.4816			
2007	71	SR	-0.5812			
2007	72	BCR	1.0200	-0.9972	-1.3939	2.3911
2007	73	SR	-0.5350			
2007	74	SR	-0.4499			
2007	75	BCR	0.6505	-2.4498	0.3899	2.0599
2007	76	SR	1.1214			
2007	77	SR	0.8924			
2007	78	BCR	1.0854	-2.5958	0.2578	2.3381
2007	79	SR	0.7167			
2007	80	SR	1.6168			
2007	81	BCR	1.0017	-2.8775	0.1426	2.7349
2007	82	SR	0.2386			

Note. These Rasch difficulties were based on a common scale.

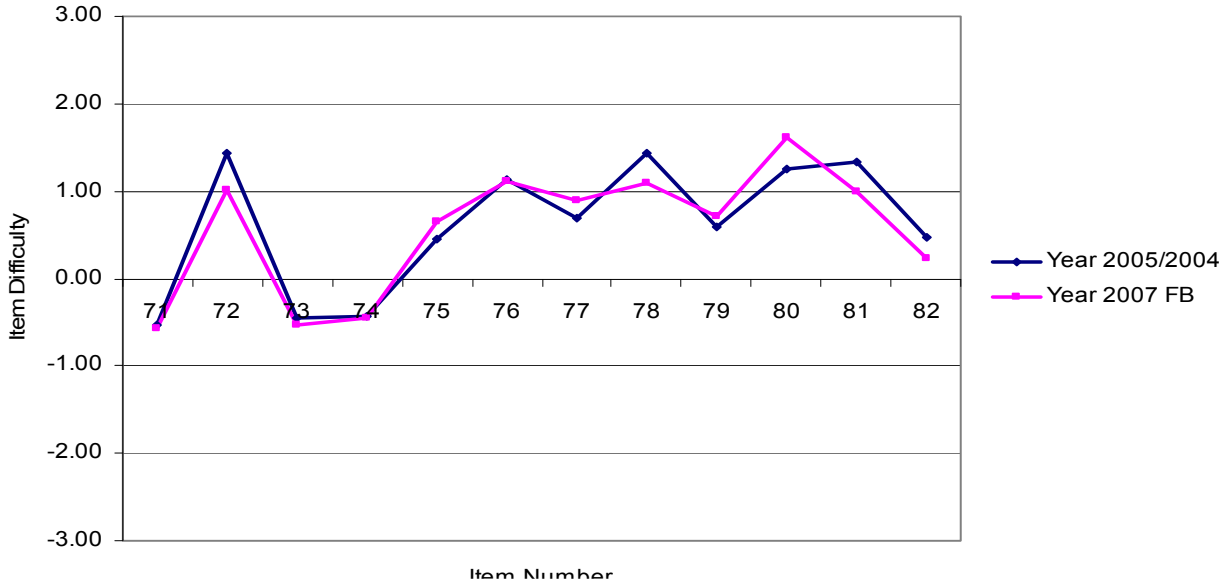


Figure 1.3 Augmented IRT Item Difficulty Comparison Plot for Year 2005/2004 vs. Year 2007: Grade 3 Form B

Table 1.25 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 4 Form A

Item Number	Item Type	Year 05	Year 07
71	SR	0.51	0.56
72	BCR	0.48	0.55
73	SR	0.55	0.61
74	SR	0.79	0.79
75	BCR	0.48	0.52
76	SR	0.76	0.78
77	SR	0.58	0.56
78	BCR	0.47	0.49
79	SR	0.79	0.82
80	SR	0.52	0.56
81	BCR	0.24	0.28
82	SR	0.67	0.73

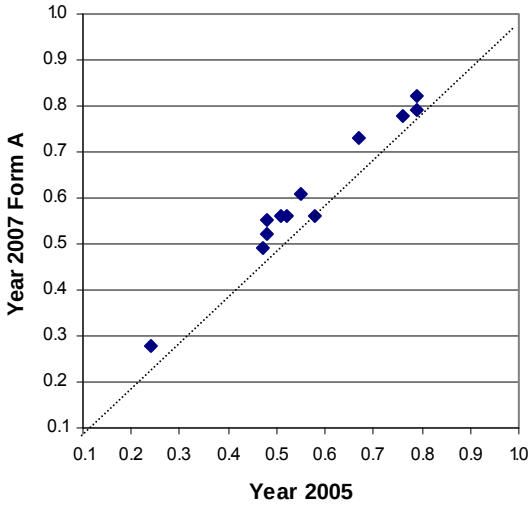


Table 1.26 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 4 Form A

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	72	BCR	2,188	1.45	0.61	5.00	45.00	49.00	1.00	1.00
2005	75	BCR	2,188	1.44	0.60	5.00	45.00	49.00	0.00	1.00
2005	78	BCR	2,266	1.41	0.57	2.00	55.00	41.00	2.00	1.00
2005	81	BCR	2,266	0.71	0.66	39.00	48.00	11.00	0.00	2.00
2007	72	BCR	30,174	1.66	0.53	2.03	30.64	66.52	0.64	0.17
2007	75	BCR	30,174	1.55	0.55	1.59	40.75	56.66	0.47	0.53
2007	78	BCR	30,174	1.46	0.60	3.01	49.35	45.19	1.94	0.51
2007	81	BCR	30,174	0.85	0.66	28.23	55.82	13.94	0.48	1.53

Table 1.27 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 4 Form A

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	71	SR	1.3183			
2005	72	BCR	1.9371	-3.6737	-0.6056	4.2793
2005	73	SR	1.0621			
2005	74	SR	-0.2556			
2005	75	BCR	2.1874	-3.9498	-0.8403	4.7900
2005	76	SR	-0.0642			
2005	77	SR	1.0255			
2005	78	BCR	1.6339	-4.2731	0.1857	4.0874
2005	79	SR	-0.2319			
2005	80	SR	1.3183			
2005	81	BCR	4.0141	-2.9786	-0.4466	3.4251
2005	82	SR	0.3795			
2007	71	SR	1.1275			
2007	72	BCR	1.4246	-3.9432	-1.0716	5.0148
2007	73	SR	0.8360			
2007	74	SR	-0.1767			
2007	75	BCR	1.5790	-4.7955	-0.4851	5.2806
2007	76	SR	-0.1660			
2007	77	SR	1.2465			
2007	78	BCR	1.5483	-3.8291	0.1137	3.7154
2007	79	SR	-0.4818			
2007	80	SR	1.1823			
2007	81	BCR	3.4195	-2.9824	-0.1251	3.1075
2007	82	SR	0.2118			

Note. These Rasch difficulties were based on a common scale.

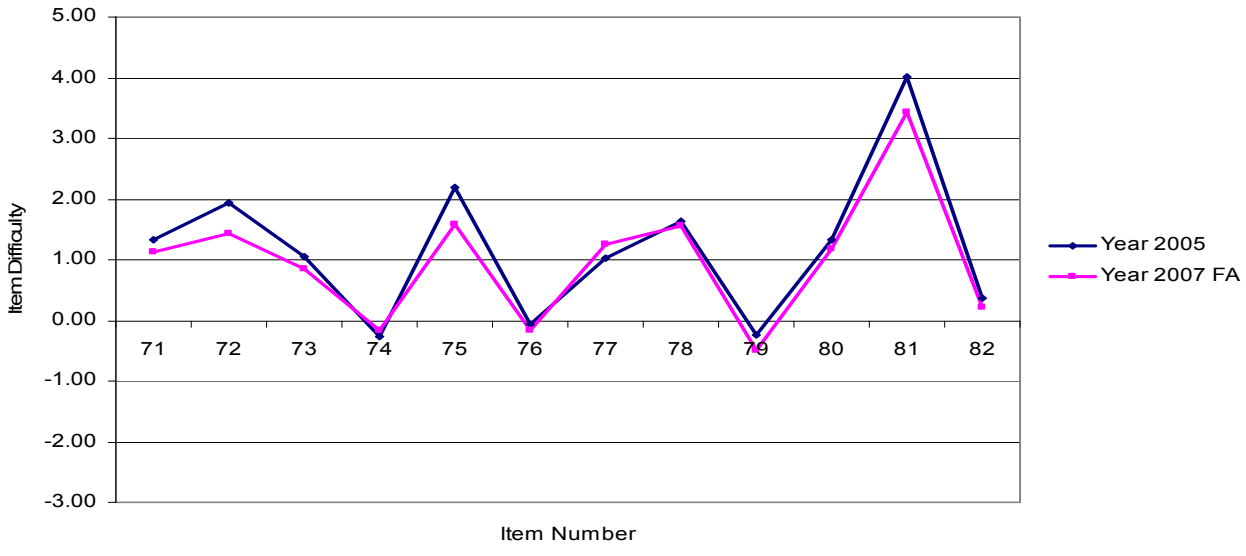


Figure 1.4 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 4 Form A

Table 1.28 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 4 Form B

Item Number	Item Type	Year 05	Year 07
71	SR	0.79	0.84
72	BCR	0.46	0.44
73	SR	0.59	0.57
74	SR	0.63	0.68
75	BCR	0.52	0.56
76	SR	0.73	0.78
77	SR	0.55	0.62
78	BCR	0.43	0.48
79	SR	0.49	0.57
80	SR	0.48	0.49
81	BCR	0.33	0.50
82	SR	0.53	0.58

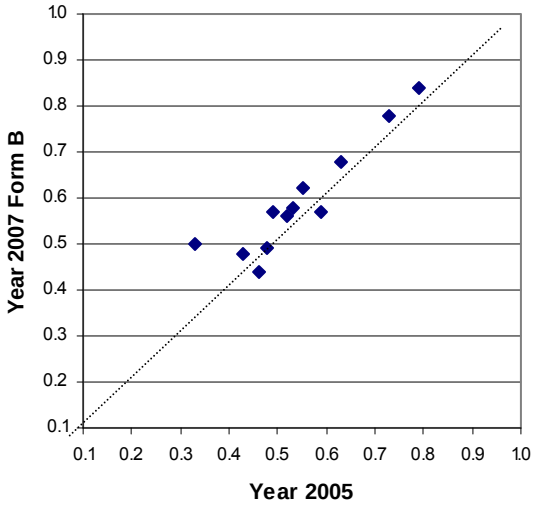


Table 1.29 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 4 Form B

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	72	BCR	2,235	1.38	0.65	6.00	51.00	39.00	3.00	1.00
2005	75	BCR	2,235	1.56	0.65	5.00	31.00	60.00	1.00	2.00
2005	78	BCR	2,215	1.29	0.56	4.00	63.00	32.00	1.00	0.00
2005	81	BCR	2,215	0.99	0.75	25.00	48.00	23.00	2.00	2.00
2007	72	BCR	29,955	1.31	0.61	6.48	55.99	35.88	1.24	0.40
2007	75	BCR	29,955	1.69	0.59	4.26	23.29	69.91	1.81	0.72
2007	78	BCR	29,955	1.45	0.55	2.09	49.99	47.37	0.17	0.39
2007	81	BCR	29,955	1.49	0.63	6.11	37.55	54.85	0.64	0.85

Table 1.30 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 4 Form B

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	71	SR	-0.2477			
2005	72	BCR	1.7832	-3.3964	-0.021	3.4174
2005	73	SR	0.9410			
2005	74	SR	0.6725			
2005	75	BCR	1.7672	-3.209	-1.119	4.3280
2005	76	SR	-0.0593			
2005	77	SR	1.0932			
2005	78	BCR	2.0176	-4.1043	0.1823	3.922
2005	79	SR	1.2683			
2005	80	SR	1.3979			
2005	81	BCR	2.6567	-2.3317	-0.2162	2.5479
2005	82	SR	1.1418			
2007	71	SR	-0.5343			
2007	72	BCR	2.0834	-3.7861	-0.0235	3.8096
2007	73	SR	1.1757			
2007	74	SR	0.5294			
2007	75	BCR	1.6275	-3.1782	-1.3278	4.5059
2007	76	SR	-0.0504			
2007	77	SR	0.9068			
2007	78	BCR	2.4055	-5.0568	-0.7227	5.7795
2007	79	SR	1.1552			
2007	80	SR	1.6008			
2007	81	BCR	2.3188	-3.6205	-1.0745	4.6950
2007	82	SR	1.0512			

Note. These Rasch difficulties were based on a common scale.

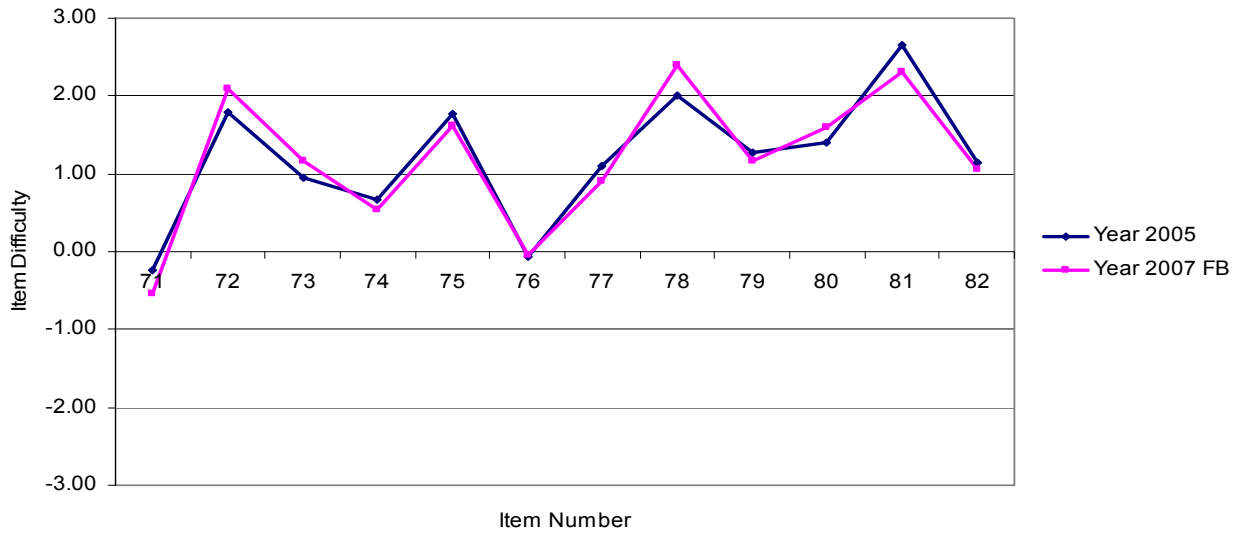


Figure 1.5 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 4 Form B

Table 1.31 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 5 Form A

Item Number	Item Type	Year 05	Year 07
61	SR	0.75	0.72
62	BCR	0.36	0.42
63	SR	0.53	0.59
64	SR	0.81	0.83
65	BCR	0.37	0.38
66	SR	0.56	0.67
67	SR	0.61	0.64
68	BCR	0.35	0.41
69	SR	0.34	0.42
70	SR	0.37	0.45
71	BCR	0.35	0.43
72	SR	0.63	0.76

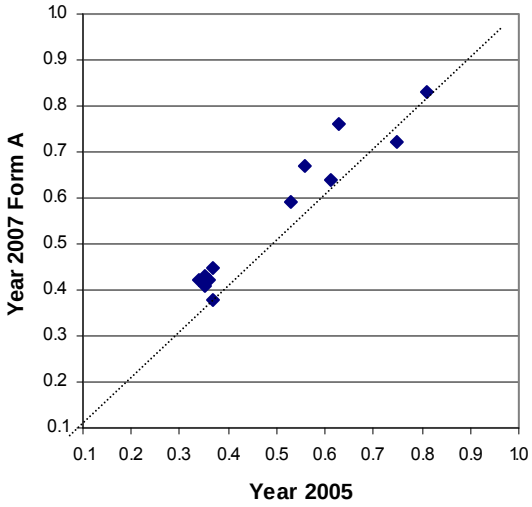


Table 1.32 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 5 Form A

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,163	1.07	0.51	8.00	75.00	15.00	0.00	1.00
2005	65	BCR	2,163	1.10	0.61	11.00	64.00	23.00	1.00	2.00
2005	68	BCR	2,257	1.05	0.60	13.00	65.00	20.00	0.00	2.00
2005	71	BCR	2,257	1.06	0.55	9.00	71.00	17.00	0.00	3.00
2007	62	BCR	30,883	1.25	0.55	4.27	65.63	28.76	0.50	0.84
2007	65	BCR	30,883	1.13	0.54	7.42	71.43	19.70	0.76	0.70
2007	68	BCR	30,883	1.24	0.67	11.27	53.33	33.24	1.43	0.73
2007	71	BCR	30,883	1.28	0.62	8.08	55.76	34.84	0.82	0.51

Table 1.33 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 5 Form A

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	-0.3477			
2005	62	BCR	2.5179	-4.2835	0.4316	3.8519
2005	63	SR	0.8127			
2005	64	SR	-0.8112			
2005	65	BCR	2.3627	-3.6517	-0.0064	3.6581
2005	66	SR	0.6417			
2005	67	SR	0.3405			
2005	68	BCR	2.6820	-3.8218	-0.2301	4.0519
2005	69	SR	1.7021			
2005	70	SR	1.5429			
2005	71	BCR	2.3054	-3.8853	0.4131	3.4722
2005	72	SR	0.1902			
2007	61	SR	-0.2445			
2007	62	BCR	1.8768	-4.3444	0.6386	3.7058
2007	63	SR	0.4821			
2007	64	SR	-0.9831			
2007	65	BCR	1.9237	-3.9951	0.5322	3.4629
2007	66	SR	0.018			
2007	67	SR	0.1235			
2007	68	BCR	1.8519	-3.0717	-0.412	3.4836
2007	69	SR	1.2965			
2007	70	SR	1.2079			
2007	71	BCR	1.8363	-3.3608	-0.0997	3.4605
2007	72	SR	-0.6218			

Note. These Rasch difficulties were based on a common scale.

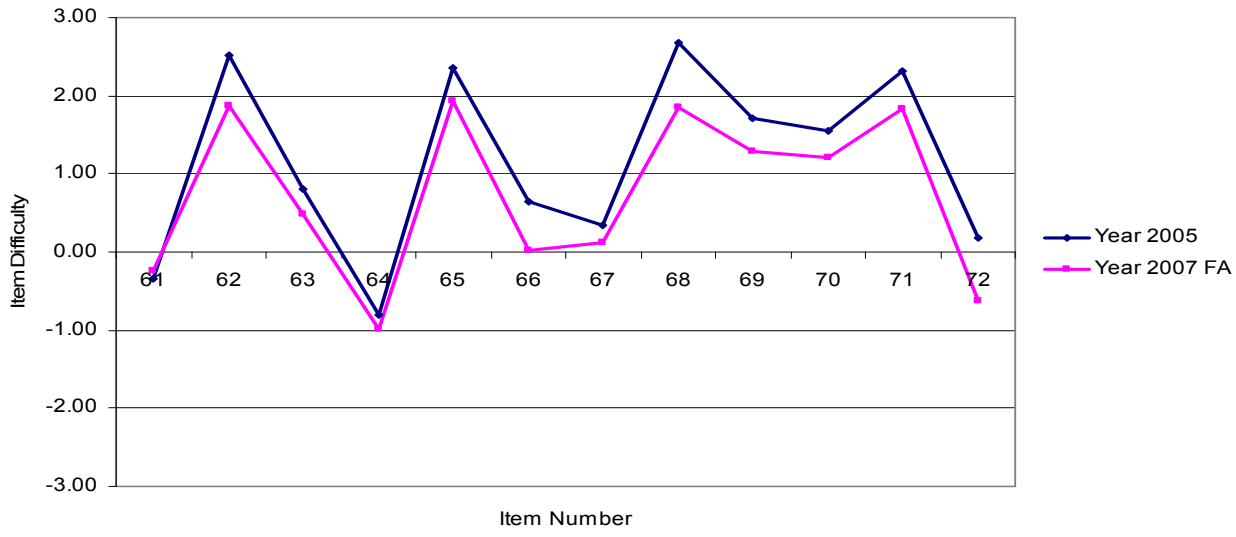


Figure 1.6 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 5 Form A

Table 1.34 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 5 Form B

Item Number	Item Type	Year 05	Year 07
61	SR	0.51	0.55
62	BCR	0.43	0.48
63	SR	0.72	0.82
64	SR	0.48	0.51
65	BCR	0.37	0.41
66	SR	0.75	0.81
67	SR	0.63	0.68
68	BCR	0.38	0.42
69	SR	0.71	0.77
70	SR	0.68	0.68
71	BCR	0.41	0.47
72	SR	0.55	0.63

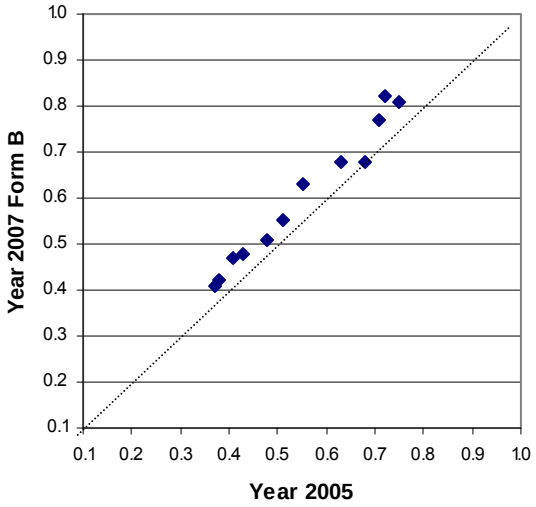


Table 1.35 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 5 Form B

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,231	1.30	0.70	10.00	47.00	39.00	2.00	2.00
2005	65	BCR	2,231	1.11	0.55	10.00	68.00	21.00	0.00	1.00
2005	68	BCR	2,221	1.15	0.60	10.00	63.00	26.00	0.00	1.00
2005	71	BCR	2,221	1.22	0.74	15.00	43.00	39.00	1.00	3.00
2007	62	BCR	30,693	1.44	0.59	3.32	49.64	45.39	1.33	0.32
2007	65	BCR	30,693	1.22	0.57	6.19	65.86	26.47	0.94	0.54
2007	68	BCR	30,693	1.27	0.53	2.70	66.86	28.96	0.72	0.77
2007	71	BCR	30,693	1.40	0.70	9.92	41.92	45.21	2.41	0.54

Table 1.36 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 5 Form B

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	0.9315			
2005	62	BCR	1.7668	-3.0373	-0.4671	3.5044
2005	63	SR	-0.3614			
2005	64	SR	1.0777			
2005	65	BCR	3.1486	-4.6852	-0.6436	5.3288
2005	66	SR	-0.4182			
2005	67	SR	0.2996			
2005	68	BCR	2.2817	-3.6787	-0.1882	3.8668
2005	69	SR	-0.2080			
2005	70	SR	-0.0461			
2005	71	BCR	2.2445	-2.8682	-1.0489	3.9172
2005	72	SR	0.5447			
2007	61	SR	0.7126			
2007	62	BCR	1.2424	-3.8438	-0.1524	3.9962
2007	63	SR	-0.9256			
2007	64	SR	0.9681			
2007	65	BCR	1.9756	-3.9258	0.2455	3.6803
2007	66	SR	-0.7653			
2007	67	SR	0.033			
2007	68	BCR	1.6086	-3.8547	0.2498	3.6048
2007	69	SR	-0.4724			
2007	70	SR	-0.0251			
2007	71	BCR	1.4035	-2.6719	-0.4491	3.121
2007	72	SR	0.1946			

Note. These Rasch difficulties were based on a common scale.

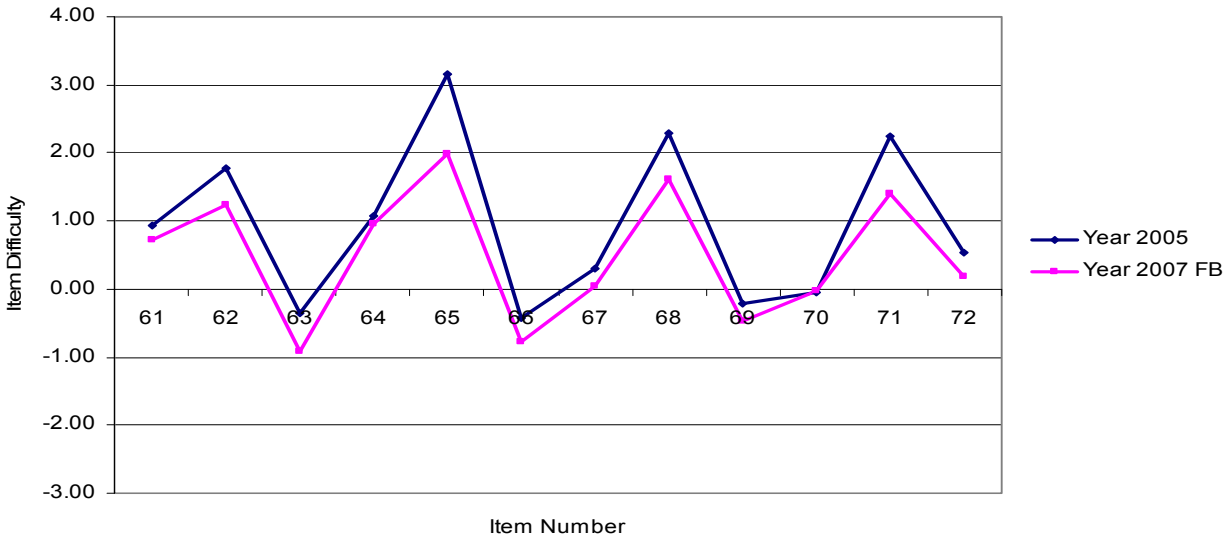


Figure 1.7 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 5 Form B

Table 1.37 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 6 Form A

Item Number	Item Type	Year 05	Year 07
61	SR	0.41	0.46
62	BCR	0.43	0.47
63	SR	0.62	0.70
64	SR	0.68	0.78
65	BCR	0.42	0.46
66	SR	0.68	0.70
67	SR	0.46	0.49
68	BCR	0.42	0.40
69	SR	0.86	0.89
70	SR	0.58	0.56
71	BCR	0.40	0.40
72	SR	0.54	0.61

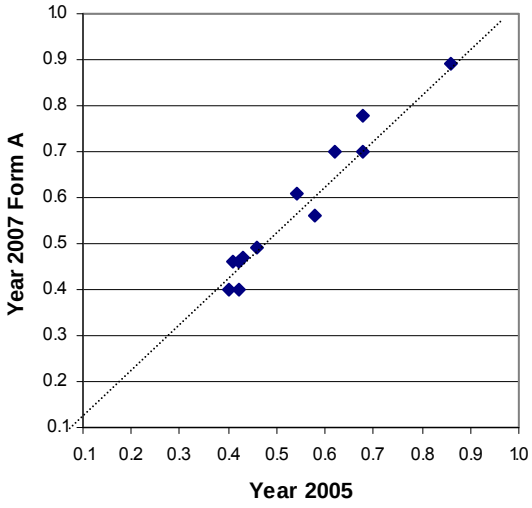


Table 1.38 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 6 Form A

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,262	1.28	0.65	5.00	58.00	31.00	3.00	3.00
2005	65	BCR	2,262	1.25	0.69	7.00	56.00	29.00	3.00	4.00
2005	68	BCR	2,213	1.25	0.71	12.00	49.00	35.00	2.00	2.00
2005	71	BCR	2,213	1.21	0.82	15.00	46.00	29.00	6.00	4.00
2007	62	BCR	31,339	1.42	0.62	2.75	53.26	39.93	2.84	1.22
2007	65	BCR	31,339	1.39	0.65	4.98	52.11	38.73	3.11	1.07
2007	68	BCR	31,339	1.19	0.70	12.62	54.55	29.06	2.27	1.51
2007	71	BCR	31,339	1.20	0.89	22.99	36.93	31.27	6.90	1.90

Table 1.39 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 6 Form A

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	1.6154			
2005	62	BCR	1.5753	-3.5694	0.4231	3.1463
2005	63	SR	0.5317			
2005	64	SR	0.1910			
2005	65	BCR	1.6099	-3.2673	0.4131	2.8542
2005	66	SR	0.1524			
2005	67	SR	1.2876			
2005	68	BCR	1.9383	-2.9117	-0.3301	3.2419
2005	69	SR	-1.1948			
2005	70	SR	0.6606			
2005	71	BCR	1.6137	-2.2421	0.1446	2.0975
2005	72	SR	0.8837			
2007	61	SR	1.2967			
2007	62	BCR	0.9838	-3.9978	0.1002	3.8976
2007	63	SR	0.0096			
2007	64	SR	-0.5493			
2007	65	BCR	1.3890	-3.3172	0.0212	3.2961
2007	66	SR	0.0128			
2007	67	SR	1.1631			
2007	68	BCR	2.0624	-3.1815	0.1260	3.0555
2007	69	SR	-1.4390			
2007	70	SR	0.7441			
2007	71	BCR	1.5694	-1.9073	-0.0550	1.9623
2007	72	SR	0.4720			

Note. These Rasch difficulties were based on a common scale.

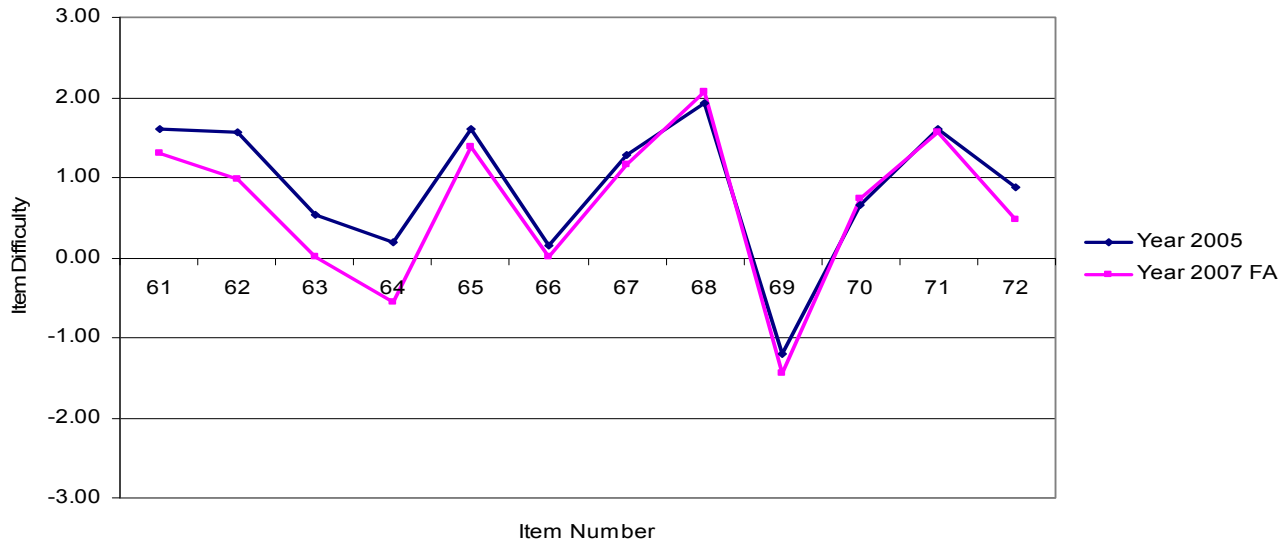


Figure 1.8 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 6 Form A

Table 1.40 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 6 Form B

Item Number	Item Type	Year 05	Year 07
61	SR	0.48	0.50
62	BCR	0.39	0.39
63	SR	0.44	0.47
64	SR	0.37	0.38
65	BCR	0.31	0.38
66	SR	0.66	0.71
67	SR	0.42	0.47
68	BCR	0.45	0.40
69	SR	0.58	0.56
70	SR	0.45	0.45
71	BCR	0.48	0.54
72	SR	0.43	0.54

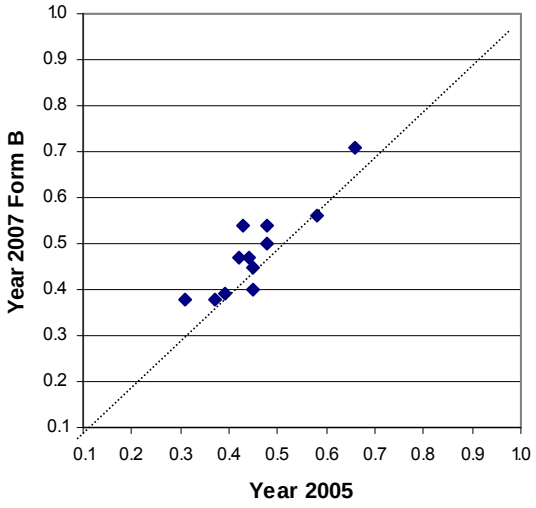


Table 1.41 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 6 Form B

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,286	1.18	0.71	14.00	53.00	29.00	2.00	2.00
2005	65	BCR	2,286	0.94	0.57	17.00	67.00	13.00	0.00	3.00
2005	68	BCR	2,278	1.35	0.73	10.00	46.00	38.00	4.00	1.00
2005	71	BCR	2,278	1.44	0.75	9.00	38.00	46.00	4.00	3.00
2007	62	BCR	31,128	1.18	0.78	19.28	44.04	32.56	2.89	1.23
2007	65	BCR	31,128	1.13	0.62	10.98	63.18	23.16	1.30	1.38
2007	68	BCR	31,128	1.20	0.82	19.56	42.22	32.21	4.53	1.49
2007	71	BCR	31,128	1.61	0.87	12.40	23.76	50.19	12.28	1.37

Table 1.42 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 6 Form B

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	1.1655			
2005	62	BCR	1.9738	-2.7592	-0.0462	2.8054
2005	63	SR	1.3777			
2005	64	SR	1.7278			
2005	65	BCR	3.0781	-3.7831	0.1486	3.6345
2005	66	SR	0.0572			
2005	67	SR	1.4703			
2005	68	BCR	1.4382	-2.6269	-0.0810	2.7079
2005	69	SR	0.6581			
2005	70	SR	1.2828			
2005	71	BCR	1.3191	-2.4929	-0.4440	2.9369
2005	72	SR	1.2718			
2007	61	SR	1.1203			
2007	62	BCR	1.6868	-2.1096	-0.3222	2.4318
2007	63	SR	1.2314			
2007	64	SR	1.6474			
2007	65	BCR	1.9829	-3.1114	0.1952	2.9162
2007	66	SR	-0.0760			
2007	67	SR	1.1471			
2007	68	BCR	1.6954	-1.8039	-0.2437	2.0476
2007	69	SR	0.8038			
2007	70	SR	1.2334			
2007	71	BCR	1.0008	-1.5360	-0.7039	2.2399
2007	72	SR	0.8124			

Note. These Rasch difficulties were based on a common scale.

Figure 1.9 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 6 Form B

Table 1.43 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 7 Form A

Item Number	Item Type	Year 05	Year 07
61	SR	0.63	0.66
62	BCR	0.52	0.55
63	SR	0.63	0.65
64	SR	0.66	0.65
65	BCR	0.45	0.42
66	SR	0.68	0.72
67	SR	0.60	0.60
68	BCR	0.40	0.47
69	SR	0.88	0.88
70	SR	0.75	0.77
71	BCR	0.43	0.44
72	SR	0.53	0.54

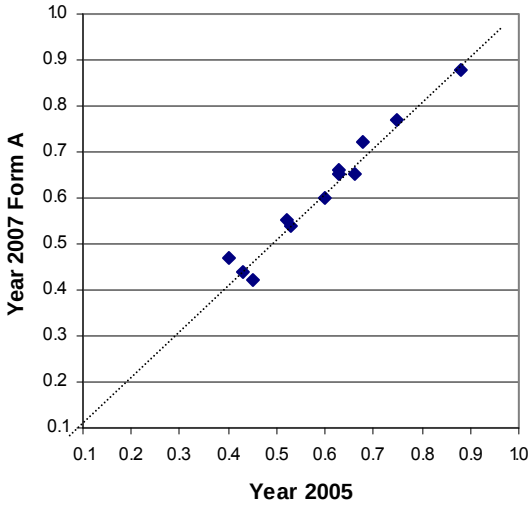


Table 1.44 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 7 Form A

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,194	1.55	0.70	4.00	38.00	50.00	6.00	2.00
2005	65	BCR	2,194	1.34	0.77	9.00	43.00	39.00	4.00	5.00
2005	68	BCR	30,234	1.21	0.62	8.00	62.00	27.00	2.00	1.00
2005	71	BCR	30,234	1.29	0.82	15.00	44.00	32.00	7.00	2.00
2007	62	BCR	32,114	1.65	0.62	2.61	31.34	60.81	3.97	1.26
2007	65	BCR	32,114	1.26	0.75	14.03	42.60	39.14	1.80	2.43
2007	68	BCR	32,114	1.41	0.67	5.23	49.68	39.75	4.11	1.24
2007	71	BCR	32,114	1.33	0.66	4.96	58.21	30.68	4.35	1.80

Table 1.45 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 7 Form A

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	0.2584			
2005	62	BCR	0.8135	-2.9830	-0.2325	3.2155
2005	63	SR	0.2397			
2005	64	SR	0.0934			
2005	65	BCR	1.3223	-2.7247	-0.2025	2.9272
2005	66	SR	-0.0798			
2005	67	SR	0.3810			
2005	68	BCR	1.8123	-3.5048	0.3619	3.1429
2005	69	SR	-1.5336			
2005	70	SR	-0.5920			
2005	71	BCR	1.4011	-2.2542	0.0299	2.2243
2005	72	SR	0.6634			
2007	61	SR	0.0086			
2007	62	BCR	0.5418	-3.2089	-0.8134	4.0224
2007	63	SR	0.0527			
2007	64	SR	0.0459			
2007	65	BCR	1.7340	-2.6962	-0.5614	3.2576
2007	66	SR	-0.2786			
2007	67	SR	0.3226			
2007	68	BCR	0.9831	-3.2780	0.1664	3.1116
2007	69	SR	-1.5373			
2007	70	SR	-0.6676			
2007	71	BCR	1.1365	-3.2492	0.4938	2.7554
2007	72	SR	0.6768			

Note. These Rasch difficulties were based on a common scale.

Figure 1.10 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 7 Form A

Table 1.46 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 7 Form B

Item Number	Item Type	Year 05	Year 07
61	SR	0.60	0.59
62	BCR	0.55	0.53
63	SR	0.72	0.71
64	SR	0.42	0.53
65	BCR	0.51	0.52
66	SR	0.55	0.59
67	SR	0.72	0.83
68	BCR	0.41	0.47
69	SR	0.29	0.27
70	SR	0.60	0.73
71	BCR	0.49	0.50
72	SR	0.55	0.54

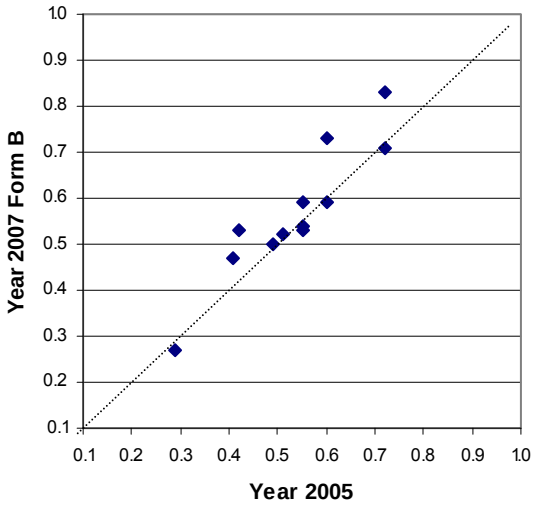


Table 1.47 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 7 Form B

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,269	1.64	0.57	1.00	33.00	62.00	2.00	1.00
2005	65	BCR	2,269	1.54	0.63	3.00	42.00	51.00	4.00	1.00
2005	68	BCR	2,282	1.24	0.66	10.00	52.00	35.00	1.00	2.00
2005	71	BCR	2,282	1.46	0.67	7.00	36.00	54.00	1.00	2.00
2007	62	BCR	31,846	1.59	0.63	1.47	40.37	52.05	4.73	1.38
2007	65	BCR	31,846	1.57	0.63	2.30	40.08	52.08	4.11	1.42
2007	68	BCR	31,846	1.40	0.65	4.57	48.91	42.09	2.44	1.99
2007	71	BCR	31,846	1.49	0.69	5.74	38.67	49.91	3.67	2.02

Table 1.48 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 7 Form B

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	0.4186			
2005	62	BCR	0.6991	-4.0223	-0.5227	4.5450
2005	63	SR	-0.2446			
2005	64	SR	1.3314			
2005	65	BCR	0.8247	-3.6511	-0.1183	3.7693
2005	66	SR	0.5738			
2005	67	SR	-0.4375			
2005	68	BCR	2.1609	-3.4798	-0.5650	4.0448
2005	69	SR	2.1106			
2005	70	SR	0.4515			
2005	71	BCR	1.8958	-3.3291	-1.2878	4.6168
2005	72	SR	0.7476			
2007	61	SR	0.3754			
2007	62	BCR	0.5535	-3.6912	0.0403	3.6509
2007	63	SR	-0.2669			
2007	64	SR	0.7089			
2007	65	BCR	0.7465	-3.4363	-0.1985	3.6348
2007	66	SR	0.3701			
2007	67	SR	-0.9994			
2007	68	BCR	1.1703	-3.7139	0.0922	3.6216
2007	69	SR	2.1429			
2007	70	SR	-0.4029			
2007	71	BCR	1.1420	-2.8994	-0.4808	3.3802
2007	72	SR	0.6241			

Note. These Rasch difficulties were based on a common scale.

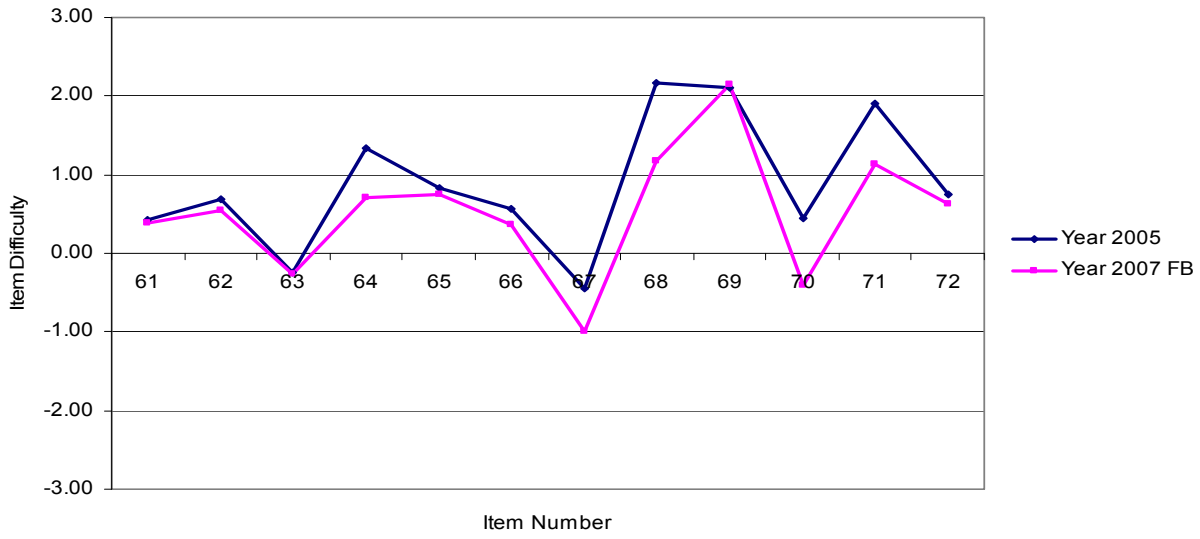


Figure 1.11 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 7 Form B

Table 1.49 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 8 Form A

Item Number	Item Type	Year 05	Year 07
61	SR	0.28	0.34
62	BCR	0.56	0.55
63	SR	0.79	0.82
64	SR	0.85	0.86
65	BCR	0.52	0.50
66	SR	0.79	0.80
67	SR	0.57	0.56
68	BCR	0.47	0.45
69	SR	0.42	0.41
70	SR	0.76	0.75
71	BCR	0.42	0.43
72	SR	0.62	0.69

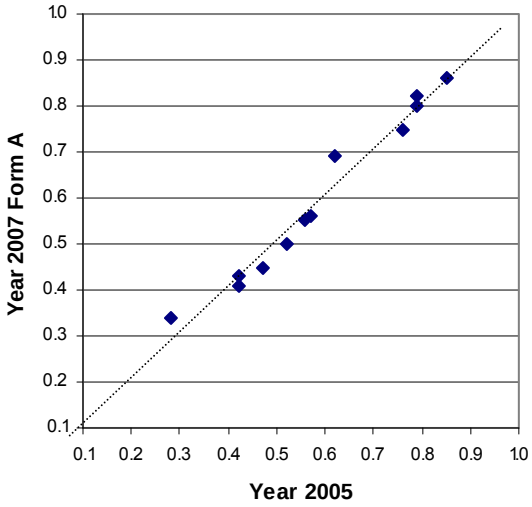


Table 1.50 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 8 Form A

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,195	1.67	0.74	5.00	32.00	52.00	10.00	1.00
2005	65	BCR	2,195	1.57	0.71	4.00	36.00	51.00	6.00	3.00
2005	68	BCR	2,270	1.42	0.77	9.00	40.00	43.00	5.00	3.00
2005	71	BCR	2,270	1.26	0.71	8.00	49.00	36.00	2.00	5.00
2007	62	BCR	32,609	1.65	0.69	3.10	34.21	53.08	8.27	1.34
2007	65	BCR	32,609	1.50	0.73	6.50	40.06	45.75	5.99	1.70
2007	68	BCR	32,609	1.36	0.71	6.88	49.54	37.06	4.03	2.49
2007	71	BCR	32,609	1.30	0.65	3.79	57.47	31.61	3.01	4.12

Table 1.51 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 8 Form A

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	2.0677			
2005	62	BCR	0.5928	-2.2842	-0.2361	2.5202
2005	63	SR	-0.5742			
2005	64	SR	-1.1145			
2005	65	BCR	0.7904	-2.6349	-0.2166	2.8515
2005	66	SR	-0.6172			
2005	67	SR	0.6604			
2005	68	BCR	1.2768	-2.2997	-0.2838	2.5835
2005	69	SR	1.3912			
2005	70	SR	-0.3607			
2005	71	BCR	1.6618	-2.9262	-0.1769	3.1032
2005	72	SR	0.4188			
2007	61	SR	1.7184			
2007	62	BCR	0.4281	-2.9192	-0.0803	2.9995
2007	63	SR	-0.8649			
2007	64	SR	-1.2399			
2007	65	BCR	0.8175	-2.7566	-0.1481	2.9046
2007	66	SR	-0.8170			
2007	67	SR	0.6456			
2007	68	BCR	1.2712	-2.7023	-0.0236	2.7259
2007	69	SR	1.4585			
2007	70	SR	-0.3658			
2007	71	BCR	1.3742	-3.8384	0.4270	3.4114
2007	72	SR	-0.1350			

Note. These Rasch difficulties were based on a common scale.

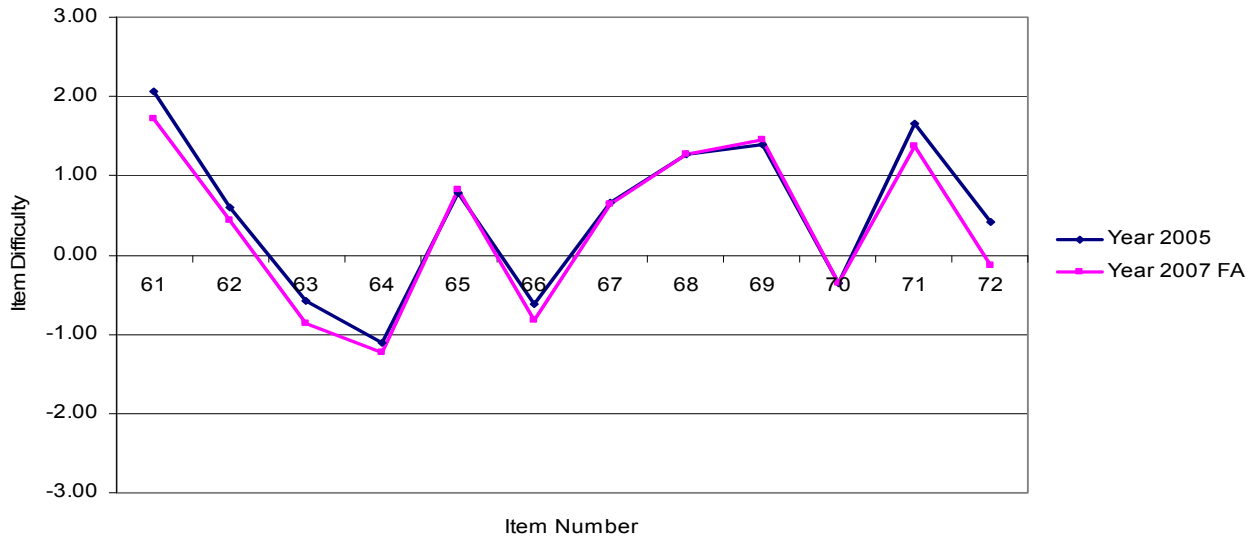


Figure 1.12 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 8 Form A

Table 1.52 Augmented Item P-Value Comparison for Year 2005 vs. Year 2007: Grade 8 Form B

Item Number	Item Type	Year 05	Year 07
61	SR	0.63	0.64
62	BCR	0.55	0.56
63	SR	0.91	0.92
64	SR	0.69	0.69
65	BCR	0.54	0.50
66	SR	0.56	0.53
67	SR	0.62	0.60
68	BCR	0.48	0.52
69	SR	0.81	0.81
70	SR	0.65	0.65
71	BCR	0.52	0.51
72	SR	0.58	0.57

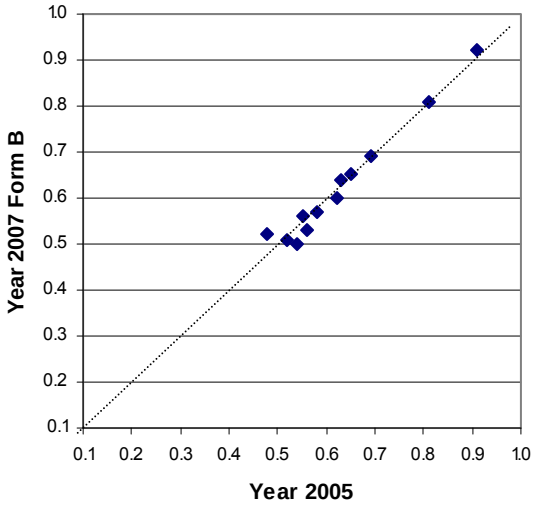


Table 1.53 BCR Item Score-Point Distribution Comparison for Year 2005 vs. Year 2007: Grade 8 Form B

Year	Item #	Item Type	N	Mean	SD	Score-Point Distribution (%)				
						0	1	2	3	Omit
2005	62	BCR	2,276	1.65	0.66	3.00	32.00	58.00	6.00	1.00
2005	65	BCR	2,276	1.61	0.67	2.00	39.00	51.00	7.00	2.00
2005	68	BCR	30,460	1.44	0.71	7.00	45.00	42.00	5.00	1.00
2005	71	BCR	30,460	1.55	0.79	10.00	28.00	53.00	7.00	2.00
2007	62	BCR	32,452	1.68	0.63	2.03	31.12	59.66	5.88	1.30
2007	65	BCR	32,452	1.51	0.69	4.17	42.42	46.28	5.38	1.75
2007	68	BCR	32,452	1.56	0.74	4.75	39.52	45.61	8.54	1.59
2007	71	BCR	32,452	1.54	0.79	9.56	30.11	51.05	7.34	1.95

Table 1.54 Augment IRT Item Difficulty Comparison for Year 2005 vs. Year 2007: Grade 8 Form B

Year	Item #	Item Type	Rasch Difficulty	Step 0-1	Step 1-2	Step 2-3
2005	61	SR	0.3788			
2005	62	BCR	0.7000	-2.8688	-0.3921	3.2609
2005	63	SR	-1.7352			
2005	64	SR	0.0105			
2005	65	BCR	0.5321	-3.2655	0.1298	3.1357
2005	66	SR	0.6932			
2005	67	SR	0.3867			
2005	68	BCR	1.0702	-2.5919	-0.0272	2.6191
2005	69	SR	-0.7417			
2005	70	SR	0.1154			
2005	71	BCR	1.1735	-1.8262	-0.8182	2.6444
2005	72	SR	0.5270			
2007	61	SR	0.2266			
2007	62	BCR	0.4596	-3.0584	-0.2356	3.2940
2007	63	SR	-1.9561			
2007	64	SR	-0.0410			
2007	65	BCR	0.8603	-2.7890	-0.0510	2.8400
2007	66	SR	0.7404			
2007	67	SR	0.5508			
2007	68	BCR	0.7356	-2.4394	0.0959	2.3435
2007	69	SR	-0.7751			
2007	70	SR	0.2330			
2007	71	BCR	0.9936	-2.0250	-0.3500	2.3750
2007	72	SR	0.5625			

Note. These Rasch difficulties were based on a common scale.

