Kentucky Summative Assessments

2022–2023 Yearbook

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Glossary of Terms

Classification accuracy: the extent to which achievement classifications from test scores match classifications if test scores contained no error of measurement.

Classification consistency: the extent to which achievement classifications from test scores match classifications from test scores of a parallel form of the same test.

Constructed-response item: a test item that requires a form of written response by the examinee.

Differential item functioning (DIF): the difference in performance on an item between subgroups of students, after controlling for differences in group achievement or score level.

Item response theory (IRT): the measurement theory that prescribes relationships of item difficulty and examinee proficiency for indices of test performance.

Item-test correlation: the correlation between item score and total test score.

Kappa (statistic)**:** the proportion of consistent performance level classifications beyond chance.

Multiple-choice item: a test item that requires selection of response from a group of options.

Performance level: a categorization of achievement from test performance.

p-**value:** the proportion of correct responses to an item (for multiple-choice items).

Rasch model: a measurement model that factors proficiency and item difficulty in determining probability of item success.

Raw score: the sum of points for a test or subdomain.

Reliability: the consistency of results obtained from a measurement.

Scaled score: a score derived from a transformation of a raw score.

Standard error of measurement (SEM): a statistic in classical test theory that expresses the interval of an examinee's true score.

Standard setting: the process of setting cut points that delineate levels of achievement.

True score: a student's expected score resulting from multiple replications of measurement.

Appendix A. Participation Rates

Reading

Category	Group	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	Students Tested	46,598	46,934	43,462	46,245	46,842	49,133	49,285
Gender	Female	48.8%	48.7%	48.2%	48.7%	48.2%	48.6%	48.9%
	Male	51.2%	51.3%	51.8%	51.3%	51.8%	51.4%	51.1%
Ethnicity	Hispanic	8.7%	8.6%	8.5%	8.8%	8.7%	8.6%	8.9%
	Asian	2.1%	2.2%	2.2%	2.0%	1.9%	1.8%	1.9%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%
	Black/African American	10.6%	10.6%	10.2%	10.9%	10.9%	10.9%	10.9%
	American Indian	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%
	White	72.7%	72.8%	73.5%	72.9%	73.1%	73.5%	73.5%
	Two or More Races	5.6%	5.5%	5.4%	5.1%	5.1%	4.9%	4.6%
Migrant	Non-Migrant	99.5%	99.5%	99.5%	99.5%	99.5%	99.6%	99.6%
	Migrant	0.5%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%
LEP	Non-LEP	91.4%	92.1%	94.3%	95.4%	95.6%	96.1%	96.1%
	LEP	8.6%	7.9%	5.7%	4.6%	4.4%	3.9%	3.9%
Economic Disadvantage	Economically Disadvantaged	62.7%	61.8%	61.3%	60.5%	60.3%	59.4%	56.3%
	Not Economically Disadvantaged	37.3%	38.2%	38.7%	39.5%	39.7%	40.6%	43.7%
IEP	Non-IEP	82.2%	83.4%	84.9%	86.4%	86.9%	88.1%	89.7%
	IEP	17.8%	16.6%	15.1%	13.6%	13.1%	11.9%	10.3%

Mathematics

Category	Group	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	Students Tested	46,608	46,945	43,471	46,248	46,838	49,135	49,248
Gender	Female	48.8%	48.7%	48.2%	48.7%	48.1%	48.5%	48.8%
	Male	51.2%	51.3%	51.8%	51.3%	51.8%	51.4%	51.2%
Ethnicity	Hispanic	8.7%	8.6%	8.5%	8.9%	8.7%	8.7%	9.0%
	Asian	2.1%	2.2%	2.2%	2.0%	1.9%	1.8%	1.9%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%
	Black/African American	10.6%	10.6%	10.2%	10.9%	10.9%	10.9%	10.8%
	American Indian	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%
	White	72.7%	72.8%	73.4%	72.8%	73.1%	73.5%	73.5%
	Two or More Races	5.6%	5.5%	5.4%	5.1%	5.1%	4.9%	4.6%
Migrant	Non-Migrant	99.5%	99.5%	99.5%	99.5%	99.5%	99.6%	99.6%
	Migrant	0.5%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%
LEP	Non-LEP	91.4%	92.1%	94.2%	95.3%	95.6%	96.1%	96.0%
	LEP	8.6%	7.9%	5.8%	4.7%	4.4%	3.9%	4.0%
Economic Disadvantage	Economically Disadvantaged	62.7%	61.8%	61.3%	60.5%	60.3%	59.4%	56.2%
	Not Economically Disadvantaged	37.3%	38.2%	38.7%	39.5%	39.7%	40.6%	43.8%
IEP	Non-IEP	82.2%	83.4%	84.9%	86.4%	86.9%	88.1%	89.7%
	IEP	17.8%	16.6%	15.1%	13.6%	13.1%	11.9%	10.3%

Science

Category	Group	Grade 4	Grade 7	Grade 11
All	Students Tested	46,934	46,809	44,097
Gender	Female	48.7%	48.2%	49.0%
	Male	51.3%	51.8%	51.0%
Ethnicity	Hispanic	8.6%	8.7%	8.2%
	Asian	2.2%	1.9%	2.2%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.1%
	Black/African American	10.6%	10.8%	9.8%
	American Indian	0.1%	0.1%	0.1%
	White	72.8%	73.1%	75.6%
	Two or More Races	5.5%	5.1%	4.0%
Migrant	Non-Migrant	99.5%	99.5%	99.7%
	Migrant	0.5%	0.5%	0.3%
LEP	Non-LEP	92.1%	95.6%	96.7%
	LEP	7.9%	4.4%	3.3%
Economic Disadvantage	Economically Disadvantaged	61.8%	60.3%	52.3%
	Not Economically Disadvantaged	38.2%	39.7%	47.7%
IEP	Non-IEP	83.4%	86.9%	91.1%
	IEP	16.6%	13.1%	8.9%

Social Studies

Category	Group	Grade 5	Grade 8	Grade 11
All	Students Tested	43,442	49,083	44,007
Gender	Female	48.2%	48.5%	49.0%
	Male	51.8%	51.5%	51.0%
Ethnicity	Hispanic	8.4%	8.6%	8.2%
	Asian	2.2%	1.7%	2.2%
	Native Hawaiian/Pacific Islander	0.2%	0.1%	0.1%
	Black/African American	10.2%	10.9%	9.7%
	American Indian	0.1%	0.2%	0.1%
	White	73.5%	73.5%	75.6%
	Two or More Races	5.4%	4.9%	4.0%
Migrant	Non-Migrant	99.5%	99.6%	99.7%
	Migrant	0.5%	0.4%	0.3%
LEP	Non-LEP	94.3%	96.1%	96.8%
	LEP	5.7%	3.9%	3.2%
Economic Disadvantage	Economically Disadvantaged	61.3%	59.4%	52.3%
	Not Economically Disadvantaged	38.7%	40.6%	47.7%
IEP	Non-IEP	84.9%	88.1%	91.1%
	IEP	15.1%	11.9%	8.9%

Editing and Mechanics

Category	Group	Grade 5	Grade 8	Grade 11
All	Students Tested	43,434	49,053	43,927
Gender	Female	48.2%	48.5%	49.0%
	Male	51.8%	51.4%	51.0%
Ethnicity	Hispanic	8.4%	8.6%	8.1%
	Asian	2.2%	1.8%	2.2%
	Native Hawaiian/Pacific Islander	0.2%	0.1%	0.1%
	Black/African American	10.2%	10.9%	9.7%
	American Indian	0.1%	0.2%	0.1%
	White	73.5%	73.5%	75.7%
	Two or More Races	5.4%	4.9%	4.0%
Migrant	Non-Migrant	99.5%	99.6%	99.7%
	Migrant	0.5%	0.4%	0.3%
LEP	Non-LEP	94.3%	96.1%	96.8%
	LEP	5.7%	3.9%	3.2%
Economic Disadvantage	Economically Disadvantaged	61.3%	59.4%	52.3%
	Not Economically Disadvantaged	38.7%	40.6%	47.7%
IEP	Non-IEP	84.9%	88.1%	91.1%
	IEP	15.1%	11.9%	8.9%

On-Demand Writing

Category	Group	Grade 5	Grade 8	Grade 11
All	Students Tested	43,417	48,963	43,590
Gender	Female	48.2%	48.6%	49.2%
	Male	51.8%	51.4%	50.8%
Ethnicity	Hispanic	8.4%	8.6%	8.1%
	Asian	2.2%	1.8%	2.2%
	Native Hawaiian/Pacific Islander	0.2%	0.1%	0.1%
	Black/African American	10.2%	10.8%	9.6%
	American Indian	0.1%	0.2%	0.1%
	White	73.5%	73.5%	75.8%
	Two or More Races	5.4%	4.9%	4.0%
Migrant	Non-Migrant	99.5%	99.6%	99.7%
	Migrant	0.5%	0.4%	0.3%
LEP	Non-LEP	94.3%	96.1%	96.8%
	LEP	5.7%	3.9%	3.2%
Economic Disadvantage	Economically Disadvantaged	61.3%	59.4%	52.2%
	Not Economically Disadvantaged	38.7%	40.6%	47.8%
IEP	Non-IEP	84.9%	88.1%	91.1%
	IEP	15.1%	11.9%	8.9%

Appendix B. Score Reports

Individual Student Report (ISR)

FIRSTNAME01 B. LASTNAME01

These are your student's results from the
Kentucky Summative Assessments

Spring 2023
Grade 3

To access a full description of your child's Grade
3 Performance Levels please scan the QR Code
or go to https://bit.ly/PLDGrade3.

State ID: **3160000001**
Sample School Name
Sample District Name

Kentucky Summative Assessments Student Scores
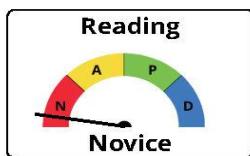
Reading

Performance Level

Novice

! **Novice**
420
Score Range 400-499

A student performing at the **Novice** performance level for grade 3 Reading demonstrates minimal ability to read closely by asking and answering questions and making logical inferences about a text to construct meaning. The student rarely demonstrates the ability to identify relevant explicit and implicit information from a summary to determine the theme or central ideas of a text.

Mathematics
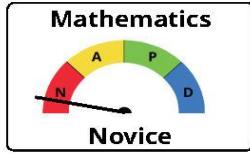
Performance Level

Novice

! **Novice**
425
Score Range 400-504

A student performing at the **Novice** performance level for grade 3 Mathematics displays little understanding of how to make sense of quantities and their relationships in problem situations. The student rarely demonstrates the ability to flexibly choose among methods and strategies to solve contextual and mathematical problems, understand and explain their approaches and produce accurate answers efficiently.

PERFORMANCE LEVEL LEGEND

! Novice (N)   ▲ Apprentice (A)   ✔ Proficient (P)   ★ Distinguished (D)

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Kentucky Summative Assessments Student Scores (continued)   FIRSTNAME01 B. LASTNAME01

Reading: FIRSTNAME01'S OVERALL RESULTS - Novice

	400	499	512	527	600
Your Student 420					
School Average 481					
District Average 481					
State Average 497					
	Novice	Apprentice	Proficient	Distinguished	
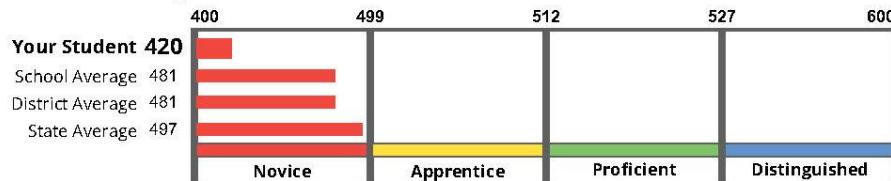
Mathematics: FIRSTNAME01'S OVERALL RESULTS - Novice

	400	504	520	541	600
Your Student 425					
School Average 504					
District Average 504					
State Average 507					
	Novice	Apprentice	Proficient	Distinguished	
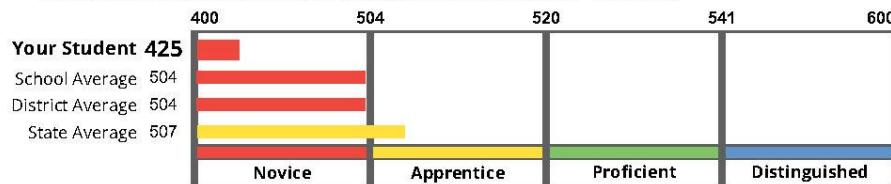
How will my student's school use the test results?

This report provides specific information about your student's performance on the Kentucky Summative Assessments (KSA). It also includes information for teachers and parents/guardians about how to support student learning. The KSA test is only one indication of how well students do in each subject tested; therefore, it is also important to consider how well students are doing on class work, special projects and assessments.

For further information, visit the Kentucky Department of Education online at https://www.kyschoolreportcard.com/.

School Summary Report

TESTED STUDENTS SCHOOL SUMMARY
Kentucky Summative Assessments
School Name
District Name

Spring 2023
Grade 6
Mathematics

Grade 6 Mathematics

Percent of Students by Performance Level*

Number of Students tested		Novice	Apprentice	Proficient	Distinguished	Graph Display of Percent of Students by Performance Level
		Percent of Students by Performance Level				
State	41,223	56%	16%	9%	19%	
District	178	41%	14%	7%	38%	
School	32	42%	14%	6%	38%	

Graph scale: 0 25 50 75 100
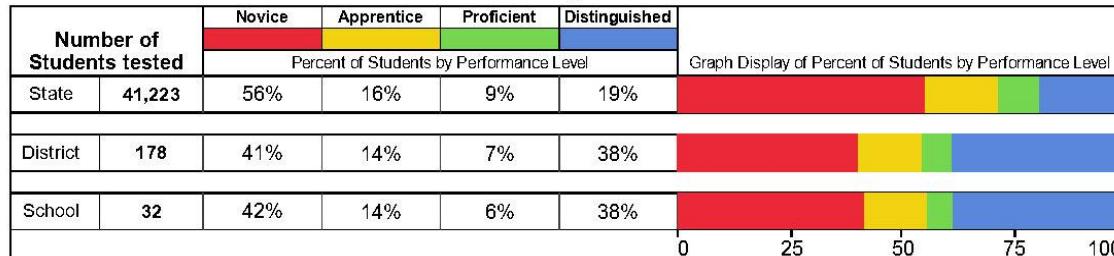
Average Scores by Reporting Category

Each content area has been further divided into reporting categories to provide more detail about your school performance. The specific reporting categories have been analyzed for statistical significance to create a status by category. The school's formative assessment system should support how your students are performing on these content areas.

Overall Score in Mathematics (Average score for all students tested)			
State	###		
District	###	Compared to the STATE, this district's score is about the same.	=
School	###	Compared to the STATE, this school's score is higher.	↑
		Compared to the DISTRICT, this school's score is lower.	↓

Compared to school's Overall Mathematics Score, this school's...			
School	###	**Ratios and Proportional Relationships** score is about the same.	=
School	###	**Number System** score is higher.	↑
School	###	**Expressions and Equations** score is lower.	↓
School	###	**Geometry** score is about the same.	=
School	###	**Statistics and Probability** score is about the same.	=

* Students participating in the Alternate Kentucky Summative Assessments are included in Performance Level.

School Name (456)   MA Page 1 of 1   District Name (123)

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District Summary Report

TESTED STUDENTS DISTRICT SUMMARY
Kentucky Summative Assessments

Spring 2023
Grade 6
Reading

District Name

Grade 6 Reading

DISTRICT NAME

School Name	Code	Number Students Tested	Scale Score	Novice	Apprentice	Proficient	Distinguished
				Performance Level* — Percent of Students			
State		###,###	###	###	###	###	###
District		###,###	###	###	###	###	###
School Name 1	######	###,###	###	###	###	###	###
School Name 2	######	###,###	###	###	###	###	###
School Name 3	######	###,###	###	###	###	###	###
School Name 4	######	###,###	###	###	###	###	###
School Name 5	######	###,###	###	###	###	###	###
School Name 6	######	###,###	###	###	###	###	###
School Name 7	######	###,###	###	###	###	###	###
School Name 8	######	###,###	###	###	###	###	###
School Name 9	######	###,###	###	###	###	###	###
School Name 10	######	###,###	###	###	###	###	###
School Name 11	######	###,###	###	###	###	###	###
School Name 12	######	###,###	###	###	###	###	###
School Name 13	######	###,###	###	###	###	###	###
School Name 14	######	###,###	###	###	###	###	###
School Name 15	######	###,###	###	###	###	###	###
School Name 16	######	###,###	###	###	###	###	###

*Students participating in the Alternate Kentucky Summative Assessments are included in Performance Level.

RD Page 1 of 1 — District Name (123)

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State Summary Report

TESTED STUDENTS STATE SUMMARY
Kentucky Summative Assessments

Spring 2023
Grade 6
Mathematics

Commonwealth of Kentucky

Grade 6 Mathematics

| District Name | Code | Number Students Tested | Total Mathematics Scale Score | Performance Level* Percent of Students | | | |
				Novice	Apprentice	Proficient	Distinguished
State		###,###	###	###	###	###	###
District Name 1	######	###,###	###	###	###	###	###
District Name 2	######	###,###	###	###	###	###	###
District Name 3	######	###,###	###	###	###	###	###
District Name 4	######	###,###	###	###	###	###	###
District Name 5	######	###,###	###	###	###	###	###
District Name 6	######	###,###	###	###	###	###	###
District Name 7	######	###,###	###	###	###	###	###
District Name 8	######	###,###	###	###	###	###	###
District Name 9	######	###,###	###	###	###	###	###
District Name 10	######	###,###	###	###	###	###	###
District Name 11	######	###,###	###	###	###	###	###
District Name 12	######	###,###	###	###	###	###	###
District Name 13	######	###,###	###	###	###	###	###
District Name 14	######	###,###	###	###	###	###	###
District Name 15	######	###,###	###	###	###	###	###
District Name 16	######	###,###	###	###	###	###	###
District Name 17	######	###,###	###	###	###	###	###
District Name 18	######	###,###	###	###	###	###	###

*Students participating in the Alternate Kentucky Summative Assessments are included in Performance Level.

MA Page 1 of 2   Commonwealth of Kentucky (999)

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School Listing Report

TESTED STUDENTS SCHOOL LISTING

Kentucky Summative Assessments

Spring 2023

Grade <3 or 6 or 10>

School Name

District Name

NOVICE	APPRENTICE	PROFICIENT	DISTINGUISHED

Student Name	Student ID	Alternate KSA[1]	Reading			Mathematics		
			Accommodated[2]	Performance Level[3]	Score	Accommodated[2]	Performance Level[3]	Score
ALASTNAME, FIRSTNAME I.	9999999999			N	###		N	###
BLASTNAME, FIRSTNAME I.	9999999999	Y		D	###		P	###
CLASTNAME, FIRSTNAME I.	9999999999			N	###		N	###
DLASTNAME, FIRSTNAME I.	9999999999			D	###		D	###
ELASTNAME, FIRSTNAME I.	9999999999			P	###		A	###
FLASTNAME, FIRSTNAME I.	9999999999			N	###		A	###
GLASTNAME, FIRSTNAME I.	9999999999			P	###		A	###
HLASTNAME, FIRSTNAME I.	9999999999		Y	P	###		E	
ILASTNAME, FIRSTNAME I.	9999999999			D	###		P	###
JLASTNAME, FIRSTNAME I.	9999999999			D	###		P	###
KLASTNAME, FIRSTNAME I.	9999999999			P	###		E	
LLASTNAME, FIRSTNAME I.	9999999999			D	###		P	###
MLASTNAME, FIRSTNAME I.	9999999999			E			A	###
NLASTNAME, FIRSTNAME I.	9999999999			P	###		P	###
OLASTNAME, FIRSTNAME I.	9999999999			P	###		N	###
PLASTNAME, FIRSTNAME I.	9999999999			A	###		D	###
QLASTNAME, FIRSTNAME I.	9999999999			P	###		N	###
RLASTNAME, FIRSTNAME I.	9999999999			N	###		N	###
SLASTNAME, FIRSTNAME I.	9999999999			N	###		A	###
TLASTNAME, FIRSTNAME I.	9999999999			P	###		P	###

1 Y = Participates in Alternate Kentucky Summative Assessments

2 Y = Participates in Kentucky Summative Assessments with accommodations

3 The performance level designations are D = Distinguished, P = Proficient, A = Apprentice, N = Novice, **E = Exempted**; "—" = Student did not test

School Name (456)   Page 1 of 2   District Name (123)

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TESTED STUDENTS SCHOOL LISTING

Spring 2023

Kentucky Summative Assessments

Grade <3 or 6 or 10>

School Name
District Name

NOVICE	APPRENTICE	PROFICIENT	DISTINGUISHED

Student Name	Student ID	Alternate KSA[1]	Reading Accommodated[2]	Reading Performance Level[3]	Reading Score	Mathematics Accommodated[2]	Mathematics Performance Level[3]	Mathematics Score
ZALASTNAME, FIRSTNAME I.	9999999999			N	###		N	###
ZBLASTNAME, FIRSTNAME I.	9999999999	Y		D	###		P	###
ZCLASTNAME, FIRSTNAME I.	9999999999			N	###		N	###
ZDLASTNAME, FIRSTNAME I.	9999999999			D	###		D	###
ZELASTNAME, FIRSTNAME I.	9999999999			P	###		D	###
ZFLASTNAME, FIRSTNAME I.	9999999999			N	###		A	###
ZGLASTNAME, FIRSTNAME I.	9999999999			P	###		A	###
ZMLASTNAME, FIRSTNAME I.	9999999999			P	###		E	
ZNLASTNAME, FIRSTNAME I.	9999999999			D	###		P	###
ZOLASTNAME, FIRSTNAME I.	9999999999			D	###		P	###
ZPLASTNAME, FIRSTNAME I.	9999999999			P	###		E	
ZQLASTNAME, FIRSTNAME I.	9999999999			D	###		A	###
ZRLASTNAME, FIRSTNAME I.	9999999999			E			D	###
ZSLASTNAME, FIRSTNAME I.	9999999999			P	###		A	###
ZTLASTNAME, FIRSTNAME I.	9999999999			P	###		P	###

Number of Students Assessed:	####	Number of Students with One or More Test Exemptions:	6
Number of Students Alternate Assessed:	####	Total Number of Students:	####

1 Y = Participates in Alternate Kentucky Summative Assessments

2 Y = Participates in Kentucky Summative Assessments with accommodations

3 The performance level designations are D = Distinguished, P = Proficient, A = Apprentice, N = Novice, **E = Exempted**; "—" = Student did not test

Appendix C. Item Mean Summaries

Single-Point Items[1]

Subject	Grade	$p<0.30$	$0.30=<p<0.55$	$0.55=<p<0.75$	$0.75=<p<0.95$	$p>=0.95$	Mean of p	N
Reading	3	4	39	30	2	-	0.51	75
	4	2	33	39	5	-	0.55	79
	5	1	22	35	12	-	0.62	70
	6	3	30	26	5	-	0.54	64
	7	6	45	14	6	-	0.49	71
	8	3	28	35	3	-	0.54	69
	10	6	38	26	1	-	0.49	71
Mathematics	3	12	45	32	12	-	0.52	101
	4	6	47	36	9	-	0.54	98
	5	7	40	31	9	-	0.52	87
	6	19	52	19	-	-	0.42	90
	7	37	57	8	1	-	0.36	103
	8	27	57	11	1	-	0.39	96
	10	36	58	8	1	-	0.35	103
Science	4	5	21	9	2	-	0.47	37
	7	11	26	3	-	-	0.36	40
	11	10	25	7	-	-	0.42	42
Social Studies	5	1	42	28	10	-	0.54	81
	8	9	49	23	3	-	0.47	84
	11	7	49	32	2	-	0.50	90
Editing and Mechanics	5	3	13	36	12	-	0.62	64
	8	3	21	17	23	-	0.62	64
	11	5	15	26	18	-	0.60	64

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[1] Single-point items include multiple choice, fill in the blank, short answer, and technical enhanced items.

Multi-Points Items[2]

Subject	Grade	2-Point Items				4-Point Items			
		N	*Mean*	*Min.*	*Max.*	*N*	*Mean*	*Min.*	*Max.*
Reading	3	29	0.99	0.10	1.53	-	-	-	-
	4	19	1.08	0.60	1.77	7	1.08	0.85	1.32
	5	23	1.12	0.64	1.63	6	1.19	0.97	1.64
	6	26	1.04	0.55	1.42	6	1.27	0.76	1.71
	7	25	1.03	0.63	1.42	7	1.17	0.63	1.88
	8	25	1.07	0.63	1.57	9	1.62	0.88	2.34
	10	23	0.84	0.26	1.28	6	0.92	0.68	1.38
Mathematics	3	24	1.09	0.22	1.81	-	-	-	-
	4	18	0.94	0.33	1.54	9	1.03	0.63	1.60
	5	25	0.90	0.24	1.61	4	1.12	0.36	1.64
	6	17	0.90	0.22	1.63	7	0.83	0.21	1.31
	7	23	0.61	0.07	1.32	7	0.64	0.23	1.40
	8	23	0.70	0.11	1.26	9	0.71	0.38	1.73
	10	26	0.58	0.05	1.19	4	0.65	0.42	0.95
Science	4	12	1.03	0.55	1.39	7	0.83	0.54	1.20
	7	9	1.05	0.85	1.22	7	0.87	0.43	1.08
	11	7	1.02	0.62	1.25	7	1.15	0.82	1.88
Social Studies	5	23	1.09	0.54	1.67	4	1.15	0.91	1.52
	8	20	1.09	0.52	1.63	4	1.30	1.23	1.38
	11	19	1.09	0.71	1.67	4	1.32	1.15	1.43
Editing and Mechanics	5	40	1.09	0.38	1.73	-	-	-	-
	8	38	1.14	0.65	1.88	-	-	-	-
	11	40	1.03	0.28	1.75	-	-	-	-

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[2] Multi-points items include multi-select, short answer, multi-part, and technical enhanced items for 2-point items, and extended response 4-point items.

Appendix D. Item-Total Correlation Summaries

Single-Point Items[3]

Subject	Grade	$r<0.20$	$0.20=<r<0.40$	$0.40=<r<0.60$	$0.60=<r<0.80$	$r>=0.80$	Median Pt. Bis	N
Reading	3	6	31	38	-	-	0.40	75
	4	4	38	36	1	-	0.39	79
	5	2	26	42	-	-	0.43	70
	6	8	31	25	-	-	0.37	64
	7	16	35	20	-	-	0.35	71
	8	4	38	27	-	-	0.37	69
	10	6	40	25	-	-	0.35	71
Mathematics	3	7	36	54	4	-	0.42	101
	4	2	33	62	1	-	0.43	98
	5	5	28	52	2	-	0.45	87
	6	8	47	35	-	-	0.37	90
	7	14	57	32	-	-	0.33	103
	8	15	48	31	2	-	0.36	96
	10	28	46	29	-	-	0.32	103
Science	4	5	16	16	-	-	0.38	37
	7	10	17	13	-	-	0.33	40
	11	10	19	13	-	-	0.31	42
Social Studies	5	10	36	35	-	-	0.36	81
	8	6	45	33	-	-	0.37	84
	11	9	37	43	1	-	0.40	90
Editing and Mechanics	5	7	33	24	-	-	0.38	64
	8	4	32	28	-	-	0.38	64
	11	6	20	38	-	-	0.41	64

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[3] Single-point items include multiple choice, fill in the blank, short answer, and technical enhanced items.

Multi-Points Items[4]

Subject	Grade	2-Point Items				4-Point Items			
		N	*Median r*	*Min. r*	*Max. r*	*N*	*Median r*	*Min. r*	*Max. r*
Reading	3	29	0.54	-0.03	0.67	-	-	-	-
	4	19	0.51	0.12	0.70	7	0.61	0.51	0.65
	5	23	0.48	0.32	0.66	6	0.60	0.55	0.70
	6	26	0.47	0.21	0.56	6	0.61	0.57	0.67
	7	25	0.50	0.22	0.63	7	0.64	0.60	0.70
	8	25	0.44	0.16	0.68	9	0.65	0.58	0.74
	10	23	0.48	0.30	0.68	6	0.68	0.60	0.74
Mathematics	3	24	0.48	0.27	0.68	-	-	-	-
	4	18	0.47	0.18	0.68	9	0.67	0.57	0.76
	5	25	0.46	0.11	0.68	4	0.62	0.50	0.72
	6	17	0.47	0.22	0.63	7	0.66	0.39	0.78
	7	23	0.40	0.16	0.66	7	0.61	0.48	0.71
	8	23	0.39	-0.09	0.69	9	0.61	0.38	0.78
	10	26	0.38	0.08	0.61	4	0.56	0.29	0.70
Science	4	12	0.38	0.10	0.54	7	0.57	0.53	0.68
	7	9	0.43	0.31	0.54	7	0.65	0.59	0.70
	11	7	0.37	0.22	0.48	7	0.68	0.64	0.72
Social Studies	5	23	0.42	0.09	0.54	4	0.52	0.45	0.69
	8	20	0.48	0.04	0.63	4	0.60	0.58	0.68
	11	19	0.43	0.11	0.63	4	0.66	0.66	0.69
Editing and Mechanics	5	40	0.45	0.17	0.62	-	-	-	-
	8	38	0.48	0.14	0.64	-	-	-	-
	11	40	0.48	0.30	0.69	-	-	-	-

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[4] Multi-points items include multi-select, short answer, multi-part, and technical enhanced items for 2-point items and extended response 4-point items.

Appendix E. Differential Item Functioning Summaries

Reading

Grade	Subgroups	DIF Categories					
		Negligible DIF		*Moderate DIF*		*Substantial DIF*	
		Focal	*Reference*	*Focal*	*Reference*	*Focal*	*Reference*
3	Male-Female	41	61	2	–	–	–
	White-Black	48	54	–	2	–	–
	White-Hispanic	55	49	–	–	–	–
4	Male-Female	46	51	7	1	–	–
	White-Black	39	65	–	1	–	–
	White-Hispanic	50	55	–	–	–	–
5	Male-Female	37	52	5	5	–	–
	White-Black	30	67	–	1	–	1
	White-Hispanic	41	55	–	3	–	–
6	Male-Female	42	38	11	3	2	–
	White-Black	38	53	–	5	–	–
	White-Hispanic	42	54	–	–	–	–
7	Male-Female	36	53	10	1	3	–
	White-Black	48	53	–	1	–	1
	White-Hispanic	43	59	–	1	–	–
8	Male-Female	40	52	7	–	4	–
	White-Black	40	60	–	3	–	–
	White-Hispanic	54	49	–	–	–	–
10	Male-Female	35	52	10	1	2	–
	White-Black	40	60	–	–	–	–
	White-Hispanic	39	60	–	1	–	–

Note. "Focal" indicates DIF in favor of Female, Black, or Hispanic students. "Reference" indicates DIF in favor of Male or White students.

Mathematics

Grade	Subgroups	Negligible DIF Focal	Negligible DIF Reference	Moderate DIF Focal	Moderate DIF Reference	Substantial DIF Focal	Substantial DIF Reference
3	Male-Female	58	61	1	4	–	1
3	White-Black	42	74	–	6	–	3
3	White-Hispanic	31	90	–	4	–	–
4	Male-Female	62	57	–	6	–	–
4	White-Black	40	76	–	7	–	2
4	White-Hispanic	31	90	–	3	–	1
5	Male-Female	50	60	2	4	–	–
5	White-Black	40	69	–	7	–	–
5	White-Hispanic	26	89	–	1	–	–
6	Male-Female	53	58	1	2	–	–
6	White-Black	36	76	–	1	–	1
6	White-Hispanic	33	78	–	2	–	1
7	Male-Female	48	82	–	1	–	2
7	White-Black	45	74	–	7	–	7
7	White-Hispanic	46	83	–	2	–	2
8	Male-Female	63	63	1	1	–	–
8	White-Black	49	76	–	1	–	2
8	White-Hispanic	47	77	–	4	–	–
10	Male-Female	53	77	1	1	–	1
10	White-Black	62	65	–	4	1	1
10	White-Hispanic	36	92	–	3	1	1

Note. "Focal" indicates DIF in favor of Female, Black, or Hispanic students. "Reference" indicates DIF in favor of Male or White students.

Science

Grade	Subgroups	Negligible DIF Focal	Negligible DIF Reference	Moderate DIF Focal	Moderate DIF Reference	Substantial DIF Focal	Substantial DIF Reference
4	Male-Female	23	33	–	–	–	–
4	White-Black	21	35	–	–	–	–
4	White-Hispanic	21	35	–	–	–	–
7	Male-Female	23	30	2	1	–	–
7	White-Black	32	24	–	–	–	–
7	White-Hispanic	22	34	–	–	–	–
11	Male-Female	19	35	–	2	–	–
11	White-Black	37	18	1	–	–	–
11	White-Hispanic	27	29	–	–	–	–

Note. "Focal" indicates DIF in favor of Female, Black, or Hispanic students. "Reference" indicates DIF in favor of Male or White students.

Social Studies

| Grade | Subgroups | DIF Categories | | | | | |
| | | Negligible DIF | | Moderate DIF | | Substantial DIF | |
		Focal	Reference	Focal	Reference	Focal	Reference
5	Male-Female	33	71	3	1	–	–
	White-Black	32	70	–	4	–	2
	White-Hispanic	40	67	–	1	–	–
8	Male-Female	37	59	–	5	7	–
	White-Black	49	58	–	1	–	–
	White-Hispanic	33	75	–	–	–	–
11	Male-Female	32	72	4	2	3	–
	White-Black	49	61	–	3	–	–
	White-Hispanic	48	59	1	5	–	–

Note. "Focal" indicates DIF in favor of Female, Black, or Hispanic students. "Reference" indicates DIF in favor of Male or White students.

Editing and Mechanics

| Grade | Subgroups | DIF Categories | | | | | |
| | | Negligible DIF | | Moderate DIF | | Substantial DIF | |
		Focal	Reference	Focal	Reference	Focal	Reference
5	Male-Female	56	42	3	3	–	–
	White-Black	33	65	–	3	–	3
	White-Hispanic	45	58	–	–	–	1
8	Male-Female	59	36	4	1	1	1
	White-Black	35	63	–	1	–	3
	White-Hispanic	41	57	–	3	–	1
11	Male-Female	48	43	4	4	1	4
	White-Black	29	71	–	3	–	1
	White-Hispanic	36	61	–	6	–	1

Note. "Focal" indicates DIF in favor of Female, Black, or Hispanic students. "Reference" indicates DIF in favor of Male or White students.

Appendix F. Item Response Theory Parameter Summary

Reading

Grade	#Items	Item Difficulty					Infit				Outfit			
		Min.	P25	Median	P75	Max.	<0.5	0.5<=Infit<1.5	1.5<=Infit<2.0	>2.0	<0.5	0.5<=Outfit<1.5	1.5<=Outfit<2.0	>2.0
3	103	-1.4270	-0.4431	0.1048	0.6064	3.1468	-	102	1	-	-	100	1	2
4	105	-1.9434	-0.3675	0.1023	0.6698	2.2422	-	105	-	-	-	103	1	1
5	99	-1.8587	-0.5080	0.1910	0.7997	2.4578	-	99	-	-	-	98	1	-
6	96	-1.4271	-0.2522	0.3180	0.8364	2.1530	-	96	-	-	-	95	1	-
7	101	-2.2867	-0.4634	0.1341	0.6169	2.0007	-	101	-	-	-	101	-	-
8	102	-1.7254	-0.5180	-0.0523	0.4746	1.5760	-	102	-	-	-	101	1	-
10	100	-1.4624	-0.1973	0.3128	0.7855	2.0569	-	100	-	-	-	100	-	-

Mathematics

Grade	#Items	Item Difficulty					Infit				Outfit			
		Min.	P25	Median	P75	Max.	<0.5	0.5<=Infit<1.5	1.5<=Infit<2.0	>2.0	<0.5	0.5<=Outfit<1.5	1.5<=Outfit<2.0	>2.0
3	125	-2.4916	-0.3824	0.2558	1.0363	3.7517	-	125	-	-	-	119	6	-
4	125	-1.8917	-0.2583	0.3650	1.0262	3.5875	-	123	2	-	-	121	3	1
5	115	-1.8641	-0.5227	0.0739	0.7472	4.2485	-	115	-	-	-	112	3	-
6	113	-2.0294	-0.4876	0.0458	0.5341	3.3294	-	113	-	-	1	112	-	-
7	132	-2.2888	-0.2090	0.3125	1.0492	3.2737	-	132	-	-	2	129	1	-
8	127	-1.8235	-0.3840	0.1777	0.8846	3.0085	-	126	1	-	-	125	2	-
10	126	-1.9921	-0.3034	0.2574	0.8521	5.1619	-	126	-	-	3	123	-	-

Science

Grade	#Items	Item Difficulty					Infit				Outfit			
		Min.	P25	Median	P75	Max.	<0.5	0.5<=Infit<1.5	1.5<=Infit<2.0	>2.0	<0.5	0.5<=Outfit<1.5	1.5<=Outfit<2.0	>2.0
4	56	-1.7202	-0.4593	0.1713	0.8733	2.2521	-	56	-	-	-	54	2	-
7	56	-1.3635	-0.5338	0.1746	0.4661	1.5303	-	56	-	-	-	54	2	-
11	56	-2.0243	-1.1530	-0.4571	0.2486	1.2369	-	56	-	-	-	51	4	1

Social Studies

Grade	#Items	Item Difficulty					Infit				Outfit			
		Min.	P25	Median	P75	Max.	<0.5	0.5<=Infit<1.5	1.5<=Infit<2.0	>2.0	<0.5	0.5<=Outfit<1.5	1.5<=Outfit<2.0	>2.0
5	108	-2.9399	-0.4526	0.1142	0.6500	1.7443	-	108	-	-	-	107	1	-
8	108	-2.5044	-0.5032	0.0067	0.5351	2.0091	-	108	-	-	-	103	4	1
11	111	-1.9681	-0.5812	-0.0269	0.4406	1.2001	-	111	-	-	-	110	1	-

Editing and Mechanics

Grade	#Items	Item Difficulty					Infit				Outfit			
		Min.	P25	Median	P75	Max.	<0.5	0.5<=Infit<1.5	1.5<=Infit<2.0	>2.0	<0.5	0.5<=Outfit<1.5	1.5<=Outfit<2.0	>2.0
5	102	-2.1022	-0.6191	-0.0542	0.8450	2.5520	-	102	-	-	-	100	2	-
8	101	-2.3064	-1.2252	-0.2556	0.7279	2.0089	-	101	-	-	1	97	3	-
11	104	-1.8492	-0.6805	0.0890	1.0242	2.7223	-	104	-	-	-	100	4	-

Appendix G. Scoring Tables

Grade 3 Reading, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	33
01 – 05	1	440	17
01 – 05	2	452	12
01 – 05	3	459	10
01 – 05	4	464	9
01 – 05	5	469	8
01 – 05	6	472	8
01 – 05	7	476	7
01 – 05	8	479	7
01 – 05	9	481	6
01 – 05	10	484	6
01 – 05	11	486	6
01 – 05	12	488	6
01 – 05	13	490	6
01 – 05	14	492	6
01 – 05	15	494	6
01 – 05	16	496	6
01 – 05	17	498	5
01 – 05	18	499	5
01 – 05	19	501	5
01 – 05	20	503	5
01 – 05	21	505	5
01 – 05	22	507	5
01 – 05	23	508	5
01 – 05	24	510	5
01 – 05	25	512	6
01 – 05	26	514	6
01 – 05	27	516	6
01 – 05	28	518	6
01 – 05	29	520	6
01 – 05	30	522	6
01 – 05	31	524	6
01 – 05	32	526	6
01 – 05	33	529	7
01 – 05	34	532	7
01 – 05	35	535	7
01 – 05	36	538	8
01 – 05	37	542	8
01 – 05	38	547	9
01 – 05	39	552	10
01 – 05	40	560	12
01 – 05	41	572	17
01 – 05	42	596	34

Grade 3 Reading, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	440	17
06 – 10	2	452	12
06 – 10	3	459	10
06 – 10	4	465	9
06 – 10	5	469	8
06 – 10	6	473	8
06 – 10	7	476	7
06 – 10	8	479	7
06 – 10	9	482	7
06 – 10	10	485	6
06 – 10	11	487	6
06 – 10	12	489	6
06 – 10	13	491	6
06 – 10	14	493	6
06 – 10	15	495	6
06 – 10	16	497	6
06 – 10	17	499	6
06 – 10	18	501	6
06 – 10	19	503	5
06 – 10	20	504	5
06 – 10	21	506	5
06 – 10	22	508	6
06 – 10	23	510	6
06 – 10	24	512	6
06 – 10	25	514	6
06 – 10	26	515	6
06 – 10	27	517	6
06 – 10	28	519	6
06 – 10	29	522	6
06 – 10	30	524	6
06 – 10	31	526	6
06 – 10	32	529	7
06 – 10	33	531	7
06 – 10	34	534	7
06 – 10	35	538	8
06 – 10	36	541	8
06 – 10	37	545	9
06 – 10	38	550	10
06 – 10	39	557	11
06 – 10	40	565	13
06 – 10	41	579	18
06 – 10	42	600	34

Grade 3 Reading, Braille Form

Raw Score	Scale Score	Conditional SEM
0	400	33
1	440	17
2	452	12
3	459	10
4	465	9
5	469	8
6	473	8
7	476	7
8	479	7
9	482	7
10	484	6
11	486	6
12	489	6
13	491	6
14	493	6
15	495	6
16	496	6
17	498	6
18	500	6
19	502	6
20	504	5
21	506	6
22	507	6
23	509	6
24	511	6
25	513	6
26	515	6
27	517	6
28	519	6
29	521	6
30	523	6
31	526	6
32	528	7
33	531	7
34	534	7
35	538	8
36	541	8
37	546	9
38	552	10
39	559	12
40	572	17
41	596	34

Grade 4 Reading, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	33
01 – 05	1	442	17
01 – 05	2	454	12
01 – 05	3	462	10
01 – 05	4	467	9
01 – 05	5	472	8
01 – 05	6	475	8
01 – 05	7	479	7
01 – 05	8	481	7
01 – 05	9	484	7
01 – 05	10	487	6
01 – 05	11	489	6
01 – 05	12	491	6
01 – 05	13	493	6
01 – 05	14	495	6
01 – 05	15	497	6
01 – 05	16	499	6
01 – 05	17	501	6
01 – 05	18	503	5
01 – 05	19	505	5
01 – 05	20	506	5
01 – 05	21	508	5
01 – 05	22	510	5
01 – 05	23	512	5
01 – 05	24	513	5
01 – 05	25	515	5
01 – 05	26	517	5
01 – 05	27	519	6
01 – 05	28	521	6
01 – 05	29	523	6
01 – 05	30	525	6
01 – 05	31	527	6
01 – 05	32	529	6
01 – 05	33	531	6
01 – 05	34	533	6
01 – 05	35	536	7
01 – 05	36	538	7
01 – 05	37	541	7
01 – 05	38	545	8
01 – 05	39	548	8
01 – 05	40	553	9
01 – 05	41	558	10
01 – 05	42	566	12
01 – 05	43	578	17
01 – 05	44	600	34

