

Kentucky Summative Assessments



2021–2022 Yearbook



Pearson

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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: 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): Measurement theory that prescribes relationships of item difficulty and examinee proficiency for indices of test performance.

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

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

Multiple-choice item: 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: 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, expressing 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	46,565	42,980	46,446	46,770	48,968	49,982	46,926
Gender	Female	48.8%	48.2%	48.7%	48.3%	48.7%	48.9%	48.7%
	Male	51.2%	51.8%	51.3%	51.7%	51.3%	51.1%	51.3%
Ethnicity	Hispanic	8.3%	8.2%	8.6%	8.5%	8.3%	8.5%	7.9%
	Asian	2.1%	2.1%	1.9%	1.9%	1.7%	1.7%	2.0%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.1%
	Black/African American	10.6%	10.1%	10.9%	10.9%	10.9%	11.1%	10.0%
	American Indian	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
	White	73.3%	74.0%	73.1%	73.4%	73.9%	73.8%	75.8%
	Two or More Races	5.4%	5.3%	5.1%	5.0%	4.8%	4.6%	4.0%
Migrant	Non-Migrant	99.5%	99.5%	99.6%	99.5%	99.6%	99.6%	99.6%
	Migrant	0.5%	0.5%	0.4%	0.5%	0.4%	0.4%	0.4%
LEP	Non-LEP	92.0%	92.9%	94.4%	95.8%	96.4%	96.5%	96.8%
	LEP	8.0%	7.1%	5.6%	4.2%	3.6%	3.5%	3.2%
Economic Disadvantage	Economically Disadvantaged	62.1%	61.3%	61.2%	61.0%	60.1%	59.3%	54.5%
	Not Economically Disadvantaged	37.9%	38.7%	38.8%	39.0%	39.9%	40.7%	45.5%
IEP	Non-IEP	83.8%	84.4%	85.6%	86.4%	87.4%	88.2%	90.3%
	IEP	16.2%	15.6%	14.4%	13.6%	12.6%	11.8%	9.7%

Mathematics

Category	Group	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	Students Tested	46,629	43,026	46,494	46,867	49,069	50,097	46,933
Gender	Female	48.8%	48.2%	48.7%	48.3%	48.8%	48.9%	48.7%
	Male	51.2%	51.8%	51.3%	51.7%	51.2%	51.1%	51.3%
Ethnicity	Hispanic	8.3%	8.2%	8.7%	8.6%	8.5%	8.7%	8.1%
	Asian	2.2%	2.2%	1.9%	1.9%	1.7%	1.7%	2.0%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.1%
	Black/African American	10.6%	10.1%	10.9%	10.9%	10.9%	11.1%	10.0%
	American Indian	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
	White	73.2%	73.9%	73.1%	73.3%	73.8%	73.6%	75.6%
	Two or More Races	5.4%	5.3%	5.1%	5.0%	4.8%	4.6%	4.0%
Migrant	Non-Migrant	99.5%	99.5%	99.6%	99.5%	99.6%	99.6%	99.6%
	Migrant	0.5%	0.5%	0.4%	0.5%	0.4%	0.4%	0.4%
LEP	Non-LEP	91.8%	92.8%	94.2%	95.6%	96.2%	96.3%	96.6%
	LEP	8.2%	7.2%	5.8%	4.4%	3.8%	3.7%	3.4%
Economic Disadvantage	Economically Disadvantaged	62.1%	61.3%	61.2%	61.0%	60.1%	59.3%	54.5%
	Not Economically Disadvantaged	37.9%	38.7%	38.8%	39.0%	39.9%	40.7%	45.5%
IEP	Non-IEP	83.8%	84.4%	85.6%	86.4%	87.5%	88.2%	90.3%
	IEP	16.2%	15.6%	14.4%	13.6%	12.5%	11.8%	9.7%

Science

Category	Group	Grade 4	Grade 7	Grade 11
All	Students Tested	43,012	49,024	43,753
Gender	Female	48.2%	48.7%	49.6%
	Male	51.8%	51.3%	50.4%
Ethnicity	Hispanic	8.2%	8.5%	7.5%
	Asian	2.2%	1.7%	2.1%
	Native Hawaiian/Pacific Islander	0.2%	0.1%	0.1%
	Black/African American	10.1%	10.9%	10.2%
	American Indian	0.1%	0.1%	0.1%
	White	73.9%	73.8%	76.4%
	Two or More Races	5.3%	4.8%	3.7%
Migrant	Non-Migrant	99.5%	99.6%	99.7%
	Migrant	0.5%	0.4%	0.3%
LEP	Non-LEP	92.8%	96.2%	96.8%
	LEP	7.2%	3.8%	3.2%
Economic Disadvantage	Economically Disadvantaged	61.3%	60.1%	50.9%
	Not Economically Disadvantaged	38.7%	39.9%	49.1%
IEP	Non-IEP	84.4%	87.5%	91.3%
	IEP	15.6%	12.5%	8.7%

Social Studies

Category	Group	Grade 5	Grade 8	Grade 11
All	Students Tested	46,434	49,943	43,525
Gender	Female	48.7%	48.8%	49.6%
	Male	51.3%	51.1%	50.4%
Ethnicity	Hispanic	8.6%	8.5%	7.4%
	Asian	1.9%	1.7%	2.1%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.1%
	Black/African American	10.9%	11.1%	10.2%
	American Indian	0.1%	0.1%	0.1%
	White	73.2%	73.8%	76.5%
	Two or More Races	5.1%	4.6%	3.7%
Migrant	Non-Migrant	99.6%	99.6%	99.7%
	Migrant	0.4%	0.4%	0.3%
LEP	Non-LEP	94.4%	96.5%	96.9%
	LEP	5.6%	3.5%	3.1%
Economic Disadvantage	Economically Disadvantaged	61.2%	59.3%	51.0%
	Not Economically Disadvantaged	38.8%	40.7%	49.0%
IEP	Non-IEP	85.6%	88.2%	91.3%
	IEP	14.4%	11.8%	8.7%