Figure 1.13 Augmented IRT Item Difficulty Comparison Plot for Year 2005 vs. Year 2007: Grade 8 Form B

1.11 Field Test Analyses

All field test items embedded in operational forms were subjected to rigorous analyses for their properties because these analyses will provide information about which items would be included as operational items in the future. All statistical results concerning field test items were reserved in the 2007 item bank. Information on item bank can be found in the section 1.17, Item Bank Construction. The following field test analyses were conducted:

- Classical item analyses for *SR* and *BCR* items
- *Differential item functioning* (*DIF*) analyses
- *IRT* analyses

Classical Item Analyses for *SR* and *BCR* items

Classical item analyses for *SR* and *BCR* items were conducted within each field test form.

SR items were flagged for further scrutiny if:

- An item distractor was not selected by all students (i.e., nonfunctional distractor), or selected by a large number of high ability students, with low selection from other ability groupings (i.e., ambiguous distractor).
- An item *p*-value was less than .20 or greater than .90.
- An item point-biserial was less than .10 (i.e., poorly discriminating). If an item point-biserial was close to zero or negative, the item was checked for a miskeyed answer.

BCR items were flagged for further scrutiny if:

- An item did not elicit the full range of rubric scores.
- The ratio of mean item score to maximum score was less than .20 or greater than .90.
- An item-total correlation was less than .10.

Any items needed a careful decision. For example, an item that was flagged as being difficult (*p*-value less than .20) and poorly discriminating (point-biserial less than .10) was considered for dropping as a possible operational item. If the item represented important content that had not been extensively taught, however, it would be justified to be included in operational test form.

Differential Item Functioning Analyses

Analyses of *Differential item functioning* (*DIF*) are intended to compare the performance of different subgroups of the population on specific items, when the group have been statistically matched on their tested proficiency.

In present analyses, the gender reference group was males, and the ethnic group was Caucasians. The gender focal group was females and the ethic focal group was African-Americans. Because the 2007 MSA-Reading included both the *SAT10* items and the "Maryland-specific" items on each field test form, the total score as the matching variable consisted of selected SAT items and Maryland-specific items.

Any *SR* and *BCR* items that were flagged as showing *DIF* were subjected to further examination. For each of these items, for example, reading experts judged if the differential difficulty of the item was unfairly related to group membership:

- If the differential difficulty of the item is unfairly related to group membership, then the item should not be used at all.
- If the differential difficulty of the item is related to group membership, then the item should only be used if there is no other item matching the test blueprint.

For further information about the *DIF* procedures used for the 2007 MSA-Reading, please see section 3.7.

Item Response Theory (IRT) Analyses

To put field test items on the same scale of the operational test items, field test items were calibrated by fixing the parameters of the operational test items within each test form. Then, item difficulties, step difficulties, and fit statistics were stored in the 2007 item bank.

1.12 Operational Test Construction Using IRT Methods

The selection of items to be included in the final operational test forms of the 2007 MSA-Reading required a careful consideration based on test blueprints, classical item analyses, *DIF* analyses, and IRT analyses. Specifically, IRT method played a major role in constructing 2007 operational forms. First, Harcourt suggested the following guidelines:

- Do not include the items with too easy or too hard items
- Do not include the *BCR* items with score distributions that do not elicit the full range of rubric scores
- Do not include the items with *DIF* classifications "C" for the *SR* items and "CC" for the *BCR* items *unless* they have been deemed acceptable by the external review of reading experts
- Finally, do not include the items which have Rasch *Infit* and *Outfit* mean-squares lower than .5 or higher than 1.5. More specific information on Rasch *Infit* and *Outfit* mean-squares can be found in Chapter 3.

A procedure for using IRT methods to build tests that meet any desired set of test specifications was outlined by Lord (1977). The procedure utilizes an item bank with item parameter estimates available for the IRT model of choice, with accompanying information functions. The steps in the procedure suggested by Lord (1977) are as follows:

- First, the shape of desired test information needs to be decided. This was termed as the target information function by Lord (1977).
- Second, specific items need to be selected from the item bank with item information functions that will fill up hard-to-fill areas under the target information function.
- Third, the test information function after test items are added needs to be recalculated.
- Fourth, until the test information function approximates the target information function to a satisfactory degree, test items need to keep on being selected.

It should be noted that these steps were implemented within a framework defined by the content specification of the test. In addition, reading specialists from MSDE reviewed the final test forms of the 2007 MSA-Reading. The following table and figure show the results of constructing grade 3 operational form A using IRT method. Further information on other grades can be obtained from MSDE.

Table 1.55 Grade 3 Form A Construction Using IRT Method

CID	Item Type	P-value	b1	b2	b3
3283234	BCR	0.51	-2.0444	0.8731	4.5805
3283230	BCR	0.45	-2.0517	1.5992	4.7887
3293093	BCR	0.34	0.0267	2.0973	4.8099
3293091	BCR	0.32	-0.2865	2.6307	6.0696
SAT10	SR	0.93	-2.3300		
SAT10	SR	0.85	-1.1000		
SAT10	SR	0.65	0.1500		
SAT10	SR	0.82	-0.9300		
SAT10	SR	0.54	0.9300		
SAT10	SR	0.85	-1.0800		
SAT10	SR	0.63	0.4500		
SAT10	SR	0.30	2.2900		
SAT10	SR	0.65	-0.0800		
SAT10	SR	0.46	1.0000		
SAT10	SR	0.68	-0.1100		
SAT10	SR	0.64	0.2400		
SAT10	SR	0.72	-0.1500		
SAT10	SR	0.69	-0.0300		
SAT10	SR	0.90	-1.8000		
SAT10	SR	0.65	0.0000		
SAT10	SR	0.65	0.0300		
SAT10	SR	0.45	0.9300		
SAT10	SR	0.82	-1.0600		
SAT10	SR	0.88	-1.4300		
SAT10	SR	0.81	-0.9100		
SAT10	SR	0.54	0.6500		
SAT10	SR	0.73	-0.4017		
SAT10	SR	0.78	-0.4000		
SAT10	SR	0.60	0.5900		
3283204	SR	0.85	-1.0949		
3283207	SR	0.75	-0.3692		
3283216	SR	0.64	0.3514		
3283222	SR	0.51	0.9950		
3293081	SR	0.56	0.7788		
3293085	SR	0.33	1.9304		
3293089	SR	0.56	0.6826		

Note. a: item discrimination; b1: step 1 difficulty; b2: step 2 difficulty; b3: step 3 difficulty

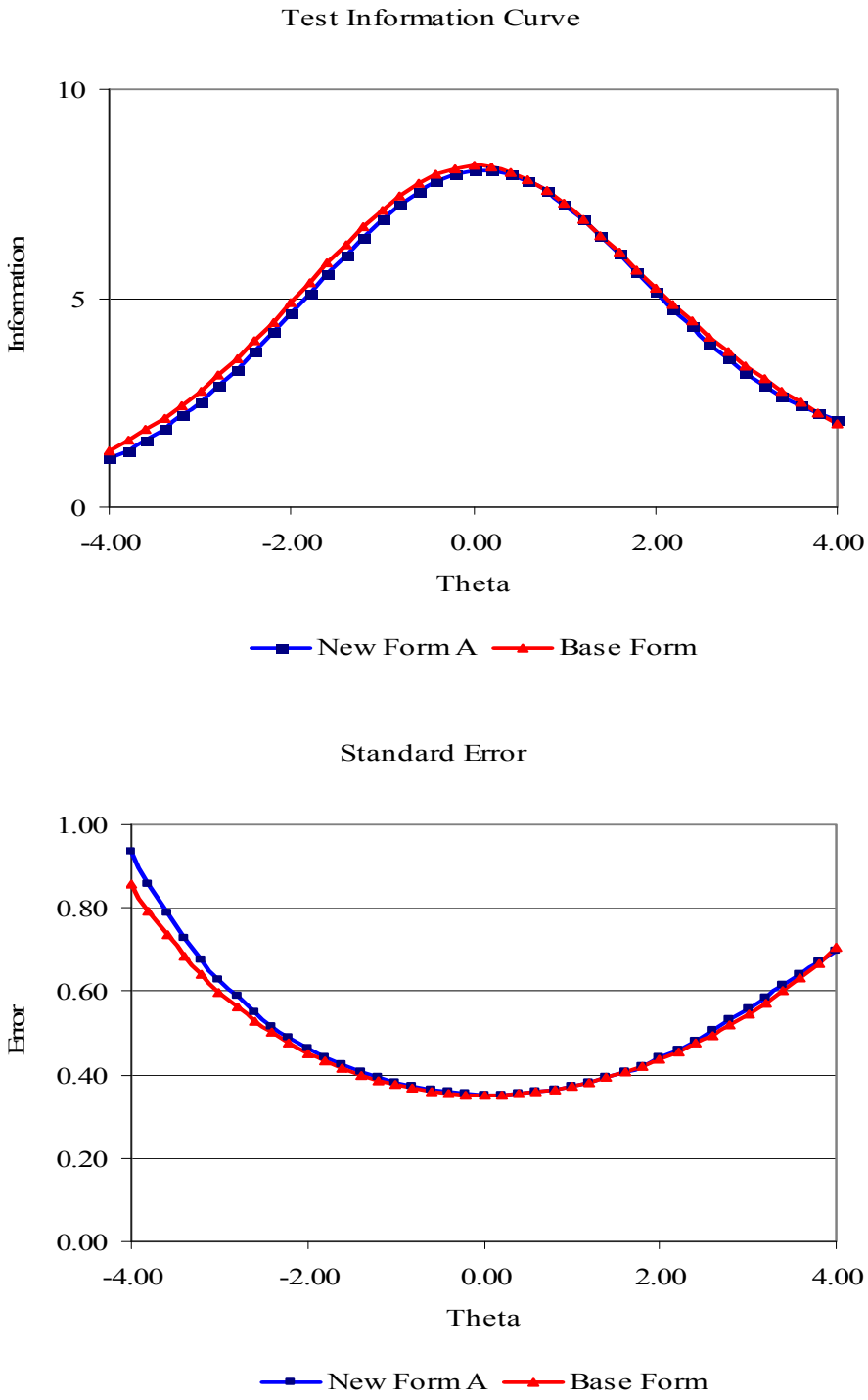


Figure 1.14 Grade 3 Form A IRT Form Construction

1.13 Linking, Equating, and Scaling Procedures

The 2007 MSA-Reading was calibrated, equated, and scaled using the same statistical methods and procedures that were employed in 2006. It should be noted that only SR items were considered as potential year-to-year linking items.

Stratified Random Sampling Procedures

To select equating samples to conduct linking and equating with, stratified random sampling procedures were used in 2007. To verify that the sample was representative of the statewide examinee population in terms of gender and ethnicity, the distributions of gender and ethnicity in the 2007 sample were compared with the total 2007 MSA population distributions. Appendix A, The 2007 MSA-Reading Stratified Random Sampling provides the results of sampling. The results indicated that the calibration sample were representative of the statewide examinee population in terms of gender and ethnicity.

Robust Z Procedures

Robust z values were calculated by the following calculations (South Carolina Department of Education, 2001):

- The mean and standard deviation of the linking pool's item difficulties for each form
- The ratio of the standard deviations between form 1 and the rest of the forms
- The correlation between test form 1 and other test form item difficulties
- The difference between test form 1 and other test form item difficulties for each item in the linking pool
- The mean of the differences calculated above
- The median of the differences
- The interquartile range of the differences
- The robust z for each item in the linking pool where the robust z is defined as (the difference between the test form1 and other test form item difficulty minus the median of the differences) / (interquartile range multiplied by 0.74).

Guidelines for Possible Linking Items

Once the above calculations were made, the following guidelines were taken in determining possible sets of common items to be used for the Rasch equating (SCDE, 2001):

- Do not include those items with an absolute value of robust z exceeding 1.645. In addition, if one difficulty or step from a *SR* item is eliminated from the pool based on robust z, all other difficulties are also removed.
- Do not eliminate more than 20 percent of the pool linking items.
- Consider that the ratio of the standard deviations of the test form 1 and other test form item difficulties should be in the 90 to 110 percent range.
- It is assumed that the correlation of the test form 1 and other test form item difficulties is greater than .95.

The reason to apply these guidelines was to exclude items that changed in difficulty more than the other items.

Form-to-Form Linking Procedures

The stability of SAT10 common items appearing on both form A and form B was verified at each grade level:

- Calibrate the two operational test forms separately
- Calculate robust z with Rasch difficulties for form A and form B
- Correlate Rasch difficulties for form A and form B

After examining the robust z and correlations from the two separate calibration, it was determined that the common item difficulties were consistent across the two forms for all items and could be included as form-to-form linking items in the fixed calibration of the two forms.

Year-to-Year Linking Procedures

Each test form contained a set of SAT 10 common items, and these items were used to equate the item parameters and place the 2007 tests on the previous years' scale using the fixed method. The stability of the equating common items was evaluated using robust z, correlation coefficients, and standard deviations.

Tables 1.56 through 1.61 included Rasch item difficulties used for calculating robust z values, correlation coefficients, and standard deviations. Figures 1.21 through 1.38 depicts common item difficulty between the base form (2003 or 2004) and either 2007 form A or B. It should be noted that the item difficulties in 2007 form A or B were obtained from independent calibration, and those in base form were on a common scale (e.g., linked to 2003 or 2004 item parameters).

Table 1.56 Common Linking Item Difficulties of Year 2003 vs. Year 2007 MSA-Reading: Grade 3

Item No.	Y2003 Base (F1)	Y2007 Form A	Y2007 Form B
2	-2.33	-2.0116	-1.9111
5	-1.10	-1.5020	-1.3905
6	.15	.1247	.2107
9	-.93	-1.2383	-1.1024
11*	.93	.0472	.1322
15	-1.08	-.9700	-.9601
18	.45	-.1186	-.1211
20	2.29	1.5432	1.4237
23	-.08	.0244	.1241
30	1.00	.8939	1.0052
31	-.11	-.1938	-.2065
32	.24	.0244	.0629
34	-.15	-.4170	-.3393
41	-.03	-.4343	-.2580
44	-1.80	-1.8931	-1.7596
49	.00	.1565	.2461
55	.03	.2055	.3363
56	.93	1.2442	1.2505
57	-1.06	-.8837	-.7833
58	-1.43	-1.7904	-1.6420
59	-.91	-.9732	-.8421
61	.65	.7536	.8248
69	-.40	-.9128	-.6992
70	.59	.3635	.4434
Form Statistics			
Mean	-.173	-.332	-.248
SD	1.030	.965	.928
Comparison of each Form with Base Form (Form 1)			
Corr w Base	1.000	.950	.947
SD ratio	100%	94%	90%
Mean Diff	.000	-.159	-.075
Median Diff	.000	-.100	-.046
IQR Diff	.000	.477	.398

Based on robust z and item difficulty plot, item 11 on both Form A and Form B was dropped from the possible linking item pool.

The following correlation and SD ratio are based on dropping the item:

Comparison of each Form with Base Form (Form 1)			
Corr w Base	1.000	.959	.956
SD ratio	100%	96%	92%

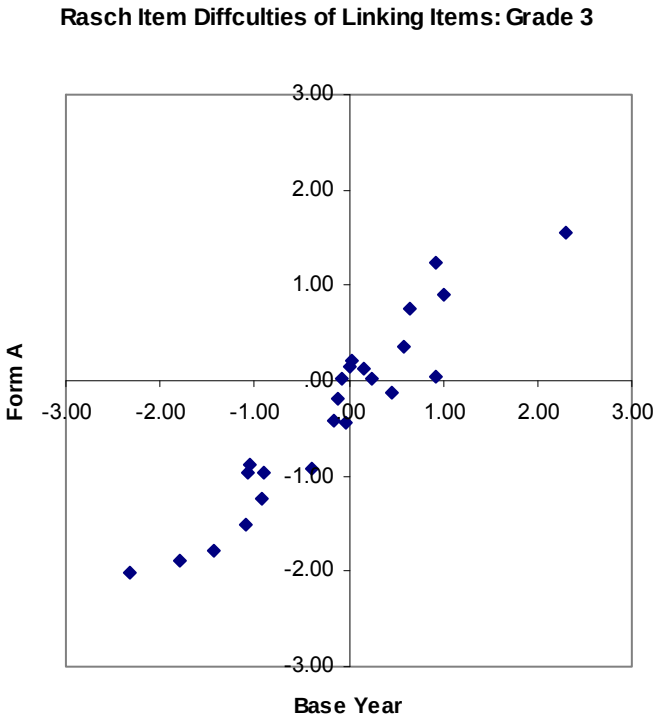


Figure 1.15 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 3 Form A

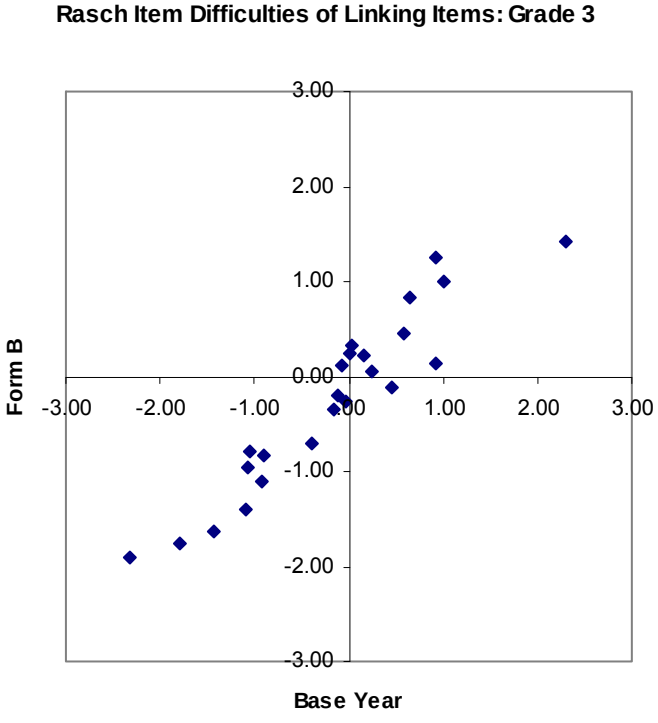


Figure 1.16 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 3 Form B

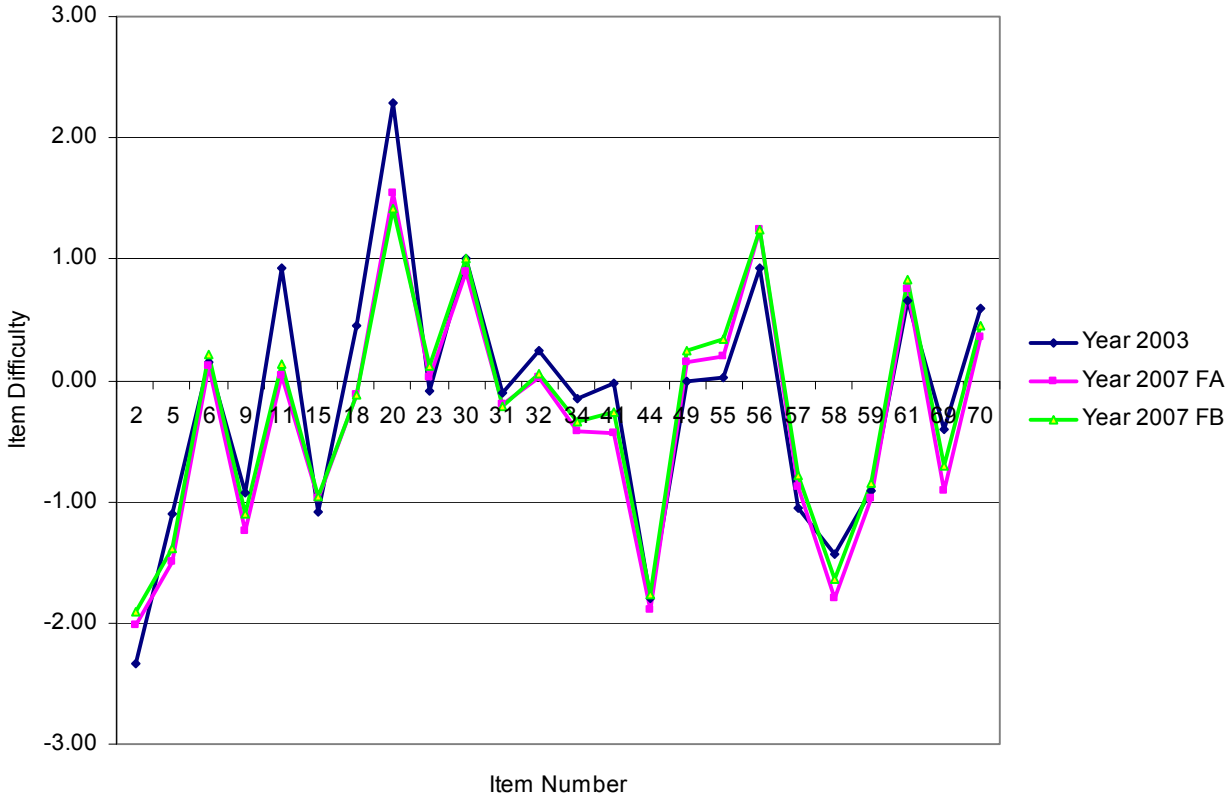


Figure 1.17 Free Calibration Item Difficulty Comparison of Year 2003 vs. Year 2007: Grade 3

Table 1.57 Common Linking Item Difficulties of Year 2004 vs. Year 2007 MSA-Reading: Grade 4

Item No.	Y2004 Base (F6)	Y2007 Form A	Y2007 Form B
1	-3.9886	-3.4568	-3.7872
4	-1.7739	-2.0327	-2.1327
9	-.1033	-.5780	-.7021
10	-1.2892	-1.1162	-1.3136
18	.0403	-.1440	-.2316
23	-.6252	-.7542	-.8282
24	-.2092	-.2200	-.2422
29	-1.4440	-1.9159	-1.9301
35	-.6775	-.7943	-.9849
38	.2123	.2054	.1749
41	-.3429	-.3952	-.5062
42	.2842	.2192	.0280
43	-.7393	-.6942	-.7154
44	-.3247	-.4678	-.3573
45	1.5832	1.8424	1.7750
46	-1.9501	-1.9318	-1.9374
47	-.4109	-.3338	-.4134
50	-.5286	-.3941	-.4587
51	-1.8443	-2.0487	-2.3046
52	.8212	.8822	.8904
53	1.3188	1.4533	1.3810
54	2.0024	2.1056	2.1922
55	-1.4991	-1.6235	-1.5584
62	-.1689	-.1775	-.3074
64	.7087	.6377	.6875
Form Statistics			
Mean	-.438	-.469	-.543
SD	1.278	1.291	1.342
Comparison of each Form with Base Form (Form 6)			
Corr w Base	1.000	.986	.988
SD ratio	100%	101%	105%
Mean Diff	.000	-.031	-.105
Median Diff	.000	-.011	-.033
IQR Diff	.000	.206	.280

None of items was dropped for this grade based on robust z and item difficulty plot.

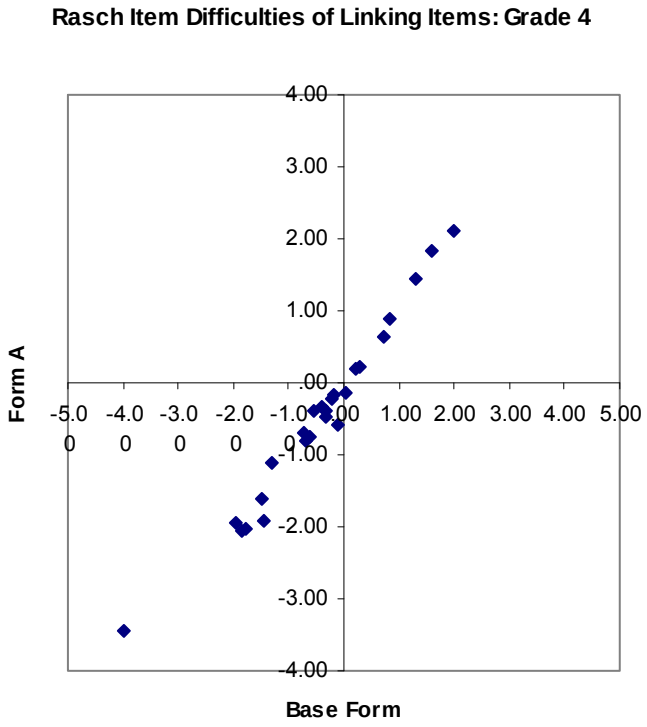


Figure 1.18 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 4 Form A

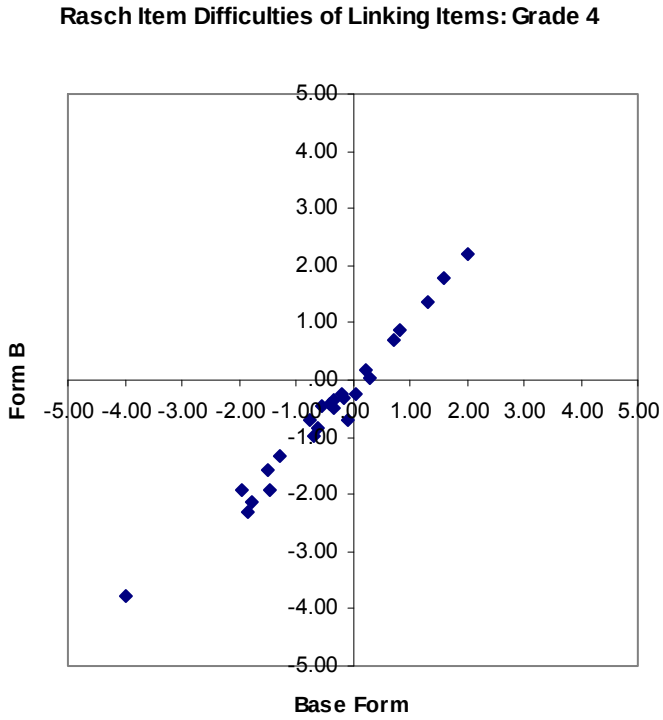


Figure 1.19 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 4 Form B

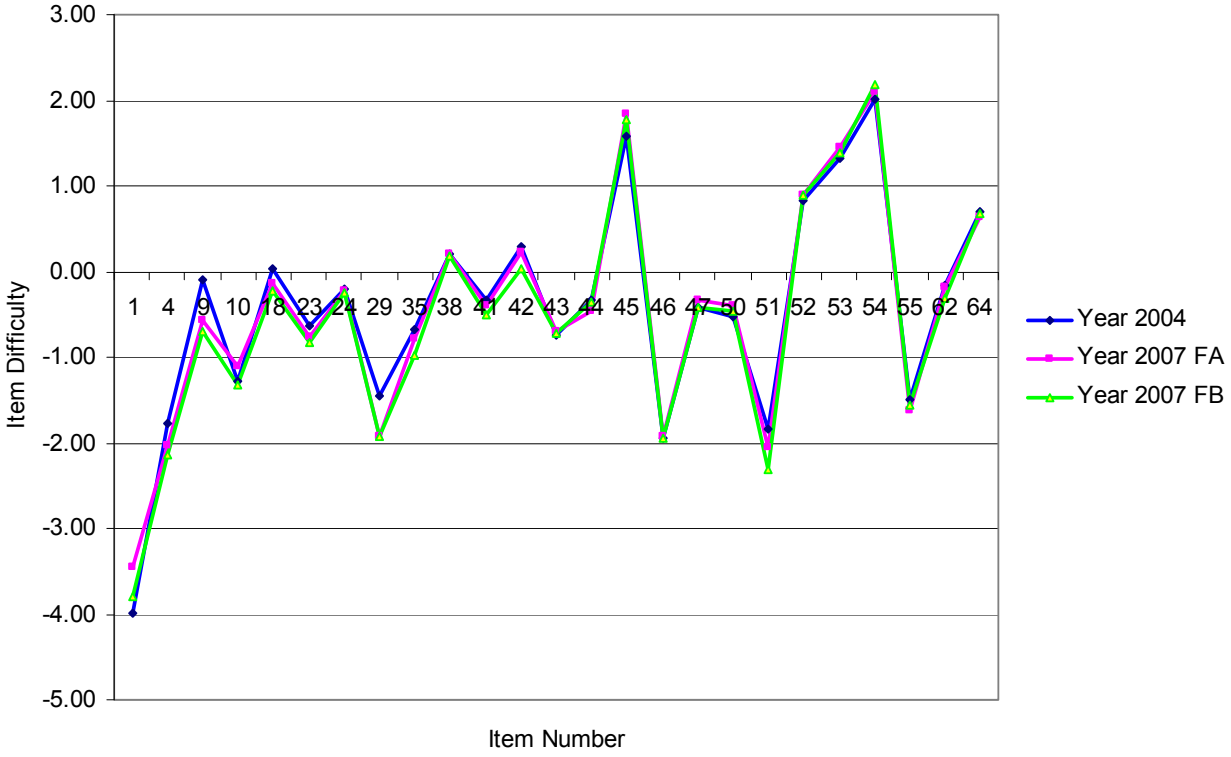


Figure 1.20 Free Calibration Item Difficulty Comparison of Year 2004 vs. Year 2007: Grade 4

Table 1.58 Common Linking Item Difficulties of Year 2003 vs. Year 2007 MSA-Reading: Grade 5

Item No.	Y2003 Base (F1)	Y2007 Form A	Y2007 Form B
4	.51	.4068	.4889
5	.56	.5716	.6842
6	.37	.2230	.2532
9	-1.52	-1.9459	-1.9853
10*	-.96	-1.6921	-1.6186
11	-1.11	-1.0302	-1.0361
13	-1.14	-1.2331	-1.2519
16*	-.71	-1.1025	-1.2959
17	-.47	-.9109	-.6542
19	-.37	-.4540	-.3882
23	.49	.5333	.5929
25	-.19	-.2383	-.1902
28*	.28	.6878	.6488
31	.45	.4814	.5991
33	-.65	-.8598	-.8254
34	1.44	1.4661	1.6013
37	-.02	.1745	.3657
41	-.38	-.6709	-.6000
45	.69	.5597	.6073
49*	-.92	-1.5282	-1.4448
Form Statistics			
Mean	-.183	-.328	-.272
SD	.767	.944	.976
Comparison of each Form with Base Form (Form 1)			
Corr w Base	1.000	.970	.972
SD ratio	100%	**123%**	**127%**
Mean Diff	.000	-.146	-.090
Median Diff	.000	-.098	-.052
IQR Diff	.000	.344	.301

Items 10, 16, 28, and 49 on both Form A and Form B were dropped from the possible item linking pool based on robust z and item difficulty plot.

The following correlation and SD ratio are based on dropping those items.

Comparison of each Form with Base Form (Form 1)			
Corr w Base	1.000	.984	.984
SD ratio	100%	111%	116%

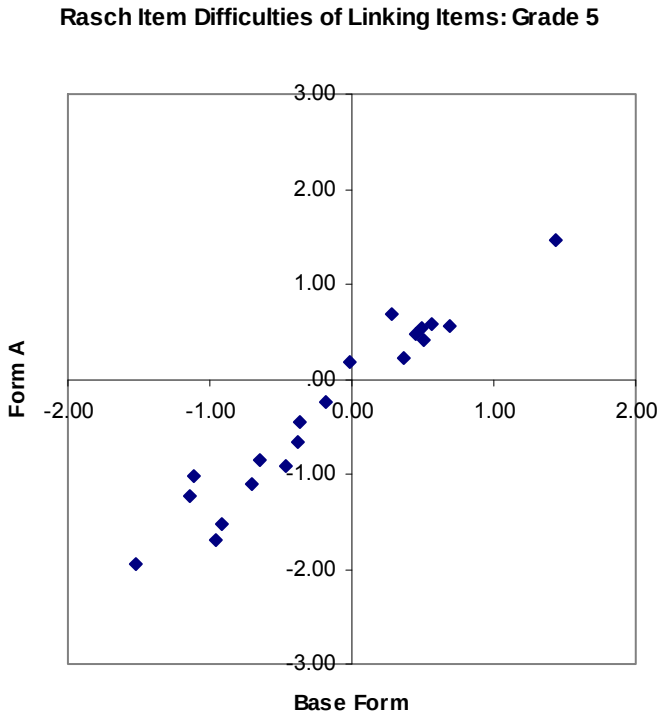


Figure 1.21 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 5 Form A

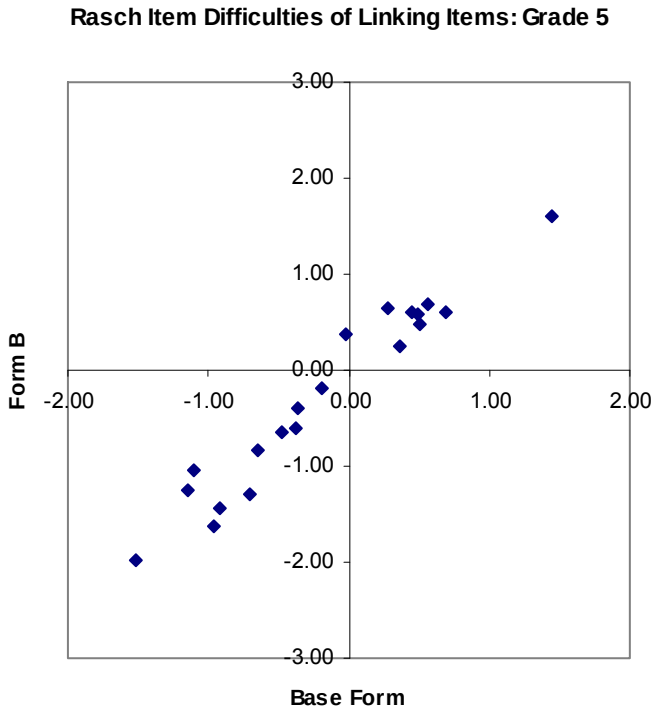


Figure 1.22 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 5 Form B

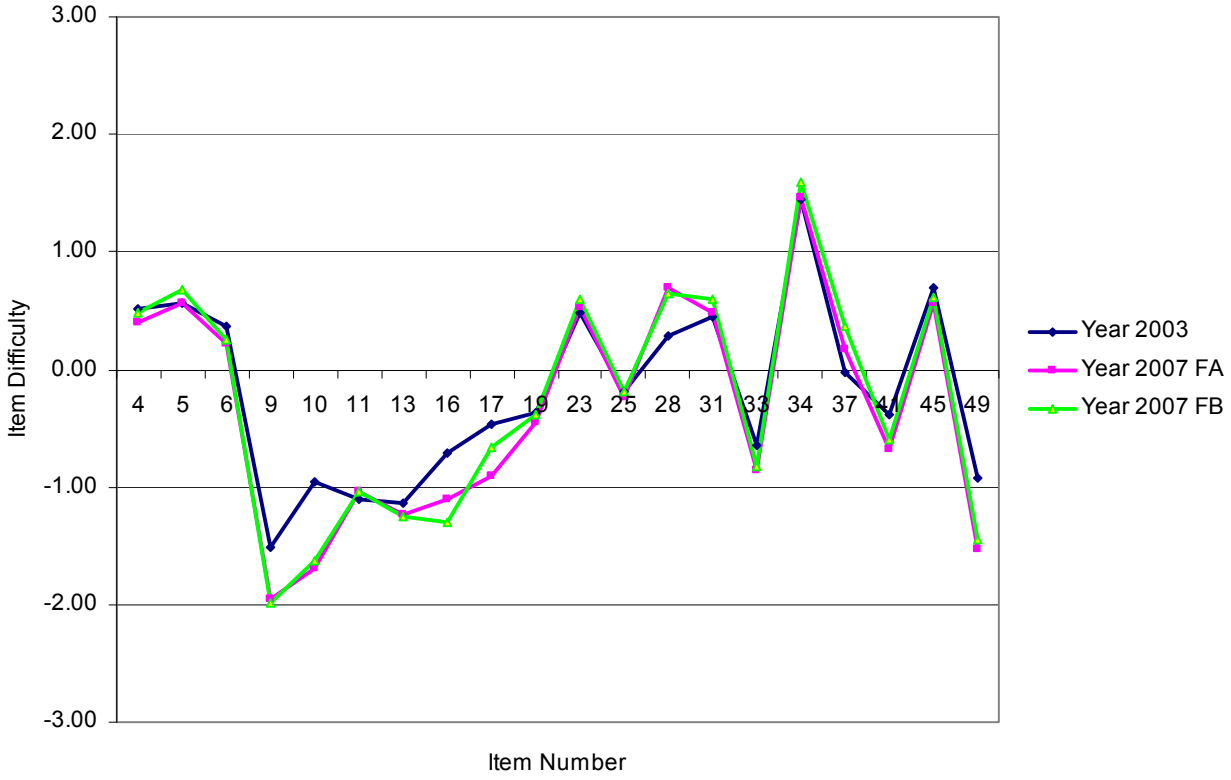


Figure 1.23 Free Calibration Item Difficulty Comparison of Year 2003 vs. Year 2007: Grade 5

Table 1.59 Common Linking Item Difficulties of Year 2004 vs. Year 2007 MSA-Reading: Grade 6

Item No.	Y2004 Base (F4)	Y2007 Form A	Y2007 Form B
1	-.6467	-.3203	-.4886
5	.9241	1.0997	.8664
8	.7190	.7219	.5152
9	-1.8289	-2.2677	-2.4338
10	-.2987	-.2210	-.4330
14	-.2270	-.5556	-.6750
16	-.5273	-.5483	-.7529
18	-.9466	-.9592	-1.2262
21	-1.6635	-1.5110	-1.6005
22	-.4965	-.4737	-.6717
23	-.0437	-.0322	-.1279
24	.0022	.0630	-.1349
25	.2939	.1171	-.0587
28	-.3341	-.6885	-.7565
29	.2820	.4548	.2567
30	.3824	.0415	-.0695
32	-1.2626	-1.1742	-1.4729
33	1.8873	1.9872	1.7651
34	-1.0083	-.7443	-1.0129
35	.5459	.3136	.0784
36	-.4554	-.7186	-.7070
37	-.8703	-.8354	-.9141
38	.6399	.6742	.3943
39	-1.4312	-1.5053	-1.6044
40	-.4922	-.5068	-.7985
Form Statistics			
Mean	-.274	-.304	-.483
SD	.869	.904	.885
Comparison of each Form with Base Form (Form 4)			
Corr w Base	1.000	.975	.979
SD ratio	100%	104%	102%
Mean Diff	.000	-.029	-.208
Median Diff	.000	.012	-.204
IQR Diff	.000	.265	.222

None of items was dropped from the possible item linking pool based on robust z and item difficulty plot.

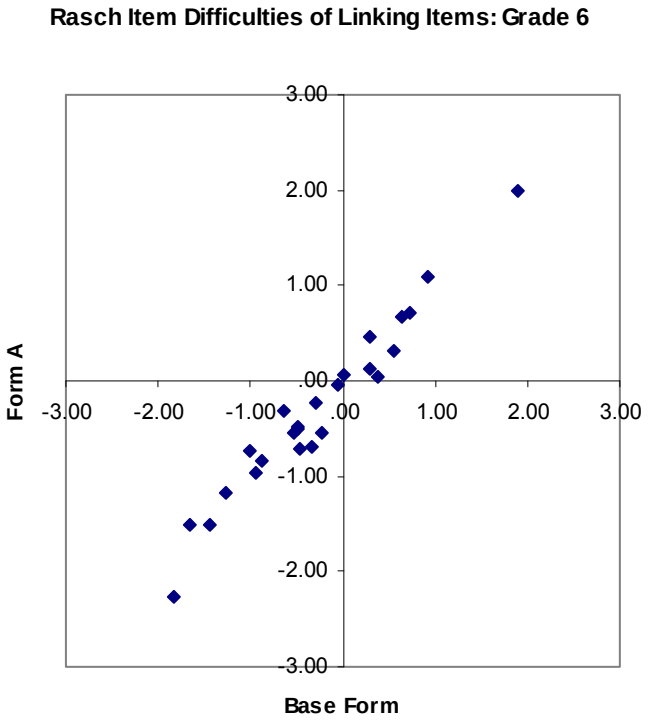


Figure 1.24 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 6 Form A

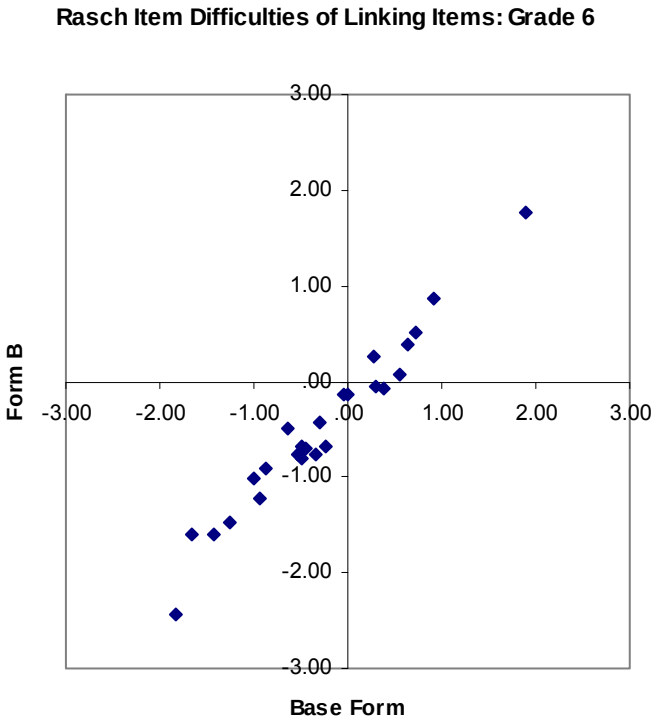


Figure 1.25 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 6 Form B

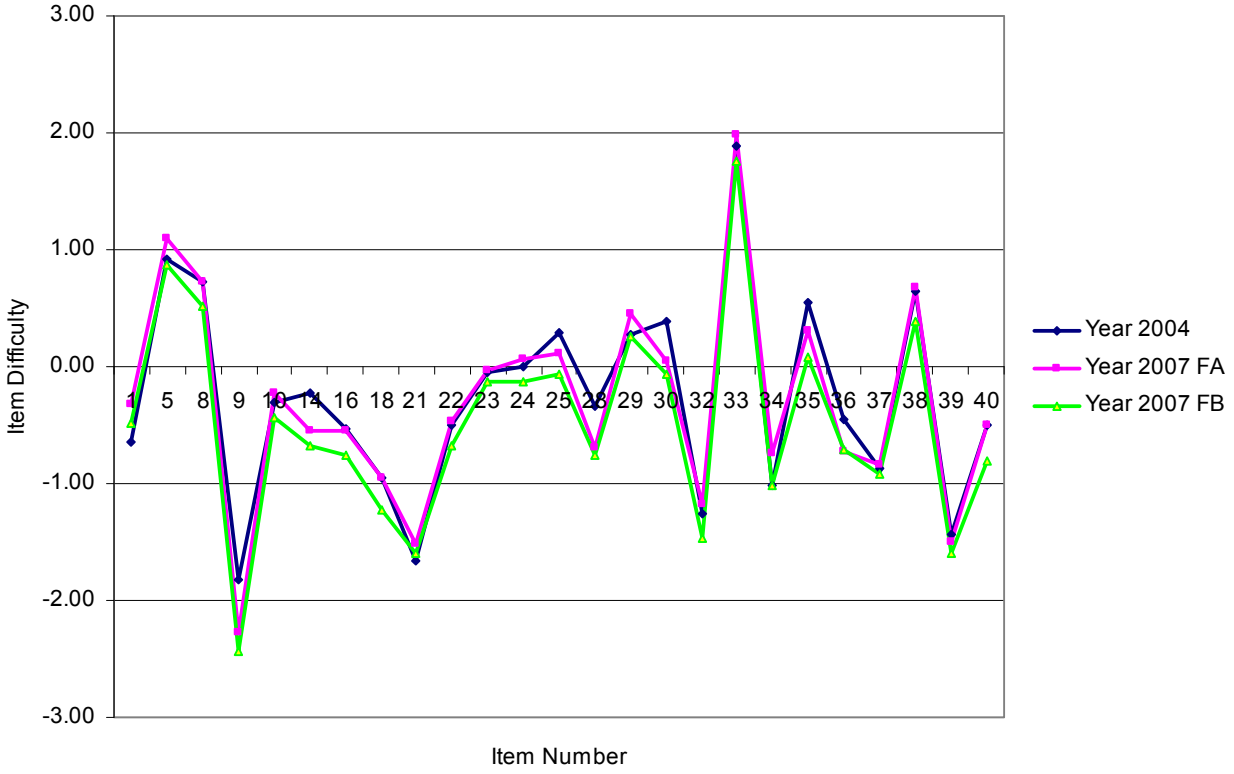


Figure 1.26 Free Calibration Item Difficulty Comparison of Year 2004 vs. Year 2007: Grade 6

Table 1.60 Common Linking Item Difficulties of Year 2004 vs. Year 2007 MSA-Reading: Grade 7

Item No.	Y2004 Base (F2)	Y2007 Form A	Y2007 Form B
1	-1.6474	-1.5909	-1.6809
3	-1.1065	-1.1286	-1.0808
6	1.2004	1.1664	.9751
8	1.1216	1.7129	1.6403
10	.3792	.3062	.3172
14	.0457	-.0861	-.0639
16	.1649	.2432	.1392
20	-1.1073	-.9055	-1.0695
22	-1.5119	-1.3739	-1.4477
23	.6159	.7216	.6684
26	-.4347	-.4310	-.5532
27	.8787	.9416	.8447
28	.2107	.3233	.2289
31	.5308	.6525	.5086
32	-1.3415	-1.2924	-1.2032
33	.5246	.4380	.3169
36	-1.8027	-1.5741	-1.7298
37	-.2783	-.1860	-.3069
38	-.5500	-.3652	-.4049
39	.2337	.3399	.2653
40	-1.3703	-1.4191	-1.4585
41	-.5760	-.5573	-.6003
42	-.3503	-.1484	-.2518
43	-.3690	-.1239	-.3002
44	-.0528	.0571	-.1153
Form Statistics			
Mean	-.264	-.171	-.254
SD	.878	.898	.882
Comparison of each Form with Base Form (Form 2)			
Corr w Base	1.000	.987	.987
SD ratio	100%	102%	101%
Mean Diff	.000	.093	.009
Median Diff	.000	.092	-.022
IQR Diff	.000	.134	.126

None of items was dropped from the possible item linking pool based on robust z and item difficulty plot.

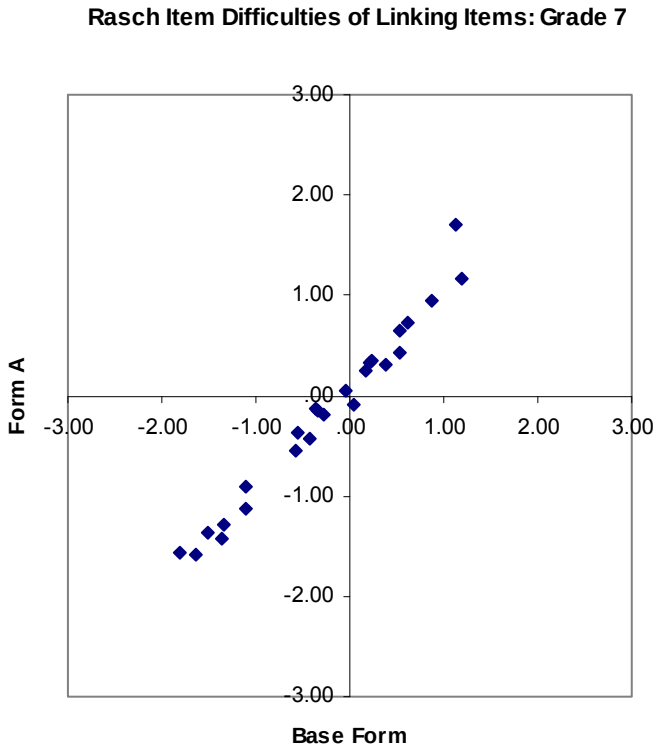


Figure 1.27 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 7 Form A

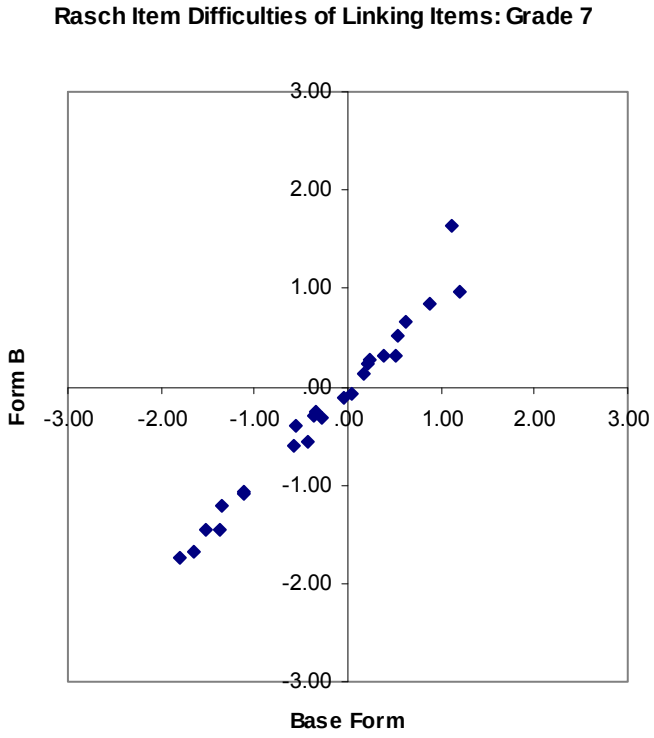


Figure 1.28 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 7 Form B

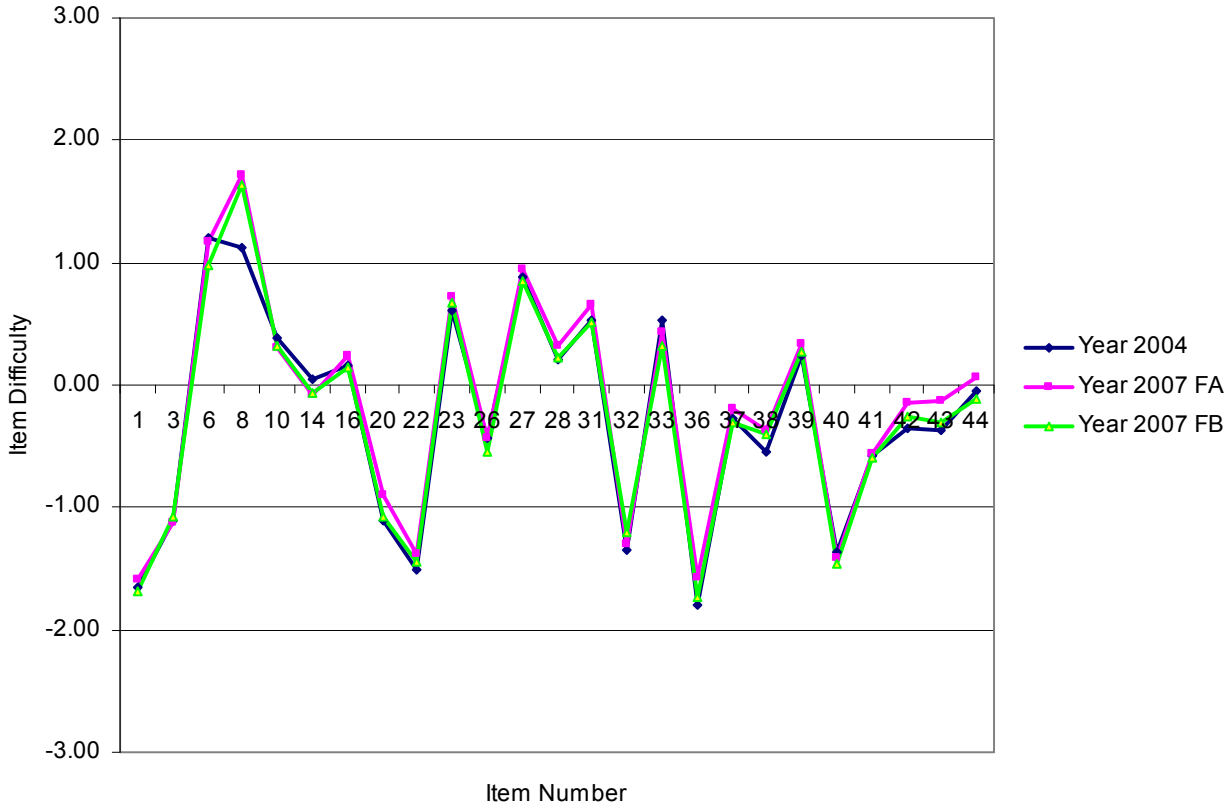


Figure 1.29 Free Calibration Item Difficulty Comparison of Year 2004 vs. Year 2007: Grade 7

Table 1.61 Common Linking Item Difficulties of Year 2003 vs. Year 2007 MSA-Reading: Grade 8

Item No.	Y2003 Base (F1)	Y2007 Form A	Y2007 Form B
3	.07	.3181	.3589
6	.96	.7690	.7176
8	.51	.7486	.7836
9	-1.57	-2.3643	-2.0075
22	-3.60	-3.4811	-3.6271
23	.64	.7257	.7390
25	-.80	-.7794	-.7988
26	.39	.3374	.4941
29	-.19	-.1813	-.1528
31	.20	.4182	.4217
32	.98	.8316	.9377
33	.29	.3873	.3967
35	-.46	-.5108	-.5112
37	-.24	-.3098	-.3326
38	-.49	-.4935	-.4056
41	-1.02	-1.1797	-1.0413
44	-.16	-.3377	-.2593
46	-.22	-.7805	-.7419
48	-.05	-.0791	-.0436
49	-.16	-.2493	-.3353
50	-.18	-.3400	-.2427
Form Statistics			
Mean	-.243	-.312	-.269
SD	.984	1.052	1.049
Comparison of each Form with Base Form (Form 1)			
Corr w Base	1.000	.973	.982
SD ratio	100%	107%	107%
Mean Diff	.000	-.069	-.026
Median Diff	.000	-.051	-.021
IQR Diff	.000	.245	.192

None of items was dropped from the possible item linking pool based on robust z and item difficulty plot.