Grade 4 Reading, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	33
06 – 10	1	442	17
06 – 10	2	454	12
06 – 10	3	462	10
06 – 10	4	467	9
06 – 10	5	472	8
06 – 10	6	475	8
06 – 10	7	479	7
06 – 10	8	482	7
06 – 10	9	484	7
06 – 10	10	487	6
06 – 10	11	489	6
06 – 10	12	491	6
06 – 10	13	494	6
06 – 10	14	496	6
06 – 10	15	498	6
06 – 10	16	499	6
06 – 10	17	501	6
06 – 10	18	503	5
06 – 10	19	505	5
06 – 10	20	507	5
06 – 10	21	508	5
06 – 10	22	510	5
06 – 10	23	512	5
06 – 10	24	514	5
06 – 10	25	515	5
06 – 10	26	517	5
06 – 10	27	519	6
06 – 10	28	521	6
06 – 10	29	523	6
06 – 10	30	525	6
06 – 10	31	527	6
06 – 10	32	529	6
06 – 10	33	531	6
06 – 10	34	533	6
06 – 10	35	536	7
06 – 10	36	539	7
06 – 10	37	542	7
06 – 10	38	545	8
06 – 10	39	549	8
06 – 10	40	554	9
06 – 10	41	560	10
06 – 10	42	567	13
06 – 10	43	580	17
06 – 10	44	600	34

Grade 4 Reading, Braille Form

Raw Score	Scale Score	Conditional SEM
0	400	33
1	442	17
2	454	12
3	462	10
4	467	9
5	472	8
6	475	8
7	479	7
8	482	7
9	484	7
10	487	6
11	489	6
12	491	6
13	494	6
14	496	6
15	498	6
16	500	6
17	501	6
18	503	6
19	505	5
20	507	5
21	509	5
22	510	5
23	512	5
24	514	5
25	516	6
26	518	6
27	520	6
28	522	6
29	524	6
30	526	6
31	528	6
32	530	6
33	532	6
34	535	7
35	538	7
36	541	7
37	544	8
38	548	8
39	552	9
40	558	10
41	565	12
42	578	17
43	600	34

Grade 5 Reading, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	443	17
01 – 05	2	456	12
01 – 05	3	463	10
01 – 05	4	469	9
01 – 05	5	473	8
01 – 05	6	477	8
01 – 05	7	481	7
01 – 05	8	484	7
01 – 05	9	487	7
01 – 05	10	489	7
01 – 05	11	492	6
01 – 05	12	494	6
01 – 05	13	496	6
01 – 05	14	499	6
01 – 05	15	501	6
01 – 05	16	503	6
01 – 05	17	505	6
01 – 05	18	507	6
01 – 05	19	509	6
01 – 05	20	511	6
01 – 05	21	513	6
01 – 05	22	515	6
01 – 05	23	517	6
01 – 05	24	519	6
01 – 05	25	521	6
01 – 05	26	523	6
01 – 05	27	525	6
01 – 05	28	527	6
01 – 05	29	529	6
01 – 05	30	531	6
01 – 05	31	533	6
01 – 05	32	536	6
01 – 05	33	538	7
01 – 05	34	541	7
01 – 05	35	544	7
01 – 05	36	547	8
01 – 05	37	551	8
01 – 05	38	556	9
01 – 05	39	561	10
01 – 05	40	569	12
01 – 05	41	581	17
01 – 05	42	600	34

Grade 5 Reading, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	442	17
06 – 10	2	455	12
06 – 10	3	462	10
06 – 10	4	468	9
06 – 10	5	472	8
06 – 10	6	476	8
06 – 10	7	480	7
06 – 10	8	483	7
06 – 10	9	485	7
06 – 10	10	488	6
06 – 10	11	490	6
06 – 10	12	493	6
06 – 10	13	495	6
06 – 10	14	497	6
06 – 10	15	499	6
06 – 10	16	501	6
06 – 10	17	503	6
06 – 10	18	505	6
06 – 10	19	507	6
06 – 10	20	509	6
06 – 10	21	511	6
06 – 10	22	513	6
06 – 10	23	515	6
06 – 10	24	517	6
06 – 10	25	518	6
06 – 10	26	520	6
06 – 10	27	522	6
06 – 10	28	524	6
06 – 10	29	527	6
06 – 10	30	529	6
06 – 10	31	531	6
06 – 10	32	533	6
06 – 10	33	536	7
06 – 10	34	539	7
06 – 10	35	542	7
06 – 10	36	545	8
06 – 10	37	549	8
06 – 10	38	553	9
06 – 10	39	559	10
06 – 10	40	567	12
06 – 10	41	579	17
06 – 10	42	600	34

Grade 5 Reading, Braille Form

Raw Score	Scale Score	Conditional SEM
0	400	34
1	444	17
2	456	12
3	464	10
4	469	9
5	474	8
6	478	8
7	481	7
8	484	7
9	487	7
10	490	7
11	492	6
12	495	6
13	497	6
14	499	6
15	502	6
16	504	6
17	506	6
18	508	6
19	510	6
20	512	6
21	514	6
22	516	6
23	518	6
24	520	6
25	522	6
26	524	6
27	526	6
28	528	6
29	531	6
30	533	6
31	535	6
32	538	7
33	541	7
34	544	7
35	547	8
36	551	8
37	555	9
38	561	10
39	569	12
40	581	17
41	600	34

Grade 6 Reading, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	448	17
01 – 05	2	461	12
01 – 05	3	468	10
01 – 05	4	474	9
01 – 05	5	478	8
01 – 05	6	482	8
01 – 05	7	485	7
01 – 05	8	488	7
01 – 05	9	491	7
01 – 05	10	493	6
01 – 05	11	496	6
01 – 05	12	498	6
01 – 05	13	500	6
01 – 05	14	502	6
01 – 05	15	505	6
01 – 05	16	507	6
01 – 05	17	509	6
01 – 05	18	511	6
01 – 05	19	512	6
01 – 05	20	514	6
01 – 05	21	516	6
01 – 05	22	518	6
01 – 05	23	520	6
01 – 05	24	522	6
01 – 05	25	525	6
01 – 05	26	527	6
01 – 05	27	529	6
01 – 05	28	531	6
01 – 05	29	534	6
01 – 05	30	536	7
01 – 05	31	539	7
01 – 05	32	542	7
01 – 05	33	545	7
01 – 05	34	548	8
01 – 05	35	552	8
01 – 05	36	557	9
01 – 05	37	562	10
01 – 05	38	570	12
01 – 05	39	582	17
01 – 05	40	600	34

Grade 6 Reading, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	448	17
06 – 10	2	460	12
06 – 10	3	468	10
06 – 10	4	473	9
06 – 10	5	478	8
06 – 10	6	482	8
06 – 10	7	485	7
06 – 10	8	488	7
06 – 10	9	491	7
06 – 10	10	493	6
06 – 10	11	496	6
06 – 10	12	498	6
06 – 10	13	500	6
06 – 10	14	502	6
06 – 10	15	504	6
06 – 10	16	506	6
06 – 10	17	508	6
06 – 10	18	510	6
06 – 10	19	512	6
06 – 10	20	514	6
06 – 10	21	516	6
06 – 10	22	518	6
06 – 10	23	520	6
06 – 10	24	522	6
06 – 10	25	524	6
06 – 10	26	526	6
06 – 10	27	528	6
06 – 10	28	530	6
06 – 10	29	533	6
06 – 10	30	535	7
06 – 10	31	538	7
06 – 10	32	541	7
06 – 10	33	544	8
06 – 10	34	548	8
06 – 10	35	552	9
06 – 10	36	557	10
06 – 10	37	564	11
06 – 10	38	572	13
06 – 10	39	586	18
06 – 10	40	600	34

Grade 6 Reading, Braille Form

Raw Score	Scale Score	Conditional SEM
0	400	34
1	449	17
2	461	12
3	468	10
4	474	9
5	478	8
6	482	8
7	485	7
8	488	7
9	491	7
10	494	6
11	496	6
12	499	6
13	501	6
14	503	6
15	505	6
16	507	6
17	509	6
18	511	6
19	513	6
20	515	6
21	517	6
22	519	6
23	521	6
24	523	6
25	526	6
26	528	6
27	530	6
28	533	6
29	535	7
30	538	7
31	541	7
32	544	7
33	548	8
34	551	8
35	556	9
36	562	10
37	569	12
38	582	17
39	600	34

Grade 7 Reading, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	440	17
01 – 05	2	453	12
01 – 05	3	460	10
01 – 05	4	466	9
01 – 05	5	470	8
01 – 05	6	474	8
01 – 05	7	477	7
01 – 05	8	480	7
01 – 05	9	483	7
01 – 05	10	485	6
01 – 05	11	488	6
01 – 05	12	490	6
01 – 05	13	492	6
01 – 05	14	494	6
01 – 05	15	496	6
01 – 05	16	498	6
01 – 05	17	500	5
01 – 05	18	501	5
01 – 05	19	503	5
01 – 05	20	505	5
01 – 05	21	506	5
01 – 05	22	508	5
01 – 05	23	510	5
01 – 05	24	512	5
01 – 05	25	513	5
01 – 05	26	515	5
01 – 05	27	517	5
01 – 05	28	519	6
01 – 05	29	521	6
01 – 05	30	523	6
01 – 05	31	525	6
01 – 05	32	527	6
01 – 05	33	529	6
01 – 05	34	531	6
01 – 05	35	534	7
01 – 05	36	537	7
01 – 05	37	540	8
01 – 05	38	544	8
01 – 05	39	548	9
01 – 05	40	553	10
01 – 05	41	561	12
01 – 05	42	573	17
01 – 05	43	596	33

Grade 7 Reading, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	437	17
06 – 10	2	450	12
06 – 10	3	457	10
06 – 10	4	463	9
06 – 10	5	468	8
06 – 10	6	472	8
06 – 10	7	475	7
06 – 10	8	478	7
06 – 10	9	481	7
06 – 10	10	484	6
06 – 10	11	486	6
06 – 10	12	488	6
06 – 10	13	491	6
06 – 10	14	493	6
06 – 10	15	495	6
06 – 10	16	497	6
06 – 10	17	499	6
06 – 10	18	501	6
06 – 10	19	502	6
06 – 10	20	504	6
06 – 10	21	506	5
06 – 10	22	508	5
06 – 10	23	510	5
06 – 10	24	512	6
06 – 10	25	513	6
06 – 10	26	515	6
06 – 10	27	517	6
06 – 10	28	519	6
06 – 10	29	521	6
06 – 10	30	523	6
06 – 10	31	525	6
06 – 10	32	527	6
06 – 10	33	530	6
06 – 10	34	532	7
06 – 10	35	535	7
06 – 10	36	538	7
06 – 10	37	541	8
06 – 10	38	545	8
06 – 10	39	549	9
06 – 10	40	555	10
06 – 10	41	562	12
06 – 10	42	575	17
06 – 10	43	598	34

Grade 7 Reading, Braille Form

Raw Score	Scale Score	Conditional SEM
0	400	34
1	440	17
2	453	12
3	460	10
4	466	9
5	470	8
6	474	8
7	477	7
8	480	7
9	483	7
10	485	6
11	488	6
12	490	6
13	492	6
14	494	6
15	496	6
16	498	6
17	500	5
18	502	5
19	503	5
20	505	5
21	507	5
22	509	5
23	510	5
24	512	5
25	514	5
26	516	6
27	517	6
28	519	6
29	521	6
30	523	6
31	525	6
32	528	6
33	530	6
34	533	7
35	536	7
36	539	8
37	542	8
38	547	9
39	552	10
40	559	12
41	571	17
42	595	33

Grade 8 Reading, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	442	17
01 – 05	2	455	12
01 – 05	3	462	10
01 – 05	4	468	9
01 – 05	5	473	8
01 – 05	6	476	8
01 – 05	7	480	7
01 – 05	8	483	7
01 – 05	9	486	7
01 – 05	10	488	6
01 – 05	11	490	6
01 – 05	12	493	6
01 – 05	13	495	6
01 – 05	14	497	6
01 – 05	15	499	6
01 – 05	16	501	6
01 – 05	17	503	6
01 – 05	18	505	5
01 – 05	19	506	5
01 – 05	20	508	5
01 – 05	21	510	5
01 – 05	22	512	5
01 – 05	23	513	5
01 – 05	24	515	5
01 – 05	25	517	5
01 – 05	26	519	6
01 – 05	27	521	6
01 – 05	28	522	6
01 – 05	29	524	6
01 – 05	30	526	6
01 – 05	31	529	6
01 – 05	32	531	6
01 – 05	33	533	6
01 – 05	34	536	7
01 – 05	35	539	7
01 – 05	36	542	8
01 – 05	37	546	8
01 – 05	38	550	9
01 – 05	39	556	10
01 – 05	40	563	12
01 – 05	41	575	17
01 – 05	42	599	34

Grade 8 Reading, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	438	17
06 – 10	2	451	12
06 – 10	3	458	10
06 – 10	4	464	9
06 – 10	5	468	8
06 – 10	6	472	8
06 – 10	7	476	7
06 – 10	8	479	7
06 – 10	9	482	7
06 – 10	10	484	7
06 – 10	11	487	6
06 – 10	12	489	6
06 – 10	13	491	6
06 – 10	14	494	6
06 – 10	15	496	6
06 – 10	16	498	6
06 – 10	17	500	6
06 – 10	18	502	6
06 – 10	19	504	6
06 – 10	20	506	6
06 – 10	21	508	6
06 – 10	22	510	6
06 – 10	23	511	6
06 – 10	24	513	6
06 – 10	25	515	6
06 – 10	26	517	6
06 – 10	27	519	6
06 – 10	28	522	6
06 – 10	29	524	6
06 – 10	30	526	6
06 – 10	31	528	6
06 – 10	32	531	6
06 – 10	33	533	7
06 – 10	34	536	7
06 – 10	35	539	7
06 – 10	36	543	8
06 – 10	37	546	8
06 – 10	38	551	9
06 – 10	39	556	10
06 – 10	40	564	12
06 – 10	41	576	17
06 – 10	42	600	34

Grade 8 Reading, Braille Form

Raw Score	Scale Score	Conditional SEM
0	400	34
1	443	17
2	455	12
3	463	10
4	468	9
5	473	8
6	477	8
7	480	7
8	483	7
9	486	7
10	489	6
11	491	6
12	493	6
13	496	6
14	498	6
15	500	6
16	502	6
17	504	6
18	505	6
19	507	6
20	509	5
21	511	5
22	513	5
23	514	5
24	516	6
25	518	6
26	520	6
27	522	6
28	524	6
29	526	6
30	528	6
31	530	6
32	533	7
33	536	7
34	538	7
35	542	8
36	545	8
37	550	9
38	555	10
39	563	12
40	575	17
41	599	34

Grade 10 Reading, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	445	17
01 – 05	2	458	13
01 – 05	3	466	10
01 – 05	4	471	9
01 – 05	5	476	8
01 – 05	6	480	8
01 – 05	7	483	7
01 – 05	8	487	7
01 – 05	9	489	7
01 – 05	10	492	7
01 – 05	11	495	6
01 – 05	12	497	6
01 – 05	13	499	6
01 – 05	14	501	6
01 – 05	15	503	6
01 – 05	16	505	6
01 – 05	17	507	6
01 – 05	18	509	6
01 – 05	19	511	5
01 – 05	20	513	5
01 – 05	21	514	5
01 – 05	22	516	5
01 – 05	23	518	5
01 – 05	24	520	5
01 – 05	25	522	5
01 – 05	26	523	6
01 – 05	27	525	6
01 – 05	28	527	6
01 – 05	29	529	6
01 – 05	30	531	6
01 – 05	31	533	6
01 – 05	32	535	6
01 – 05	33	538	6
01 – 05	34	540	7
01 – 05	35	543	7
01 – 05	36	546	7
01 – 05	37	549	8
01 – 05	38	553	8
01 – 05	39	557	9
01 – 05	40	563	10
01 – 05	41	570	12
01 – 05	42	583	17
01 – 05	43	600	34

Grade 10 Reading, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	441	17
06 – 10	2	454	13
06 – 10	3	462	10
06 – 10	4	467	9
06 – 10	5	472	8
06 – 10	6	476	8
06 – 10	7	480	7
06 – 10	8	483	7
06 – 10	9	486	7
06 – 10	10	488	7
06 – 10	11	491	6
06 – 10	12	493	6
06 – 10	13	496	6
06 – 10	14	498	6
06 – 10	15	500	6
06 – 10	16	502	6
06 – 10	17	504	6
06 – 10	18	506	6
06 – 10	19	508	6
06 – 10	20	510	6
06 – 10	21	512	6
06 – 10	22	513	6
06 – 10	23	515	6
06 – 10	24	517	6
06 – 10	25	519	6
06 – 10	26	521	6
06 – 10	27	523	6
06 – 10	28	525	6
06 – 10	29	527	6
06 – 10	30	529	6
06 – 10	31	531	6
06 – 10	32	533	6
06 – 10	33	536	6
06 – 10	34	538	7
06 – 10	35	541	7
06 – 10	36	544	7
06 – 10	37	548	8
06 – 10	38	551	8
06 – 10	39	556	9
06 – 10	40	562	10
06 – 10	41	569	12
06 – 10	42	582	17
06 – 10	43	600	34

Grade 10 Reading, Braille Form

Raw Score	Scale Score	Conditional SEM
0	400	34
1	445	17
2	458	13
3	466	10
4	471	9
5	476	8
6	480	8
7	484	7
8	487	7
9	490	7
10	492	7
11	495	6
12	497	6
13	499	6
14	502	6
15	504	6
16	506	6
17	508	6
18	509	6
19	511	6
20	513	6
21	515	6
22	517	5
23	519	6
24	520	6
25	522	6
26	524	6
27	526	6
28	528	6
29	530	6
30	532	6
31	535	6
32	537	6
33	539	7
34	542	7
35	545	7
36	548	8
37	552	8
38	557	9
39	562	10
40	570	12
41	582	17
42	600	34

Grade 3 Mathematics, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01 – 03	0	400	34
01 – 03	1	442	17
01 – 03	2	454	12
01 – 03	3	462	10
01 – 03	4	468	9
01 – 03	5	472	8
01 – 03	6	476	8
01 – 03	7	479	7
01 – 03	8	482	7
01 – 03	9	485	7
01 – 03	10	488	7
01 – 03	11	490	6
01 – 03	12	493	6
01 – 03	13	495	6
01 – 03	14	497	6
01 – 03	15	499	6
01 – 03	16	501	6
01 – 03	17	503	6
01 – 03	18	505	6
01 – 03	19	507	6
01 – 03	20	509	6
01 – 03	21	511	6
01 – 03	22	513	6
01 – 03	23	515	6
01 – 03	24	517	6
01 – 03	25	519	6
01 – 03	26	521	6
01 – 03	27	524	6
01 – 03	28	526	6
01 – 03	29	528	6
01 – 03	30	530	6
01 – 03	31	533	7
01 – 03	32	536	7
01 – 03	33	538	7
01 – 03	34	542	8
01 – 03	35	545	8
01 – 03	36	550	9
01 – 03	37	555	10
01 – 03	38	562	12
01 – 03	39	575	17
01 – 03	40	598	33

Grade 3 Mathematics, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04 – 06	0	400	34
04 – 06	1	441	17
04 – 06	2	453	13
04 – 06	3	461	10
04 – 06	4	467	9
04 – 06	5	472	8
04 – 06	6	476	8
04 – 06	7	479	7
04 – 06	8	482	7
04 – 06	9	485	7
04 – 06	10	488	7
04 – 06	11	490	6
04 – 06	12	493	6
04 – 06	13	495	6
04 – 06	14	497	6
04 – 06	15	499	6
04 – 06	16	501	6
04 – 06	17	503	6
04 – 06	18	505	6
04 – 06	19	507	6
04 – 06	20	509	6
04 – 06	21	511	6
04 – 06	22	513	6
04 – 06	23	515	6
04 – 06	24	517	6
04 – 06	25	519	6
04 – 06	26	521	6
04 – 06	27	523	6
04 – 06	28	525	6
04 – 06	29	528	6
04 – 06	30	530	6
04 – 06	31	533	7
04 – 06	32	535	7
04 – 06	33	538	7
04 – 06	34	542	8
04 – 06	35	546	8
04 – 06	36	550	9
04 – 06	37	556	10
04 – 06	38	563	12
04 – 06	39	576	17
04 – 06	40	600	34

Grade 3 Mathematics, Forms 7 – 8

Form	Raw Score	Scale Score	Conditional SEM
07 – 08	0	400	34
07 – 08	1	442	17
07 – 08	2	454	12
07 – 08	3	462	10
07 – 08	4	468	9
07 – 08	5	473	8
07 – 08	6	477	8
07 – 08	7	480	7
07 – 08	8	483	7
07 – 08	9	486	7
07 – 08	10	489	7
07 – 08	11	492	6
07 – 08	12	494	6
07 – 08	13	496	6
07 – 08	14	498	6
07 – 08	15	501	6
07 – 08	16	503	6
07 – 08	17	505	6
07 – 08	18	507	6
07 – 08	19	509	6
07 – 08	20	511	6
07 – 08	21	513	6
07 – 08	22	515	6
07 – 08	23	517	6
07 – 08	24	519	6
07 – 08	25	521	6
07 – 08	26	523	6
07 – 08	27	525	6
07 – 08	28	527	6
07 – 08	29	530	6
07 – 08	30	532	7
07 – 08	31	535	7
07 – 08	32	538	7
07 – 08	33	541	7
07 – 08	34	544	8
07 – 08	35	548	8
07 – 08	36	553	9
07 – 08	37	558	10
07 – 08	38	566	12
07 – 08	39	578	17
07 – 08	40	600	34

Grade 3 Mathematics, Forms 9 – 10

Form	Raw Score	Scale Score	Conditional SEM
09 – 10	0	400	34
09 – 10	1	443	17
09 – 10	2	455	12
09 – 10	3	463	10
09 – 10	4	468	9
09 – 10	5	472	8
09 – 10	6	476	8
09 – 10	7	479	7
09 – 10	8	482	7
09 – 10	9	485	7
09 – 10	10	487	6
09 – 10	11	490	6
09 – 10	12	492	6
09 – 10	13	494	6
09 – 10	14	496	6
09 – 10	15	498	6
09 – 10	16	500	6
09 – 10	17	502	6
09 – 10	18	504	6
09 – 10	19	506	6
09 – 10	20	507	6
09 – 10	21	509	6
09 – 10	22	511	6
09 – 10	23	513	6
09 – 10	24	515	6
09 – 10	25	517	6
09 – 10	26	519	6
09 – 10	27	521	6
09 – 10	28	523	6
09 – 10	29	525	6
09 – 10	30	528	6
09 – 10	31	530	7
09 – 10	32	533	7
09 – 10	33	536	7
09 – 10	34	539	8
09 – 10	35	543	8
09 – 10	36	548	9
09 – 10	37	553	10
09 – 10	38	561	12
09 – 10	39	573	17
09 – 10	40	597	34

Grade 4 Mathematics, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01 – 03	0	400	34
01 – 03	1	447	17
01 – 03	2	460	12
01 – 03	3	468	10
01 – 03	4	473	9
01 – 03	5	478	8
01 – 03	6	482	8
01 – 03	7	485	7
01 – 03	8	489	7
01 – 03	9	492	7
01 – 03	10	494	7
01 – 03	11	497	6
01 – 03	12	499	6
01 – 03	13	502	6
01 – 03	14	504	6
01 – 03	15	506	6
01 – 03	16	508	6
01 – 03	17	510	6
01 – 03	18	512	6
01 – 03	19	515	6
01 – 03	20	517	6
01 – 03	21	519	6
01 – 03	22	521	6
01 – 03	23	523	6
01 – 03	24	525	6
01 – 03	25	527	6
01 – 03	26	529	6
01 – 03	27	531	6
01 – 03	28	533	6
01 – 03	29	535	6
01 – 03	30	537	6
01 – 03	31	539	6
01 – 03	32	541	6
01 – 03	33	544	7
01 – 03	34	547	7
01 – 03	35	550	8
01 – 03	36	554	9
01 – 03	37	559	10
01 – 03	38	567	12
01 – 03	39	578	17
01 – 03	40	600	33

Grade 4 Mathematics, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04 – 06	0	400	34
04 – 06	1	443	17
04 – 06	2	456	13
04 – 06	3	464	11
04 – 06	4	470	9
04 – 06	5	475	9
04 – 06	6	479	8
04 – 06	7	483	8
04 – 06	8	486	7
04 – 06	9	489	7
04 – 06	10	492	7
04 – 06	11	495	7
04 – 06	12	497	6
04 – 06	13	500	6
04 – 06	14	502	6
04 – 06	15	504	6
04 – 06	16	506	6
04 – 06	17	509	6
04 – 06	18	511	6
04 – 06	19	513	6
04 – 06	20	515	6
04 – 06	21	517	6
04 – 06	22	519	6
04 – 06	23	521	6
04 – 06	24	524	6
04 – 06	25	526	6
04 – 06	26	528	6
04 – 06	27	530	6
04 – 06	28	533	6
04 – 06	29	535	6
04 – 06	30	538	7
04 – 06	31	541	7
04 – 06	32	543	7
04 – 06	33	547	8
04 – 06	34	550	8
04 – 06	35	554	9
04 – 06	36	559	9
04 – 06	37	565	11
04 – 06	38	574	13
04 – 06	39	587	18
04 – 06	40	600	34

Grade 4 Mathematics, Forms 7 – 8

Form	Raw Score	Scale Score	Conditional SEM
07 – 08	0	400	34
07 – 08	1	448	17
07 – 08	2	461	12
07 – 08	3	469	10
07 – 08	4	474	9
07 – 08	5	479	8
07 – 08	6	483	8
07 – 08	7	486	7
07 – 08	8	489	7
07 – 08	9	492	7
07 – 08	10	495	6
07 – 08	11	497	6
07 – 08	12	500	6
07 – 08	13	502	6
07 – 08	14	504	6
07 – 08	15	506	6
07 – 08	16	508	6
07 – 08	17	510	6
07 – 08	18	512	6
07 – 08	19	514	6
07 – 08	20	515	6
07 – 08	21	517	6
07 – 08	22	519	6
07 – 08	23	521	6
07 – 08	24	523	6
07 – 08	25	525	6
07 – 08	26	527	6
07 – 08	27	529	6
07 – 08	28	531	6
07 – 08	29	534	6
07 – 08	30	536	6
07 – 08	31	538	7
07 – 08	32	541	7
07 – 08	33	544	7
07 – 08	34	547	8
07 – 08	35	551	8
07 – 08	36	556	9
07 – 08	37	562	10
07 – 08	38	569	13
07 – 08	39	582	17
07 – 08	40	600	34

Grade 4 Mathematics, Forms 9 – 10

Form	Raw Score	Scale Score	Conditional SEM
09 – 10	0	400	34
09 – 10	1	443	17
09 – 10	2	455	13
09 – 10	3	463	11
09 – 10	4	469	9
09 – 10	5	474	9
09 – 10	6	478	8
09 – 10	7	482	8
09 – 10	8	485	7
09 – 10	9	488	7
09 – 10	10	491	7
09 – 10	11	493	7
09 – 10	12	496	6
09 – 10	13	498	6
09 – 10	14	501	6
09 – 10	15	503	6
09 – 10	16	505	6
09 – 10	17	507	6
09 – 10	18	510	6
09 – 10	19	512	6
09 – 10	20	514	6
09 – 10	21	516	6
09 – 10	22	518	6
09 – 10	23	520	6
09 – 10	24	522	6
09 – 10	25	525	6
09 – 10	26	527	6
09 – 10	27	529	6
09 – 10	28	532	6
09 – 10	29	534	7
09 – 10	30	537	7
09 – 10	31	539	7
09 – 10	32	542	7
09 – 10	33	546	8
09 – 10	34	549	8
09 – 10	35	553	9
09 – 10	36	558	10
09 – 10	37	565	11
09 – 10	38	573	13
09 – 10	39	586	18
09 – 10	40	600	34

Grade 5 Mathematics, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01 – 03	0	400	34
01 – 03	1	440	17
01 – 03	2	453	12
01 – 03	3	460	10
01 – 03	4	466	9
01 – 03	5	470	8
01 – 03	6	474	8
01 – 03	7	478	7
01 – 03	8	481	7
01 – 03	9	483	7
01 – 03	10	486	7
01 – 03	11	489	6
01 – 03	12	491	6
01 – 03	13	493	6
01 – 03	14	496	6
01 – 03	15	498	6
01 – 03	16	500	6
01 – 03	17	502	6
01 – 03	18	504	6
01 – 03	19	506	6
01 – 03	20	508	6
01 – 03	21	510	6
01 – 03	22	512	6
01 – 03	23	514	6
01 – 03	24	516	6
01 – 03	25	518	6
01 – 03	26	520	6
01 – 03	27	522	6
01 – 03	28	525	6
01 – 03	29	527	6
01 – 03	30	530	7
01 – 03	31	532	7
01 – 03	32	535	7
01 – 03	33	539	8
01 – 03	34	543	8
01 – 03	35	547	9
01 – 03	36	553	10
01 – 03	37	560	12
01 – 03	38	570	14
01 – 03	39	585	19
01 – 03	40	600	34

Grade 5 Mathematics, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04 – 06	0	400	34
04 – 06	1	444	17
04 – 06	2	456	12
04 – 06	3	464	10
04 – 06	4	470	9
04 – 06	5	474	8
04 – 06	6	478	8
04 – 06	7	482	7
04 – 06	8	485	7
04 – 06	9	488	7
04 – 06	10	490	7
04 – 06	11	493	6
04 – 06	12	495	6
04 – 06	13	497	6
04 – 06	14	500	6
04 – 06	15	502	6
04 – 06	16	504	6
04 – 06	17	506	6
04 – 06	18	508	6
04 – 06	19	509	6
04 – 06	20	511	6
04 – 06	21	513	6
04 – 06	22	515	6
04 – 06	23	517	6
04 – 06	24	519	6
04 – 06	25	520	6
04 – 06	26	522	6
04 – 06	27	524	6
04 – 06	28	526	6
04 – 06	29	528	6
04 – 06	30	531	6
04 – 06	31	533	7
04 – 06	32	536	7
04 – 06	33	539	7
04 – 06	34	542	8
04 – 06	35	546	8
04 – 06	36	551	9
04 – 06	37	557	11
04 – 06	38	566	13
04 – 06	39	581	19
04 – 06	40	600	35

Grade 5 Mathematics, Forms 7 – 8

Form	Raw Score	Scale Score	Conditional SEM
07 – 08	0	400	34
07 – 08	1	443	17
07 – 08	2	455	12
07 – 08	3	462	10
07 – 08	4	468	9
07 – 08	5	473	8
07 – 08	6	476	8
07 – 08	7	480	7
07 – 08	8	483	7
07 – 08	9	486	7
07 – 08	10	488	7
07 – 08	11	491	6
07 – 08	12	493	6
07 – 08	13	496	6
07 – 08	14	498	6
07 – 08	15	500	6
07 – 08	16	502	6
07 – 08	17	504	6
07 – 08	18	506	6
07 – 08	19	508	6
07 – 08	20	510	6
07 – 08	21	512	6
07 – 08	22	514	6
07 – 08	23	516	6
07 – 08	24	518	6
07 – 08	25	520	6
07 – 08	26	522	6
07 – 08	27	524	6
07 – 08	28	527	6
07 – 08	29	529	6
07 – 08	30	531	7
07 – 08	31	534	7
07 – 08	32	537	7
07 – 08	33	540	8
07 – 08	34	544	8
07 – 08	35	549	9
07 – 08	36	554	10
07 – 08	37	561	12
07 – 08	38	571	14
07 – 08	39	586	19
07 – 08	40	600	34

Grade 5 Mathematics, Forms 9 – 10

Form	Raw Score	Scale Score	Conditional SEM
09 – 10	0	400	34
09 – 10	1	445	17
09 – 10	2	458	12
09 – 10	3	465	10
09 – 10	4	471	9
09 – 10	5	476	8
09 – 10	6	480	8
09 – 10	7	483	7
09 – 10	8	486	7
09 – 10	9	489	7
09 – 10	10	492	7
09 – 10	11	494	6
09 – 10	12	497	6
09 – 10	13	499	6
09 – 10	14	501	6
09 – 10	15	503	6
09 – 10	16	505	6
09 – 10	17	507	6
09 – 10	18	509	6
09 – 10	19	511	5
09 – 10	20	512	5
09 – 10	21	514	5
09 – 10	22	516	5
09 – 10	23	518	5
09 – 10	24	519	5
09 – 10	25	521	6
09 – 10	26	523	6
09 – 10	27	525	6
09 – 10	28	527	6
09 – 10	29	529	6
09 – 10	30	531	6
09 – 10	31	534	6
09 – 10	32	536	7
09 – 10	33	539	7
09 – 10	34	543	8
09 – 10	35	547	8
09 – 10	36	551	9
09 – 10	37	558	11
09 – 10	38	566	13
09 – 10	39	581	19
09 – 10	40	600	35

Grade 6 Mathematics, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01 – 03	0	400	34
01 – 03	1	441	17
01 – 03	2	454	12
01 – 03	3	461	10
01 – 03	4	467	9
01 – 03	5	472	8
01 – 03	6	476	8
01 – 03	7	479	8
01 – 03	8	483	7
01 – 03	9	486	7
01 – 03	10	488	7
01 – 03	11	491	7
01 – 03	12	493	6
01 – 03	13	496	6
01 – 03	14	498	6
01 – 03	15	500	6
01 – 03	16	502	6
01 – 03	17	504	6
01 – 03	18	506	6
01 – 03	19	508	6
01 – 03	20	510	6
01 – 03	21	512	6
01 – 03	22	514	6
01 – 03	23	516	6
01 – 03	24	518	6
01 – 03	25	520	6
01 – 03	26	522	6
01 – 03	27	524	6
01 – 03	28	526	6
01 – 03	29	529	6
01 – 03	30	531	6
01 – 03	31	533	7
01 – 03	32	536	7
01 – 03	33	539	7
01 – 03	34	542	8
01 – 03	35	546	8
01 – 03	36	550	9
01 – 03	37	555	10
01 – 03	38	563	12
01 – 03	39	574	17
01 – 03	40	598	33

Grade 6 Mathematics, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04 – 06	0	400	33
04 – 06	1	442	17
04 – 06	2	454	12
04 – 06	3	462	10
04 – 06	4	467	9
04 – 06	5	472	8
04 – 06	6	476	8
04 – 06	7	479	7
04 – 06	8	482	7
04 – 06	9	485	7
04 – 06	10	488	7
04 – 06	11	490	6
04 – 06	12	493	6
04 – 06	13	495	6
04 – 06	14	497	6
04 – 06	15	500	6
04 – 06	16	502	6
04 – 06	17	504	6
04 – 06	18	506	6
04 – 06	19	508	6
04 – 06	20	510	6
04 – 06	21	512	6
04 – 06	22	514	6
04 – 06	23	516	6
04 – 06	24	517	6
04 – 06	25	519	6
04 – 06	26	521	6
04 – 06	27	524	6
04 – 06	28	526	6
04 – 06	29	528	6
04 – 06	30	530	6
04 – 06	31	533	7
04 – 06	32	535	7
04 – 06	33	538	7
04 – 06	34	542	8
04 – 06	35	545	8
04 – 06	36	550	9
04 – 06	37	555	10
04 – 06	38	562	12
04 – 06	39	574	17
04 – 06	40	597	33

Grade 6 Mathematics, Forms 7 – 8

Form	Raw Score	Scale Score	Conditional SEM
07 – 08	0	400	34
07 – 08	1	446	17
07 – 08	2	459	12
07 – 08	3	466	10
07 – 08	4	472	9
07 – 08	5	477	8
07 – 08	6	480	8
07 – 08	7	484	7
07 – 08	8	487	7
07 – 08	9	490	7
07 – 08	10	492	6
07 – 08	11	495	6
07 – 08	12	497	6
07 – 08	13	499	6
07 – 08	14	501	6
07 – 08	15	503	6
07 – 08	16	505	6
07 – 08	17	507	6
07 – 08	18	509	6
07 – 08	19	511	5
07 – 08	20	513	5
07 – 08	21	514	5
07 – 08	22	516	5
07 – 08	23	518	5
07 – 08	24	520	5
07 – 08	25	521	5
07 – 08	26	523	6
07 – 08	27	525	6
07 – 08	28	527	6
07 – 08	29	529	6
07 – 08	30	531	6
07 – 08	31	533	6
07 – 08	32	536	7
07 – 08	33	538	7
07 – 08	34	541	7
07 – 08	35	545	8
07 – 08	36	549	9
07 – 08	37	554	10
07 – 08	38	561	12
07 – 08	39	573	17
07 – 08	40	597	33

Grade 6 Mathematics, Forms 9 – 10

Form	Raw Score	Scale Score	Conditional SEM
09 – 10	0	400	34
09 – 10	1	447	17
09 – 10	2	459	12
09 – 10	3	467	10
09 – 10	4	473	9
09 – 10	5	477	8
09 – 10	6	481	8
09 – 10	7	484	7
09 – 10	8	488	7
09 – 10	9	490	7
09 – 10	10	493	6
09 – 10	11	495	6
09 – 10	12	498	6
09 – 10	13	500	6
09 – 10	14	502	6
09 – 10	15	504	6
09 – 10	16	506	6
09 – 10	17	508	6
09 – 10	18	509	5
09 – 10	19	511	5
09 – 10	20	513	5
09 – 10	21	515	5
09 – 10	22	516	5
09 – 10	23	518	5
09 – 10	24	520	5
09 – 10	25	522	5
09 – 10	26	523	6
09 – 10	27	525	6
09 – 10	28	527	6
09 – 10	29	529	6
09 – 10	30	531	6
09 – 10	31	534	6
09 – 10	32	536	7
09 – 10	33	539	7
09 – 10	34	542	7
09 – 10	35	545	8
09 – 10	36	549	9
09 – 10	37	555	10
09 – 10	38	562	12
09 – 10	39	574	17
09 – 10	40	597	33

Grade 7 Mathematics, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01 – 03	0	400	34
01 – 03	1	451	17
01 – 03	2	463	12
01 – 03	3	471	10
01 – 03	4	476	9
01 – 03	5	481	8
01 – 03	6	485	8
01 – 03	7	488	7
01 – 03	8	491	7
01 – 03	9	493	6
01 – 03	10	496	6
01 – 03	11	498	6
01 – 03	12	500	6
01 – 03	13	502	6
01 – 03	14	504	6
01 – 03	15	506	5
01 – 03	16	507	5
01 – 03	17	509	5
01 – 03	18	511	5
01 – 03	19	512	5
01 – 03	20	514	5
01 – 03	21	516	5
01 – 03	22	517	5
01 – 03	23	519	5
01 – 03	24	521	5
01 – 03	25	523	6
01 – 03	26	525	6
01 – 03	27	527	6
01 – 03	28	529	6
01 – 03	29	531	6
01 – 03	30	533	6
01 – 03	31	535	6
01 – 03	32	538	7
01 – 03	33	540	7
01 – 03	34	544	7
01 – 03	35	547	8
01 – 03	36	551	9
01 – 03	37	557	10
01 – 03	38	564	12
01 – 03	39	576	17
01 – 03	40	599	33

Grade 7 Mathematics, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04 – 06	0	400	34
04 – 06	1	445	17
04 – 06	2	458	13
04 – 06	3	466	11
04 – 06	4	472	9
04 – 06	5	477	9
04 – 06	6	481	8
04 – 06	7	485	7
04 – 06	8	488	7
04 – 06	9	491	7
04 – 06	10	493	6
04 – 06	11	495	6
04 – 06	12	498	6
04 – 06	13	500	6
04 – 06	14	502	6
04 – 06	15	504	6
04 – 06	16	505	5
04 – 06	17	507	5
04 – 06	18	509	5
04 – 06	19	511	5
04 – 06	20	512	5
04 – 06	21	514	5
04 – 06	22	516	5
04 – 06	23	518	5
04 – 06	24	519	6
04 – 06	25	521	6
04 – 06	26	523	6
04 – 06	27	525	6
04 – 06	28	528	6
04 – 06	29	530	6
04 – 06	30	532	6
04 – 06	31	535	7
04 – 06	32	538	7
04 – 06	33	541	7
04 – 06	34	544	8
04 – 06	35	548	8
04 – 06	36	553	9
04 – 06	37	559	10
04 – 06	38	567	13
04 – 06	39	579	17
04 – 06	40	600	34

Grade 7 Mathematics, Forms 7 – 8

Form	Raw Score	Scale Score	Conditional SEM
07 – 08	0	400	34
07 – 08	1	446	17
07 – 08	2	459	13
07 – 08	3	467	11
07 – 08	4	473	9
07 – 08	5	478	9
07 – 08	6	482	8
07 – 08	7	485	7
07 – 08	8	489	7
07 – 08	9	491	7
07 – 08	10	494	7
07 – 08	11	497	6
07 – 08	12	499	6
07 – 08	13	501	6
07 – 08	14	504	6
07 – 08	15	506	6
07 – 08	16	508	6
07 – 08	17	510	6
07 – 08	18	512	6
07 – 08	19	514	6
07 – 08	20	516	6
07 – 08	21	518	6
07 – 08	22	520	6
07 – 08	23	522	6
07 – 08	24	524	6
07 – 08	25	526	6
07 – 08	26	528	6
07 – 08	27	530	6
07 – 08	28	532	6
07 – 08	29	534	6
07 – 08	30	537	6
07 – 08	31	539	7
07 – 08	32	542	7
07 – 08	33	545	7
07 – 08	34	548	7
07 – 08	35	551	8
07 – 08	36	556	9
07 – 08	37	561	10
07 – 08	38	568	12
07 – 08	39	580	17
07 – 08	40	600	33