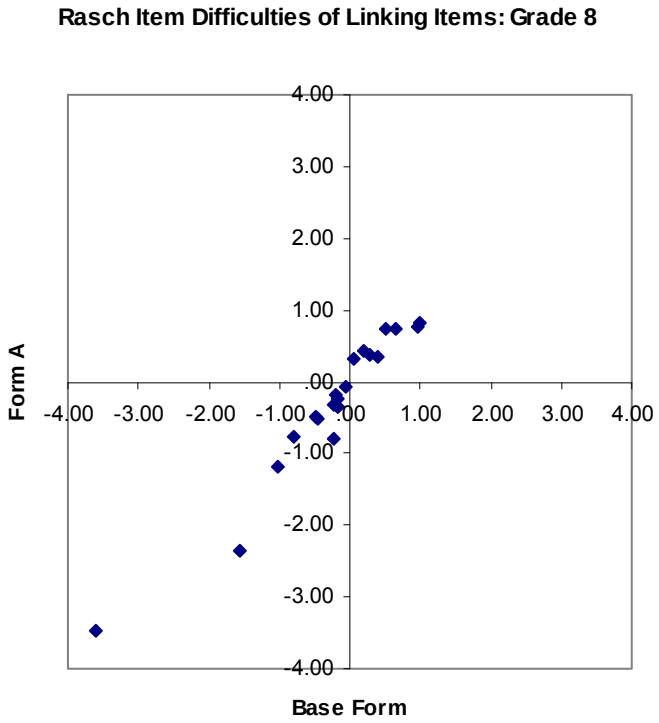


Figure 1.30 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 8 Form A

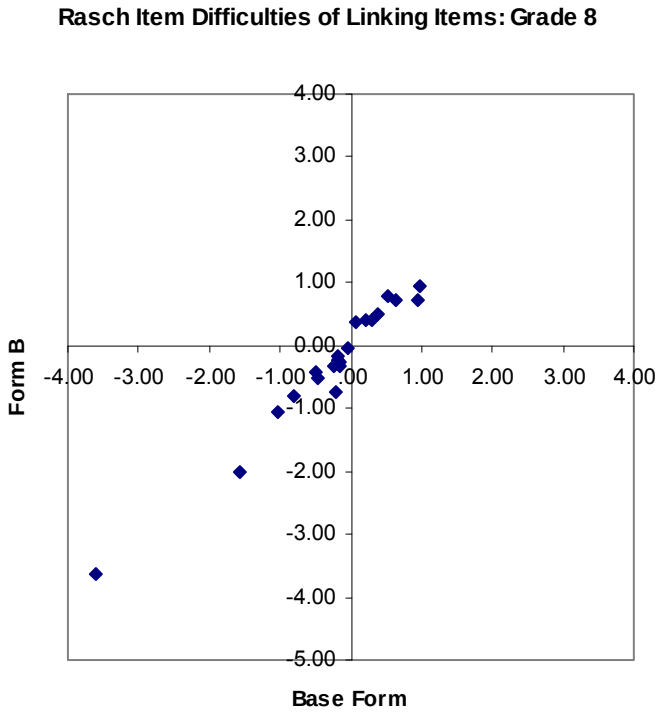


Figure 1.31 Item Difficulty Plot of Base Year Form vs. Current Year Form: Grade 8 Form B

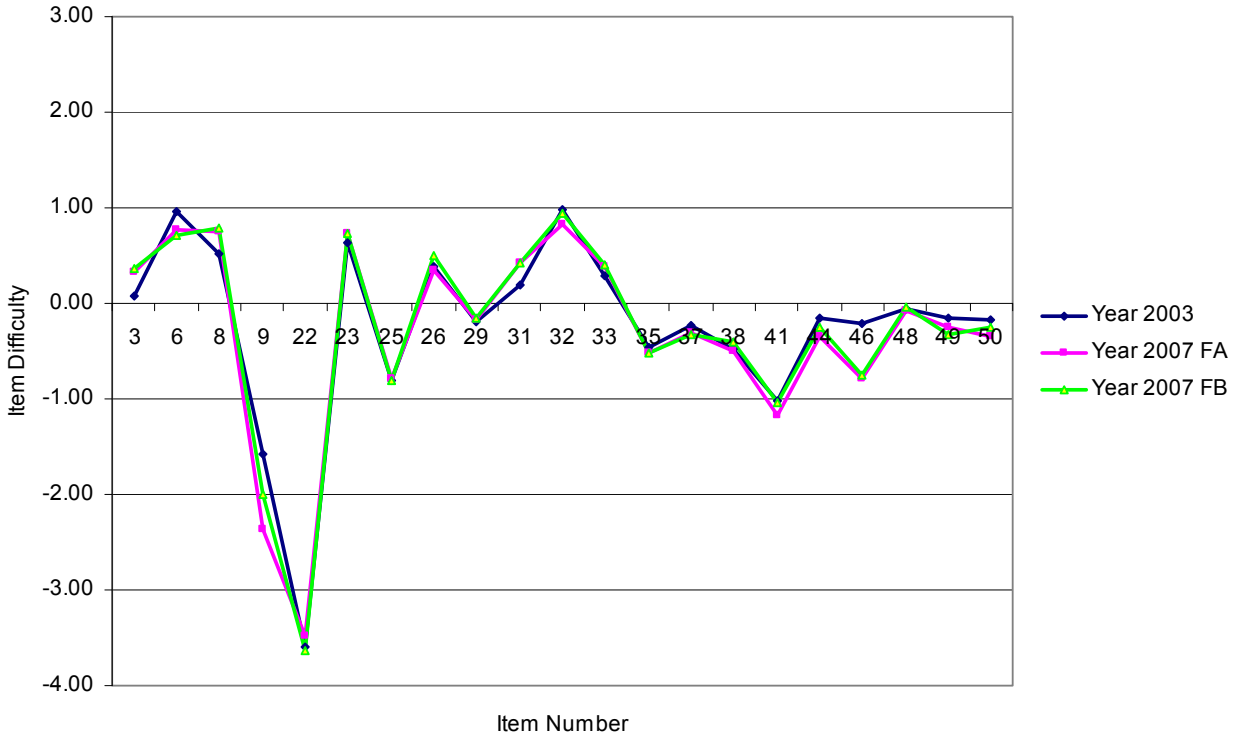


Figure 1.32 Free Calibration Item Difficulty Comparison of Year 2003 vs. Year 2007: Grade 8

Reporting Scale Scores

In order to facilitate the use and interpretation of the results of the 2007 MSA-Reading, MSDE provided Harcourt with specifications about the score scale (Mean = 400, SD = 40, LOSS = 240, HOSS = 650). For grade 4, for example, the following is the formula to convert each student' ability or theta to scale score:

$$ReportingAbilityScaleScore = 32.8271 \cdot theta + 362.7449$$

$$ReportingSEM = 32.8271 \cdot SEM$$

where

theta = the *IRT* ability estimate, and

SEM = the conditional *SEM* of the ability estimate.

The following table depicts the slope and intercept to use for each grade. It should be noted that these same slops and intercepts have been used since Year 2003 (grades 3, 5, and 8) and Year 2004 (grades 4, 6, and 7).

Table 1.62 The 2007 MSA-Reading Slope and Intercept: Grades 3 through 8

Grade	Slope	Intercept
3	32.4123	384.8579
4	32.8271	362.7449
5	33.0171	380.0082
6	30.4732	373.0575
7	31.9262	377.0054
8	30.3891	376.8316

1.14 Score Interpretation

To help provide appropriate interpretation of the 2007 MSA-Reading test scores, two types of scores were created: 240-650 scale scores, and performance levels and descriptions.

240-650 Scale Scores

As explained in section 1.13, Linking, Equating, and Scaling, the 2007 MSA-Reading produced scale scores that ranged between 240 and 650. Those scale scores have the same meaning within the same grade, but those scores are not comparable across grade levels.

It should be noted that those scale scores have only simple meaning that higher scale scores represent higher performance in reading tests. Thus, performance levels and descriptions can give a specific interpretation other than a simple interpretation because they were developed to bring meaning to those scale scores.

Performance Level Descriptors

As previously explained, performance levels and descriptions provide specific information about students' performance levels and help interpret the 2007 MSA-Reading scale scores. They describe what students at a particular level generally know and can be applicable to all students within each grade level. As Table 2.1 shows a range of scale scores at each performance level, for example, grade 4 reading scale scores from 371 to 436 indicate the level of *Proficient*, and students at this level can read grade appropriate text and demonstrate the ability to comprehend literature and informational passages. Further information about the 2007 MSA-Reading score interpretation can be obtained from the MSDE.

1.15 Test Validity

As noted in the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999), "validity is the most important consideration in test evaluation."

Messick (1989) defined validity as follows:

> Validity is an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores or other modes of assessment. (p.5)

This definition implies that test validation is the process of accumulating evidence to support intended use of test scores. Consequently, test validation is a series of on-going and independent processes that are essential investigations of the appropriate use or interpretation of test scores from a particular measurement procedure (Suen, 1990).

In addition, test validation embraces all of the experimental, statistical, and philosophical means by which hypotheses and scientific theories can be evaluated. This is the reason that validity is now recognized as a unitary concept (Messick, 1989).

To investigate the validity evidence of the 2007 MSA-Reading, content-related evidence, evidence of internal structure, and evidence of unidimensionality were collected.

Content-Related Evidence

Content validity is frequently defined in terms of the sampling adequacy of test items. That is, content validity is the extent to which the items in a test adequately represent the domain of items or the construct of interest (Suen, 1990). Consequently, content validity provides judgmental evidence in support of the domain relevance and representativeness of the content in the test (Messick, 1989).

The 2007 MSA-Reading blueprints provide extensive evidence regarding the alignment between the content in the 2007 MSA-Reading and the *VSC*. The 2007 MSA-Reading operational test forms were created from the pool of item that had been field-tested in 2006 and before. The item composition of these tests is reported in section 1.5, Test Structure of the 2007 MSA-Reading. In addition, 2007 MSA-Reading blueprints are presented in Appendix D.

Item Development

Test development for MSA-Reading is ongoing and continuous. Content specialists, teachers all over Maryland, Harcourt, and MSDE were greatly involved in developing and reviewing test items. Committees such as content review, bias review, and vision review reviewed all of the items which were finally stored in the item bank. Specifically, an internal review by MSDE and Harcourt staff for alignment and quality required a great deal of time and energy. More specific information on item (test) development and review can be obtained in section 1.4, Development and Review of the 2007 MSA-Reading.

Field testing was conducted within a test window scheduled. Once field-test items were scored, MSDE and Harcourt conducted additional item analysis and content review. Any field-test items that exhibited statistics that suggested potential problems were carefully reviewed by content specialists within MSDE and Harcourt. A determination was then made as to whether the

item should be eliminated or revised and field-tested again. Information on statistical analyses for field test items can be obtained in section 1.9, Field Test Analyses.

Differential Item Functioning (DIF)

1) Bias Review of Field Test Items

A separate Bias Review Committee examined each item on reading tests looking for indications of bias that would impact the performance of an identifiable group of students. They discussed or rejected items biased on gender, ethnic, religious, or geographical bias.

2) DIF Statistics

For DIF analyses, subgroups were first identified to either reference or focal groups. For 2007 MSA-Reading, males and whites were assigned to the reference group and females and African-Americans were assigned to the focal group.

For SR items, Harcourt applied Mantel-Haenszel procedure, and standardized mean difference (SMD) and standard deviation (SD) were calculated for BCR item analyses. All items were placed in severity classifications base don Educational Testing Service (ETS) guidelines. More information on DIF analyses can be obtained in section 3.7, Differential Item Functioning.

Evidence from Internal Structure

The 2007 MSA-Reading has three reading processes: *General Reading*, *Literary Reading*, and *Informational Reading.* Tables 4.3 through 4.8 show correlations among the reading processes.

1.16 Unidimensionality Analyses

Measurement implies order and magnitude on a single dimension (Andrich, 1989). Consequently, in the case of scholastic achievement, this requires a linear scale to reflect this idea of measurement. Such a test is considered to be unidimensional (Andrich, 1988, 1989). However, unidimensionality cannot be strictly met in a real testing situation because students' cognitive, personality, and test-taking factors usually have a unique influence on their test performance to some level (Andrich, 1988; Hambleton, Swaminathan, & Rogers, 1991). Consequently, what is required for unidimensionality to be met is an investigation of the presence of a dominant factor that influences test performance. This dominant factor is considered as the ability measured by the test (Andrich, 1988; Hambleton et al., 1991; Ryan, 1983).

To check the unidimensionality of the 2007 MSA-Reading, polychoric correlation coefficients were computed with *LISREL 8.5* (Jöreskog & Sörbom, 1993). Principal component analysis was then applied to produce eigenvalues. The first and the second principal component eigenvalues were compared without rotation. Table 1.63 summarizes the results of the first and second principal component eigenvalues of the 2007 MSA-Reading.

In general, the first factor extracted somewhat large amount of eigenvalues across all grades. With regard to factor analysis and eigenvalues, there is one unit of information per item so that the eigenvalues sum to the number of items. The rule of thumb to determine the unidimensionality of a test requires that the eigenvalue of the first component or factor should be at least three times larger than the second one. As can be seen, the size of the eigenvalue of the first component meets the criterion for the unidimensionality. Thus, we can conclude that the assumption of unidimensionality for the 2007 MSA-Reading was met.

Table 1.63 The 2007 MSA-Reading Eigenvalues between the First and Second Components

Grade	Form	Number of Items	First Eigenvalue	Second Eigenvalue
3	A	37	12.47	1.50
	B	37	11.39	1.47
4	A	37	11.56	1.36
	B	37	12.17	1.47
5	A	37	10.15	1.34
	B	37	10.80	1.43
6	A	37	12.33	1.48
	B	37	11.62	1.44
7	A	37	11.82	1.36
	B	37	11.21	1.46
8	A	37	10.46	1.43
	B	37	10.15	1.48

Note. Form A designates the operational portion of Forms 1, 3, 5, 7, and 9, which is identical. Form B designates the operational portion of Forms 2, 4, 6, 8, and 10, which is identical.

1.17 Item Bank Construction

The number of test forms to be constructed each year and the need to replace items that would be released to the public necessitated the availability of a large pool of items. The 2007 MSA-Reading item bank continued to be maintained by Harcourt as computer files and paper copies. This enabled test items to be readily available to both Harcourt and MSDE staff for reference, test construction, test book design, and printing.

Harcourt maintained a computerized statistical item bank to store supporting and identification information on each item. The information stored in this item bank for each item was as follows:

- CID
- Test administration year and season
- Test form
- Grade level
- Item type
- Item stem and options
- Passage code and title
- Subject code and description
- Process code and description
- Standard code and description
- Indicator code and description
- Objective code and description
- Item status
- Item statistics

In terms of Rasch item statistics data, all field test items were calibrated by fixing the parameters of the operational test items within each operational test form. For example, each unique field test items of reading test forms A, B, C, D, and E were independently calibrated after fixing the same operational items appearing across the field test forms with the same Rasch difficulties because these field test forms belonged to the same operational form A (e.g., contained the same operational items on each field test form). Then, item difficulties, step difficulties, and fit statistics were stored in the 2007 item bank.

1.18 Quality Control Procedures

A standard quality procedure at Harcourt Assessment, Inc. was to create a test deck for MSA programs. The test deck began when Quality Assurance entered mock data into the enrollment system, which was transferred to the materials requisition system; the order was packaged by our Distribution Center, and shipped to the Quality Assurance Department. We then reviewed the packing list against the data entered, the materials algorithms applied, the materials packaged against the packing list, and the actual packaging of the documents. These documents were then used to create a test deck of mock data along with advance copies of documents that were received from the printer. Advance printer copies were inclusive of documents throughout the print run to assure we were randomly testing printed documents. The Maryland test deck was a comprehensive set of all documents that:

- Verify all scan positions for item responses and demographics to verify scanning setup and scan densities
- Verify all constructed response score points, zoning of image, reader scoring, reader resolution, and reader check scores
- Verify the handling of blank documents through the system
- Test all demographic and item edits
- Verify pre-id bar code read, match and no-match
- Verify attemptedness rules applied by subtest
- Verify duplicate student handling (same test duplicate, different test duplicate)
- Verify duplicate student with different demographics rules applied
- Verify the document counts to the enrollment, pre-id and actual document receipt
- Verify pre-id matching and application to student record
- Verify various raw score points and access to dummy and live scoring tables
- Verify cut scores applied
- Verify valid score on one subtest and invalid score on other subtest
- Verify scoring applied to Braille and Large Print
- Verify valid multiple choice and invalid constructed response
- Verify valid constructed response and invalid multiple choice
- Verify all special scoring rules
- Verify all summary programs for rounding
- Verify summary inclusion and exclusion (Braille, standard and non-standard student summarization)
- Verify each scoring level for group reporting
- Verify all reporting programs for accuracy in all text and data presented
- Verify class, school, district, and state summary data on home reports
- Verify all data file programs to assure valid information in every field

- Verify data descriptions for accuracy against data file
- Create compare programs to allow for update of files

The Maryland test deck was the first order processed through the Maryland system to verify all aspects of the materials packaging, scanning, editing, scoring, summary, and reporting. Pre-determined conditions were included in the test deck to assure the programs were processing all data to meet the requirements of the program with zero defects. Processing of live orders couldn't proceed until each phase of the test deck had been approved by our Quality Assurance Department. An Issues Log with sign-off approvals was utilized to assure we were addressing any issues that arose in the review of the test deck data across all functional groups at Harcourt.

Prior to release of any order for reporting we received a preliminary file from Scoring Operations to run a key check TRIAN to assure that all scoring keys had been determined and applied accurately. Any item that was not performing as expected was flagged and reviewed by our content specialist and psychometrician. Upon completion of the key check, we proceeded to run the pilot level reports.

We ran the pilot district utilizing live data. The pilot district included multiple buildings, all grades, and any unique accommodations. A formal pilot review process was conducted with expert Harcourt staff prior to release of the information to MSDE.

Upon completion of the processing of all district level data, Harcourt Scoring Operations provided the Quality Assurance Department with a state level data file(s) and state data for review and approval. Harcourt Quality Assurance programmers duplicated all data independently to assure accurate interpretation of the expected results. A series of SAS programs were run on these files to assure 100% accuracy. These included but were not limited to:

- Statewide Duplicate Student
- Statewide FD of Demographic Variables
- District/Building/N-Count
- Statewide RS/SS/Cut Score tables
- Proc Means to verify summary statistics
- Item Response listing to verify all constructed responses are scored and within the valid range
- Normative data check for all raw scores
- Reader Resolution report to verify all readings and resolution combinations

Upon complete review and approval by Quality Assurance, we posted the statewide student files to a secure FTP site for review by MSDE.

2. RESULTS OF THE 2007 MSA-READING

This section provides information about the 2007 MSA-Reading results for students in grades 3 through 8. Table 2.1 contains information about the cutoff score of each performance level. Table 2.2 contains the pass rate of each performance level based on the cutoff score. It should be noted that the same cutoff scores had been applied since Year 2003 (grades 3, 5, and 8) and Year 2004 (grades 4, 6, and 7).

Table 2.1 MSA-Reading Cut Scores: Grades 3 through 8

Grade	Cut Score of Performance Level	
	Proficient	Advanced
3	388	456
4	371	437
5	384	425
6	381	421
7	385	425
8	391	425

Note. These cut scores have been applied since 2003 (grades 3, 5, and 8) and 2004 (grades 4, 6, and 7).

Table 2.2 The 2007 MSA-Reading Pass Rates: Grades 3 through 8

Grade	*N*	Percentage of Performance Level		
		Basic	Proficient	Advanced
3	59,407	19.44	60.30	20.26
4	60,129	13.93	61.26	24.81
5	61,576	23.29	43.62	33.09
6	62,467	23.40	43.64	32.96
7	63,960	29.69	40.82	29.49
8	65,061	31.58	44.44	23.97

Note. Percentages may not add to 100% due to rounding. Percentages are calculated based on raw scores from data files.

Note. Analyses were conducted with a whole population.

3. OVERVIEW OF STATISTICAL SUMMARIES

This section provides general information about statistical and psychometric summaries used for the 2007 MSA-Reading program. Actual statistical results described in this section appear in section 4 and appendices.

3.1 Classical Descriptive Statistics

Table 4.1 contains the classical descriptive statistics of each form for each grade and includes:

- Form number
- Number of items
- Numbers of students (These numbers were based on a whole population.)
- Means and standard deviations of raw scores
- Stratified Cronbach's Alpha
- Standard error of measurement (SEM)

Stratified Cronbach's Alpha

The 2007 MSA-Reading tests included both *SR* and *BCR* items. Consequently, it was asked to use an adequate reliability coefficient that addressed the important factor, different item type. The following formula depicts the reliability coefficient, *Stratified Cronbach's Alpha*:

$$Stratified\ \ a = 1 - \frac{\sum \sigma_i^2 (1 - \rho_{ii'})}{\sigma_t^2}$$

where

σ_i^2 = variance of score on different item type *i*,

σ_t^2 = variance of total score, and

$\rho_{ii'}$ = reliability coefficient of score on different item type *i*.

Standard Error of Measurement (Based on Classical Test Theory)

The *standard error of measurement* (*SEM*) is commonly used in interpreting and reporting individual test scores and score differences on tests (Harvill, 1991).

Classical test theory is based on the following assumptions (Andrich & Luo, 2004):

- Each person *v* has a true score on the construct, usually denoted by the variable T_v
- The best overall indicator of the person's true score is the sum of the scores on the items and is usually denoted by the variable X_v
- This observed score will have an error for each person which is usually denoted by E_v
- These errors are not correlated with the true score
- Across a population of people, the errors sum to 0 and they are normally distributed.

From these assumptions, the following equations can be derived:

$$X_v = T_v + E_v .$$

Therefore,

$$\sigma_x^2 = \sigma_t^2 + \sigma_e^2$$

where

σ_x^2 = the variance of the observed score in a population of persons,

σ_t^2 = the variance of their true score variance, and

σ_e^2 = the error variance.

The reliability coefficient of the test can be calculated by the following formula:

$$\rho_x = \frac{\sigma_t^2}{\sigma_x^2} = \frac{\sigma_x^2 - \sigma_e^2}{\sigma_x^2} .$$

Thus, the *SEM* is calculated by the following formula:

$$\sigma_e = \sigma_x \sqrt{1 - \rho_x} .$$

For example, consider a student with a score of 90 from a sample of students with a mean score of 60 and variance of 225 on a test with reliability of 0.80. According to the formulas provided above, the obtained score is 90, and its *SEM* is 6.71. Thus, an approximate 68% score band for estimating this students' true score is from 83.29 (90 - 6.71) to 96.71 (90 + 6.71).

Note that this equation is only useful to estimate true score when the test reliability is reasonably high and the obtained score for the examinee is not an extreme deviate from the mean of the appropriate reference group. When we use this equation, consequently, we should be careful with statements so that they do not imply greater precision than is actually involved (Harvill, 1991).

Conditional Standard Error of Measurement (Based on Item Response Theory)

Under the Rasch model, the *SEM* for each person is as follows (Andrich & Luo, 2004):

$$\sigma_{\hat{\beta}} = \frac{1}{\sqrt{\sum_{i=1}^{L} p_{vi}(1 - p_{vi})}}$$

where

v = subscript for a person,

i = subscript for an item,

L = length of the test,

$\hat{\beta}$ = ability estimate, and

p_{vi} = the probability that a person answers an item correctly and defined as follows:

$p_{vi} = \frac{e^{\beta_v - \delta_i}}{1 + e^{\beta_v - \delta_i}}$ where β_v is person's ability and δ_i is item's difficulty.

A confidence band can be found for use in interpreting the ability estimate. For example, an approximate 68% confidence interval for $\hat{\beta}$ is given by

$\hat{\beta} \pm SEM$

3.2 Scale Score Descriptive Statistics

Table 4.2 provides information about scale score descriptive statistics of each form for each grade and includes:

- Form number
- Number of items
- Numbers of students (These numbers were calculated based on a whole population.)
- Mean and standard deviation of scale scores
- 10% quantile (P10), 25% quantile (Q1), median (P50), 75% quantile (Q3), 90% quantile, and IQR (Interquantile Range= Q3-Q1)
- Conditional *standard errors of measurement* (*SEM*) for the proficient and advanced cut scores

In addition, Appendix B provides frequency distributions and histograms of the scale scores of the 2007 MSA-Reading.

3.3 Classical and *IRT* Item Parameters

Appendix C provides both classical and *IRT*-based item parameters and includes:

- Item type (*SR* or *BCR*)
- *P*-value: in order for *p*-values of the *BCR* items to be comparable with *p*-values of the *SR* items they were calculated as modified proportions of the maximum obtainable domain scores.
- Point-biserial correlation: a Pearson's *r* between the scored item and the total score
- Rasch difficulty estimate
- Standard error of the Rasch difficulty
- Mean-square infit
- Mean-square outfit

It should be noted Rasch difficulty estimates of these items are the same as those from the base year, and the item parameters for the other items are on the same scale. In addition, it should be noted that the first 25 items in each table are the SAT10 common items, whereas the remainder are Maryland-augmented items.

Fit Statistics for Rasch Model

Fit statistics are used for evaluating the goodness-of-fit of a model to the data. Fit statistics are calculated by comparing the observed and expected trace lines obtained for an item after parameter estimates are obtained using a particular model. *WINSTEPS* provides two kinds of fit statistics called *mean-squares* that show the size of the randomness or amount of distortion of the measurement system.

Outfit mean-squares are influenced by outliers and are usually easy to diagnose and remedy. *Infit* mean-squares, on the other hand, are influenced by response patterns and are harder to diagnose and remedy. Table 3.1 provides a guideline for evaluating mean-square fit statistics (Linacre & Wright, 2000).

In general, mean-squares near 1.0 indicate little distortion of the measurement system, while values less than 1.0 indicate observations are too predictable (redundancy, model overfit). Values greater than 1.0 indicate unpredictability (unmodeled noise, model underfit).

Table 3.1 Criteria to Evaluate Mean-Square Fit Statistics

Mean-Square	Interpretation
> 2.0	Distorts or degrades the measurement system
1.5 – 2.0	Unproductive for construction of measurement, but not degraded
0.5 – 1.5	Productive for measurement
< 0.5	Unproductive for measurement, but not degrading. May produce misleadingly good reliabilities and separations

3.4 Inter-Rater Reliability

Tables 4.47 through 4.52 contain information about the scoring agreement between rater 1 and rater 2. When the two readers assigned the same score to a student's answer, the scores were in perfect agreement. Scores differed by one score point were adjacent, and scores differed by two or more score points were in discrepancy. For further information about inter-rater agreement, please see section 1.7, MSA-Reading Scoring Procedures. For the 2007 MSA-Reading, the adjacent agreement rates were above 97%, and perfect agreement rates were above 75% across all grades.

3.5 Correlations among Reading Processes

The 2007 MSA-Reading consisted of three reading processes (strands): *General Reading*, *Literary Reading*, and *Informational Reading*. Tables 4.3 through 4.8 (pages 120-121) contain correlation coefficients among these reading processes.

3.6 Decision Accuracy and Consistency at the Cut Scores

Tables 4.9 through 4.14 contain the results of analyses performed to estimate the accuracy and consistency of the decisions for passing (proficient) on the 2007 MSA-Reading. The analyses make use of the methods outlined and implemented in Livingston and Lewis (1995), Haertel (1996), and Young and Yoon (1998).

The *accuracy* of a decision is the extent to which it would agree with the decisions that would be made if each student could somehow be tested with all possible parallel forms of the assessments. The *consistency* of a decision is the extent to which it would agree with the decisions that would be made if the students had taken a different form of the examination, equal in difficulty and covering the same content as the form they actually took.

Students can be misclassified in one of two ways. Students who were below the proficiency cut score, but were classified (on the basis of the assessment) as being above a cut score, are considered to be *false positives*. Students who were above the proficiency cut score, but were classified as being below a cut score, are considered to be *false negatives*.

For the 2007 MSA-Reading, Tables 4.9 through 4.14 include:

- Performance level
- Accuracy classifications
- False positives
- False negatives
- Consistency classifications

The tables illustrate the general rule that decision consistency is less than decision accuracy.

3.7 Differential Item Functioning

This section provides information about *differential item functioning* (*DIF*) analyses used for the 2007 MSA-Reading. For the 2007 MSA-Reading *DIF* analyses, the *reference* group was either male or Caucasian students, and the *focal* group was either female or African-American students.

Since the 2007 MSA-Reading was a mixed-format examination, comprising of both *BCR* and *SR* items, the *DIF* procedure used consists of Mantel's (1963) extension of the Mantel-Haenszel procedure (the Mantel Chi-square) for the *BCR* items and the Mantel-Haenszel procedure (Mantel & Haenszel, 1959) for the *SR* items.

Brief Constructed Response (BCR) Items

To help interpret the Mantel Chi-square (Mantel χ^2), the Educational Testing Service (ETS) *DIF* procedure uses the Mantel statistic in conjunction with the *standardized mean difference* (*SMD*).

Mantel Statistic

The Mantel χ^2 is simply a conditional mean comparison of the ordered response categories for reference and focal groups combined over values of the matching variable score. By "ordered" we mean that a response of 1 on an item is higher than 0, 2 is higher than 1, and so on. "Conditional," on the other hand, refers to the comparison of members from the two groups who received the same score on the matching variable, i.e., the total test score in our analysis.

Table 3.2 shows a $2 \times T \times K$ contingency table, where T is the number of response categories and K is the number of levels of the matching variable. The values, y_1, y_2, …, y_T are the T scores that can be gained on the item. The values, n_{Ftk} and n_{Rtk}, represent the numbers of focal and reference groups who are at the k^{th} level of the matching variable and gain an item score of y_t. The "+" indicates total number over a particular index (Zwick, Donoghue, & Grima, 1993).

Table 3.2 $2 \times T$ Contingency Table at the k^{th} level

Group	Item Score				Total
	y_1	y_2		y_T	
Reference	n_{R1k}	n_{R2k}	…	n_{RTk}	n_{R+k}
Focal	n_{F1k}	n_{F2k}	…	n_{FTk}	n_{F+k}
Total	n_{+1k}	n_{+2k}	…	n_{+Tk}	n_{++k}

Note. This table was cited from Zwick, et al. (1993)

The Mantel statistics is defined as the following formula:

$$\text{Mantel } \chi^2 = \frac{(\sum_k F_k - \sum_k E(F_k))^2}{\sum_k Var(F_k)}$$

where

F_k = the sum of scores for the focal group at the k^{th} level of the matching variable and is defined as follows:

$F_k = \sum_t y_t n_{Ftk}$,

The expectation of F_k under the null hypothesis is

$$E(F_k) = \frac{n_{F+k}}{n_{++k}} \sum_t y_t n_{+tk} .$$

And, the variance of F_k under the null hypothesis is as follows:

$$Var(F_k) = \frac{n_{R+k} n_{F+k}}{n_{++k}^2 (n_{++k} - 1)} \left[(n_{++k} \sum_t y_t^2 n_{+tk}) - (\sum_t y_t n_{+tk})^2 \right].$$

Under H_0, the Mantel statistic has a chi-square distribution with one degree of freedom. In *DIF* applications, rejecting H_0 suggests that the students of the reference and focal groups who are similar in overall test performance tend to differ in their mean performance. In the case of dichotomous items, on the other hand, the statistics is identical to the Mantel-Haenszel (1959) statistic without the continuity correction (Zwick, Donoghue, & Grima, 1993).

Standardized Mean Difference (SMD)

A summary statistic to accompany the Mantel approach is the *standardized mean difference* (*SMD*) between the reference and focal groups proposed by Dorans and Schmitt (1991). This statistic compares the means of the reference and focal groups, adjusting for differences in the distribution of the reference and focal group members across the values of the matching variable.

$$SMD = \sum_k p_{Fk} m_{Fk} - \sum_k p_{Fk} m_{Rk}$$

where

$p_{Fk} = \frac{n_{F+k}}{n_{F++}}$, the proportion of the focal group members who are at the k^{th} level of the matching variable,

$m_{RK} = \frac{1}{n_{F+k}} \times (\sum_t y_t n_{Ftk})$, the mean item score of the focal group members at the k^{th} level, and

m_{Rk} = the analogous value for the reference group.

As can be seen from the equation above, the *SMD* is the difference between the unweighted item mean of the focal group and the weighted item mean of the reference group. The weights for the reference group are applied to make the weighted number of the reference group students the same as in the focal group within the same ability. A negative *SMD* value implies that the focal group has a lower mean item score than the reference group, conditional on the matching variable.

DIF classification for BCR items

The *SMD* is divided by the total group item standard deviation to obtain an effect-size value for the *SMD*. This effect-size *SMD* is then examined in conjunction with the Mantel χ^2 to obtain *DIF* classifications that are depicted in Table 3.3 below.

Table 3.3 *DIF* Classification for BCR Items

Category	Description	Criterion
AA	No *DIF*	Non-significant Mantel χ^2 or Significant Mantel χ^2 and |SMD/SD| ≤ .17
BB	Weak *DIF*	Significant Mantel χ^2 and .17 < |SMD/SD| ≤ .25
CC	Strong *DIF*	Significant Mantel χ^2 and .25 < |SMD/SD|

Note. SD is the total group standard deviation of the item score in its original metric.

Selected Response (SR) Items

For the *SR* items, the Mantel-Haenszel Chi-square (M-H χ^2) in conjunction with the M-H odds ratio that is transferred to what ETS calls, the delta scale (D).

The Odds Ratio

The odds of a correct response (proportion passing divided by proportion failing) are *P/Q* or *P/(1-P)*. The odds ratio, on the other hand, is simply the odds of a correct response of the reference group divided by the odds of a correct response of the focal group.

For a given item, the odds ratio is defined as follows:

$$\alpha_{M-H} = \frac{P_r / Q_r}{P_f / Qf}.$$

And, the corresponding null hypothesis is that the odds of getting the item correct are equal for the two groups. Thus, the odds ratio is equal to 1:

$$H_0: \alpha_{M-H} = \frac{P_r / Q_r}{P_f / Qf} = 1.$$

The Delta Scale

In order to make the odds ratio symmetrical around zero with its range being in the interval $-\infty$ to $+\infty$, the odds ratio is transformed into a log odds ratio as per the following:

$$\beta_{M-H} = \ln(\alpha_{\text{M-H}}).$$

The simple natural logarithm transformation of this odds ratio is symmetrical about zero in which zero has the interpretation of equal odds. This *DIF* measure is a signed index where a positive value signifies *DIF* in favor of the reference group while a negative value indicates *DIF* in favor of the focal group. β_{M-H} also has the advantage of being transformed linearly to other interval scale metrics (Camilli & Shepard, 1994). This fact is utilized by ETS in creating their delta scale (D), which is defined as follows:

$$\text{D} = -2.35 \cdot \beta_{M-H}.$$

DIF classification for SR items

The following table depicts *DIF* classifications for SR items to examine the M-H χ^2 in conjunction with the delta scale (D):

Table 3.4 *DIF* Classification for SR Items

Category	Description	Criterion
A	No *DIF*	Non-significant M-H χ^2 or $\lvert D \rvert < 1.0$
C	Strong *DIF*	Significant M-H χ^2 and $\lvert D \rvert \geq 1.5$
B	Weak *DIF*	Otherwise classified as B

3.8 Equating and Scaling

Tables 4.14 through 4.26 contain the 2007 MSA-Reading total and subtotal raw score to scale score (RS/SS) conversion tables. It should be noted that the total RS/SS tables for verbatim students were created after excluding general reading items (16 items for grade 3 and 15 items for grade 4). Because of these procedures verbatim students did not receive general reading raw scores and scale scores. Conditional standard errors for the total and subtotal scale scores are also included.

The Rasch and Partial Credit *IRT* Models

The most basic expression of the Rasch model is in the *item characteristic curve* (ICC). It shows the probability of a correct response to an item as a function of the ability level. The probability of a correct response is bounded by 1 (certainty of a correct response) and 0 (certainty of an incorrect response).

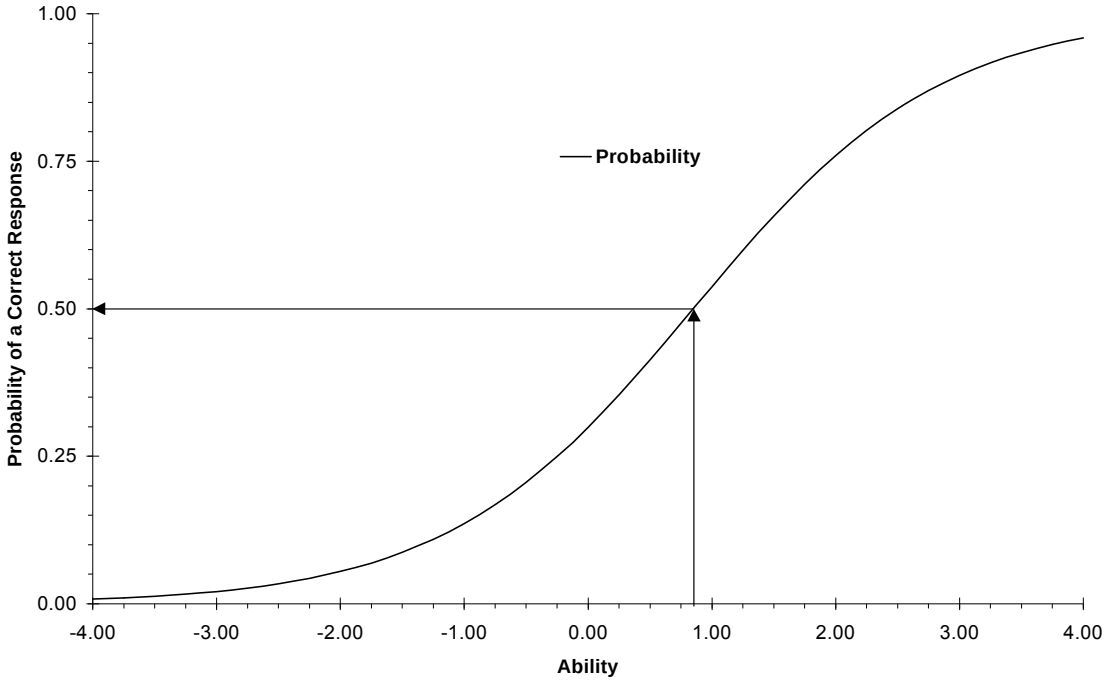
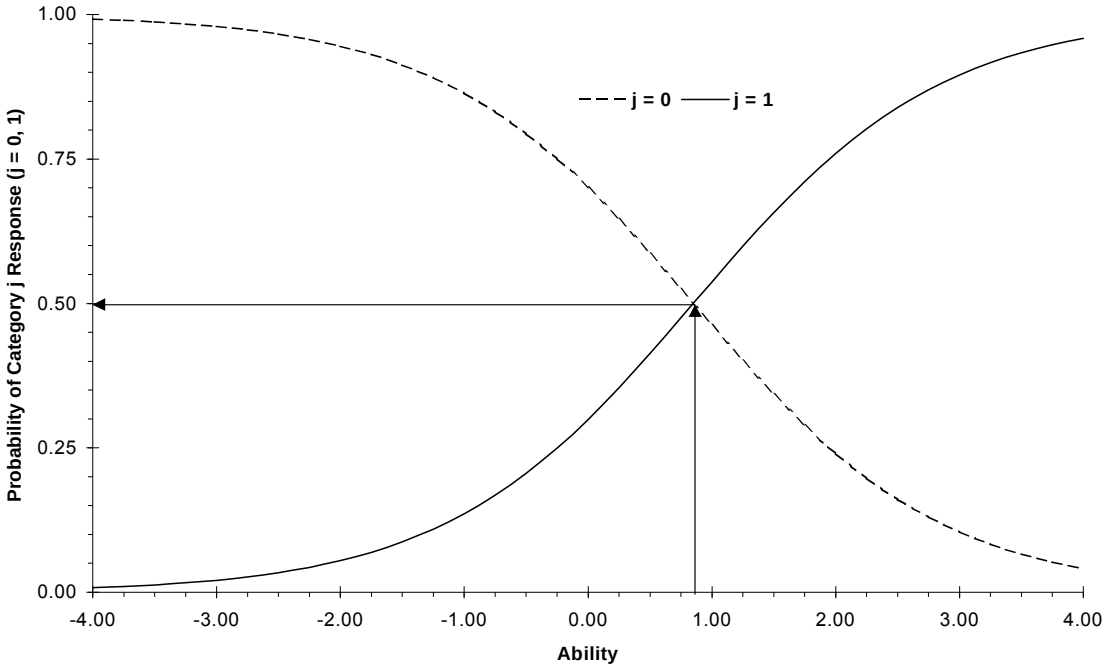


Figure 3.1 Item Characteristic Curve

As an example, consider Figure 3.1 which depicts a item that falls at approximately 0.85 on the ability (horizontal) scale. When a person answers an item at the same level as their ability, then that person has a probability of roughly 50% of answering the item correctly. Another way of expressing this is that if we have a group of 100 people, all of whom have an ability of 0.85, we would expect about 50% of them to answer the item correctly. A person whose ability was above 0.85 would a higher probability of getting the item right, while a person whose ability is below 0.85 would have a lower probability of getting the item right. This makes intuitive sense and is the basic formulation of Rasch measurement for test items having only 2 possible categories (i.e., wrong or right).



Figugure 3.2 Category Response Curves for a One-Step Item

Figure 3.2 extends this formulation to show the probabilities of obtaining a wrong answer or a right answer. The curve on the left ($j = 0$) shows the probability of getting a score of "0" while the curve on the right ($j = 1$) shows the probability of getting a score of "1". The point at which the two curves cross indicates the transition point on the ability scale where the most likely response changes from a "0" to a "1". Here, the probability of answering the item correctly is 50%.

The key step in the formulation, and the point at which the Rasch dichotomous model merges with the PCM, requires us to assume an additional response category. Suppose that, rather than scoring items as completely wrong or completely right, we add a category representing answers

that, though not totally correct, are still clearly not totally incorrect. These relationships are shown in Figure 3.3.

The left-most curve ($j = 0$) in Figure 3.3 represents the probability for all examinees getting a score of "0" (completely incorrect) on the item, given their ability. Those of very low ability (e.g., below - 2) are very likely to be in this category and, in fact, are more likely to be in this category than the other two. Those receiving a "1" (partial credit) tend to fall in the middle range of abilities (the middle curve, $j = 1$). The final, right-most curve ($j = 2$) represents the probability for those receiving scores of "2" (completely correct). Very high-ability people are clearly more likely to be in this category than in any other, but there are still some of average and low ability that can get full credit for the item.

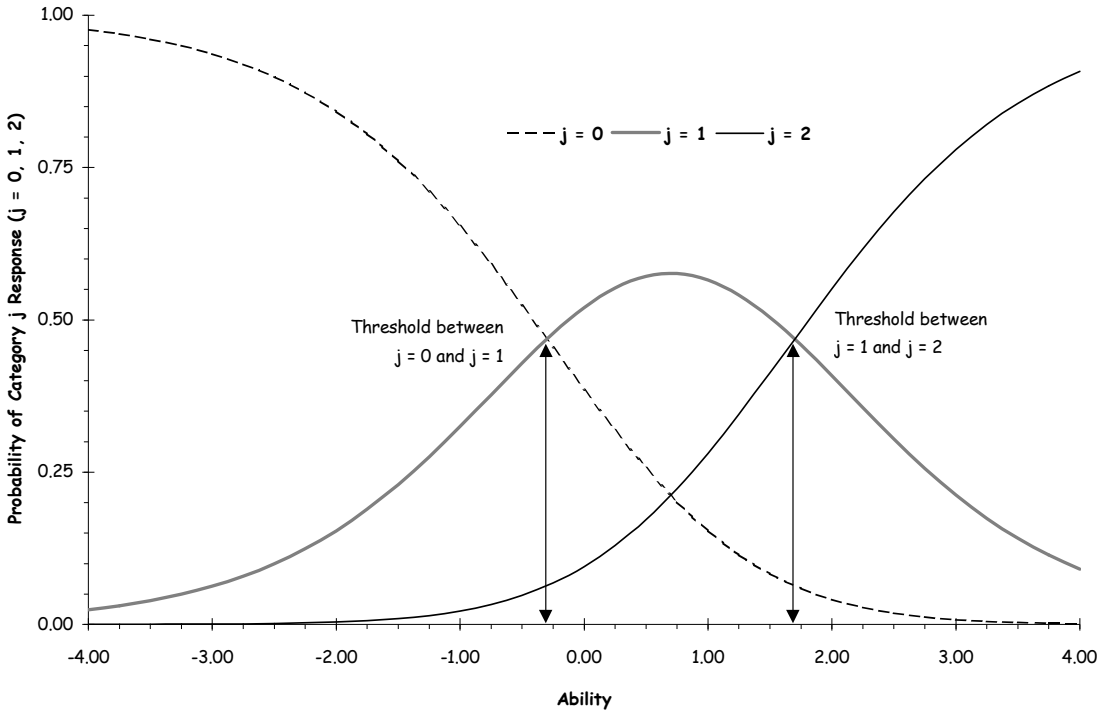


Figure 3.3 Category Response Curves for a Two-Step Item

Although the actual computations are quite complex, the points at which lines cross each other have a similar interpretation as for the dichotomous case. Consider the point at which the $j = 0$ line crosses the $j = 1$ line, indicated by the left arrow. For abilities to the left of (or less than) this point, the probability is greatest for a "0" response. To the right of (or above) this point, and up to the point at which the $j = 1$ and $j = 2$ lines cross (marked by the right arrow), the most likely response is a "1". For abilities to the right of this point, the most likely response is a "2".

Note that the probability of scoring a "1" response ($j = 1$) declines in both directions as ability decreases to the low extreme or increases to the high extreme. These points then may be thought of as the difficulties of crossing the *thresholds* between categories.

An important implication of the formulation can be summarized as: If the commonly used Rasch model applied to dichotomously (right/wrong) scored items can be thought of as simply a special case of the PCM, then the act of scaling multiple-choice items together with polytomous items, whether they have three or more response categories, is a straightforward process of applying the measurement model. The quality of the scaling then can be assessed in terms of known procedures.

One important property of the PCM is its ability to separate the estimation of item/task parameters from the person parameters. With the PCM, as with the Rasch model, the total score given by the sum of the categories in which a person responds is a sufficient statistic for estimating person ability (i.e., no additional information need be estimated). The total number of responses across examinees in a particular category is a sufficient statistic for estimating the step difficulty for that category. Thus with PCM, the same total score will yield the same ability estimate for different examinees.

The PCM is a direct extension of the dichotomous one-parameter *IRT* model developed by Rasch (Rasch, 1980). For an item/task involving m_i score categories, one general expression for the probability of scoring x on item/task i is given by

$$P_{nix} = \exp\sum_{j=0}^{x}\left(\theta_n - D_{ij}\right) / \sum_{k=0}^{m_i}\left[\exp\sum_{j=0}^{k}\left(\theta_n - D_{ij}\right)\right]$$

where

$x = 0, 1, ..., m_i$, and by definition, $\sum_{j=0}^{0}\left(\theta - D_{ij}\right) = 0$.

The above equation gives the probability of scoring x on the i-th test item as a function of ability (θ) and the difficulty of the m_i steps of the task (Masters, 1982).

According to this model, the probability of an examinee scoring in a particular category (step) is the sum of the logit (log-odds) differences between θ and D_{ij} of all the completed steps, divided by the sum of the differences of all the steps of a task. Thissen and Steinberg (1986) refers to this model as a divide-by-total model. The parameters estimated by this model are (1) an ability estimate for each person (or ability estimate at each raw score level) and (2) m_i threshold (difficulty) estimates for each task with $m_i + 1$ score categories.

4. THE 2007 MSA-READING STATISTICAL SUMMARY

Table 4.1 The 2007 MSA-Reading Classical Descriptive Statistics: Grades 3 through 8

Grade	Form	No. of Items	*N*	*M*	*SD*	Reliability	*SEM*
3	A	37	29,732	28.44	7.74	0.89	2.56
	B	37	29,675	29.42	7.51	0.88	2.64
4	A	37	30,174	30.59	6.18	0.86	2.34
	B	37	29,955	30.78	6.53	0.87	2.37
5	A	37	30,883	27.75	6.79	0.86	2.54
	B	37	30,693	28.51	7.04	0.87	2.55
6	A	37	31,339	28.67	7.57	0.89	2.48
	B	37	31,128	27.57	7.52	0.88	2.61
7	A	37	32,114	28.56	7.66	0.89	2.57
	B	37	31,846	28.31	7.48	0.88	2.55
8	A	37	32,609	28.11	7.30	0.86	2.76
	B	37	32,452	28.84	6.95	0.83	2.85

Note. Analyses were conducted with a whole population.

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Table 4.2 The 2007 MSA-Reading Scale Score Descriptive Statistics: Grades 3 through 8

Grade	Form	*N*	*M*	*SD*	*P10*	*Q1*	*Mdn*	*Q3*	*P90*	*IQR*	*SEM* at Cut-Points	
											Prof.	Adv.
3	A	29,732	418.9	45.1	360	389	419	452	478	63	11	16
	B	29,675	417.8	39.6	364	391	419	444	471	53	11	15
	Overall	59,407	418.4	42.4	364	389	419	446	471	57	N/A	N/A
4	A	30,174	405.3	41.5	347	382	412	432	449	50	12	17
	B	29,955	407.9	44.2	347	382	412	439	459	57	12	17
	Overall	60,129	406.6	42.9	347	382	412	432	459	50	N/A	N/A
5	A	30,883	411.2	35.2	366	386	408	434	455	48	12	13
	B	30,693	411.6	36.7	368	387	409	435	458	48	11	13
	Overall	61,576	411.4	36.0	366	386	409	434	458	48	N/A	N/A
6	A	31,339	405.7	36.4	360	382	407	432	454	50	11	13
	B	31,128	404.7	32.2	363	381	407	425	448	44	10	12
	Overall	62,467	405.2	34.4	360	382	407	430	448	48	N/A	N/A
7	A	32,114	404.9	37.9	358	378	406	432	455	54	11	14
	B	31,846	405.7	37.6	360	379	404	429	458	50	11	13
	Overall	63,960	405.3	37.7	358	379	404	429	455	50	N/A	N/A
8	A	32,609	405.7	33.5	365	383	406	428	446	45	11	12
	B	32,452	405.4	29.3	368	389	407	424	441	35	10	12
	Overall	65,061	405.5	31.5	368	385	406	424	446	39	N/A	N/A

Note. Analyses were conducted with a whole population.

Table 4.3 The 2007 MSA-Reading Strand Correlations: Grade 3

Form	*N*	1	2	3
Form A				
1. General Reading	29,732	1.00		
2. Literary Reading	29,732	0.67	1.00	
3. Information Reading	29,732	0.69	0.72	1.00
Form B				
1. General Reading	29,675	1.00		
2. Literary Reading	29,675	0.67	1.00	
3. Information Reading	29,675	0.65	0.67	1.00

Note. Analyses were conducted with a whole population.

Table 4.4 The 2007 MSA-Reading Strand Correlations: Grade 4

Form	*N*	1	2	3
Form A				
1. General Reading	30,174	1.00		
2. Literary Reading	30,174	0.62	1.00	
3. Information Reading	30,174	0.65	0.62	1.00
Form B				
1. General Reading	29,955	1.00		
2. Literary Reading	29,955	0.67	1.00	
3. Information Reading	29,955	0.65	0.66	1.00

Note. Analyses were conducted with a whole population.

Table 4.5 The 2007 MSA-Reading Strand Correlations: Grade 5

Form	*N*	1	2	3
Form A				
1. General Reading	30,883	1.00		
2. Literary Reading	30,883	0.67	1.00	
3. Information Reading	30,883	0.63	0.64	1.00
Form B				
1. General Reading	30,693	1.00		
2. Literary Reading	30,693	0.69	1.00	
3. Information Reading	30,693	0.64	0.67	1.00

Note. Analyses were conducted with a whole population.

Table 4.6 The 2007 MSA-Reading Strand Correlations: Grade 6

Form	*N*	1	2	3
Form A				
1. General Reading	31,339	1.00		
2. Literary Reading	31,339	0.71	1.00	
3. Information Reading	31,339	0.69	0.68	1.00
Form B				
1. General Reading	31,128	1.00		
2. Literary Reading	31,128	0.72	1.00	
3. Information Reading	31,128	0.68	0.67	1.00

Note. Analyses were conducted with a whole population.

Table 4.7 The 2007 MSA-Reading Strand Correlations: Grade 7

Form	*N*	1	2	3
Form A				
1. General Reading	32,114	1.00		
2. Literary Reading	32,114	0.70	1.00	
3. Information Reading	32,114	0.69	0.70	1.00
Form B				
1. General Reading	31,846	1.00		
2. Literary Reading	31,846	0.70	1.00	
3. Information Reading	31,846	0.67	0.70	1.00

Note. Analyses were conducted with a whole population

Table 4.8 The 2007 MSA-Reading Strand Correlations: Grade 8

Form	*N*	1	2	3
Form A				
1. General Reading	32,609	1.00		
2. Literary Reading	32,609	0.63	1.00	
3. Information Reading	32,609	0.66	0.69	1.00
Form B				
1. General Reading	32,452	1.00		
2. Literary Reading	32,452	0.61	1.00	
3. Information Reading	32,452	0.62	0.64	1.00

Note. Analyses were conducted with a whole population

Table 4.9 The 2007 MSA-Reading Decision Accuracy and Consistency Indices: Grade 3

Form	Performance Cut	Accuracy	False Positive	False Negative	Consistency
A	*B : PA*	0.92	0.03	0.05	0.88
	BP : A	0.93	0.05	0.03	0.90
B	*B : PA*	0.91	0.04	0.05	0.88
	BP : A	0.92	0.04	0.03	0.89

Note. B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced.

Table 4.10 The 2007 MSA-Reading Decision Accuracy and Consistency Indices: Grade 4

Form	Performance Cut	Accuracy	False Positive	False Negative	Consistency
A	*B : PA*	0.92	0.03	0.05	0.89
	BP : A	0.89	0.07	0.04	0.85
B	*B : PA*	0.93	0.03	0.04	0.89
	BP : A	0.90	0.06	0.04	0.86

Note. B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced.

Table 4.11 The 2007 MSA-Reading Decision Accuracy and Consistency Indices: Grade 5

Form	Performance Cut	Accuracy	False Positive	False Negative	Consistency
A	*B : PA*	0.90	0.04	0.06	0.86
	BP : A	0.89	0.06	0.05	0.85
B	*B : PA*	0.90	0.04	0.05	0.87
	BP : A	0.90	0.06	0.05	0.86

Note. B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced.

Table 4.12 The 2007 MSA-Reading Decision Accuracy and Consistency Indices: Grade 6

Form	Performance Cut	Accuracy	False Positive	False Negative	Consistency
A	*B : PA*	0.91	0.04	0.05	0.88
	BP : A	0.91	0.05	0.04	0.87
B	*B : PA*	0.91	0.04	0.06	0.87
	BP : A	0.90	0.06	0.04	0.86

Note. B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced.

Table 4.13 The 2007 MSA-Reading Decision Accuracy and Consistency Indices: Grade 7

Form	Performance Cut	Accuracy	False Positive	False Negative	Consistency
A	*B : PA*	0.90	0.05	0.06	0.86
	BP : A	0.91	0.05	0.04	0.88
B	*B : PA*	0.90	0.04	0.06	0.86
	BP : A	0.91	0.05	0.04	0.88

Note. B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced.

Table 4.14 The 2007 MSA-Reading Decision Accuracy and Consistency Indices: Grade 8

Form	Performance Cut	Accuracy	False Positive	False Negative	Consistency
A	*B : PA*	0.89	0.05	0.06	0.84
	BP : A	0.90	0.06	0.04	0.86
B	*B : PA*	0.88	0.05	0.07	0.83
	BP : A	0.89	0.07	0.04	0.85

Note. B:PA denotes the cut between Basic and Proficient, while BP:A denotes the cut between Proficient and Advanced.

Table 4.15 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 3 Form A

	Form A			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS - 1*SEM*	SS + 1*SEM*
0	240[a]	47	240[a]	287
1	240[a]	34	240[a]	274
2	264	25	240[a]	289
3	280	21	259	301
4	292	19	273	311
5	302	17	285	319
6	311	16	295	327
7	318	15	303	333
8	325	14	311	339
9	331	14	317	345
10	336	13	323	349
11	342	13	329	355
12	347	13	334	360
13	351	12	339	363
14	356	12	344	368
15	360	12	348	372
16	365	12	353	377
17	369	12	357	381
18	373	12	361	385
19	377	11	366	388
20	381	11	370	392
21	385	11	374	396
22	389	11	378	400
23	393	11	382	404
24	397	12	385	409
25	401	12	389	413
26	406	12	394	418
27	410	12	398	422
28	414	12	402	426
29	419	12	407	431
30	424	13	411	437
31	429	13	416	442
32	434	13	421	447
33	440	14	426	454
34	446	14	432	460
35	452	15	437	467
36	460	16	444	476
37	468	17	451	485
38	478	19	459	497
39	490	20	470	510
40	504	23	481	527
41	522	25	497	547
42	543	27	516	570
43	569	30	539	599
44	602	37	565	639
45	630	49	581	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Table 4.16 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 3 Form B

		Form B		
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	46	240[a]	286
1	247	33	240[a]	280
2	271	24	247	295
3	286	20	266	306
4	297	18	279	315
5	306	16	290	322
6	314	15	299	329
7	321	14	307	335
8	327	14	313	341
9	333	13	320	346
10	338	13	325	351
11	343	12	331	355
12	347	12	335	359
13	352	12	340	364
14	356	12	344	368
15	360	11	349	371
16	364	11	353	375
17	368	11	357	379
18	372	11	361	383
19	376	11	365	387
20	379	11	368	390
21	383	11	372	394
22	387	11	376	398
23	391	11	380	402
24	394	11	383	405
25	398	11	387	409
26	402	11	391	413
27	406	11	395	417
28	410	12	398	422
29	414	12	402	426
30	419	12	407	431
31	423	12	411	435
32	428	12	416	440
33	433	13	420	446
34	438	13	425	451
35	444	14	430	458
36	450	14	436	464
37	456	15	441	471
38	463	16	447	479
39	471	17	454	488
40	480	18	462	498
41	491	19	472	510
42	504	22	482	526
43	520	25	495	545
44	547	34	513	581
45	571	47	524	618

Note. [a]LOSS was set to 240.

Table 4.17 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 3 Form A

		Form A			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	250	47	240[a]	297
GR	1	275	35	240	310
GR	2	302	26	276	328
GR	3	319	22	297	341
GR	4	333	20	313	353
GR	5	345	19	326	364
GR	6	355	18	337	373
GR	7	365	18	347	383
GR	8	375	18	357	393
GR	9	385	18	367	403
GR	10	395	18	377	413
GR	11	406	19	387	425
GR	12	418	21	397	439
GR	13	433	23	410	456
GR	14	451	27	424	478
GR	15	480	35	445	515
GR	16	505	48	457	553
LI	0	240	49	240[a]	289
LI	1	268	37	240[a]	305
LI	2	301	29	272	330
LI	3	324	26	298	350
LI	4	343	24	319	367
LI	5	359	22	337	381
LI	6	374	22	352	396
LI	7	388	22	366	410
LI	8	403	22	381	425
LI	9	418	23	395	441
LI	10	437	26	411	463
LI	11	461	31	430	492
LI	12	501	40	461	541
LI	13	557	45	512	602
LI	14	592	54	538	646
IN	0	280	48	240[a]	328
IN	1	306	36	270	342
IN	2	334	27	307	361
IN	3	354	23	331	377
IN	4	369	21	348	390
IN	5	382	20	362	402
IN	6	395	20	375	415
IN	7	407	20	387	427
IN	8	420	20	400	440
IN	9	433	21	412	454
IN	10	448	23	425	471
IN	11	466	26	440	492
IN	12	490	30	460	520
IN	13	525	37	488	562
IN	14	574	43	531	617
IN	15	608	53	555	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.18 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 3 Form B

			Form B		
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	250	47	240[a]	297
GR	1	275	35	240	310
GR	2	302	26	276	328
GR	3	319	22	297	341
GR	4	333	20	313	353
GR	5	345	19	326	364
GR	6	355	18	337	373
GR	7	365	18	347	383
GR	8	375	18	357	393
GR	9	385	18	367	403
GR	10	395	18	377	413
GR	11	406	19	387	425
GR	12	418	21	397	439
GR	13	433	23	410	456
GR	14	451	27	424	478
GR	15	480	35	445	515
GR	16	505	48	457	553
LI	0	272	48	240[a]	320
LI	1	297	35	262	332
LI	2	325	26	299	351
LI	3	343	22	321	365
LI	4	357	21	336	378
LI	5	369	19	350	388
LI	6	381	19	362	400
LI	7	392	19	373	411
LI	8	404	20	384	424
LI	9	417	21	396	438
LI	10	431	23	408	454
LI	11	449	25	424	474
LI	12	471	29	442	500
LI	13	504	37	467	541
LI	14	532	50	482	582
IN	0	265	48	240[a]	313
IN	1	290	36	254	326
IN	2	320	27	293	347
IN	3	340	24	316	364
IN	4	356	22	334	378
IN	5	371	21	350	392
IN	6	384	20	364	404
IN	7	396	20	376	416
IN	8	408	20	388	428
IN	9	421	20	401	441
IN	10	434	21	413	455
IN	11	449	23	426	472
IN	12	466	25	441	491
IN	13	488	29	459	517
IN	14	521	37	484	558
IN	15	548	49	499	597

Note. [a]LOSS was set to 240.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.19 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 3 Form A

	Form A			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240	48	240[a]	288
1	256	35	240[a]	291
2	284	27	257	311
3	303	23	280	326
4	317	20	297	337
5	329	19	310	348
6	339	18	321	357
7	348	17	331	365
8	356	16	340	372
9	364	16	348	380
10	371	15	356	386
11	378	15	363	393
12	385	15	370	400
13	392	15	377	407
14	398	15	383	413
15	405	15	390	420
16	412	15	397	427
17	419	15	404	434
18	427	16	411	443
19	435	16	419	451
20	443	17	426	460
21	453	18	435	471
22	464	20	444	484
23	477	22	455	499
24	494	24	470	518
25	515	27	488	542
26	539	29	510	568
27	566	31	535	597
28	601	38	563	639
29	629	49	580	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Table 4.20 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 3 Form B

	Form B			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	244	47	240[a]	291
1	268	34	240[a]	302
2	294	25	269	319
3	310	21	289	331
4	322	19	303	341
5	333	17	316	350
6	341	16	325	357
7	349	16	333	365
8	357	15	342	372
9	363	15	348	378
10	370	14	356	384
11	376	14	362	390
12	382	14	368	396
13	388	14	374	402
14	394	14	380	408
15	400	14	386	414
16	406	14	392	420
17	412	14	398	426
18	419	15	404	434
19	426	15	411	441
20	433	16	417	449
21	440	16	424	456
22	449	17	432	466
23	458	18	440	476
24	468	19	449	487
25	480	20	460	500
26	495	23	472	518
27	513	26	487	539
28	541	35	506	576
29	566	48	518	614

Table 4.21 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 3 Form A

		Form A			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
LI	0	240	49	240[a]	289
LI	1	268	37	240[a]	305
LI	2	301	29	272	330
LI	3	324	26	298	350
LI	4	343	24	319	367
LI	5	359	22	337	381
LI	6	374	22	352	396
LI	7	388	22	366	410
LI	8	403	22	381	425
LI	9	418	23	395	441
LI	10	437	26	411	463
LI	11	461	31	430	492
LI	12	501	40	461	541
LI	13	557	45	512	602
LI	14	592	54	538	646
IN	0	280	48	240[a]	328
IN	1	306	36	270	342
IN	2	334	27	307	361
IN	3	354	23	331	377
IN	4	369	21	348	390
IN	5	382	20	362	402
IN	6	395	20	375	415
IN	7	407	20	387	427
IN	8	420	20	400	440
IN	9	433	21	412	454
IN	10	448	23	425	471
IN	11	466	26	440	492
IN	12	490	30	460	520
IN	13	525	37	488	562
IN	14	574	43	531	617
IN	15	608	53	555	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. LI=Literary, IN=Informational

Table 4.22 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 3 Form B

		Form B			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
LI	0	272	48	240[a]	320
LI	1	297	35	262	332
LI	2	325	26	299	351
LI	3	343	22	321	365
LI	4	357	21	336	378
LI	5	369	19	350	388
LI	6	381	19	362	400
LI	7	392	19	373	411
LI	8	404	20	384	424
LI	9	417	21	396	438
LI	10	431	23	408	454
LI	11	449	25	424	474
LI	12	471	29	442	500
LI	13	504	37	467	541
LI	14	532	50	482	582
IN	0	265	48	240[a]	313
IN	1	290	36	254	326
IN	2	320	27	293	347
IN	3	340	24	316	364
IN	4	356	22	334	378
IN	5	371	21	350	392
IN	6	384	20	364	404
IN	7	396	20	376	416
IN	8	408	20	388	428
IN	9	421	20	401	441
IN	10	434	21	413	455
IN	11	449	23	426	472
IN	12	466	25	441	491
IN	13	488	29	459	517
IN	14	521	37	484	558
IN	15	548	49	499	597

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. LI=Literary, IN=Informational

Table 4.23 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 4 Form A

	Form A			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	48	240[a]	240[a]
1	240[a]	35	240[a]	240[a]
2	240[a]	26	240[a]	254
3	246	22	240[a]	268
4	259	20	240[a]	279
5	269	18	251	287
6	279	17	262	296
7	287	16	271	303
8	294	15	279	309
9	300	14	286	314
10	307	14	293	321
11	312	14	298	326
12	318	13	305	331
13	323	13	310	336
14	328	13	315	341
15	333	12	321	345
16	338	12	326	350
17	342	12	330	354
18	347	12	335	359
19	351	12	339	363
20	355	12	343	367
21	360	12	348	372
22	364	12	352	376
23	368	12	356	380
24	373	12	361	385
25	377	12	365	389
26	382	12	370	394
27	386	12	374	398
28	391	13	378	404
29	396	13	383	409
30	401	13	388	414
31	406	13	393	419
32	412	14	398	426
33	418	14	404	432
34	425	15	410	440
35	432	16	416	448
36	440	17	423	457
37	449	18	431	467
38	460	20	440	480
39	474	23	451	497
40	492	26	466	518
41	516	29	487	545
42	544	31	513	575
43	573	32	541	605
44	609	38	571	647
45	638	50	588	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.24 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 4 Form B

	Form B			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	48	240[a]	240[a]
1	240[a]	35	240[a]	241
2	240[a]	26	240[a]	259
3	250	22	240[a]	272
4	263	19	244	282
5	273	18	255	291
6	282	16	266	298
7	290	15	275	305
8	297	15	282	312
9	303	14	289	317
10	309	14	295	323
11	314	13	301	327
12	320	13	307	333
13	325	13	312	338
14	329	12	317	341
15	334	12	322	346
16	339	12	327	351
17	343	12	331	355
18	347	12	335	359
19	352	12	340	364
20	356	12	344	368
21	360	12	348	372
22	365	12	353	377
23	369	12	357	381
24	373	12	361	385
25	378	12	366	390
26	382	12	370	394
27	387	12	375	399
28	392	13	379	405
29	396	13	383	409
30	401	13	388	414
31	407	13	394	420
32	412	14	398	426
33	418	14	404	432
34	425	15	410	440
35	432	16	416	448
36	439	17	422	456
37	448	18	430	466
38	459	20	439	479
39	473	23	450	496
40	492	27	465	519
41	519	32	487	551
42	553	34	519	587
43	588	35	553	623
44	629	41	588	650[b]
45	650[b]	52	609	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Table 4.25 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 4 Form A

		Form A			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	240	51	240[a]	291
GR	1	240	38	240[a]	278
GR	2	261	29	240[a]	290
GR	3	282	24	258	306
GR	4	298	22	276	320
GR	5	311	20	291	331
GR	6	323	19	304	342
GR	7	334	19	315	353
GR	8	344	19	325	363
GR	9	355	19	336	374
GR	10	366	19	347	385
GR	11	378	20	358	398
GR	12	391	22	369	413
GR	13	408	26	382	434
GR	14	435	35	400	470
GR	15	459	48	411	507
LI	0	240	50	240[a]	290
LI	1	243	38	240[a]	281
LI	2	276	30	246	306
LI	3	301	27	274	328
LI	4	321	25	296	346
LI	5	339	24	315	363
LI	6	355	23	332	378
LI	7	370	22	348	392
LI	8	385	22	363	407
LI	9	399	22	377	421
LI	10	415	24	391	439
LI	11	435	27	408	462
LI	12	462	34	428	496
LI	13	515	50	465	565
LI	14	583	45	538	628
LI	15	618	53	565	650[b]
IN	0	247	49	240[a]	296
IN	1	274	37	240[a]	311
IN	2	305	28	277	333
IN	3	326	24	302	350
IN	4	342	22	320	364
IN	5	357	21	336	378
IN	6	370	21	349	391
IN	7	383	21	362	404
IN	8	397	21	376	418
IN	9	412	22	390	434
IN	10	428	24	404	452
IN	11	448	27	421	475
IN	12	474	32	442	506
IN	13	512	38	474	550
IN	14	563	44	519	607
IN	15	598	54	544	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.26 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 4 Form B

			Form B		
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	240	51	240[a]	291
GR	1	240	38	240[a]	278
GR	2	261	29	240[a]	290
GR	3	282	24	258	306
GR	4	298	22	276	320
GR	5	311	20	291	331
GR	6	323	19	304	342
GR	7	334	19	315	353
GR	8	344	19	325	363
GR	9	355	19	336	374
GR	10	366	19	347	385
GR	11	378	20	358	398
GR	12	391	22	369	413
GR	13	408	26	382	434
GR	14	435	35	400	470
GR	15	459	48	411	507
LI	0	240	48	240[a]	288
LI	1	262	36	240[a]	298
LI	2	291	28	263	319
LI	3	312	24	288	336
LI	4	329	23	306	352
LI	5	344	22	322	366
LI	6	358	22	336	380
LI	7	373	22	351	395
LI	8	387	22	365	409
LI	9	402	23	379	425
LI	10	419	24	395	443
LI	11	438	27	411	465
LI	12	464	33	431	497
LI	13	507	42	465	549
LI	14	564	44	520	608
LI	15	598	53	545	650[b]
IN	0	240	50	240[a]	290
IN	1	268	38	240[a]	306
IN	2	301	29	272	330
IN	3	323	25	298	348
IN	4	340	23	317	363
IN	5	356	22	334	378
IN	6	370	21	349	391
IN	7	383	21	362	404
IN	8	396	21	375	417
IN	9	410	22	388	432
IN	10	425	23	402	448
IN	11	443	26	417	469
IN	12	470	34	436	504
IN	13	531	57	474	588
IN	14	613	48	565	650[b]
IN	15	650	55	595	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.27 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 4 Form A

	Form A			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240	48	240[a]	288
1	240	36	240[a]	276
2	257	27	240[a]	284
3	276	23	253	299
4	290	21	269	311
5	303	19	284	322
6	314	18	296	332
7	323	17	306	340
8	332	17	315	349
9	341	16	325	357
10	348	16	332	364
11	356	15	341	371
12	363	15	348	378
13	370	15	355	385
14	377	15	362	392
15	384	15	369	399
16	391	15	376	406
17	398	15	383	413
18	406	16	390	422
19	413	16	397	429
20	422	17	405	439
21	431	18	413	449
22	441	19	422	460
23	454	21	433	475
24	469	23	446	492
25	488	27	461	515
26	513	30	483	543
27	542	31	511	573
28	573	32	541	605
29	609	38	571	647
30	637	50	587	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Table 4.28 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 4 Form B

	Form B			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240	48	240[a]	288
1	240	35	240[a]	275
2	265	26	240[a]	291
3	282	22	260	304
4	296	20	276	316
5	307	19	288	326
6	317	18	299	335
7	326	17	309	343
8	334	16	318	350
9	342	16	326	358
10	350	16	334	366
11	357	15	342	372
12	364	15	349	379
13	371	15	356	386
14	378	15	363	393
15	385	15	370	400
16	392	15	377	407
17	399	15	384	414
18	406	16	390	422
19	414	16	398	430
20	422	17	405	439
21	431	17	414	448
22	441	19	422	460
23	452	21	431	473
24	467	23	444	490
25	487	28	459	515
26	516	34	482	550
27	552	34	518	586
28	587	35	552	622
29	629	41	588	650[b]
30	650	52	598	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Table 4.29 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 4 Form A

		Form A			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
LI	0	240	50	240[a]	290
LI	1	243	38	240[a]	281
LI	2	276	30	246	306
LI	3	301	27	274	328
LI	4	321	25	296	346
LI	5	339	24	315	363
LI	6	355	23	332	378
LI	7	370	22	348	392
LI	8	385	22	363	407
LI	9	399	22	377	421
LI	10	415	24	391	439
LI	11	435	27	408	462
LI	12	462	34	428	496
LI	13	515	50	465	565
LI	14	583	45	538	628
LI	15	618	53	565	650[b]
IN	0	247	49	240[a]	296
IN	1	274	37	240[a]	311
IN	2	305	28	277	333
IN	3	326	24	302	350
IN	4	342	22	320	364
IN	5	357	21	336	378
IN	6	370	21	349	391
IN	7	383	21	362	404
IN	8	397	21	376	418
IN	9	412	22	390	434
IN	10	428	24	404	452
IN	11	448	27	421	475
IN	12	474	32	442	506
IN	13	512	38	474	550
IN	14	563	44	519	607
IN	15	598	54	544	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. LI=Literary, IN=Informational

Table 4.30 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table for Verbatim Students: Grade 4 Form B

		Form B			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
LI	0	240	48	240[a]	288
LI	1	262	36	240[a]	298
LI	2	291	28	263	319
LI	3	312	24	288	336
LI	4	329	23	306	352
LI	5	344	22	322	366
LI	6	358	22	336	380
LI	7	373	22	351	395
LI	8	387	22	365	409
LI	9	402	23	379	425
LI	10	419	24	395	443
LI	11	438	27	411	465
LI	12	464	33	431	497
LI	13	507	42	465	549
LI	14	564	44	520	608
LI	15	598	53	545	650[b]
IN	0	240	50	240[a]	290
IN	1	268	38	240[a]	306
IN	2	301	29	272	330
IN	3	323	25	298	348
IN	4	340	23	317	363
IN	5	356	22	334	378
IN	6	370	21	349	391
IN	7	383	21	362	404
IN	8	396	21	375	417
IN	9	410	22	388	432
IN	10	425	23	402	448
IN	11	443	26	417	469
IN	12	470	34	436	504
IN	13	531	57	474	588
IN	14	613	48	565	650[b]
IN	15	650	55	595	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. LI=Literary, IN=Informational

Table 4.31 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 5 Form A

	Form A			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS - 1*SEM*	SS + 1*SEM*
0	240[a]	47	240[a]	261
1	240[a]	34	240[a]	271
2	262	25	240[a]	287
3	277	21	256	298
4	289	18	271	307
5	298	17	281	315
6	306	16	290	322
7	313	15	298	328
8	319	14	305	333
9	325	14	311	339
10	330	13	317	343
11	335	13	322	348
12	340	12	328	352
13	345	12	333	357
14	349	12	337	361
15	353	12	341	365
16	358	12	346	370
17	362	12	350	374
18	366	12	354	378
19	370	12	358	382
20	374	12	362	386
21	378	12	366	390
22	382	12	370	394
23	386	12	374	398
24	391	12	379	403
25	395	12	383	407
26	399	12	387	411
27	403	12	391	415
28	408	12	396	420
29	413	13	400	426
30	418	13	405	431
31	423	13	410	436
32	428	14	414	442
33	434	14	420	448
34	441	15	426	456
35	448	16	432	464
36	455	17	438	472
37	464	18	446	482
38	475	19	456	494
39	487	21	466	508
40	502	23	479	525
41	520	26	494	546
42	541	27	514	568
43	566	30	536	596
44	598	37	561	635
45	625	49	576	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Table 4.32 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 5 Form B

	Form B			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	47	240[a]	258
1	240[a]	34	240[a]	269
2	259	25	240[a]	284
3	275	21	254	296
4	286	18	268	304
5	295	17	278	312
6	303	16	287	319
7	310	15	295	325
8	317	14	303	331
9	322	14	308	336
10	328	13	315	341
11	333	13	320	346
12	338	12	326	350
13	342	12	330	354
14	347	12	335	359
15	351	12	339	363
16	355	12	343	367
17	359	12	347	371
18	363	12	351	375
19	368	11	357	379
20	371	11	360	382
21	375	11	364	386
22	379	11	368	390
23	383	11	372	394
24	387	12	375	399
25	392	12	380	404
26	396	12	384	408
27	400	12	388	412
28	404	12	392	416
29	409	12	397	421
30	414	13	401	427
31	418	13	405	431
32	424	13	411	437
33	429	14	415	443
34	435	14	421	449
35	442	15	427	457
36	449	16	433	465
37	458	17	441	475
38	468	19	449	487
39	479	21	458	500
40	494	23	471	517
41	512	26	486	538
42	533	28	505	561
43	558	30	528	588
44	591	37	554	628
45	619	50	569	650[b]

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Table 4.33 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 5 Form A

		Form A			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	246	48	240[a]	294
GR	1	270	35	240[a]	305
GR	2	297	26	271	323
GR	3	315	22	293	337
GR	4	328	21	307	349
GR	5	341	19	322	360
GR	6	352	19	333	371
GR	7	362	19	343	381
GR	8	373	19	354	392
GR	9	383	19	364	402
GR	10	394	19	375	413
GR	11	406	20	386	426
GR	12	420	22	398	442
GR	13	437	26	411	463
GR	14	464	35	429	499
GR	15	488	48	440	536
LI	0	246	49	240[a]	295
LI	1	273	36	240[a]	309
LI	2	303	28	275	331
LI	3	323	25	298	348
LI	4	340	23	317	363
LI	5	355	22	333	377
LI	6	370	22	348	392
LI	7	384	22	362	406
LI	8	398	22	376	420
LI	9	415	24	391	439
LI	10	433	26	407	459
LI	11	455	28	427	483
LI	12	482	32	450	514
LI	13	520	38	482	558
LI	14	567	42	525	609
LI	15	600	52	548	650[b]
IN	0	267	48	240[a]	315
IN	1	292	35	257	327
IN	2	320	27	293	347
IN	3	339	23	316	362
IN	4	354	22	332	376
IN	5	368	21	347	389
IN	6	380	20	360	400
IN	7	393	20	373	413
IN	8	405	21	384	426
IN	9	418	21	397	439
IN	10	433	23	410	456
IN	11	451	26	425	477
IN	12	475	31	444	506
IN	13	512	38	474	550
IN	14	561	43	518	604
IN	15	594	53	541	647

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.34 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 5 Form B

		Form B			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	245	48	240[a]	293
GR	1	269	35	240[a]	304
GR	2	296	26	270	322
GR	3	314	22	292	336
GR	4	327	21	306	348
GR	5	340	19	321	359
GR	6	351	19	332	370
GR	7	361	19	342	380
GR	8	372	19	353	391
GR	9	382	19	363	401
GR	10	393	19	374	412
GR	11	405	20	385	425
GR	12	419	22	397	441
GR	13	436	26	410	462
GR	14	463	35	428	498
GR	15	487	48	439	535
LI	0	246	49	240[a]	295
LI	1	272	37	240[a]	309
LI	2	303	28	275	331
LI	3	324	25	299	349
LI	4	341	23	318	364
LI	5	356	22	334	378
LI	6	370	21	349	391
LI	7	384	21	363	405
LI	8	398	22	376	420
LI	9	413	23	390	436
LI	10	429	24	405	453
LI	11	448	27	421	475
LI	12	474	32	442	506
LI	13	514	40	474	554
LI	14	565	43	522	608
LI	15	599	53	546	650[b]
IN	0	258	49	240[a]	307
IN	1	284	36	248	320
IN	2	313	27	286	340
IN	3	332	23	309	355
IN	4	347	21	326	368
IN	5	361	20	341	381
IN	6	373	20	353	393
IN	7	385	20	365	405
IN	8	397	20	377	417
IN	9	409	21	388	430
IN	10	424	23	401	447
IN	11	441	26	415	467
IN	12	465	30	435	495
IN	13	499	37	462	536
IN	14	548	43	505	591
IN	15	581	53	528	634

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.35 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 6 Form A

	Form A			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	44	240[a]	261
1	240[a]	32	240[a]	271
2	263	23	240	286
3	277	19	258	296
4	288	17	271	305
5	297	16	281	313
6	304	15	289	319
7	311	14	297	325
8	316	13	303	329
9	322	13	309	335
10	327	12	315	339
11	332	12	320	344
12	336	12	324	348
13	340	11	329	351
14	345	11	334	356
15	349	11	338	360
16	352	11	341	363
17	356	11	345	367
18	360	11	349	371
19	364	11	353	375
20	367	11	356	378
21	371	11	360	382
22	375	11	364	386
23	379	11	368	390
24	382	11	371	393
25	386	11	375	397
26	390	11	379	401
27	394	11	383	405
28	398	11	387	409
29	402	11	391	413
30	407	12	395	419
31	411	12	399	423
32	416	12	404	428
33	421	13	408	434
34	426	13	413	439
35	432	14	418	446
36	439	14	425	453
37	446	15	431	461
38	454	16	438	470
39	463	18	445	481
40	474	19	455	493
41	488	21	467	509
42	504	24	480	528
43	525	27	498	552
44	554	34	520	588
45	579	46	533	625

Note. [a]LOSS was set to 240.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.36 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 6 Form B

	Form B			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	44	240[a]	274
1	252	31	240[a]	283
2	274	23	251	297
3	288	19	269	307
4	298	17	281	315
5	307	15	292	322
6	314	14	300	328
7	320	13	307	333
8	325	13	312	338
9	331	12	319	343
10	335	12	323	347
11	340	12	328	352
12	344	11	333	355
13	348	11	337	359
14	352	11	341	363
15	356	11	345	367
16	360	11	349	371
17	363	11	352	374
18	367	10	357	377
19	371	10	361	381
20	374	10	364	384
21	378	10	368	388
22	381	10	371	391
23	385	10	375	395
24	388	10	378	398
25	392	11	381	403
26	396	11	385	407
27	399	11	388	410
28	403	11	392	414
29	407	11	396	418
30	411	11	400	422
31	416	12	404	428
32	420	12	408	432
33	425	12	413	437
34	430	13	417	443
35	435	13	422	448
36	441	14	427	455
37	448	14	434	462
38	455	15	440	470
39	463	16	447	479
40	473	18	455	491
41	484	19	465	503
42	497	22	475	519
43	515	25	490	540
44	542	33	509	575
45	566	45	521	611

Note. [a]LOSS was set to 240.

Table 4.37 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 6 Form A

		Form A			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	253	44	240[a]	297
GR	1	276	32	244	308
GR	2	300	24	276	324
GR	3	316	21	295	337
GR	4	329	19	310	348
GR	5	339	18	321	357
GR	6	349	17	332	366
GR	7	359	17	342	376
GR	8	368	17	351	385
GR	9	377	17	360	394
GR	10	387	18	369	405
GR	11	398	19	379	417
GR	12	410	21	389	431
GR	13	426	24	402	450
GR	14	451	32	419	483
GR	15	474	44	430	518
LI	0	241	46	240[a]	287
LI	1	266	34	240[a]	300
LI	2	294	26	268	320
LI	3	314	23	291	337
LI	4	330	21	309	351
LI	5	344	20	324	364
LI	6	357	20	337	377
LI	7	369	19	350	388
LI	8	382	20	362	402
LI	9	395	20	375	415
LI	10	409	22	387	431
LI	11	426	24	402	450
LI	12	448	28	420	476
LI	13	481	35	446	516
LI	14	525	39	486	564
LI	15	555	49	506	604
IN	0	270	45	240[a]	315
IN	1	294	33	261	327
IN	2	320	25	295	345
IN	3	338	22	316	360
IN	4	352	20	332	372
IN	5	365	19	346	384
IN	6	377	19	358	396
IN	7	389	19	370	408
IN	8	401	19	382	420
IN	9	413	20	393	433
IN	10	426	21	405	447
IN	11	442	22	420	464
IN	12	460	25	435	485
IN	13	484	29	455	513
IN	14	520	38	482	558
IN	15	550	49	501	599

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.38 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 6 Form B

		Form B			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	253	44	240[a]	297
GR	1	276	32	244	308
GR	2	300	24	276	324
GR	3	316	21	295	337
GR	4	329	19	310	348
GR	5	339	18	321	357
GR	6	349	17	332	366
GR	7	359	17	342	376
GR	8	368	17	351	385
GR	9	377	17	360	394
GR	10	387	18	369	405
GR	11	398	19	379	417
GR	12	410	21	389	431
GR	13	426	24	402	450
GR	14	451	32	419	483
GR	15	474	44	430	518
LI	0	264	45	240[a]	309
LI	1	288	33	255	321
LI	2	315	25	290	340
LI	3	333	22	311	355
LI	4	348	21	327	369
LI	5	361	20	341	381
LI	6	373	19	354	392
LI	7	385	19	366	404
LI	8	398	19	379	417
LI	9	410	20	390	430
LI	10	424	21	403	445
LI	11	440	23	417	463
LI	12	460	26	434	486
LI	13	486	30	456	516
LI	14	522	37	485	559
LI	15	551	48	503	599
IN	0	283	44	240[a]	327
IN	1	306	32	274	338
IN	2	331	24	307	355
IN	3	347	21	326	368
IN	4	360	19	341	379
IN	5	371	18	353	389
IN	6	382	18	364	400
IN	7	392	18	374	410
IN	8	402	18	384	420
IN	9	413	18	395	431
IN	10	424	19	405	443
IN	11	437	21	416	458
IN	12	453	23	430	476
IN	13	473	26	447	499
IN	14	502	34	468	536
IN	15	527	46	481	573

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.39 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 7 Form A

	Form A			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	46	240[a]	257
1	240[a]	33	240[a]	267
2	258	24	240[a]	282
3	273	20	253	293
4	284	18	266	302
5	293	16	277	309
6	300	15	285	315
7	307	14	293	321
8	313	14	299	327
9	319	13	306	332
10	324	13	311	337
11	329	12	317	341
12	334	12	322	346
13	338	12	326	350
14	342	12	330	354
15	347	11	336	358
16	351	11	340	362
17	355	11	344	366
18	358	11	347	369
19	362	11	351	373
20	366	11	355	377
21	370	11	359	381
22	374	11	363	385
23	378	11	367	389
24	381	11	370	392
25	385	11	374	396
26	389	11	378	400
27	393	11	382	404
28	397	12	385	409
29	402	12	390	414
30	406	12	394	418
31	411	12	399	423
32	415	13	402	428
33	421	13	408	434
34	426	14	412	440
35	432	14	418	446
36	439	15	424	454
37	446	16	430	462
38	455	17	438	472
39	465	19	446	484
40	476	20	456	496
41	490	22	468	512
42	508	25	483	533
43	529	28	501	557
44	559	36	523	595
45	586	48	538	634

Note. [a]LOSS was set to 240.

Table 4.40 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 7 Form B

	Form B			
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	46	240[a]	252
1	240[a]	33	240[a]	262
2	254	24	240[a]	278
3	269	20	249	289
4	281	18	263	299
5	291	17	274	308
6	299	16	283	315
7	306	15	291	321
8	312	14	298	326
9	318	14	304	332
10	324	13	311	337
11	329	13	316	342
12	334	12	322	346
13	339	12	327	351
14	343	12	331	355
15	347	12	335	359
16	352	12	340	364
17	356	11	345	367
18	360	11	349	371
19	364	11	353	375
20	368	11	357	379
21	372	11	361	383
22	376	11	365	387
23	379	11	368	390
24	383	11	372	394
25	387	11	376	398
26	391	11	380	402
27	395	11	384	406
28	400	12	388	412
29	404	12	392	416
30	408	12	396	420
31	413	12	401	425
32	418	13	405	431
33	423	13	410	436
34	429	14	415	443
35	435	14	421	449
36	442	15	427	457
37	449	16	433	465
38	458	17	441	475
39	468	19	449	487
40	480	20	460	500
41	494	22	472	516
42	511	24	487	535
43	532	28	504	560
44	562	35	527	597
45	587	47	540	634

Note. [a]LOSS was set to 240.

Table 4.41 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 7 Form A

		Form A			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	252	46	240[a]	298
GR	1	276	34	242	310
GR	2	302	25	277	327
GR	3	318	22	296	340
GR	4	332	20	312	352
GR	5	343	19	324	362
GR	6	354	18	336	372
GR	7	364	18	346	382
GR	8	373	18	355	391
GR	9	383	18	365	401
GR	10	394	19	375	413
GR	11	406	20	386	426
GR	12	419	22	397	441
GR	13	436	25	411	461
GR	14	462	34	428	496
GR	15	486	46	440	532
LI	0	242	47	240[a]	289
LI	1	268	35	240[a]	303
LI	2	296	26	270	322
LI	3	314	23	291	337
LI	4	330	21	309	351
LI	5	343	20	323	363
LI	6	355	20	335	375
LI	7	367	20	347	387
LI	8	379	20	359	399
LI	9	392	21	371	413
LI	10	406	22	384	428
LI	11	423	25	398	448
LI	12	446	30	416	476
LI	13	484	39	445	523
LI	14	534	42	492	576
LI	15	567	51	516	618
IN	0	249	47	240[a]	296
IN	1	275	35	240	310
IN	2	304	27	277	331
IN	3	324	24	300	348
IN	4	341	22	319	363
IN	5	355	21	334	376
IN	6	368	20	348	388
IN	7	381	20	361	401
IN	8	393	20	373	413
IN	9	406	21	385	427
IN	10	420	22	398	442
IN	11	436	24	412	460
IN	12	456	27	429	483
IN	13	481	31	450	512
IN	14	517	38	479	555
IN	15	546	49	497	595

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.42 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 7 Form B

			Form B		
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	252	46	240[a]	298
GR	1	276	34	242	310
GR	2	302	25	277	327
GR	3	318	22	296	340
GR	4	332	20	312	352
GR	5	343	19	324	362
GR	6	354	18	336	372
GR	7	364	18	346	382
GR	8	373	18	355	391
GR	9	383	18	365	401
GR	10	394	19	375	413
GR	11	406	20	386	426
GR	12	419	22	397	441
GR	13	436	25	411	461
GR	14	462	34	428	496
GR	15	486	46	440	532
LI	0	240	48	240[a]	288
LI	1	256	36	240[a]	292
LI	2	286	28	258	314
LI	3	308	25	283	333
LI	4	326	23	303	349
LI	5	341	22	319	363
LI	6	355	21	334	376
LI	7	369	21	348	390
LI	8	382	20	362	402
LI	9	395	21	374	416
LI	10	409	22	387	431
LI	11	426	24	402	450
LI	12	448	28	420	476
LI	13	479	35	444	514
LI	14	522	40	482	562
LI	15	553	51	502	604
IN	0	253	48	240[a]	301
IN	1	279	36	243	315
IN	2	309	27	282	336
IN	3	329	24	305	353
IN	4	345	22	323	367
IN	5	359	21	338	380
IN	6	372	20	352	392
IN	7	385	20	365	405
IN	8	397	20	377	417
IN	9	410	21	389	431
IN	10	425	22	403	447
IN	11	442	25	417	467
IN	12	464	29	435	493
IN	13	494	34	460	528
IN	14	535	40	495	575
IN	15	566	50	516	616

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.43 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 8 Form A

		Form A		
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	44	240[a]	259
1	240[a]	32	240[a]	270
2	262	24	240[a]	286
3	278	20	258	298
4	289	18	271	307
5	298	16	282	314
6	306	15	291	321
7	313	14	299	327
8	320	13	307	333
9	325	13	312	338
10	331	12	319	343
11	336	12	324	348
12	340	12	328	352
13	345	11	334	356
14	349	11	338	360
15	353	11	342	364
16	357	11	346	368
17	361	11	350	372
18	365	11	354	376
19	368	11	357	379
20	372	11	361	383
21	376	11	365	387
22	379	10	369	389
23	383	11	372	394
24	386	11	375	397
25	390	11	379	401
26	394	11	383	405
27	398	11	387	409
28	402	11	391	413
29	406	11	395	417
30	410	11	399	421
31	414	12	402	426
32	419	12	407	431
33	423	12	411	435
34	428	13	415	441
35	434	13	421	447
36	440	14	426	454
37	446	15	431	461
38	454	15	439	469
39	462	17	445	479
40	472	18	454	490
41	483	20	463	503
42	497	22	475	519
43	516	25	491	541
44	543	33	510	576
45	567	45	522	612

Note. [a]LOSS was set to 240.

Table 4.44 The 2007 MSA-Reading Total Raw Score to Scale Score Conversion Table: Grade 8 Form B

		Form B		
Raw Score	Scale Score (SS)	Standard Error (*SEM*)	SS – 1*SEM*	SS + 1*SEM*
0	240[a]	44	240[a]	260
1	240[a]	32	240[a]	271
2	264	24	240	288
3	279	20	259	299
4	291	18	273	309
5	300	16	284	316
6	308	15	293	323
7	315	14	301	329
8	321	13	308	334
9	326	13	313	339
10	332	12	320	344
11	336	12	324	348
12	341	12	329	353
13	345	11	334	356
14	349	11	338	360
15	353	11	342	364
16	357	11	346	368
17	361	11	350	372
18	364	10	354	374
19	368	10	358	378
20	372	10	362	382
21	375	10	365	385
22	378	10	368	388
23	382	10	372	392
24	385	10	375	395
25	389	10	379	399
26	392	10	382	402
27	396	10	386	406
28	399	11	388	410
29	403	11	392	414
30	407	11	396	418
31	411	11	400	422
32	415	11	404	426
33	420	12	408	432
34	424	12	412	436
35	429	13	416	442
36	435	13	422	448
37	441	14	427	455
38	448	15	433	463
39	455	16	439	471
40	464	17	447	481
41	475	19	456	494
42	487	21	466	508
43	504	24	480	528
44	529	33	496	562
45	552	45	507	597

Note. [a]LOSS was set to 240.

Table 4.45 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 8 Form A

			Form A		
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	240	47	240[a]	287
GR	1	267	36	240[a]	303
GR	2	297	27	270	324
GR	3	317	22	295	339
GR	4	331	20	311	351
GR	5	343	18	325	361
GR	6	353	17	336	370
GR	7	362	17	345	379
GR	8	371	16	355	387
GR	9	380	16	364	396
GR	10	389	17	372	406
GR	11	399	17	382	416
GR	12	409	18	391	427
GR	13	421	20	401	441
GR	14	437	24	413	461
GR	15	461	32	429	493
GR	16	483	44	439	527
LI	0	254	45	240[a]	299
LI	1	278	33	245	311
LI	2	306	26	280	332
LI	3	324	23	301	347
LI	4	340	21	319	361
LI	5	354	20	334	374
LI	6	367	20	347	387
LI	7	380	20	360	400
LI	8	393	20	373	413
LI	9	407	21	386	428
LI	10	423	23	400	446
LI	11	442	25	417	467
LI	12	466	29	437	495
LI	13	500	36	464	536
LI	14	527	47	480	574
IN	0	264	46	240[a]	310
IN	1	289	34	255	323
IN	2	318	26	292	344
IN	3	337	23	314	360
IN	4	352	21	331	373
IN	5	365	20	345	385
IN	6	378	19	359	397
IN	7	389	19	370	408
IN	8	401	19	382	420
IN	9	413	19	394	432
IN	10	426	21	405	447
IN	11	441	22	419	463
IN	12	460	26	434	486
IN	13	485	30	455	515
IN	14	522	37	485	559
IN	15	550	48	502	598

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.46 The 2007 MSA-Reading Subtotal Raw Score to Scale Score Conversion Table: Grade 8 Form B

		Form B			
Strand	RS	SS	SEM	SS-SEM	SS+SEM
GR	0	240	47	240[a]	287
GR	1	267	36	240[a]	303
GR	2	297	27	270	324
GR	3	317	22	295	339
GR	4	331	20	311	351
GR	5	343	18	325	361
GR	6	353	17	336	370
GR	7	362	17	345	379
GR	8	371	16	355	387
GR	9	380	16	364	396
GR	10	389	17	372	406
GR	11	399	17	382	416
GR	12	409	18	391	427
GR	13	421	20	401	441
GR	14	437	24	413	461
GR	15	461	32	429	493
GR	16	483	44	439	527
LI	0	252	45	240[a]	297
LI	1	277	34	243	311
LI	2	306	26	280	332
LI	3	326	23	303	349
LI	4	342	21	321	363
LI	5	356	20	336	376
LI	6	369	20	349	389
LI	7	382	19	363	401
LI	8	394	20	374	414
LI	9	408	21	387	429
LI	10	423	22	401	445
LI	11	441	25	416	466
LI	12	466	30	436	496
LI	13	502	37	465	539
LI	14	530	47	483	577
IN	0	272	45	240[a]	317
IN	1	296	33	263	329
IN	2	321	24	297	345
IN	3	338	21	317	359
IN	4	351	19	332	370
IN	5	363	18	345	381
IN	6	373	18	355	391
IN	7	384	18	366	402
IN	8	394	18	376	412
IN	9	404	18	386	422
IN	10	416	19	397	435
IN	11	429	21	408	450
IN	12	444	23	421	467
IN	13	464	27	437	491
IN	14	494	35	459	529
IN	15	520	46	474	566

Note. [a]LOSS was set to 240. [b]HOSS was set to 650.

Note. GR= General Reading, LI=Literary, IN=Informational

Table 4.47 The 2007 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 3

Form	Item No.	Perfect		Adjacent		Discrepancy		Total	
		N	%	*N*	%	*N*	%	*N*	%
A	72	23,336	78.5	6,193	20.8	203	0.7	29,732	100.0
	75	24,340	81.9	5,203	17.5	189	0.6	29,732	100.0
	78	22,964	77.2	6,651	22.4	117	0.4	29,732	100.0
	81	24,729	83.2	4,963	16.7	40	0.1	29,732	100.0
B	72	23,102	77.9	6,179	20.8	394	1.3	29,675	100.0
	75	23,403	78.9	6,098	20.5	174	0.6	29,675	100.0
	78	22,570	76.1	6,788	22.9	317	1.1	29,675	100.0
	81	22,768	76.7	6,590	22.2	317	1.1	29,675	100.0

Note. Analyses were conducted with a whole population.

Table 4.48 The 2007 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 4

Form	Item No.	Perfect		Adjacent		Discrepancy		Total	
		N	%	*N*	%	*N*	%	*N*	%
A	72	23,032	76.3	7,068	23.4	74	0.2	30,174	100.0
	75	23,223	77.0	6,875	22.8	76	0.3	30,174	100.0
	78	23,640	78.3	6,439	21.3	95	0.3	30,174	100.0
	81	23,725	78.6	6,206	20.6	243	0.8	30,174	100.0
B	72	24,606	82.1	5,039	16.8	310	1.0	29,955	100.0
	75	23,148	77.3	6,569	21.9	238	0.8	29,955	100.0
	78	23,774	79.4	6,110	20.4	71	0.2	29,955	100.0
	81	22,933	76.6	6,874	22.9	148	0.5	29,955	100.0

Note. Analyses were conducted with a whole population.

Table 4.49 The 2007 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 5

Form	Item No.	Perfect		Adjacent		Discrepancy		Total	
		N	%	*N*	%	*N*	%	*N*	%
A	62	24,911	80.7	5,868	19.0	104	0.3	30,883	100.0
	65	23,614	76.5	7,168	23.2	101	0.3	30,883	100.0
	68	23,594	76.4	7,152	23.2	137	0.4	30,883	100.0
	71	27,552	89.2	3,241	10.5	90	0.3	30,883	100.0
B	62	23,059	75.1	7,572	24.7	62	0.2	30,693	100.0
	65	24,281	79.1	6,295	20.5	117	0.4	30,693	100.0
	68	24,491	79.8	6,090	19.8	112	0.4	30,693	100.0
	71	24,818	80.9	5,725	18.7	150	0.5	30,693	100.0

Note. Analyses were conducted with a whole population.

Table 4.50 The 2007 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 6

Form	Item No.	Perfect		Adjacent		Discrepancy		Total	
		N	%	*N*	%	*N*	%	*N*	%
A	62	24,250	77.4	6,981	22.3	108	0.3	31,339	100.0
	65	23,270	74.3	7,961	25.4	108	0.3	31,339	100.0
	68	24,058	76.8	7,058	22.5	223	0.7	31,339	100.0
	71	24,250	77.4	6,684	21.3	405	1.3	31,339	100.0
B	62	25,513	82.0	5,080	16.3	535	1.7	31,128	100.0
	65	23,567	75.7	6,786	21.8	775	2.5	31,128	100.0
	68	24,468	78.6	5,792	18.6	868	2.8	31,128	100.0
	71	24,365	78.3	6,627	21.3	136	0.4	31,128	100.0

Note. Analyses were conducted with a whole population.

Table 4.51 The 2007 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 7

Form	Item No.	Perfect		Adjacent		Discrepancy		Total	
		N	%	*N*	%	*N*	%	*N*	%
A	62	24,020	74.8	7,853	24.5	241	0.8	32,114	100.0
	65	28,427	88.5	3,364	10.5	323	1.0	32,114	100.0
	68	25,193	78.4	6,595	20.5	326	1.0	32,114	100.0
	71	26,037	81.1	5,911	18.4	166	0.5	32,114	100.0
B	62	24,369	76.5	7,295	22.9	182	0.6	31,846	100.0
	65	24,661	77.4	7,111	22.3	74	0.2	31,846	100.0
	68	24,367	76.5	7,091	22.3	388	1.2	31,846	100.0
	71	25,412	79.8	6,332	19.9	102	0.3	31,846	100.0

Note. Analyses were conducted with a whole population.

Table 4.52 The 2007 MSA-Reading Score Difference between Rater 1 and Rater 2: Grade 8

Form	Item No.	Perfect		Adjacent		Discrepancy		Total	
		N	%	*N*	%	*N*	%	*N*	%
A	62	26,160	80.2	6,163	18.9	286	0.9	32,609	100.0
	65	26,700	81.9	5,683	17.4	226	0.7	32,609	100.0
	68	25,884	79.4	6,312	19.4	413	1.3	32,609	100.0
	71	25,633	78.6	6,904	21.2	72	0.2	32,609	100.0
B	62	24,564	75.7	7,682	23.7	206	0.6	32,452	100.0
	65	24,992	77.0	7,164	22.1	296	0.9	32,452	100.0
	68	25,446	78.4	6,611	20.4	395	1.2	32,452	100.0
	71	25,634	79.0	6,664	20.5	154	0.5	32,452	100.0

Note. Analyses were conducted with a whole population.