Grade 7 Mathematics, Forms 9 – 10

Form	Raw Score	Scale Score	Conditional SEM
09 – 10	0	400	34
09 – 10	1	445	17
09 – 10	2	458	13
09 – 10	3	466	11
09 – 10	4	472	9
09 – 10	5	477	8
09 – 10	6	481	8
09 – 10	7	484	7
09 – 10	8	487	7
09 – 10	9	490	7
09 – 10	10	493	6
09 – 10	11	495	6
09 – 10	12	497	6
09 – 10	13	499	6
09 – 10	14	501	6
09 – 10	15	503	5
09 – 10	16	505	5
09 – 10	17	507	5
09 – 10	18	508	5
09 – 10	19	510	5
09 – 10	20	512	5
09 – 10	21	513	5
09 – 10	22	515	5
09 – 10	23	517	5
09 – 10	24	519	5
09 – 10	25	520	6
09 – 10	26	522	6
09 – 10	27	524	6
09 – 10	28	526	6
09 – 10	29	529	6
09 – 10	30	531	6
09 – 10	31	533	7
09 – 10	32	536	7
09 – 10	33	539	7
09 – 10	34	542	8
09 – 10	35	546	8
09 – 10	36	551	9
09 – 10	37	556	10
09 – 10	38	564	12
09 – 10	39	576	17
09 – 10	40	600	34

Grade 8 Mathematics, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01 – 03	0	400	34
01 – 03	1	445	17
01 – 03	2	457	12
01 – 03	3	465	10
01 – 03	4	471	9
01 – 03	5	475	8
01 – 03	6	479	8
01 – 03	7	482	7
01 – 03	8	485	7
01 – 03	9	488	7
01 – 03	10	491	6
01 – 03	11	493	6
01 – 03	12	495	6
01 – 03	13	498	6
01 – 03	14	500	6
01 – 03	15	502	6
01 – 03	16	504	6
01 – 03	17	506	6
01 – 03	18	508	6
01 – 03	19	510	6
01 – 03	20	512	6
01 – 03	21	514	6
01 – 03	22	516	6
01 – 03	23	518	6
01 – 03	24	519	6
01 – 03	25	521	6
01 – 03	26	523	6
01 – 03	27	525	6
01 – 03	28	527	6
01 – 03	29	530	6
01 – 03	30	532	6
01 – 03	31	534	6
01 – 03	32	537	7
01 – 03	33	539	7
01 – 03	34	542	7
01 – 03	35	546	8
01 – 03	36	550	9
01 – 03	37	555	10
01 – 03	38	562	12
01 – 03	39	575	17
01 – 03	40	599	34

Grade 8 Mathematics, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04 – 06	0	400	34
04 – 06	1	444	17
04 – 06	2	456	12
04 – 06	3	464	10
04 – 06	4	470	9
04 – 06	5	474	8
04 – 06	6	478	8
04 – 06	7	482	7
04 – 06	8	485	7
04 – 06	9	488	7
04 – 06	10	490	7
04 – 06	11	493	6
04 – 06	12	495	6
04 – 06	13	497	6
04 – 06	14	500	6
04 – 06	15	502	6
04 – 06	16	504	6
04 – 06	17	506	6
04 – 06	18	508	6
04 – 06	19	510	6
04 – 06	20	512	6
04 – 06	21	514	6
04 – 06	22	516	6
04 – 06	23	517	6
04 – 06	24	519	6
04 – 06	25	521	6
04 – 06	26	523	6
04 – 06	27	525	6
04 – 06	28	527	6
04 – 06	29	529	6
04 – 06	30	532	6
04 – 06	31	534	6
04 – 06	32	537	7
04 – 06	33	540	7
04 – 06	34	543	8
04 – 06	35	547	8
04 – 06	36	551	9
04 – 06	37	557	10
04 – 06	38	564	12
04 – 06	39	577	17
04 – 06	40	600	34

Grade 8 Mathematics, Forms 7 – 8

Form	Raw Score	Scale Score	Conditional SEM
07 – 08	0	400	34
07 – 08	1	443	17
07 – 08	2	456	12
07 – 08	3	464	10
07 – 08	4	469	9
07 – 08	5	474	8
07 – 08	6	478	8
07 – 08	7	481	7
07 – 08	8	484	7
07 – 08	9	487	7
07 – 08	10	490	7
07 – 08	11	492	6
07 – 08	12	495	6
07 – 08	13	497	6
07 – 08	14	499	6
07 – 08	15	501	6
07 – 08	16	503	6
07 – 08	17	505	6
07 – 08	18	507	6
07 – 08	19	509	6
07 – 08	20	511	6
07 – 08	21	513	6
07 – 08	22	514	6
07 – 08	23	516	6
07 – 08	24	518	6
07 – 08	25	520	6
07 – 08	26	522	6
07 – 08	27	524	6
07 – 08	28	526	6
07 – 08	29	528	6
07 – 08	30	530	6
07 – 08	31	533	6
07 – 08	32	535	7
07 – 08	33	538	7
07 – 08	34	542	8
07 – 08	35	545	8
07 – 08	36	549	9
07 – 08	37	555	10
07 – 08	38	562	12
07 – 08	39	574	17
07 – 08	40	597	33

Grade 8 Mathematics, Forms 9 – 10

Form	Raw Score	Scale Score	Conditional SEM
09 – 10	0	400	34
09 – 10	1	441	17
09 – 10	2	454	12
09 – 10	3	462	10
09 – 10	4	467	9
09 – 10	5	472	8
09 – 10	6	476	8
09 – 10	7	479	7
09 – 10	8	483	7
09 – 10	9	485	7
09 – 10	10	488	7
09 – 10	11	491	6
09 – 10	12	493	6
09 – 10	13	495	6
09 – 10	14	497	6
09 – 10	15	500	6
09 – 10	16	502	6
09 – 10	17	504	6
09 – 10	18	506	6
09 – 10	19	508	6
09 – 10	20	509	6
09 – 10	21	511	6
09 – 10	22	513	6
09 – 10	23	515	6
09 – 10	24	517	6
09 – 10	25	519	6
09 – 10	26	521	6
09 – 10	27	523	6
09 – 10	28	524	6
09 – 10	29	527	6
09 – 10	30	529	6
09 – 10	31	531	6
09 – 10	32	533	6
09 – 10	33	536	7
09 – 10	34	539	7
09 – 10	35	542	8
09 – 10	36	546	9
09 – 10	37	551	10
09 – 10	38	559	12
09 – 10	39	570	17
09 – 10	40	594	33

Grade 10 Mathematics, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01 – 03	0	400	34
01 – 03	1	443	17
01 – 03	2	456	13
01 – 03	3	464	10
01 – 03	4	470	9
01 – 03	5	474	8
01 – 03	6	478	8
01 – 03	7	482	7
01 – 03	8	485	7
01 – 03	9	488	7
01 – 03	10	491	7
01 – 03	11	493	6
01 – 03	12	496	6
01 – 03	13	498	6
01 – 03	14	500	6
01 – 03	15	502	6
01 – 03	16	504	6
01 – 03	17	507	6
01 – 03	18	509	6
01 – 03	19	511	6
01 – 03	20	513	6
01 – 03	21	515	6
01 – 03	22	516	6
01 – 03	23	518	6
01 – 03	24	520	6
01 – 03	25	522	6
01 – 03	26	524	6
01 – 03	27	527	6
01 – 03	28	529	6
01 – 03	29	531	6
01 – 03	30	533	6
01 – 03	31	535	6
01 – 03	32	538	7
01 – 03	33	541	7
01 – 03	34	543	7
01 – 03	35	547	8
01 – 03	36	551	8
01 – 03	37	556	10
01 – 03	38	562	12
01 – 03	39	574	17
01 – 03	40	597	33

Grade 10 Mathematics, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04 – 06	0	400	34
04 – 06	1	446	17
04 – 06	2	458	12
04 – 06	3	466	10
04 – 06	4	471	9
04 – 06	5	476	8
04 – 06	6	479	8
04 – 06	7	483	7
04 – 06	8	486	7
04 – 06	9	489	7
04 – 06	10	491	6
04 – 06	11	494	6
04 – 06	12	496	6
04 – 06	13	498	6
04 – 06	14	500	6
04 – 06	15	502	6
04 – 06	16	504	6
04 – 06	17	506	6
04 – 06	18	508	6
04 – 06	19	510	6
04 – 06	20	512	6
04 – 06	21	514	6
04 – 06	22	516	6
04 – 06	23	518	6
04 – 06	24	520	6
04 – 06	25	522	6
04 – 06	26	524	6
04 – 06	27	526	6
04 – 06	28	528	6
04 – 06	29	531	6
04 – 06	30	533	6
04 – 06	31	535	7
04 – 06	32	538	7
04 – 06	33	541	7
04 – 06	34	544	7
04 – 06	35	548	8
04 – 06	36	552	9
04 – 06	37	557	10
04 – 06	38	564	12
04 – 06	39	577	17
04 – 06	40	600	34

Grade 10 Mathematics, Forms 7 – 8

Form	Raw Score	Scale Score	Conditional SEM
07 – 08	0	400	34
07 – 08	1	446	17
07 – 08	2	458	12
07 – 08	3	466	10
07 – 08	4	471	9
07 – 08	5	476	8
07 – 08	6	480	8
07 – 08	7	483	7
07 – 08	8	486	7
07 – 08	9	489	7
07 – 08	10	491	6
07 – 08	11	494	6
07 – 08	12	496	6
07 – 08	13	498	6
07 – 08	14	500	6
07 – 08	15	502	6
07 – 08	16	504	6
07 – 08	17	506	6
07 – 08	18	508	6
07 – 08	19	510	6
07 – 08	20	512	6
07 – 08	21	514	6
07 – 08	22	516	6
07 – 08	23	518	6
07 – 08	24	520	6
07 – 08	25	522	6
07 – 08	26	524	6
07 – 08	27	526	6
07 – 08	28	528	6
07 – 08	29	530	6
07 – 08	30	533	6
07 – 08	31	535	7
07 – 08	32	538	7
07 – 08	33	541	7
07 – 08	34	544	7
07 – 08	35	548	8
07 – 08	36	552	9
07 – 08	37	557	10
07 – 08	38	565	12
07 – 08	39	577	17
07 – 08	40	600	34

Grade 10 Mathematics, Forms 9 – 10

Form	Raw Score	Scale Score	Conditional SEM
09 – 10	0	400	34
09 – 10	1	444	17
09 – 10	2	456	12
09 – 10	3	464	10
09 – 10	4	469	9
09 – 10	5	474	8
09 – 10	6	478	8
09 – 10	7	481	7
09 – 10	8	484	7
09 – 10	9	487	7
09 – 10	10	489	6
09 – 10	11	492	6
09 – 10	12	494	6
09 – 10	13	496	6
09 – 10	14	498	6
09 – 10	15	501	6
09 – 10	16	503	6
09 – 10	17	505	6
09 – 10	18	507	6
09 – 10	19	509	6
09 – 10	20	510	6
09 – 10	21	512	6
09 – 10	22	514	6
09 – 10	23	516	6
09 – 10	24	518	6
09 – 10	25	520	6
09 – 10	26	523	6
09 – 10	27	525	6
09 – 10	28	527	6
09 – 10	29	529	6
09 – 10	30	532	6
09 – 10	31	534	7
09 – 10	32	537	7
09 – 10	33	540	7
09 – 10	34	543	8
09 – 10	35	547	8
09 – 10	36	551	9
09 – 10	37	556	10
09 – 10	38	564	12
09 – 10	39	576	17
09 – 10	40	600	34

Grade 4 Science, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	449	17
01	2	462	13
01	3	470	11
01	4	476	10
01	5	481	9
01	6	485	8
01	7	489	8
01	8	493	7
01	9	496	7
01	10	499	7
01	11	502	7
01	12	505	7
01	13	507	7
01	14	510	7
01	15	512	7
01	16	515	6
01	17	517	6
01	18	520	6
01	19	522	6
01	20	525	7
01	21	528	7
01	22	530	7
01	23	533	7
01	24	536	7
01	25	538	7
01	26	541	7
01	27	544	7
01	28	547	7
01	29	551	8
01	30	555	8
01	31	559	9
01	32	564	10
01	33	571	12
01	34	583	17
01	35	600	33

Grade 4 Science, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	451	17
02	2	464	13
02	3	472	11
02	4	478	9
02	5	482	9
02	6	487	8
02	7	490	8
02	8	494	7
02	9	497	7
02	10	500	7
02	11	503	7
02	12	505	7
02	13	508	6
02	14	510	6
02	15	512	6
02	16	515	6
02	17	517	6
02	18	519	6
02	19	522	6
02	20	524	6
02	21	526	6
02	22	529	6
02	23	531	6
02	24	534	7
02	25	536	7
02	26	539	7
02	27	542	7
02	28	545	7
02	29	548	7
02	30	551	8
02	31	555	8
02	32	559	9
02	33	565	10
02	34	572	12
02	35	584	17
02	36	600	34

Grade 4 Science, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	451	17
03	2	463	12
03	3	471	10
03	4	477	9
03	5	481	8
03	6	485	8
03	7	489	7
03	8	492	7
03	9	495	7
03	10	498	7
03	11	500	7
03	12	503	6
03	13	505	6
03	14	508	6
03	15	510	6
03	16	512	6
03	17	514	6
03	18	517	6
03	19	519	6
03	20	521	6
03	21	523	6
03	22	525	6
03	23	528	6
03	24	530	6
03	25	532	6
03	26	534	6
03	27	537	6
03	28	539	6
03	29	542	6
03	30	544	7
03	31	547	7
03	32	550	7
03	33	553	7
03	34	556	8
03	35	560	9
03	36	566	10
03	37	573	12
03	38	585	17
03	39	600	33

Grade 4 Science, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	449	17
04	2	462	12
04	3	469	10
04	4	475	9
04	5	480	8
04	6	484	8
04	7	487	7
04	8	490	7
04	9	493	7
04	10	496	7
04	11	499	7
04	12	501	6
04	13	504	6
04	14	506	6
04	15	508	6
04	16	510	6
04	17	513	6
04	18	515	6
04	19	517	6
04	20	519	6
04	21	521	6
04	22	523	6
04	23	525	6
04	24	528	6
04	25	530	6
04	26	532	6
04	27	535	6
04	28	537	7
04	29	540	7
04	30	543	7
04	31	546	7
04	32	549	8
04	33	553	8
04	34	557	9
04	35	562	10
04	36	570	12
04	37	582	17
04	38	600	33

Grade 7 Science, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	442	17
01	2	455	13
01	3	463	11
01	4	469	9
01	5	473	9
01	6	478	8
01	7	481	8
01	8	485	7
01	9	488	7
01	10	490	7
01	11	493	7
01	12	496	6
01	13	498	6
01	14	500	6
01	15	502	6
01	16	505	6
01	17	507	6
01	18	509	6
01	19	511	6
01	20	513	6
01	21	515	6
01	22	517	6
01	23	519	6
01	24	521	6
01	25	523	6
01	26	525	6
01	27	527	6
01	28	530	6
01	29	532	6
01	30	535	7
01	31	538	7
01	32	541	7
01	33	544	8
01	34	548	9
01	35	554	10
01	36	561	12
01	37	573	17
01	38	596	33

Grade 7 Science, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	448	17
02	2	461	13
02	3	469	11
02	4	475	9
02	5	480	9
02	6	485	8
02	7	488	8
02	8	492	7
02	9	495	7
02	10	498	7
02	11	500	7
02	12	503	6
02	13	505	6
02	14	508	6
02	15	510	6
02	16	512	6
02	17	514	6
02	18	516	6
02	19	518	6
02	20	521	6
02	21	523	6
02	22	525	6
02	23	527	6
02	24	529	6
02	25	531	6
02	26	533	6
02	27	536	6
02	28	538	7
02	29	541	7
02	30	544	7
02	31	547	8
02	32	552	9
02	33	557	10
02	34	564	12
02	35	576	17
02	36	599	33

Grade 7 Science, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	449	17
03	2	462	13
03	3	470	11
03	4	476	9
03	5	481	9
03	6	485	8
03	7	489	8
03	8	492	7
03	9	495	7
03	10	498	7
03	11	501	6
03	12	503	6
03	13	505	6
03	14	508	6
03	15	510	6
03	16	512	6
03	17	514	6
03	18	516	6
03	19	518	6
03	20	520	6
03	21	522	6
03	22	524	6
03	23	526	6
03	24	529	6
03	25	531	6
03	26	533	6
03	27	536	7
03	28	538	7
03	29	541	7
03	30	545	8
03	31	549	9
03	32	554	10
03	33	561	12
03	34	573	17
03	35	597	33

Grade 7 Science, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	446	17
04	2	459	13
04	3	467	11
04	4	473	9
04	5	478	9
04	6	482	8
04	7	485	8
04	8	489	7
04	9	492	7
04	10	494	7
04	11	497	7
04	12	500	6
04	13	502	6
04	14	504	6
04	15	506	6
04	16	509	6
04	17	511	6
04	18	513	6
04	19	515	6
04	20	517	6
04	21	519	6
04	22	521	6
04	23	524	6
04	24	526	6
04	25	528	6
04	26	531	6
04	27	533	7
04	28	536	7
04	29	539	7
04	30	542	8
04	31	546	8
04	32	550	9
04	33	555	10
04	34	563	12
04	35	575	17
04	36	599	33

Grade 11 Science, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	437	17
01	2	449	12
01	3	457	10
01	4	463	9
01	5	468	9
01	6	472	8
01	7	475	8
01	8	479	7
01	9	482	7
01	10	485	7
01	11	488	7
01	12	490	7
01	13	493	7
01	14	495	7
01	15	498	6
01	16	501	6
01	17	503	6
01	18	506	7
01	19	508	7
01	20	511	7
01	21	513	7
01	22	516	7
01	23	519	7
01	24	522	7
01	25	525	7
01	26	528	7
01	27	531	8
01	28	535	8
01	29	539	8
01	30	543	9
01	31	548	9
01	32	554	11
01	33	562	12
01	34	574	17
01	35	598	33

Grade 11 Science, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	431	17
02	2	444	13
02	3	452	11
02	4	458	9
02	5	463	9
02	6	467	8
02	7	471	8
02	8	474	7
02	9	477	7
02	10	480	7
02	11	483	7
02	12	486	7
02	13	488	6
02	14	491	6
02	15	493	6
02	16	496	6
02	17	498	6
02	18	500	6
02	19	503	6
02	20	505	6
02	21	507	6
02	22	510	6
02	23	512	6
02	24	514	6
02	25	517	7
02	26	520	7
02	27	522	7
02	28	525	7
02	29	528	7
02	30	531	7
02	31	535	8
02	32	538	8
02	33	542	9
02	34	547	9
02	35	553	10
02	36	561	12
02	37	573	17
02	38	596	33

Grade 11 Science, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	442	17
03	2	454	12
03	3	462	10
03	4	467	9
03	5	472	8
03	6	475	8
03	7	479	7
03	8	482	7
03	9	484	7
03	10	487	7
03	11	490	6
03	12	492	6
03	13	494	6
03	14	497	6
03	15	499	6
03	16	501	6
03	17	504	6
03	18	506	6
03	19	508	6
03	20	511	6
03	21	513	6
03	22	515	7
03	23	518	7
03	24	521	7
03	25	524	7
03	26	527	7
03	27	530	8
03	28	533	8
03	29	537	8
03	30	542	9
03	31	547	10
03	32	553	11
03	33	561	13
03	34	573	17
03	35	597	34

Grade 11 Science, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	438	17
04	2	451	13
04	3	459	11
04	4	465	9
04	5	469	9
04	6	474	8
04	7	477	8
04	8	481	7
04	9	484	7
04	10	487	7
04	11	489	7
04	12	492	7
04	13	494	6
04	14	497	6
04	15	499	6
04	16	502	6
04	17	504	6
04	18	506	6
04	19	509	6
04	20	511	6
04	21	514	6
04	22	516	7
04	23	519	7
04	24	522	7
04	25	525	7
04	26	528	7
04	27	531	7
04	28	534	8
04	29	538	8
04	30	543	9
04	31	547	9
04	32	553	11
04	33	561	12
04	34	574	17
04	35	597	34

Grade 5 Social Studies, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	441	17
01 – 05	2	453	12
01 – 05	3	461	10
01 – 05	4	467	9
01 – 05	5	472	9
01 – 05	6	476	8
01 – 05	7	479	8
01 – 05	8	482	7
01 – 05	9	485	7
01 – 05	10	488	7
01 – 05	11	491	7
01 – 05	12	493	6
01 – 05	13	496	6
01 – 05	14	498	6
01 – 05	15	500	6
01 – 05	16	503	6
01 – 05	17	505	6
01 – 05	18	507	6
01 – 05	19	509	6
01 – 05	20	511	6
01 – 05	21	513	6
01 – 05	22	515	6
01 – 05	23	517	6
01 – 05	24	520	6
01 – 05	25	522	6
01 – 05	26	524	6
01 – 05	27	526	6
01 – 05	28	529	6
01 – 05	29	531	7
01 – 05	30	534	7
01 – 05	31	537	7
01 – 05	32	540	7
01 – 05	33	544	8
01 – 05	34	547	8
01 – 05	35	552	9
01 – 05	36	558	10
01 – 05	37	565	12
01 – 05	38	578	17
01 – 05	39	600	34

Grade 5 Social Studies, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	437	17
06 – 10	2	450	13
06 – 10	3	458	11
06 – 10	4	464	9
06 – 10	5	469	9
06 – 10	6	473	8
06 – 10	7	477	8
06 – 10	8	480	7
06 – 10	9	483	7
06 – 10	10	486	7
06 – 10	11	489	7
06 – 10	12	492	6
06 – 10	13	494	6
06 – 10	14	497	6
06 – 10	15	499	6
06 – 10	16	501	6
06 – 10	17	503	6
06 – 10	18	506	6
06 – 10	19	508	6
06 – 10	20	510	6
06 – 10	21	512	6
06 – 10	22	514	6
06 – 10	23	516	6
06 – 10	24	519	6
06 – 10	25	521	6
06 – 10	26	523	6
06 – 10	27	526	6
06 – 10	28	528	7
06 – 10	29	531	7
06 – 10	30	533	7
06 – 10	31	536	7
06 – 10	32	540	7
06 – 10	33	543	8
06 – 10	34	547	8
06 – 10	35	552	9
06 – 10	36	558	10
06 – 10	37	565	12
06 – 10	38	578	17
06 – 10	39	600	34

Grade 8 Social Studies, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	445	17
01 – 05	2	457	12
01 – 05	3	465	10
01 – 05	4	470	9
01 – 05	5	475	8
01 – 05	6	478	8
01 – 05	7	482	7
01 – 05	8	485	7
01 – 05	9	488	7
01 – 05	10	490	6
01 – 05	11	493	6
01 – 05	12	495	6
01 – 05	13	497	6
01 – 05	14	499	6
01 – 05	15	501	6
01 – 05	16	503	6
01 – 05	17	505	6
01 – 05	18	507	6
01 – 05	19	509	6
01 – 05	20	511	6
01 – 05	21	513	6
01 – 05	22	515	6
01 – 05	23	517	6
01 – 05	24	519	6
01 – 05	25	521	6
01 – 05	26	523	6
01 – 05	27	525	6
01 – 05	28	527	6
01 – 05	29	529	6
01 – 05	30	532	6
01 – 05	31	534	7
01 – 05	32	537	7
01 – 05	33	540	7
01 – 05	34	544	8
01 – 05	35	547	8
01 – 05	36	552	9
01 – 05	37	558	10
01 – 05	38	566	12
01 – 05	39	578	17
01 – 05	40	600	34

Grade 8 Social Studies, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	33
06 – 10	1	446	17
06 – 10	2	458	12
06 – 10	3	466	10
06 – 10	4	471	9
06 – 10	5	476	8
06 – 10	6	479	8
06 – 10	7	483	7
06 – 10	8	486	7
06 – 10	9	488	7
06 – 10	10	491	6
06 – 10	11	493	6
06 – 10	12	495	6
06 – 10	13	497	6
06 – 10	14	499	6
06 – 10	15	501	6
06 – 10	16	503	6
06 – 10	17	505	6
06 – 10	18	507	6
06 – 10	19	509	6
06 – 10	20	511	6
06 – 10	21	513	6
06 – 10	22	514	6
06 – 10	23	516	6
06 – 10	24	518	6
06 – 10	25	520	6
06 – 10	26	522	6
06 – 10	27	524	6
06 – 10	28	526	6
06 – 10	29	528	6
06 – 10	30	530	6
06 – 10	31	533	6
06 – 10	32	535	7
06 – 10	33	538	7
06 – 10	34	542	8
06 – 10	35	545	8
06 – 10	36	550	9
06 – 10	37	555	10
06 – 10	38	563	12
06 – 10	39	576	17
06 – 10	40	600	34

Grade 11 Social Studies, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	444	17
01 – 05	2	456	12
01 – 05	3	463	10
01 – 05	4	469	9
01 – 05	5	473	8
01 – 05	6	477	8
01 – 05	7	480	7
01 – 05	8	483	7
01 – 05	9	486	7
01 – 05	10	489	6
01 – 05	11	491	6
01 – 05	12	493	6
01 – 05	13	495	6
01 – 05	14	497	6
01 – 05	15	499	6
01 – 05	16	501	6
01 – 05	17	503	6
01 – 05	18	505	6
01 – 05	19	507	6
01 – 05	20	509	6
01 – 05	21	511	6
01 – 05	22	513	6
01 – 05	23	515	6
01 – 05	24	517	6
01 – 05	25	519	6
01 – 05	26	521	6
01 – 05	27	523	6
01 – 05	28	525	6
01 – 05	29	527	6
01 – 05	30	530	6
01 – 05	31	532	7
01 – 05	32	535	7
01 – 05	33	538	7
01 – 05	34	541	8
01 – 05	35	545	8
01 – 05	36	550	9
01 – 05	37	556	10
01 – 05	38	563	12
01 – 05	39	576	17
01 – 05	40	599	34

Grade 11 Social Studies, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	33
06 – 10	1	444	17
06 – 10	2	456	12
06 – 10	3	463	10
06 – 10	4	468	9
06 – 10	5	473	8
06 – 10	6	476	8
06 – 10	7	480	7
06 – 10	8	483	7
06 – 10	9	485	7
06 – 10	10	488	6
06 – 10	11	490	6
06 – 10	12	492	6
06 – 10	13	495	6
06 – 10	14	497	6
06 – 10	15	499	6
06 – 10	16	501	6
06 – 10	17	503	6
06 – 10	18	505	6
06 – 10	19	507	6
06 – 10	20	509	6
06 – 10	21	511	6
06 – 10	22	512	6
06 – 10	23	514	6
06 – 10	24	516	6
06 – 10	25	518	6
06 – 10	26	520	6
06 – 10	27	523	6
06 – 10	28	525	6
06 – 10	29	527	6
06 – 10	30	530	6
06 – 10	31	532	7
06 – 10	32	535	7
06 – 10	33	538	7
06 – 10	34	542	8
06 – 10	35	545	8
06 – 10	36	550	9
06 – 10	37	556	10
06 – 10	38	563	12
06 – 10	39	576	17
06 – 10	40	599	34

Grade 5 Editing and Mechanics, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	440	17
01 – 05	2	453	13
01 – 05	3	461	11
01 – 05	4	467	10
01 – 05	5	472	9
01 – 05	6	477	8
01 – 05	7	481	8
01 – 05	8	484	7
01 – 05	9	487	7
01 – 05	10	490	7
01 – 05	11	493	7
01 – 05	12	496	7
01 – 05	13	498	7
01 – 05	14	501	7
01 – 05	15	504	7
01 – 05	16	506	7
01 – 05	17	509	7
01 – 05	18	512	7
01 – 05	19	514	7
01 – 05	20	517	7
01 – 05	21	520	7
01 – 05	22	522	7
01 – 05	23	525	7
01 – 05	24	528	7
01 – 05	25	530	7
01 – 05	26	533	7
01 – 05	27	536	7
01 – 05	28	539	7
01 – 05	29	542	7
01 – 05	30	546	8
01 – 05	31	549	8
01 – 05	32	554	9
01 – 05	33	559	10
01 – 05	34	567	12
01 – 05	35	579	17
01 – 05	36	600	34

Grade 5 Editing and Mechanics, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	444	17
06 – 10	2	457	13
06 – 10	3	465	11
06 – 10	4	471	10
06 – 10	5	476	9
06 – 10	6	480	8
06 – 10	7	484	8
06 – 10	8	488	7
06 – 10	9	491	7
06 – 10	10	494	7
06 – 10	11	497	7
06 – 10	12	500	7
06 – 10	13	502	7
06 – 10	14	505	7
06 – 10	15	508	7
06 – 10	16	510	7
06 – 10	17	513	7
06 – 10	18	515	7
06 – 10	19	518	7
06 – 10	20	520	7
06 – 10	21	523	7
06 – 10	22	526	7
06 – 10	23	528	7
06 – 10	24	531	7
06 – 10	25	534	7
06 – 10	26	536	7
06 – 10	27	539	7
06 – 10	28	542	7
06 – 10	29	546	8
06 – 10	30	549	8
06 – 10	31	553	8
06 – 10	32	558	9
06 – 10	33	564	10
06 – 10	34	571	12
06 – 10	35	584	17
06 – 10	36	600	34

Grade 8 Editing and Mechanics, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	439	17
01 – 05	2	452	12
01 – 05	3	459	10
01 – 05	4	465	9
01 – 05	5	470	9
01 – 05	6	474	8
01 – 05	7	478	8
01 – 05	8	481	7
01 – 05	9	485	7
01 – 05	10	487	7
01 – 05	11	490	7
01 – 05	12	493	7
01 – 05	13	496	7
01 – 05	14	498	6
01 – 05	15	501	6
01 – 05	16	503	6
01 – 05	17	505	6
01 – 05	18	508	6
01 – 05	19	510	6
01 – 05	20	512	6
01 – 05	21	514	6
01 – 05	22	517	6
01 – 05	23	519	6
01 – 05	24	521	6
01 – 05	25	524	6
01 – 05	26	526	7
01 – 05	27	529	7
01 – 05	28	532	7
01 – 05	29	535	7
01 – 05	30	538	8
01 – 05	31	542	9
01 – 05	32	547	9
01 – 05	33	553	11
01 – 05	34	561	13
01 – 05	35	575	18
01 – 05	36	599	34

Grade 8 Editing and Mechanics, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	440	17
06 – 10	2	452	12
06 – 10	3	460	10
06 – 10	4	466	9
06 – 10	5	470	9
06 – 10	6	475	8
06 – 10	7	478	8
06 – 10	8	482	7
06 – 10	9	485	7
06 – 10	10	488	7
06 – 10	11	491	7
06 – 10	12	493	7
06 – 10	13	496	6
06 – 10	14	499	6
06 – 10	15	501	6
06 – 10	16	503	6
06 – 10	17	505	6
06 – 10	18	508	6
06 – 10	19	510	6
06 – 10	20	512	6
06 – 10	21	514	6
06 – 10	22	517	6
06 – 10	23	519	6
06 – 10	24	521	6
06 – 10	25	524	6
06 – 10	26	526	7
06 – 10	27	529	7
06 – 10	28	532	7
06 – 10	29	535	7
06 – 10	30	538	8
06 – 10	31	543	9
06 – 10	32	548	10
06 – 10	33	554	11
06 – 10	34	563	13
06 – 10	35	577	18
06 – 10	36	600	34

Grade 11 Editing and Mechanics, Forms 1 – 5

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	444	17
01 – 05	2	457	13
01 – 05	3	465	11
01 – 05	4	470	9
01 – 05	5	475	9
01 – 05	6	479	8
01 – 05	7	483	8
01 – 05	8	487	7
01 – 05	9	490	7
01 – 05	10	493	7
01 – 05	11	496	7
01 – 05	12	499	7
01 – 05	13	501	7
01 – 05	14	504	7
01 – 05	15	507	7
01 – 05	16	509	7
01 – 05	17	512	7
01 – 05	18	514	7
01 – 05	19	517	7
01 – 05	20	520	7
01 – 05	21	522	7
01 – 05	22	525	7
01 – 05	23	528	7
01 – 05	24	531	7
01 – 05	25	533	7
01 – 05	26	537	7
01 – 05	27	540	7
01 – 05	28	543	8
01 – 05	29	547	8
01 – 05	30	551	8
01 – 05	31	556	9
01 – 05	32	561	10
01 – 05	33	567	11
01 – 05	34	575	13
01 – 05	35	588	17
01 – 05	36	600	34

Grade 11 Editing and Mechanics, Forms 6 – 10

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	446	17
06 – 10	2	459	13
06 – 10	3	466	11
06 – 10	4	472	9
06 – 10	5	477	9
06 – 10	6	481	8
06 – 10	7	485	8
06 – 10	8	489	7
06 – 10	9	492	7
06 – 10	10	495	7
06 – 10	11	498	7
06 – 10	12	500	7
06 – 10	13	503	7
06 – 10	14	506	7
06 – 10	15	508	6
06 – 10	16	511	6
06 – 10	17	513	6
06 – 10	18	515	6
06 – 10	19	518	6
06 – 10	20	520	6
06 – 10	21	523	6
06 – 10	22	525	6
06 – 10	23	528	7
06 – 10	24	531	7
06 – 10	25	533	7
06 – 10	26	536	7
06 – 10	27	539	7
06 – 10	28	542	7
06 – 10	29	545	8
06 – 10	30	549	8
06 – 10	31	553	8
06 – 10	32	558	9
06 – 10	33	563	10
06 – 10	34	571	12
06 – 10	35	583	17
06 – 10	36	600	34

Grade 5 On-Demand Writing, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	-
01	10	466	10
01	11	473	5
01	12	476	4
01	13	479	3
01	14	481	3
01	15	483	4
01	16	486	4
01	17	490	5
01	18	496	6
01	19	502	4
01	20	505	3
01	21	507	3
01	22	508	3
01	23	510	3
01	24	512	3
01	25	514	3
01	26	516	3
01	27	518	3
01	28	520	3
01	29	521	3
01	30	523	3
01	31	524	2
01	32	525	2
01	33	526	2
01	34	527	3
01	35	529	3
01	36	530	3
01	37	532	3
01	38	535	4
01	39	542	7
01	40	552	11

Grade 5 On-Demand Writing, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	-
02	10	463	10
02	11	471	6
02	12	475	4
02	13	479	4
02	14	481	4
02	15	484	4
02	16	487	4
02	17	490	4
02	18	494	5
02	19	499	4
02	20	501	3
02	21	504	3
02	22	505	3
02	23	507	3
02	24	508	3
02	25	510	3
02	26	512	3
02	27	514	3
02	28	516	4
02	29	519	4
02	30	522	4
02	31	524	4
02	32	527	4
02	33	530	4
02	34	532	4
02	35	535	4
02	36	538	4
02	37	541	4
02	38	545	5
02	39	551	7
02	40	561	11

Grade 5 On-Demand Writing, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	-
03	10	468	10
03	11	476	6
03	12	481	4
03	13	484	4
03	14	487	4
03	15	490	4
03	16	492	4
03	17	495	4
03	18	498	4
03	19	500	3
03	20	502	3
03	21	504	3
03	22	506	3
03	23	508	3
03	24	510	3
03	25	512	3
03	26	514	3
03	27	516	3
03	28	518	3
03	29	520	3
03	30	522	3
03	31	524	3
03	32	525	3
03	33	527	3
03	34	528	3
03	35	530	3
03	36	532	3
03	37	534	4
03	38	537	5
03	39	544	7
03	40	554	11

Grade 5 On-Demand Writing, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	-
04	10	457	10
04	11	465	6
04	12	471	5
04	13	475	4
04	14	478	4
04	15	481	4
04	16	484	4
04	17	488	5
04	18	494	5
04	19	499	5
04	20	502	4
04	21	505	3
04	22	507	3
04	23	509	3
04	24	511	3
04	25	513	3
04	26	515	3
04	27	518	3
04	28	520	4
04	29	523	4
04	30	525	4
04	31	528	4
04	32	531	4
04	33	534	4
04	34	537	4
04	35	540	4
04	36	544	4
04	37	548	4
04	38	552	5
04	39	559	7
04	40	569	11

Grade 8 On-Demand Writing, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	-
01	12	454	10
01	13	462	6
01	14	467	5
01	15	471	4
01	16	474	4
01	17	477	4
01	18	479	4
01	19	482	4
01	20	485	4
01	21	488	4
01	22	491	4
01	23	494	4
01	24	497	4
01	25	499	3
01	26	501	3
01	27	503	3
01	28	505	3
01	29	507	3
01	30	509	3
01	31	511	3
01	32	513	3
01	33	515	4
01	34	518	4
01	35	521	4
01	36	525	5
01	37	529	4
01	38	532	4
01	39	535	4
01	40	538	3
01	41	540	3
01	42	542	3
01	43	544	3
01	44	547	4
01	45	550	4
01	46	553	4
01	47	557	6
01	48	565	10

Grade 8 On-Demand Writing, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	-
02	12	460	10
02	13	468	6
02	14	473	4
02	15	476	4
02	16	479	4
02	17	481	3
02	18	483	3
02	19	485	3
02	20	487	3
02	21	490	3
02	22	492	4
02	23	495	4
02	24	498	4
02	25	500	3
02	26	502	3
02	27	504	3
02	28	506	3
02	29	508	3
02	30	509	3
02	31	511	3
02	32	513	3
02	33	515	3
02	34	517	3
02	35	519	3
02	36	521	3
02	37	524	3
02	38	526	3
02	39	528	3
02	40	530	3
02	41	532	3
02	42	535	3
02	43	537	3
02	44	539	3
02	45	542	4
02	46	545	4
02	47	549	5
02	48	557	10

Grade 8 On-Demand Writing, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	-
03	12	467	10
03	13	474	5
03	14	477	4
03	15	480	3
03	16	481	3
03	17	483	3
03	18	485	3
03	19	486	3
03	20	488	3
03	21	491	3
03	22	493	4
03	23	496	4
03	24	498	3
03	25	500	3
03	26	502	3
03	27	503	3
03	28	505	3
03	29	506	3
03	30	507	3
03	31	509	3
03	32	510	3
03	33	512	3
03	34	514	4
03	35	517	4
03	36	521	4
03	37	524	4
03	38	527	4
03	39	529	3
03	40	531	3
03	41	533	3
03	42	535	3
03	43	536	3
03	44	538	3
03	45	540	3
03	46	543	4
03	47	547	5
03	48	555	10

Grade 8 On-Demand Writing, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	-
04	12	459	10
04	13	467	6
04	14	471	4
04	15	474	4
04	16	477	3
04	17	479	3
04	18	481	3
04	19	483	3
04	20	485	3
04	21	487	4
04	22	490	4
04	23	493	4
04	24	497	4
04	25	501	4
04	26	504	4
04	27	506	3
04	28	508	3
04	29	510	3
04	30	512	3
04	31	514	3
04	32	516	3
04	33	518	4
04	34	521	4
04	35	525	5
04	36	530	5
04	37	535	5
04	38	538	4
04	39	541	4
04	40	543	3
04	41	546	3
04	42	548	3
04	43	550	3
04	44	552	3
04	45	554	4
04	46	557	4
04	47	562	5
04	48	569	10

Grade 11 On-Demand Writing, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	-
01	12	441	11
01	13	452	8
01	14	461	6
01	15	466	5
01	16	470	4
01	17	474	4
01	18	478	4
01	19	482	5
01	20	487	5
01	21	492	5
01	22	495	4
01	23	498	3
01	24	500	3
01	25	502	3
01	26	504	3
01	27	505	3
01	28	507	3
01	29	508	3
01	30	510	3
01	31	511	3
01	32	513	3
01	33	515	3
01	34	518	4
01	35	520	4
01	36	523	4
01	37	527	4
01	38	529	4
01	39	532	4
01	40	535	4
01	41	537	4
01	42	540	4
01	43	542	4
01	44	545	4
01	45	548	4
01	46	552	5
01	47	557	6
01	48	565	10

Grade 11 On-Demand Writing, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	-
02	12	457	10
02	13	465	6
02	14	471	5
02	15	475	4
02	16	478	4
02	17	480	3
02	18	483	4
02	19	486	4
02	20	489	4
02	21	493	4
02	22	496	3
02	23	498	3
02	24	500	3
02	25	501	3
02	26	503	3
02	27	504	3
02	28	505	3
02	29	506	3
02	30	508	3
02	31	509	3
02	32	511	3
02	33	513	3
02	34	515	4
02	35	519	4
02	36	522	4
02	37	526	4
02	38	529	4
02	39	532	4
02	40	535	3
02	41	537	3
02	42	539	3
02	43	542	3
02	44	544	4
02	45	547	4
02	46	550	4
02	47	555	6
02	48	563	10

Grade 11 On-Demand Writing, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	-
03	12	455	11
03	13	464	6
03	14	470	5
03	15	474	4
03	16	477	4
03	17	480	4
03	18	483	4
03	19	486	4
03	20	490	4
03	21	494	4
03	22	497	4
03	23	499	3
03	24	501	3
03	25	503	3
03	26	504	3
03	27	505	3
03	28	507	3
03	29	508	3
03	30	510	3
03	31	511	3
03	32	513	3
03	33	514	3
03	34	516	3
03	35	519	4
03	36	521	4
03	37	524	4
03	38	527	4
03	39	530	4
03	40	532	3
03	41	534	3
03	42	537	3
03	43	539	4
03	44	542	4
03	45	545	4
03	46	548	4
03	47	553	6
03	48	561	10

Grade 11 On-Demand Writing, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	-
04	12	443	11
04	13	454	7
04	14	463	6
04	15	468	5
04	16	471	4
04	17	475	4
04	18	478	4
04	19	482	4
04	20	485	4
04	21	489	4
04	22	492	4
04	23	495	4
04	24	498	3
04	25	500	3
04	26	502	3
04	27	504	3
04	28	506	3
04	29	507	3
04	30	509	3
04	31	511	3
04	32	513	3
04	33	515	3
04	34	517	4
04	35	521	4
04	36	525	5
04	37	530	5
04	38	534	4
04	39	538	4
04	40	541	4
04	41	544	4
04	42	547	4
04	43	550	4
04	44	553	4
04	45	556	4
04	46	560	5
04	47	565	6
04	48	573	10

Appendix H. Score Frequency Distributions

Figure 1. Reading Grade 3 Score Frequency and Cumulative Frequency Distributions
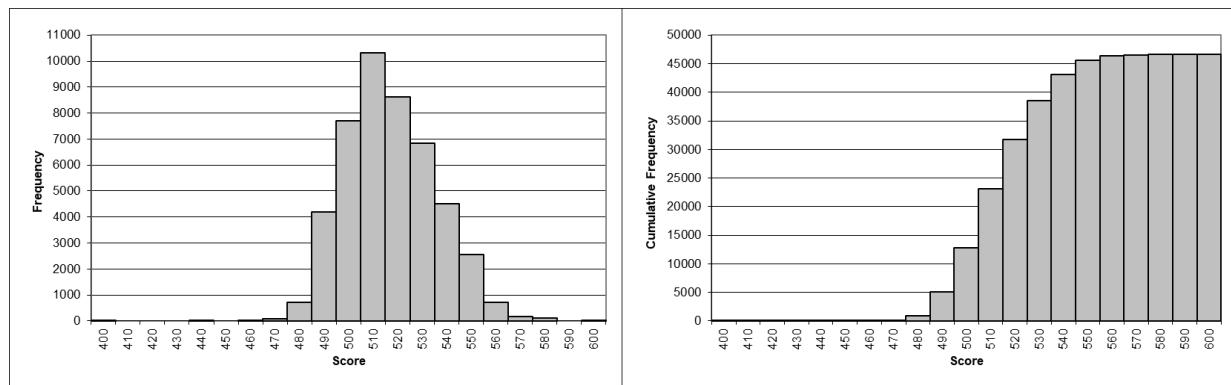
Figure 2. Reading Grade 4 Score Frequency and Cumulative Frequency Distributions
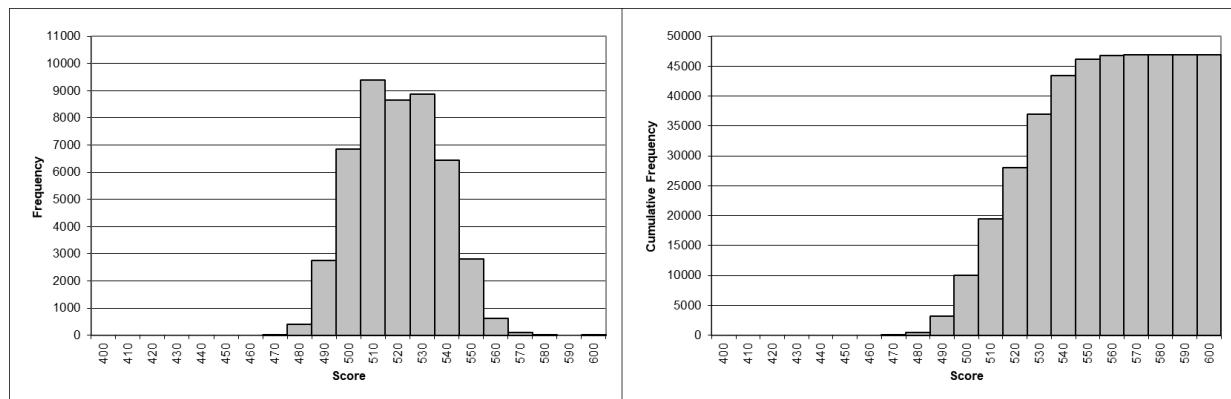
**Figure 3. Reading Grade 5 Score Frequency and Cumulative Frequency Distributions**
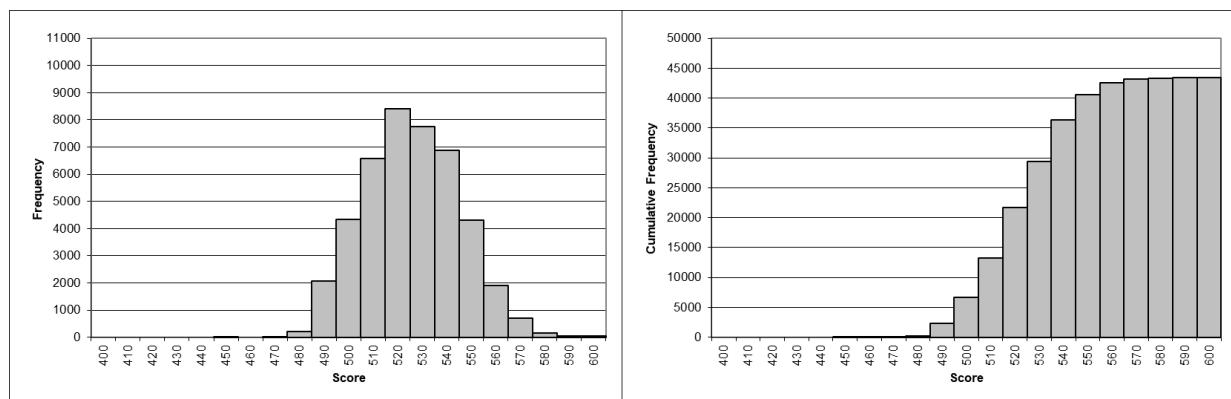
**Figure 4. Reading Grade 6 Score Frequency and Cumulative Frequency Distributions**
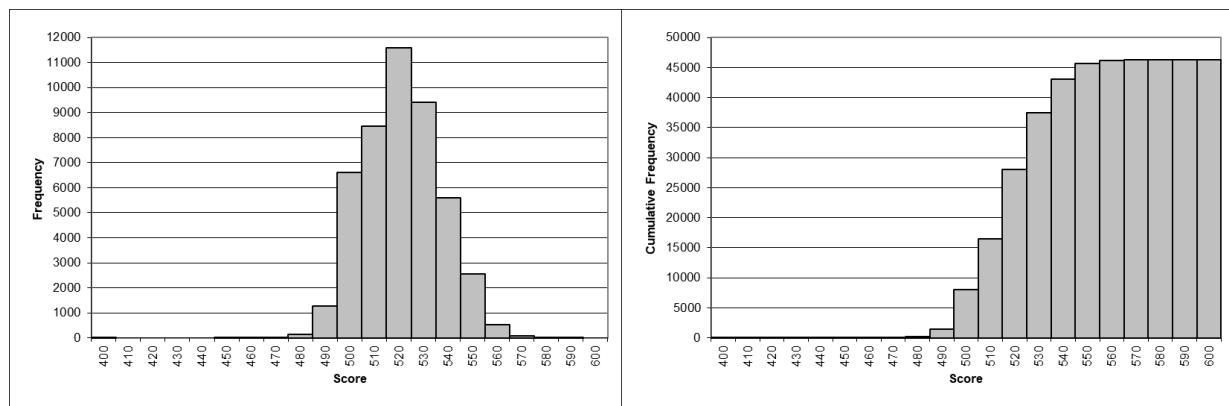
Figure 5. Reading Grade 7 Score Frequency and Cumulative Frequency Distributions
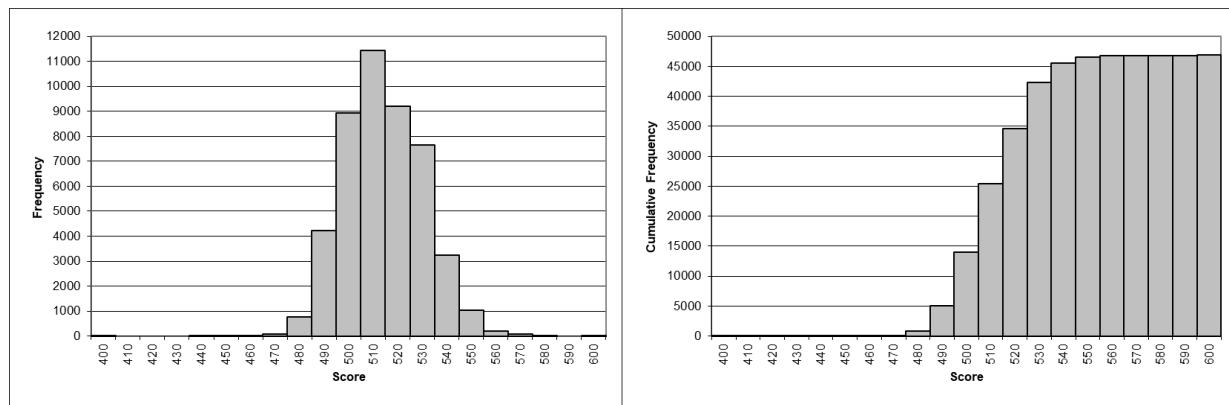
Figure 6. Reading Grade 8 Score Frequency and Cumulative Frequency Distributions
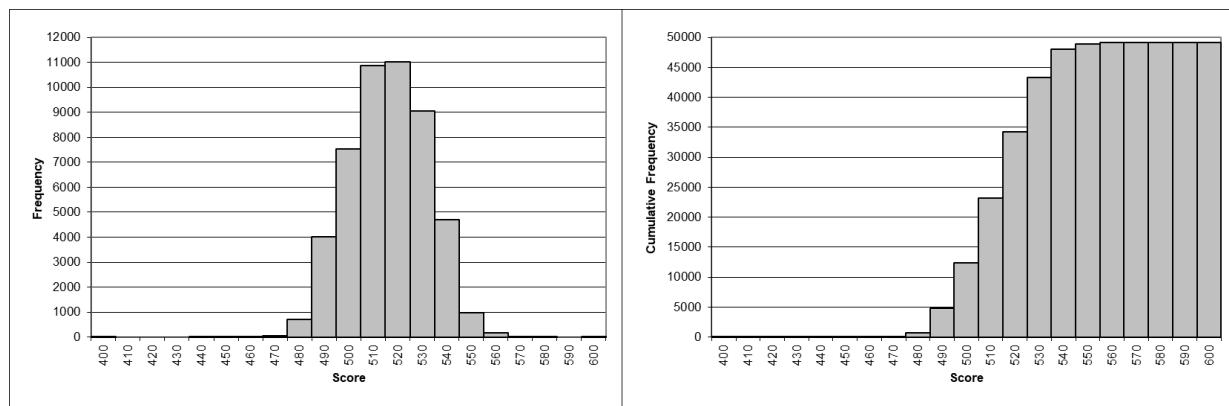
Figure 7. Reading Grade 10 Score Frequency and Cumulative Frequency Distributions
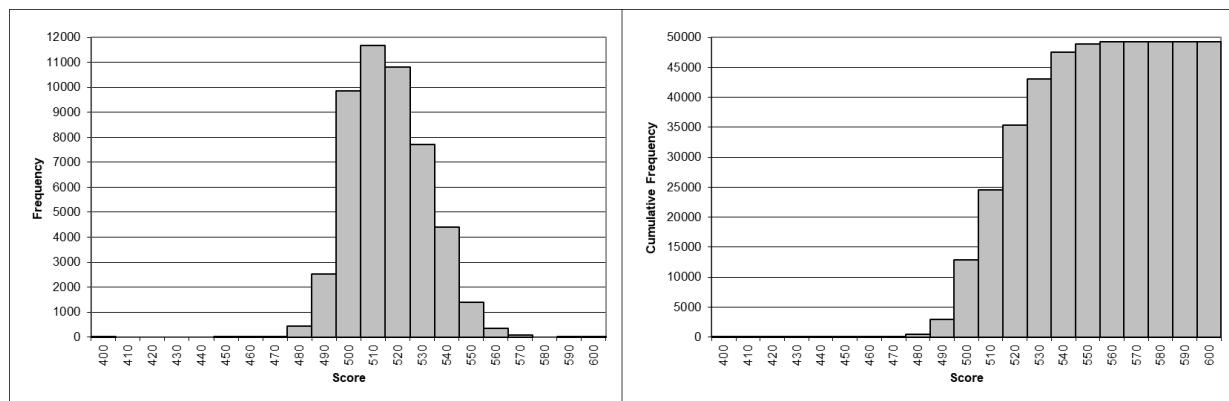
Figure 8. Mathematics Grade 3 Score Frequency and Cumulative Frequency Distributions
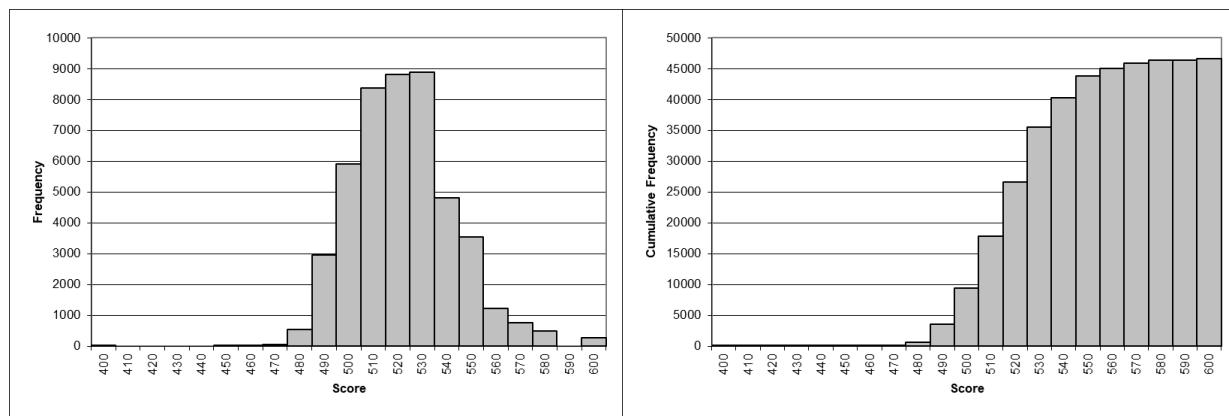
Figure 9. Mathematics Grade 4 Score Frequency and Cumulative Frequency Distributions
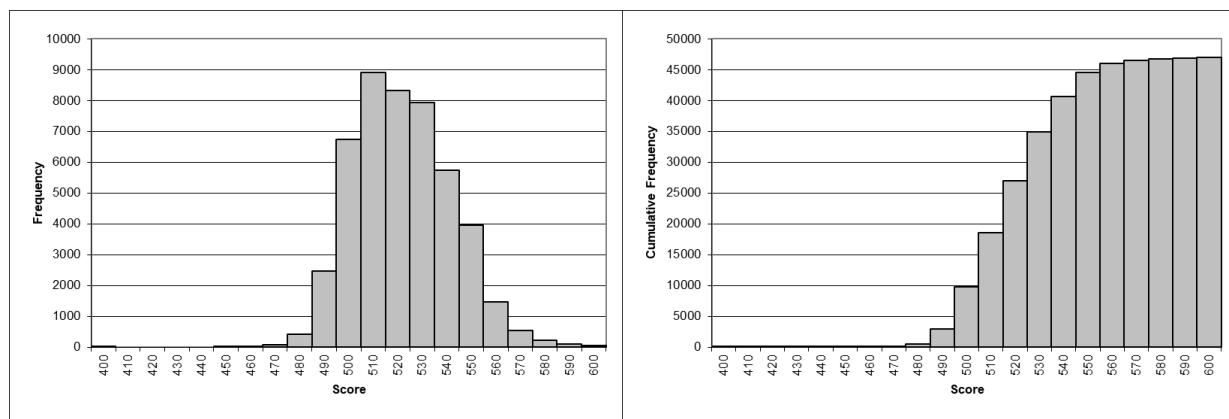
Figure 10. Mathematics Grade 5 Score Frequency and Cumulative Frequency Distributions
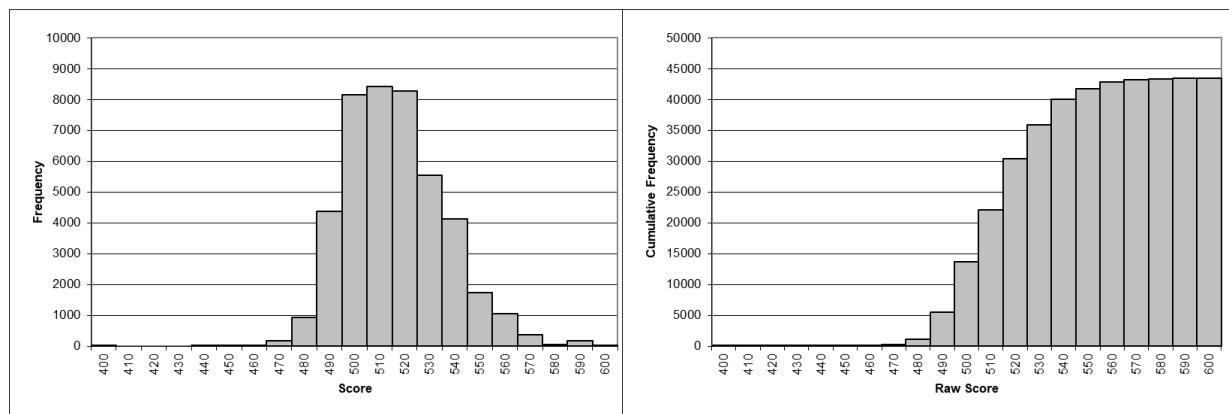
Figure 11. Mathematics Grade 6 Score Frequency and Cumulative Frequency Distributions
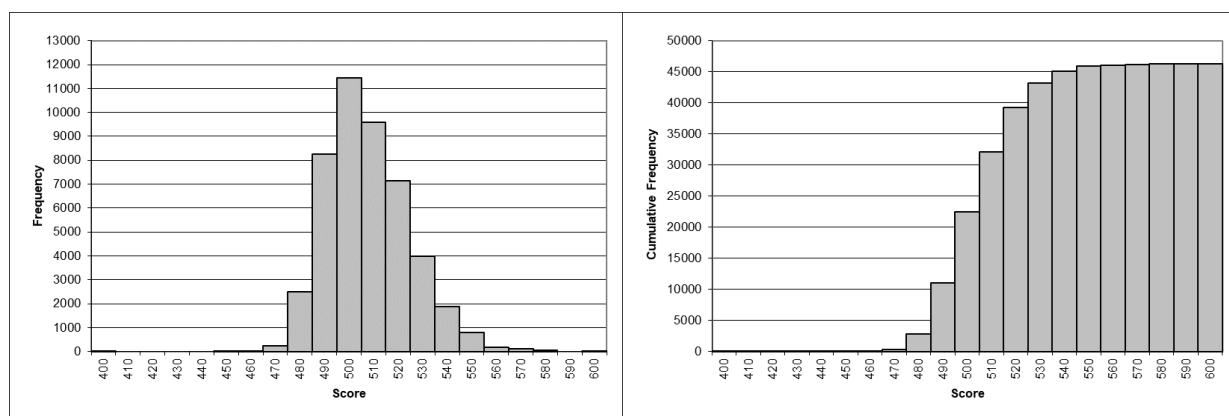
Figure 12. Mathematics Grade 7 Score Frequency and Cumulative Frequency Distributions
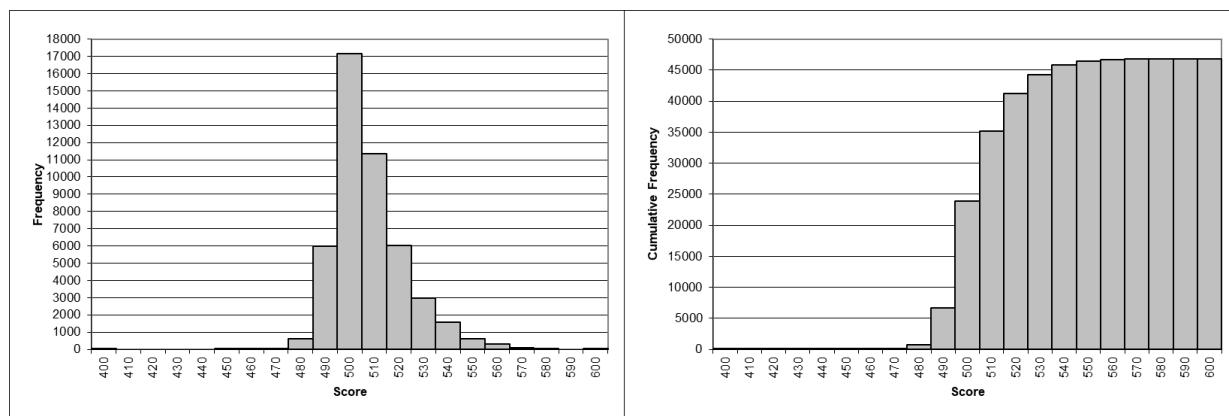
Figure 13. Mathematics Grade 8 Score Frequency and Cumulative Frequency Distributions
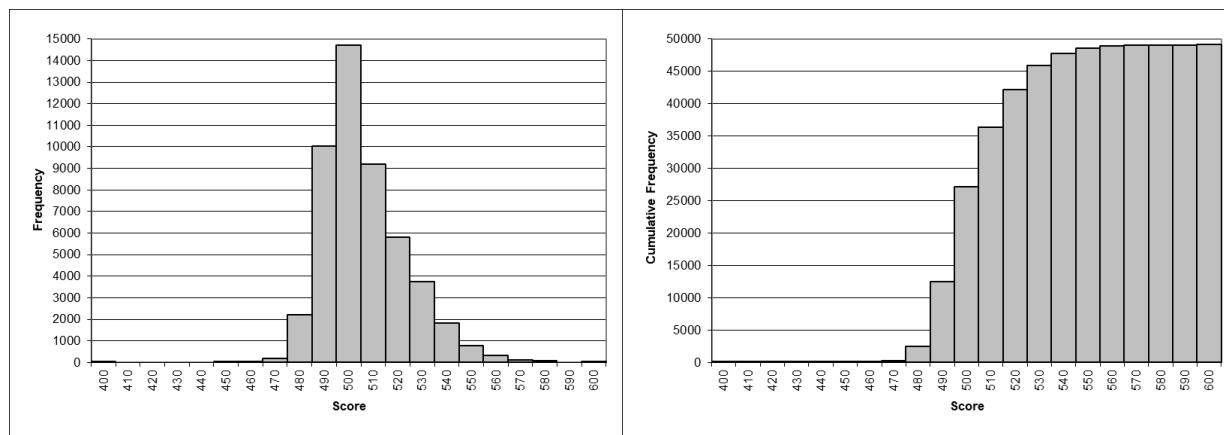
Figure 14. Mathematics Grade 10 Score Frequency and Cumulative Frequency Distributions
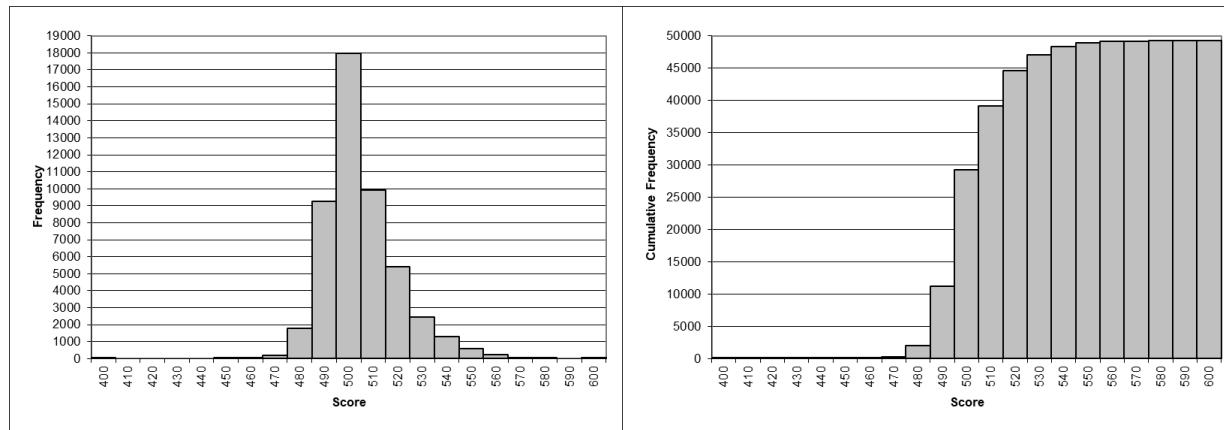
Figure 15. Science Grade 4 Score Frequency and Cumulative Frequency Distributions
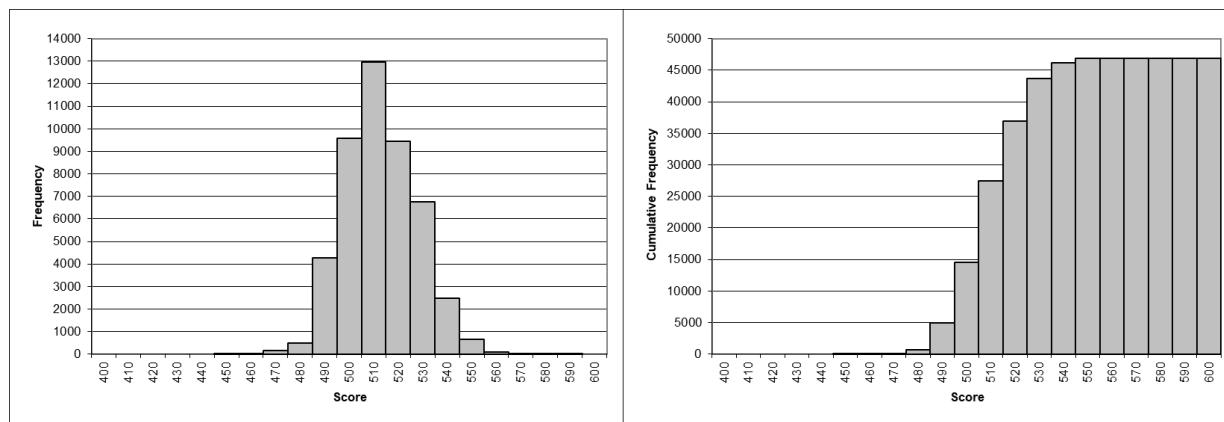
Figure 16. Science Grade 7 Score Frequency and Cumulative Frequency Distributions
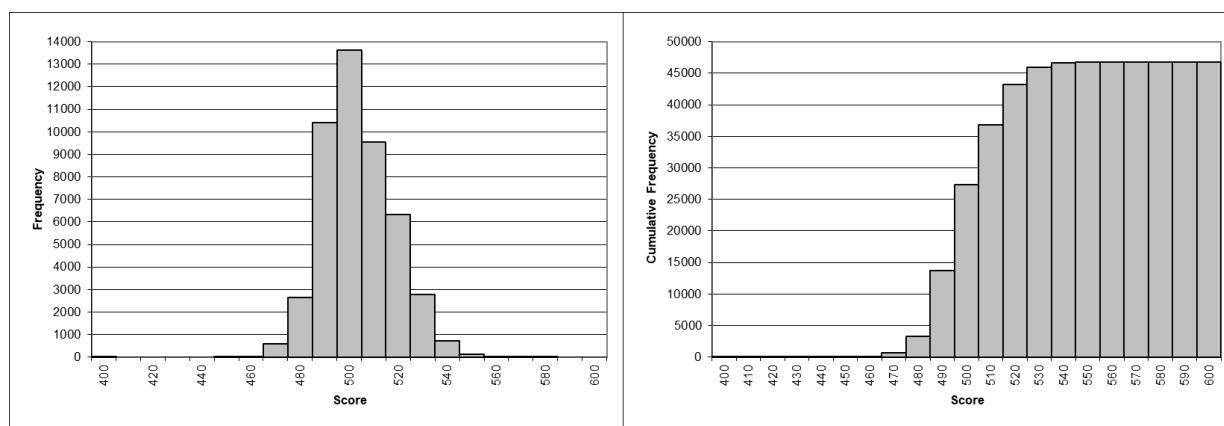
Figure 17. Science Grade 11 Score Frequency and Cumulative Frequency Distributions
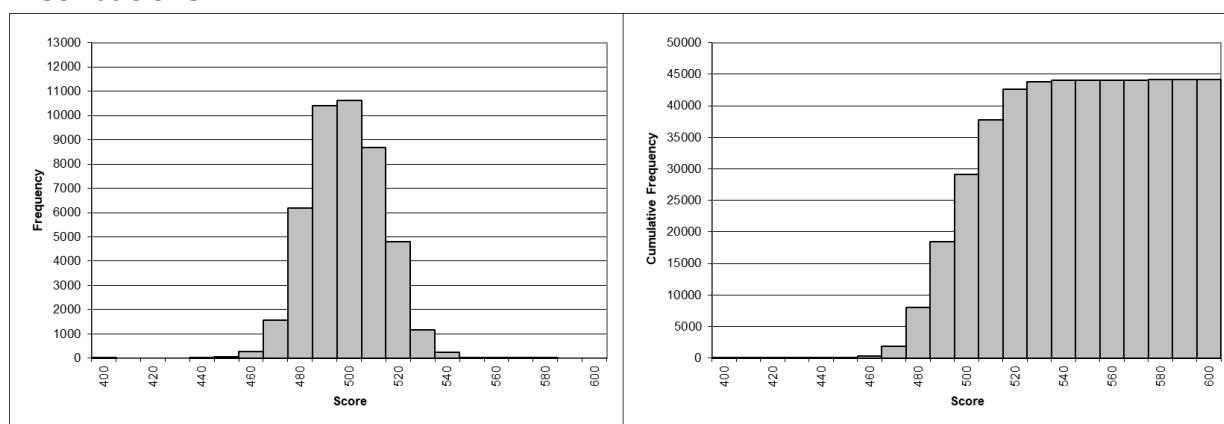
Figure 18. Social Studies Grade 5 Score Frequency and Cumulative Frequency Distributions
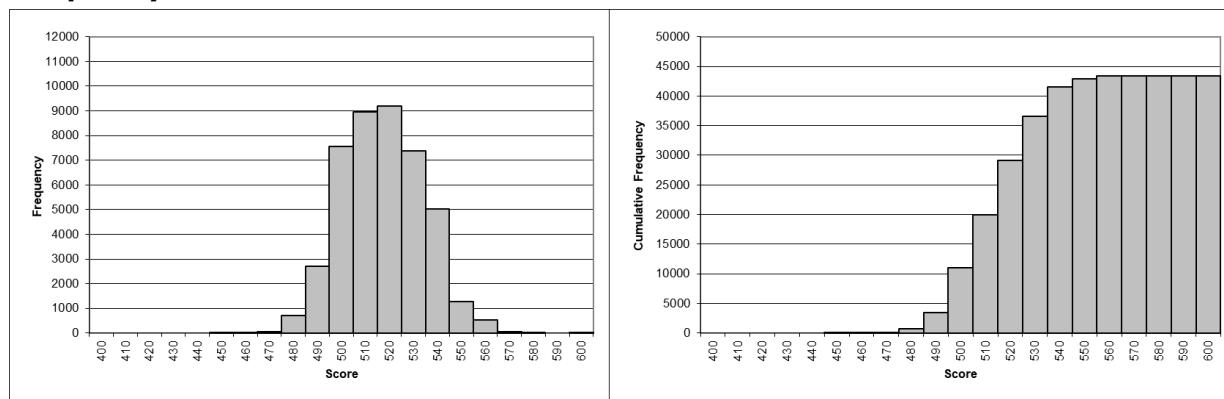
Figure 19. Social Studies Grade 8 Score Frequency and Cumulative Frequency Distributions
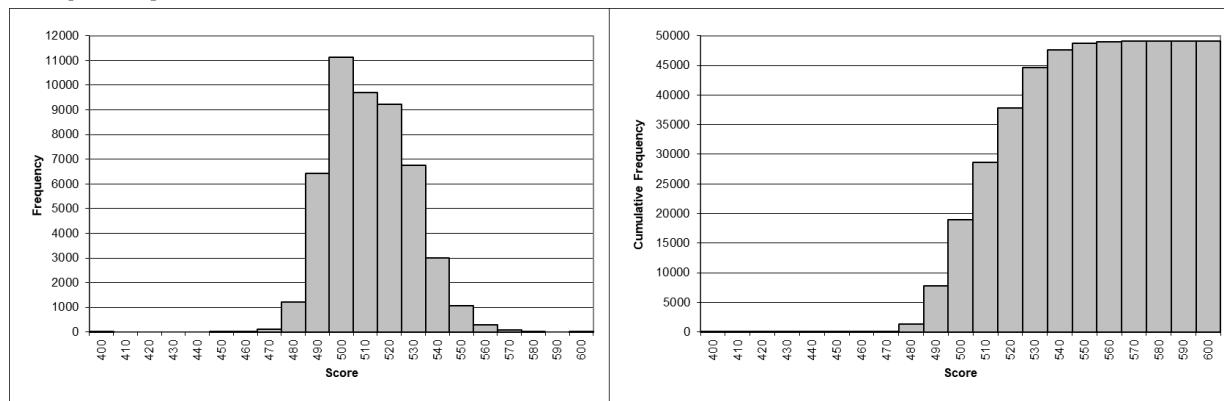
Figure 20. Social Studies Grade 11 Score Frequency and Cumulative Frequency Distributions
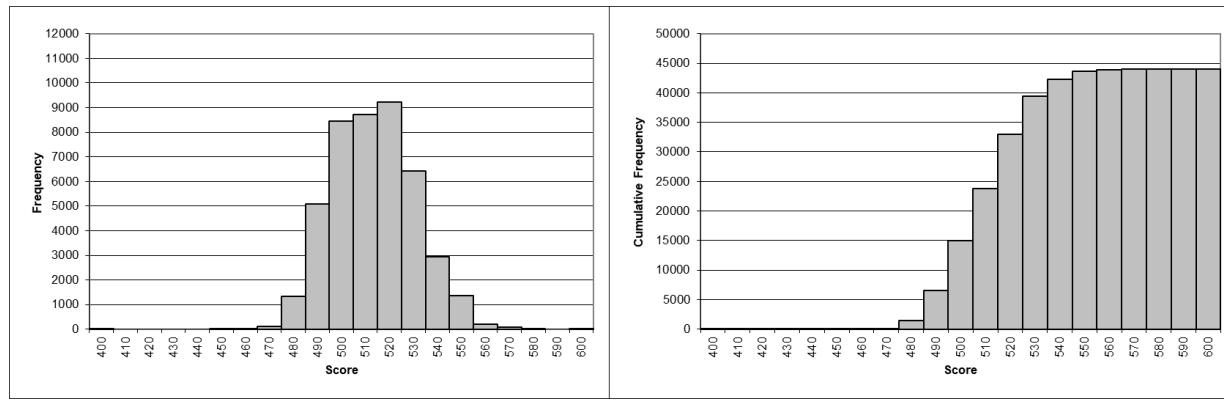
Figure 21. Editing and Mechanics Grade 5 Score Frequency and Cumulative Frequency Distributions
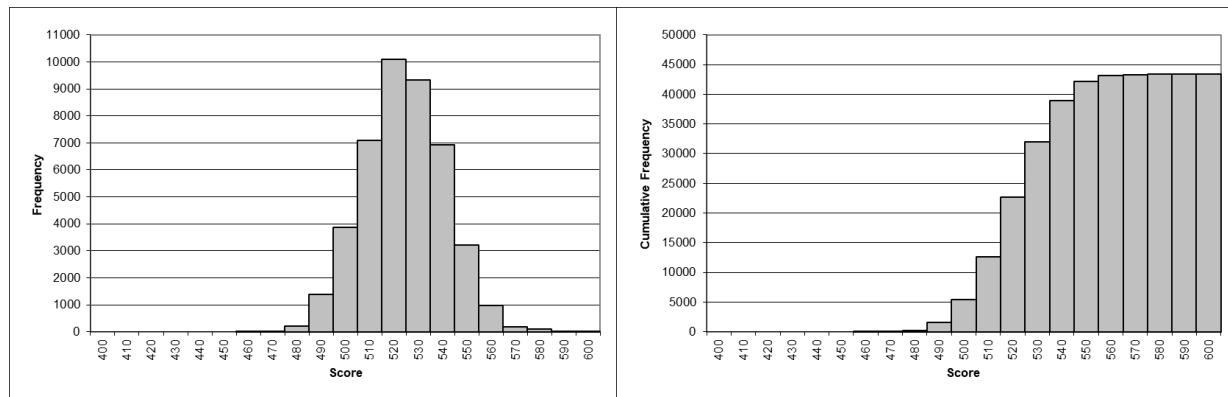
Figure 22. Editing and Mechanics Grade 8 Score Frequency and Cumulative Frequency Distributions
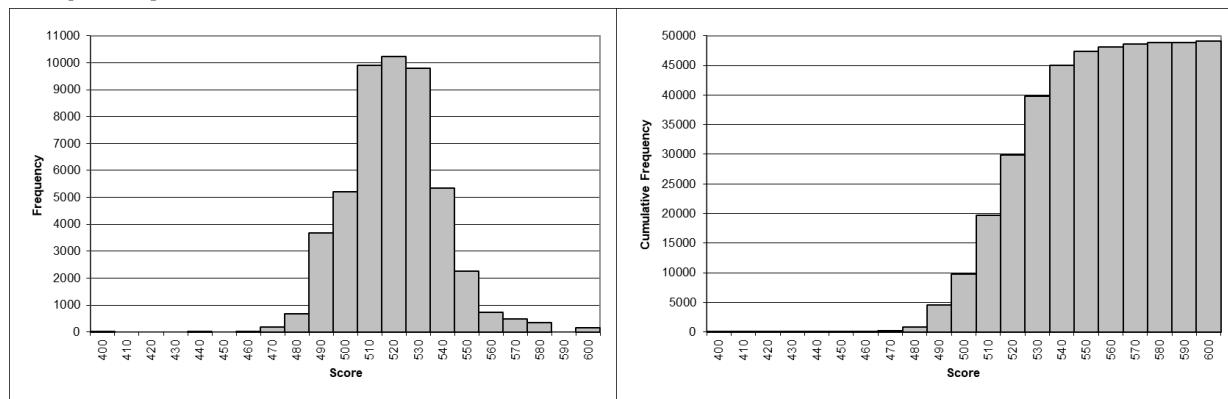
Figure 23. Editing and Mechanics Grade 11 Score Frequency and Cumulative Frequency Distributions
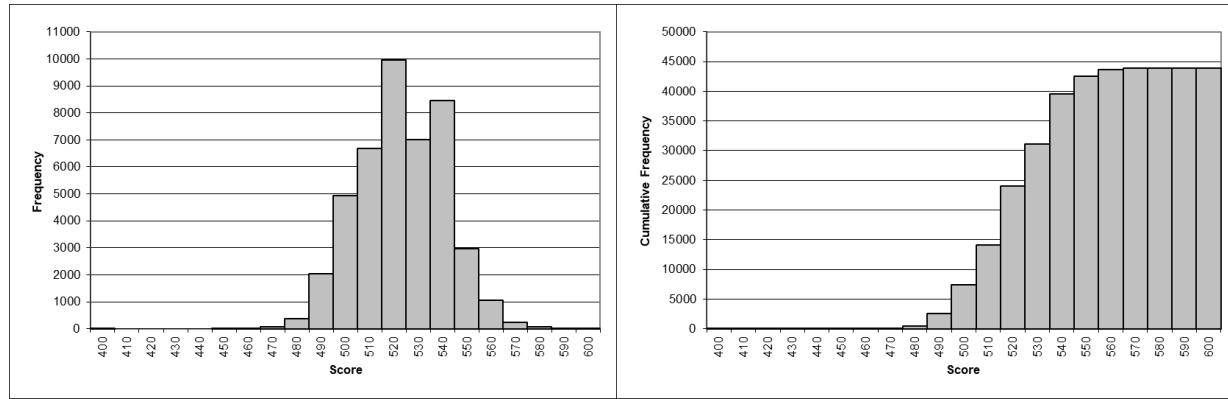
Figure 24. On-Demand Writing Grade 5 Score Frequency and Cumulative Frequency Distributions
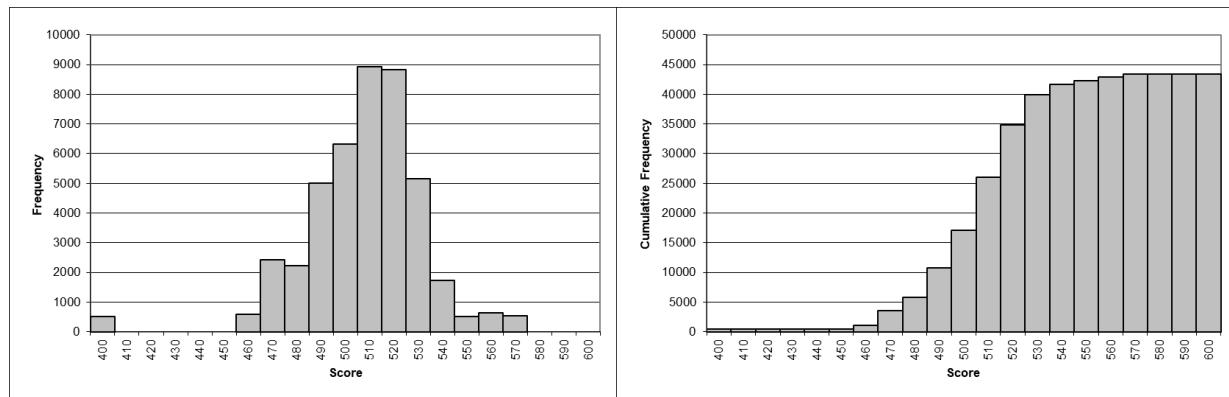
Figure 25. On-Demand Writing Grade 8 Score Frequency and Cumulative Frequency Distributions
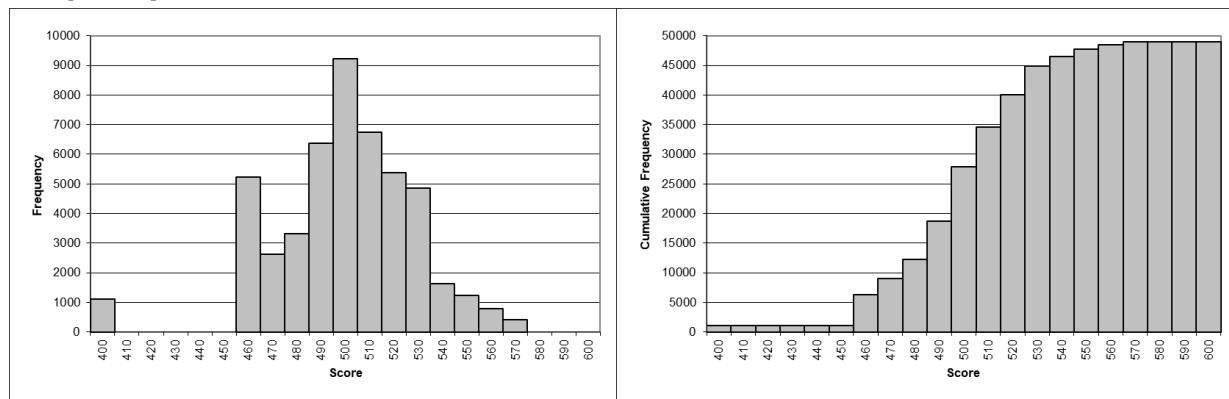
Figure 26. On-Demand Writing Grade 11 Score Frequency and Cumulative Frequency Distributions
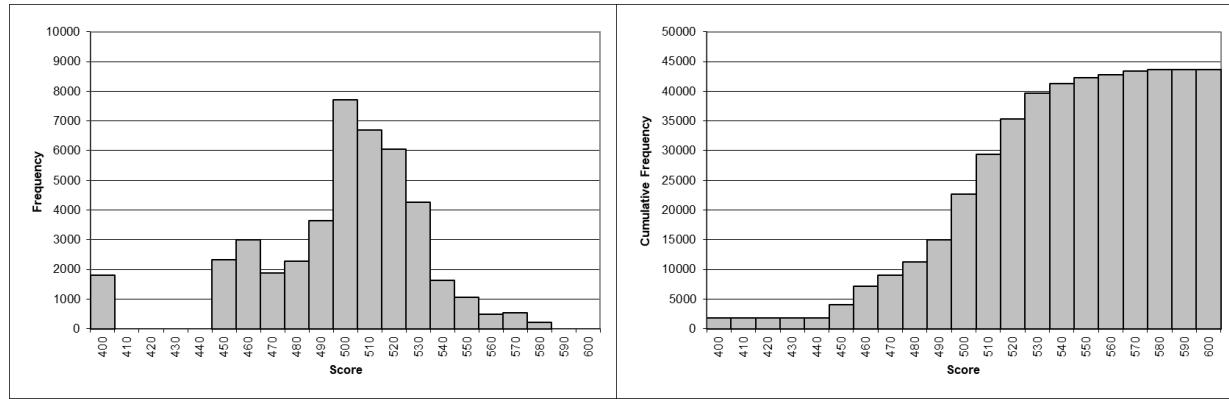
Appendix I. Scale Score Descriptive Statistics[5]

Grade 3 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,598	512.50	18.2	499	512	524	600	0.37
Gender	Female	22,737	513.48	18.4	499	512	526	600	0.36
	Male	23,859	511.56	17.9	498	510	524	600	0.37
Ethnicity	Hispanic	4,038	508.34	16.6	497	506	518	579	0.64
	Asian	975	518.06	18.3	505	518	531	579	0.24
	Native Hawaiian/Pacific Islander	86	510.76	14.0	499	511	522	541	0.24
	Black/African American	4,924	503.38	16.0	492	501	514	579	0.48
	American Indian	78	509.91	19.6	494	509	524	560	0.22
	White	33,885	514.27	18.2	501	514	526	600	0.32
	Two or More Races	2,608	511.18	17.7	498	510	524	596	0.38
Migrant	Non-Migrant	46,360	512.53	18.2	499	512	524	600	0.37
	Migrant	238	505.16	16.2	494	503	514	579	0.81
LEP	Non-LEP	42,592	513.08	18.4	499	512	526	600	0.34
	LEP	4,006	506.34	14.7	496	505	516	565	0.42
Economic Disadvantage	Economically Disadvantaged	29,196	508.90	17.1	496	507	520	600	0.46
	Not Economically Disadvantaged	17,402	518.54	18.3	505	518	531	600	0.19
IEP	Non-IEP	38,306	513.63	18.0	501	512	526	600	0.32
	IEP	8,292	507.26	18.0	494	505	518	600	0.66

Grade 4 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,934	515.31	17.2	503	515	527	600	0.12
Gender	Female	22,856	516.35	17.2	503	517	529	600	0.11
	Male	24,075	514.33	17.1	501	514	527	600	0.14
Ethnicity	Hispanic	4,022	510.57	16.0	499	510	521	566	0.31
	Asian	1,015	521.75	17.6	510	523	536	567	-0.31
	Native Hawaiian/Pacific Islander	94	513.38	16.6	498	512	525	566	0.41
	Black/African American	4,972	506.49	15.8	495	505	517	560	0.44
	American Indian	58	510.17	17.9	499	508	521	548	0.28
	White	34,189	517.08	17.0	505	517	529	600	0.06
	Two or More Races	2,581	513.98	16.7	501	514	527	578	0.23
Migrant	Non-Migrant	46,707	515.35	17.2	503	515	529	600	0.12
	Migrant	227	507.30	14.9	496	505	519	553	0.42
LEP	Non-LEP	43,226	516.05	17.2	503	515	529	600	0.09
	LEP	3,708	506.67	14.1	497	506	517	553	0.26
Economic Disadvantage	Economically Disadvantaged	29,023	511.73	16.4	499	512	523	600	0.24
	Not Economically Disadvantaged	17,911	521.11	16.8	510	523	533	600	-0.09
IEP	Non-IEP	39,150	516.88	16.9	505	517	529	600	0.06
	IEP	7,784	507.44	16.3	495	505	519	600	0.56

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[5] Scale score statistics are not reported on n-counts less than 10.