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APPENDIX A: THE 2007 MSA-READING STRATIFIED RANDOM SAMPLING

Table A.1 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 3 LEA

LEA	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.		2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	1.09	33	1.16	-0.07	1.09	33	1.16	-0.07
2	8.92	267	9.40	-0.48	8.92	267	9.38	-0.46
3	12.19	366	12.88	-0.69	12.19	366	12.86	-0.67
4	2.01	60	2.11	-0.10	2.01	60	2.11	-0.10
5	0.59	6	0.21	0.38	0.59	18	0.63	-0.04
6	3.37	101	3.56	-0.19	3.37	101	3.55	-0.18
7	2.00	12	0.42	1.58	2.00	0	0	2.00
8	2.96	89	3.13	-0.17	2.96	89	3.13	-0.17
9	0.45	14	0.49	-0.04	0.45	14	0.49	-0.04
10	4.87	146	5.14	-0.27	4.87	146	5.13	-0.26
11	0.53	16	0.56	-0.03	0.53	16	0.56	-0.03
12	4.79	59	2.08	2.71	4.79	63	2.21	2.58
13	5.84	175	6.16	-0.32	5.84	175	6.15	-0.31
14	0.23	7	0.25	-0.02	0.23	7	0.25	-0.02
15	16.10	483	17.00	-0.90	16.10	483	16.98	-0.88
16	14.84	445	15.66	-0.82	14.84	445	15.64	-0.80
17	0.86	26	0.92	-0.06	0.86	26	0.91	-0.05
18	1.85	55	1.94	-0.09	1.85	55	1.93	-0.08
19	0.30	9	0.32	-0.02	0.30	9	0.32	-0.02
20	0.46	0	0.00	0.46	0.46	0	0	0.46
21	2.68	80	2.82	-0.14	2.68	80	2.81	-0.13
22	1.81	54	1.90	-0.09	1.81	54	1.90	-0.09
23	0.71	21	0.74	-0.03	0.71	21	0.74	-0.03
24	0.18	5	0.18	0.00	0.18	5	0.18	0.00
30	9.86	296	10.42	-0.56	9.86	296	10.40	-0.54
31	0.53	16	0.56	-0.03	0.53	16	0.56	-0.03
Total	100.00	2841	100	0.00	100.00	2845	100	0.00

Note: 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City; 31. Edison Partnership

Table A.2 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 3 Ethnicity

Race	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	0.41	12	0.42	-0.01	0.41	5	0.18	0.23
2	5.59	168	5.91	-0.33	5.59	187	6.57	-0.98
3	37.69	1046	36.82	0.87	37.69	1103	38.77	-1.08
4	47.46	1387	48.82	-1.36	47.46	1318	46.33	1.13
5	8.68	225	7.92	0.76	8.68	228	8.01	0.67
Miss	0.17	3	0.11	0.06	0.17	4	0.14	0.03
Total	100.00	2841	100.00	0.00	100.00	2845	100.00	0.00

Note: 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.3 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 3 Gender

Gender	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
F	48.89	1395	49.10	-0.21	48.89	1464	51.46	-2.57
M	51.00	1443	50.79	0.21	51.00	1380	48.51	2.49
Miss	0.11	3	0.11	0.00	0.11	1	0.04	0.07
Total	100.00	2841	100.00	0.00	100.00	2845	100.00	0.00

Note: F. Female; M. Male; Miss: Missing

Table A.4 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 4 LEA

LEA	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	1.14	34	1.15	-0.01	1.14	34	1.15	-0.01
2	8.69	261	8.80	-0.11	8.69	261	8.80	-0.11
3	12.25	367	12.38	-0.13	12.25	367	12.37	-0.12
4	2.00	60	2.02	-0.02	2.00	60	2.02	-0.02
5	0.71	0	0.00	0.71	0.71	1	0.03	0.68
6	3.25	97	3.27	-0.02	3.25	97	3.27	-0.02
7	1.89	57	1.92	-0.03	1.89	57	1.92	-0.03
8	3.18	95	3.20	-0.02	3.18	95	3.20	-0.02
9	0.57	17	0.57	0.00	0.57	17	0.57	0.00
10	4.87	146	4.92	-0.05	4.87	146	4.92	-0.05
11	0.50	15	0.51	-0.01	0.50	15	0.51	-0.01
12	4.83	145	4.89	-0.06	4.83	145	4.89	-0.06
13	5.98	180	6.07	-0.09	5.98	180	6.07	-0.09
14	0.29	9	0.30	-0.01	0.29	9	0.30	-0.01
15	16.16	485	16.36	-0.20	16.16	485	16.35	-0.19
16	14.94	448	15.11	-0.17	14.94	448	15.10	-0.16
17	0.87	26	0.88	-0.01	0.87	26	0.88	-0.01
18	1.96	59	1.99	-0.03	1.96	59	1.99	-0.03
19	0.30	9	0.30	0.00	0.30	9	0.30	0.00
20	0.47	0	0.00	0.47	0.47	0	0.00	0.47
21	2.69	81	2.73	-0.04	2.69	81	2.73	-0.04
22	1.87	56	1.89	-0.02	1.87	56	1.89	-0.02
23	0.77	23	0.78	-0.01	0.77	23	0.78	-0.01
24	0.18	6	0.20	-0.02	0.18	6	0.20	-0.02
30	9.17	275	9.27	-0.10	9.17	275	9.27	-0.10
31	0.46	14	0.47	-0.01	0.46	14	0.47	-0.01
Total	100.00	2965	100	0.00	100.00	2966	100.00	0.00

Note: 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City; 31. Edison Partnership

Table A.5 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 4 Ethnicity

Race	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	0.39	8	0.27	0.12	0.39	11	0.37	0.02
2	5.70	174	5.87	-0.17	5.70	188	6.34	-0.64
3	37.51	1064	35.89	1.62	37.51	1147	38.67	-1.16
4	47.52	1469	49.54	-2.02	47.52	1362	45.92	1.60
5	8.73	247	8.33	0.40	8.73	257	8.66	0.06
Miss	0.15	3	0.10	0.05	0.15	1	0.03	0.11
Total	100.00	2965	100.00	0.00	100.00	2966	100.00	0.00

Note: 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.6 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 4 Gender

Gender	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
F	48.65	1425	48.06	0.59	48.65	1374	46.33	2.32
M	51.26	1538	51.87	-0.61	51.26	1592	53.67	-2.41
Miss	0.09	2	0.07	0.02	0.09	0	0.00	0.09
Total	100.00	2965	100.00	0.00	100.00	2966	100.00	0.00

Note: F. Female; M. Male; Miss: Missing

Table A.7 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 5 LEA

LEA	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	1.06	32	1.10	-0.04	1.06	32	1.10	-0.04
2	8.71	261	8.96	-0.25	8.71	261	9.00	-0.29
3	12.28	368	12.63	-0.35	12.28	368	12.69	-0.41
4	2.07	62	2.13	-0.06	2.07	62	2.14	-0.07
5	0.57	1	0.03	0.54	0.57	0	0.00	0.57
6	3.36	101	3.47	-0.11	3.36	100	3.45	-0.09
7	1.92	2	0.07	1.85	1.92	0	0.00	1.92
8	3.03	91	3.12	-0.09	3.03	91	3.14	-0.11
9	0.51	15	0.51	0.00	0.51	15	0.52	-0.01
10	4.88	146	5.01	-0.13	4.88	146	5.04	-0.16
11	0.54	16	0.55	-0.01	0.54	16	0.55	-0.01
12	4.80	144	4.94	-0.14	4.80	144	4.97	-0.17
13	5.95	179	6.14	-0.19	5.95	179	6.17	-0.22
14	0.23	7	0.24	-0.01	0.23	7	0.24	-0.01
15	16.36	491	16.85	-0.49	16.36	491	16.94	-0.58
16	15.32	460	15.79	-0.47	15.32	460	15.87	-0.55
17	0.98	29	1.00	-0.02	0.98	29	1.00	-0.02
18	1.91	57	1.96	-0.05	1.91	57	1.97	-0.06
19	0.35	11	0.38	-0.03	0.35	0	0.00	0.35
20	0.51	0	0.00	0.51	0.51	0	0.00	0.51
21	2.56	77	2.64	-0.08	2.56	77	2.66	-0.10
22	1.72	52	1.78	-0.06	1.72	52	1.79	-0.07
23	0.71	21	0.72	-0.01	0.71	21	0.72	-0.01
24	0.27	8	0.27	0.00	0.27	8	0.28	-0.01
30	8.95	269	9.23	-0.28	8.95	269	9.28	-0.33
31	0.45	14	0.48	-0.03	0.45	14	0.48	-0.03
Total	100.00	2914	100.00	0.00	100.00	2899	100.00	0.00

Note: 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City; 31. Edison Partnership

Table A.8 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 5 Ethnicity

Race	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	0.35	10	0.34	0.01	0.35	10	0.34	0.01
2	5.42	168	5.77	-0.35	5.42	174	6.00	-0.59
3	37.29	1077	36.96	0.33	37.29	1098	37.88	-0.58
4	48.25	1427	48.97	-0.72	48.25	1350	46.57	1.68
5	8.56	227	7.79	0.77	8.56	263	9.07	-0.51
Miss	0.13	5	0.17	-0.04	0.13	4	0.14	-0.01
Total	100.00	2914	100.00	0.00	100.00	2899	100.00	0.00

Note: 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.9 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 5 Gender

Gender	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
F	49.04	1386	47.56	1.47	49.04	1420	48.98	0.05
M	50.86	1524	52.30	-1.44	50.86	1474	50.85	0.02
Miss	0.10	4	0.14	-0.04	0.10	5	0.17	-0.07
Total	100.00	2914	100.00	0.00	100.00	2899	100.00	0.00

Note: F. Female; M. Male; Miss: Missing

Table A.10 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 6 LEA

LEA	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	1.04	31	1.10	-0.06	1.04	31	1.08	-0.04
2	8.76	263	9.37	-0.61	8.76	263	9.19	-0.43
3	12.25	367	13.08	-0.83	12.25	367	12.82	-0.57
4	2.14	64	2.28	-0.14	2.14	64	2.24	-0.10
5	0.63	19	0.68	-0.05	0.63	19	0.66	-0.03
6	3.37	101	3.60	-0.23	3.37	101	3.53	-0.16
7	2.00	0	0.00	2.00	2.00	3	0.10	1.90
8	3.12	94	3.35	-0.23	3.12	94	3.28	-0.16
9	0.49	15	0.53	-0.04	0.49	15	0.52	-0.03
10	4.93	148	5.27	-0.34	4.93	148	5.17	-0.24
11	0.58	17	0.61	-0.03	0.58	17	0.59	-0.01
12	4.72	31	1.10	3.62	4.72	84	2.94	1.78
13	6.32	190	6.77	-0.45	6.32	190	6.64	-0.32
14	0.24	7	0.25	-0.01	0.24	7	0.24	0.00
15	16.14	484	17.25	-1.11	16.14	484	16.91	-0.77
16	15.13	454	16.18	-1.05	15.13	454	15.86	-0.73
17	0.87	26	0.93	-0.06	0.87	26	0.91	-0.04
18	1.91	57	2.03	-0.12	1.91	57	1.99	-0.08
19	0.33	10	0.36	-0.03	0.33	10	0.35	-0.02
20	0.51	0	0.00	0.51	0.51	0	0.00	0.51
21	2.42	73	2.60	-0.18	2.42	73	2.55	-0.13
22	1.48	44	1.57	-0.09	1.48	44	1.54	-0.06
23	0.72	14	0.50	0.22	0.72	14	0.49	0.23
24	0.33	10	0.36	-0.03	0.33	10	0.35	-0.02
30	9.14	274	9.76	-0.62	9.14	274	9.57	-0.43
31	0.43	13	0.46	-0.03	0.43	13	0.45	-0.02
Total	100.00	2806	100.00	0.00	100.00	2862	100.00	0.00

Note: 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City; 31. Edison Partnership

Table A.11 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 6 Ethnicity

Race	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	0.41	12	0.43	-0.02	0.41	14	0.49	-0.08
2	5.29	172	6.13	-0.84	5.29	170	5.94	-0.65
3	38.41	1123	40.02	-1.61	38.41	1153	40.29	-1.88
4	47.66	1241	44.23	3.43	47.66	1295	45.25	2.41
5	8.02	249	8.87	-0.85	8.02	226	7.90	0.13
Miss	0.20	9	0.32	-0.12	0.20	4	0.14	0.06
Total	100.00	2806	100.00	0.00	100.00	2862	100.00	0.00

Note: 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.12 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 6 Gender

Gender	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
F	48.65	1354	48.25	0.40	48.65	1375	48.04	0.61
M	51.20	1445	51.50	-0.29	51.20	1484	51.85	-0.65
Miss	0.14	7	0.25	-0.11	0.14	3	0.10	0.04
Total	100.00	2806	100.00	0.00	100.00	2862	100.00	0.00

Note: F. Female; M. Male; Miss: Missing

Table A.13 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 7 LEA

LEA	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	1.02	30	1.06	-0.04	1.02	30	1.00	0.02
2	8.49	207	7.34	1.15	8.49	255	8.51	-0.02
3	12.09	266	9.43	2.66	12.09	363	12.12	-0.03
4	2.08	62	2.20	-0.12	2.08	62	2.07	0.01
5	0.63	19	0.67	-0.04	0.63	19	0.63	0.00
6	3.43	101	3.58	-0.15	3.43	103	3.44	-0.01
7	2.00	60	2.13	-0.13	2.00	60	2.00	0.00
8	3.27	98	3.47	-0.20	3.27	98	3.27	0.00
9	0.56	17	0.60	-0.04	0.56	17	0.57	-0.01
10	4.67	140	4.96	-0.29	4.67	140	4.67	0.00
11	0.56	0	0.00	0.56	0.56	13	0.43	0.13
12	4.65	139	4.93	-0.28	4.65	139	4.64	0.01
13	5.92	177	6.27	-0.35	5.92	177	5.91	0.01
14	0.26	8	0.28	-0.02	0.26	8	0.27	-0.01
15	15.77	473	16.77	-1.00	15.77	473	15.79	-0.02
16	15.70	471	16.70	-1.00	15.70	471	15.73	-0.03
17	0.93	28	0.99	-0.06	0.93	28	0.93	0.00
18	2.01	60	2.13	-0.12	2.01	60	2.00	0.01
19	0.35	11	0.39	-0.04	0.35	11	0.37	-0.02
20	0.51	15	0.53	-0.02	0.51	15	0.50	0.01
21	2.50	75	2.66	-0.16	2.50	75	2.50	0.00
22	1.57	47	1.67	-0.10	1.57	47	1.57	0.00
23	0.79	10	0.35	0.44	0.79	24	0.80	-0.01
24	0.44	13	0.46	-0.02	0.44	13	0.43	0.01
30	9.81	294	10.42	-0.61	9.81	294	9.82	-0.01
Total	100.00	2821	99.99	0.01	100.00	2995	99.97	0.03

Note: 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City

Table A.14 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 7 Ethnicity

Race	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	0.38	11	0.39	-0.01	0.38	9	0.30	0.08
2	5.19	158	5.60	-0.41	5.19	138	4.61	0.58
3	39.21	1161	41.16	-1.95	39.21	1183	39.50	-0.29
4	47.26	1271	45.05	2.21	47.26	1444	48.21	-0.95
5	7.70	217	7.69	0.01	7.70	215	7.18	0.52
Miss	0.26	3	0.11	0.15	0.26	6	0.20	0.06
Total	100.00	2821	100.00	0.00	100.00	2995	100.00	0.00

Note: 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.15 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 7 Gender

Gender	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
F	48.44	1331	47.18	1.26	48.44	1418	47.35	1.10
M	51.38	1488	52.75	-1.37	51.38	1572	52.49	-1.11
Miss	0.18	2	0.07	0.11	0.18	5	0.17	0.01
Total	100.00	2821	100.00	0.00	100.00	2995	100.00	0.00

Note: F. Female; M. Male; Miss: Missing

Table A.16 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 8 LEA

LEA	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	1.12	34	1.15	-0.03	1.12	34	1.15	-0.03
2	8.39	252	8.54	-0.15	8.39	252	8.49	-0.10
3	12.16	365	12.36	-0.20	12.16	365	12.30	-0.14
4	2.11	63	2.13	-0.02	2.11	63	2.12	-0.01
5	0.62	19	0.64	-0.02	0.62	19	0.64	-0.02
6	3.51	105	3.56	-0.05	3.51	105	3.54	-0.03
7	2.04	12	0.41	1.63	2.04	28	0.94	1.10
8	3.23	97	3.29	-0.06	3.23	97	3.27	-0.04
9	0.52	16	0.54	-0.02	0.52	16	0.54	-0.02
10	4.70	141	4.78	-0.08	4.70	141	4.75	-0.05
11	0.63	19	0.64	-0.01	0.63	19	0.64	-0.01
12	4.56	137	4.64	-0.08	4.56	137	4.62	-0.06
13	6.00	180	6.10	-0.10	6.00	180	6.06	-0.06
14	0.26	8	0.27	-0.01	0.26	8	0.27	-0.01
15	15.75	472	15.99	-0.24	15.75	472	15.90	-0.15
16	15.62	469	15.89	-0.27	15.62	469	15.80	-0.18
17	0.91	27	0.91	0.00	0.91	27	0.91	0.00
18	1.84	55	1.86	-0.02	1.84	55	1.85	-0.01
19	0.40	12	0.41	-0.01	0.40	12	0.40	0.00
20	0.53	16	0.54	-0.01	0.53	16	0.54	-0.01
21	2.42	73	2.47	-0.05	2.42	73	2.46	-0.04
22	1.66	50	1.69	-0.03	1.66	50	1.68	-0.02
23	0.75	22	0.75	0.00	0.75	22	0.74	0.01
24	0.66	20	0.68	-0.02	0.66	20	0.67	-0.01
30	9.59	288	9.76	-0.17	9.59	288	9.70	-0.11
Total	100.00	2952	100.00	0.00	100.00	2968	100.00	0.00

Note: 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City

Table A.17 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 8 Ethnicity

Race	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
1	0.38	13	0.44	-0.06	0.38	14	0.47	-0.09
2	5.06	153	5.18	-0.13	5.06	173	5.83	-0.77
3	39.24	1157	39.19	0.05	39.24	1169	39.39	-0.14
4	47.83	1408	47.70	0.14	47.83	1402	47.24	0.60
5	7.26	216	7.32	-0.06	7.26	204	6.87	0.38
Miss	0.23	5	0.17	0.06	0.23	6	0.20	0.02
Total	100.00	2952	100.00	0.00	100.00	2968	100.00	0.00

Note: 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.18 The 2007 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 8 Gender

Gender	Operational Form A				Operational Form B			
	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.	2007 Pop. %	2007 S. R. S.	% of 2007 S. R. S.	% of Differ.
F	48.94	1456	49.32	-0.39	48.94	1480	49.87	-0.93
M	50.88	1492	50.54	0.34	50.88	1485	50.03	0.85
Miss	0.18	4	0.14	0.05	0.18	3	0.10	0.08
Total	100.00	2952	100.00	0.00	100.00	2968	100.00	0.00

Note: F. Female; M. Male; Miss: Missing

APPENDIX B: SCALE SCORE HISTOGRAMS AND TUKEY CHARTS

Year 2003 Grade=3

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240	*	175	175	0.27	0.27
250		3	178	0.00	0.28
260		3	181	0.00	0.28
270		15	196	0.02	0.30
280		21	217	0.03	0.34
290		31	248	0.05	0.38
300	*	102	350	0.16	0.54
310	*	227	577	0.35	0.89
320	***	519	1096	0.81	1.70
330	*****	1075	2171	1.67	3.37
340	**********	2017	4188	3.13	6.50
350	**********	3126	7314	4.85	11.34
360	**********	4782	12096	7.42	18.76
370	**********	5482	17578	8.50	27.26
380	**********	6300	23878	9.77	37.04
390	**********	6025	29903	9.35	46.38
400	**********	6565	36468	10.18	56.56
410	**********	5755	42223	8.93	65.49
420	**********	5027	47250	7.80	73.29
430	**********	4773	52023	7.40	80.69
440	**********	3782	55805	5.87	86.56
450	**********	3057	58862	4.74	91.30
460	*********	1896	60758	2.94	94.24
470	*******	1395	62153	2.16	96.40
480	****	892	63045	1.38	97.79
490	****	737	63782	1.14	98.93
500	*	281	64063	0.44	99.37
510	*	201	64264	0.31	99.68
520		67	64331	0.10	99.78
530		56	64387	0.09	99.87
540		28	64415	0.04	99.91
550		20	64435	0.03	99.94
560		22	64457	0.03	99.98
570		0	64457	0.00	99.98
580		10	64467	0.02	99.99
590		2	64469	0.00	100.00
600		2	64471	0.00	100.00
610		0	64471	0.00	100.00
620		0	64471	0.00	100.00
630		0	64471	0.00	100.00
640		0	64471	0.00	100.00
650		0	64471	0.00	100.00

1000 2000 3000 4000 5000 6000

Frequency

Figure B.1 Year 2003 Scale Score Distribution: Grade3

Year 2007 Grade=3 Form=A

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		1	1	0.00	0.00
250		0	1	0.00	0.00
260		8	9	0.03	0.03
270		0	9	0.00	0.03
280		24	33	0.08	0.11
290		33	66	0.11	0.22
300	*	69	135	0.23	0.45
310	*	102	237	0.34	0.80
320	**	139	376	0.47	1.26
330	******	421	797	1.42	2.68
340	********	620	1417	2.09	4.77
350	**********	880	2297	2.96	7.73
360	**********	1055	3352	3.55	11.27
370	**********	1797	5149	6.04	17.32
380	**********	1407	6556	4.73	22.05
390	**********	2469	9025	8.30	30.35
400	**********	1931	10956	6.49	36.85
410	**********	3098	14054	10.42	47.27
420	**********	2451	16505	8.24	55.51
430	**********	2624	19129	8.83	64.34
440	**********	1406	20535	4.73	69.07
450	**********	2990	23525	10.06	79.12
460	**********	1508	25033	5.07	84.20
470	**********	1439	26472	4.84	89.04
480	**********	1185	27657	3.99	93.02
490	**********	910	28567	3.06	96.08
500	*********	657	29224	2.21	98.29
510		0	29224	0.00	98.29
520	****	332	29556	1.12	99.41
530		0	29556	0.00	99.41
540	**	126	29682	0.42	99.83
550		0	29682	0.00	99.83
560		0	29682	0.00	99.83
570		37	29719	0.12	99.96
580		0	29719	0.00	99.96
590		0	29719	0.00	99.96
600		11	29730	0.04	99.99
610		0	29730	0.00	99.99
620		0	29730	0.00	99.99
630		2	29732	0.01	100.00
640		0	29732	0.00	100.00
650		0	29732	0.00	100.00

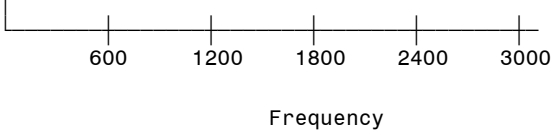


Figure B.2 Year 2007 Scale Score Distribution: Grade 3 Form A

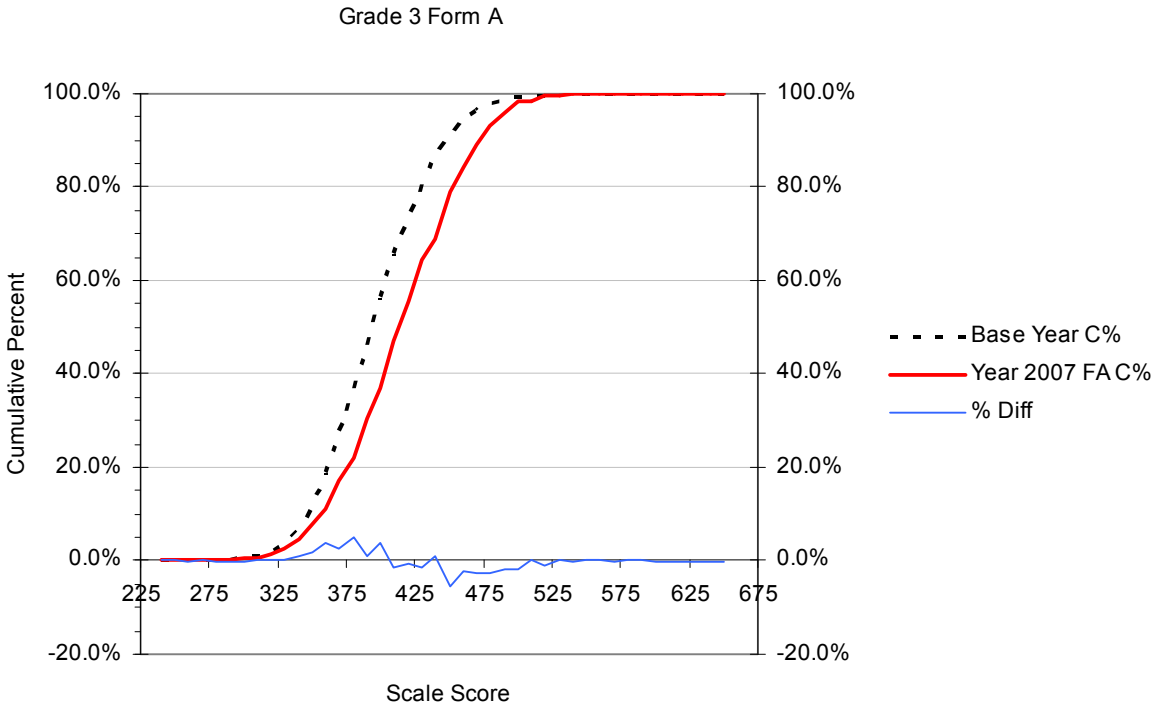


Figure B.3. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 3 Form A

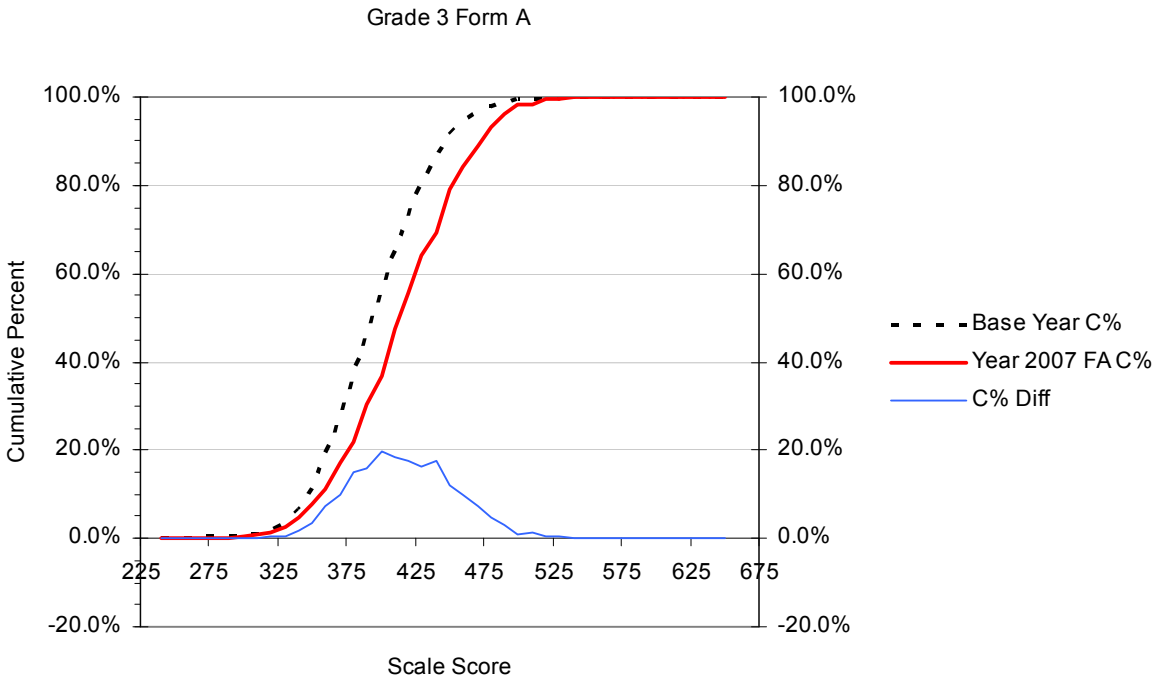


Figure B.4. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 3 Form A

Year 2007 Grade=3 Form=B

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		1	1	0.00	0.00
250		2	3	0.01	0.01
260		0	3	0.00	0.01
270		5	8	0.02	0.03
280		0	8	0.00	0.03
290		12	20	0.04	0.07
300		20	40	0.07	0.13
310	**	113	153	0.38	0.52
320	*	82	235	0.28	0.79
330	****	298	533	1.00	1.80
340	******	474	1007	1.60	3.39
350	*********	669	1676	2.25	5.65
360	******************	1341	3017	4.52	10.17
370	***************	1127	4144	3.80	13.96
380	*************************	1974	6118	6.65	20.62
390	********************************	2500	8618	8.42	29.04
400	*************************	2026	10644	6.83	35.87
410	**	3538	14182	11.92	47.79
420	*********************************	2649	16831	8.93	56.72
430	************************************	2871	19702	9.67	66.39
440	*************************************	2935	22637	9.89	76.28
450	******************	1433	24070	4.83	81.11
460	**********************************	2579	26649	8.69	89.80
470	**************	1068	27717	3.60	93.40
480	**********	810	28527	2.73	96.13
490	********	571	29098	1.92	98.06
500	****	327	29425	1.10	99.16
510		0	29425	0.00	99.16
520	**	173	29598	0.58	99.74
530		0	29598	0.00	99.74
540		0	29598	0.00	99.74
550	*	64	29662	0.22	99.96
560		0	29662	0.00	99.96
570		13	29675	0.04	100.00
580		0	29675	0.00	100.00
590		0	29675	0.00	100.00
600		0	29675	0.00	100.00
610		0	29675	0.00	100.00
620		0	29675	0.00	100.00
630		0	29675	0.00	100.00
640		0	29675	0.00	100.00
650		0	29675	0.00	100.00

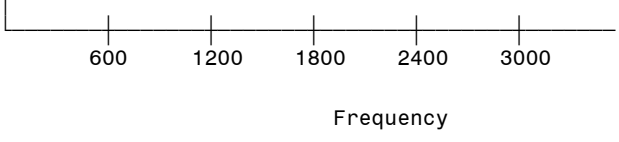


Figure B.5 Year 2007 Scale Score Distribution: Grade 3 Form B

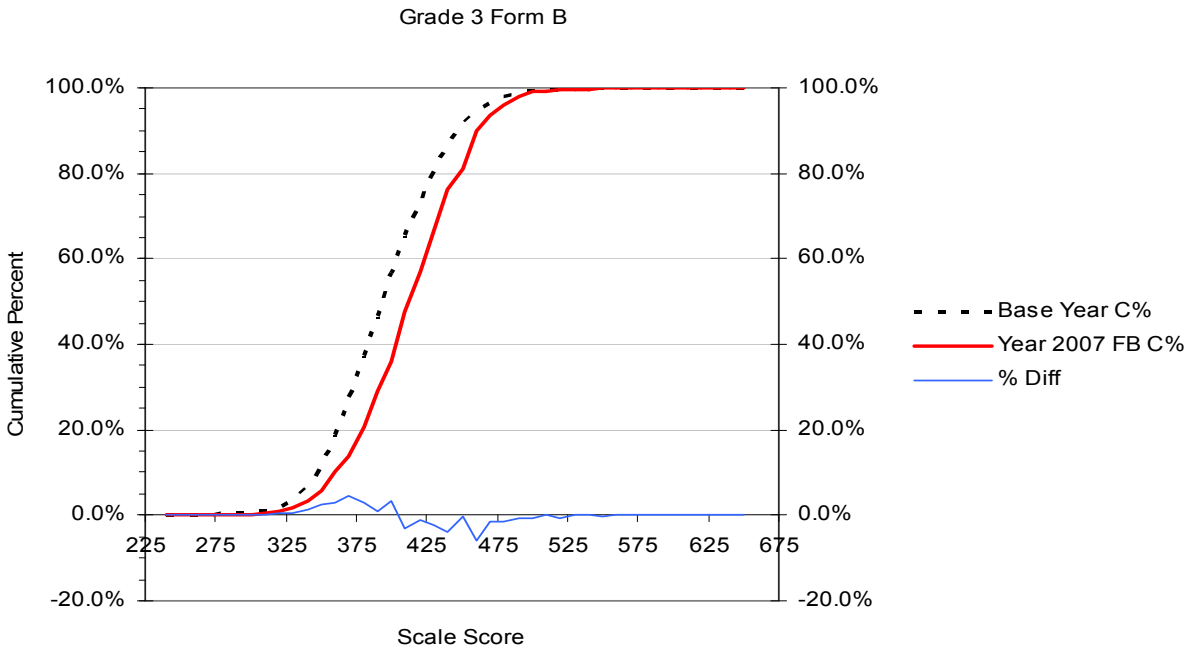


Figure B.6. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 3 Form B

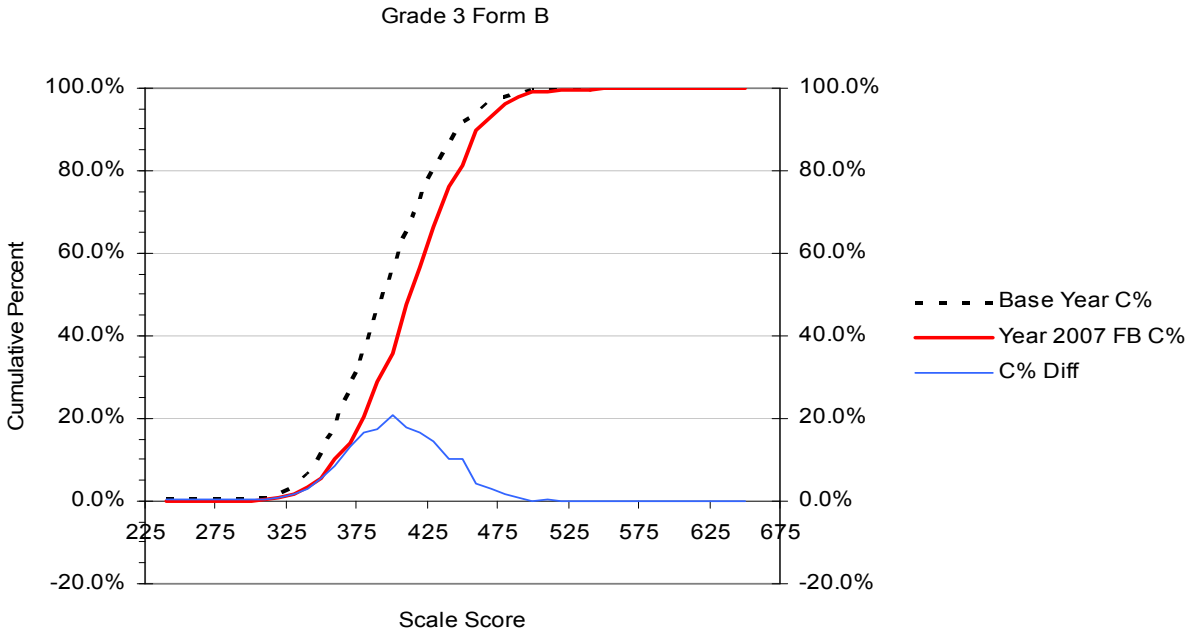


Figure B.7. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 3 Form B

Note. The scale score distributions and the Tukey plots for 2007 generated based on raw scores from 2007 data files.

Year 2004 Grade=4

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		72	72	0.12	0.12
250		3	75	0.00	0.12
260		1	76	0.00	0.12
270		11	87	0.02	0.14
280		75	162	0.12	0.26
290		75	237	0.12	0.38
300	*	273	510	0.44	0.83
310	**	347	857	0.56	1.39
320	****	896	1753	1.45	2.84
330	********	1516	3269	2.46	5.30
340	**********	2255	5524	3.65	8.95
350	**********	2552	8076	4.13	13.08
360	**********	3552	11628	5.75	18.84
370	**********	4251	15879	6.89	25.72
380	**********	4738	20617	7.68	33.40
390	**********	5806	26423	9.41	42.80
400	**********	6760	33183	10.95	53.76
410	**********	4626	37809	7.49	61.25
420	**********	7417	45226	12.02	73.26
430	**********	4696	49922	7.61	80.87
440	**********	4619	54541	7.48	88.35
450	**********	2514	57055	4.07	92.43
460	*********	1852	58907	3.00	95.43
470	*******	1352	60259	2.19	97.62
480	***	659	60918	1.07	98.68
490	*	239	61157	0.39	99.07
500	*	297	61454	0.48	99.55
510	*	110	61564	0.18	99.73
520		77	61641	0.12	99.86
530		31	61672	0.05	99.91
540		26	61698	0.04	99.95
550		9	61707	0.01	99.96
560		4	61711	0.01	99.97
570		8	61719	0.01	99.98
580		4	61723	0.01	99.99
590		7	61730	0.01	100.00
600		0	61730	0.00	100.00
610		0	61730	0.00	100.00
620		0	61730	0.00	100.00
630		0	61730	0.00	100.00
640		0	61730	0.00	100.00
650		0	61730	0.00	100.00

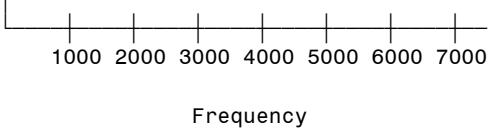


Figure B.8 Year 2004 Scale Score Distribution: Grade 4

Year 2007 Grade=4 Form=A

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		6	6	0.02	0.02
250		7	13	0.02	0.04
260		16	29	0.05	0.10
270		30	59	0.10	0.20
280		48	107	0.16	0.35
290	**	192	299	0.64	0.99
300	*	131	430	0.43	1.43
310	***	342	772	1.13	2.56
320	*****	536	1308	1.78	4.33
330	*******	717	2025	2.38	6.71
340	********	804	2829	2.66	9.38
350	********	819	3648	2.71	12.09
360	**********	1538	5186	5.10	17.19
370	**********	1231	6417	4.08	21.27
380	**********	1597	8014	5.29	26.56
390	**********	2122	10136	7.03	33.59
400	**********	2871	13007	9.51	43.11
410	**********	3690	16697	12.23	55.34
420	**********	2115	18812	7.01	62.35
430	**********	4509	23321	14.94	77.29
440	**********	2249	25570	7.45	84.74
450	**********	1882	27452	6.24	90.98
460	**********	1323	28775	4.38	95.36
470	********	848	29623	2.81	98.17
480		0	29623	0.00	98.17
490	****	377	30000	1.25	99.42
500		0	30000	0.00	99.42
510		0	30000	0.00	99.42
520	*	142	30142	0.47	99.89
530		0	30142	0.00	99.89
540		28	30170	0.09	99.99
550		0	30170	0.00	99.99
560		0	30170	0.00	99.99
570		3	30173	0.01	100.00
580		0	30173	0.00	100.00
590		0	30173	0.00	100.00
600		0	30173	0.00	100.00
610		1	30174	0.00	100.00
620		0	30174	0.00	100.00
630		0	30174	0.00	100.00
640		0	30174	0.00	100.00
650		0	30174	0.00	100.00

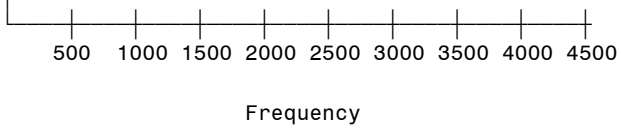


Figure B.9 Year 2007 Scale Score Distribution: Grade 4 Form A

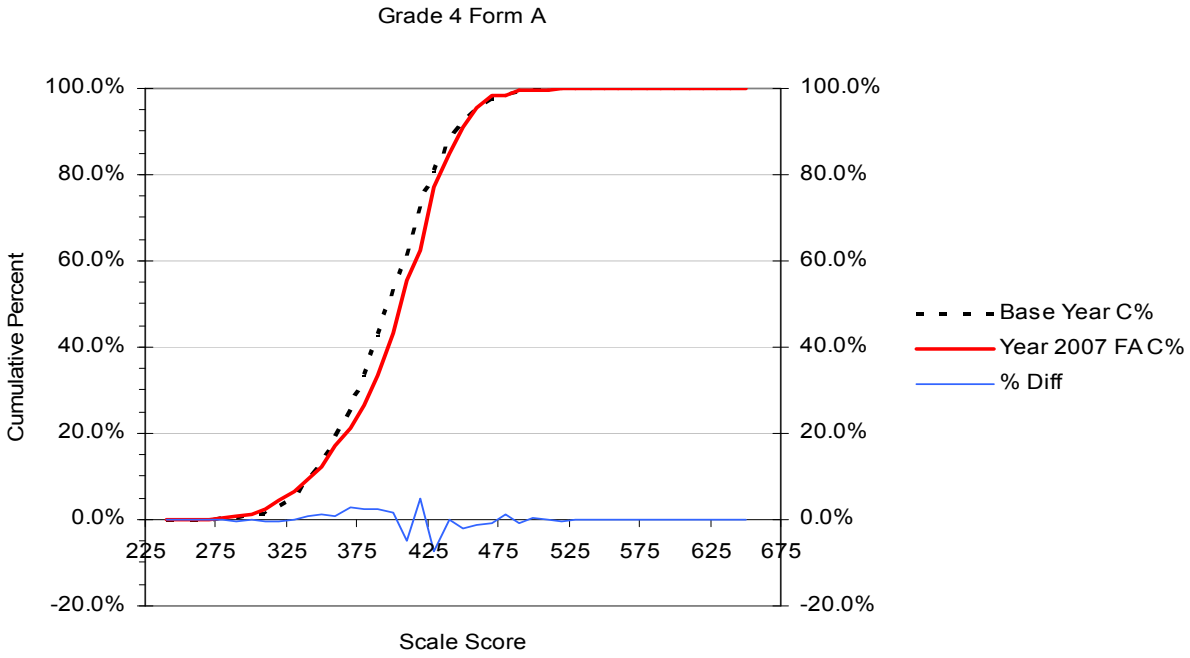


Figure B.10. Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 4 Form A

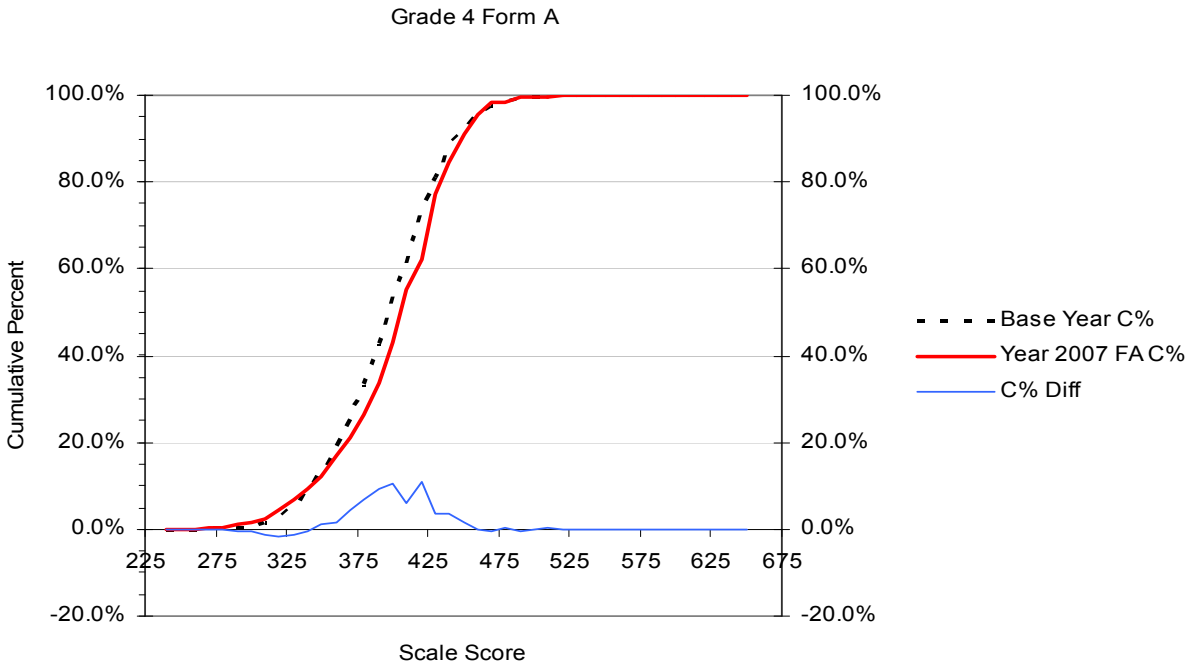
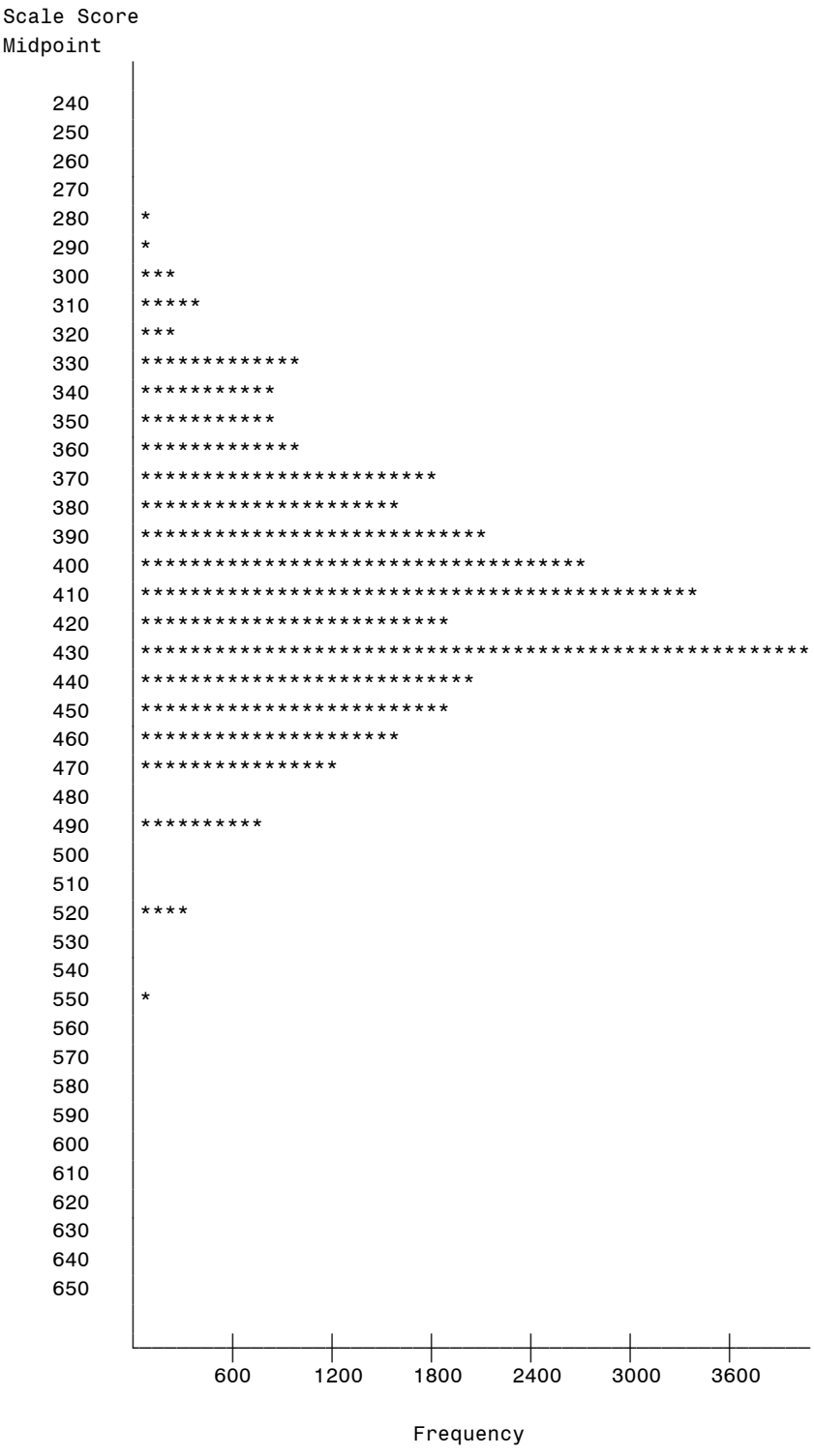


Figure B.11. Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Cumulative percent Differences between CDFs: Grade 4 Form A

Year 2007 Grade=4 Form=B



Scale Score Midpoint	Freq	Cum. Freq	Percent	Cum. Percent
240	7	7	0.02	0.02
250	15	22	0.05	0.07
260	25	47	0.08	0.16
270	31	78	0.10	0.26
280	53	131	0.18	0.44
290	77	208	0.26	0.69
300	230	438	0.77	1.46
310	354	792	1.18	2.64
320	242	1034	0.81	3.45
330	982	2016	3.28	6.73
340	843	2859	2.81	9.54
350	840	3699	2.80	12.35
360	991	4690	3.31	15.66
370	1779	6469	5.94	21.60
380	1595	8064	5.32	26.92
390	2083	10147	6.95	33.87
400	2665	12812	8.90	42.77
410	3388	16200	11.31	54.08
420	1894	18094	6.32	60.40
430	4037	22131	13.48	73.88
440	2023	24154	6.75	80.63
450	1872	26026	6.25	86.88
460	1587	27613	5.30	92.18
470	1221	28834	4.08	96.26
480	0	28834	0.00	96.26
490	722	29556	2.41	98.67
500	0	29556	0.00	98.67
510	0	29556	0.00	98.67
520	324	29880	1.08	99.75
530	0	29880	0.00	99.75
540	0	29880	0.00	99.75
550	63	29943	0.21	99.96
560	0	29943	0.00	99.96
570	0	29943	0.00	99.96
580	0	29943	0.00	99.96
590	9	29952	0.03	99.99
600	0	29952	0.00	99.99
610	0	29952	0.00	99.99
620	0	29952	0.00	99.99
630	3	29955	0.01	100.00
640	0	29955	0.00	100.00
650	0	29955	0.00	100.00

Figure B.12 Year 2007 Scale Score Distribution: Grade 4 Form B

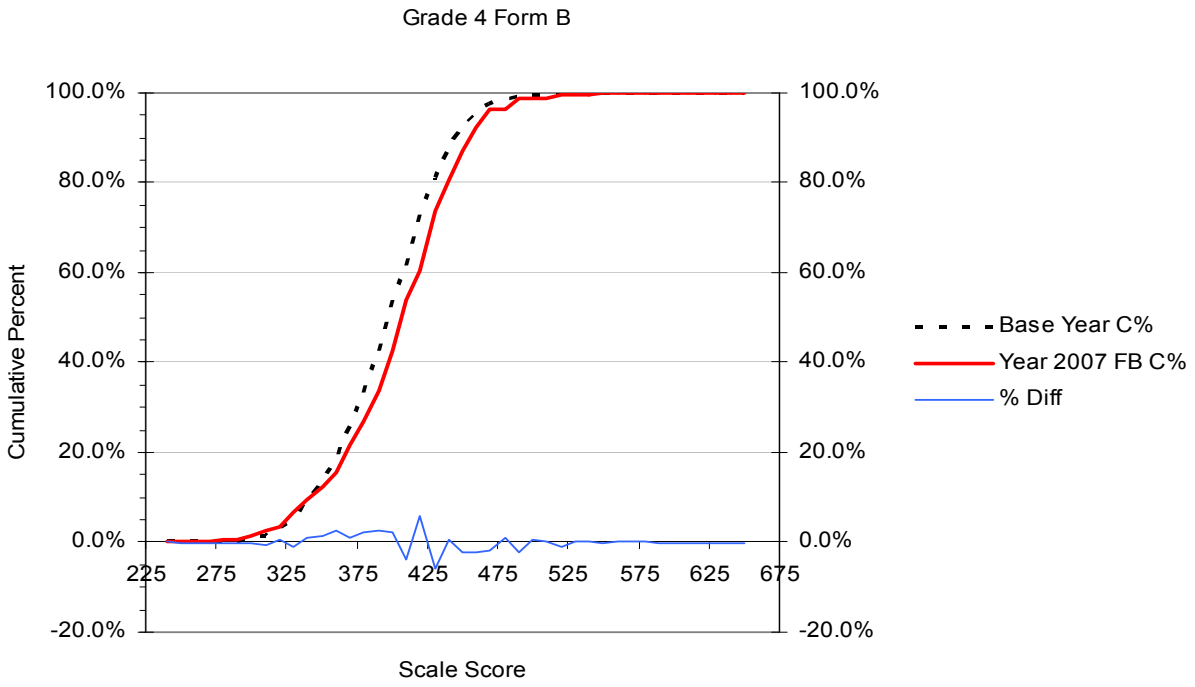


Figure B.13. Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 4 Form B

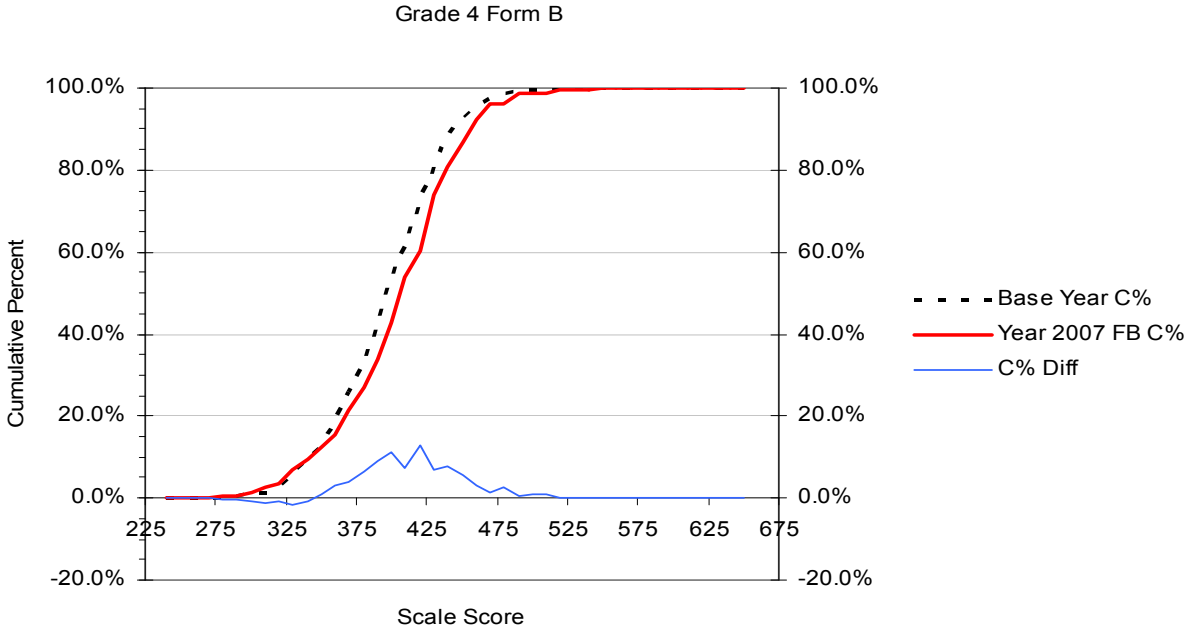


Figure B.14. Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 4 Form B

Note. The scale score distributions and the Tukey plots for 2007 generated based on raw scores from 2007 data files.