Grade 5 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,462	520.94	19.4	507	521	533	600	0.24
Gender	Female	20,937	522.28	19.5	507	522	536	600	0.24
	Male	22,523	519.69	19.1	505	519	533	600	0.25
Ethnicity	Hispanic	3,674	515.82	18.6	503	515	529	600	0.42
	Asian	969	528.60	21.8	513	529	544	600	0.19
	Native Hawaiian/Pacific Islander	78	517.45	15.7	505	519	529	551	-0.16
	Black/African American	4,418	511.23	17.4	499	509	523	579	0.40
	American Indian	51	520.63	16.8	507	522	531	556	0.03
	White	31,930	522.76	19.1	509	523	536	600	0.19
	Two or More Races	2,340	519.39	19.0	505	519	533	600	0.30
Migrant	Non-Migrant	43,226	520.99	19.4	507	521	533	600	0.24
	Migrant	236	510.74	17.7	497	508	524	569	0.47
LEP	Non-LEP	40,980	521.82	19.3	507	522	536	600	0.22
	LEP	2,482	506.39	14.4	496	505	515	579	0.50
Economic Disadvantage	Economically Disadvantaged	26,661	516.50	18.2	503	517	529	600	0.28
	Not Economically Disadvantaged	16,801	527.97	19.1	515	529	541	600	0.14
IEP	Non-IEP	36,897	523.09	18.8	509	523	536	600	0.22
	IEP	6,565	508.85	17.7	495	507	520	600	0.67

Grade 6 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,245	516.60	15.5	505	516	528	586	0.08
Gender	Female	22,507	517.87	15.2	507	518	529	586	0.08
	Male	23,738	515.41	15.7	504	516	527	586	0.09
Ethnicity	Hispanic	4,086	512.17	14.4	502	512	522	572	0.19
	Asian	919	522.33	16.1	512	522	534	586	-0.06
	Native Hawaiian/Pacific Islander	93	512.41	16.2	502	510	522	572	0.68
	Black/African American	5,022	508.32	14.2	498	507	518	572	0.38
	American Indian	55	514.33	15.0	502	516	524	544	-0.04
	White	33,699	518.36	15.3	507	518	529	586	0.02
	Two or More Races	2,371	514.84	15.4	504	514	526	572	0.12
Migrant	Non-Migrant	46,032	516.65	15.5	505	516	528	586	0.08
	Migrant	213	506.23	13.7	496	506	514	544	0.31
LEP	Non-LEP	44,103	517.28	15.4	506	518	528	586	0.05
	LEP	2,142	502.72	10.9	496	502	510	542	0.25
Economic Disadvantage	Economically Disadvantaged	27,962	513.09	14.8	502	512	524	586	0.17
	Not Economically Disadvantaged	18,283	521.98	15.1	512	522	533	586	-0.09
IEP	Non-IEP	39,961	518.27	15.0	508	518	529	586	0.05
	IEP	6,284	506.02	14.2	496	504	514	564	0.50

Grade 7 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,842	509.62	15.7	498	508	521	598	0.26
Gender	Female	22,556	511.31	15.4	501	512	521	598	0.22
	Male	24,285	508.06	15.9	496	506	519	575	0.31
Ethnicity	Hispanic	4,077	505.36	14.4	495	504	515	562	0.37
	Asian	898	518.49	17.0	506	519	530	575	0.03
	Native Hawaiian/Pacific Islander	85	508.20	15.0	498	508	519	540	0.10
	Black/African American	5,092	501.32	14.0	492	500	510	575	0.33
	American Indian	63	507.70	15.3	494	506	519	540	0.38
	White	34,241	511.24	15.6	500	512	523	598	0.22
	Two or More Races	2,385	508.21	15.4	497	508	519	575	0.29
Migrant	Non-Migrant	46,614	509.66	15.7	498	508	521	598	0.25
	Migrant	228	502.10	13.2	492	501	511	540	0.36
LEP	Non-LEP	44,800	510.21	15.7	499	510	521	598	0.23
	LEP	2,042	496.67	10.4	490	496	503	537	0.24
Economic Disadvantage	Economically Disadvantaged	28,257	506.02	14.6	495	505	515	575	0.30
	Not Economically Disadvantaged	18,585	515.10	15.8	504	515	525	598	0.10
IEP	Non-IEP	40,707	511.22	15.4	500	510	521	598	0.22
	IEP	6,135	499.01	13.2	490	497	506	561	0.59

Grade 8 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,133	511.48	15.3	500	512	522	599	-0.01
Gender	Female	23,859	513.44	14.9	503	513	524	599	-0.03
	Male	25,270	509.64	15.3	498	510	521	575	0.03
Ethnicity	Hispanic	4,245	507.28	14.5	497	506	517	563	0.18
	Asian	863	519.48	15.3	510	521	531	575	-0.18
	Native Hawaiian/Pacific Islander	72	508.97	14.6	500	511	518	539	-0.08
	Black/African American	5,344	503.95	14.0	494	503	513	556	0.23
	American Indian	75	512.43	14.1	504	513	522	546	-0.16
	White	36,109	512.98	15.1	502	513	524	599	-0.06
	Two or More Races	2,420	510.38	15.4	499	510	522	564	-0.13
Migrant	Non-Migrant	48,922	511.53	15.3	501	512	522	599	-0.01
	Migrant	211	501.06	13.8	490	499	510	542	0.43
LEP	Non-LEP	47,215	512.07	15.1	501	513	522	599	-0.03
	LEP	1,918	497.16	10.6	490	497	504	543	0.22
Economic Disadvantage	Economically Disadvantaged	29,189	507.90	14.5	497	508	519	575	0.06
	Not Economically Disadvantaged	19,944	516.72	14.9	506	517	526	599	-0.18
IEP	Non-IEP	43,286	513.07	14.9	503	513	524	599	-0.07
	IEP	5,847	499.70	12.5	490	498	508	550	0.44

Grade 10 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,285	511.59	15.2	500	511	522	600	0.32
Gender	Female	24,077	514.05	15.0	503	513	525	582	0.26
	Male	25,205	509.26	15.1	498	507	519	600	0.40
Ethnicity	Hispanic	4,390	507.83	14.4	497	506	518	569	0.43
	Asian	921	519.98	15.9	509	520	531	569	-0.02
	Native Hawaiian/Pacific Islander	77	508.08	15.6	496	504	519	562	0.78
	Black/African American	5,355	504.56	13.2	496	503	513	569	0.57
	American Indian	69	508.09	17.5	495	506	523	562	0.56
	White	36,219	512.96	15.2	501	513	523	600	0.26
	Two or More Races	2,249	510.51	14.9	500	509	520	582	0.43
Migrant	Non-Migrant	49,065	511.64	15.2	500	511	522	600	0.32
	Migrant	220	501.22	13.1	493	500	507	551	1.04
LEP	Non-LEP	47,342	512.18	15.2	501	511	523	600	0.30
	LEP	1,943	497.39	9.2	492	497	503	533	-0.04
Economic Disadvantage	Economically Disadvantaged	27,728	508.12	14.2	498	506	517	582	0.42
	Not Economically Disadvantaged	21,557	516.06	15.4	504	516	527	600	0.14
IEP	Non-IEP	44,218	512.86	15.1	501	512	523	600	0.26
	IEP	5,067	500.53	11.1	493	499	506	557	0.64

Grade 3 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,608	517.90	20.5	503	517	530	600	0.63
Gender	Female	22,745	516.83	19.9	502	515	530	600	0.60
	Male	23,861	518.93	21.0	503	517	532	600	0.64
Ethnicity	Hispanic	4,044	512.64	18.6	499	511	524	600	0.61
	Asian	981	528.95	23.7	513	528	543	600	0.41
	Native Hawaiian/Pacific Islander	86	517.08	18.8	504	515	530	573	0.74
	Black/African American	4,921	506.96	17.6	494	504	517	600	0.86
	American Indian	78	515.54	21.4	497	514	528	573	0.41
	White	33,886	519.97	20.4	505	519	533	600	0.60
	Two or More Races	2,608	515.82	19.7	501	513	528	600	0.74
Migrant	Non-Migrant	46,368	517.94	20.5	503	517	530	600	0.63
	Migrant	240	510.44	18.0	497	507	519	600	0.91
LEP	Non-LEP	42,588	518.53	20.7	503	517	530	600	0.63
	LEP	4,020	511.27	17.8	498	509	523	600	0.43
Economic Disadvantage	Economically Disadvantaged	29,200	513.41	18.8	499	511	525	600	0.65
	Not Economically Disadvantaged	17,408	525.44	21.1	511	525	538	600	0.53
IEP	Non-IEP	38,317	519.77	20.2	505	519	533	600	0.63
	IEP	8,291	509.26	20.0	495	505	521	600	0.90

Grade 4 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,945	517.68	19.7	503	516	531	600	0.41
Gender	Female	22,861	516.42	19.3	502	515	529	600	0.43
	Male	24,081	518.88	20.1	504	517	533	600	0.38
Ethnicity	Hispanic	4,036	511.72	18.0	499	510	523	600	0.50
	Asian	1,020	530.18	22.7	514	530	544	600	0.17
	Native Hawaiian/Pacific Islander	94	514.13	18.3	502	514	527	562	0.18
	Black/African American	4,971	506.61	17.0	495	504	517	600	0.70
	American Indian	57	513.70	20.4	500	509	517	574	1.17
	White	34,183	519.82	19.5	505	519	533	600	0.35
	Two or More Races	2,581	515.31	18.8	502	514	527	600	0.49
Migrant	Non-Migrant	46,714	517.73	19.7	503	517	531	600	0.41
	Migrant	231	508.88	16.7	498	507	519	565	0.22
LEP	Non-LEP	43,216	518.49	19.8	504	517	532	600	0.39
	LEP	3,729	508.34	16.8	497	506	519	600	0.42
Economic Disadvantage	Economically Disadvantaged	29,029	513.18	18.2	500	512	525	600	0.45
	Not Economically Disadvantaged	17,916	524.98	20.0	510	525	538	600	0.26
IEP	Non-IEP	39,166	519.63	19.4	505	519	533	600	0.38
	IEP	7,779	507.87	18.3	495	504	519	600	0.75

Grade 5 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,471	511.95	19.6	497	510	524	600	0.54
Gender	Female	20,945	510.95	18.9	497	509	522	600	0.59
	Male	22,524	512.88	20.2	498	511	526	600	0.49
Ethnicity	Hispanic	3,688	507.18	18.2	494	506	519	600	0.43
	Asian	973	524.74	24.3	508	523	539	600	0.11
	Native Hawaiian/Pacific Islander	78	509.88	18.4	496	509	520	553	0.50
	Black/African American	4,417	500.88	16.3	489	498	510	600	0.86
	American Indian	51	510.06	18.7	497	506	522	566	0.67
	White	31,924	513.81	19.4	500	512	527	600	0.50
	Two or More Races	2,338	509.90	18.6	496	508	520	600	0.72
Migrant	Non-Migrant	43,235	512.00	19.6	498	510	524	600	0.54
	Migrant	236	503.64	16.5	493	502	514	560	0.52
LEP	Non-LEP	40,968	512.71	19.6	498	511	525	600	0.54
	LEP	2,503	499.60	15.5	489	498	509	581	0.20
Economic Disadvantage	Economically Disadvantaged	26,663	507.15	17.7	494	506	518	600	0.58
	Not Economically Disadvantaged	16,808	519.57	20.1	506	519	532	600	0.37
IEP	Non-IEP	36,910	513.85	19.2	500	512	526	600	0.51
	IEP	6,561	501.29	18.1	489	498	510	600	1.04

Grade 6 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,248	503.38	16.8	491	502	514	598	0.63
Gender	Female	22,510	502.87	16.4	491	501	513	597	0.54
	Male	23,738	503.86	17.3	491	502	514	598	0.69
Ethnicity	Hispanic	4,103	498.19	15.3	488	496	508	598	0.48
	Asian	923	513.59	21.2	498	511	526	597	0.52
	Native Hawaiian/Pacific Islander	93	498.88	15.5	488	496	506	555	0.69
	Black/African American	5,018	493.90	13.2	486	493	501	574	0.66
	American Indian	55	503.53	16.2	493	501	513	550	0.82
	White	33,688	505.30	16.7	493	504	516	598	0.59
	Two or More Races	2,368	501.27	16.2	490	499	511	574	0.72
Migrant	Non-Migrant	46,030	503.43	16.8	491	502	514	598	0.64
	Migrant	218	493.01	16.6	483	492	501	545	-0.57
LEP	Non-LEP	44,081	504.04	16.8	492	502	514	598	0.64
	LEP	2,167	489.81	11.7	483	488	496	550	-0.23
Economic Disadvantage	Economically Disadvantaged	27,962	499.22	14.9	488	497	508	598	0.61
	Not Economically Disadvantaged	18,286	509.73	17.6	497	508	521	598	0.49
IEP	Non-IEP	39,966	504.88	16.7	493	503	516	598	0.60
	IEP	6,282	493.80	14.5	484	491	500	574	1.09

Grade 7 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,838	503.22	14.7	493	500	510	600	1.11
Gender	Female	22,552	503.12	14.4	493	500	510	600	1.16
	Male	24,285	503.31	15.0	493	500	511	600	1.07
Ethnicity	Hispanic	4,090	499.58	12.3	491	498	505	600	0.83
	Asian	899	514.80	21.5	499	510	527	600	1.02
	Native Hawaiian/Pacific Islander	85	500.26	13.6	493	498	505	556	1.51
	Black/African American	5,085	495.72	10.4	489	495	501	576	0.95
	American Indian	63	502.33	14.9	493	499	509	567	1.64
	White	34,231	504.60	14.8	495	502	512	600	1.03
	Two or More Races	2,384	501.42	13.6	493	499	508	579	1.05
Migrant	Non-Migrant	46,607	503.25	14.7	493	500	510	600	1.12
	Migrant	231	496.84	11.5	491	497	502	538	-2.41
LEP	Non-LEP	44,780	503.63	14.8	493	501	511	600	1.11
	LEP	2,058	494.31	9.3	489	494	499	540	-0.83
Economic Disadvantage	Economically Disadvantaged	28,246	499.77	12.3	491	498	506	600	1.07
	Not Economically Disadvantaged	18,592	508.46	16.4	497	505	517	600	0.89
IEP	Non-IEP	40,712	504.25	14.9	494	501	512	600	1.08
	IEP	6,126	496.39	11.4	491	495	500	567	1.25

Grade 8 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,135	501.99	16.9	490	498	511	600	1.01
Gender	Female	23,855	501.86	16.3	491	499	511	600	0.95
	Male	25,276	502.11	17.5	490	498	512	600	1.06
Ethnicity	Hispanic	4,256	497.71	14.7	488	495	504	575	0.79
	Asian	863	518.24	25.4	498	516	533	600	0.57
	Native Hawaiian/Pacific Islander	72	503.04	18.8	489	500	517	547	0.48
	Black/African American	5,344	493.81	12.3	485	492	500	600	1.23
	American Indian	76	502.99	22.0	491	498	512	599	2.33
	White	36,102	503.46	17.0	491	500	514	600	0.90
	Two or More Races	2,417	499.78	15.9	488	497	508	599	1.21
Migrant	Non-Migrant	48,920	502.03	16.9	490	499	511	600	1.02
	Migrant	215	492.96	15.6	485	493	500	551	-1.21
LEP	Non-LEP	47,199	502.44	17.0	491	500	512	600	1.01
	LEP	1,936	491.02	11.3	485	491	495	600	0.36
Economic Disadvantage	Economically Disadvantaged	29,196	497.88	14.5	488	495	505	600	1.05
	Not Economically Disadvantaged	19,939	508.02	18.4	495	506	519	600	0.80
IEP	Non-IEP	43,289	503.25	17.1	491	500	513	600	0.96
	IEP	5,846	492.66	11.8	485	491	498	575	1.37

Grade 10 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,248	500.52	15.0	491	498	508	600	0.96
Gender	Female	24,045	500.59	14.2	491	498	508	600	0.90
	Male	25,199	500.46	15.7	491	498	508	600	1.02
Ethnicity	Hispanic	4,412	496.60	13.4	489	496	503	564	0.14
	Asian	922	513.44	22.5	498	510	527	600	0.92
	Native Hawaiian/Pacific Islander	77	496.81	12.0	489	494	501	547	1.63
	Black/African American	5,323	493.61	11.1	487	493	500	576	0.54
	American Indian	70	498.90	14.3	491	496	508	544	0.08
	White	36,186	501.80	15.0	491	498	510	600	0.95
	Two or More Races	2,252	498.91	14.4	491	496	505	577	1.03
Migrant	Non-Migrant	49,027	500.56	15.0	491	498	508	600	0.97
	Migrant	221	492.27	11.8	486	491	498	544	-1.38
LEP	Non-LEP	47,268	500.99	14.9	491	498	509	600	1.04
	LEP	1,980	489.19	11.2	485	489	496	541	-2.69
Economic Disadvantage	Economically Disadvantaged	27,692	496.80	12.6	489	496	503	577	0.72
	Not Economically Disadvantaged	21,556	505.31	16.4	494	502	514	600	0.90
IEP	Non-IEP	44,197	501.52	15.1	491	498	509	600	0.92
	IEP	5,051	491.76	10.3	485	491	496	565	1.11

Grade 4 Science

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,934	508.72	14.4	499	508	519	582	0.16
Gender	Female	22,858	508.32	14.0	499	508	517	582	0.20
	Male	24,073	509.11	14.7	499	508	519	572	0.13
Ethnicity	Hispanic	4,035	504.20	13.3	496	503	512	553	0.11
	Asian	1,019	514.22	15.2	504	514	525	562	0.03
	Native Hawaiian/Pacific Islander	94	505.81	12.5	499	507	513	536	-0.08
	Black/African American	4,969	500.73	12.4	493	500	508	551	0.32
	American Indian	57	504.67	12.8	494	504	515	529	-0.07
	White	34,179	510.38	14.2	500	510	520	582	0.12
	Two or More Races	2,578	507.23	13.8	498	506	517	557	0.22
Migrant	Non-Migrant	46,703	508.76	14.4	499	508	519	582	0.16
	Migrant	231	501.75	13.0	494	501	508	544	-0.41
LEP	Non-LEP	43,207	509.37	14.4	499	508	519	582	0.15
	LEP	3,727	501.21	12.1	493	500	508	544	-0.05
Economic Disadvantage	Economically Disadvantaged	29,021	505.83	13.6	496	505	515	582	0.24
	Not Economically Disadvantaged	17,913	513.41	14.3	504	513	523	571	-0.02
IEP	Non-IEP	39,158	509.73	14.1	500	510	519	572	0.13
	IEP	7,776	503.68	14.6	493	502	512	582	0.43

Grade 7 Science

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,809	499.08	14.0	489	498	509	575	0.28
Gender	Female	22,542	498.38	13.7	489	498	508	575	0.30
	Male	24,266	499.73	14.3	489	498	510	555	0.25
Ethnicity	Hispanic	4,085	494.77	12.6	485	493	502	575	0.30
	Asian	899	505.58	15.7	494	505	517	555	0.08
	Native Hawaiian/Pacific Islander	85	495.79	14.0	488	496	505	523	-0.26
	Black/African American	5,078	491.35	11.3	485	490	498	544	0.26
	American Indian	63	498.62	12.2	492	498	505	526	0.33
	White	34,216	500.69	14.0	492	500	510	563	0.23
	Two or More Races	2,382	497.57	13.5	488	497	506	544	0.13
Migrant	Non-Migrant	46,579	499.11	14.0	489	498	509	575	0.28
	Migrant	230	492.33	10.9	485	492	498	518	-0.20
LEP	Non-LEP	44,753	499.56	14.0	489	498	509	575	0.27
	LEP	2,056	488.64	9.7	482	489	495	519	-0.71
Economic Disadvantage	Economically Disadvantaged	28,222	495.93	12.9	488	495	504	555	0.27
	Not Economically Disadvantaged	18,587	503.86	14.3	493	503	514	575	0.14
IEP	Non-IEP	40,689	500.19	14.0	490	498	510	575	0.23
	IEP	6,120	491.70	11.6	485	490	498	541	0.43

Grade 11 Science

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	44,097	493.98	14.7	484	494	504	574	-0.03
Gender	Female	21,621	495.04	14.0	485	495	505	561	-0.05
	Male	22,472	492.97	15.3	482	493	504	574	0.02
Ethnicity	Hispanic	3,620	490.11	14.3	481	490	500	547	-0.19
	Asian	964	500.61	15.7	491	502	511	574	-0.07
	Native Hawaiian/Pacific Islander	56	488.16	12.4	479	488	497	513	0.13
	Black/African American	4,303	486.35	13.2	477	485	494	543	0.07
	American Indian	64	495.50	16.0	484	493	507	533	0.10
	White	33,321	495.28	14.5	485	495	506	562	-0.06
	Two or More Races	1,762	492.55	13.8	483	492	502	547	0.22
Migrant	Non-Migrant	43,952	494.01	14.7	484	494	504	574	-0.03
	Migrant	145	484.73	12.5	475	482	493	517	0.11
LEP	Non-LEP	42,645	494.46	14.6	484	494	505	574	-0.01
	LEP	1,452	479.87	11.9	472	480	487	516	-1.03
Economic Disadvantage	Economically Disadvantaged	23,084	490.61	14.0	481	490	500	574	-0.03
	Not Economically Disadvantaged	21,013	497.69	14.6	488	498	508	562	-0.10
IEP	Non-IEP	40,162	495.05	14.5	485	495	505	574	-0.07
	IEP	3,935	483.09	12.6	475	482	490	534	0.36

Grade 5 Social Studies

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,442	512.73	16.5	500	512	524	600	0.17
Gender	Female	20,928	513.04	16.2	501	512	524	600	0.21
	Male	22,512	512.44	16.8	500	512	524	578	0.15
Ethnicity	Hispanic	3,670	509.23	15.4	498	509	520	578	0.26
	Asian	969	520.82	17.5	509	521	533	578	0.02
	Native Hawaiian/Pacific Islander	78	509.59	15.5	498	511	520	540	-0.21
	Black/African American	4,414	504.15	14.8	493	503	514	565	0.33
	American Indian	51	511.08	13.9	499	508	523	543	0.35
	White	31,921	514.22	16.4	503	514	526	600	0.12
	Two or More Races	2,337	510.82	16.1	499	510	522	578	0.27
Migrant	Non-Migrant	43,206	512.77	16.5	500	512	524	600	0.17
	Migrant	236	506.51	15.3	496	506	517	547	0.21
LEP	Non-LEP	40,962	513.34	16.5	501	513	526	600	0.14
	LEP	2,480	502.74	12.5	493	503	511	547	0.29
Economic Disadvantage	Economically Disadvantaged	26,646	509.07	15.6	498	508	520	578	0.25
	Not Economically Disadvantaged	16,796	518.54	16.3	508	519	531	600	0.01
IEP	Non-IEP	36,882	514.21	16.1	503	514	526	600	0.14
	IEP	6,560	504.39	16.1	493	503	514	578	0.58

Grade 8 Social Studies

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,083	507.46	16.8	495	505	519	600	0.41
Gender	Female	23,824	508.13	16.2	495	507	519	600	0.39
	Male	25,255	506.82	17.3	493	505	519	600	0.45
Ethnicity	Hispanic	4,240	503.66	15.4	493	501	514	566	0.51
	Asian	858	519.03	18.9	505	520	532	600	0.16
	Native Hawaiian/Pacific Islander	72	506.72	15.8	493	507	516	552	0.58
	Black/African American	5,341	499.25	14.3	490	497	507	558	0.57
	American Indian	75	509.72	16.9	495	509	522	550	0.34
	White	36,072	508.97	16.7	497	507	521	600	0.36
	Two or More Races	2,420	505.57	16.2	493	503	517	563	0.42
Migrant	Non-Migrant	48,872	507.49	16.8	495	505	519	600	0.41
	Migrant	211	498.65	14.2	488	495	505	545	0.97
LEP	Non-LEP	47,168	508.00	16.7	495	507	520	600	0.39
	LEP	1,915	494.05	11.0	488	493	501	544	0.56
Economic Disadvantage	Economically Disadvantaged	29,155	503.57	15.2	493	501	514	578	0.48
	Not Economically Disadvantaged	19,928	513.15	17.3	499	513	525	600	0.21
IEP	Non-IEP	43,244	508.90	16.7	497	507	521	600	0.37
	IEP	5,839	496.77	13.4	488	495	503	558	0.81

Grade 11 Social Studies

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	44,007	508.76	17.1	495	507	521	599	0.29
Gender	Female	21,572	509.85	16.2	497	509	521	599	0.26
	Male	22,432	507.72	17.8	493	507	520	599	0.35
Ethnicity	Hispanic	3,591	504.84	15.7	493	503	515	563	0.34
	Asian	964	518.11	18.5	505	519	530	576	0.11
	Native Hawaiian/Pacific Islander	56	502.07	13.7	491	501	514	530	0.08
	Black/African American	4,287	500.15	14.5	490	499	509	563	0.38
	American Indian	64	508.30	18.1	493	508	520	556	0.37
	White	33,282	510.12	17.1	497	509	523	599	0.24
	Two or More Races	1,757	507.05	16.3	495	505	518	576	0.43
Migrant	Non-Migrant	43,864	508.80	17.1	495	507	521	599	0.29
	Migrant	143	497.85	11.7	489	495	505	538	0.73
LEP	Non-LEP	42,590	509.27	17.0	497	509	521	599	0.27
	LEP	1,417	493.30	10.9	486	492	499	535	0.42
Economic Disadvantage	Economically Disadvantaged	23,029	504.47	15.6	492	503	515	576	0.35
	Not Economically Disadvantaged	20,978	513.47	17.4	501	514	525	599	0.14
IEP	Non-IEP	40,075	510.08	16.8	497	509	523	599	0.26
	IEP	3,932	495.31	13.4	486	493	501	556	0.78

Grade 5 Editing and Mechanics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,434	520.12	16.7	509	520	531	600	0.07
Gender	Female	20,924	521.61	16.5	510	522	533	600	0.04
	Male	22,508	518.74	16.7	508	520	530	600	0.11
Ethnicity	Hispanic	3,668	515.10	15.8	504	515	526	579	0.12
	Asian	969	526.49	17.8	515	528	536	600	-0.01
	Native Hawaiian/Pacific Islander	78	517.69	16.9	505	520	528	567	-0.09
	Black/African American	4,416	511.12	15.5	500	512	522	584	0.18
	American Indian	51	520.22	16.5	508	520	528	559	0.46
	White	31,916	521.82	16.4	510	522	533	600	0.05
	Two or More Races	2,334	519.32	16.0	509	520	530	579	0.09
Migrant	Non-Migrant	43,198	520.18	16.7	509	520	531	600	0.07
	Migrant	236	510.30	16.1	500	510	520	567	0.29
LEP	Non-LEP	40,955	520.87	16.5	510	520	531	600	0.06
	LEP	2,479	507.72	13.9	498	508	517	564	0.13
Economic Disadvantage	Economically Disadvantaged	26,640	516.49	16.1	505	517	528	600	0.10
	Not Economically Disadvantaged	16,794	525.88	16.0	515	526	536	600	0.02
IEP	Non-IEP	36,877	522.08	15.9	512	522	533	600	0.10
	IEP	6,557	509.09	16.9	497	508	520	600	0.51

Grade 8 Editing and Mechanics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,053	515.47	18.8	503	514	526	600	0.44
Gender	Female	23,814	517.91	18.7	505	517	529	600	0.52
	Male	25,235	513.17	18.6	501	512	524	600	0.38
Ethnicity	Hispanic	4,240	509.66	17.7	498	510	521	600	0.38
	Asian	860	524.85	22.7	510	524	538	600	0.62
	Native Hawaiian/Pacific Islander	72	514.85	20.2	503	514	525	599	1.23
	Black/African American	5,327	506.28	16.8	493	505	517	600	0.37
	American Indian	75	517.15	18.8	505	517	529	563	0.26
	White	36,059	517.37	18.6	505	517	529	600	0.44
	Two or More Races	2,415	514.19	17.7	501	514	526	600	0.27
Migrant	Non-Migrant	48,842	515.53	18.8	503	514	526	600	0.44
	Migrant	211	501.73	18.0	488	501	512	561	0.53
LEP	Non-LEP	47,134	516.22	18.6	503	517	526	600	0.45
	LEP	1,919	497.20	13.7	487	496	505	575	0.30
Economic Disadvantage	Economically Disadvantaged	29,129	511.07	17.4	499	512	521	600	0.35
	Not Economically Disadvantaged	19,924	521.91	18.9	510	521	532	600	0.50
IEP	Non-IEP	43,223	517.50	18.2	505	517	529	600	0.50
	IEP	5,830	500.42	16.3	488	498	510	599	0.67

Grade 11 Editing and Mechanics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,927	518.60	17.6	506	520	531	600	-0.06
Gender	Female	21,542	521.83	16.7	511	522	533	600	-0.11
	Male	22,382	515.50	17.9	501	515	528	588	0.04
Ethnicity	Hispanic	3,568	513.52	17.0	501	513	525	575	-0.08
	Asian	962	526.15	18.6	513	528	539	583	-0.44
	Native Hawaiian/Pacific Islander	56	514.36	17.4	501	514	525	556	0.32
	Black/African American	4,278	510.09	15.9	499	509	520	575	0.05
	American Indian	64	516.53	15.3	505	518	527	551	-0.05
	White	33,238	520.12	17.4	508	520	533	588	-0.10
	Two or More Races	1,756	516.97	17.2	504	517	528	600	0.09
Migrant	Non-Migrant	43,783	518.64	17.6	506	520	531	600	-0.07
	Migrant	144	505.66	15.7	495	506	515	545	-0.11
LEP	Non-LEP	42,518	519.20	17.4	507	520	531	600	-0.08
	LEP	1,409	500.41	12.5	493	500	508	556	0.02
Economic Disadvantage	Economically Disadvantaged	22,973	514.45	16.6	503	514	525	583	0.03
	Not Economically Disadvantaged	20,954	523.15	17.5	512	525	536	600	-0.24
IEP	Non-IEP	40,014	520.09	17.1	508	520	533	600	-0.09
	IEP	3,913	503.40	15.1	493	501	512	575	0.33

Grade 5 On-Demand Writing

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,417	503.73	23.6	492	507	518	569	-0.86
Gender	Female	20,921	507.56	22.4	496	509	520	569	-0.73
	Male	22,494	500.17	24.1	487	502	516	569	-0.95
Ethnicity	Hispanic	3,665	499.74	23.3	487	502	516	569	-0.91
	Asian	969	512.01	23.0	501	514	524	569	-0.80
	Native Hawaiian/Pacific Islander	78	506.06	23.0	492	505	521	569	0.16
	Black/African American	4,414	492.57	25.3	479	495	509	569	-1.08
	American Indian	51	504.94	19.9	492	507	516	561	0.12
	White	31,904	505.55	23.0	494	508	519	569	-0.82
	Two or More Races	2,334	502.72	22.2	490	505	516	569	-0.84
Migrant	Non-Migrant	43,181	503.79	23.5	492	507	518	569	-0.86
	Migrant	236	493.67	27.7	481	499	510	569	-1.18
LEP	Non-LEP	40,940	504.59	23.3	494	507	518	569	-0.83
	LEP	2,477	489.51	24.3	478	494	505	569	-1.40
Economic Disadvantage	Economically Disadvantaged	26,627	499.17	23.8	487	502	514	569	-0.99
	Not Economically Disadvantaged	16,790	510.96	21.3	499	512	523	569	-0.61
IEP	Non-IEP	36,866	506.93	21.6	495	508	519	569	-0.74
	IEP	6,551	485.73	26.2	468	486	502	569	-0.85

Grade 8 On-Demand Writing

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	48,963	495.60	28.6	480	497	514	569	-0.55
Gender	Female	23,782	501.35	27.1	487	502	518	569	-0.51
	Male	25,177	490.17	29.0	473	493	509	569	-0.57
Ethnicity	Hispanic	4,227	488.35	29.4	468	491	507	569	-0.61
	Asian	859	511.13	28.0	497	513	529	569	-0.55
	Native Hawaiian/Pacific Islander	72	494.25	35.8	480	500	518	565	-0.98
	Black/African American	5,306	481.17	29.3	460	485	498	569	-0.67
	American Indian	75	496.15	30.9	480	498	514	569	-0.66
	White	36,012	498.40	27.5	485	498	516	569	-0.51
	Two or More Races	2,407	492.72	29.1	477	495	511	569	-0.62
Migrant	Non-Migrant	48,754	495.67	28.6	480	497	514	569	-0.55
	Migrant	209	479.10	30.0	460	481	497	555	-0.50
LEP	Non-LEP	47,054	496.64	28.1	481	497	514	569	-0.54
	LEP	1,909	469.92	28.6	454	468	490	569	-0.68
Economic Disadvantage	Economically Disadvantaged	29,063	489.46	28.3	471	492	507	569	-0.57
	Not Economically Disadvantaged	19,900	504.57	26.6	491	506	521	569	-0.57
IEP	Non-IEP	43,151	499.23	26.9	485	498	516	569	-0.56
	IEP	5,812	468.67	26.9	454	467	487	565	-0.53

Grade 11 On-Demand Writing

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,590	494.67	33.4	478	500	515	573	-0.80
Gender	Female	21,447	501.82	29.5	490	505	520	573	-0.84
	Male	22,140	487.74	35.4	465	495	511	573	-0.67
Ethnicity	Hispanic	3,530	486.80	34.0	464	495	510	573	-0.74
	Asian	958	506.28	32.2	495	509	522	573	-0.86
	Native Hawaiian/Pacific Islander	56	494.25	33.5	486	500	514	561	-1.16
	Black/African American	4,204	480.57	33.8	457	489	504	573	-0.64
	American Indian	64	494.17	30.3	481	500	515	550	-1.06
	White	33,033	497.11	32.7	485	501	518	573	-0.85
	Two or More Races	1,740	491.99	34.2	476	498	513	573	-0.79
Migrant	Non-Migrant	43,448	494.74	33.4	478	500	515	573	-0.80
	Migrant	142	470.84	37.3	443	476	498	561	-0.48
LEP	Non-LEP	42,197	495.72	32.9	482	500	516	573	-0.83
	LEP	1,393	462.83	31.7	443	461	489	561	-0.47
Economic Disadvantage	Economically Disadvantaged	22,746	488.30	33.2	468	495	510	573	-0.73
	Not Economically Disadvantaged	20,844	501.61	32.3	490	506	521	573	-0.96
IEP	Non-IEP	39,716	497.54	32.2	486	502	518	573	-0.91
	IEP	3,874	465.16	30.9	441	464	490	573	-0.23

Appendix J. Performance Level Rates

Grade 3 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,598	27.4%	25.8%	25.9%	20.9%
Gender	Female	22,737	25.6%	25.4%	26.4%	22.6%
	Male	23,859	29.1%	26.3%	25.5%	19.2%
Ethnicity	Hispanic	4,038	34.4%	30.1%	22.5%	12.9%
	Asian	975	18.2%	22.7%	28.7%	30.5%
	Native Hawaiian/Pacific Islander	86	27.9%	29.1%	29.1%	14.0%
	Black/African American	4,924	47.0%	26.5%	18.3%	8.2%
	American Indian	78	30.8%	25.6%	20.5%	23.1%
	White	33,885	23.8%	25.2%	27.4%	23.6%
	Two or More Races	2,608	29.4%	27.4%	24.8%	18.5%
Migrant	Non-Migrant	46,360	27.3%	25.8%	25.9%	20.9%
	Migrant	238	43.3%	28.6%	19.7%	8.4%
LEP	Non-LEP	42,592	26.5%	25.2%	26.2%	22.0%
	LEP	4,006	36.8%	32.3%	22.4%	8.6%
Economic Disadvantage	Economically Disadvantaged	29,196	33.8%	28.0%	23.5%	14.7%
	Not Economically Disadvantaged	17,402	16.6%	22.3%	29.8%	31.3%
IEP	Non-IEP	38,306	24.8%	25.6%	27.2%	22.4%
	IEP	8,292	39.3%	26.9%	19.8%	14.0%

Grade 4 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,934	24.6%	27.6%	26.5%	21.3%
Gender	Female	22,856	22.9%	27.0%	27.1%	23.1%
	Male	24,075	26.3%	28.1%	26.0%	19.6%
Ethnicity	Hispanic	4,022	32.9%	31.7%	22.5%	12.9%
	Asian	1,015	15.7%	19.6%	27.7%	37.0%
	Native Hawaiian/Pacific Islander	94	29.8%	27.7%	25.5%	17.0%
	Black/African American	4,972	43.5%	30.2%	17.8%	8.5%
	American Indian	58	31.0%	32.8%	19.0%	17.2%
	White	34,189	21.0%	26.8%	28.3%	23.9%
	Two or More Races	2,581	26.5%	29.1%	26.3%	18.1%
Migrant	Non-Migrant	46,707	24.6%	27.6%	26.5%	21.4%
	Migrant	227	42.7%	27.8%	22.9%	6.6%
LEP	Non-LEP	43,226	23.3%	26.9%	27.1%	22.6%
	LEP	3,708	39.8%	35.0%	19.4%	5.9%
Economic Disadvantage	Economically Disadvantaged	29,023	30.9%	30.4%	24.2%	14.6%
	Not Economically Disadvantaged	17,911	14.6%	23.0%	30.3%	32.1%
IEP	Non-IEP	39,150	21.1%	27.2%	28.2%	23.5%
	IEP	7,784	42.6%	29.1%	17.9%	10.3%

Grade 5 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,462	24.2%	27.6%	28.0%	20.3%
Gender	Female	20,937	22.2%	26.8%	28.6%	22.4%
	Male	22,523	26.0%	28.3%	27.4%	18.3%
Ethnicity	Hispanic	3,674	32.8%	31.0%	22.9%	13.2%
	Asian	969	16.1%	21.4%	27.9%	34.7%
	Native Hawaiian/Pacific Islander	78	25.6%	32.1%	29.5%	12.8%
	Black/African American	4,418	42.6%	29.9%	19.5%	8.0%
	American Indian	51	23.5%	25.5%	33.3%	17.6%
	White	31,930	20.8%	26.9%	29.8%	22.5%
	Two or More Races	2,340	25.7%	29.8%	26.7%	17.8%
Migrant	Non-Migrant	43,226	24.1%	27.6%	28.0%	20.3%
	Migrant	236	44.5%	28.4%	17.4%	9.7%
LEP	Non-LEP	40,980	22.5%	27.2%	28.9%	21.4%
	LEP	2,482	51.7%	33.8%	12.4%	2.2%
Economic Disadvantage	Economically Disadvantaged	26,661	31.2%	30.2%	25.3%	13.4%
	Not Economically Disadvantaged	16,801	13.1%	23.4%	32.3%	31.2%
IEP	Non-IEP	36,897	19.7%	27.6%	30.2%	22.6%
	IEP	6,565	49.7%	27.4%	15.6%	7.3%