Year 2003 Grade=5

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240	*	134	134	0.20	0.20
250		4	138	0.01	0.20
260		14	152	0.02	0.22
270		15	167	0.02	0.25
280		36	203	0.05	0.30
290		59	262	0.09	0.39
300	*	160	422	0.24	0.62
310	**	395	817	0.58	1.21
320	****	721	1538	1.06	2.27
330	*******	1342	2880	1.98	4.25
340	**********	2255	5135	3.33	7.58
350	**********	2989	8124	4.41	12.00
360	**********	4227	12351	6.24	18.24
370	**********	5685	18036	8.39	26.63
380	**********	5646	23682	8.34	34.97
390	**********	6664	30346	9.84	44.81
400	**********	6750	37096	9.97	54.78
410	**********	6814	43910	10.06	64.84
420	**********	5659	49569	8.36	73.19
430	**********	5052	54621	7.46	80.65
440	**********	4698	59319	6.94	87.59
450	**********	2996	62315	4.42	92.02
460	**********	1996	64311	2.95	94.96
470	*******	1463	65774	2.16	97.12
480	****	720	66494	1.06	98.19
490	**	452	66946	0.67	98.85
500	**	383	67329	0.57	99.42
510	*	147	67476	0.22	99.64
520	*	121	67597	0.18	99.82
530		58	67655	0.09	99.90
540		20	67675	0.03	99.93
550		17	67692	0.03	99.96
560		14	67706	0.02	99.98
570		12	67718	0.02	99.99
580		2	67720	0.00	100.00
590		2	67722	0.00	100.00
600		0	67722	0.00	100.00
610		0	67722	0.00	100.00
620		0	67722	0.00	100.00
630		0	67722	0.00	100.00
640		0	67722	0.00	100.00
650		0	67722	0.00	100.00

1000 2000 3000 4000 5000 6000

Frequency

Figure B.15 Year 2003 Scale Score Distribution: Grade 5

Year 2007 Grade=5 Form=A

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		1	1	0.00	0.00
250		0	1	0.00	0.00
260		1	2	0.00	0.01
270		0	2	0.00	0.01
280		5	7	0.02	0.02
290		5	12	0.02	0.04
300		10	22	0.03	0.07
310		30	52	0.10	0.17
320		32	84	0.10	0.27
330	*	149	233	0.48	0.75
340	***	330	563	1.07	1.82
350	**********	974	1537	3.15	4.98
360	**********	1057	2594	3.42	8.40
370	**********	2298	4892	7.44	15.84
380	**********	2101	6993	6.80	22.64
390	**********	2488	9481	8.06	30.70
400	**********	4432	13913	14.35	45.05
410	**********	3296	17209	10.67	55.72
420	**********	3417	20626	11.06	66.79
430	**********	3370	23996	10.91	77.70
440	**********	1560	25556	5.05	82.75
450	**********	1446	27002	4.68	87.43
460	**********	2256	29258	7.30	94.74
470		0	29258	0.00	94.74
480	*******	735	29993	2.38	97.12
490	*****	494	30487	1.60	98.72
500	**	248	30735	0.80	99.52
510		0	30735	0.00	99.52
520	*	105	30840	0.34	99.86
530		0	30840	0.00	99.86
540		32	30872	0.10	99.96
550		0	30872	0.00	99.96
560		0	30872	0.00	99.96
570		9	30881	0.03	99.99
580		0	30881	0.00	99.99
590		0	30881	0.00	99.99
600		2	30883	0.01	100.00
610		0	30883	0.00	100.00
620		0	30883	0.00	100.00
630		0	30883	0.00	100.00
640		0	30883	0.00	100.00
650		0	30883	0.00	100.00

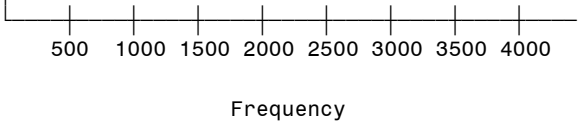


Figure B.16 Year 2007 Scale Score Distribution: Grade 5 Form A

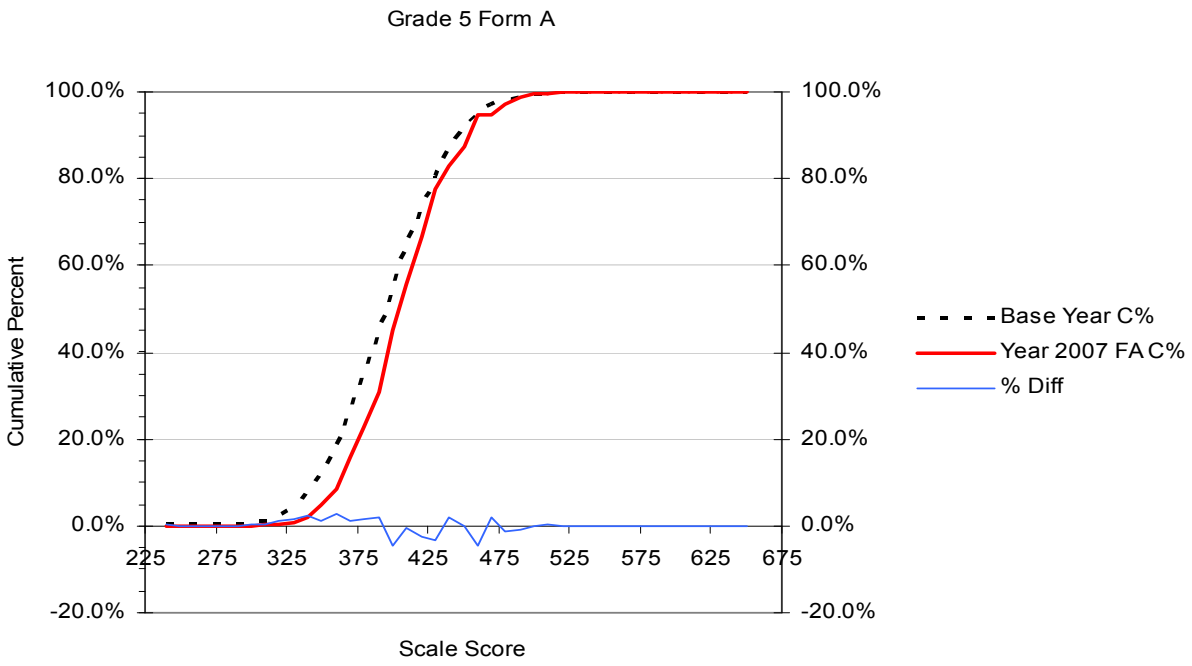


Figure B.17. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 5 Form A

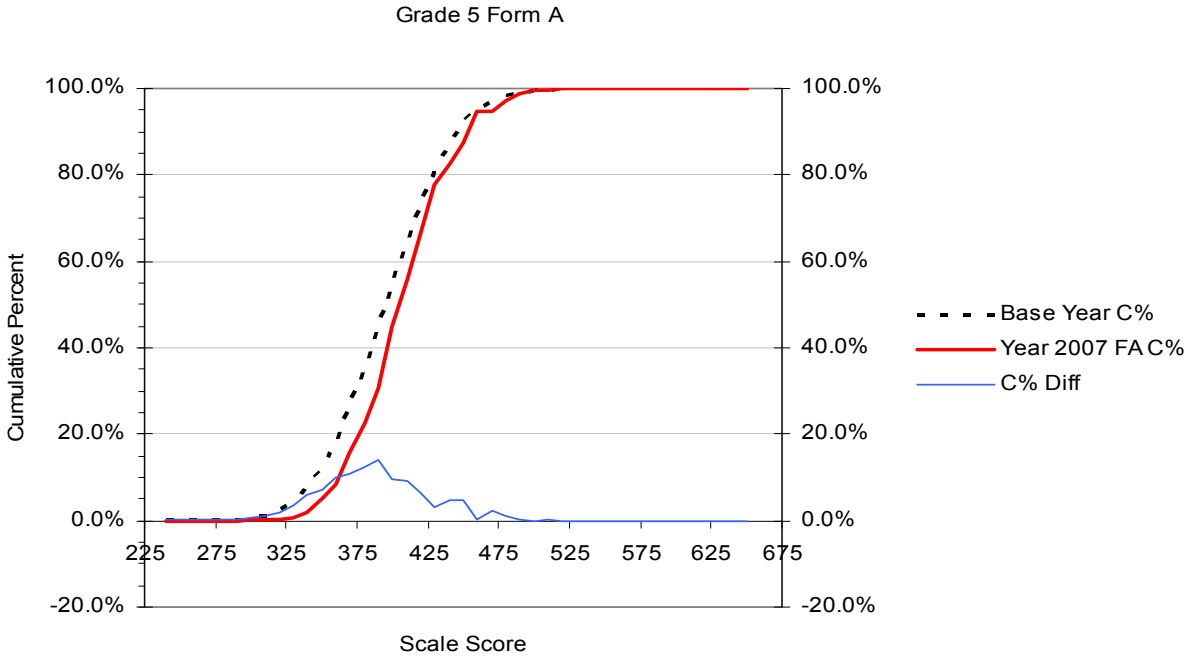


Figure B.18. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 5 Form A

Year 2007 Grade=5 Form=B

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		0	0	0.00	0.00
250		0	0	0.00	0.00
260		0	0	0.00	0.00
270		0	0	0.00	0.00
280		2	2	0.01	0.01
290		3	5	0.01	0.02
300		30	35	0.10	0.11
310		28	63	0.09	0.21
320	*	108	171	0.35	0.56
330	**	207	378	0.67	1.23
340	****	436	814	1.42	2.65
350	*******	681	1495	2.22	4.87
360	***************	1535	3030	5.00	9.87
370	**************	1437	4467	4.68	14.55
380	****************************	2881	7348	9.39	23.94
390	**********************	2375	9723	7.74	31.68
400	**	4304	14027	14.02	45.70
410	******************************	3143	17170	10.24	55.94
420	*********************************	3403	20573	11.09	67.03
430	*****************	1684	22257	5.49	72.51
440	*******************************	3198	25455	10.42	82.93
450	**************	1386	26841	4.52	87.45
460	*************	1296	28137	4.22	91.67
470	**********	1028	29165	3.35	95.02
480	*******	734	29899	2.39	97.41
490	*****	462	30361	1.51	98.92
500		0	30361	0.00	98.92
510	**	223	30584	0.73	99.64
520		0	30584	0.00	99.64
530	*	71	30655	0.23	99.88
540		0	30655	0.00	99.88
550		0	30655	0.00	99.88
560		31	30686	0.10	99.98
570		0	30686	0.00	99.98
580		0	30686	0.00	99.98
590		6	30692	0.02	100.00
600		0	30692	0.00	100.00
610		0	30692	0.00	100.00
620		1	30693	0.00	100.00
630		0	30693	0.00	100.00
640		0	30693	0.00	100.00
650		0	30693	0.00	100.00

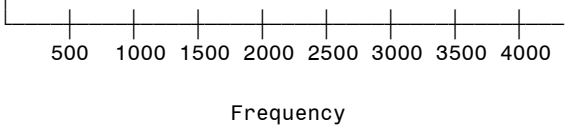


Figure B.19 Year 2007 Scale Score Distribution: Grade 5 Form B

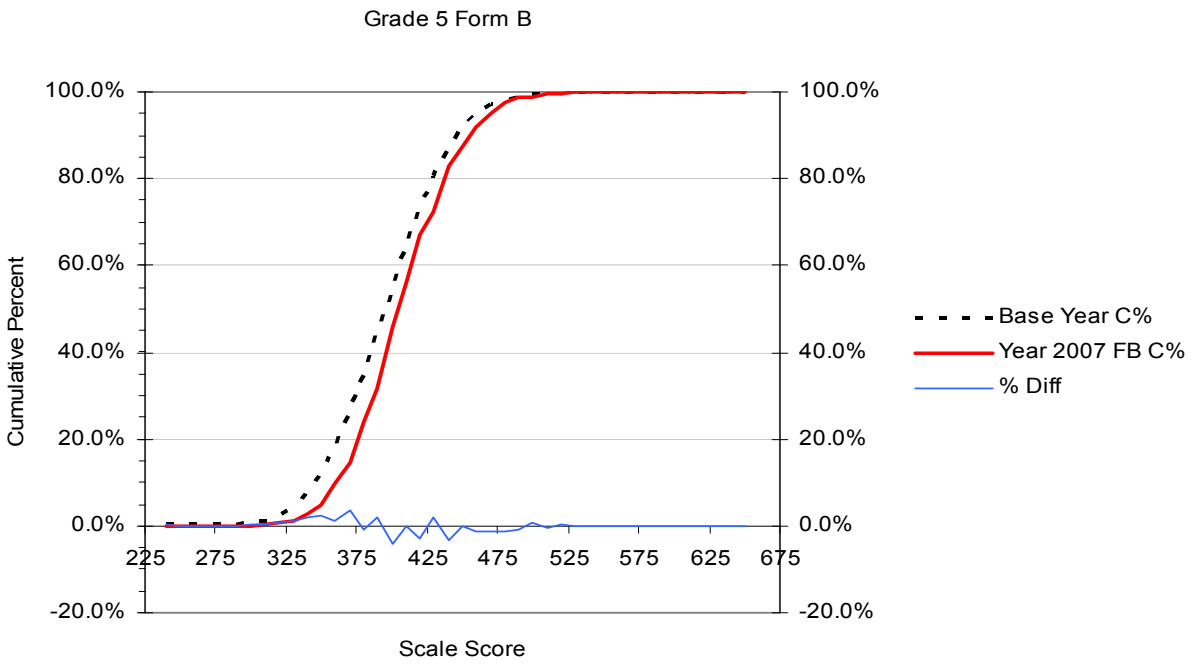


Figure B.20. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 5 Form B

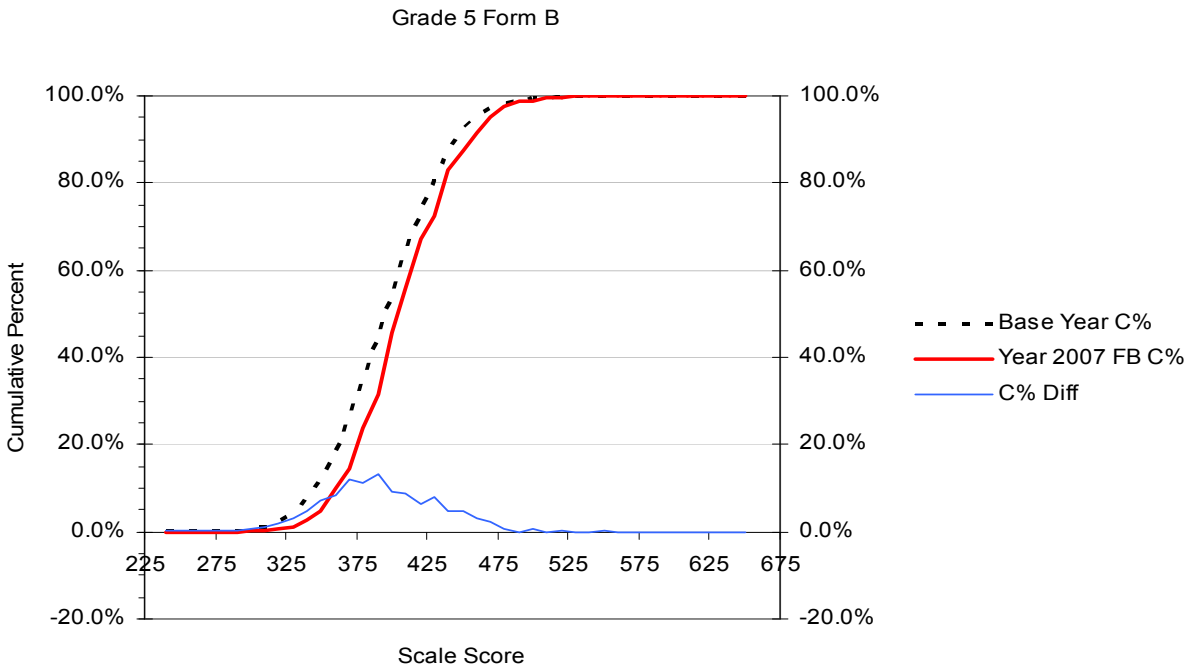


Figure B.21. Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 5 Form B

Note. The scale score distributions and the Tukey plots for 2007 generated based on raw scores from 2007 data files.

Year 2004 Grade=6

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240	*	277	277	0.41	0.41
250		12	289	0.02	0.42
260		8	297	0.01	0.44
270		14	311	0.02	0.46
280		33	344	0.05	0.51
290		61	405	0.09	0.59
300	*	108	513	0.16	0.75
310	**	317	830	0.47	1.22
320	***	624	1454	0.92	2.13
330	*******	1351	2805	1.98	4.12
340	**********	2070	4875	3.04	7.16
350	***************	3040	7915	4.46	11.62
360	*********************	4285	12200	6.29	17.91
370	**************************	5602	17802	8.23	26.14
380	**************************	5716	23518	8.39	34.53
390	**********************************	6849	30367	10.06	44.59
400	*********************************	6684	37051	9.81	54.40
410	**********************************	7001	44052	10.28	64.68
420	**************************	5803	49855	8.52	73.20
430	**************************	5801	55656	8.52	81.72
440	******************	3799	59455	5.58	87.30
450	***************	2997	62452	4.40	91.70
460	*********	1706	64158	2.50	94.20
470	*********	1780	65938	2.61	96.82
480	*****	1001	66939	1.47	98.29
490	***	564	67503	0.83	99.11
500	*	146	67649	0.21	99.33
510	*	298	67947	0.44	99.77
520		0	67947	0.00	99.77
530		66	68013	0.10	99.86
540		51	68064	0.07	99.94
550		22	68086	0.03	99.97
560		6	68092	0.01	99.98
570		9	68101	0.01	99.99
580		4	68105	0.01	100.00
590		1	68106	0.00	100.00
600		0	68106	0.00	100.00
610		0	68106	0.00	100.00
620		0	68106	0.00	100.00
630		0	68106	0.00	100.00
640		0	68106	0.00	100.00
650		0	68106	0.00	100.00

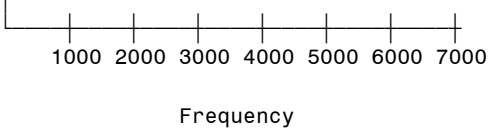


Figure B.22 Year 2004 Scale Score Distribution: Grade 6

Year 2007 Grade=6 Form=A

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		4	4	0.01	0.01
250		0	4	0.00	0.01
260		5	9	0.02	0.03
270		0	9	0.00	0.03
280		2	11	0.01	0.04
290		6	17	0.02	0.05
300	*	39	56	0.12	0.18
310	*	46	102	0.15	0.33
320	**	166	268	0.53	0.86
330	****	317	585	1.01	1.87
340	*******	560	1145	1.79	3.65
350	**********	1235	2380	3.94	7.59
360	**********	1804	4184	5.76	13.35
370	**********	1626	5810	5.19	18.54
380	**********	3082	8892	9.83	28.37
390	**********	3709	12601	11.84	40.21
400	**********	2762	15363	8.81	49.02
410	**********	3042	18405	9.71	58.73
420	**********	3247	21652	10.36	69.09
430	**********	3296	24948	10.52	79.61
440	**********	1596	26544	5.09	84.70
450	**********	2520	29064	8.04	92.74
460	**********	914	29978	2.92	95.66
470	*********	656	30634	2.09	97.75
480		0	30634	0.00	97.75
490	*****	398	31032	1.27	99.02
500	***	195	31227	0.62	99.64
510		0	31227	0.00	99.64
520		0	31227	0.00	99.64
530	*	80	31307	0.26	99.90
540		0	31307	0.00	99.90
550		26	31333	0.08	99.98
560		0	31333	0.00	99.98
570		0	31333	0.00	99.98
580		6	31339	0.02	100.00
590		0	31339	0.00	100.00
600		0	31339	0.00	100.00
610		0	31339	0.00	100.00
620		0	31339	0.00	100.00
630		0	31339	0.00	100.00
640		0	31339	0.00	100.00
650		0	31339	0.00	100.00

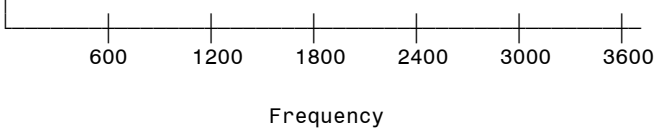


Figure B.23 Year 2007 Scale Score Distribution: Grade 6 Form A

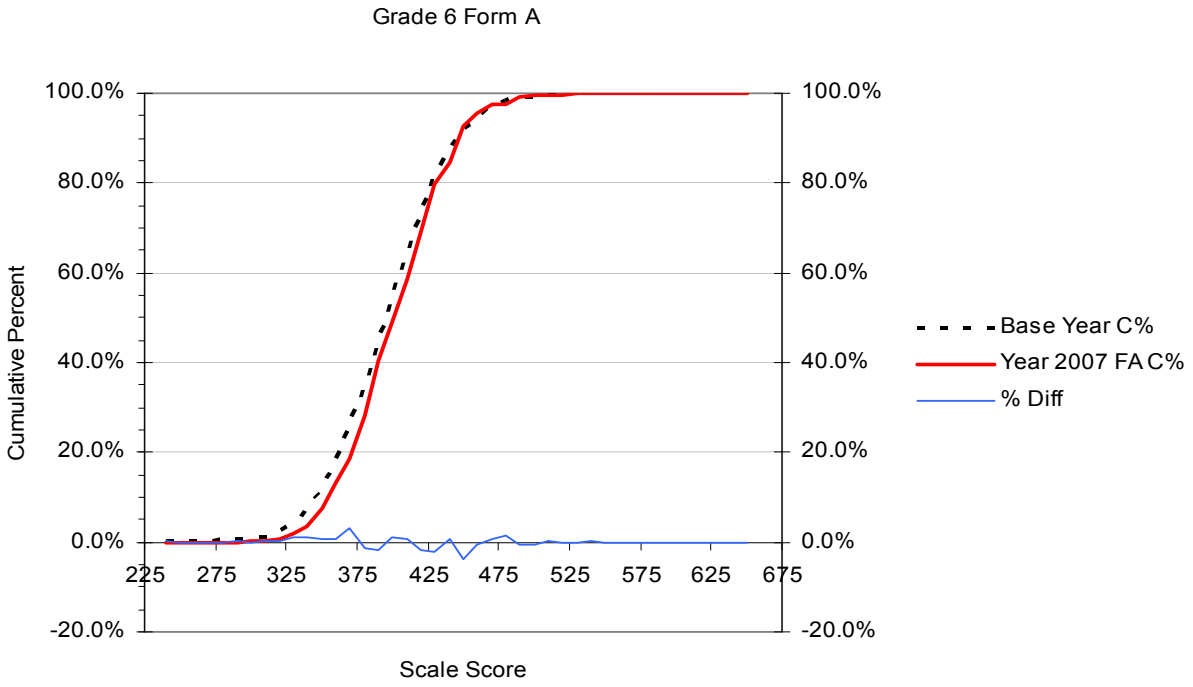


Figure B.24. Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 6 Form A

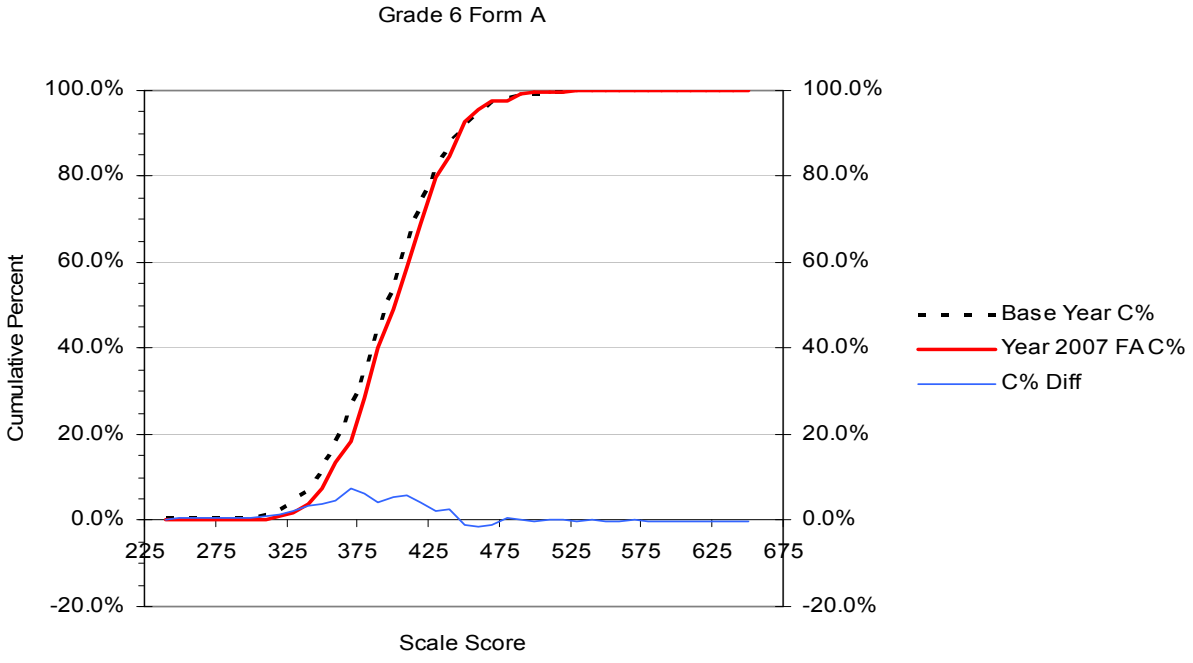
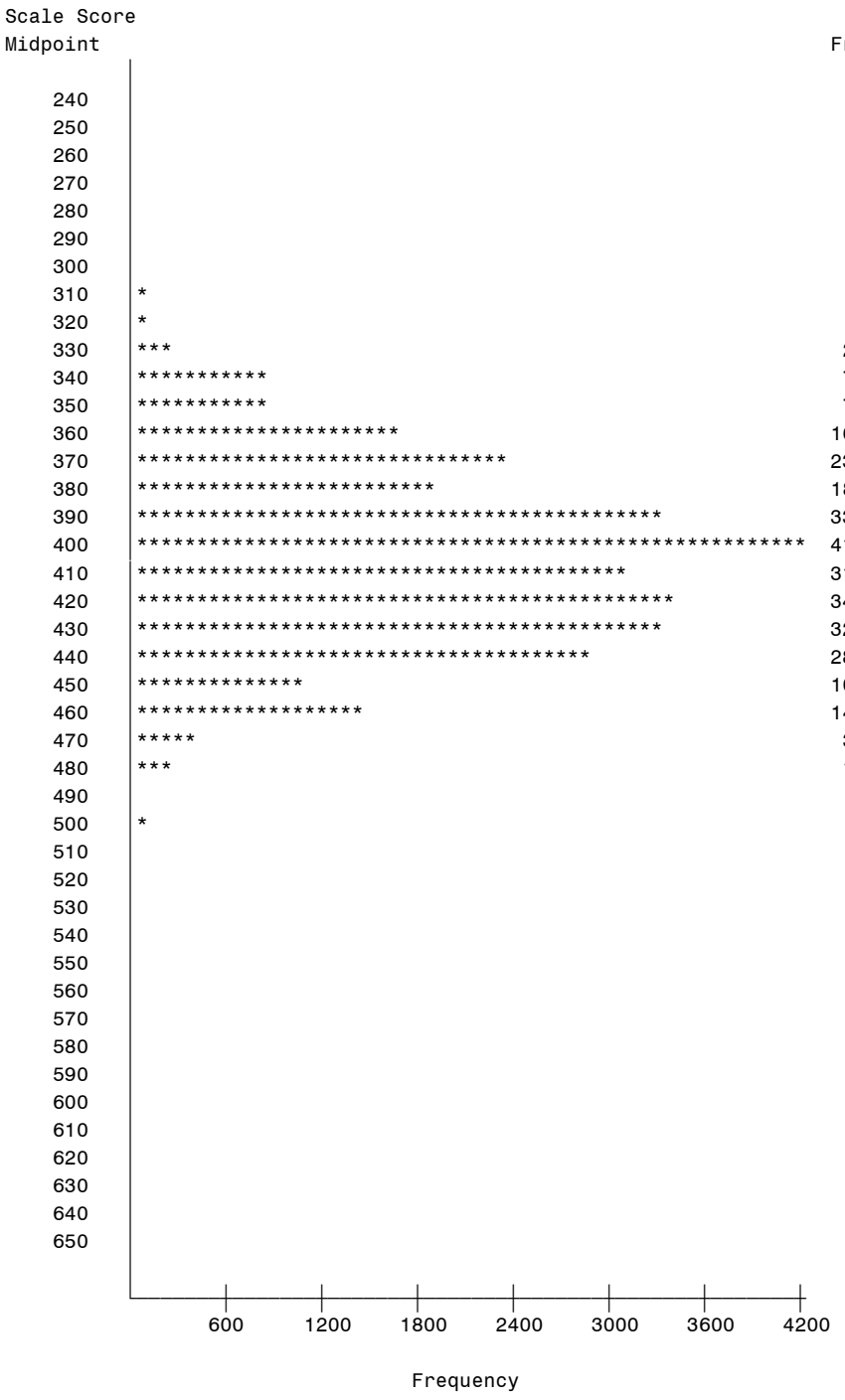


Figure B.25. Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 6 Form A

Year 2007 Grade=6 Form=B



Scale Score Midpoint	Freq	Cum. Freq	Percent	Cum. Percent
240	2	2	0.01	0.01
250	1	3	0.00	0.01
260	0	3	0.00	0.01
270	3	6	0.01	0.02
280	0	6	0.00	0.02
290	5	11	0.02	0.04
300	14	25	0.04	0.08
310	56	81	0.18	0.26
320	55	136	0.18	0.44
330	225	361	0.72	1.16
340	790	1151	2.54	3.70
350	793	1944	2.55	6.25
360	1678	3622	5.39	11.64
370	2341	5963	7.52	19.16
380	1855	7818	5.96	25.12
390	3336	11154	10.72	35.83
400	4183	15337	13.44	49.27
410	3107	18444	9.98	59.25
420	3406	21850	10.94	70.19
430	3271	25121	10.51	80.70
440	2869	27990	9.22	89.92
450	1061	29051	3.41	93.33
460	1410	30461	4.53	97.86
470	355	30816	1.14	99.00
480	195	31011	0.63	99.62
490	0	31011	0.00	99.62
500	79	31090	0.25	99.88
510	0	31090	0.00	99.88
520	30	31120	0.10	99.97
530	0	31120	0.00	99.97
540	7	31127	0.02	100.00
550	0	31127	0.00	100.00
560	0	31127	0.00	100.00
570	1	31128	0.00	100.00
580	0	31128	0.00	100.00
590	0	31128	0.00	100.00
600	0	31128	0.00	100.00
610	0	31128	0.00	100.00
620	0	31128	0.00	100.00
630	0	31128	0.00	100.00
640	0	31128	0.00	100.00
650	0	31128	0.00	100.00

Figure B.26 Year 2007 Scale Score Distribution: Grade 6 Form B

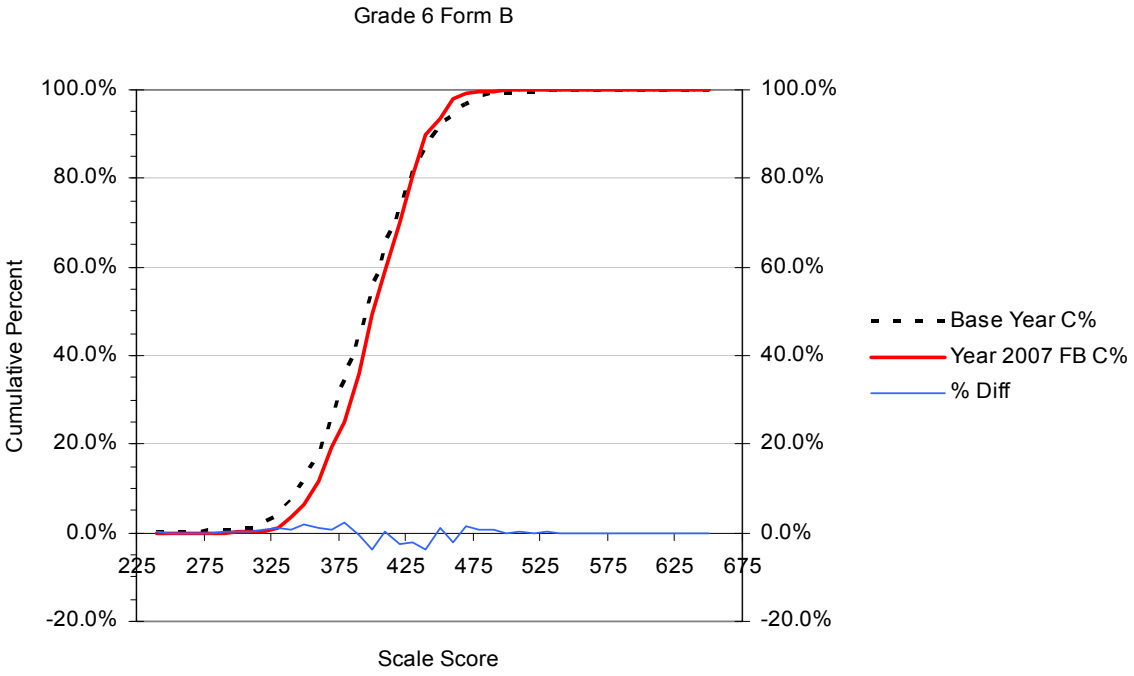


Figure B.27 Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 6 Form B

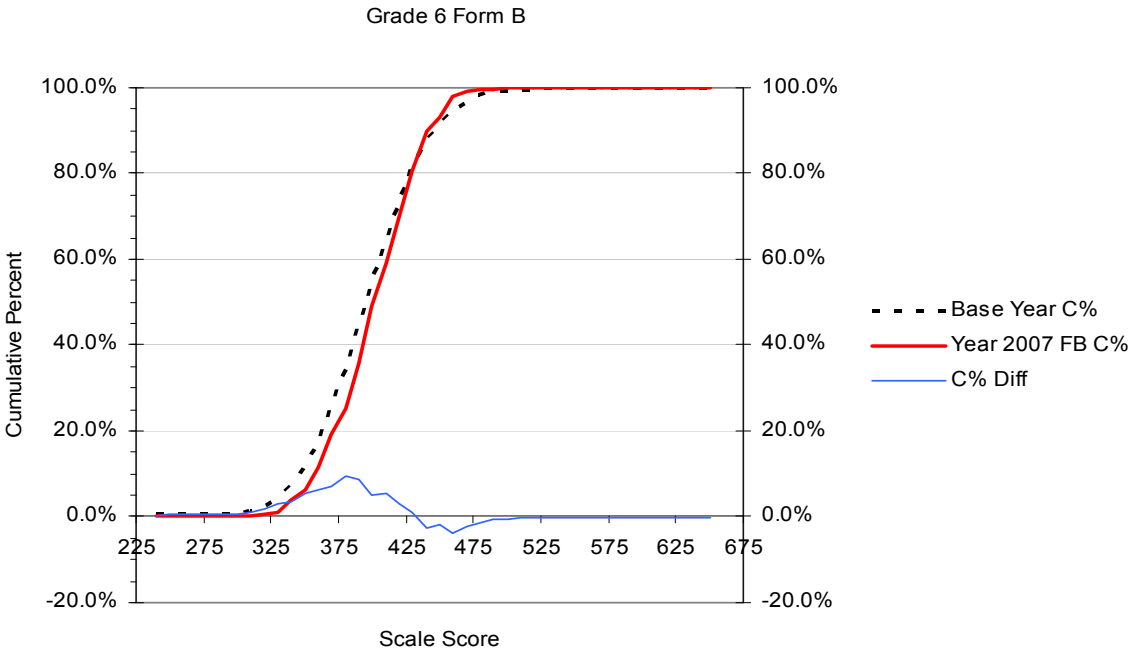


Figure B.28 Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 6 Form B

Note. The scale score distributions and the Tukey plots for 2007 generated based on raw scores from 2007 data files.

Year 2004 Grade=7

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240	**	436	436	0.63	0.63
250		0	436	0.00	0.63
260		31	467	0.04	0.68
270		12	479	0.02	0.69
280		32	511	0.05	0.74
290		62	573	0.09	0.83
300	*	134	707	0.19	1.02
310	**	410	1117	0.59	1.62
320	****	776	1893	1.12	2.74
330	******	1288	3181	1.86	4.60
340	*********	1778	4959	2.57	7.17
350	**********	2797	7756	4.04	11.21
360	**********	3648	11404	5.27	16.49
370	**********	5034	16438	7.28	23.77
380	**********	5865	22303	8.48	32.25
390	**********	7817	30120	11.30	43.55
400	**********	6965	37085	10.07	53.62
410	**********	7175	44260	10.37	63.99
420	**********	6773	51033	9.79	73.79
430	**********	5910	56943	8.55	82.33
440	**********	4679	61622	6.77	89.10
450	**********	2633	64255	3.81	92.90
460	*********	1782	66037	2.58	95.48
470	********	1546	67583	2.24	97.72
480	**	414	67997	0.60	98.31
490	***	563	68560	0.81	99.13
500	*	257	68817	0.37	99.50
510		94	68911	0.14	99.64
520	*	128	69039	0.19	99.82
530		54	69093	0.08	99.90
540		32	69125	0.05	99.95
550		11	69136	0.02	99.96
560		14	69150	0.02	99.98
570		5	69155	0.01	99.99
580		5	69160	0.01	100.00
590		1	69161	0.00	100.00
600		0	69161	0.00	100.00
610		2	69163	0.00	100.00
620		0	69163	0.00	100.00
630		0	69163	0.00	100.00
640		0	69163	0.00	100.00
650		0	69163	0.00	100.00

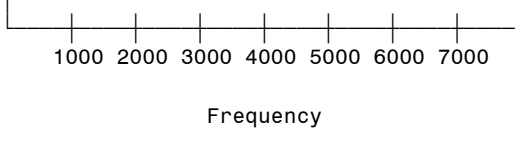


Figure B.29 Year 2004 Scale Score Distribution: Grade 7

Year 2007 Grade=7 Form=A

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		3	3	0.01	0.01
250		0	3	0.00	0.01
260		1	4	0.00	0.01
270		3	7	0.01	0.02
280		8	15	0.02	0.05
290		16	31	0.05	0.10
300		31	62	0.10	0.19
310	**	142	204	0.44	0.64
320	***	258	462	0.80	1.44
330	******	466	928	1.45	2.89
340	*********	662	1590	2.06	4.95
350	**********	935	2525	2.91	7.86
360	*************************	1995	4520	6.21	14.07
370	**********************************	2652	7172	8.26	22.33
380	******************************	2271	9443	7.07	29.40
390	**	3599	13042	11.21	40.61
400	**********************************	2842	15884	8.85	49.46
410	***	3108	18992	9.68	59.14
420	***	3266	22258	10.17	69.31
430	***	3287	25545	10.24	79.54
440	*********************	1606	27151	5.00	84.55
450	******************	1414	28565	4.40	88.95
460	*****************	1233	29798	3.84	92.79
470	************	943	30741	2.94	95.72
480	********	629	31370	1.96	97.68
490	*****	401	31771	1.25	98.93
500		0	31771	0.00	98.93
510	***	203	31974	0.63	99.56
520		0	31974	0.00	99.56
530	*	105	32079	0.33	99.89
540		0	32079	0.00	99.89
550		0	32079	0.00	99.89
560		25	32104	0.08	99.97
570		0	32104	0.00	99.97
580		0	32104	0.00	99.97
590		10	32114	0.03	100.00
600		0	32114	0.00	100.00
610		0	32114	0.00	100.00
620		0	32114	0.00	100.00
630		0	32114	0.00	100.00
640		0	32114	0.00	100.00
650		0	32114	0.00	100.00

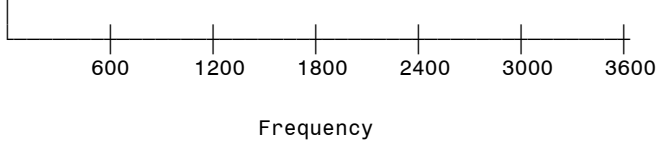


Figure B.30 Year 2007 Scale Score Distribution: Grade 7 Form A

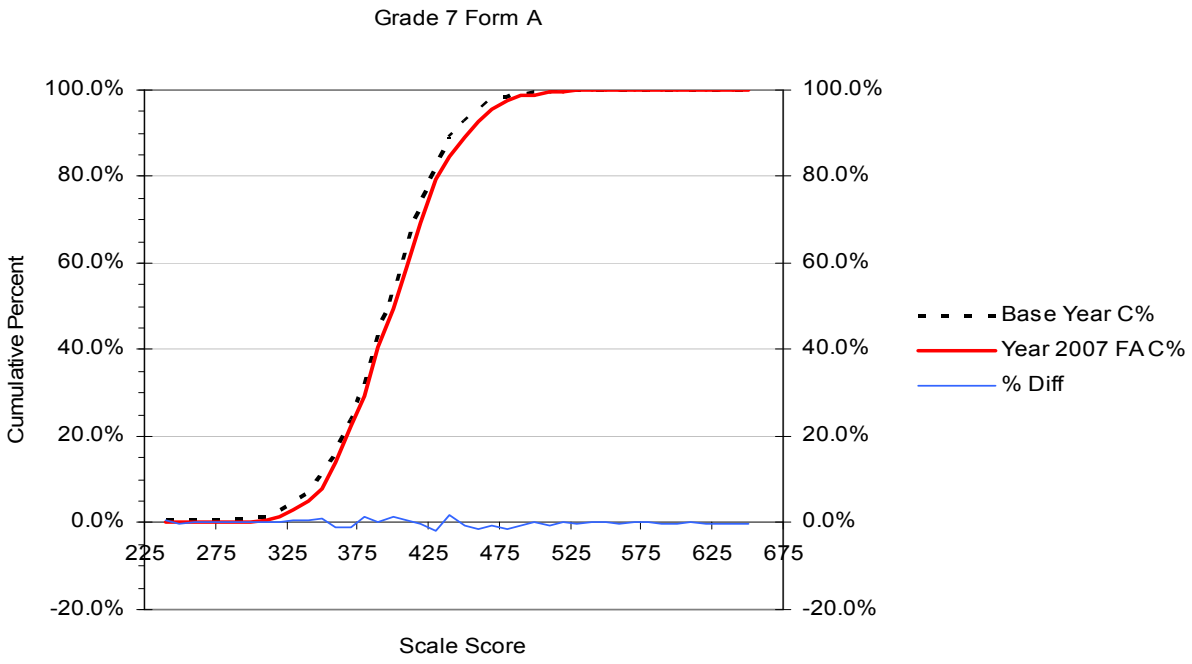


Figure B.31 Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 7 Form A

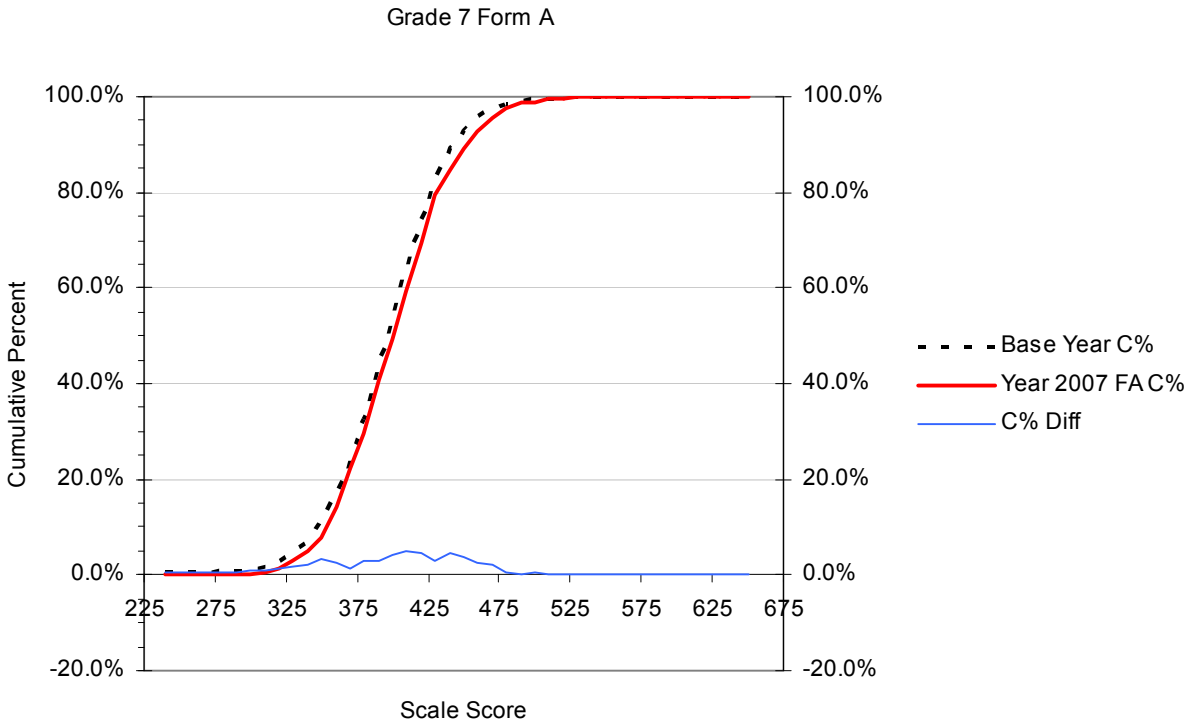


Figure B.32 Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 7 Form A

Year 2007 Grade=7 Form=B

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		3	3	0.01	0.01
250		2	5	0.01	0.02
260		0	5	0.00	0.02
270		4	9	0.01	0.03
280		4	13	0.01	0.04
290		15	28	0.05	0.09
300		39	67	0.12	0.21
310	*	116	183	0.36	0.57
320	**	224	407	0.70	1.28
330	****	403	810	1.27	2.54
340	******	618	1428	1.94	4.48
350	*********	937	2365	2.94	7.43
360	********************	2029	4394	6.37	13.80
370	******************	1759	6153	5.52	19.32
380	**********************************	3393	9546	10.65	29.98
390	**************************	2680	12226	8.42	38.39
400	**	4338	16564	13.62	52.01
410	*******************************	3127	19691	9.82	61.83
420	*******************************	3146	22837	9.88	71.71
430	**********	1585	24422	4.98	76.69
440	*****************************	2914	27336	9.15	85.84
450	************	1280	28616	4.02	89.86
460	**********	1121	29737	3.52	93.38
470	********	843	30580	2.65	96.02
480	******	629	31209	1.98	98.00
490	***	347	31556	1.09	99.09
500		0	31556	0.00	99.09
510	**	176	31732	0.55	99.64
520		0	31732	0.00	99.64
530	*	79	31811	0.25	99.89
540		0	31811	0.00	99.89
550		0	31811	0.00	99.89
560		26	31837	0.08	99.97
570		0	31837	0.00	99.97
580		0	31837	0.00	99.97
590		9	31846	0.03	100.00
600		0	31846	0.00	100.00
610		0	31846	0.00	100.00
620		0	31846	0.00	100.00
630		0	31846	0.00	100.00
640		0	31846	0.00	100.00
650		0	31846	0.00	100.00

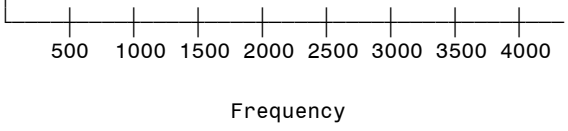


Figure B.33 Year 2007 Scale Score Distribution: Grade 7 Form B

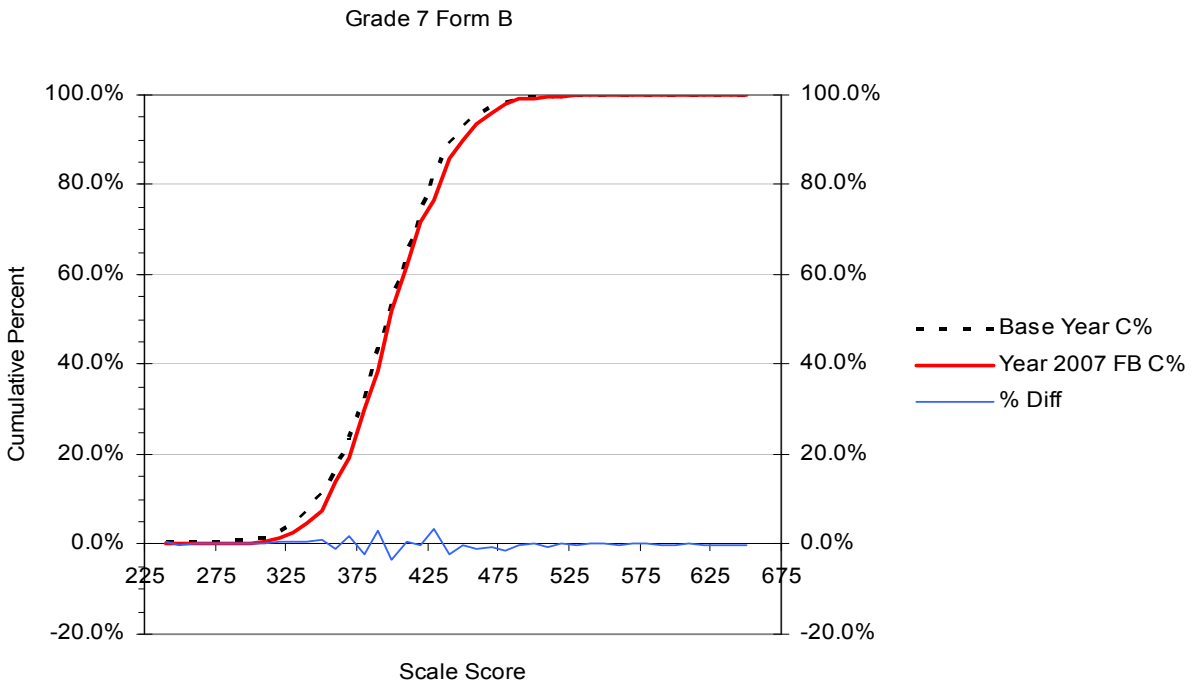


Figure B.34 Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 7 Form B

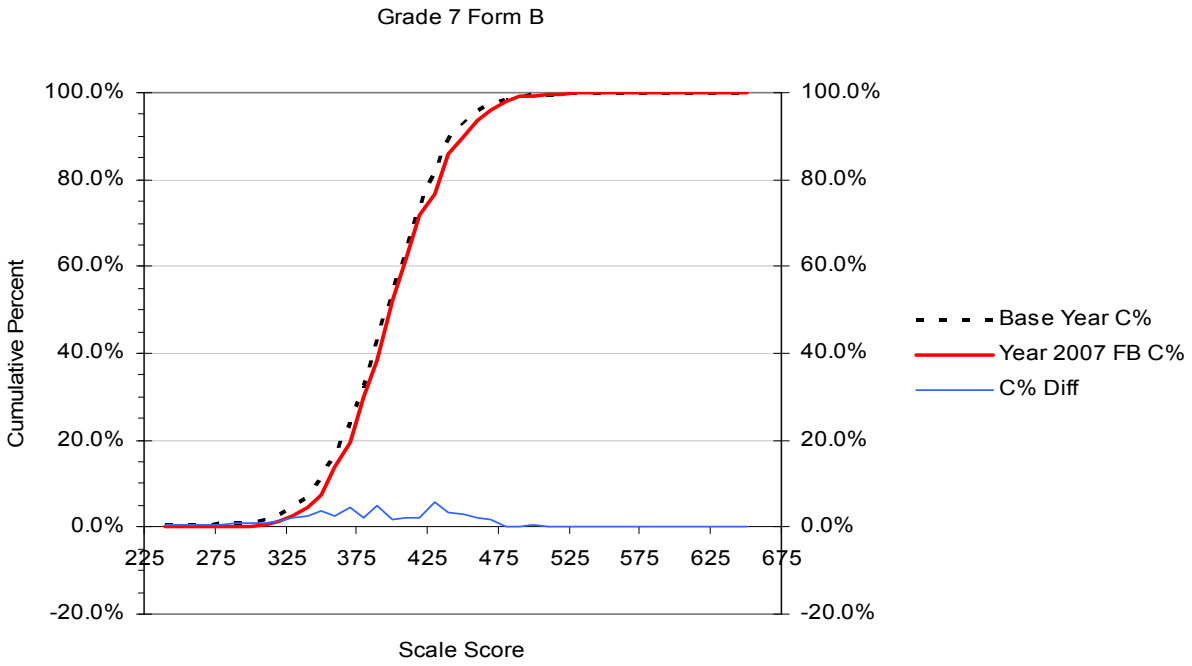


Figure B.35 Cumulative Distribution Functions (CDFs) for the Year 2004 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 7 Form B

Note. The scale score distributions and the Tukey plots for 2007 generated based on raw scores from 2007 data files.

Year 2003 Grade=8

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240	***	552	552	0.82	0.82
250		0	552	0.00	0.82
260		10	562	0.01	0.83
270		12	574	0.02	0.85
280		34	608	0.05	0.90
290		76	684	0.11	1.01
300	*	136	820	0.20	1.21
310	*	214	1034	0.32	1.53
320	***	566	1600	0.84	2.36
330	****	864	2464	1.28	3.64
340	**********	1923	4387	2.84	6.48
350	************	2609	6996	3.85	10.33
360	********************	3998	10994	5.90	16.24
370	**************************	5525	16519	8.16	24.40
380	*************************	5473	21992	8.08	32.48
390	**********************************	7195	29187	10.63	43.11
400	**	7935	37122	11.72	54.83
410	*******************************	6409	43531	9.47	64.29
420	********************************	6584	50115	9.72	74.02
430	**************************	5539	55654	8.18	82.20
440	********************	3943	59597	5.82	88.02
450	*****************	3316	62913	4.90	92.92
460	**********	1998	64911	2.95	95.87
470	******	1276	66187	1.88	97.76
480	***	699	66886	1.03	98.79
490	*	166	67052	0.25	99.03
500	**	403	67455	0.60	99.63
510		19	67474	0.03	99.66
520	*	140	67614	0.21	99.86
530		27	67641	0.04	99.90
540		33	67674	0.05	99.95
550		28	67702	0.04	99.99
560		0	67702	0.00	99.99
570		3	67705	0.00	100.00
580		1	67706	0.00	100.00
590		0	67706	0.00	100.00
600		0	67706	0.00	100.00
610		0	67706	0.00	100.00
620		0	67706	0.00	100.00
630		0	67706	0.00	100.00
640		0	67706	0.00	100.00
650		0	67706	0.00	100.00

1000 2000 3000 4000 5000 6000 7000 8000

Frequency

Figure B.36 Year 2003 Scale Score Distribution: Grade 8

Year 2007 Grade=8 Form=A

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		5	5	0.02	0.02
250		0	5	0.00	0.02
260		5	10	0.02	0.03
270		0	10	0.00	0.03
280		12	22	0.04	0.07
290		13	35	0.04	0.11
300		17	52	0.05	0.16
310	*	71	123	0.22	0.38
320	*	62	185	0.19	0.57
330	**	191	376	0.59	1.15
340	****	389	765	1.19	2.35
350	**********	1054	1819	3.23	5.58
360	**********	1075	2894	3.30	8.87
370	**********	2342	5236	7.18	16.06
380	**********	3317	8553	10.17	26.23
390	**********	4171	12724	12.79	39.02
400	**********	3152	15876	9.67	48.69
410	**********	5125	21001	15.72	64.40
420	**********	3242	24243	9.94	74.34
430	**********	2924	27167	8.97	83.31
440	**********	1374	28541	4.21	87.52
450	**********	2134	30675	6.54	94.07
460	*******	736	31411	2.26	96.33
470	*****	514	31925	1.58	97.90
480	***	319	32244	0.98	98.88
490		0	32244	0.00	98.88
500	**	205	32449	0.63	99.51
510		0	32449	0.00	99.51
520	*	89	32538	0.27	99.78
530		0	32538	0.00	99.78
540	*	52	32590	0.16	99.94
550		0	32590	0.00	99.94
560		0	32590	0.00	99.94
570		19	32609	0.06	100.00
580		0	32609	0.00	100.00
590		0	32609	0.00	100.00
600		0	32609	0.00	100.00
610		0	32609	0.00	100.00
620		0	32609	0.00	100.00
630		0	32609	0.00	100.00
640		0	32609	0.00	100.00
650		0	32609	0.00	100.00

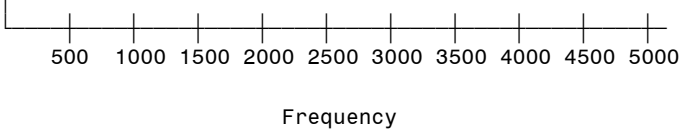


Figure B.37 Year 2007 Scale Score Distribution: Grade 8 Form A

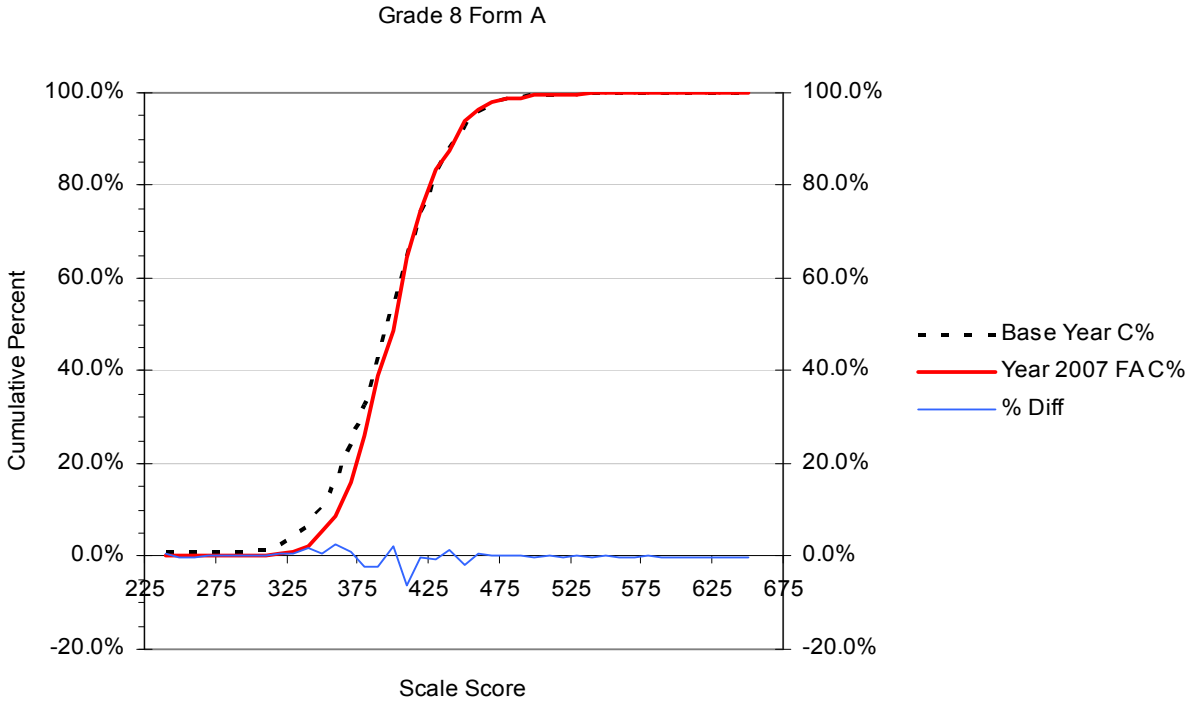


Figure B.38 Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 8 Form A

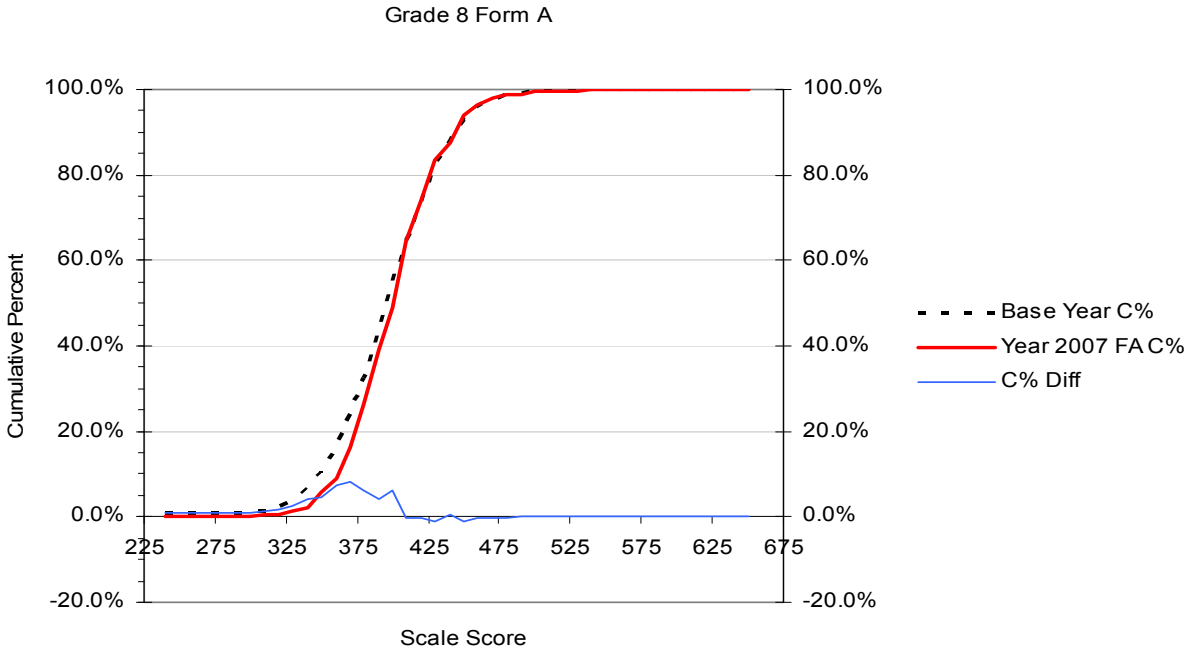


Figure B.39 Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 8 Form A

Year 2007 Grade=8 Form=B

Scale Score Midpoint		Freq	Cum. Freq	Percent	Cum. Percent
240		8	8	0.02	0.02
250		0	8	0.00	0.02
260		7	15	0.02	0.05
270		0	15	0.00	0.05
280		5	20	0.02	0.06
290		12	32	0.04	0.10
300		14	46	0.04	0.14
310		29	75	0.09	0.23
320	*	113	188	0.35	0.58
330	*	206	394	0.63	1.21
340	**	309	703	0.95	2.17
350	****	817	1520	2.52	4.68
360	*******	1341	2861	4.13	8.82
370	*******	1314	4175	4.05	12.87
380	**********	2718	6893	8.38	21.24
390	**********	3820	10713	11.77	33.01
400	**********	4913	15626	15.14	48.15
410	**********	3820	19446	11.77	59.92
420	**********	5775	25221	17.80	77.72
430	*********	1767	26988	5.44	83.16
440	**********	2842	29830	8.76	91.92
450	*****	1008	30838	3.11	95.03
460	******	1154	31992	3.56	98.58
470		0	31992	0.00	98.58
480	*	252	32244	0.78	99.36
490	*	130	32374	0.40	99.76
500		60	32434	0.18	99.94
510		0	32434	0.00	99.94
520		0	32434	0.00	99.94
530		18	32452	0.06	100.00
540		0	32452	0.00	100.00
550		0	32452	0.00	100.00
560		0	32452	0.00	100.00
570		0	32452	0.00	100.00
580		0	32452	0.00	100.00
590		0	32452	0.00	100.00
600		0	32452	0.00	100.00
610		0	32452	0.00	100.00
620		0	32452	0.00	100.00
630		0	32452	0.00	100.00
640		0	32452	0.00	100.00
650		0	32452	0.00	100.00

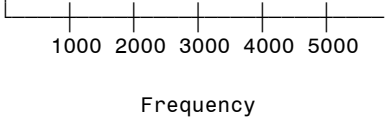


Figure B.40 Year 2007 Scale Score Distribution: Grade 8 Form B

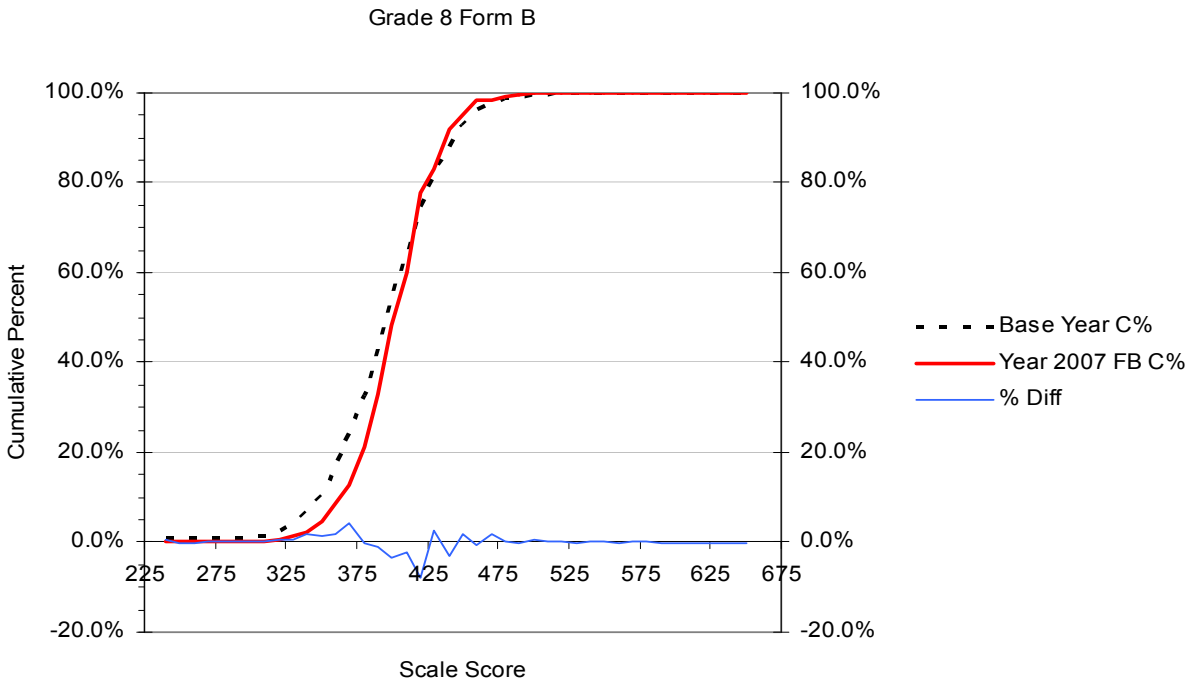


Figure B.41 Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Percent Differences between CDFs: Grade 8 Form B

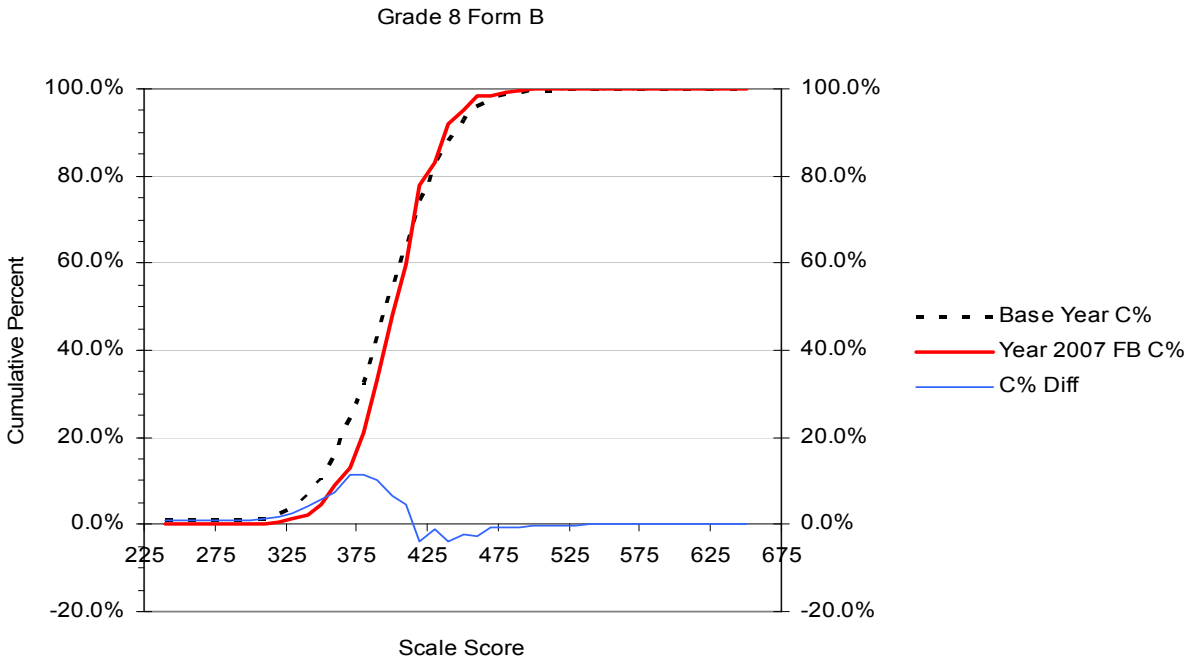


Figure B.42 Cumulative Distribution Functions (CDFs) for the Year 2003 vs. Year 2007 Scale Scores with the Cumulative Percent Differences between CDFs: Grade 8 Form B

Note. The scale score distributions and the Tukey plots for 2007 generated based on raw scores from 2007 data files.

APPENDIX C: THE 2007 MSA-READING CLASSICAL AND *IRT* ITEM PARAMETERS

Table C.1 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 3 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
2	SR	0.93	0.13	-2.3300	0.09	1.50	2.45			
5	SR	0.88	0.38	-1.1000	0.06	0.80	0.58			
6	SR	0.66	0.43	0.1500	0.05	1.04	0.95			
9	SR	0.85	0.34	-0.9300	0.06	0.94	0.89			
11	SR	0.68	0.40	0.1654	0.05	0.99	0.98			
15	SR	0.83	0.23	-1.0800	0.06	1.27	1.71			
18	SR	0.71	0.39	0.4500	0.04	0.98	0.92			
20	SR	0.40	0.35	2.2900	0.05	1.29	1.46			
23	SR	0.67	0.38	-0.0800	0.05	1.11	1.14			
30	SR	0.52	0.42	1.0000	0.04	1.01	1.00			
31	SR	0.72	0.32	-0.1100	0.05	1.09	1.11			
32	SR	0.69	0.45	0.2400	0.05	0.90	0.79			
34	SR	0.76	0.49	-0.1500	0.05	0.83	0.70			
41	SR	0.75	0.52	-0.0300	0.05	0.80	0.67			
44	SR	0.91	0.37	-1.8000	0.07	0.92	0.65			
49	SR	0.66	0.33	0.0000	0.05	1.20	1.32			
55	SR	0.65	0.49	0.0300	0.05	1.01	0.92			
56	SR	0.46	0.26	0.9300	0.04	1.21	1.31			
57	SR	0.82	0.26	-1.0600	0.06	1.28	1.74			
58	SR	0.90	0.43	-1.4300	0.06	0.70	0.43			
59	SR	0.83	0.50	-0.9100	0.06	0.88	0.66			
61	SR	0.55	0.41	0.6500	0.04	1.07	1.11			
68	SR	0.77	0.48	-0.4632	0.05	0.87	0.74			
69	SR	0.81	0.38	-0.4000	0.05	0.86	0.76			
70	SR	0.62	0.44	0.5900	0.04	0.97	0.99			
71A	SR	0.80	0.48	-0.6027	0.05	0.88	0.77			
72A	BCR	0.55	0.43	0.6767	0.04	1.03	1.04	-3.7457	-0.1823	3.9279
73A	SR	0.87	0.40	-1.3357	0.06	0.92	0.71			
74A	SR	0.70	0.43	0.0066	0.05	1.02	0.96			
75A	BCR	0.51	0.47	1.3267	0.04	0.99	0.99	-4.1588	-0.2494	4.4082
76A	SR	0.57	0.38	0.8172	0.04	1.10	1.13			
77A	SR	0.57	0.49	0.7501	0.04	0.97	0.93			
78A	BCR	0.38	0.57	2.1952	0.03	0.96	0.95	-2.4813	-0.5270	3.0083
79A	SR	0.45	0.29	1.4026	0.04	1.16	1.28			
80A	SR	0.37	0.28	1.8600	0.05	1.16	1.35			
81A	BCR	0.36	0.55	2.7146	0.03	0.93	0.93	-3.1880	-0.2086	3.3966
82A	SR	0.66	0.45	0.1785	0.05	0.93	1.06			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.2 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 3 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
2	SR	0.93	0.15	-2.3300	0.09	1.46	1.89			
5	SR	0.89	0.37	-1.1000	0.06	0.78	0.59			
6	SR	0.67	0.41	0.1500	0.04	0.99	0.90			
9	SR	0.86	0.32	-0.9300	0.06	0.93	0.85			
11	SR	0.68	0.39	0.1617	0.04	0.99	0.98			
15	SR	0.83	0.23	-1.0800	0.06	1.14	1.45			
18	SR	0.71	0.38	0.4500	0.04	0.88	0.81			
20	SR	0.41	0.35	2.2900	0.05	1.37	1.62			
23	SR	0.67	0.38	-0.0800	0.05	1.08	1.09			
30	SR	0.52	0.41	1.0000	0.04	0.95	0.94			
31	SR	0.72	0.31	-0.1100	0.05	1.03	1.06			
32	SR	0.69	0.44	0.2400	0.04	0.89	0.81			
34	SR	0.76	0.48	-0.1500	0.05	0.81	0.67			
41	SR	0.75	0.51	-0.0300	0.05	0.81	0.73			
44	SR	0.91	0.38	-1.8000	0.07	0.94	0.72			
49	SR	0.66	0.33	0.0000	0.05	1.15	1.25			
55	SR	0.65	0.47	0.0300	0.05	1.05	0.99			
56	SR	0.47	0.26	0.9300	0.04	1.16	1.26			
57	SR	0.82	0.27	-1.0600	0.06	1.24	1.51			
58	SR	0.90	0.43	-1.4300	0.06	0.72	0.44			
59	SR	0.83	0.48	-0.9100	0.06	0.91	0.70			
61	SR	0.56	0.41	0.6500	0.04	1.00	0.99			
68	SR	0.76	0.47	-0.4148	0.05	0.90	0.79			
69	SR	0.81	0.38	-0.4000	0.05	0.87	0.83			
70	SR	0.62	0.42	0.5900	0.04	0.94	0.91			
71B	SR	0.80	0.45	-0.5812	0.05	0.89	0.76			
72B	BCR	0.56	0.29	1.0200	0.03	1.39	1.59	-0.9972	-1.3939	2.3911
73B	SR	0.79	0.31	-0.5350	0.05	1.03	1.07			
74B	SR	0.78	0.30	-0.4499	0.05	1.05	1.06			
75B	BCR	0.54	0.56	0.6505	0.03	0.90	0.90	-2.4498	0.3899	2.0599
76B	SR	0.48	0.38	1.1214	0.04	0.98	1.01			
77B	SR	0.54	0.17	0.8924	0.04	1.24	1.38			
78B	BCR	0.51	0.44	1.0854	0.03	1.07	1.07	-2.5958	0.2578	2.3381
79B	SR	0.58	0.32	0.7167	0.04	1.11	1.15			
80B	SR	0.40	0.20	1.6168	0.04	1.19	1.35			
81B	BCR	0.50	0.47	1.0017	0.03	1.02	1.02	-2.8775	0.1426	2.7349
82B	SR	0.65	0.43	0.2386	0.04	0.94	0.91			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.3 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 4 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.99	0.21	-3.9886	0.21	1.66	1.04			
4	SR	0.95	0.27	-1.7739	0.08	0.80	0.66			
9	SR	0.84	0.34	-0.1033	0.05	0.86	0.73			
10	SR	0.90	0.25	-1.2892	0.07	1.19	1.22			
18	SR	0.78	0.32	0.0403	0.05	0.96	1.00			
23	SR	0.86	0.46	-0.6252	0.06	0.82	0.59			
24	SR	0.80	0.45	-0.2092	0.05	0.89	0.77			
29	SR	0.94	0.32	-1.4440	0.07	0.66	0.47			
35	SR	0.86	0.34	-0.6775	0.06	0.93	0.86			
38	SR	0.73	0.42	0.2123	0.05	0.93	0.86			
41	SR	0.82	0.38	-0.3429	0.05	0.92	0.92			
42	SR	0.73	0.33	0.2842	0.05	1.01	1.04			
43	SR	0.85	0.45	-0.7393	0.06	0.88	0.63			
44	SR	0.82	0.42	-0.3247	0.05	0.87	0.75			
45	SR	0.43	0.23	1.5832	0.04	1.13	1.20			
46	SR	0.95	0.36	-1.9501	0.09	0.91	0.55			
47	SR	0.82	0.36	-0.4109	0.05	1.03	0.96			
50	SR	0.82	0.50	-0.5286	0.05	0.89	0.73			
51	SR	0.95	0.28	-1.8443	0.08	0.80	0.66			
52	SR	0.62	0.35	0.8212	0.04	1.03	1.05			
53	SR	0.51	0.30	1.3188	0.04	1.05	1.08			
54	SR	0.37	0.26	2.0024	0.04	1.05	1.17			
55	SR	0.92	0.38	-1.4991	0.07	0.81	0.50			
62	SR	0.79	0.40	-0.1689	0.05	0.95	0.91			
64	SR	0.64	0.39	0.7087	0.04	0.96	0.93			
71A	SR	0.56	0.27	1.1275	0.04	1.10	1.14			
72A	BCR	0.55	0.37	1.4246	0.04	1.05	1.07	-3.9432	-1.0716	5.0148
73A	SR	0.61	0.20	0.8360	0.04	1.19	1.43			
74A	SR	0.79	0.45	-0.1767	0.05	0.88	0.77			
75A	BCR	0.52	0.36	1.5790	0.04	1.03	1.04	-4.7955	-0.4851	5.2806
76A	SR	0.78	0.32	-0.1660	0.05	1.03	1.15			
77A	SR	0.56	0.17	1.2465	0.04	1.20	1.29			
78A	BCR	0.49	0.43	1.5483	0.04	0.93	0.93	-3.8291	0.1137	3.7154
79A	SR	0.82	0.42	-0.4818	0.05	0.92	0.76			
80A	SR	0.56	0.32	1.1823	0.04	1.06	1.10			
81A	BCR	0.28	0.43	3.4195	0.03	0.98	0.99	-2.9824	-0.1251	3.1075
82A	SR	0.73	0.33	0.2118	0.05	1.04	0.97			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.4 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 4 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.99	0.19	-3.9886	0.21	1.27	0.48			
4	SR	0.95	0.28	-1.7739	0.08	0.78	0.60			
9	SR	0.84	0.35	-0.1033	0.05	0.84	0.76			
10	SR	0.90	0.25	-1.2892	0.07	1.09	1.19			
18	SR	0.78	0.33	0.0403	0.05	0.97	0.91			
23	SR	0.86	0.45	-0.6252	0.06	0.82	0.65			
24	SR	0.80	0.44	-0.2092	0.05	0.93	0.79			
29	SR	0.94	0.32	-1.4440	0.07	0.71	0.56			
35	SR	0.86	0.34	-0.6775	0.06	0.89	0.90			
38	SR	0.73	0.42	0.2123	0.05	0.98	0.99			
41	SR	0.82	0.38	-0.3429	0.05	0.92	0.99			
42	SR	0.73	0.35	0.2842	0.05	0.97	0.92			
43	SR	0.85	0.44	-0.7393	0.06	0.97	0.79			
44	SR	0.81	0.42	-0.3247	0.05	0.96	0.83			
45	SR	0.44	0.23	1.5832	0.04	1.15	1.25			
46	SR	0.95	0.36	-1.9501	0.08	1.00	0.76			
47	SR	0.82	0.35	-0.4109	0.05	1.06	0.98			
50	SR	0.82	0.50	-0.5286	0.05	0.92	0.77			
51	SR	0.96	0.27	-1.8443	0.08	0.71	0.61			
52	SR	0.62	0.35	0.8212	0.04	1.03	1.05			
53	SR	0.51	0.29	1.3188	0.04	1.11	1.18			
54	SR	0.36	0.27	2.0024	0.04	1.03	1.16			
55	SR	0.92	0.37	-1.4991	0.07	0.93	0.73			
62	SR	0.79	0.41	-0.1689	0.05	0.95	0.90			
64	SR	0.65	0.40	0.7087	0.04	1.00	0.96			
71B	SR	0.84	0.42	-0.5343	0.05	0.93	0.86			
72B	BCR	0.44	0.50	2.0834	0.04	0.92	0.92	-3.7861	-0.0235	3.8096
73B	SR	0.57	0.31	1.1757	0.04	1.09	1.12			
74B	SR	0.68	0.40	0.5294	0.04	1.01	1.02			
75B	BCR	0.56	0.48	1.6275	0.04	0.93	0.94	-3.1782	-1.3278	4.5059
76B	SR	0.78	0.43	-0.0504	0.05	0.92	0.83			
77B	SR	0.62	0.34	0.9068	0.04	1.03	1.05			
78B	BCR	0.48	0.37	2.4055	0.04	1.06	1.08	-5.0568	-0.7227	5.7795
79B	SR	0.57	0.42	1.1552	0.04	0.91	0.89			
80B	SR	0.49	0.29	1.6008	0.04	1.08	1.40			
81B	BCR	0.50	0.45	2.3188	0.03	1.02	1.02	-3.6205	-1.0745	4.6950
82B	SR	0.58	0.36	1.0512	0.04	1.05	1.06			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.5 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 5 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
4	SR	0.60	0.38	0.5100	0.04	0.96	0.93			
5	SR	0.57	0.34	0.5600	0.04	1.02	1			
6	SR	0.63	0.48	0.3700	0.04	0.86	0.8			
9	SR	0.93	0.27	-1.5200	0.06	0.74	0.65			
10	SR	0.90	0.39	-1.6360	0.07	0.89	0.6			
11	SR	0.84	0.22	-1.1100	0.06	1.11	1.38			
13	SR	0.86	0.19	-1.1400	0.06	1.03	1.28			
16	SR	0.84	0.34	-1.0474	0.05	0.95	0.95			
17	SR	0.80	0.40	-0.4700	0.05	0.80	0.7			
19	SR	0.75	0.24	-0.3700	0.05	1.07	1.16			
21	SR	0.82	0.37	-0.9721	0.05	0.92	0.83			
23	SR	0.57	0.32	0.4900	0.04	1.05	1.04			
25	SR	0.72	0.42	-0.1900	0.05	0.92	0.84			
26	SR	0.72	0.24	-0.2441	0.05	1.10	1.39			
28	SR	0.54	0.20	0.7388	0.04	1.14	1.21			
31	SR	0.58	0.43	0.4500	0.04	0.96	0.92			
32	SR	0.69	0.33	-0.0667	0.04	1.02	1.08			
33	SR	0.81	0.43	-0.6500	0.05	0.85	0.75			
34	SR	0.39	0.35	1.4400	0.04	0.96	0.98			
35	SR	0.69	0.45	-0.0645	0.04	0.92	0.82			
37	SR	0.63	0.32	-0.0200	0.04	1.10	1.13			
41	SR	0.78	0.38	-0.3800	0.05	0.86	0.76			
44	SR	0.67	0.46	0.0306	0.04	0.91	0.83			
45	SR	0.57	0.39	0.6900	0.04	0.98	0.99			
49	SR	0.87	0.40	-1.4723	0.06	0.91	0.73			
61A	SR	0.72	0.17	-0.2445	0.05	1.17	1.48			
62A	BCR	0.42	0.41	1.8768	0.04	0.96	0.95	-4.3444	0.6386	3.7058
63A	SR	0.59	0.35	0.4821	0.04	1.02	1.05			
64A	SR	0.83	0.40	-0.9831	0.05	0.90	0.73			
65A	BCR	0.38	0.44	1.9237	0.04	0.89	0.87	-3.9951	0.5322	3.4629
66A	SR	0.67	0.26	0.0180	0.04	1.07	1.1			
67A	SR	0.64	0.36	0.1235	0.04	1.00	0.99			
68A	BCR	0.41	0.41	1.8519	0.03	1.02	1.02	-3.0717	-0.412	3.4836
69A	SR	0.42	0.37	1.2965	0.04	0.98	0.99			
70A	SR	0.45	0.13	1.2079	0.04	1.22	1.34			
71A	BCR	0.43	0.35	1.8363	0.03	1.10	1.09	-3.3608	-0.0997	3.4605
72A	SR	0.76	0.31	-0.6218	0.05	1.00	1.08			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.6 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 5 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
4	SR	0.59	0.38	0.5100	0.04	1.00	0.98			
5	SR	0.56	0.35	0.5600	0.04	1.05	1.06			
6	SR	0.64	0.48	0.3700	0.04	0.89	0.83			
9	SR	0.93	0.25	-1.5200	0.06	0.71	0.68			
10	SR	0.90	0.39	-1.6419	0.07	0.90	0.65			
11	SR	0.84	0.23	-1.1100	0.06	1.07	1.3			
13	SR	0.86	0.18	-1.1400	0.06	1.04	2.06			
16	SR	0.85	0.34	-1.3201	0.06	0.97	0.94			
17	SR	0.80	0.39	-0.4700	0.05	0.88	0.79			
19	SR	0.75	0.23	-0.3700	0.05	1.10	1.2			
21	SR	0.82	0.38	-0.8888	0.05	0.96	0.89			
23	SR	0.57	0.33	0.4900	0.04	1.05	1.06			
25	SR	0.72	0.42	-0.1900	0.05	0.93	0.83			
26	SR	0.72	0.25	-0.2073	0.05	1.12	1.37			
28	SR	0.54	0.20	0.6177	0.04	1.17	1.29			
31	SR	0.58	0.43	0.4500	0.04	0.96	0.93			
32	SR	0.70	0.34	-0.0776	0.04	1.01	1.02			
33	SR	0.81	0.43	-0.6500	0.05	0.80	0.67			
34	SR	0.39	0.36	1.4400	0.04	0.98	1			
35	SR	0.68	0.46	0.0044	0.04	0.91	0.83			
37	SR	0.63	0.32	-0.0200	0.04	1.15	1.23			
41	SR	0.78	0.38	-0.3800	0.05	0.88	0.8			
44	SR	0.66	0.47	0.1666	0.04	0.90	0.82			
45	SR	0.56	0.39	0.6900	0.04	0.98	0.98			
49	SR	0.87	0.39	-1.4685	0.06	0.91	0.64			
61B	SR	0.55	0.44	0.7126	0.04	0.94	0.94			
62B	BCR	0.48	0.48	1.2424	0.04	0.94	0.93	-3.8438	-0.1524	3.9962
63B	SR	0.82	0.47	-0.9256	0.05	0.86	0.66			
64B	SR	0.51	0.28	0.9681	0.04	1.09	1.12			
65B	BCR	0.41	0.48	1.9756	0.04	0.92	0.91	-3.9258	0.2455	3.6803
66B	SR	0.81	0.44	-0.7653	0.05	0.89	0.7			
67B	SR	0.68	0.22	0.0330	0.04	1.19	1.36			
68B	BCR	0.42	0.39	1.6086	0.04	0.98	0.97	-3.8547	0.2498	3.6048
69B	SR	0.77	0.38	-0.4724	0.05	0.97	0.94			
70B	SR	0.68	0.14	-0.0251	0.04	1.19	1.47			
71B	BCR	0.47	0.53	1.4035	0.03	0.94	0.93	-2.6719	-0.4491	3.121
72B	SR	0.63	0.28	0.1946	0.04	1.10	1.14			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.7 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 6 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.77	0.37	-0.6467	0.05	1.18	1.09			
5	SR	0.51	0.36	0.9241	0.04	1.04	1.06			
8	SR	0.59	0.39	0.7190	0.04	1.04	1.11			
9	SR	0.94	0.34	-1.8289	0.07	0.66	0.49			
10	SR	0.74	0.23	-0.2987	0.05	1.20	1.73			
14	SR	0.77	0.34	-0.2270	0.05	0.92	0.96			
16	SR	0.79	0.53	-0.5273	0.05	0.83	0.64			
18	SR	0.83	0.38	-0.9466	0.06	0.93	0.78			
21	SR	0.88	0.40	-1.6635	0.07	1.05	0.76			
22	SR	0.78	0.42	-0.4965	0.05	0.93	0.82			
23	SR	0.69	0.42	-0.0437	0.05	0.98	0.91			
24	SR	0.69	0.46	0.0022	0.05	0.97	0.93			
25	SR	0.68	0.29	0.2939	0.04	1.09	1.24			
28	SR	0.79	0.49	-0.3341	0.05	0.77	0.63			
29	SR	0.63	0.46	0.2820	0.04	0.97	0.90			
30	SR	0.69	0.38	0.3824	0.04	0.97	0.93			
32	SR	0.86	0.41	-1.2626	0.06	0.97	0.74			
33	SR	0.32	0.24	1.8873	0.04	1.09	1.30			
34	SR	0.81	0.30	-1.0083	0.06	1.23	1.76			
35	SR	0.64	0.38	0.5459	0.04	0.99	0.94			
36	SR	0.79	0.35	-0.4554	0.05	0.92	0.96			
37	SR	0.82	0.49	-0.8703	0.05	0.91	0.72			
38	SR	0.58	0.51	0.6399	0.04	0.90	0.85			
39	SR	0.88	0.45	-1.4312	0.06	0.83	0.55			
40	SR	0.78	0.43	-0.4922	0.05	0.94	0.84			
61A	SR	0.46	0.10	1.2967	0.04	1.35	1.54			
62A	BCR	0.47	0.46	0.9838	0.04	0.95	0.95	-3.9978	0.1002	3.8976
63A	SR	0.70	0.29	0.0096	0.05	1.11	1.25			
64A	SR	0.78	0.45	-0.5493	0.05	0.90	0.82			
65A	BCR	0.46	0.56	1.3890	0.03	0.90	0.90	-3.3172	0.0212	3.2961
66A	SR	0.70	0.45	0.0128	0.05	0.93	0.86			
67A	SR	0.49	0.40	1.1631	0.04	1.00	1.07			
68A	BCR	0.40	0.46	2.0624	0.03	0.99	1.00	-3.1815	0.1260	3.0555
69A	SR	0.89	0.35	-1.4390	0.06	0.95	0.89			
70A	SR	0.56	0.37	0.7441	0.04	1.04	1.09			
71A	BCR	0.40	0.54	1.5694	0.03	0.92	0.91	-1.9073	-0.0550	1.9623
72A	SR	0.61	0.14	0.4720	0.04	1.31	1.44			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.8 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 6 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.77	0.36	-0.6467	0.05	1.19	1.10			
5	SR	0.51	0.37	0.9241	0.04	1.00	1.00			
8	SR	0.60	0.40	0.7190	0.04	1.00	1.04			
9	SR	0.94	0.33	-1.8289	0.07	0.67	0.44			
10	SR	0.74	0.22	-0.2987	0.05	1.17	1.34			
14	SR	0.78	0.35	-0.2270	0.05	0.90	0.83			
16	SR	0.80	0.53	-0.5273	0.05	0.81	0.65			
18	SR	0.84	0.38	-0.9466	0.06	0.89	0.74			
21	SR	0.89	0.41	-1.6635	0.07	1.06	0.70			
22	SR	0.78	0.41	-0.4965	0.05	0.97	0.89			
23	SR	0.70	0.42	-0.0437	0.05	0.99	0.93			
24	SR	0.70	0.46	0.0022	0.05	0.95	0.92			
25	SR	0.69	0.30	0.2939	0.04	1.04	1.10			
28	SR	0.79	0.49	-0.3341	0.05	0.78	0.62			
29	SR	0.63	0.47	0.2820	0.04	0.96	0.89			
30	SR	0.69	0.37	0.3824	0.04	0.96	0.98			
32	SR	0.86	0.41	-1.2626	0.06	0.88	0.66			
33	SR	0.32	0.25	1.8873	0.04	1.03	1.24			
34	SR	0.82	0.29	-1.0083	0.06	1.11	1.40			
35	SR	0.65	0.38	0.5459	0.04	0.94	0.90			
36	SR	0.79	0.33	-0.4554	0.05	0.98	0.96			
37	SR	0.82	0.47	-0.8703	0.05	0.93	0.75			
38	SR	0.58	0.51	0.6399	0.04	0.87	0.82			
39	SR	0.88	0.44	-1.4312	0.06	0.88	0.57			
40	SR	0.78	0.42	-0.4922	0.05	0.87	0.75			
61B	SR	0.50	0.09	1.1203	0.04	1.33	1.48			
62B	BCR	0.39	0.57	1.6868	0.03	0.85	0.84	-2.1096	-0.3222	2.4318
63B	SR	0.47	0.19	1.2314	0.04	1.20	1.34			
64B	SR	0.38	0.40	1.6474	0.04	0.95	0.99			
65B	BCR	0.38	0.45	1.9829	0.03	0.94	0.95	-3.1114	0.1952	2.9162
66B	SR	0.71	0.45	-0.0760	0.05	0.87	0.85			
67B	SR	0.47	0.29	1.1471	0.04	1.10	1.17			
68B	BCR	0.40	0.41	1.6954	0.03	1.07	1.07	-1.8039	-0.2437	2.0476
69B	SR	0.56	0.22	0.8038	0.04	1.20	1.30			
70B	SR	0.45	0.23	1.2334	0.04	1.16	1.24			
71B	BCR	0.54	0.56	1.0008	0.03	0.88	0.88	-1.5360	-0.7039	2.2399
72B	SR	0.54	0.08	0.8124	0.04	1.31	1.43			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.9 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 7 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.89	0.38	-1.6474	0.06	0.91	0.67			
3	SR	0.85	0.25	-1.1065	0.06	1.02	1.19			
6	SR	0.47	0.46	1.2004	0.04	0.96	1.01			
8	SR	0.37	0.30	1.1216	0.04	1.08	1.18			
10	SR	0.62	0.24	0.3792	0.04	1.15	1.22			
14	SR	0.69	0.38	0.0457	0.04	0.94	0.95			
16	SR	0.65	0.36	0.1649	0.04	0.99	0.99			
20	SR	0.82	0.42	-1.1073	0.06	0.95	0.82			
22	SR	0.87	0.40	-1.5119	0.06	0.94	0.86			
23	SR	0.55	0.42	0.6159	0.04	0.99	0.99			
26	SR	0.77	0.24	-0.4347	0.05	1.10	1.44			
27	SR	0.52	0.26	0.8787	0.04	1.17	1.26			
28	SR	0.63	0.42	0.2107	0.04	0.98	0.99			
31	SR	0.58	0.35	0.5308	0.04	1.06	1.11			
32	SR	0.86	0.38	-1.3415	0.06	0.91	0.85			
33	SR	0.61	0.31	0.5246	0.04	1.10	1.21			
36	SR	0.89	0.31	-1.8027	0.07	1.06	1.05			
37	SR	0.71	0.49	-0.2783	0.05	0.88	0.77			
38	SR	0.73	0.37	-0.5500	0.05	1.02	1.01			
39	SR	0.63	0.30	0.2337	0.04	1.10	1.13			
40	SR	0.87	0.34	-1.3703	0.06	0.86	0.90			
41	SR	0.77	0.41	-0.5760	0.05	0.94	0.96			
42	SR	0.70	0.52	-0.3503	0.05	0.90	0.79			
43	SR	0.71	0.42	-0.3690	0.05	0.99	1.01			
44	SR	0.68	0.45	-0.0528	0.05	0.93	0.86			
61A	SR	0.66	0.30	0.0086	0.04	1.10	1.18			
62A	BCR	0.55	0.55	0.5418	0.04	0.87	0.85	-3.2089	-0.8134	4.0224
63A	SR	0.65	0.43	0.0527	0.04	0.97	0.91			
64A	SR	0.65	0.46	0.0459	0.04	0.92	0.86			
65A	BCR	0.42	0.58	1.7340	0.03	0.85	0.85	-2.6962	-0.5614	3.2576
66A	SR	0.72	0.26	-0.2786	0.05	1.14	1.23			
67A	SR	0.60	0.35	0.3226	0.04	1.07	1.09			
68A	BCR	0.47	0.51	0.9831	0.03	0.97	0.97	-3.2780	0.1664	3.1116
69A	SR	0.88	0.47	-1.5373	0.06	0.83	0.56			
70A	SR	0.77	0.49	-0.6676	0.05	0.89	0.77			
71A	BCR	0.44	0.53	1.1365	0.03	0.86	0.86	-3.2492	0.4938	2.7554
72A	SR	0.54	0.17	0.6768	0.04	1.26	1.41			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.10 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 7 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.89	0.36	-1.6474	0.06	0.91	0.71			
3	SR	0.85	0.25	-1.1065	0.05	1.08	1.24			
6	SR	0.48	0.47	1.2004	0.04	0.93	0.99			
8	SR	0.37	0.31	1.1216	0.04	1.08	1.17			
10	SR	0.62	0.24	0.3792	0.04	1.14	1.25			
14	SR	0.69	0.38	0.0457	0.04	0.94	0.91			
16	SR	0.64	0.36	0.1649	0.04	1.02	1.00			
20	SR	0.83	0.41	-1.1073	0.05	0.94	0.82			
22	SR	0.87	0.39	-1.5119	0.06	0.95	0.97			
23	SR	0.54	0.42	0.6159	0.04	0.99	0.98			
26	SR	0.77	0.24	-0.4347	0.05	1.06	1.25			
27	SR	0.51	0.26	0.8787	0.04	1.16	1.25			
28	SR	0.63	0.42	0.2107	0.04	0.96	0.98			
31	SR	0.58	0.36	0.5308	0.04	1.04	1.05			
32	SR	0.85	0.37	-1.3415	0.06	0.98	0.89			
33	SR	0.61	0.32	0.5246	0.04	1.04	1.24			
36	SR	0.90	0.31	-1.8027	0.07	1.02	0.87			
37	SR	0.71	0.50	-0.2783	0.05	0.85	0.77			
38	SR	0.74	0.37	-0.5500	0.05	1.04	1.11			
39	SR	0.63	0.29	0.2337	0.04	1.13	1.22			
40	SR	0.87	0.35	-1.3703	0.06	0.86	0.86			
41	SR	0.77	0.42	-0.5760	0.05	0.92	0.83			
42	SR	0.71	0.51	-0.3503	0.05	0.89	0.76			
43	SR	0.71	0.43	-0.3690	0.05	1.00	1.10			
44	SR	0.68	0.45	-0.0528	0.04	0.91	0.83			
61B	SR	0.59	0.43	0.3754	0.04	0.96	0.91			
62B	BCR	0.53	0.51	0.5535	0.03	0.92	0.91	-3.6912	0.0403	3.6509
63B	SR	0.71	0.38	-0.2669	0.05	0.99	0.97			
64B	SR	0.53	0.34	0.7089	0.04	1.04	1.09			
65B	BCR	0.52	0.50	0.7465	0.03	0.90	0.90	-3.4363	-0.1985	3.6348
66B	SR	0.59	0.35	0.3701	0.04	1.04	1.12			
67B	SR	0.83	0.28	-0.9994	0.05	1.04	1.09			
68B	BCR	0.47	0.45	1.1703	0.04	0.99	0.99	-3.7139	0.0922	3.6216
69B	SR	0.27	0.41	2.1429	0.05	0.94	0.98			
70B	SR	0.73	0.26	-0.4029	0.05	1.12	1.29			
71B	BCR	0.50	0.52	1.1420	0.03	0.96	0.97	-2.8994	-0.4808	3.3802
72B	SR	0.54	0.31	0.6241	0.04	1.08	1.11			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.11 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 8 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
3	SR	0.62	0.39	0.0700	0.04	1.06	1.05			
6	SR	0.53	0.25	0.9600	0.04	1.13	1.18			
8	SR	0.54	0.37	0.5100	0.04	1.02	1.06			
9	SR	0.93	0.34	-1.5700	0.06	0.53	0.39			
22	SR	0.98	0.24	-3.6000	0.15	1.10	0.84			
23	SR	0.55	0.17	0.6400	0.04	1.18	1.31			
24	SR	0.58	0.25	0.6021	0.04	1.10	1.15			
25	SR	0.81	0.22	-0.8000	0.05	1.12	1.42			
26	SR	0.62	0.29	0.3900	0.04	1.06	1.09			
29	SR	0.71	0.41	-0.1900	0.04	0.94	0.89			
30	SR	0.62	0.32	0.3534	0.04	1.05	1.05			
31	SR	0.61	0.38	0.2000	0.04	1.05	1.15			
32	SR	0.52	0.19	0.9800	0.04	1.22	1.37			
33	SR	0.62	0.39	0.2900	0.04	1.00	0.96			
35	SR	0.76	0.27	-0.4600	0.05	1.01	1.17			
36	SR	0.53	0.20	0.8299	0.04	1.19	1.27			
37	SR	0.74	0.33	-0.2400	0.05	0.98	0.97			
38	SR	0.75	0.39	-0.4900	0.05	0.97	0.91			
39	SR	0.52	0.34	0.9049	0.04	1.04	1.09			
41	SR	0.85	0.26	-1.0200	0.05	0.97	1.28			
44	SR	0.73	0.48	-0.1600	0.04	0.82	0.77			
46	SR	0.80	0.43	-0.2200	0.05	0.76	0.66			
48	SR	0.70	0.49	-0.0500	0.04	0.85	0.76			
49	SR	0.74	0.34	-0.1600	0.04	1.00	0.99			
50	SR	0.73	0.40	-0.1800	0.04	0.90	0.86			
61A	SR	0.34	0.33	1.7184	0.04	1.02	1.09			
62A	BCR	0.55	0.55	0.4281	0.03	0.85	0.85	-2.9192	-0.0803	2.9995
63A	SR	0.82	0.36	-0.8649	0.05	0.94	1.21			
64A	SR	0.86	0.26	-1.2399	0.06	1.04	0.96			
65A	BCR	0.50	0.57	0.8175	0.03	0.87	0.87	-2.7566	-0.1481	2.9046
66A	SR	0.80	0.36	-0.8170	0.05	0.94	0.87			
67A	SR	0.56	0.41	0.6456	0.04	0.96	0.95			
68A	BCR	0.45	0.55	1.2712	0.03	0.90	0.90	-2.7023	-0.0236	2.7259
69A	SR	0.41	0.34	1.4585	0.04	1.00	1.06			
70A	SR	0.75	0.40	-0.3658	0.05	0.95	0.93			
71A	BCR	0.43	0.52	1.3742	0.04	0.88	0.88	-3.8384	0.4270	3.4114
72A	SR	0.69	0.33	-0.1350	0.05	1.02	1.04			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.12 The 2007 MSA-Reading Classical and *IRT* Item Parameters: Grade 8 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
3	SR	0.63	0.37	0.0700	0.04	1.07	1.04			
6	SR	0.53	0.23	0.9600	0.04	1.08	1.12			
8	SR	0.54	0.36	0.5100	0.04	1.02	0.99			
9	SR	0.93	0.35	-1.5700	0.06	0.62	0.40			
22	SR	0.98	0.25	-3.6000	0.15	0.91	0.75			
23	SR	0.55	0.15	0.6400	0.04	1.15	1.20			
24	SR	0.58	0.24	0.6408	0.04	1.02	1.05			
25	SR	0.81	0.22	-0.8000	0.05	1.06	1.14			
26	SR	0.63	0.28	0.3900	0.04	1.06	1.07			
29	SR	0.72	0.41	-0.1900	0.04	0.93	0.90			
30	SR	0.61	0.31	0.4163	0.04	1.03	1.02			
31	SR	0.62	0.37	0.2000	0.04	1.03	1.02			
32	SR	0.52	0.17	0.9800	0.04	1.17	1.28			
33	SR	0.62	0.38	0.2900	0.04	0.97	0.95			
35	SR	0.76	0.28	-0.4600	0.05	0.99	1.00			
36	SR	0.53	0.20	0.7995	0.04	1.14	1.21			
37	SR	0.74	0.33	-0.2400	0.05	0.93	0.87			
38	SR	0.75	0.38	-0.4900	0.05	0.99	0.95			
39	SR	0.52	0.32	0.8781	0.04	1.00	1.03			
41	SR	0.85	0.27	-1.0200	0.05	1.02	1.14			
44	SR	0.73	0.47	-0.1600	0.04	0.85	0.81			
46	SR	0.80	0.44	-0.2200	0.05	0.73	0.64			
48	SR	0.70	0.48	-0.0500	0.04	0.87	0.77			
49	SR	0.75	0.34	-0.1600	0.04	0.93	0.90			
50	SR	0.74	0.40	-0.1800	0.04	0.91	0.88			
61B	SR	0.64	0.45	0.2266	0.04	0.88	0.82			
62B	BCR	0.56	0.54	0.4596	0.03	0.85	0.84	-3.0584	-0.2356	3.2940
63B	SR	0.92	0.45	-1.9561	0.07	0.85	0.50			
64B	SR	0.69	0.30	-0.0410	0.04	1.02	1.04			
65B	BCR	0.50	0.54	0.8603	0.03	0.83	0.83	-2.7890	-0.0510	2.8400
66B	SR	0.53	0.09	0.7404	0.04	1.24	1.35			
67B	SR	0.60	0.14	0.5508	0.04	1.17	1.30			
68B	BCR	0.52	0.50	0.7356	0.03	0.89	0.89	-2.4394	0.0959	2.3435
69B	SR	0.81	0.50	-0.7751	0.05	0.84	0.70			
70B	SR	0.65	0.16	0.2330	0.04	1.17	1.28			
71B	BCR	0.51	0.56	0.9936	0.03	0.81	0.81	-2.0250	-0.3500	2.3750
72B	SR	0.57	0.03	0.5625	0.04	1.29	1.47			

Note. 'A' indicates that it is a unique item appearing only on Form A.