Grade 6 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,245	21.3%	30.1%	31.7%	16.8%
Gender	Female	22,507	18.1%	30.3%	33.1%	18.4%
	Male	23,738	24.3%	30.0%	30.3%	15.3%
Ethnicity	Hispanic	4,086	29.4%	34.4%	27.1%	9.1%
	Asian	919	13.7%	22.4%	35.7%	28.2%
	Native Hawaiian/Pacific Islander	93	32.3%	34.4%	20.4%	12.9%
	Black/African American	5,022	40.3%	33.5%	20.4%	5.9%
	American Indian	55	25.5%	29.1%	32.7%	12.7%
	White	33,699	17.4%	29.2%	34.0%	19.3%
	Two or More Races	2,371	24.6%	31.9%	29.3%	14.2%
Migrant	Non-Migrant	46,032	21.2%	30.1%	31.8%	16.9%
	Migrant	213	42.3%	37.1%	16.0%	4.7%
LEP	Non-LEP	44,103	19.7%	29.9%	32.8%	17.6%
	LEP	2,142	54.6%	35.9%	8.6%	0.8%
Economic Disadvantage	Economically Disadvantaged	27,962	27.5%	33.5%	28.3%	10.7%
	Not Economically Disadvantaged	18,283	11.9%	25.0%	37.0%	26.2%
IEP	Non-IEP	39,961	17.1%	30.1%	34.2%	18.7%
	IEP	6,284	48.3%	30.6%	15.8%	5.2%

Grade 7 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,842	29.9%	24.4%	30.2%	15.6%
Gender	Female	22,556	24.9%	25.1%	32.7%	17.3%
	Male	24,285	34.5%	23.8%	27.8%	13.9%
Ethnicity	Hispanic	4,077	39.4%	27.1%	24.6%	9.0%
	Asian	898	15.7%	16.4%	34.0%	34.0%
	Native Hawaiian/Pacific Islander	85	30.6%	32.9%	22.4%	14.1%
	Black/African American	5,092	51.7%	24.3%	18.8%	5.3%
	American Indian	63	30.2%	34.9%	19.0%	15.9%
	White	34,241	25.7%	24.2%	32.6%	17.5%
	Two or More Races	2,385	32.5%	25.7%	28.2%	13.6%
Migrant	Non-Migrant	46,614	29.8%	24.4%	30.2%	15.6%
	Migrant	228	46.1%	28.9%	20.6%	4.4%
LEP	Non-LEP	44,800	28.3%	24.3%	31.2%	16.2%
	LEP	2,042	64.7%	26.2%	8.4%	0.7%
Economic Disadvantage	Economically Disadvantaged	28,257	37.5%	26.6%	26.4%	9.5%
	Not Economically Disadvantaged	18,585	18.2%	21.1%	35.9%	24.8%
IEP	Non-IEP	40,707	25.2%	24.8%	32.6%	17.3%
	IEP	6,135	60.5%	21.8%	13.9%	3.8%

Grade 8 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,133	31.2%	25.0%	28.2%	15.7%
Gender	Female	23,859	26.2%	25.2%	30.3%	18.3%
	Male	25,270	35.9%	24.7%	26.2%	13.2%
Ethnicity	Hispanic	4,245	42.0%	26.1%	22.8%	9.1%
	Asian	863	15.3%	20.6%	30.9%	33.1%
	Native Hawaiian/Pacific Islander	72	33.3%	34.7%	22.2%	9.7%
	Black/African American	5,344	51.4%	25.3%	17.5%	5.8%
	American Indian	75	24.0%	28.0%	34.7%	13.3%
	White	36,109	27.1%	24.9%	30.4%	17.6%
	Two or More Races	2,420	33.6%	25.0%	27.1%	14.2%
Migrant	Non-Migrant	48,922	31.0%	25.0%	28.2%	15.7%
	Migrant	211	60.7%	19.4%	15.2%	4.7%
LEP	Non-LEP	47,215	29.4%	25.2%	29.1%	16.3%
	LEP	1,918	73.7%	20.1%	5.7%	0.4%
Economic Disadvantage	Economically Disadvantaged	29,189	39.3%	26.9%	24.4%	9.3%
	Not Economically Disadvantaged	19,944	19.3%	22.1%	33.6%	25.0%
IEP	Non-IEP	43,286	26.3%	25.7%	30.6%	17.4%
	IEP	5,847	67.0%	19.9%	10.3%	2.8%

Grade 10 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,285	26.1%	27.9%	30.7%	15.3%
Gender	Female	24,077	20.1%	27.0%	34.1%	18.7%
	Male	25,205	31.7%	28.8%	27.4%	12.1%
Ethnicity	Hispanic	4,390	34.2%	30.3%	26.1%	9.4%
	Asian	921	12.2%	20.4%	34.2%	33.2%
	Native Hawaiian/Pacific Islander	77	37.7%	27.3%	24.7%	10.4%
	Black/African American	5,355	42.6%	32.0%	19.7%	5.7%
	American Indian	69	42.0%	17.4%	29.0%	11.6%
	White	36,219	22.9%	27.1%	32.9%	17.2%
	Two or More Races	2,249	27.0%	30.6%	29.5%	12.9%
Migrant	Non-Migrant	49,065	25.9%	27.9%	30.8%	15.4%
	Migrant	220	51.8%	32.3%	10.0%	5.9%
LEP	Non-LEP	47,342	24.5%	27.8%	31.7%	16.0%
	LEP	1,943	64.6%	30.2%	5.0%	0.2%
Economic Disadvantage	Economically Disadvantaged	27,728	33.0%	31.1%	26.3%	9.6%
	Not Economically Disadvantaged	21,557	17.2%	23.8%	36.3%	22.7%
IEP	Non-IEP	44,218	22.8%	27.4%	32.9%	16.8%
	IEP	5,067	54.5%	32.0%	11.2%	2.2%

Grade 3 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,608	27.3%	29.9%	29.9%	12.9%
Gender	Female	22,745	28.8%	30.5%	29.1%	11.6%
	Male	23,861	25.8%	29.3%	30.7%	14.2%
Ethnicity	Hispanic	4,044	36.3%	32.1%	24.4%	7.2%
	Asian	981	13.8%	23.1%	33.8%	29.3%
	Native Hawaiian/Pacific Islander	86	25.6%	37.2%	26.7%	10.5%
	Black/African American	4,921	50.2%	28.2%	17.2%	4.4%
	American Indian	78	35.9%	21.8%	28.2%	14.1%
	White	33,886	23.1%	29.8%	32.5%	14.6%
	Two or More Races	2,608	29.4%	32.4%	28.4%	9.7%
Migrant	Non-Migrant	46,368	27.2%	29.8%	30.0%	13.0%
	Migrant	240	38.3%	37.5%	18.3%	5.8%
LEP	Non-LEP	42,588	26.2%	29.6%	30.5%	13.6%
	LEP	4,020	38.2%	32.6%	23.6%	5.6%
Economic Disadvantage	Economically Disadvantaged	29,200	34.3%	32.1%	25.6%	7.9%
	Not Economically Disadvantaged	17,408	15.4%	26.1%	37.2%	21.3%
IEP	Non-IEP	38,317	23.0%	30.6%	32.2%	14.1%
	IEP	8,291	47.0%	26.3%	19.3%	7.4%

Grade 4 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,945	32.9%	24.4%	31.7%	10.9%
Gender	Female	22,861	35.0%	25.2%	30.3%	9.5%
	Male	24,081	31.0%	23.7%	33.1%	12.2%
Ethnicity	Hispanic	4,036	44.5%	26.1%	24.2%	5.2%
	Asian	1,020	16.6%	16.8%	37.8%	28.8%
	Native Hawaiian/Pacific Islander	94	36.2%	26.6%	28.7%	8.5%
	Black/African American	4,971	57.3%	22.9%	16.7%	3.2%
	American Indian	57	43.9%	33.3%	12.3%	10.5%
	White	34,183	28.2%	24.6%	34.9%	12.3%
	Two or More Races	2,581	37.1%	25.6%	29.2%	8.1%
Migrant	Non-Migrant	46,714	32.9%	24.4%	31.8%	10.9%
	Migrant	231	49.4%	27.3%	21.2%	2.2%
LEP	Non-LEP	43,216	31.3%	24.4%	32.8%	11.5%
	LEP	3,729	52.2%	24.7%	20.0%	3.1%
Economic Disadvantage	Economically Disadvantaged	29,029	41.0%	26.1%	26.4%	6.4%
	Not Economically Disadvantaged	17,916	19.8%	21.7%	40.3%	18.2%
IEP	Non-IEP	39,166	28.3%	25.1%	34.4%	12.1%
	IEP	7,779	56.1%	20.8%	18.3%	4.7%

Grade 5 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,471	27.3%	31.4%	30.6%	10.8%
Gender	Female	20,945	28.1%	33.0%	29.7%	9.2%
	Male	22,524	26.5%	29.9%	31.3%	12.2%
Ethnicity	Hispanic	3,688	34.8%	33.6%	25.7%	5.9%
	Asian	973	13.8%	21.5%	35.6%	29.2%
	Native Hawaiian/Pacific Islander	78	28.2%	35.9%	23.1%	12.8%
	Black/African American	4,417	51.0%	30.7%	15.4%	2.9%
	American Indian	51	31.4%	29.4%	31.4%	7.8%
	White	31,924	23.3%	31.3%	33.3%	12.1%
	Two or More Races	2,338	30.2%	34.1%	27.6%	8.1%
Migrant	Non-Migrant	43,235	27.2%	31.4%	30.6%	10.8%
	Migrant	236	41.9%	33.5%	21.6%	3.0%
LEP	Non-LEP	40,968	25.8%	31.3%	31.5%	11.3%
	LEP	2,503	51.1%	33.1%	14.4%	1.5%
Economic Disadvantage	Economically Disadvantaged	26,663	35.0%	34.0%	25.3%	5.8%
	Not Economically Disadvantaged	16,808	15.1%	27.3%	38.9%	18.7%
IEP	Non-IEP	36,910	22.8%	32.0%	33.4%	11.8%
	IEP	6,561	52.7%	27.6%	14.7%	5.1%

Grade 6 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,248	32.1%	29.7%	27.9%	10.3%
Gender	Female	22,510	32.6%	30.2%	27.8%	9.4%
	Male	23,738	31.7%	29.2%	27.9%	11.2%
Ethnicity	Hispanic	4,103	43.2%	31.0%	20.7%	5.1%
	Asian	923	17.6%	23.9%	31.6%	26.9%
	Native Hawaiian/Pacific Islander	93	41.9%	33.3%	19.4%	5.4%
	Black/African American	5,018	56.8%	28.4%	12.4%	2.4%
	American Indian	55	29.1%	32.7%	29.1%	9.1%
	White	33,688	27.0%	29.9%	31.2%	11.9%
	Two or More Races	2,368	37.9%	29.2%	24.8%	8.1%
Migrant	Non-Migrant	46,030	32.0%	29.7%	27.9%	10.4%
	Migrant	218	56.4%	25.2%	14.7%	3.7%
LEP	Non-LEP	44,081	30.3%	29.9%	29.0%	10.8%
	LEP	2,167	68.2%	25.4%	5.9%	0.6%
Economic Disadvantage	Economically Disadvantaged	27,962	40.6%	31.6%	22.5%	5.3%
	Not Economically Disadvantaged	18,286	19.2%	26.7%	36.1%	18.0%
IEP	Non-IEP	39,966	27.7%	30.6%	30.4%	11.3%
	IEP	6,282	60.3%	24.0%	11.6%	4.1%

Grade 7 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,838	32.3%	30.5%	26.2%	11.0%
Gender	Female	22,552	31.8%	30.9%	26.9%	10.4%
	Male	24,285	32.8%	30.1%	25.5%	11.6%
Ethnicity	Hispanic	4,090	39.8%	34.4%	20.3%	5.6%
	Asian	899	16.7%	21.2%	31.0%	31.0%
	Native Hawaiian/Pacific Islander	85	38.8%	34.1%	21.2%	5.9%
	Black/African American	5,085	53.7%	31.0%	13.2%	2.1%
	American Indian	63	33.3%	33.3%	23.8%	9.5%
	White	34,231	28.3%	30.2%	28.8%	12.7%
	Two or More Races	2,384	37.3%	29.6%	25.0%	8.2%
Migrant	Non-Migrant	46,607	32.3%	30.4%	26.2%	11.1%
	Migrant	231	42.9%	39.0%	16.0%	2.2%
LEP	Non-LEP	44,780	31.2%	30.3%	27.0%	11.5%
	LEP	2,058	56.3%	34.0%	8.8%	0.8%
Economic Disadvantage	Economically Disadvantaged	28,246	39.7%	33.1%	21.7%	5.6%
	Not Economically Disadvantaged	18,592	21.2%	26.6%	33.0%	19.2%
IEP	Non-IEP	40,712	29.5%	30.0%	28.3%	12.1%
	IEP	6,126	51.0%	33.5%	11.8%	3.7%

Grade 8 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,135	36.8%	27.3%	24.9%	11.0%
Gender	Female	23,855	35.7%	28.4%	25.9%	10.0%
	Male	25,276	37.9%	26.2%	24.0%	11.9%
Ethnicity	Hispanic	4,256	45.6%	29.7%	19.3%	5.5%
	Asian	863	17.6%	15.5%	28.7%	38.1%
	Native Hawaiian/Pacific Islander	72	36.1%	22.2%	25.0%	16.7%
	Black/African American	5,344	58.7%	26.5%	12.3%	2.5%
	American Indian	76	31.6%	35.5%	21.1%	11.8%
	White	36,102	32.7%	27.3%	27.6%	12.4%
	Two or More Races	2,417	41.5%	28.6%	21.8%	8.1%
Migrant	Non-Migrant	48,920	36.8%	27.3%	25.0%	11.0%
	Migrant	215	54.9%	30.7%	12.1%	2.3%
LEP	Non-LEP	47,199	35.6%	27.4%	25.7%	11.4%
	LEP	1,936	67.9%	24.4%	6.6%	1.1%
Economic Disadvantage	Economically Disadvantaged	29,196	45.7%	29.0%	19.6%	5.7%
	Not Economically Disadvantaged	19,939	23.9%	24.8%	32.7%	18.6%
IEP	Non-IEP	43,289	33.3%	27.5%	27.2%	12.1%
	IEP	5,846	63.3%	25.8%	8.3%	2.6%

Grade 10 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,248	34.3%	31.1%	25.0%	9.5%
Gender	Female	24,045	32.3%	32.5%	26.6%	8.6%
	Male	25,199	36.3%	29.8%	23.6%	10.4%
Ethnicity	Hispanic	4,412	42.7%	33.0%	19.7%	4.6%
	Asian	922	17.8%	20.0%	30.2%	32.1%
	Native Hawaiian/Pacific Islander	77	45.5%	33.8%	15.6%	5.2%
	Black/African American	5,323	53.2%	32.0%	12.9%	1.9%
	American Indian	70	38.6%	27.1%	27.1%	7.1%
	White	36,186	30.7%	30.9%	27.6%	10.8%
	Two or More Races	2,252	37.6%	33.5%	21.4%	7.4%
Migrant	Non-Migrant	49,027	34.2%	31.1%	25.1%	9.6%
	Migrant	221	59.3%	30.3%	8.6%	1.8%
LEP	Non-LEP	47,268	32.9%	31.3%	25.9%	9.9%
	LEP	1,980	67.9%	27.6%	4.2%	0.4%
Economic Disadvantage	Economically Disadvantaged	27,692	42.4%	33.5%	19.7%	4.4%
	Not Economically Disadvantaged	21,556	23.9%	28.1%	31.9%	16.1%
IEP	Non-IEP	44,197	31.0%	31.6%	27.0%	10.4%
	IEP	5,051	63.4%	27.3%	7.8%	1.5%

Grade 4 Science

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,934	15.9%	49.4%	27.8%	6.9%
Gender	Female	22,858	15.8%	51.1%	26.9%	6.1%
	Male	24,073	16.0%	47.8%	28.6%	7.6%
Ethnicity	Hispanic	4,035	23.0%	54.6%	19.4%	3.0%
	Asian	1,019	9.2%	41.4%	33.9%	15.5%
	Native Hawaiian/Pacific Islander	94	19.1%	57.4%	22.3%	1.1%
	Black/African American	4,969	31.0%	55.3%	12.1%	1.7%
	American Indian	57	26.3%	45.6%	28.1%	0.0%
	White	34,179	12.9%	47.9%	31.2%	8.0%
	Two or More Races	2,578	17.2%	53.0%	24.7%	5.0%
Migrant	Non-Migrant	46,703	15.8%	49.4%	27.9%	6.9%
	Migrant	231	28.6%	56.7%	13.9%	0.9%
LEP	Non-LEP	43,207	14.8%	48.7%	29.1%	7.4%
	LEP	3,727	28.1%	57.6%	13.2%	1.0%
Economic Disadvantage	Economically Disadvantaged	29,021	19.9%	53.8%	22.2%	4.1%
	Not Economically Disadvantaged	17,913	9.3%	42.3%	36.9%	11.4%
IEP	Non-IEP	39,158	13.8%	49.0%	29.9%	7.3%
	IEP	7,776	26.5%	51.4%	17.5%	4.7%

Grade 7 Science

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,809	29.3%	47.5%	20.9%	2.4%
Gender	Female	22,542	30.0%	49.0%	19.0%	2.1%
	Male	24,266	28.6%	46.1%	22.6%	2.7%
Ethnicity	Hispanic	4,085	39.7%	47.4%	12.1%	0.8%
	Asian	899	17.8%	41.6%	32.9%	7.7%
	Native Hawaiian/Pacific Islander	85	34.1%	48.2%	17.6%	0.0%
	Black/African American	5,078	50.7%	42.9%	6.1%	0.3%
	American Indian	63	20.6%	61.9%	17.5%	0.0%
	White	34,216	24.9%	48.2%	24.0%	2.9%
	Two or More Races	2,382	32.4%	48.1%	18.1%	1.4%
Migrant	Non-Migrant	46,579	29.2%	47.5%	20.9%	2.4%
	Migrant	230	44.3%	48.7%	7.0%	0.0%
LEP	Non-LEP	44,753	27.9%	47.8%	21.7%	2.5%
	LEP	2,056	59.0%	39.3%	1.6%	0.0%
Economic Disadvantage	Economically Disadvantaged	28,222	36.2%	48.5%	14.2%	1.0%
	Not Economically Disadvantaged	18,587	18.7%	45.9%	30.9%	4.5%
IEP	Non-IEP	40,689	25.9%	48.5%	22.9%	2.7%
	IEP	6,120	51.7%	40.5%	7.3%	0.5%

Grade 11 Science

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	44,097	46.6%	42.9%	10.2%	0.4%
Gender	Female	21,621	43.1%	46.4%	10.2%	0.3%
	Male	22,472	49.9%	39.4%	10.1%	0.5%
Ethnicity	Hispanic	3,620	56.9%	37.1%	5.9%	0.1%
	Asian	964	28.0%	50.9%	19.1%	2.0%
	Native Hawaiian/Pacific Islander	56	64.3%	33.9%	1.8%	0.0%
	Black/African American	4,303	70.4%	26.7%	2.8%	0.1%
	American Indian	64	45.3%	40.6%	12.5%	1.6%
	White	33,321	42.5%	45.6%	11.4%	0.5%
	Two or More Races	1,762	52.7%	39.0%	7.9%	0.4%
Migrant	Non-Migrant	43,952	46.5%	42.9%	10.2%	0.4%
	Migrant	145	73.1%	24.8%	2.1%	0.0%
LEP	Non-LEP	42,645	45.2%	43.9%	10.5%	0.4%
	LEP	1,452	87.4%	12.4%	0.2%	0.0%
Economic Disadvantage	Economically Disadvantaged	23,084	56.4%	37.4%	6.0%	0.1%
	Not Economically Disadvantaged	21,013	35.7%	48.8%	14.7%	0.8%
IEP	Non-IEP	40,162	43.3%	45.3%	11.0%	0.5%
	IEP	3,935	79.5%	18.3%	2.1%	0.0%

Grade 5 Social Studies

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,442	32.0%	25.7%	26.4%	15.9%
Gender	Female	20,928	30.8%	26.8%	26.7%	15.8%
	Male	22,512	33.1%	24.8%	26.1%	16.0%
Ethnicity	Hispanic	3,670	39.1%	28.4%	22.4%	10.0%
	Asian	969	18.1%	20.8%	29.9%	31.2%
	Native Hawaiian/Pacific Islander	78	32.1%	29.5%	26.9%	11.5%
	Black/African American	4,414	52.3%	26.4%	16.2%	5.2%
	American Indian	51	43.1%	17.6%	25.5%	13.7%
	White	31,921	28.4%	25.5%	28.3%	17.8%
	Two or More Races	2,337	36.8%	25.9%	24.8%	12.6%
Migrant	Non-Migrant	43,206	31.9%	25.7%	26.4%	15.9%
	Migrant	236	46.6%	25.4%	21.6%	6.4%
LEP	Non-LEP	40,962	30.5%	25.5%	27.2%	16.7%
	LEP	2,480	56.2%	28.8%	13.0%	2.0%
Economic Disadvantage	Economically Disadvantaged	26,646	40.0%	27.0%	23.0%	10.0%
	Not Economically Disadvantaged	16,796	19.3%	23.8%	31.8%	25.1%
IEP	Non-IEP	36,882	28.0%	26.3%	28.4%	17.3%
	IEP	6,560	54.6%	22.5%	15.1%	7.8%

Grade 8 Social Studies

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,083	42.8%	22.5%	21.9%	12.9%
Gender	Female	23,824	40.0%	24.2%	23.4%	12.5%
	Male	25,255	45.5%	20.9%	20.4%	13.2%
Ethnicity	Hispanic	4,240	51.2%	22.9%	18.2%	7.7%
	Asian	858	21.3%	17.6%	27.4%	33.7%
	Native Hawaiian/Pacific Islander	72	41.7%	29.2%	20.8%	8.3%
	Black/African American	5,341	64.3%	19.7%	11.8%	4.2%
	American Indian	75	36.0%	24.0%	26.7%	13.3%
	White	36,072	38.9%	23.0%	23.7%	14.4%
	Two or More Races	2,420	46.8%	21.9%	21.3%	10.0%
Migrant	Non-Migrant	48,872	42.7%	22.5%	21.9%	12.9%
	Migrant	211	67.3%	18.5%	10.4%	3.8%
LEP	Non-LEP	47,168	41.3%	22.8%	22.5%	13.4%
	LEP	1,915	80.2%	14.2%	5.2%	0.5%
Economic Disadvantage	Economically Disadvantaged	29,155	52.0%	22.8%	17.8%	7.4%
	Not Economically Disadvantaged	19,928	29.3%	22.0%	27.8%	20.9%
IEP	Non-IEP	43,244	38.7%	23.5%	23.7%	14.1%
	IEP	5,839	73.4%	15.4%	7.9%	3.3%

Grade 11 Social Studies

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	44,007	34.1%	27.6%	24.8%	13.4%
Gender	Female	21,572	29.9%	30.0%	26.9%	13.3%
	Male	22,432	38.2%	25.3%	22.9%	13.6%
Ethnicity	Hispanic	3,591	41.7%	30.3%	20.4%	7.6%
	Asian	964	17.2%	22.2%	31.1%	29.5%
	Native Hawaiian/Pacific Islander	56	48.2%	26.8%	23.2%	1.8%
	Black/African American	4,287	55.3%	26.8%	13.8%	4.1%
	American Indian	64	34.4%	31.3%	21.9%	12.5%
	White	33,282	30.9%	27.5%	26.7%	15.0%
	Two or More Races	1,757	37.5%	29.1%	22.7%	10.8%
Migrant	Non-Migrant	43,864	34.0%	27.6%	24.9%	13.5%
	Migrant	143	64.3%	24.5%	9.8%	1.4%
LEP	Non-LEP	42,590	32.7%	27.9%	25.5%	13.9%
	LEP	1,417	75.9%	19.7%	4.0%	0.4%
Economic Disadvantage	Economically Disadvantaged	23,029	43.4%	29.1%	20.0%	7.5%
	Not Economically Disadvantaged	20,978	24.0%	26.0%	30.1%	19.9%
IEP	Non-IEP	40,075	30.5%	28.4%	26.5%	14.5%
	IEP	3,932	70.8%	19.2%	7.8%	2.3%

Grade 5 Editing and Mechanics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,434	22.0%	30.2%	26.7%	21.1%
Gender	Female	20,924	18.9%	29.6%	28.0%	23.5%
	Male	22,508	24.8%	30.7%	25.6%	18.8%
Ethnicity	Hispanic	3,668	31.7%	33.5%	22.4%	12.5%
	Asian	969	14.1%	22.7%	29.1%	34.1%
	Native Hawaiian/Pacific Islander	78	28.2%	24.4%	29.5%	17.9%
	Black/African American	4,416	40.7%	33.6%	17.8%	7.9%
	American Indian	51	23.5%	31.4%	25.5%	19.6%
	White	31,916	18.5%	29.4%	28.4%	23.7%
	Two or More Races	2,334	22.0%	32.6%	26.8%	18.6%
Migrant	Non-Migrant	43,198	21.9%	30.2%	26.8%	21.2%
	Migrant	236	44.1%	31.4%	17.8%	6.8%
LEP	Non-LEP	40,955	20.4%	29.9%	27.5%	22.2%
	LEP	2,479	48.9%	34.3%	13.4%	3.4%
Economic Disadvantage	Economically Disadvantaged	26,640	28.4%	33.1%	23.9%	14.6%
	Not Economically Disadvantaged	16,794	11.8%	25.6%	31.2%	31.4%
IEP	Non-IEP	36,877	17.1%	30.6%	29.1%	23.3%
	IEP	6,557	49.4%	28.1%	13.6%	8.9%

Grade 8 Editing and Mechanics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,053	27.2%	23.1%	34.9%	14.8%
Gender	Female	23,814	22.1%	22.8%	37.6%	17.4%
	Male	25,235	31.9%	23.3%	32.4%	12.4%
Ethnicity	Hispanic	4,240	38.5%	25.4%	28.3%	7.8%
	Asian	860	15.8%	19.4%	33.8%	30.9%
	Native Hawaiian/Pacific Islander	72	29.2%	25.0%	31.9%	13.9%
	Black/African American	5,327	46.5%	24.8%	23.6%	5.1%
	American Indian	75	24.0%	18.7%	40.0%	17.3%
	White	36,059	23.1%	22.6%	37.4%	16.9%
	Two or More Races	2,415	28.9%	23.5%	35.6%	12.0%
Migrant	Non-Migrant	48,842	27.0%	23.1%	35.0%	14.9%
	Migrant	211	56.4%	23.2%	15.2%	5.2%
LEP	Non-LEP	47,134	25.4%	23.2%	36.0%	15.4%
	LEP	1,919	70.8%	19.5%	9.2%	0.5%
Economic Disadvantage	Economically Disadvantaged	29,129	35.1%	25.2%	30.8%	8.9%
	Not Economically Disadvantaged	19,924	15.6%	20.0%	41.0%	23.5%
IEP	Non-IEP	43,223	22.2%	23.6%	37.8%	16.4%
	IEP	5,830	63.8%	19.4%	13.4%	3.5%

Grade 11 Editing and Mechanics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,927	21.1%	33.8%	31.0%	14.1%
Gender	Female	21,542	14.3%	33.5%	35.2%	17.0%
	Male	22,382	27.7%	34.0%	26.9%	11.4%
Ethnicity	Hispanic	3,568	28.7%	37.8%	26.2%	7.3%
	Asian	962	12.3%	25.8%	34.1%	27.9%
	Native Hawaiian/Pacific Islander	56	28.6%	37.5%	23.2%	10.7%
	Black/African American	4,278	35.7%	40.3%	19.4%	4.7%
	American Indian	64	17.2%	46.9%	29.7%	6.3%
	White	33,238	18.6%	32.5%	33.0%	15.9%
	Two or More Races	1,756	22.7%	37.2%	28.6%	11.5%
Migrant	Non-Migrant	43,783	21.0%	33.7%	31.0%	14.2%
	Migrant	144	42.4%	41.0%	14.6%	2.1%
LEP	Non-LEP	42,518	19.8%	33.7%	31.9%	14.6%
	LEP	1,409	61.1%	34.6%	3.8%	0.5%
Economic Disadvantage	Economically Disadvantaged	22,973	27.2%	38.1%	26.5%	8.2%
	Not Economically Disadvantaged	20,954	14.5%	29.0%	35.9%	20.6%
IEP	Non-IEP	40,014	17.8%	33.8%	33.1%	15.3%
	IEP	3,913	54.4%	34.0%	9.2%	2.4%

Grade 5 On-Demand Writing

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,417	18.1%	42.5%	27.9%	11.5%
Gender	Female	20,921	13.5%	40.6%	31.2%	14.7%
	Male	22,494	22.4%	44.3%	24.8%	8.5%
Ethnicity	Hispanic	3,665	23.6%	43.9%	24.7%	7.7%
	Asian	969	9.1%	36.3%	33.3%	21.3%
	Native Hawaiian/Pacific Islander	78	17.9%	39.7%	26.9%	15.4%
	Black/African American	4,414	34.0%	44.0%	17.3%	4.6%
	American Indian	51	17.6%	43.1%	33.3%	5.9%
	White	31,904	15.5%	42.2%	29.6%	12.7%
	Two or More Races	2,334	18.7%	44.8%	27.0%	9.5%
Migrant	Non-Migrant	43,181	18.0%	42.5%	27.9%	11.5%
	Migrant	236	32.2%	44.1%	18.2%	5.5%
LEP	Non-LEP	40,940	16.9%	42.2%	28.8%	12.1%
	LEP	2,477	37.2%	47.7%	13.3%	1.8%
Economic Disadvantage	Economically Disadvantaged	26,627	23.4%	45.6%	23.5%	7.6%
	Not Economically Disadvantaged	16,790	9.7%	37.7%	34.9%	17.8%
IEP	Non-IEP	36,866	12.7%	43.5%	30.8%	13.0%
	IEP	6,551	48.3%	37.0%	11.6%	3.2%

Grade 8 On-Demand Writing

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	48,963	21.6%	33.4%	36.9%	8.2%
Gender	Female	23,782	15.2%	31.0%	42.9%	10.9%
	Male	25,177	27.7%	35.6%	31.1%	5.6%
Ethnicity	Hispanic	4,227	29.9%	36.1%	29.1%	4.9%
	Asian	859	10.5%	20.5%	48.4%	20.6%
	Native Hawaiian/Pacific Islander	72	22.2%	26.4%	40.3%	11.1%
	Black/African American	5,306	40.2%	35.1%	22.2%	2.5%
	American Indian	75	21.3%	30.7%	41.3%	6.7%
	White	36,012	18.0%	33.0%	39.9%	9.2%
	Two or More Races	2,407	24.3%	35.9%	32.7%	7.1%
Migrant	Non-Migrant	48,754	21.5%	33.4%	36.9%	8.2%
	Migrant	209	43.5%	34.4%	19.1%	2.9%
LEP	Non-LEP	47,054	20.2%	33.4%	37.9%	8.5%
	LEP	1,909	56.5%	31.7%	10.9%	0.9%
Economic Disadvantage	Economically Disadvantaged	29,063	28.3%	36.3%	30.5%	4.9%
	Not Economically Disadvantaged	19,900	11.9%	29.0%	46.1%	13.0%
IEP	Non-IEP	43,151	16.3%	34.0%	40.5%	9.2%
	IEP	5,812	61.3%	28.5%	9.4%	0.7%

Grade 11 On-Demand Writing

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,590	19.6%	38.3%	34.7%	7.4%
Gender	Female	21,447	12.6%	36.6%	41.5%	9.2%
	Male	22,140	26.4%	39.9%	28.0%	5.6%
Ethnicity	Hispanic	3,530	27.4%	40.5%	28.3%	3.8%
	Asian	958	11.9%	30.2%	42.7%	15.2%
	Native Hawaiian/Pacific Islander	56	16.1%	41.1%	35.7%	7.1%
	Black/African American	4,204	33.3%	42.7%	21.4%	2.5%
	American Indian	64	18.8%	39.1%	35.9%	6.3%
	White	33,033	17.2%	37.6%	37.0%	8.2%
	Two or More Races	1,740	21.3%	40.6%	31.6%	6.6%
Migrant	Non-Migrant	43,448	19.6%	38.3%	34.7%	7.4%
	Migrant	142	45.8%	38.7%	14.1%	1.4%
LEP	Non-LEP	42,197	18.5%	38.3%	35.6%	7.6%
	LEP	1,393	55.6%	38.0%	6.2%	0.1%
Economic Disadvantage	Economically Disadvantaged	22,746	25.0%	42.1%	28.5%	4.3%
	Not Economically Disadvantaged	20,844	13.8%	34.1%	41.4%	10.7%
IEP	Non-IEP	39,716	16.3%	38.5%	37.2%	8.1%
	IEP	3,874	54.4%	36.3%	8.6%	0.6%

Appendix K. Reliability[6]

Grade 3 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,575	0.88	6.26
Gender	Female	22,722	0.88	6.33
	Male	23,851	0.88	6.18
Ethnicity	Hispanic	4,038	0.86	6.19
	Asian	975	0.87	6.62
	Native Hawaiian/Pacific Islander	86	0.82	5.96
	Black/African American	4,923	0.86	5.96
	American Indian	78	0.89	6.49
	White	33,864	0.87	6.52
	Two or More Races	2,607	0.87	6.34
Migrant	Non-Migrant	46,337	0.88	6.26
	Migrant	238	0.86	6.07
LEP	Non-LEP	42,569	0.88	6.32
	LEP	4,006	0.84	5.89
Economic Disadvantage	Economically Disadvantaged	29,186	0.87	6.15
	Not Economically Disadvantaged	17,389	0.86	6.79
IEP	Non-IEP	38,290	0.87	6.47
	IEP	8,285	0.88	6.17

Grade 4 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,928	0.88	5.93
Gender	Female	22,853	0.87	6.19
	Male	24,072	0.87	6.14
Ethnicity	Hispanic	4,022	0.86	5.97
	Asian	1,015	0.87	6.34
	Native Hawaiian/Pacific Islander	94	0.87	5.98
	Black/African American	4,972	0.86	5.93
	American Indian	58	0.89	5.93
	White	34,183	0.87	6.10
	Two or More Races	2,581	0.87	6.04
Migrant	Non-Migrant	46,701	0.88	5.93
	Migrant	227	0.85	5.76
LEP	Non-LEP	43,220	0.87	6.19
	LEP	3,708	0.83	5.80
Economic Disadvantage	Economically Disadvantaged	29,020	0.87	5.89
	Not Economically Disadvantaged	17,908	0.86	6.28
IEP	Non-IEP	39,146	0.87	6.08
	IEP	7,782	0.87	5.87

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[6] Students with '0' or perfect scores are excluded from calculation of reliability.

Grade 5 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	43,408	0.88	6.64
Gender	Female	20,904	0.88	6.68
	Male	22,502	0.88	6.58
Ethnicity	Hispanic	3,673	0.88	6.41
	Asian	963	0.88	7.30
	Native Hawaiian/Pacific Islander	78	0.85	6.08
	Black/African American	4,418	0.87	6.26
	American Indian	51	0.86	6.29
	White	31,886	0.88	6.56
	Two or More Races	2,337	0.88	6.53
Migrant	Non-Migrant	43,172	0.88	6.64
	Migrant	236	0.88	6.14
LEP	Non-LEP	40,926	0.88	6.61
	LEP	2,482	0.82	6.11
Economic Disadvantage	Economically Disadvantaged	26,654	0.88	6.27
	Not Economically Disadvantaged	16,754	0.86	7.03
IEP	Non-IEP	36,847	0.87	6.72
	IEP	6,561	0.87	6.34

Grade 6 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,244	0.84	6.19
Gender	Female	22,507	0.83	6.28
	Male	23,737	0.84	6.25
Ethnicity	Hispanic	4,086	0.82	6.09
	Asian	919	0.84	6.43
	Native Hawaiian/Pacific Islander	93	0.85	6.28
	Black/African American	5,022	0.81	6.19
	American Indian	55	0.83	6.18
	White	33,698	0.83	6.28
	Two or More Races	2,371	0.84	6.18
Migrant	Non-Migrant	46,031	0.84	6.19
	Migrant	213	0.80	6.13
LEP	Non-LEP	44,102	0.84	6.14
	LEP	2,142	0.68	6.14
Economic Disadvantage	Economically Disadvantaged	27,961	0.83	6.08
	Not Economically Disadvantaged	18,283	0.83	6.21
IEP	Non-IEP	39,961	0.83	6.19
	IEP	6,283	0.81	6.18

Grade 7 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,839	0.86	5.88
Gender	Female	22,554	0.85	5.95
	Male	24,284	0.86	5.93
Ethnicity	Hispanic	4,077	0.84	5.76
	Asian	898	0.86	6.36
	Native Hawaiian/Pacific Islander	85	0.85	5.81
	Black/African American	5,090	0.82	5.87
	American Indian	63	0.85	5.94
	White	34,240	0.85	6.02
	Two or More Races	2,385	0.85	5.98
Migrant	Non-Migrant	46,611	0.86	5.88
	Migrant	228	0.81	5.76
LEP	Non-LEP	44,797	0.86	5.85
	LEP	2,042	0.69	5.81
Economic Disadvantage	Economically Disadvantaged	28,255	0.84	5.83
	Not Economically Disadvantaged	18,584	0.85	6.11
IEP	Non-IEP	40,705	0.85	5.98
	IEP	6,134	0.80	5.89

Grade 8 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	49,130	0.85	5.90
Gender	Female	23,857	0.84	5.97
	Male	25,269	0.85	5.93
Ethnicity	Hispanic	4,245	0.83	5.97
	Asian	863	0.84	6.12
	Native Hawaiian/Pacific Islander	72	0.83	6.00
	Black/African American	5,343	0.82	5.91
	American Indian	75	0.83	5.83
	White	36,108	0.84	6.02
	Two or More Races	2,419	0.85	5.89
Migrant	Non-Migrant	48,919	0.85	5.90
	Migrant	211	0.81	6.01
LEP	Non-LEP	47,212	0.84	6.05
	LEP	1,918	0.68	6.00
Economic Disadvantage	Economically Disadvantaged	29,187	0.83	5.95
	Not Economically Disadvantaged	19,943	0.83	6.13
IEP	Non-IEP	43,284	0.84	5.95
	IEP	5,846	0.77	5.99

Grade 10 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	49,282	0.85	5.90
Gender	Female	24,077	0.84	6.02
	Male	25,202	0.84	6.01
Ethnicity	Hispanic	4,390	0.83	5.94
	Asian	921	0.85	6.14
	Native Hawaiian/Pacific Islander	77	0.85	6.03
	Black/African American	5,355	0.79	6.06
	American Indian	69	0.88	6.06
	White	36,216	0.85	5.88
	Two or More Races	2,249	0.84	5.96
Migrant	Non-Migrant	49,062	0.85	5.89
	Migrant	220	0.78	6.15
LEP	Non-LEP	47,339	0.84	6.06
	LEP	1,943	0.54	6.23
Economic Disadvantage	Economically Disadvantaged	27,726	0.82	6.00
	Not Economically Disadvantaged	21,556	0.85	5.97
IEP	Non-IEP	44,216	0.85	5.86
	IEP	5,066	0.69	6.15

Grade 3 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,344	0.88	6.81
Gender	Female	22,653	0.88	6.67
	Male	23,689	0.88	6.91
Ethnicity	Hispanic	4,037	0.87	6.56
	Asian	960	0.87	7.79
	Native Hawaiian/Pacific Islander	86	0.87	6.78
	Black/African American	4,914	0.87	6.23
	American Indian	78	0.90	6.78
	White	33,670	0.87	7.02
	Two or More Races	2,595	0.88	6.54
Migrant	Non-Migrant	46,105	0.88	6.81
	Migrant	239	0.86	6.38
LEP	Non-LEP	42,326	0.88	6.83
	LEP	4,018	0.87	6.36
Economic Disadvantage	Economically Disadvantaged	29,126	0.87	6.61
	Not Economically Disadvantaged	17,218	0.86	7.38
IEP	Non-IEP	38,075	0.87	6.92
	IEP	8,269	0.89	6.45

Grade 4 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,890	0.89	6.48
Gender	Female	22,844	0.88	6.63
	Male	24,043	0.89	6.58
Ethnicity	Hispanic	4,031	0.87	6.39
	Asian	1,013	0.89	7.29
	Native Hawaiian/Pacific Islander	94	0.88	6.33
	Black/African American	4,970	0.85	6.55
	American Indian	57	0.89	6.75
	White	34,142	0.88	6.68
	Two or More Races	2,580	0.88	6.50
Migrant	Non-Migrant	46,659	0.89	6.48
	Migrant	231	0.85	6.47
LEP	Non-LEP	43,163	0.89	6.49
	LEP	3,727	0.85	6.43
Economic Disadvantage	Economically Disadvantaged	29,017	0.87	6.52
	Not Economically Disadvantaged	17,873	0.88	6.81
IEP	Non-IEP	39,115	0.88	6.65
	IEP	7,775	0.87	6.55

Grade 5 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	43,440	0.89	6.46
Gender	Female	20,929	0.88	6.50
	Male	22,509	0.89	6.65
Ethnicity	Hispanic	3,686	0.87	6.50
	Asian	967	0.89	7.78
	Native Hawaiian/Pacific Islander	78	0.88	6.38
	Black/African American	4,415	0.84	6.47
	American Indian	51	0.88	6.47
	White	31,904	0.88	6.67
	Two or More Races	2,337	0.88	6.43
Migrant	Non-Migrant	43,204	0.89	6.46
	Migrant	236	0.85	6.40
LEP	Non-LEP	40,939	0.88	6.74
	LEP	2,501	0.82	6.45
Economic Disadvantage	Economically Disadvantaged	26,658	0.87	6.35
	Not Economically Disadvantaged	16,782	0.88	6.88
IEP	Non-IEP	36,881	0.88	6.61
	IEP	6,559	0.87	6.51

Grade 6 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,220	0.85	6.46
Gender	Female	22,505	0.85	6.31
	Male	23,715	0.86	6.37
Ethnicity	Hispanic	4,100	0.82	6.39
	Asian	918	0.89	6.68
	Native Hawaiian/Pacific Islander	93	0.82	6.57
	Black/African American	5,016	0.74	6.66
	American Indian	55	0.85	6.29
	White	33,670	0.86	6.21
	Two or More Races	2,368	0.84	6.49
Migrant	Non-Migrant	46,003	0.85	6.46
	Migrant	217	0.80	6.88
LEP	Non-LEP	44,056	0.85	6.44
	LEP	2,164	0.63	6.80
Economic Disadvantage	Economically Disadvantaged	27,954	0.81	6.46
	Not Economically Disadvantaged	18,266	0.87	6.27
IEP	Non-IEP	39,938	0.85	6.39
	IEP	6,282	0.79	6.65