APPENDIX D: THE 2007 MSA-READING BLUEPRINTS

Table D.1 The 2007 MSA-Reading Blueprint: Grade 3

Code	Standard / Objective statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***16***										
1.B	**General Reading Process: Vocabulary: Students will apply their knowledge of letter/sound relationships and word structure to decode unfamiliar words**											
1.B.1	**Use a variety of phonetic skills to read unfamiliar words**											
1.B.1.a	Apply phonics skills											
1.B.2	**Decode words in grade-level texts**											
1.B.2.a	Sound out common word parts											
1.B.2.b	Break words into familiar parts											
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Develop a conceptual understanding of new words**											
1.D.2.b	Identify and explain word relationships to determine the meanings of words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to determine the meanings of words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***16***										
1.B	**General Reading Process: Vocabulary: Students will apply their knowledge of letter/sound relationships and word structure to decode unfamiliar words**											
1.B.1	**Use a variety of phonetic skills to read unfamiliar words**											
1.B.1.a	Apply phonics skills											
1.B.2	**Decode words in grade-level texts**											
1.B.2.a	Sound out common word parts											
1.B.2.b	Break words into familiar parts											
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Develop a conceptual understanding of new words**											
1.D.2.b	Identify and explain word relationships to determine the meanings of words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to determine the meanings of words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions based on the text and prior knowledge											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop comprehension skills by reading a variety of self-selected and assigned informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to meaning											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions based on the text and prior knowledge											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop comprehension skills by reading a variety of self-selected and assigned informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to meaning											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3	**Develop knowledge of organizational structure of informational text to understand what is read**											
2.A.3.a	Identify and analyze the organization of texts											
2.A.3.b	Identify and use words and phrases associated with common organizational patterns											
2.A.4	**Determine important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Identify and explain relationships between and among ideas											
2.A.4.g	Draw conclusions and make generalizations from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Identify and explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Identify and explain the author's use of language**											
2.A.5.a	Identify and explain specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Identify and explain specific words and punctuation that create tone											
2.A.5.c	Identify and explain the effect of repetition of words or phrases											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3	**Develop knowledge of organizational structure of informational text to understand what is read**											
2.A.3.a	Identify and analyze the organization of texts											
2.A.3.b	Identify and use words and phrases associated with common organizational patterns											
2.A.4	**Determine important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Identify and explain relationships between and among ideas											
2.A.4.g	Draw conclusions and make generalizations from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Identify and explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Identify and explain the author's use of language**											
2.A.5.a	Identify and explain specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Identify and explain specific words and punctuation that create tone											
2.A.5.c	Identify and explain the effect of repetition of words or phrases											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.b	Identify and explain additions or changes that would make the text easier to understand											
2.A.6.c	Identify and explain what makes the text a reliable source of information											
2.A.6.d	Explain whether or not the author's opinion is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have made it easier to understand the author's point											
2.A.6.f	Identify and explain words that affect the reader's feelings											
3	**Comprehension of Literary Text**	***4***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
			(7)	***(3)***			***(7)***	***(3)***			***(7)***	***(3)***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Use text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how graphic aids contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											
3.A.3	**Use elements of narrative texts to facilitate understanding**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											
3.A.3.b	Identify and explain the elements of a story											
3.A.3.c	Identify and describe the setting											
3.A.3.d	Identify and analyze the characters											
3.A.3.e	Identify and explain the relationships between and among characters and events											
3.A.3.f	Identify and describe the narrator of the story											
3.A.4	**Use elements of poetry to facilitate understanding**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.b	Identify and explain additions or changes that would make the text easier to understand											
2.A.6.c	Identify and explain what makes the text a reliable source of information											
2.A.6.d	Explain whether or not the author's opinion is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have made it easier to understand the author's point											
2.A.6.f	Identify and explain words that affect the reader's feelings											
3	**Comprehension of Literary Text**	***4***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
					(7)	***(3)***			***(7)***	***(3)***		
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Use text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how graphic aids contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											
3.A.3	**Use elements of narrative texts to facilitate understanding**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											
3.A.3.b	Identify and explain the elements of a story											
3.A.3.c	Identify and describe the setting											
3.A.3.d	Identify and analyze the characters											
3.A.3.e	Identify and explain the relationships between and among characters and events											
3.A.3.f	Identify and describe the narrator of the story											
3.A.4	**Use elements of poetry to facilitate understanding**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.4.a	Use structural features to identify poetry as a literary form											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain sound elements of poetry											
3.A.5	**Use elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to identify a play as a literary form											
3.A.5.b	Identify and explain the action of a scene											
3.A.5.c	Identify and explain stage directions that help to create character and movement											
3.A.5.d	Identify and explain stage directions and dialogue that help to create character											
3.A.6	**Determine important ideas and messages in literary texts**											
3.A.6.a	Identify and explain main ideas and universal themes											
3.A.6.b	Identify and explain a similar theme in more than one text											
3.A.6.c	Retell the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.7	**Identify and describe the author's use of language**											
3.A.7.a	Identify and explain how the author's use of dialogue contributes to a story											
3.A.7.b	Identify and explain specific words and phrases that contribute to the meaning of a text											
3.A.7.c	Identify and explain words and punctuation that create tone											
3.A.7.d	Identify and explain figurative language											
3.A.7.e	Identify and explain language that appeals to the senses and feelings											
3.A.7.f	Identify and explain repetition and exaggeration											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.4.a	Use structural features to identify poetry as a literary form											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain sound elements of poetry											
3.A.5	**Use elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to identify a play as a literary form											
3.A.5.b	Identify and explain the action of a scene											
3.A.5.c	Identify and explain stage directions that help to create character and movement											
3.A.5.d	Identify and explain stage directions and dialogue that help to create character											
3.A.6	**Determine important ideas and messages in literary texts**											
3.A.6.a	Identify and explain main ideas and universal themes											
3.A.6.b	Identify and explain a similar theme in more than one text											
3.A.6.c	Retell the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.7	**Identify and describe the author's use of language**											
3.A.7.a	Identify and explain how the author's use of dialogue contributes to a story											
3.A.7.b	Identify and explain specific words and phrases that contribute to the meaning of a text											
3.A.7.c	Identify and explain words and punctuation that create tone											
3.A.7.d	Identify and explain figurative language											
3.A.7.e	Identify and explain language that appeals to the senses and feelings											
3.A.7.f	Identify and explain repetition and exaggeration											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Identify and explain the believability of the characters' actions and the story's events											
3.A.8.b	Identify and explain questions left unanswered by the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Identify and explain the believability of the characters' actions and the story's events											
3.A.8.b	Identify and explain questions left unanswered by the text											

Note. The number in the parenthesis indicates the total number of field test items.

Table D.2 The 2007 MSA-Reading Blueprint: Grade 4

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.B	**General Reading Process: Phonics: Students will apply knowledge of letter/sound relationships and word structure to decode words**											
1.B.1	**Use a variety of phonetic skills to read unfamiliar words**											
1.B.1.a	Apply phonics skills											
1.B.2	**Decode words in grade-level texts**											
1.B.2.a	Sound out common word parts											
1.B.2.b	Break words into familiar parts											
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Develop a conceptual understanding of new words**											
1.D.2.b	Identify and explain word relationships to determine the meanings of words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to determine the meanings of words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.B	**General Reading Process: Phonics: Students will apply knowledge of letter/sound relationships and word structure to decode words**											
1.B.1	**Use a variety of phonetic skills to read unfamiliar words**											
1.B.1.a	Apply phonics skills											
1.B.2	**Decode words in grade-level texts**											
1.B.2.a	Sound out common word parts											
1.B.2.b	Break words into familiar parts											
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Develop a conceptual understanding of new words**											
1.D.2.b	Identify and explain word relationships to determine the meanings of words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to determine the meanings of words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions or make generalizations about the text											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4***	***2***	***4*** ***(7)***	***2*** ***(3)***	***4***	***2***	***4*** ***(7)***	***2*** ***(3)***	***4***	***2***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop comprehension skills by reading a variety of self-selected and assigned informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions or make generalizations about the text											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
			(7)	***(3)***			***(7)***	***(3)***			***(7)***	***(3)***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop comprehension skills by reading a variety of self-selected and assigned informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to meaning											
2.A.3	**Develop knowledge of organizational structure of informational text to understand what is read**											
2.A.3.a	Identify and analyze the organization of texts											
2.A.3.b	Identify and use words and phrases associated with common organizational patterns											
2.A.4	**Determine important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Identify and explain relationships between and among ideas											
2.A.4.g	Draw conclusions and make generalizations from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Identify and explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Identify and explain the author's use of language**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to meaning											
2.A.3	**Develop knowledge of organizational structure of informational text to understand what is read**											
2.A.3.a	Identify and analyze the organization of texts											
2.A.3.b	Identify and use words and phrases associated with common organizational patterns											
2.A.4	**Determine important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Identify and explain relationships between and among ideas											
2.A.4.g	Draw conclusions and make generalizations from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Identify and explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Identify and explain the author's use of language**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.5.a	Identify and explain specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Identify and explain specific words and punctuation that create tone											
2.A.5.c	Identify and explain the effect of repetition of words or phrases											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											
2.A.6.b	Identify and explain additions or changes that would make the text easier to understand											
2.A.6.c	Identify and explain what makes the text a reliable source of information											
2.A.6.d	Explain whether or not the author's opinion is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have made it easier to understand the author's point											
2.A.6.f	Identify and explain words that affect the reader's feelings											
3	**Comprehension of Literary Text**	***5***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
			(7)	***(3)***			***(7)***	***(3)***			***(7)***	***(3)***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Use text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how print features contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.5.a	Identify and explain specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Identify and explain specific words and punctuation that create tone											
2.A.5.c	Identify and explain the effect of repetition of words or phrases											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											
2.A.6.b	Identify and explain additions or changes that would make the text easier to understand											
2.A.6.c	Identify and explain what makes the text a reliable source of information											
2.A.6.d	Explain whether or not the author's opinion is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have made it easier to understand the author's point											
2.A.6.f	Identify and explain words that affect the reader's feelings											
3	**Comprehension of Literary Text**	***5***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Use text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how print features contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3	**Use elements of narrative texts to facilitate understanding**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											
3.A.3.b	Identify and explain the elements of a story											
3.A.3.c	Identify and describe the setting											
3.A.3.d	Identify and analyze the characters											
3.A.3.e	Identify and explain the relationships between and among characters and events											
3.A.3.f	Identify and explain how the actions of the character(s) affect the plot											
3.A.3.g	Identify and describe the narrator of the story											
3.A.4	**Use elements of poetry to facilitate understanding**											
3.A.4.a	Use structural features to identify poetry as a literary form and distinguish among types of poems											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain sound elements of poetry											
3.A.5	**Use elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to identify a play as a literary form											
3.A.5.b	Identify and explain the action of a scene											
3.A.5.c	Identify and explain stage directions that help to create character and movement											
3.A.5.d	Identify and explain stage directions and dialogue that help to create character											
3.A.6	**Determine important ideas and messages in literary texts**											

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3	**Use elements of narrative texts to facilitate understanding**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											
3.A.3.b	Identify and explain the elements of a story											
3.A.3.c	Identify and describe the setting											
3.A.3.d	Identify and analyze the characters											
3.A.3.e	Identify and explain the relationships between and among characters and events											
3.A.3.f	Identify and explain how the actions of the character(s) affect the plot											
3.A.3.g	Identify and describe the narrator of the story											
3.A.4	**Use elements of poetry to facilitate understanding**											
3.A.4.a	Use structural features to identify poetry as a literary form and distinguish among types of poems											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain sound elements of poetry											
3.A.5	**Use elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to identify a play as a literary form											
3.A.5.b	Identify and explain the action of a scene											
3.A.5.c	Identify and explain stage directions that help to create character and movement											
3.A.5.d	Identify and explain stage directions and dialogue that help to create character											
3.A.6	**Determine important ideas and messages in literary texts**											

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.6.a	Identify and explain main ideas and universal themes											
3.A.6.b	Identify and explain a similar theme in more than one text											
3.A.6.c	Paraphrase the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.7	**Identify and describe the author's use of language**											
3.A.7.a	Identify and explain how the author's use of dialogue contributes to a story											
3.A.7.b	Identify and explain specific words and phrases that contribute to the meaning of a text											
3.A.7.c	Identify and explain words and punctuation that create tone											
3.A.7.d	Identify and explain figurative language											
3.A.7.e	Identify and explain language that appeals to the senses and feelings											
3.A.7.f	Identify and explain repetition and exaggeration											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Identify and explain the believability of the characters' actions and the story's events											
3.A.8.b	Identify and explain questions left unanswered by the text											
3.A.8.c	Identify and explain the relationship between a literary text and its historical context											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.6.a	Identify and explain main ideas and universal themes											
3.A.6.b	Identify and explain a similar theme in more than one text											
3.A.6.c	Paraphrase the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.7	**Identify and describe the author's use of language**											
3.A.7.a	Identify and explain how the author's use of dialogue contributes to a story											
3.A.7.b	Identify and explain specific words and phrases that contribute to the meaning of a text											
3.A.7.c	Identify and explain words and punctuation that create tone											
3.A.7.d	Identify and explain figurative language											
3.A.7.e	Identify and explain language that appeals to the senses and feelings											
3.A.7.f	Identify and explain repetition and exaggeration											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Identify and explain the believability of the characters' actions and the story's events											
3.A.8.b	Identify and explain questions left unanswered by the text											
3.A.8.c	Identify and explain the relationship between a literary text and its historical context											

Note. The number in the parenthesis indicates the total number of field test items.

Table D.3 The 2007 MSA-Reading Blueprint: Grade 5

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Develop and apply a conceptual understanding of new words**											
1.D.2.b	Identify and explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions or make generalizations about the text											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Develop and apply a conceptual understanding of new words**											
1.D.2.b	Identify and explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions or make generalizations about the text											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
					(7)	***(3)***			***(7)***	***(3)***		
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop and apply comprehension skills by reading a variety of self-selected and assigned print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to meaning											
2.A.3	**Develop and apply knowledge of organizational structure of informational text to understand what is read**											
2.A.3.a	Identify and analyze the organizational patterns of texts											
2.A.3.b	Identify and use words and phrases associated with common organizational patterns											
2.A.4	**Determine and analyze important ideas and messages in informational text**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop and apply comprehension skills by reading a variety of self-selected and assigned print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to meaning											
2.A.3	**Develop and apply knowledge of organizational structure of informational text to understand what is read**											
2.A.3.a	Identify and analyze the organizational patterns of texts											
2.A.3.b	Identify and use words and phrases associated with common organizational patterns											
2.A.4	**Determine and analyze important ideas and messages in informational text**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Identify and explain relationships between and among ideas											
2.A.4.g	Draw conclusions and make generalizations from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Identify and explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Identify and explain the author's use of language**											
2.A.5.a	Identify and explain specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Identify and explain specific words and punctuation that create tone											
2.A.5.c	Identify and explain the effect of repetition of words and phrases											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											
2.A.6.b	Identify and explain additions and changes that would make the text easier to understand											
2.A.6.c	Identify and explain what makes the text a reliable source of information											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Identify and explain relationships between and among ideas											
2.A.4.g	Draw conclusions and make generalizations from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Identify and explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Identify and explain the author's use of language**											
2.A.5.a	Identify and explain specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Identify and explain specific words and punctuation that create tone											
2.A.5.c	Identify and explain the effect of repetition of words and phrases											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											
2.A.6.b	Identify and explain additions and changes that would make the text easier to understand											
2.A.6.c	Identify and explain what makes the text a reliable source of information											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.d	Determine and explain whether or not the author's opinion is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have clarified the author's point											
2.A.6.f	Identify and explain words the author uses to appeal to emotion											
3	**Comprehension of Literary Text**	***5***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how print features contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											
3.A.3.b	Identify and explain the conflict and the events of the plot											
3.A.3.c	Identify and describe the setting and explain how the setting affects the characters and the mood											
3.A.3.d	Analyze the characterization											
3.A.3.e	Identify and explain relationships between and among characters and events											
3.A.3.f	Identify and explain how the actions of the character(s) affect the plot											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.d	Determine and explain whether or not the author's opinion is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have clarified the author's point											
2.A.6.f	Identify and explain words the author uses to appeal to emotion											
3	**Comprehension of Literary Text**	***5***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
					(7)	***(3)***			***(7)***	***(3)***		
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how print features contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											
3.A.3.b	Identify and explain the conflict and the events of the plot											
3.A.3.c	Identify and describe the setting and explain how the setting affects the characters and the mood											
3.A.3.d	Analyze the characterization											
3.A.3.e	Identify and explain relationships between and among characters and events											
3.A.3.f	Identify and explain how the actions of the character(s) affect the plot											

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.g	Identify and describe the narrator											
3.A.4	**Analyze elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to identify poetry as a literary form and distinguish among types of poems											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain sound elements of poetry											
3.A.5	**Analyze elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to identify a play as a literary form and distinguish among types of plays											
3.A.5.b	Identify and explain the action of a scene											
3.A.5.c	Identify and explain how stage directions create character and movement											
3.A.6	**Determine important ideas and messages in literary texts**											
3.A.6.a	Identify and explain main ideas and universal themes											
3.A.6.b	Identify and explain similar themes across multiple texts											
3.A.6.c	Paraphrase the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.6.f	Explain the implications for the reader and/or society											
3.A.7	**Identify and describe the author's use of language**											
3.A.7.a	Identify and explain how the author's use of dialogue contributes to a story											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.g	Identify and describe the narrator											
3.A.4	**Analyze elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to identify poetry as a literary form and distinguish among types of poems											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain sound elements of poetry											
3.A.5	**Analyze elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to identify a play as a literary form and distinguish among types of plays											
3.A.5.b	Identify and explain the action of a scene											
3.A.5.c	Identify and explain how stage directions create character and movement											
3.A.6	**Determine important ideas and messages in literary texts**											
3.A.6.a	Identify and explain main ideas and universal themes											
3.A.6.b	Identify and explain similar themes across multiple texts											
3.A.6.c	Paraphrase the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.6.f	Explain the implications for the reader and/or society											
3.A.7	**Identify and describe the author's use of language**											
3.A.7.a	Identify and explain how the author's use of dialogue contributes to a story											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.7.b	Identify and explain specific words and phrases that contribute to the meaning of a text											
3.A.7.c	Identify and explain words and phrases that create tone											
3.A.7.d	Identify and explain figurative language that contributes to meaning											
3.A.7.e	Identify and explain language that appeals to the senses and feelings											
3.A.7.f	Identify and explain repetition and exaggeration contribute to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Determine and explain the plausibility of the characters' actions and the plot											
3.A.8.b	Identify and explain questions left unanswered by the text											
3.A.8.c	Identify and explain the relationship between a literary text and its historical context											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.7.b	Identify and explain specific words and phrases that contribute to the meaning of a text											
3.A.7.c	Identify and explain words and phrases that create tone											
3.A.7.d	Identify and explain figurative language that contributes to meaning											
3.A.7.e	Identify and explain language that appeals to the senses and feelings											
3.A.7.f	Identify and explain repetition and exaggeration contribute to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Determine and explain the plausibility of the characters' actions and the plot											
3.A.8.b	Identify and explain questions left unanswered by the text											
3.A.8.c	Identify and explain the relationship between a literary text and its historical context											

Note. The number in the parenthesis indicates the total number of field test items.

Table D.4 The 2007 MSA-Reading Blueprint: Grade 6

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Apply a conceptual understanding of new words**											
1.D.2.b	Explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions or make generalizations about the text											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Apply a conceptual understanding of new words**											
1.D.2.b	Explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain what is directly stated in the text											
1.E.4.c	Identify and explain what is not directly stated in the text by drawing inferences											
1.E.4.d	Draw conclusions or make generalizations about the text											
1.E.4.e	Confirm, refute, or make predictions and form new ideas											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop and apply comprehension skills by reading a variety of self-selected and assigned print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to supporting the main idea of the text											
2.A.3	**Develop and apply knowledge of organizational structure of informational text to facilitate understanding**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1.E.4.f	Paraphrase the main idea of the text											
1.E.4.g	Summarize the text											
1.E.4.h	Connect the text to prior knowledge or personal experience											
2	**Comprehension of Informational Text**	***5***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Develop and apply comprehension skills by reading a variety of self-selected and assigned print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of nonfiction materials to gain information and content knowledge											
2.A.1.b	Read, use, and identify the characteristics of functional documents											
2.A.2	**Identify and use text features to facilitate understanding of informational texts**											
2.A.2.a	Use print features											
2.A.2.b	Use graphic aids											
2.A.2.c	Use informational aids											
2.A.2.d	Use organizational aids											
2.A.2.e	Use online features											
2.A.2.f	Identify and explain the contributions of text features to supporting the main idea of the text											
2.A.3	**Develop and apply knowledge of organizational structure of informational text to facilitate understanding**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3.a	Identify and analyze the organizational patterns of texts											
2.A.3.b	Explain how the organizational pattern clarifies and reinforces meaning and supports the author's/text's purpose											
2.A.4	**Determine and analyze important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages.											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Explain relationships between and among ideas											
2.A.4.g	Synthesize ideas from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Analyze purposeful use of language**											
2.A.5.a	Analyze specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Analyze specific language choices that create tone											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3.a	Identify and analyze the organizational patterns of texts											
2.A.3.b	Explain how the organizational pattern clarifies and reinforces meaning and supports the author's/text's purpose											
2.A.4	**Determine and analyze important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's opinion											
2.A.4.c	State and support main ideas or messages.											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information not related to the main idea											
2.A.4.f	Explain relationships between and among ideas											
2.A.4.g	Synthesize ideas from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Analyze purposeful use of language**											
2.A.5.a	Analyze specific words or phrases that contribute to the meaning of a text											
2.A.5.b	Analyze specific language choices that create tone											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.5.c	Analyze the effect of repetition of words or phrases on meaning											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											
2.A.6.b	Analyze changes or additions to the structures and features of the text that would make the text easier to understand											
2.A.6.c	Analyze the text and its information for reliability											
2.A.6.d	Determine and explain whether or not the author's argument or position is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have clarified the author's point.											
2.A.6.f	Identify and explain language intended to persuade the reader											
3	**Comprehension of Literary Text**	***5***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how print features contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.5.c	Analyze the effect of repetition of words or phrases on meaning											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Explain whether the text fulfills the reading purpose											
2.A.6.b	Analyze changes or additions to the structures and features of the text that would make the text easier to understand											
2.A.6.c	Analyze the text and its information for reliability											
2.A.6.d	Determine and explain whether or not the author's argument or position is presented fairly											
2.A.6.e	Identify and explain information not included in the text that would have clarified the author's point.											
2.A.6.f	Identify and explain language intended to persuade the reader											
3	**Comprehension of Literary Text**	***5***	***4***	***2***	***4*** ***(7)***	***2*** ***(3)***	***4***	***2***	***4*** ***(7)***	***2*** ***(3)***	***4***	***2***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze text features to facilitate understanding of literary texts**											
3.A.2.a	Identify and explain how organizational aids contribute to meaning											
3.A.2.b	Identify and explain how print features contribute to meaning											
3.A.2.c	Identify and explain how informational aids contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Identify and use structural features to distinguish among types of narrative text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.b	Analyze the conflict and the events of the plot											
3.A.3.c	Analyze details that provide information about the setting, the mood created by the setting, and ways in which the setting affects the characters											
3.A.3.d	Analyze the characterization											
3.A.3.e	Analyze relationships between and among characters and events											
3.A.3.f	Identify and explain how the actions of the character(s) affect the plot											
3.A.3.g	Analyze conflicts that motivate characters and those that advance the plot											
3.A.3.h	Identify and explain the author's approach to issues of time in a narrative											
3.A.3.i	Identify and explain the point of view											
3.A.4	**Analyze elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to distinguish among types of poems											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain how sound elements of poetry contribute to meaning											
3.A.5	**Analyze elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to distinguish among types of plays											
3.A.5.b	Identify and explain the action of scenes and acts											
3.A.5.c	Identify and explain how stage directions create character and movement											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.b	Analyze the conflict and the events of the plot											
3.A.3.c	Analyze details that provide information about the setting, the mood created by the setting, and ways in which the setting affects the characters											
3.A.3.d	Analyze the characterization											
3.A.3.e	Analyze relationships between and among characters and events											
3.A.3.f	Identify and explain how the actions of the character(s) affect the plot											
3.A.3.g	Analyze conflicts that motivate characters and those that advance the plot											
3.A.3.h	Identify and explain the author's approach to issues of time in a narrative											
3.A.3.i	Identify and explain the point of view											
3.A.4	**Analyze elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to distinguish among types of poems											
3.A.4.b	Identify and explain the meaning of words, lines, and stanzas											
3.A.4.c	Identify and explain how sound elements of poetry contribute to meaning											
3.A.5	**Analyze elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to distinguish among types of plays											
3.A.5.b	Identify and explain the action of scenes and acts											
3.A.5.c	Identify and explain how stage directions create character and movement											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.5.d	Identify and explain stage directions and dialogue that help to create character											
3.A.6	**Determine important ideas and messages in literary texts**											
3.A.6.a	Analyze main ideas and universal themes											
3.A.6.b	Analyze similar themes across multiple texts											
3.A.6.c	Paraphrase the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.6.f	Explain the implications for the reader and/or society											
3.A.7	**Analyze the author's purposeful use of language**											
3.A.7.a	Analyze specific words and phrases that contribute to the meaning of a text											
3.A.7.b	Analyze words and phrases that create tone											
3.A.7.c	Identify and explain figurative language that contributes to meaning											
3.A.7.d	Analyze how sensory language contributes to meaning											
3.A.7.e	Analyze how repetition and exaggeration contribute to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Determine and explain the plausibility of the characters' actions and the plot											
3.A.8.b	Identify and explain questions left unanswered by the text											
3.A.8.c	Identify and explain the relationship between a literary text and its historical and social context											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.5.d	Identify and explain stage directions and dialogue that help to create character											
3.A.6	**Determine important ideas and messages in literary texts**											
3.A.6.a	Analyze main ideas and universal themes											
3.A.6.b	Analyze similar themes across multiple texts											
3.A.6.c	Paraphrase the text											
3.A.6.d	Summarize the text											
3.A.6.e	Identify and explain personal connections to the text											
3.A.6.f	Explain the implications for the reader and/or society											
3.A.7	**Analyze the author's purposeful use of language**											
3.A.7.a	Analyze specific words and phrases that contribute to the meaning of a text											
3.A.7.b	Analyze words and phrases that create tone											
3.A.7.c	Identify and explain figurative language that contributes to meaning											
3.A.7.d	Analyze how sensory language contributes to meaning											
3.A.7.e	Analyze how repetition and exaggeration contribute to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Determine and explain the plausibility of the characters' actions and the plot											
3.A.8.b	Identify and explain questions left unanswered by the text											
3.A.8.c	Identify and explain the relationship between a literary text and its historical and social context											

Note. The number in the parenthesis indicates the total number of field test items.

Table D.5 The 2007 MSA-Reading Blueprint: Grade 7

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Apply a conceptual understanding of new words**											
1.D.2.b	Explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain information directly stated in the text											
1.E.4.c	Draw inferences and/or conclusions or make generalizations											
1.E.4.d	Confirm, refute, or make predictions and form new ideas											
1.E.4.e	Summarize or paraphrase the text											
1.E.4.f	Connect the text to prior knowledge or personal experience											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***15***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Apply a conceptual understanding of new words**											
1.D.2.b	Explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	**Use strategies to demonstrate understanding of the text (after reading)**											
1.E.4.a	Identify and explain the main idea											
1.E.4.b	Identify and explain information directly stated in the text											
1.E.4.c	Draw inferences and/or conclusions or make generalizations											
1.E.4.d	Confirm, refute, or make predictions and form new ideas											
1.E.4.e	Summarize or paraphrase the text											
1.E.4.f	Connect the text to prior knowledge or personal experience											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2	**Comprehension of Informational Text**	***5***	***4***	***2***	***4*** ***(7)***	***2*** ***(3)***	***4***	***2***	***4*** ***(7)***	***2*** ***(3)***	***4***	***2***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Apply comprehension skills by selecting, reading, and interpreting a variety of print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of primary and secondary sources of academic information											
2.A.1.b	Read, use, and identify the characteristics of workplace and other real-world documents											
2.A.2	**Analyze text features to facilitate understanding of informational texts**											
2.A.2.a	Analyze print features that contribute to meaning											
2.A.2.b	Analyze graphic aids that contribute to meaning											
2.A.2.c	Analyze informational aids that contribute to meaning											
2.A.2.d	Analyze organizational aids that contribute to meaning											
2.A.2.e	Analyze online features that contribute to meaning											
2.A.2.f	Analyze the relationship between the text features and the content of the text as a whole											
2.A.3	**Apply knowledge of organizational patterns of informational text to facilitate understanding**											
2.A.3.a	Analyze the organizational patterns of texts											
2.A.3.b	Analyze the contribution of the organizational pattern to clarifying or reinforcing meaning and supporting the author's purpose and/or argument											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2	**Comprehension of Informational Text**	***5***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Apply comprehension skills by selecting, reading, and interpreting a variety of print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of primary and secondary sources of academic information											
2.A.1.b	Read, use, and identify the characteristics of workplace and other real-world documents											
2.A.2	**Analyze text features to facilitate understanding of informational texts**											
2.A.2.a	Analyze print features that contribute to meaning											
2.A.2.b	Analyze graphic aids that contribute to meaning											
2.A.2.c	Analyze informational aids that contribute to meaning											
2.A.2.d	Analyze organizational aids that contribute to meaning											
2.A.2.e	Analyze online features that contribute to meaning											
2.A.2.f	Analyze the relationship between the text features and the content of the text as a whole											
2.A.3	**Apply knowledge of organizational patterns of informational text to facilitate understanding**											
2.A.3.a	Analyze the organizational patterns of texts											
2.A.3.b	Analyze the contribution of the organizational pattern to clarifying or reinforcing meaning and supporting the author's purpose and/or argument											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3.c	Use organizational structure to locate specific information											
2.A.4	**Analyze important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's argument, viewpoint, or perspective											
2.A.4.c	State and support main ideas and messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information or ideas peripheral to the main idea or message											
2.A.4.f	Explain relationships between and among ideas											
2.A.4.g	Synthesize ideas from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Analyze purposeful use of language**											
2.A.5.a	Analyze specific word choice that contributes to meaning and/or creates style											
2.A.5.b	Analyze specific language choices to determine tone											
2.A.5.c	Analyze repetition and variation of specific words and phrases that contribute to meaning											
2.A.6	**Read critically to evaluate informational text**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3.c	Use organizational structure to locate specific information											
2.A.4	**Analyze important ideas and messages in informational text**											
2.A.4.a	Identify and explain the author's/text's purpose and intended audience											
2.A.4.b	Identify and explain the author's argument, viewpoint, or perspective											
2.A.4.c	State and support main ideas and messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Identify and explain information or ideas peripheral to the main idea or message											
2.A.4.f	Explain relationships between and among ideas											
2.A.4.g	Synthesize ideas from text to form new understanding											
2.A.4.h	Distinguish between a fact and an opinion											
2.A.4.i	Explain how someone might use the text											
2.A.4.j	Connect the text to prior knowledge or experience											
2.A.5	**Analyze purposeful use of language**											
2.A.5.a	Analyze specific word choice that contributes to meaning and/or creates style											
2.A.5.b	Analyze specific language choices to determine tone											
2.A.5.c	Analyze repetition and variation of specific words and phrases that contribute to meaning											
2.A.6	**Read critically to evaluate informational text**											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.a	Analyze the extent to which the text fulfills the reading purpose											
2.A.6.b	Analyze the extent to which the structure and features of the text clarify the purpose and the information											
2.A.6.c	Analyze the text and its information for reliability											
2.A.6.d	Analyze the author's argument or position for clarity and/or bias											
2.A.6.e	Analyze additional information that would clarify or strengthen the author's argument or viewpoint											
2.A.6.f	Analyze language intended to persuade the reader											
3	**Comprehension of Literary Text**	***5***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
			(7)	***(3)***			***(7)***	***(3)***			***(7)***	***(3)***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze text features to facilitate understanding of literary texts**											
3.A.2.a	Analyze text features that contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Use structural features to distinguish among types of narrative text											
3.A.3.b	Analyze the conflict and the events of the plot											
3.A.3.c	Analyze details that provide information about the setting, the mood created by the setting, and ways in which the setting affects the characters											
3.A.3.d	Analyze the characterization											
3.A.3.e	Analyze relationships between and among characters and events											
3.A.3.f	Analyze the actions of characters that serve to advance the plot											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.a	Analyze the extent to which the text fulfills the reading purpose											
2.A.6.b	Analyze the extent to which the structure and features of the text clarify the purpose and the information											
2.A.6.c	Analyze the text and its information for reliability											
2.A.6.d	Analyze the author's argument or position for clarity and/or bias											
2.A.6.e	Analyze additional information that would clarify or strengthen the author's argument or viewpoint											
2.A.6.f	Analyze language intended to persuade the reader											
3	**Comprehension of Literary Text**	***5***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
					(7)	***(3)***			***(7)***	***(3)***		
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze text features to facilitate understanding of literary texts**											
3.A.2.a	Analyze text features that contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Use structural features to distinguish among types of narrative text											
3.A.3.b	Analyze the conflict and the events of the plot											
3.A.3.c	Analyze details that provide information about the setting, the mood created by the setting, and ways in which the setting affects the characters											
3.A.3.d	Analyze the characterization											
3.A.3.e	Analyze relationships between and among characters and events											
3.A.3.f	Analyze the actions of characters that serve to advance the plot											

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.g	Analyze conflicts that motivate characters and those that advance the plot											
3.A.3.h	Analyze the author's approach to issues of time in a narrative											
3.A.3.i	Analyze the point of view											
3.A.3.j	Analyze the interactions among narrative elements and their contribution to meaning											
3.A.4	**Analyze elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to distinguish among types of poems											
3.A.4.b	Analyze language and structural features to determine meaning											
3.A.4.c	Analyze sound elements of poetry that contribute to meaning											
3.A.4.d	Analyze other poetic elements, such as setting, mood, tone, etc. that contribute to meaning											
3.A.5	**Analyze elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to distinguish among types of plays											
3.A.5.b	Analyze the action of individual scenes and acts and its relationship to the plot											
3.A.5.c	Analyze how stage directions affect dialogue, characters, and plot											
3.A.6	**Analyze important ideas and messages in literary texts**											
3.A.6.a	Analyze main ideas and universal themes											
3.A.6.b	Analyze similar themes across multiple texts											
3.A.6.c	Summarize or paraphrase the text											
3.A.6.d	Reflect on and explain personal connections to the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.g	Analyze conflicts that motivate characters and those that advance the plot											
3.A.3.h	Analyze the author's approach to issues of time in a narrative											
3.A.3.i	Analyze the point of view											
3.A.3.j	Analyze the interactions among narrative elements and their contribution to meaning											
3.A.4	**Analyze elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to distinguish among types of poems											
3.A.4.b	Analyze language and structural features to determine meaning											
3.A.4.c	Analyze sound elements of poetry that contribute to meaning											
3.A.4.d	Analyze other poetic elements, such as setting, mood, tone, etc. that contribute to meaning											
3.A.5	**Analyze elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to distinguish among types of plays											
3.A.5.b	Analyze the action of individual scenes and acts and its relationship to the plot											
3.A.5.c	Analyze how stage directions affect dialogue, characters, and plot											
3.A.6	**Analyze important ideas and messages in literary texts**											
3.A.6.a	Analyze main ideas and universal themes											
3.A.6.b	Analyze similar themes across multiple texts											
3.A.6.c	Summarize or paraphrase the text											
3.A.6.d	Reflect on and explain personal connections to the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.6.e	Explain the implications for the reader and/or society											
3.A.7	**Analyze the author's purposeful use of language**											
3.A.7.a	Analyze how specific language choices contribute to meaning and create style											
3.A.7.b	Analyze language choices that create tone											
3.A.7.c	Analyze figurative language that contributes to meaning and/or creates style											
3.A.7.d	Analyze imagery that contributes to meaning and/or creates style											
3.A.7.e	Analyze elements of style and their contribution to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Analyze the plausibility of the plot and the credibility of the characters											
3.A.8.b	Analyze the extent to which the text contains ambiguities, subtleties, or contradictions											
3.A.8.c	Analyze and evaluate the relationship between a literary text and its historical, social, and political contexts											

Note. The number in the parenthesis indicates the total number of field test items.

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Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.6.e	Explain the implications for the reader and/or society											
3.A.7	**Analyze the author's purposeful use of language**											
3.A.7.a	Analyze how specific language choices contribute to meaning and create style											
3.A.7.b	Analyze language choices that create tone											
3.A.7.c	Analyze figurative language that contributes to meaning and/or creates style											
3.A.7.d	Analyze imagery that contributes to meaning and/or creates style											
3.A.7.e	Analyze elements of style and their contribution to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Analyze the plausibility of the plot and the credibility of the characters											
3.A.8.b	Analyze the extent to which the text contains ambiguities, subtleties, or contradictions											
3.A.8.c	Analyze and evaluate the relationship between a literary text and its historical, social, and political contexts											

Note. The number in the parenthesis indicates the total number of field test items.

Table D.6 The 2007 MSA-Reading Blueprint: Grade 8

Code	Standard / Objective Statement	No. of SAT10 Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***16***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Apply a conceptual understanding of new words**											
1.D.2.b	Explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Select and use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	Use strategies to demonstrate understanding of the text (after reading)											
1.E.4.a	Identify and explain the main idea or argument											
1.E.4.b	Identify and explain information directly stated in the text											
1.E.4.c	Draw inferences and/or conclusions or make generalizations											
1.E.4.d	Confirm, refute, or make predictions and form new ideas											
1.E.4.e	Summarize or paraphrase the text											
1.E.4.f	Connect the text to prior knowledge or personal experience											

Code	Standard / Objective Statement	No. of SAT10 Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
1	**General Reading Process**	***16***										
1.D	**General Reading Process: Vocabulary: Students will use a variety of strategies and opportunities to understand word meanings and to increase vocabulary**											
1.D.2	**Apply a conceptual understanding of new words**											
1.D.2.b	Explain relationships between and among words											
1.D.3	**Understand, acquire, and use new vocabulary**											
1.D.3.a	Use context to determine the meanings of words											
1.D.3.b	Use word structure to determine the meanings of words											
1.D.3.c	Select and use resources to confirm definitions and gather further information about words											
1.E	**General Reading Processes: Comprehension: Students will use a variety of strategies to understand what they read (construct meaning)**											
1.E.4	Use strategies to demonstrate understanding of the text (after reading)											
1.E.4.a	Identify and explain the main idea or argument											
1.E.4.b	Identify and explain information directly stated in the text											
1.E.4.c	Draw inferences and/or conclusions or make generalizations											
1.E.4.d	Confirm, refute, or make predictions and form new ideas											
1.E.4.e	Summarize or paraphrase the text											
1.E.4.f	Connect the text to prior knowledge or personal experience											

Code	Standard / Objective Statement	No. of SAT10 Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2	**Comprehension of Informational Text**	***5***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
					(7)	***(3)***			***(7)***	***(3)***		
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Apply comprehension skills by selecting, reading, and interpreting a variety of print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of primary and secondary sources of academic information											
2.A.1.b	Read, use, and identify the characteristics of workplace and other real-world documents											
2.A.2	**Analyze text features to facilitate and extend understanding of informational texts**											
2.A.2.a	Analyze print features that contribute to meaning											
2.A.2.b	Analyze graphic aids that contribute to meaning											
2.A.2.c	Analyze informational aids that contribute to meaning											
2.A.2.d	Analyze organizational aids that contribute to meaning											
2.A.2.e	Analyze online features that contribute to meaning											
2.A.2.f	Analyze the relationship between the text features and the content of the text as a whole											
2.A.3	**Apply knowledge of organizational patterns of informational text to facilitate understanding**											
2.A.3.a	Analyze the organizational patterns of texts											
2.A.3.b	Analyze the contribution of the organizational pattern to clarifying or reinforcing meaning and supporting the author's purpose and/or argument											
2.A.3.c	Analyze shifts in organizational patterns											

Code	Standard / Objective Statement	No. of SAT10 Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2	**Comprehension of Informational Text**	***5***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***	***4***	***2***	***4 (7)***	***2 (3)***
2.A	**Comprehension of Informational Text: Students will read, comprehend, interpret, analyze, and evaluate informational texts**											
2.A.1	**Apply comprehension skills by selecting, reading, and interpreting a variety of print and electronic informational texts**											
2.A.1.a	Read, use, and identify the characteristics of primary and secondary sources of academic information											
2.A.1.b	Read, use, and identify the characteristics of workplace and other real-world documents											
2.A.2	**Analyze text features to facilitate and extend understanding of informational texts**											
2.A.2.a	Analyze print features that contribute to meaning											
2.A.2.b	Analyze graphic aids that contribute to meaning											
2.A.2.c	Analyze informational aids that contribute to meaning											
2.A.2.d	Analyze organizational aids that contribute to meaning											
2.A.2.e	Analyze online features that contribute to meaning											
2.A.2.f	Analyze the relationship between the text features and the content of the text as a whole											
2.A.3	**Apply knowledge of organizational patterns of informational text to facilitate understanding**											
2.A.3.a	Analyze the organizational patterns of texts											
2.A.3.b	Analyze the contribution of the organizational pattern to clarifying or reinforcing meaning and supporting the author's purpose and/or argument											
2.A.3.c	Analyze shifts in organizational patterns											

Code	Standard / Objective Statement	No. of SAT10 Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3.d	Use organizational structure to locate specific information											
2.A.4	**Analyze important ideas and messages in informational text**											
2.A.4.a	Analyze the author's/text's purpose and intended audience											
2.A.4.b	Analyze the author's argument, viewpoint, or perspective											
2.A.4.c	State and support main ideas and messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Analyze information or ideas peripheral to the main idea or message											
2.A.4.f	Analyze relationships between and among ideas											
2.A.4.g	Synthesize ideas from text to form new understanding											
2.A.4.h	Explain the implications of the text or now someone might use the text											
2.A.4.i	Connect the text to prior knowledge or experience											
2.A.5	**Analyze purposeful use of language**											
2.A.5.a	Analyze specific word choice that contributes to meaning and/or creates style											
2.A.5.b	Analyze specific language choices to determine tone											
2.A.5.c	Analyze the appropriateness of tone											
2.A.5.d	Analyze repetition and variation of specific words and phrases that contribute to meaning											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Analyze the extent to which the text fulfills the reading purpose											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of SAT10 Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.3.d	Use organizational structure to locate specific information											
2.A.4	**Analyze important ideas and messages in informational text**											
2.A.4.a	Analyze the author's/text's purpose and intended audience											
2.A.4.b	Analyze the author's argument, viewpoint, or perspective											
2.A.4.c	State and support main ideas and messages											
2.A.4.d	Summarize the text or a portion of text											
2.A.4.e	Analyze information or ideas peripheral to the main idea or message											
2.A.4.f	Analyze relationships between and among ideas											
2.A.4.g	Synthesize ideas from text to form new understanding											
2.A.4.h	Explain the implications of the text or now someone might use the text											
2.A.4.i	Connect the text to prior knowledge or experience											
2.A.5	**Analyze purposeful use of language**											
2.A.5.a	Analyze specific word choice that contributes to meaning and/or creates style											
2.A.5.b	Analyze specific language choices to determine tone											
2.A.5.c	Analyze the appropriateness of tone											
2.A.5.d	Analyze repetition and variation of specific words and phrases that contribute to meaning											
2.A.6	**Read critically to evaluate informational text**											
2.A.6.a	Analyze the extent to which the text fulfills the reading purpose											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.b	Analyze the extent to which the structure and features of the text clarify the purpose and the information											
2.A.6.c	Analyze the text and its information for reliability											
2.A.6.d	Analyze the author's argument or position for clarity and/or bias											
2.A.6.e	Analyze additional information that would clarify or strengthen the author's argument or viewpoint											
2.A.6.f	Analyze the effectiveness of persuasive techniques to sway the reader to a particular point of view											
2.A.6.g	Analyze the effect of elements of style on meaning											
3	**Comprehension of Literary Text**	***4***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
			(7)	***(3)***			***(7)***	***(3)***			***(7)***	***(3)***
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze and evaluate text features to facilitate and extend understanding of literary texts**											
3.A.2.a	Analyze text features that contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Use structural features to distinguish among types of narrative text											
3.A.3.b	Analyze the conflict and its role in advancing the plot											
3.A.3.c	Analyze details that provide information about the setting, the mood created by the setting, and the role the setting plays in the text											
3.A.3.d	Analyze the characterization											
3.A.3.e	Analyze relationships between and among characters and events											

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
2.A.6.b	Analyze the extent to which the structure and features of the text clarify the purpose and the information											
2.A.6.c	Analyze the text and its information for reliability											
2.A.6.d	Analyze the author's argument or position for clarity and/or bias											
2.A.6.e	Analyze additional information that would clarify or strengthen the author's argument or viewpoint											
2.A.6.f	Analyze the effectiveness of persuasive techniques to sway the reader to a particular point of view											
2.A.6.g	Analyze the effect of elements of style on meaning											
3	**Comprehension of Literary Text**	***4***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***	***4***	***2***
					(7)	***(3)***			***(7)***	***(3)***		
3.A.	**Comprehension of Literary Text: Students will read, comprehend, interpret, analyze, and evaluate literary texts**											
3.A.2	**Analyze and evaluate text features to facilitate and extend understanding of literary texts**											
3.A.2.a	Analyze text features that contribute to meaning											
3.A.3	**Analyze elements of narrative texts to facilitate understanding and interpretation**											
3.A.3.a	Use structural features to distinguish among types of narrative text											
3.A.3.b	Analyze the conflict and its role in advancing the plot											
3.A.3.c	Analyze details that provide information about the setting, the mood created by the setting, and the role the setting plays in the text											
3.A.3.d	Analyze the characterization											
3.A.3.e	Analyze relationships between and among characters and events											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.f	Analyze the actions of characters that serve to advance the plot											
3.A.3.g	Analyze conflicts that motivate characters and those that advance the plot											
3.A.3.h	Analyze the author's approach to issues of time in a narrative											
3.A.3.i	Analyze the point of view and its effect on meaning											
3.A.3.j	Analyze the interactions among narrative elements and their contribution to meaning											
3.A.4	**Analyze and evaluate elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to distinguish among types of poems											
3.A.4.b	Analyze language and structural features to determine meaning											
3.A.4.c	Analyze sound elements of poetry that contribute to meaning											
3.A.4.d	Analyze other poetic elements, such as, setting, mood, tone, etc. that contribute to meaning											
3.A.5	**Analyze and evaluate elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to distinguish among types of dramas											
3.A.5.b	Analyze structural features of drama that contribute to meaning											
3.A.5.c	Analyze how dialogue and stage directions work together to create characters and plot											
3.A.6	**Analyze important ideas and messages in literary texts**											
3.A.6.a	Analyze main ideas and universal themes											
3.A.6.b	Analyze similar themes across multiple texts											
3.A.6.c	Summarize or paraphrase the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.3.f	Analyze the actions of characters that serve to advance the plot											
3.A.3.g	Analyze conflicts that motivate characters and those that advance the plot											
3.A.3.h	Analyze the author's approach to issues of time in a narrative											
3.A.3.i	Analyze the point of view and its effect on meaning											
3.A.3.j	Analyze the interactions among narrative elements and their contribution to meaning											
3.A.4	**Analyze and evaluate elements of poetry to facilitate understanding and interpretation**											
3.A.4.a	Use structural features to distinguish among types of poems											
3.A.4.b	Analyze language and structural features to determine meaning											
3.A.4.c	Analyze sound elements of poetry that contribute to meaning											
3.A.4.d	Analyze other poetic elements, such as, setting, mood, tone, etc. that contribute to meaning											
3.A.5	**Analyze and evaluate elements of drama to facilitate understanding**											
3.A.5.a	Use structural features to distinguish among types of dramas											
3.A.5.b	Analyze structural features of drama that contribute to meaning											
3.A.5.c	Analyze how dialogue and stage directions work together to create characters and plot											
3.A.6	**Analyze important ideas and messages in literary texts**											
3.A.6.a	Analyze main ideas and universal themes											
3.A.6.b	Analyze similar themes across multiple texts											
3.A.6.c	Summarize or paraphrase the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 1)		No. of Augmented Items (Form 2)		No. of Augmented Items (Form 3)		No. of Augmented Items (Form 4)		No. of Augmented Items (Form 5)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.6.d	Reflect on and explain personal connections to the text											
3.A.6.e	Explain the implications for the reader and/or society											
3.A.7	**Analyze and evaluate the author's purposeful use of language**											
3.A.7.a	Analyze and evaluate how specific language choices contribute to meaning and create style											
3.A.7.b	Analyze and evaluate language choices that create tone											
3.A.7.c	Analyze the appropriateness of a particular tone											
3.A.7.d	Analyze and evaluate figurative language that contributes to meaning and/or creates style											
3.A.7.e	Analyze imagery that contributes to meaning and/or creates style											
3.A.7.f	Analyze elements of style and their contribution to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Analyze and evaluate the plausibility of the plot and the credibility of the characters											
3.A.8.b	Analyze and evaluate the extent to which the text contains ambiguities, subtleties, or contradictions											
3.A.8.c	Analyze and evaluate the relationship between a literary text and its historical, social, and political contexts											
3.A.8.d	Analyze the relationship between the structure and the purpose of the text											

Note. The number in the parenthesis indicates the total number of field test items.

Code	Standard / Objective Statement	No. of *SAT10* Items	No. of Augmented Items (Form 6)		No. of Augmented Items (Form 7)		No. of Augmented Items (Form 8)		No. of Augmented Items (Form 9)		No. of Augmented Items (Form 10)	
		SR	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*	*SR*	*BCR*
3.A.6.d	Reflect on and explain personal connections to the text											
3.A.6.e	Explain the implications for the reader and/or society											
3.A.7	**Analyze and evaluate the author's purposeful use of language**											
3.A.7.a	Analyze and evaluate how specific language choices contribute to meaning and create style											
3.A.7.b	Analyze and evaluate language choices that create tone											
3.A.7.c	Analyze the appropriateness of a particular tone											
3.A.7.d	Analyze and evaluate figurative language that contributes to meaning and/or creates style											
3.A.7.e	Analyze imagery that contributes to meaning and/or creates style											
3.A.7.f	Analyze elements of style and their contribution to meaning											
3.A.8	**Read critically to evaluate literary texts**											
3.A.8.a	Analyze and evaluate the plausibility of the plot and the credibility of the characters											
3.A.8.b	Analyze and evaluate the extent to which the text contains ambiguities, subtleties, or contradictions											
3.A.8.c	Analyze and evaluate the relationship between a literary text and its historical, social, and political contexts											
3.A.8.d	Analyze the relationship between the structure and the purpose of the text											

Note. The number in the parenthesis indicates the total number of field test items.