Grade 7 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,818	0.81	6.35
Gender	Female	22,540	0.81	6.21
	Male	24,277	0.82	6.31
Ethnicity	Hispanic	4,087	0.73	6.26
	Asian	894	0.89	6.84
	Native Hawaiian/Pacific Islander	85	0.78	6.36
	Black/African American	5,085	0.61	6.51
	American Indian	63	0.82	6.32
	White	34,219	0.82	6.25
	Two or More Races	2,384	0.78	6.36
Migrant	Non-Migrant	46,588	0.82	6.19
	Migrant	230	0.56	6.34
LEP	Non-LEP	44,762	0.82	6.22
	LEP	2,056	0.44	6.60
Economic Disadvantage	Economically Disadvantaged	28,245	0.74	6.27
	Not Economically Disadvantaged	18,573	0.85	6.25
IEP	Non-IEP	40,693	0.82	6.25
	IEP	6,125	0.67	6.50

Grade 8 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	49,079	0.85	6.45
Gender	Female	23,834	0.84	6.43
	Male	25,241	0.86	6.42
Ethnicity	Hispanic	4,254	0.80	6.49
	Asian	848	0.90	7.31
	Native Hawaiian/Pacific Islander	72	0.88	6.51
	Black/African American	5,343	0.71	6.58
	American Indian	74	0.83	6.52
	White	36,069	0.85	6.48
	Two or More Races	2,414	0.83	6.41
Migrant	Non-Migrant	48,866	0.85	6.45
	Migrant	213	0.73	6.64
LEP	Non-LEP	47,147	0.85	6.47
	LEP	1,932	0.59	6.71
Economic Disadvantage	Economically Disadvantaged	29,183	0.80	6.41
	Not Economically Disadvantaged	19,896	0.87	6.47
IEP	Non-IEP	43,233	0.86	6.29
	IEP	5,846	0.68	6.67

Grade 10 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	49,213	0.81	6.43
Gender	Female	24,035	0.80	6.28
	Male	25,175	0.83	6.35
Ethnicity	Hispanic	4,405	0.75	6.42
	Asian	913	0.90	6.61
	Native Hawaiian/Pacific Islander	77	0.71	6.44
	Black/African American	5,320	0.64	6.53
	American Indian	70	0.79	6.55
	White	36,172	0.82	6.30
	Two or More Races	2,251	0.80	6.36
Migrant	Non-Migrant	48,993	0.81	6.44
	Migrant	220	0.57	6.60
LEP	Non-LEP	47,243	0.82	6.27
	LEP	1,970	0.44	6.92
Economic Disadvantage	Economically Disadvantaged	27,678	0.73	6.45
	Not Economically Disadvantaged	21,535	0.85	6.25
IEP	Non-IEP	44,162	0.82	6.31
	IEP	5,051	0.57	6.73

Grade 4 Science

Category	Group	N	Reliability	SEM
All	Students Tested	46,934	0.78	6.74
Gender	Female	22,858	0.77	6.72
	Male	24,073	0.79	6.73
Ethnicity	Hispanic	4,035	0.73	6.91
	Asian	1,019	0.81	6.62
	Native Hawaiian/Pacific Islander	94	0.71	6.75
	Black/African American	4,969	0.68	7.01
	American Indian	57	0.72	6.80
	White	34,179	0.78	6.68
	Two or More Races	2,578	0.76	6.76
Migrant	Non-Migrant	46,703	0.78	6.74
	Migrant	231	0.70	7.12
LEP	Non-LEP	43,207	0.78	6.74
	LEP	3,727	0.66	7.04
Economic Disadvantage	Economically Disadvantaged	29,021	0.75	6.80
	Not Economically Disadvantaged	17,913	0.79	6.56
IEP	Non-IEP	39,158	0.78	6.62
	IEP	7,776	0.77	6.99

Grade 7 Science

Category	Group	N	Reliability	SEM
All	Students Tested	46,805	0.76	6.85
Gender	Female	22,540	0.74	6.96
	Male	24,264	0.77	6.83
Ethnicity	Hispanic	4,084	0.68	7.07
	Asian	899	0.82	6.66
	Native Hawaiian/Pacific Islander	85	0.73	7.25
	Black/African American	5,077	0.57	7.39
	American Indian	63	0.69	6.80
	White	34,215	0.77	6.70
	Two or More Races	2,381	0.73	6.94
Migrant	Non-Migrant	46,575	0.76	6.85
	Migrant	230	0.56	7.24
LEP	Non-LEP	44,750	0.76	6.84
	LEP	2,055	0.38	7.49
Economic Disadvantage	Economically Disadvantaged	28,218	0.70	7.02
	Not Economically Disadvantaged	18,587	0.79	6.56
IEP	Non-IEP	40,686	0.76	6.85
	IEP	6,119	0.61	7.22

Grade 11 Science

Category	Group	N	Reliability	SEM
All	Students Tested	44,084	0.78	6.86
Gender	Female	21,618	0.76	6.82
	Male	22,462	0.79	6.97
Ethnicity	Hispanic	3,617	0.76	6.90
	Asian	964	0.81	6.84
	Native Hawaiian/Pacific Islander	56	0.68	7.00
	Black/African American	4,300	0.70	7.14
	American Indian	64	0.82	6.78
	White	33,314	0.78	6.79
	Two or More Races	1,762	0.76	6.77
Migrant	Non-Migrant	43,939	0.78	6.86
	Migrant	145	0.66	7.28
LEP	Non-LEP	42,636	0.78	6.80
	LEP	1,448	0.54	7.58
Economic Disadvantage	Economically Disadvantaged	23,073	0.75	6.93
	Not Economically Disadvantaged	21,011	0.79	6.67
IEP	Non-IEP	40,149	0.78	6.74
	IEP	3,935	0.66	7.34

Grade 5 Social Studies

Category	Group	N	Reliability	SEM
All	Students Tested	43,440	0.85	6.39
Gender	Female	20,926	0.84	6.46
	Male	22,512	0.85	6.52
Ethnicity	Hispanic	3,670	0.83	6.35
	Asian	969	0.85	6.77
	Native Hawaiian/Pacific Islander	78	0.83	6.41
	Black/African American	4,414	0.81	6.43
	American Indian	51	0.80	6.23
	White	31,919	0.84	6.55
	Two or More Races	2,337	0.84	6.44
Migrant	Non-Migrant	43,204	0.85	6.39
	Migrant	236	0.82	6.47
LEP	Non-LEP	40,960	0.85	6.40
	LEP	2,480	0.75	6.27
Economic Disadvantage	Economically Disadvantaged	26,646	0.83	6.43
	Not Economically Disadvantaged	16,794	0.84	6.49
IEP	Non-IEP	36,880	0.84	6.45
	IEP	6,560	0.84	6.44

Grade 8 Social Studies

Category	Group	N	Reliability	SEM
All	Students Tested	49,076	0.86	6.26
Gender	Female	23,823	0.85	6.26
	Male	25,249	0.87	6.21
Ethnicity	Hispanic	4,240	0.84	6.18
	Asian	857	0.88	6.47
	Native Hawaiian/Pacific Islander	72	0.85	6.13
	Black/African American	5,340	0.80	6.36
	American Indian	75	0.87	6.10
	White	36,067	0.86	6.24
	Two or More Races	2,420	0.85	6.28
Migrant	Non-Migrant	48,865	0.86	6.26
	Migrant	211	0.80	6.37
LEP	Non-LEP	47,161	0.86	6.24
	LEP	1,915	0.66	6.42
Economic Disadvantage	Economically Disadvantaged	29,152	0.83	6.27
	Not Economically Disadvantaged	19,924	0.87	6.21
IEP	Non-IEP	43,239	0.86	6.22
	IEP	5,837	0.77	6.38

Grade 11 Social Studies

Category	Group	N	Reliability	SEM
All	Students Tested	43,998	0.86	6.37
Gender	Female	21,569	0.85	6.25
	Male	22,426	0.87	6.40
Ethnicity	Hispanic	3,591	0.85	6.09
	Asian	964	0.87	6.66
	Native Hawaiian/Pacific Islander	56	0.80	6.14
	Black/African American	4,285	0.81	6.24
	American Indian	64	0.88	6.27
	White	33,275	0.86	6.36
	Two or More Races	1,757	0.86	6.10
Migrant	Non-Migrant	43,855	0.86	6.37
	Migrant	143	0.73	6.09
LEP	Non-LEP	42,581	0.86	6.34
	LEP	1,417	0.66	6.34
Economic Disadvantage	Economically Disadvantaged	23,026	0.84	6.23
	Not Economically Disadvantaged	20,972	0.87	6.23
IEP	Non-IEP	40,067	0.86	6.27
	IEP	3,931	0.77	6.41

Grade 5 Editing and Mechanics

Category	Group	N	Reliability	SEM
All	Students Tested	43,422	0.83	6.86
Gender	Female	20,919	0.82	6.99
	Male	22,501	0.83	6.87
Ethnicity	Hispanic	3,668	0.81	6.88
	Asian	968	0.83	7.28
	Native Hawaiian/Pacific Islander	78	0.83	6.96
	Black/African American	4,416	0.81	6.76
	American Indian	51	0.82	7.02
	White	31,905	0.82	6.93
	Two or More Races	2,334	0.82	6.80
Migrant	Non-Migrant	43,186	0.83	6.85
	Migrant	236	0.82	6.82
LEP	Non-LEP	40,943	0.82	6.99
	LEP	2,479	0.76	6.79
Economic Disadvantage	Economically Disadvantaged	26,638	0.82	6.81
	Not Economically Disadvantaged	16,784	0.80	7.12
IEP	Non-IEP	36,866	0.81	6.89
	IEP	6,556	0.83	6.96

Grade 8 Editing and Mechanics

Category	Group	N	Reliability	SEM
All	Students Tested	48,887	0.85	7.04
Gender	Female	23,702	0.84	7.18
	Male	25,181	0.85	7.03
Ethnicity	Hispanic	4,236	0.85	6.77
	Asian	846	0.85	8.03
	Native Hawaiian/Pacific Islander	71	0.84	7.07
	Black/African American	5,321	0.84	6.61
	American Indian	75	0.86	7.05
	White	35,921	0.84	7.16
	Two or More Races	2,412	0.85	6.78
Migrant	Non-Migrant	48,676	0.85	7.04
	Migrant	211	0.85	6.97
LEP	Non-LEP	46,968	0.85	6.96
	LEP	1,919	0.76	6.69
Economic Disadvantage	Economically Disadvantaged	29,086	0.84	6.85
	Not Economically Disadvantaged	19,801	0.83	7.39
IEP	Non-IEP	43,060	0.84	7.00
	IEP	5,827	0.82	6.85

Grade 11 Editing and Mechanics

Category	Group	N	Reliability	SEM
All	Students Tested	43,922	0.84	7.03
Gender	Female	21,539	0.83	6.85
	Male	22,380	0.85	6.93
Ethnicity	Hispanic	3,567	0.83	6.96
	Asian	961	0.84	7.27
	Native Hawaiian/Pacific Islander	56	0.84	6.95
	Black/African American	4,277	0.81	6.90
	American Indian	64	0.80	6.84
	White	33,237	0.84	6.96
	Two or More Races	1,755	0.84	6.83
Migrant	Non-Migrant	43,778	0.84	7.02
	Migrant	144	0.80	7.02
LEP	Non-LEP	42,513	0.84	6.95
	LEP	1,409	0.69	6.96
Economic Disadvantage	Economically Disadvantaged	22,971	0.83	6.85
	Not Economically Disadvantaged	20,951	0.84	6.98
IEP	Non-IEP	40,011	0.84	6.84
	IEP	3,911	0.78	6.98

Grade 5 On-Demand Writing

Category	Group	N	Reliability	SEM
All	Students Tested	42,099	0.95	4.35
Gender	Female	20,243	0.95	4.20
	Male	21,854	0.94	4.81
Ethnicity	Hispanic	3,576	0.94	4.75
	Asian	915	0.95	4.06
	Native Hawaiian/Pacific Islander	76	0.95	4.72
	Black/African American	4,267	0.93	5.17
	American Indian	49	0.93	4.54
	White	30,929	0.95	4.27
	Two or More Races	2,285	0.94	4.64
Migrant	Non-Migrant	41,873	0.95	4.35
	Migrant	226	0.94	4.98
LEP	Non-LEP	39,707	0.95	4.32
	LEP	2,392	0.91	5.40
Economic Disadvantage	Economically Disadvantaged	25,914	0.94	4.74
	Not Economically Disadvantaged	16,185	0.95	4.03
IEP	Non-IEP	35,821	0.95	4.05
	IEP	6,278	0.91	5.98

Grade 8 On-Demand Writing

Category	Group	N	Reliability	SEM
All	Students Tested	47,124	0.95	5.33
Gender	Female	22,999	0.96	4.67
	Male	24,121	0.94	5.74
Ethnicity	Hispanic	4,035	0.94	5.75
	Asian	811	0.96	4.84
	Native Hawaiian/Pacific Islander	65	0.96	4.75
	Black/African American	5,006	0.92	6.30
	American Indian	71	0.95	5.55
	White	34,823	0.96	4.69
	Two or More Races	2,308	0.95	5.28
Migrant	Non-Migrant	46,930	0.95	5.33
	Migrant	194	0.91	6.57
LEP	Non-LEP	45,378	0.95	5.28
	LEP	1,746	0.87	7.15
Economic Disadvantage	Economically Disadvantaged	27,954	0.94	5.68
	Not Economically Disadvantaged	19,170	0.96	4.55
IEP	Non-IEP	41,720	0.96	4.53
	IEP	5,404	0.85	7.67

Grade 11 On-Demand Writing

Category	Group	N	Reliability	SEM
All	Students Tested	41,109	0.96	5.27
Gender	Female	20,629	0.96	4.95
	Male	20,478	0.96	5.39
Ethnicity	Hispanic	3,309	0.95	5.97
	Asian	893	0.97	4.39
	Native Hawaiian/Pacific Islander	52	0.96	4.82
	Black/African American	3,901	0.95	5.88
	American Indian	62	0.96	5.10
	White	31,264	0.96	5.18
	Two or More Races	1,624	0.96	5.22
Migrant	Non-Migrant	40,987	0.96	5.27
	Migrant	122	0.94	6.30
LEP	Non-LEP	39,889	0.96	5.21
	LEP	1,220	0.89	7.48
Economic Disadvantage	Economically Disadvantaged	21,452	0.96	5.27
	Not Economically Disadvantaged	19,657	0.96	5.02
IEP	Non-IEP	37,564	0.96	5.02
	IEP	3,545	0.91	7.40

Appendix L. Scoring Metrics for KSA Constructed-Response Items

Grade 3 Reading

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE03007749819	Overall	2,500	875	82.7	17.0	0.2	–	39.7	41.3	14.3	–	–	0.7	0.2	0.0	1.8	2.1
RE03010452187	Overall	2,500	875	78.5	20.8	0.7	–	37.3	46.3	12.7	–	–	0.9	0.2	0.1	1.0	1.6
RE03010452519	Overall	2,500	875	87.4	12.5	0.1	–	39.2	36.4	21.5	–	–	0.9	0.2	0.0	0.9	1.0
RE03918949721	Overall	24,387	4,878	79.9	19.7	0.3	79.8	29.3	45.5	22.9	–	–	0.8	0.0	0.0	0.9	0.6
RE03919738525	Overall	22,237	4,448	79.9	19.4	0.7	91.2	27.3	42.1	27.9	–	–	0.8	0.0	0.0	1.2	0.7
RE03920746586	Overall	24,387	4,878	80.1	19.3	0.7	93.2	41.5	44.8	10.5	–	–	1.1	0.0	0.0	1.3	0.9
RE03921257081	Overall	2,500	875	80.0	18.1	1.9	–	32.7	39.8	25.2	–	–	0.4	0.0	0.0	0.8	1.0
RE03921257833	Overall	2,500	875	80.8	18.6	0.6	–	39.1	41.1	15.7	–	–	0.8	0.3	0.0	1.5	1.6
RE03924056085	Overall	2,500	875	80.6	18.7	0.7	–	39.7	37.2	19.2	–	–	0.8	0.0	0.0	1.8	1.2
RE03924056533	Overall	2,500	875	82.9	16.6	0.6	–	42.6	42.6	9.7	–	–	0.7	0.1	0.0	2.5	1.9
RE03925548036	Overall	22,237	4,448	79.7	19.5	0.8	80.8	24.9	55.5	17.1	–	–	0.7	0.0	0.0	1.0	0.7

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic. Operational items have validity statistics.

Grade 4 Reading

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE04012347892	Overall	2,500	875	66.3	28.3	5.4	–	43.3	25.7	21.3	6.1	0.9	0.7	0.2	0.0	0.6	1.2
RE04012348232	Overall	2,500	875	65.6	29.9	4.5	–	35.8	17.6	31.7	9.1	2.9	0.8	0.3	0.0	0.8	1.0
RE04013316027	Overall	2,500	875	79.7	20.0	0.3	–	18.9	47.9	32.1	–	–	0.4	0.2	0.0	0.2	0.3
RE04013320233	Overall	2,500	875	85.6	13.0	1.4	–	43.1	35.7	19.8	–	–	0.4	0.2	0.0	0.3	0.5
RE04918440579	Overall	2,500	875	81.9	18.1	0.0	–	19.2	50.6	28.3	–	–	0.6	0.3	0.0	0.4	0.6
RE04918441324	Overall	2,500	875	80.1	19.8	0.1	–	24.7	47.8	25.1	–	–	0.5	0.3	0.0	0.8	0.9
RE04919046871	Overall	24,435	4,887	64.6	33.6	1.8	70.6	28.4	31.7	21.7	11.9	3.9	1.0	0.0	0.0	0.7	0.8
RE04921053067	Overall	2,500	875	68.8	26.3	4.9	–	35.9	29.0	22.7	7.3	1.9	0.7	0.3	0.0	0.4	1.7
RE04921053489	Overall	2,500	875	71.3	24.2	4.5	–	44.7	24.6	20.2	6.0	0.7	1.2	0.5	0.0	0.7	1.4
RE04922045166	Overall	24,435	4,887	85.3	14.5	0.2	94.4	21.1	46.9	30.6	–	–	0.4	0.0	0.0	0.5	0.5
RE04922835846	Overall	22,527	4,506	79.6	20.0	0.5	90.8	40.8	22.7	35.3	–	–	0.5	0.0	0.0	0.4	0.3
RE04923143124	Overall	22,527	4,506	66.4	28.9	4.7	77.4	32.7	30.4	22.3	9.8	2.1	1.1	0.0	0.0	0.7	0.8
RE04925848183	Overall	2,500	875	80.5	18.9	0.7	–	40.4	36.9	20.4	–	–	0.7	0.3	0.0	0.5	0.8
RE04925874691	Overall	2,500	875	66.4	30.5	3.1	–	36.6	23.3	24.2	11.2	1.7	1.0	0.3	0.0	0.9	0.8

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic. Operational items have validity statistics.

Grade 5 Reading

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE05009150554	Overall	2,500	875	82.5	15.5	1.9	–	53.2	28.1	18.0	–	–	0.3	0.3	0.0	0.0	0.1
RE05009150875	Overall	2,500	875	81.9	17.1	0.9	–	41.8	42.5	14.5	–	–	0.6	0.2	0.0	0.0	0.4
RE05009356341	Overall	2,500	875	81.9	16.0	2.1	–	27.5	36.1	35.2	–	–	0.7	0.1	0.0	0.2	0.1
RE05009356495	Overall	2,500	875	81.0	18.1	0.9	–	41.0	37.0	20.6	–	–	0.6	0.2	0.1	0.2	0.4
RE05009460220	Overall	2,500	875	65.0	30.1	4.9	–	30.0	39.2	22.5	5.9	1.3	0.7	0.2	0.0	0.0	0.2
RE05009460499	Overall	2,500	875	65.3	30.1	4.7	–	36.9	34.8	21.6	4.9	1.0	0.7	0.0	0.0	0.0	0.1
RE05012537837	Overall	2,500	875	80.8	18.4	0.8	–	46.7	34.9	16.7	–	–	0.7	0.3	0.0	0.1	0.6
RE05012540551	Overall	2,500	875	68.5	30.3	1.3	–	34.6	25.9	30.4	5.7	1.3	1.0	0.5	0.0	0.1	0.5
RE05918436163	Overall	20,796	4,160	80.0	19.2	0.8	92.7	15.6	44.2	39.1	–	–	0.4	0.0	0.0	0.2	0.4
RE05919938465	Overall	20,796	4,160	65.0	29.6	5.4	80.9	25.7	22.5	20.9	19.9	9.5	0.7	0.0	0.0	0.3	0.5
RE05922541757	Overall	2,500	875	80.3	19.7	0.0	–	19.9	43.8	35.1	–	–	0.4	0.1	0.0	0.1	0.5
RE05922546929	Overall	2,500	875	67.7	32.3	0.0	–	35.1	26.8	24.2	10.3	2.1	0.5	0.3	0.0	0.3	0.4
RE05924235958	Overall	22,689	4,538	80.3	17.0	2.8	84.8	50.7	25.1	22.8	–	–	0.5	0.0	0.0	0.3	0.5
RE05924952030	Overall	22,689	4,538	67.8	30.9	1.3	83.2	41.6	20.6	18.4	12.8	5.1	0.6	0.0	0.0	0.4	0.4

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic. Operational items have validity statistics.

Grade 6 Reading

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE06010040525	Overall	2,500	875	71.7	28.3	0.0	–	20.8	37.1	30.3	5.1	4.7	0.7	0.1	0.0	0.3	0.8
RE06010045521	Overall	2,500	875	81.9	17.7	0.3	–	51.5	31.5	14.1	–	–	0.7	0.2	0.0	0.5	1.5
RE06012937197	Overall	2,500	875	81.6	18.4	0.0	–	21.7	51.3	21.5	–	–	0.8	0.2	0.0	0.4	4.1
RE06012945433	Overall	2,500	875	74.2	24.8	1.0	–	12.8	36.8	26.3	8.2	14.1	0.8	0.4	0.0	0.0	0.5
RE06013238113	Overall	2,500	875	80.8	19.0	0.2	–	19.8	48.8	29.0	–	–	0.9	0.4	0.0	0.2	0.9
RE06013241060	Overall	2,500	875	79.0	20.8	0.2	–	39.5	37.9	12.3	3.5	0.8	1.2	0.3	0.0	0.3	4.1
RE06014262560	Overall	2,500	875	81.1	18.3	0.6	–	23.3	38.6	36.2	–	–	1.0	0.2	0.0	0.2	0.5
RE06014267019	Overall	2,500	875	84.1	10.7	5.1	–	35.1	30.6	32.1	–	–	1.0	0.4	0.0	0.1	0.7
RE06921439309	Overall	46,307	9,262	80.0	19.8	0.2	87.3	20.9	46.4	31.3	–	–	0.4	0.0	0.0	0.3	0.6
RE06921835508	Overall	2,500	875	70.6	26.2	3.2	–	31.6	31.8	25.1	4.9	3.8	1.3	0.3	0.0	0.2	0.9
RE06921836440	Overall	2,500	875	84.9	14.5	0.6	–	43.0	26.4	27.9	–	–	0.7	0.6	0.0	0.1	1.3
RE06922754649	Overall	24,523	4,905	67.8	32.1	0.1	78.2	23.3	33.5	28.6	9.3	3.1	0.9	0.0	0.0	0.6	0.8
RE06923446732	Overall	21,784	4,357	66.8	33.2	0.0	76.4	23.8	34.9	27.5	9.3	1.4	1.2	0.1	0.0	0.8	1.0

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic. Operational items have validity statistics.

Grade 7 Reading

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE07008837693	Overall	2,500	875	80.9	19.1	0.0	–	39.9	35.2	18.0	–	–	2.1	1.1	0.0	0.1	3.6
RE07008839279	Overall	2,500	875	80.5	19.5	0.0	–	45.9	33.3	9.9	2.1	0.5	2.1	1.0	0.0	0.5	4.7
RE07009145845	Overall	2,500	875	83.7	16.1	0.2	–	35.2	55.7	3.9	–	–	1.3	0.5	0.0	0.2	3.2
RE07009159278	Overall	2,500	875	78.5	21.4	0.1	–	22.2	39.1	19.9	9.9	2.5	1.9	0.5	0.0	0.4	3.6
RE07009837560	Overall	2,500	875	80.7	19.1	0.2	–	35.4	40.6	16.7	–	–	2.2	0.5	0.0	0.3	4.2
RE07009838371	Overall	2,500	875	83.8	16.2	0.0	–	30.2	33.4	19.6	5.5	1.2	2.5	0.9	0.1	0.5	6.2
RE07013137276	Overall	2,500	875	85.7	14.2	0.1	–	27.8	54.9	9.1	–	–	1.4	0.9	0.0	0.3	5.7
RE07013139732	Overall	2,500	875	79.7	20.3	0.0	–	27.7	31.5	21.4	9.1	2.6	1.8	0.9	0.0	0.3	4.7
RE07014229570	Overall	2,500	875	80.7	17.7	1.6	–	46.9	32.9	16.0	–	–	1.8	0.4	0.0	0.4	1.6
RE07014240384	Overall	2,500	875	65.9	27.9	6.2	–	47.6	23.2	15.3	6.4	1.8	2.7	0.5	0.0	0.7	1.8
RE07919135225	Overall	46,879	9,376	80.4	17.6	2.0	88.3	35.0	40.0	20.6	–	–	1.4	0.1	0.0	0.8	1.9
RE07924164063	Overall	25,062	5,013	67.2	32.6	0.2	86.9	21.0	20.4	23.6	20.0	11.5	1.1	0.1	0.0	0.6	1.6
RE07925650480	Overall	21,817	4,364	66.7	33.1	0.2	72.6	18.0	24.9	28.4	16.0	8.0	2.0	0.1	0.0	0.8	1.9

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Grade 8 Reading

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE08009731111	Overall	2,500	875	78.9	19.8	1.4	–	21.4	62.6	14.4	–	–	1.2	0.1	0.0	0.0	0.4
RE08009732251	Overall	2,500	875	81.8	16.9	1.3	–	23.7	53.5	17.9	–	–	1.8	1.7	0.0	0.3	1.1
RE08009826912	Overall	2,500	875	80.3	19.4	0.2	–	22.8	55.0	18.1	–	–	1.5	0.4	0.0	0.9	1.2
RE08009831072	Overall	2,500	875	68.9	30.7	0.3	–	21.1	25.8	29.6	12.6	5.3	2.6	0.2	0.0	0.8	2.1
RE08011258174	Overall	2,500	875	67.5	24.3	8.1	–	8.4	13.3	29.4	14.0	30.1	2.2	0.8	0.0	0.3	1.6
RE08011258833	Overall	2,500	875	68.8	28.8	2.4	–	12.5	19.0	50.3	9.7	3.3	2.8	0.7	0.0	0.4	1.4
RE08012252784	Overall	2,500	875	67.3	31.7	1.0	–	23.1	22.0	28.7	16.7	5.2	1.6	0.2	0.0	0.3	2.2
RE08012254883	Overall	2,500	875	72.2	27.1	0.7	–	40.9	26.8	21.1	4.9	1.1	2.5	0.5	0.0	1.0	1.3
RE08012858331	Overall	2,500	875	65.6	32.5	1.9	–	9.9	17.8	25.6	30.1	12.6	1.6	0.2	0.1	0.3	1.9
RE08012858522	Overall	2,500	875	71.3	26.7	1.9	–	9.6	13.0	31.2	29.9	10.4	2.0	0.5	0.0	0.6	2.8
RE08919847105	Overall	26,156	5,232	68.2	31.7	0.2	90.6	30.8	19.6	21.2	14.0	10.7	1.6	0.0	0.0	0.9	1.3
RE08922147671	Overall	23,043	4,609	83.4	16.6	0.0	90.7	30.4	53.2	13.8	–	–	1.1	0.2	0.0	0.4	0.9
RE08924146642	Overall	23,043	4,609	71.6	28.4	0.0	69.5	35.8	25.0	19.2	10.2	4.5	2.3	0.1	0.0	0.9	2.1
RE08924648904	Overall	26,156	5,232	80.3	19.2	0.5	88.7	21.8	56.5	19.9	–	–	0.6	0.0	0.0	0.4	0.7

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Grade 10 Reading

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE10009042231	Overall	2,500	875	74.4	25.4	0.2	–	41.1	24.7	17.1	6.7	1.1	4.2	0.9	0.0	1.7	2.5
RE10009042460	Overall	2,500	875	76.0	23.9	0.1	–	37.4	27.5	17.9	5.8	0.9	4.7	0.9	0.2	2.5	2.4
RE10009849952	Overall	2,500	875	81.3	18.7	0.0	–	42.7	33.0	16.4	–	–	3.9	0.5	0.0	1.7	1.8
RE10009854344	Overall	2,500	875	77.5	22.2	0.3	–	42.9	28.6	14.7	3.7	0.7	4.7	0.7	0.1	2.0	1.9
RE10014360582	Overall	2,500	875	80.1	19.5	0.3	–	29.4	37.9	25.8	–	–	3.3	0.6	0.0	0.4	2.6
RE10014363480	Overall	2,500	875	80.6	19.3	0.1	–	35.6	32.9	25.3	–	–	2.8	0.7	0.0	1.1	1.7
RE10921440922	Overall	23,553	4,711	79.8	20.0	0.2	84.3	30.4	39.8	24.6	–	–	2.4	0.2	0.0	1.1	1.6
RE10924246807	Overall	23,553	4,711	69.7	29.5	0.8	78.6	34.0	23.8	17.8	9.6	4.8	5.4	0.0	0.0	2.2	2.3
RE10924246912	Overall	25,842	5,169	68.3	30.8	0.9	81.9	34.2	19.4	18.3	13.3	7.2	3.6	0.0	0.0	1.6	2.3
RE10925560529	Overall	25,842	5,169	80.8	19.2	0.1	78.6	60.2	18.7	6.9	–	–	7.6	0.0	0.0	2.8	3.8
RE10926036450	Overall	2,500	875	80.1	16.5	3.4	–	46.6	22.3	21.3	–	–	4.4	1.2	0.1	0.9	3.3
RE10926038821	Overall	2,500	875	80.6	19.3	0.1	–	37.2	39.3	15.1	–	–	3.8	0.1	0.1	1.1	3.4
RE10926039908	Overall	2,500	875	82.3	17.6	0.1	–	35.8	33.6	19.8	–	–	4.8	1.0	0.1	2.3	2.6
RE10926040184	Overall	2,500	875	79.0	20.6	0.5	–	43.5	24.1	14.8	4.5	0.5	6.4	0.5	0.0	2.4	3.4

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Grade 3 Mathematics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA0320038	Overall	24,658	4,932	88.9	10.7	0.4	98.0	27.6	32.3	37.7	–	–	1.6	0.0	0.0	0.3	0.4
MA0320093	Overall	22,411	4,483	94.1	5.8	0.1	98.4	41.0	55.4	–	–	–	2.4	0.0	0.0	0.5	0.7
MA0320184	Overall	2,500	875	96.0	3.7	0.3	–	75.9	8.2	14.4	–	–	0.8	0.0	0.0	0.2	0.4
MA0320C3_02	Overall	15,856	3,172	90.9	8.7	0.4	94.9	62.7	12.9	22.2	–	–	1.6	0.0	0.0	0.2	0.4
MA0321099	Overall	2,500	875	96.5	3.3	0.2	–	77.7	17.7	2.5	–	–	1.1	0.0	0.0	0.4	0.6

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Grade 4 Mathematics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA0420062	Overall	9,106	1,822	80.9	17.9	1.2	89.3	37.6	30.6	24.3	5.0	–	1.7	0.0	0.0	0.3	0.5
MA0420066	Overall	15,870	3,174	77.2	18.5	4.3	88.7	56.2	16.8	9.2	6.6	8.7	1.7	0.0	0.0	0.1	0.5
MA0420093	Overall	22,371	4,475	82.5	16.8	0.7	95.1	19.5	51.9	18.1	6.7	1.5	1.6	0.0	0.0	0.1	0.5
MA0420C2_01	Overall	47,347	9,470	93.8	5.9	0.3	98.0	65.7	11.7	20.6	–	–	1.6	0.0	0.0	0.0	0.4
MA0420C4_02	Overall	47,347	9,470	92.0	7.9	0.2	97.6	33.8	49.2	15.6	–	–	1.1	0.0	0.0	0.0	0.3
MA0421029	Overall	2,500	875	83.9	14.6	1.5	–	40.6	19.9	12.8	15.3	9.6	1.0	0.0	0.0	0.2	0.6
MA0421112	Overall	2,500	875	87.7	11.7	0.7	–	35.1	26.4	24.5	7.0	5.1	1.7	0.0	0.0	0.0	0.2
MA0421138	Overall	2,500	875	88.1	9.9	1.9	–	63.2	16.7	8.9	3.4	5.0	1.6	0.0	0.0	0.5	0.7
MA0421141	Overall	2,500	875	95.0	4.0	1.0	–	62.7	11.4	20.5	–	–	3.1	0.0	0.0	0.3	2.1
MA0421144	Overall	2,512	886	92.2	7.2	0.6	–	58.2	18.0	21.6	–	–	1.6	0.0	0.0	0.2	0.3
MA0421159	Overall	2,661	895	91.1	8.9	0.0	–	51.6	34.1	12.9	–	–	0.9	0.0	0.0	0.1	0.4
MA0421174	Overall	2,500	875	91.4	7.9	0.7	–	73.9	14.9	5.0	4.0	–	1.6	0.0	0.0	0.2	0.4
MA0421177	Overall	2,570	894	90.8	8.9	0.2	–	59.3	25.3	11.3	–	–	2.9	0.0	0.0	0.1	1.0
MA0421220	Overall	2,511	887	92.9	6.3	0.8	–	57.1	10.4	29.9	–	–	1.5	0.0	0.0	0.4	0.7
MA0421225	Overall	2,500	875	91.5	8.2	0.2	–	57.4	14.7	16.7	2.7	5.7	1.6	0.0	0.0	0.2	1.0
MA0421229	Overall	2,519	898	87.5	12.0	0.4	–	68.1	23.3	5.4	–	–	2.1	0.0	0.0	0.1	1.0

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Grade 5 Mathematics

| Item | Trait | Inter-Rater Reliability | | | | | | Frequency Distribution of Total Read % | | | | | | | | | |
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA0520060	Overall	20,656	4,132	97.3	2.7	0.0	99.2	62.0	36.3	–	–	–	1.3	0.0	0.0	0.0	0.3
MA0520062	Overall	43,844	8.769	77.4	20.1	2.5	94.0	41.4	14.4	19.6	9.5	13.1	1.6	0.0	0.0	0.1	0.3
MA0520132	Overall	23,188	4,638	90.9	8.8	0.3	97.1	40.0	53.1	4.5	–	–	1.6	0.0	0.0	0.1	0.6
MA0520C4_02	Overall	43,844	8,769	94.5	5.4	0.1	99.1	54.1	41.0	2.7	–	–	1.6	0.0	0.0	0.1	0.5
MA0521043	Overall	2,551	901	85.6	11.7	2.8	–	78.7	11.4	6.3	–	–	2.9	0.0	0.0	0.1	0.5
MA0521057	Overall	2,543	893	92.8	7.1	0.1	–	35.6	19.4	43.0	–	–	1.6	0.0	0.0	0.1	0.4
MA0521074	Overall	2,746	964	88.9	10.6	0.5	–	60.6	20.1	16.7	–	–	1.7	0.0	0.0	0.1	0.8
MA0521105	Overall	2,576	888	97.1	2.9	0.0	–	74.3	23.0	0.1	–	–	1.9	0.0	0.0	0.1	0.6
MA0521123	Overall	2,604	922	88.8	11.2	0.0	–	37.5	50.5	9.8	–	–	1.8	0.0	0.0	0.3	0.2
MA0521139	Overall	2,500	875	89.3	9.1	1.6	–	78.8	8.8	5.1	1.8	2.9	1.8	0.0	0.0	0.1	0.8
MA0521149	Overall	2,527	891	98.1	1.8	0.1	–	75.3	16.7	3.5	–	–	2.0	0.0	0.1	0.5	1.9
MA0521177	Overall	2,515	890	89.6	8.0	2.5	–	25.3	8.0	44.6	8.5	10.4	2.2	0.0	0.0	0.1	0.7
MA0521178	Overall	2,598	910	84.8	13.7	1.4	–	64.7	21.9	7.2	2.7	–	1.8	0.0	0.0	0.1	1.6
MA0521182	Overall	2,528	889	83.6	15.7	0.7	–	42.6	37.1	17.9	–	–	1.6	0.0	0.0	0.2	0.6
MA0521187	Overall	2,617	904	92.6	7.0	0.4	–	45.6	21.6	30.3	–	–	2.0	0.0	0.0	0.1	0.5

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Grade 6 Mathematics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA0620017	Overall	29,231	5,847	82.2	16.2	1.6	95.5	44.7	21.2	11.5	10.8	7.4	2.8	0.0	0.0	0.2	1.3
MA0620059	Overall	17,392	3,479	89.4	9.5	1.1	90.3	73.6	12.2	10.9	–	–	2.0	0.0	0.0	0.2	1.1
MA0621005	Overall	2,500	875	91.8	7.8	0.5	–	49.3	20.7	27.7	–	–	1.1	0.0	0.0	0.4	0.8
MA0621011	Overall	2,500	875	96.1	3.5	0.3	–	70.3	4.4	22.4	–	–	1.6	0.0	0.0	0.2	1.0
MA0621014	Overall	46,623	16,319	89.6	10.0	0.4	94.4	68.8	21.0	8.1	–	–	1.0	0.0	0.0	0.1	1.0
MA0621020	Overall	2,500	875	83.5	15.0	1.5	–	32.8	36.3	16.2	5.6	4.1	2.0	0.0	0.0	0.3	2.7
MA0621040	Overall	29,231	10,231	92.7	7.1	0.2	98.6	78.2	11.2	4.4	–	–	3.2	0.0	0.0	0.4	2.7
MA0621042	Overall	2,500	875	79.5	18.4	2.1	–	33.2	24.3	21.0	10.8	8.9	0.9	0.0	0.0	0.1	0.8
MA0621068	Overall	2,500	875	95.8	4.2	0.0	–	76.6	16.0	3.0	–	–	2.0	0.0	0.0	0.2	2.2
MA0621070	Overall	2,500	875	84.3	14.4	1.3	–	69.6	17.2	6.5	1.5	–	1.9	0.0	0.0	0.5	2.9
MA0621072	Overall	2,500	875	90.1	9.5	0.5	–	52.9	19.5	23.7	–	–	2.0	0.0	0.0	0.7	1.2
MA0621082	Overall	2,500	875	86.6	13.3	0.1	–	47.9	34.7	10.2	3.0	1.6	1.5	0.0	0.0	0.1	1.1
MA0621103	Overall	17,392	6,088	89.0	10.7	0.3	96.5	58.2	17.0	23.3	–	–	0.8	0.0	0.0	0.0	0.7
MA0621104	Overall	2,500	875	85.8	12.7	1.5	–	76.3	14.1	3.9	0.9	0.0	2.8	0.0	0.0	0.4	1.5

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Grade 7 Mathematics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA0720015	Overall	33,813	6,763	91.8	7.8	0.4	96.8	59.8	27.5	6.7	–	–	3.3	0.0	0.0	0.4	2.3
MA0720018	Overall	8,750	1,750	84.3	14.6	1.1	82.6	60.1	24.5	8.5	2.0	1.0	2.6	0.0	0.0	0.1	1.3
MA0720037	Overall	38,437	7,688	84.6	10.5	4.8	94.3	48.9	5.7	18.3	6.4	17.2	1.7	0.0	0.0	0.4	1.3
MA0720109	Overall	16,171	3,235	96.1	3.7	0.2	97.3	83.4	5.4	7.8	–	–	1.8	0.0	0.0	0.2	1.4
MA0720185	Overall	2,555	894	97.0	3.0	0.0	–	74.6	16.8	1.9	–	–	3.6	0.0	0.0	0.2	2.8
MA0720C3_03	Overall	13,374	2,675	92.3	7.4	0.3	96.1	72.1	18.6	2.2	–	–	4.0	0.0	0.0	0.6	2.5
MA0721019	Overall	2,641	917	90.6	8.6	0.8	–	58.0	33.0	4.1	–	–	2.6	0.0	0.0	0.2	2.1
MA0721023	Overall	2,605	912	94.6	5.3	0.1	–	61.7	29.4	1.0	–	–	3.5	0.0	0.0	0.2	4.2
MA0721031	Overall	2,659	937	97.7	2.2	0.1	–	91.5	2.3	2.2	–	–	2.5	0.0	0.0	0.1	1.4
MA0721033	Overall	2,500	875	95.1	4.3	0.6	–	77.4	4.2	10.9	1.0	1.5	2.9	0.0	0.0	0.1	2.0
MA0721080	Overall	2,574	904	96.8	2.9	0.3	–	80.2	7.6	2.7	–	–	5.4	0.0	0.0	0.1	4.1
MA0721087	Overall	2,500	875	89.7	9.3	1.0	–	37.3	36.1	9.8	8.7	2.2	3.3	0.0	0.0	0.2	2.5
MA0721094	Overall	2,500	875	91.9	7.9	0.2	–	47.5	22.0	16.9	7.1	1.4	3.3	0.0	0.0	0.4	1.6
MA0721104	Overall	2,640	900	96.6	3.1	0.3	–	81.2	4.8	7.6	–	–	3.5	0.0	0.0	0.1	2.9
MA0721115	Overall	2,500	875	94.9	3.4	1.7	–	80.1	6.7	2.8	2.2	1.0	4.1	0.0	0.1	0.4	2.5
MA0721123	Overall	2,628	917	98.4	1.1	0.5	–	84.6	4.4	3.3	–	–	4.5	0.0	0.0	0.4	2.8
MA0721147	Overall	2,537	882	96.5	3.5	0.0	–	86.5	4.7	1.4	–	–	4.2	0.0	0.0	0.0	3.1
MA0721153	Overall	2,500	875	97.8	2.2	0.0	–	83.6	5.1	1.8	0.9	3.2	3.0	0.0	0.0	0.1	2.2

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Grade 8 Mathematics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA0820007	Overall	30,786	6,158	91.3	8.5	0.2	94.7	69.1	22.6	2.7	–	–	2.8	0.0	0.0	0.6	2.2
MA0820082	Overall	23,139	4,628	82.1	16.5	1.4	90.8	48.6	24.4	9.2	6.6	4.0	4.1	0.0	0.0	0.3	2.6
MA0820091	Overall	2,631	934	95.6	2.8	1.6	–	87.1	3.5	4.1	–	–	2.7	0.0	0.0	0.3	2.5
MA0820140	Overall	49,556	9,912	87.2	12.0	0.7	96.5	62.1	15.6	16.4	–	–	3.5	0.0	0.0	0.3	2.1
MA0820142	Overall	17,076	3,416	91.6	7.6	0.8	90.1	68.2	13.1	5.0	1.8	2.7	4.7	0.0	0.0	0.7	3.8
MA0820149	Overall	2,600	897	99.1	0.9	0.0	–	88.5	3.5	–	–	–	4.5	0.0	0.0	0.3	3.3
MA0820162	Overall	9,341	1,869	90.2	9.4	0.4	92.3	55.2	20.7	14.6	4.2	2.1	1.7	0.0	0.0	0.3	1.2
MA0820183	Overall	2,543	860	90.5	9.4	0.1	–	61.9	30.2	3.5	–	–	2.2	0.0	0.0	0.7	1.5
MA0820192	Overall	2,528	888	87.3	11.4	1.4	–	58.0	21.2	18.3	–	–	1.3	0.0	0.0	0.5	0.7
MA0821002	Overall	2,588	926	96.0	3.9	0.1	–	62.8	28.6	1.6	–	–	3.7	0.0	0.1	0.5	2.7
MA0821011	Overall	2,500	875	87.4	10.4	2.2	–	74.1	12.0	5.4	2.3	–	2.8	0.0	0.0	0.0	3.4
MA0821107	Overall	2,592	914	81.7	17.3	1.0	–	64.9	20.7	4.9	–	–	5.4	0.0	0.0	0.8	3.3
MA0821112	Overall	2,500	875	92.7	6.3	1.0	–	75.2	7.7	4.2	3.2	–	4.1	0.0	0.0	0.4	5.1
MA0821126	Overall	2,500	875	99.9	0.1	0.0	–	89.4	0.4	0.3	0.3	–	4.6	0.0	0.1	0.6	4.3
MA0821145	Overall	2,500	875	86.9	12.6	0.6	–	28.3	39.2	24.0	4.1	–	2.2	0.0	0.0	0.2	1.9
MA0821153	Overall	2,500	875	88.6	10.5	0.9	–	60.7	15.7	8.4	4.8	3.7	4.1	0.0	0.0	0.8	1.8
MA0821168	Overall	2,553	902	88.4	10.3	1.3	–	71.1	13.1	7.4	3.6	–	2.4	0.0	0.1	0.3	2.0
MA0821183	Overall	2,574	900	94.6	5.4	0.0	–	64.7	26.8	2.4	–	–	3.4	0.0	0.1	0.0	2.6

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Grade 10 Mathematics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA1019056	Overall	49,598	9,920	91.5	7.9	0.6	93.8	40.9	29.3	12.0	2.6	2.0	7.4	0.0	0.0	1.8	3.8
MA1020024	Overall	16,713	3,343	95.5	4.3	0.2	95.9	72.9	7.8	4.4	–	–	6.1	0.0	0.0	2.5	6.3
MA1020045	Overall	49,598	9,920	97.0	2.9	0.1	96.4	64.6	11.8	5.4	–	–	10.0	0.0	0.1	2.4	5.9
MA1020153	Overall	2,673	934	96.7	3.3	0.0	–	60.4	11.6	4.6	–	–	13.9	0.0	0.0	3.4	6.0
MA1020163	Overall	2,500	875	95.2	4.6	0.2	–	74.0	7.1	2.1	–	–	8.4	0.0	0.0	2.5	5.9
MA1021012	Overall	2,620	912	94.2	4.7	1.1	–	76.3	3.3	1.4	–	–	12.1	0.0	0.1	1.6	5.3
MA1021024	Overall	2,500	875	88.1	11.5	0.3	–	50.9	24.9	3.9	1.3	1.7	9.9	0.0	0.0	2.7	4.8
MA1021044	Overall	2,618	914	97.7	2.3	0.0	–	71.9	3.9	0.6	–	–	15.7	0.0	0.1	2.6	5.2
MA1021052	Overall	2,629	925	96.3	3.7	0.0	–	69.1	4.7	0.3	–	–	12.9	0.0	0.0	3.6	9.5
MA1021103	Overall	2,500	875	93.3	6.6	0.1	–	56.1	21.6	0.2	–	–	13.3	0.0	0.0	2.9	5.9
MA1021109	Overall	2,500	875	92.5	7.5	0.0	–	20.3	52.2	14.9	2.2	1.7	3.9	0.0	0.1	2.2	2.4
MA1021120	Overall	2,500	875	94.1	5.8	0.1	–	74.2	6.1	1.0	–	–	7.2	0.0	0.1	2.9	8.5
MA1021137	Overall	2,608	917	93.3	6.5	0.1	–	69.8	8.1	2.8	–	–	11.4	0.0	0.1	3.5	4.3
MA1021149	Overall	2,618	896	98.7	1.3	0.0	–	69.9	2.4	2.3	–	–	15.2	0.0	0.0	3.3	7.0
MA1021158	Overall	2,500	875	92.2	7.8	0.0	–	69.1	8.1	0.2	–	–	9.4	0.0	0.0	4.5	8.8

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Grade 4 Science

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
SC041602_08	Overall	13,601	2,721	73.4	22.6	4.0	86.7	58.7	28.2	7.0	1.5	0.3	1.9	0.5	0.0	0.8	1.0
SC041603_08	Overall	36,018	7,204	78.5	20.2	1.3	89.7	43.2	44.6	6.3	2.0	0.8	1.2	0.4	0.0	0.8	0.7
SC041606_08	Overall	11,420	2,284	70.7	25.6	3.7	93.4	35.1	25.6	20.0	14.2	2.2	1.0	0.3	0.0	0.5	1.1
SC041609_05	Overall	10,997	2,200	71.1	25.7	3.1	86.5	48.3	21.7	20.4	4.8	1.1	1.3	0.7	0.0	0.7	1.1
SC041614_05	Overall	11,287	2,258	72.9	25.8	1.3	89.6	28.7	43.4	20.3	3.3	1.0	1.4	0.3	0.0	0.7	0.9
SC041623_07	Overall	22,284	4,457	69.8	27.4	2.8	88.9	44.0	33.9	13.1	4.9	1.6	1.0	0.3	0.0	0.5	0.6
SC041624_08	Overall	36,308	7,262	82.8	15.2	2.0	94.1	51.4	19.2	16.8	5.7	1.0	1.9	0.8	0.0	0.8	2.3

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Grade 7 Science

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
SC071600_02	Overall	33,101	6,621	65.1	31.4	3.5	83.7	48.0	30.3	11.5	4.1	1.6	2.0	0.3	0.0	0.4	1.8
SC071603_06	Overall	36,136	7,228	64.9	30.9	4.1	85.4	31.6	37.7	16.6	6.7	2.7	2.1	0.4	0.0	0.5	1.6
SC071610_08	Overall	10,889	2,178	68.4	28.5	3.1	80.6	36.4	25.9	23.5	6.9	2.7	1.8	0.2	0.0	0.5	1.9
SC071613_03	Overall	25,063	5,013	68.0	28.0	3.9	84.5	40.6	25.1	19.2	7.5	3.1	2.0	0.4	0.0	0.6	1.4
SC071618_07	Overall	11,198	2,240	77.3	21.6	1.1	92.3	63.8	23.4	6.2	1.8	0.5	1.9	0.3	0.0	0.4	1.7
SC071625_08	Overall	11,014	2,203	69.6	28.0	2.4	81.8	39.9	35.0	15.3	4.3	0.7	2.0	0.2	0.1	0.3	2.1
SC071627_08	Overall	14,049	2,810	69.3	26.4	4.3	83.3	44.1	28.2	14.9	4.3	1.3	3.3	0.7	0.1	1.2	1.9

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Grade 11 Science

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
SC111606_08	Overall	33,898	6,780	70.1	27.4	2.5	91.0	35.7	31.9	18.4	2.9	0.3	4.8	0.9	0.0	1.0	4.1
SC111608_05	Overall	10,501	2,101	66.1	30.0	3.9	81.4	21.5	43.3	19.5	5.8	1.3	4.3	0.5	0.0	1.1	2.7
SC111617_08	Overall	31,630	6,326	73.7	25.2	1.0	87.5	23.2	40.9	23.0	4.3	0.6	3.5	0.7	0.0	0.8	2.9
SC111620_08	Overall	12,769	2,554	69.6	28.0	2.5	87.3	21.9	42.0	20.1	5.5	1.5	3.9	0.5	0.1	1.1	3.5
SC111704_03	Overall	23,270	4,654	68.6	29.5	1.9	88.1	29.6	37.7	21.9	3.2	0.4	2.7	0.6	0.1	1.0	2.9
SC111711_08	Overall	10,537	2,108	67.4	29.8	2.8	88.7	19.3	41.0	23.7	6.6	1.8	3.4	0.5	0.0	0.7	3.0
SC111712_08	Overall	10,592	2,119	67.2	29.9	2.9	88.8	8.0	13.9	37.5	22.3	8.1	4.5	1.1	0.0	0.9	3.7

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Grade 5 Social Studies

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
SS0520045_08	Overall	43,453	8,691	79.9	20.0	0.1	92.5	31.9	45.3	20.3	–	–	0.7	0.2	0.0	0.6	1.0
SS0520047_09	Overall	43,453	8,691	64.6	32.3	3.1	80.8	31.3	29.3	23.8	9.1	2.8	1.2	0.2	0.0	0.8	1.6
SS0521089_08	Overall	2,500	875	80.5	19.5	0.0	–	29.2	44.0	24.7	–	–	1.1	0.0	0.0	0.4	0.5
SS0521089_09	Overall	2,500	875	70.1	29.1	0.8	–	17.8	24.9	36.3	14.3	3.3	1.4	0.0	0.0	0.6	1.3
SS0522179_08	Overall	2,500	875	80.8	19.1	0.1	–	36.3	41.0	19.8	–	–	1.3	0.2	0.0	0.3	1.0
SS0522179_09	Overall	2,500	875	74.5	24.7	0.8	–	37.2	26.1	25.5	6.4	1.0	1.9	0.2	0.0	0.5	1.2
SS0522180_08	Overall	2,500	875	80.0	19.9	0.1	–	47.1	35.7	15.3	–	–	0.6	0.0	0.1	0.4	0.8
SS0522180_09	Overall	2,500	875	71.4	27.0	1.6	–	38.5	31.7	22.1	3.6	0.9	1.4	0.0	0.0	0.4	1.5

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Grade 8 Social Studies

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
SS0820002_15	Overall	49,140	9,828	72.4	27.6	0.0	73.5	18.6	36.0	25.2	9.9	1.9	2.9	0.4	0.0	1.8	3.2
SS0820004_08	Overall	49,140	9,828	81.5	18.3	0.2	91.2	17.7	46.6	29.3	–	–	2.0	0.3	0.0	1.3	2.9
SS0821087_08	Overall	2,500	875	87.7	12.3	0.0	–	51.8	19.5	22.0	–	–	3.2	0.4	0.0	1.1	2.2
SS0821087_09	Overall	2,500	875	67.1	31.4	1.5	–	27.4	21.8	25.8	11.3	6.0	3.3	0.9	0.0	0.7	2.6
SS0821089_08	Overall	2,500	875	80.5	19.4	0.1	–	35.6	40.3	18.4	–	–	2.4	0.8	0.0	0.5	2.1
SS0821089_09	Overall	2,500	875	66.2	32.7	1.1	–	22.3	31.4	27.6	8.2	3.2	2.9	1.3	0.0	0.5	2.5
SS0822179_08	Overall	2,500	875	80.3	19.7	0.0	–	20.4	31.6	42.6	–	–	2.7	0.4	0.0	0.8	1.6
SS0822179_09	Overall	2,500	875	66.1	33.4	0.6	–	17.7	29.4	34.0	11.5	2.1	2.4	0.0	0.0	1.3	1.6

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Grade 11 Social Studies

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
SS1120001_08	Overall	44,131	8,827	81.4	17.0	1.6	90.2	24.6	47.3	16.8	–	–	5.0	0.2	0.0	2.7	3.4
SS1120002_09	Overall	44,131	8,827	69.2	30.2	0.5	80.1	17.4	22.3	25.5	14.1	4.0	7.5	0.3	0.0	3.9	4.9
SS1120045_08	Overall	2,500	875	82.3	17.5	0.2	–	22.0	48.9	15.9	–	–	5.5	0.4	0.0	3.1	4.3
SS1120045_09	Overall	2,500	875	66.2	32.9	0.9	–	22.7	23.9	23.9	9.6	3.8	7.0	0.4	0.0	3.6	5.0
SS1120079_08	Overall	2,500	875	81.1	18.9	0.0	–	22.5	46.0	21.4	–	–	4.5	0.2	0.1	2.3	3.0
SS1120079_09	Overall	2,500	875	68.0	29.6	2.4	–	17.7	21.1	25.1	14.8	7.5	5.2	0.3	0.0	3.4	4.8
SS1121086_08	Overall	2,500	875	80.6	19.4	0.0	–	31.0	39.9	16.7	–	–	5.1	0.5	0.0	2.7	4.0
SS1121086_09	Overall	2,500	875	68.3	31.5	0.1	–	12.9	25.2	28.7	11.7	4.7	6.4	0.3	0.0	4.0	6.0

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Grade 5 Editing and Mechanics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
EM05002256989	Overall	2,986	1,046	80.9	16.1	3.1	–	55.0	17.7	25.4	–	–	0.3	0.4	0.0	0.1	1.1
EM05002438909	Overall	4,239	1,484	83.0	13.1	3.8	–	57.5	19.6	20.4	–	–	0.5	0.5	0.0	0.1	1.4
EM05003141582	Overall	2,500	875	83.3	15.1	1.6	–	9.6	12.4	76.8	–	–	0.3	0.3	0.0	0.3	0.4
EM05003144402	Overall	2,500	875	81.7	13.9	4.3	–	52.3	18.7	27.2	–	–	0.2	0.3	0.0	0.2	1.2
EM05004238133	Overall	3,028	1,060	81.0	12.2	6.8	–	59.6	18.9	19.8	–	–	0.4	0.4	0.0	0.1	0.8
EM05004251456	Overall	4,235	1,483	85.7	11.2	3.1	–	59.4	21.9	17.1	–	–	0.4	0.4	0.0	0.2	0.6
EM05004935664	Overall	2,500	875	84.7	10.4	4.9	–	68.0	14.9	14.6	–	–	0.4	0.4	0.0	0.3	1.4
EM05004938419	Overall	2,500	875	91.0	6.2	2.9	–	64.0	8.7	25.1	–	–	0.2	0.5	0.0	0.3	1.2
EM05005041751	Overall	2,500	875	83.9	14.5	1.6	–	34.9	24.3	39.8	–	–	0.2	0.2	0.0	0.1	0.5
EM05005041838	Overall	2,500	875	87.3	9.9	2.7	–	53.8	23.3	21.5	–	–	0.3	0.3	0.0	0.3	0.5
EM05916555623	Overall	22,858	4,572	92.1	6.3	1.7	93.9	64.4	12.8	21.3	–	–	0.3	0.1	0.0	0.4	0.7
EM05916556401	Overall	22,858	4,572	90.6	8.0	1.4	98.6	11.8	7.4	79.8	–	–	0.3	0.1	0.0	0.3	0.3
EM05922059680	Overall	43,445	8,689	89.8	8.6	1.6	96.0	69.6	16.9	11.5	–	–	0.4	0.3	0.0	0.4	0.9
EM05922060199	Overall	43,445	8,689	82.3	15.4	2.2	94.8	54.1	26.3	17.6	–	–	0.5	0.2	0.0	0.5	0.9
EM05924649645	Overall	20,587	4,118	88.4	10.2	1.4	91.6	64.8	28.7	5.0	–	–	0.3	0.2	0.0	0.2	0.9
EM05924651459	Overall	20,587	4,118	88.2	9.8	2.1	95.7	52.6	23.0	23.1	–	–	0.3	0.1	0.0	0.3	0.6

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Grade 8 Editing and Mechanics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
EM08003551618	Overall	2,500	875	79.9	16.6	3.5	–	52.4	13.4	29.4	–	–	1.5	0.4	0.0	0.5	2.5
EM08003553199	Overall	2,500	875	80.1	19.7	0.2	–	24.2	43.0	28.7	–	–	1.4	0.5	0.0	0.4	1.9
EM08003752391	Overall	3,582	1,254	81.3	18.1	0.6	–	37.0	35.8	23.6	–	–	1.1	0.3	0.0	0.4	1.8
EM08005235556	Overall	3,063	1,073	82.7	16.7	0.7	–	43.0	13.4	39.7	–	–	1.2	0.4	0.0	0.4	1.9
EM08005235664	Overall	4,323	1,514	80.4	17.1	2.4	–	39.2	42.6	14.4	–	–	1.1	0.4	0.0	0.6	1.6
EM08005834672	Overall	3,075	1,077	91.7	5.3	3.0	–	51.1	6.6	38.8	–	–	1.0	0.6	0.0	0.4	1.5
EM08006348645	Overall	3,698	1,295	81.3	15.9	2.8	–	35.2	11.6	49.5	–	–	1.0	0.2	0.0	0.5	1.9
EM08006349819	Overall	3,698	1,295	88.7	9.8	1.5	–	51.9	17.5	26.4	–	–	1.5	0.5	0.0	0.8	1.4
EM08923137182	Overall	49,112	9,823	91.8	6.4	1.8	94.6	55.4	7.9	33.4	–	–	1.2	0.3	0.0	0.6	1.1
EM08923138777	Overall	49,112	9,823	84.4	13.3	2.3	96.3	21.6	13.9	60.2	–	–	1.5	0.4	0.0	0.9	1.5
EM08923951096	Overall	22,891	4,579	95.4	2.9	1.7	96.9	61.2	3.0	32.9	–	–	1.0	0.2	0.0	0.6	1.2
EM08923951562	Overall	22,891	4,579	90.6	7.9	1.5	90.9	28.2	6.6	62.5	–	–	0.9	0.3	0.0	0.3	1.1
EM08925454757	Overall	26,221	5,245	83.2	15.0	1.8	88.7	34.3	15.9	46.7	–	–	0.9	0.2	0.0	0.5	1.5
EM08925454946	Overall	26,221	5,245	85.4	11.3	3.3	97.7	51.8	13.5	31.1	–	–	1.2	0.3	0.0	0.8	1.4

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic. Operational items have validity statistics.

Grade 11 Editing and Mechanics

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
EM11003034244	Overall	2,510	967	80.2	19.5	0.2	–	27.2	43.4	17.8	–	–	3.4	1.6	0.0	1.7	4.9
EM11003041982	Overall	2,521	881	80.1	18.5	1.4	–	49.0	27.8	9.8	–	–	4.7	2.0	0.0	1.4	5.3
EM11003043177	Overall	2,557	867	81.0	17.9	1.0	–	39.6	28.9	16.2	–	–	7.5	1.3	0.0	1.5	5.0
EM11003448490	Overall	2,539	889	80.1	19.0	0.9	–	24.7	41.4	22.9	–	–	4.0	1.3	0.1	1.4	4.3
EM11003451629	Overall	2,511	861	80.4	17.7	2.0	–	52.8	24.1	11.8	–	–	5.0	1.3	0.1	0.9	4.0
EM11003451824	Overall	2,500	875	81.4	18.5	0.1	–	38.7	32.2	17.9	–	–	3.5	2.0	0.1	1.4	4.2
EM11004837796	Overall	2,500	875	75.1	23.8	1.1	–	33.1	46.6	9.7	–	–	3.1	1.9	0.0	1.4	4.2
EM11004840075	Overall	2,500	875	80.8	19.1	0.1	–	51.4	33.9	2.7	–	–	4.6	1.6	0.0	1.3	4.4
EM11005052052	Overall	2,500	875	80.2	18.6	1.1	–	36.3	24.6	30.4	–	–	2.2	1.5	0.0	1.4	3.6
EM11005055430	Overall	2,500	875	82.9	16.6	0.6	–	40.2	35.1	15.9	–	–	2.7	1.9	0.0	1.3	2.8
EM11005544630	Overall	2,500	875	84.8	11.3	3.9	–	50.7	20.3	19.3	–	–	3.8	0.4	0.0	1.5	4.1
EM11005548211	Overall	2,500	875	79.5	19.8	0.7	–	39.1	38.2	12.2	–	–	3.1	1.5	0.0	1.5	4.4
EM11923434868	Overall	23,289	4,658	80.9	18.8	0.3	92.9	21.4	52.3	18.1	–	–	2.7	1.1	0.0	1.1	3.3
EM11923436225	Overall	23,289	4,658	82.6	16.9	0.5	96.3	68.6	19.6	3.2	–	–	2.9	1.3	0.1	1.1	3.2
EM11923454659	Overall	20,769	4,154	85.0	14.6	0.4	96.0	29.1	50.2	12.9	–	–	2.4	1.2	0.0	1.0	3.1
EM11923455150	Overall	20,769	4,154	82.2	16.6	1.3	94.5	51.3	26.4	13.3	–	–	2.8	1.6	0.0	1.0	3.5
EM11926132910	Overall	44,058	8,812	81.7	18.1	0.2	91.5	19.8	45.9	22.1	–	–	4.1	1.8	0.0	1.6	4.6
EM11926133164	Overall	44,058	8,812	83.2	16.7	0.1	94.5	23.8	46.8	16.6	–	–	4.3	2.0	0.0	1.7	4.9

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic. Operational items have validity statistics.

Appendix M. On-Demand Writing Score Distribution and Rater Agreement

Grade 5 On-Demand Writing

Prompt	Trait	Final Trait Score									Condition Code					Inter-Rater Reliability			
		0	1	2	3	4	5	6	7	8	B	A	F	I	O	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement
WR05920439458	Clarity/Coherence	1.6%	0.0%	11.2%	8.1%	27.5%	16.9%	20.8%	8.4%	5.5%	0	12	0	12	162	64.8	33.4	1.8	80.0
WR05920439458	Language/Conventions	1.6%	0.0%	11.8%	9.4%	25.4%	16.0%	21.6%	8.3%	5.9%	0	12	0	12	162	64.9	33.7	1.4	80.2
WR05920439458	Organization	1.6%	0.0%	17.4%	9.6%	22.3%	14.7%	21.3%	7.9%	5.2%	0	12	0	12	162	66.5	32.1	1.4	80.8
WR05920439458	Sourcing	1.6%	0.0%	69.7%	7.5%	7.3%	4.8%	4.7%	2.7%	1.7%	0	12	0	12	162	82.3	15.0	2.7	86.9
WR05920439458	Support	1.6%	0.0%	12.3%	8.3%	29.0%	16.7%	19.7%	7.3%	5.0%	0	12	0	12	162	66.5	32.3	1.2	81.0
WR05914242321	Clarity/Coherence	0.8%	0.0%	11.2%	8.4%	24.0%	14.9%	22.7%	10.5%	7.5%	0	0	0	0	72	63.8	33.7	2.4	87.4
WR05914242321	Language/Conventions	0.8%	0.0%	8.0%	6.8%	27.6%	15.4%	25.1%	9.4%	6.9%	0	0	0	0	72	67.2	31.6	1.1	89.4
WR05914242321	Organization	0.8%	0.0%	13.2%	8.4%	22.6%	14.8%	24.8%	9.0%	6.4%	0	0	0	0	72	66.7	32.2	1.1	91.1
WR05914242321	Sourcing	0.8%	0.0%	38.0%	15.1%	15.2%	10.9%	11.2%	5.8%	2.9%	0	0	0	0	72	63.8	31.8	4.3	81.9
WR05914242321	Support	0.8%	0.0%	13.6%	9.1%	24.9%	15.3%	21.9%	8.5%	5.7%	0	0	0	0	72	65.5	33.0	1.5	85.1
WR05913354775	Clarity/Coherence	1.0%	0.0%	16.5%	12.5%	20.5%	14.4%	23.3%	6.1%	5.7%	0	0	0	10	93	64.8	33.1	2.1	86.7
WR05913354775	Language/Conventions	1.0%	0.0%	7.2%	7.0%	25.7%	16.1%	28.9%	7.7%	6.4%	0	0	0	10	93	69.0	30.7	0.3	87.4
WR05913354775	Organization	1.0%	0.0%	10.0%	9.0%	22.7%	15.0%	29.6%	6.7%	6.0%	0	0	0	10	93	68.7	30.8	0.6	87.8
WR05913354775	Sourcing	1.0%	0.0%	42.6%	30.2%	10.6%	6.5%	5.3%	2.3%	1.4%	0	0	0	10	93	60.1	39.1	0.8	93.3
WR05913354775	Support	1.0%	0.0%	10.4%	11.1%	27.1%	15.7%	23.5%	6.1%	5.1%	0	0	0	10	93	66.4	32.8	0.8	87.4
WR05914856380	Clarity/Coherence	1.3%	0.0%	9.0%	7.6%	30.3%	16.3%	20.0%	9.6%	5.9%	10	0	0	10	124	64.8	33.5	1.8	80.6
WR05914856380	Language/Conventions	1.3%	0.0%	7.4%	6.8%	30.4%	16.7%	20.6%	10.4%	6.4%	10	0	0	10	124	64.4	33.9	1.6	80.0
WR05914856380	Organization	1.3%	0.0%	12.0%	8.8%	25.3%	16.2%	20.5%	9.9%	6.1%	10	0	0	10	124	63.2	34.8	2.0	81.9
WR05914856380	Sourcing	1.3%	0.0%	39.2%	18.2%	14.9%	9.7%	7.7%	5.6%	3.3%	10	0	0	10	124	61.6	33.5	4.9	82.5
WR05914856380	Support	1.3%	0.0%	10.1%	8.2%	30.5%	16.1%	18.6%	9.4%	5.9%	10	0	0	10	124	64.7	33.6	1.7	83.9

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic

Grade 8 On-Demand Writing

Prompt	Trait	Final Trait Score									Condition Code					Inter-Rater Reliability			
		0	1	2	3	4	5	6	7	8	B	A	F	I	O	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement
WR08914936433	Clarity/Coherence	3.3%	0.0%	21.5%	9.1%	27.4%	12.0%	18.7%	4.3%	3.6%	29	15	15	58	394	73.8	25.4	0.7	81.7
WR08914936433	Counterclaims	3.3%	0.0%	38.9%	16.0%	17.9%	10.2%	8.6%	3.3%	1.7%	29	15	15	58	394	68.8	29.4	1.8	79.8
WR08914936433	Language/Conventions	3.3%	0.0%	22.4%	10.6%	26.8%	11.8%	17.3%	4.6%	3.0%	29	15	15	58	394	72.3	27.0	0.7	77.2
WR08914936433	Organization	3.3%	0.0%	25.2%	9.5%	26.3%	11.0%	17.5%	4.2%	2.8%	29	15	15	58	394	74.6	24.7	0.7	84.2
WR08914936433	Sourcing	3.3%	0.0%	34.1%	16.8%	17.0%	10.0%	12.5%	3.9%	2.3%	29	15	15	58	394	67.4	30.7	1.9	82.1
WR08914936433	Support	3.3%	0.0%	25.4%	10.3%	26.6%	11.8%	15.6%	4.2%	2.8%	29	15	15	58	394	73.1	26.2	0.7	82.4
WR08912757251	Clarity/Coherence	1.3%	0.0%	8.9%	7.9%	31.5%	16.0%	21.2%	8.2%	5.0%	23	12	0	23	104	67.2	32.1	0.7	78.9
WR08912757251	Counterclaims	1.3%	0.0%	30.0%	18.1%	21.6%	13.2%	9.2%	4.6%	2.0%	23	12	0	23	104	61.0	35.8	3.2	77.5
WR08912757251	Language/Conventions	1.3%	0.0%	10.8%	9.8%	30.4%	16.3%	19.8%	7.5%	4.1%	23	12	0	23	104	65.6	33.5	0.9	79.6
WR08912757251	Organization	1.3%	0.0%	15.7%	9.5%	30.1%	15.5%	17.2%	7.1%	3.8%	23	12	0	23	104	67.1	32.0	0.9	84.7
WR08912757251	Sourcing	1.3%	0.0%	20.0%	11.2%	25.7%	14.6%	16.6%	6.6%	4.0%	23	12	0	23	104	66.6	32.3	1.1	82.7
WR08912757251	Support	1.3%	0.0%	14.2%	10.6%	32.5%	15.5%	15.8%	6.5%	3.7%	23	12	0	23	104	66.6	32.5	0.9	79.8
WR08914936275	Clarity/Coherence	2.6%	0.0%	16.8%	5.9%	28.5%	11.4%	24.3%	4.8%	5.8%	34	11	0	46	297	77.2	21.9	0.9	88.4
WR08914936275	Counterclaims	2.6%	0.0%	39.7%	12.9%	18.0%	7.9%	11.6%	3.9%	3.5%	34	11	0	46	297	71.5	24.7	3.8	90.6
WR08914936275	Language/Conventions	2.6%	0.0%	19.5%	6.0%	29.2%	10.6%	23.3%	3.8%	5.0%	34	11	0	46	297	78.5	20.3	1.2	90.2
WR08914936275	Organization	2.6%	0.0%	20.7%	5.9%	27.6%	10.4%	23.6%	4.1%	5.1%	34	11	0	46	297	78.5	20.4	1.1	92.4
WR08914936275	Sourcing	2.6%	0.0%	24.8%	8.8%	21.3%	10.0%	23.2%	4.1%	5.1%	34	11	0	46	297	75.7	22.9	1.5	87.0
WR08914936275	Support	2.6%	0.0%	20.3%	5.9%	30.7%	10.4%	20.8%	4.0%	5.2%	34	11	0	46	297	78.7	20.3	1.0	88.1
WR08914941248	Clarity/Coherence	1.6%	0.0%	15.9%	6.4%	34.2%	12.7%	20.3%	4.3%	4.7%	35	0	0	35	185	76.0	23.3	0.7	91.8
WR08914941248	Counterclaims	1.6%	0.0%	29.6%	14.1%	23.3%	12.0%	12.8%	3.5%	3.1%	35	0	0	35	185	68.7	29.4	1.9	94.7
WR08914941248	Language/Conventions	1.6%	0.0%	19.1%	6.8%	32.7%	12.3%	19.8%	3.9%	3.8%	35	0	0	35	185	76.6	23.0	0.5	92.3
WR08914941248	Organization	1.6%	0.0%	21.0%	7.5%	30.7%	12.1%	19.6%	4.0%	3.6%	35	0	0	35	185	76.0	23.5	0.5	92.3
WR08914941248	Sourcing	1.6%	0.0%	26.7%	10.5%	23.7%	11.6%	18.3%	3.9%	3.7%	35	0	0	35	185	72.7	26.0	1.3	86.6
WR08914941248	Support	1.6%	0.0%	20.8%	7.8%	33.2%	12.3%	16.8%	3.9%	3.7%	35	0	0	35	185	75.5	24.0	0.6	93.2

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic

Grade 11 On-Demand Writing

Prompt	Trait	Final Trait Score									Condition Code					Inter-Rater Reliability			
		0	1	2	3	4	5	6	7	8	B	A	F	I	O	%Perfect Agreement	%Adjacent	%Non-Adjacent	Validity %Perfect Agreement
WR11914052116	Clarity/Coherence	5.3%	0.0%	15.7%	7.4%	26.8%	12.9%	22.3%	5.6%	3.9%	112	12	0	125	512	73.6	25.6	0.8	89.4
WR11914052116	Counterclaims	5.3%	0.0%	34.4%	17.2%	16.7%	11.2%	8.7%	3.8%	2.7%	112	12	0	125	512	65.7	31.9	2.4	92.2
WR11914052116	Language/Conventions	5.3%	0.0%	12.3%	7.4%	29.2%	13.4%	22.5%	5.9%	3.9%	112	12	0	125	512	72.8	26.5	0.6	87.9
WR11914052116	Organization	5.3%	0.0%	19.3%	7.4%	23.4%	12.8%	21.9%	5.8%	4.0%	112	12	0	125	512	73.3	25.9	0.9	94.6
WR11914052116	Sourcing	5.3%	0.0%	40.6%	11.2%	14.0%	10.5%	10.9%	4.8%	2.6%	112	12	0	125	512	71.6	26.3	2.1	92.2
WR11914052116	Support	5.3%	0.0%	22.0%	8.0%	24.6%	12.9%	18.8%	5.2%	3.2%	112	12	0	125	512	73.4	25.7	0.8	93.9
WR11915549113	Clarity/Coherence	3.5%	0.0%	13.5%	6.8%	30.2%	11.8%	25.0%	5.8%	3.3%	94	10	0	94	250	75.5	24.3	0.2	90.3
WR11915549113	Counterclaims	3.5%	0.0%	30.9%	17.1%	20.0%	12.7%	10.2%	3.8%	1.8%	94	10	0	83	250	64.7	33.3	2.0	77.4
WR11915549113	Language/Conventions	3.5%	0.0%	10.6%	6.3%	30.3%	12.5%	27.3%	6.1%	3.3%	94	10	0	94	250	75.1	24.7	0.2	87.6
WR11915549113	Organization	3.5%	0.0%	16.8%	7.2%	27.5%	11.8%	24.7%	5.5%	3.0%	94	10	0	94	250	75.6	24.2	0.2	89.7
WR11915549113	Sourcing	3.5%	0.0%	34.0%	11.7%	14.3%	10.5%	18.3%	5.2%	2.4%	94	10	0	83	250	71.1	27.1	1.7	87.1
WR11915549113	Support	3.5%	0.0%	16.4%	7.1%	30.2%	11.6%	23.0%	5.3%	3.0%	94	10	0	94	250	76.1	23.7	0.2	88.9
WR11914053904	Clarity/Coherence	3.7%	0.0%	16.1%	5.6%	25.9%	11.0%	26.3%	6.6%	4.8%	116	11	0	158	317	76.4	23.0	0.6	84.4
WR11914053904	Counterclaims	3.7%	0.0%	32.4%	13.2%	18.5%	10.5%	14.9%	4.1%	2.6%	116	11	0	148	317	69.1	27.6	3.3	80.2
WR11914053904	Language/Conventions	3.7%	0.0%	14.0%	5.6%	28.6%	10.9%	24.7%	7.4%	5.1%	116	11	0	158	317	75.5	23.7	0.8	84.8
WR11914053904	Organization	3.7%	0.0%	17.4%	6.0%	25.8%	10.3%	22.7%	8.7%	5.3%	116	11	0	158	317	74.2	24.8	1.1	86.3
WR11914053904	Sourcing	3.7%	0.0%	39.3%	9.6%	14.5%	8.9%	12.8%	7.7%	3.5%	116	11	0	148	317	71.5	25.9	2.6	86.3
WR11914053904	Support	3.7%	0.0%	19.4%	7.0%	26.8%	9.9%	23.5%	5.6%	4.1%	116	11	0	158	317	77.1	22.3	0.6	85.1
WR11915031558	Clarity/Coherence	3.9%	0.0%	12.3%	6.1%	29.1%	13.0%	24.1%	6.4%	5.1%	95	21	0	85	296	74.3	25.3	0.4	91.9
WR11915031558	Counterclaims	3.9%	0.0%	24.9%	15.2%	20.0%	11.4%	17.7%	3.7%	3.2%	95	21	0	85	296	65.3	30.0	4.6	82.9
WR11915031558	Language/Conventions	3.9%	0.0%	9.8%	6.0%	30.9%	13.5%	24.0%	6.9%	4.9%	95	21	0	85	296	73.2	26.2	0.6	85.4
WR11915031558	Organization	3.9%	0.0%	15.3%	6.4%	27.0%	12.4%	24.2%	6.0%	4.9%	95	21	0	85	296	75.0	24.5	0.5	94.0
WR11915031558	Sourcing	3.9%	0.0%	32.8%	11.3%	15.2%	9.6%	19.7%	4.2%	3.4%	95	21	0	85	296	73.7	24.8	1.5	93.5
WR11915031558	Support	3.9%	0.0%	15.1%	7.5%	27.9%	12.7%	21.6%	6.7%	4.6%	95	21	0	85	296	73.0	26.6	0.4	90.2

Note. B = Non-Response; A = Insufficient Amount to Score; F = Non-English; I = Illegible; O = Off-Topic

Appendix N. Accuracy and Consistency

Subject	Grade	Accuracy (Overall)	Accuracy (Proficient/Non-Proficient)	Consistency	Kappa
Reading	3	72.80%	89.62%	63.45%	0.51
	4	73.19%	89.50%	63.81%	0.52
	5	72.86%	89.14%	63.28%	0.51
	6	70.17%	87.27%	59.85%	0.45
	7	71.38%	88.25%	61.77%	0.48
	8	70.47%	88.07%	60.89%	0.47
	10	71.41%	88.39%	61.63%	0.48
Mathematics	3	73.58%	89.74%	63.89%	0.51
	4	76.25%	90.40%	67.53%	0.55
	5	75.71%	90.24%	66.46%	0.54
	6	71.50%	88.70%	61.74%	0.47
	7	64.38%	87.10%	54.08%	0.36
	8	70.07%	89.17%	60.36%	0.44
	10	66.64%	87.77%	56.29%	0.39
Science	4	71.95%	85.98%	61.28%	0.40
	7	72.44%	89.08%	62.12%	0.41
	11	77.71%	93.39%	69.21%	0.48
Social Studies	5	70.19%	88.11%	60.62%	0.47
	8	73.62%	90.09%	64.96%	0.50
	11	72.02%	88.95%	62.51%	0.48
Editing and Mechanics	5	67.25%	86.16%	57.01%	0.42
	8	69.17%	86.67%	59.01%	0.44
	11	71.07%	87.29%	60.76%	0.46
On-Demand Writing	5	80.52%	91.52%	72.69%	0.61
	8	81.98%	92.33%	74.89%	0.64
	11	82.35%	93.43%	77.55%	0.67

Appendix O. Principal Components Analysis

Subject	Grade	Unexplained Variance in 1st Contrast (Eigenvalue Units)[7]
Reading	3	1.5
	4	1.7
	5	1.6
	6	1.7
	7	1.7
	8	1.8
	10	1.8
Mathematics	3	1.6
	4	1.5
	5	1.7
	6	1.9
	7	2.0
	8	1.9
	10	1.9
Science	4	1.8
	7	1.7
	11	2.0
Social Studies	5	1.9
	8	1.8
	11	1.8
Editing and Mechanics	5	2.0
	8	1.6
	11	1.8

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[7] Values greater than 2 may indicate a possible second dimension.

Appendix P. Model Fit Indices for Confirmatory Factor Analysis

Reading

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
3	1	0.0174	0.0224	0.0219	0.0229
	2	0.0186	0.0231	0.0226	0.0236
4	1	0.0181	0.0225	0.0220	0.0230
	2	0.0154	0.0196	0.0191	0.0200
5	1	0.0206	0.0260	0.0255	0.0265
	2	0.0187	0.0250	0.0245	0.0256
6	1	0.0184	0.0226	0.0221	0.0231
	2	0.0172	0.0213	0.0208	0.0218
7	1	0.0223	0.0302	0.0297	0.0307
	2	0.0239	0.0313	0.0308	0.0318
8	1	0.0156	0.0202	0.0197	0.0207
	2	0.0168	0.0234	0.0230	0.0239
10	1	0.0168	0.0211	0.0207	0.0216
	2	0.0182	0.0246	0.0241	0.0250

Mathematics

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
3	1	0.0227	0.0266	0.0260	0.0272
	2	0.0233	0.0262	0.0256	0.0268
	3	0.0256	0.0303	0.0295	0.0311
	4	0.0216	0.0264	0.0257	0.0272
4	1	0.0195	0.0232	0.0225	0.0239
	2	0.0192	0.0228	0.0221	0.0234
	3	0.0177	0.0205	0.0197	0.0214
	4	0.0208	0.0237	0.0229	0.0245
5	1	0.0241	0.0292	0.0285	0.0299
	2	0.0258	0.0311	0.0304	0.0318
	3	0.0267	0.0324	0.0315	0.0332
	4	0.0261	0.0310	0.0302	0.0319
6	1	0.0193	0.0220	0.0213	0.0226
	2	0.0198	0.0233	0.0226	0.0239
	3	0.0192	0.0202	0.0193	0.0210
	4	0.0184	0.0193	0.0185	0.0202
7	1	0.0196	0.0223	0.0216	0.0230
	2	0.0251	0.0291	0.0285	0.0298
	3	0.0237	0.0269	0.0261	0.0277
	4	0.0253	0.0297	0.0289	0.0306
8	1	0.0179	0.0202	0.0195	0.0208
	2	0.0203	0.0231	0.0225	0.0238
	3	0.0164	0.0184	0.0176	0.0192
	4	0.0184	0.0215	0.0207	0.0223
10	1	0.0235	0.0257	0.0250	0.0263
	2	0.0230	0.0251	0.0244	0.0257
	3	0.0241	0.0263	0.0255	0.0271
	4	0.0251	0.0275	0.0267	0.0283

Science

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
4	1	0.0174	0.0199	0.0189	0.0209
	2	0.0180	0.0208	0.0198	0.0218
	3	0.0266	0.0291	0.0281	0.0301
	4	0.0155	0.0172	0.0161	0.0182
7	1	0.0214	0.0237	0.0227	0.0247
	2	0.0206	0.0231	0.0221	0.0241
	3	0.0220	0.0245	0.0234	0.0255
	4	0.0154	0.0180	0.0170	0.0191
11	1	0.0201	0.0242	0.0232	0.0252
	2	0.0187	0.0213	0.0202	0.0224
	3	0.0189	0.0232	0.0221	0.0242
	4	0.0207	0.0251	0.0241	0.0262

Social Studies

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
5	1	0.0199	0.0242	0.0237	0.0248
	2	0.0233	0.0285	0.0279	0.0290
8	1	0.0190	0.0258	0.0253	0.0263
	2	0.0168	0.0238	0.0233	0.0243
11	1	0.0193	0.0252	0.0247	0.0257
	2	0.0203	0.0265	0.0260	0.0270

Editing and Mechanics

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
5	1	0.0338	0.0394	0.0388	0.0401
	2	0.0495	0.0601	0.0595	0.0608
8	1	0.0291	0.0349	0.0343	0.0356
	2	0.0293	0.0361	0.0355	0.0368
11	1	0.0207	0.0259	0.0252	0.0266
	2	0.0205	0.0255	0.0248	0.0262