Editing and Mechanics


Category	Group	Grade 5	Grade 8	Grade 11
All	Students Tested	46,423	49,899	43,427
Gender	Female	48.7%	48.9%	49.6%
	Male	51.3%	51.1%	50.4%
Ethnicity	Hispanic	8.6%	8.5%	7.4%
	Asian	1.9%	1.7%	2.0%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.1%
	Black/African American	10.9%	11.1%	10.1%
	American Indian	0.1%	0.1%	0.1%
	White	73.2%	73.8%	76.6%
	Two or More Races	5.1%	4.6%	3.7%
Migrant	Non-Migrant	99.6%	99.6%	99.7%
	Migrant	0.4%	0.4%	0.3%
LEP	Non-LEP	94.4%	96.5%	96.9%
	LEP	5.6%	3.5%	3.1%
Economic Disadvantage	Economically Disadvantaged	61.2%	59.2%	50.9%
	Not Economically Disadvantaged	38.8%	40.8%	49.1%
IEP	Non-IEP	85.6%	88.2%	91.3%
	IEP	14.4%	11.8%	8.7%

On-Demand Writing

Category	Group	Grade 5	Grade 8	Grade 11
All	Students Tested	46,391	49,768	43,155
Gender	Female	48.7%	48.9%	49.7%
	Male	51.3%	51.1%	50.3%
Ethnicity	Hispanic	8.6%	8.5%	7.4%
	Asian	1.9%	1.7%	2.1%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.1%
	Black/African American	10.8%	11.1%	10.0%
	American Indian	0.1%	0.1%	0.1%
	White	73.2%	73.8%	76.6%
	Two or More Races	5.1%	4.6%	3.7%
Migrant	Non-Migrant	99.6%	99.6%	99.7%
	Migrant	0.4%	0.4%	0.3%
LEP	Non-LEP	94.4%	96.5%	96.9%
	LEP	5.6%	3.5%	3.1%
Economic Disadvantage	Economically Disadvantaged	61.2%	59.2%	50.7%
	Not Economically Disadvantaged	38.8%	40.8%	49.3%
IEP	Non-IEP	85.6%	88.2%	91.3%
	IEP	14.4%	11.8%	8.7%

Appendix B. Score Reports

Individual Student Report (ISR)




FIRSTNAME01 B. LASTNAME01

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


Spring 2022
Grade 3

State ID: 3160000001
Sample School Name
Sample District Name




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>.

Kentucky Summative Assessments Student Scores




Reading



Novice

Performance Level




Novice

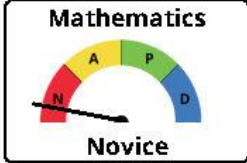
420

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



Novice

Performance Level




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)

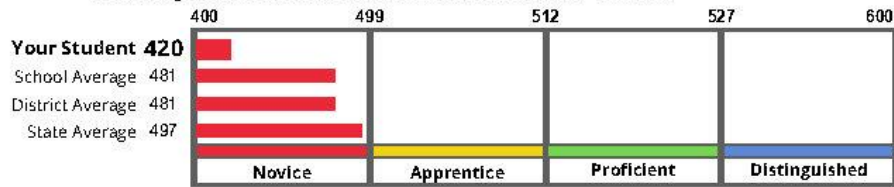
Page 1 of 2

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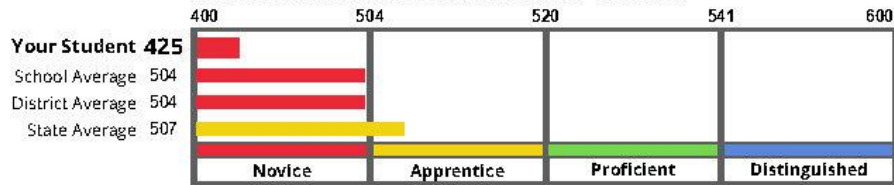
Kentucky Summative Assessments Student Scores (continued)

FIRSTNAME01 B. LASTNAME01

Reading: FIRSTNAME01'S OVERALL RESULTS - Novice



Mathematics: FIRSTNAME01'S OVERALL RESULTS - Novice



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.

During 2021-2022, the novel coronavirus (COVID-19) continued to impact Kentucky's schools and districts. School districts continued to face extraordinary circumstances, taking precautions to help contain the spread of the virus. These factors should continue to be taken into consideration as student results are reviewed.

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 2022
 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%	

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.

District Summary Report



TESTED STUDENTS DISTRICT SUMMARY
 Kentucky Summative Assessments

Spring 2022
 Grade 6
 Reading

District Name

Grade 6 Reading

DISTRICT NAME			Total Reading	Performance Level*			
School Name	Code	Number Students Tested		Scale Score	Novice	Apprentice	Proficient
				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.

State Summary Report



TESTED STUDENTS STATE SUMMARY
Kentucky Summative Assessments

Spring 2022
 Grade 10
 Mathematics


Commonwealth of Kentucky

Grade 10 Mathematics

District Name	Code	Number Students Tested	Scale Score	Performance Level*			
				Novice	Apprentice	Proficient	Distinguished
				Percent of Students			
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.

School Listing Report



TESTED STUDENTS SCHOOL LISTING

Kentucky Summative Assessments

School Name _____
District Name _____

Spring 2022

Grade <3 or 6 or 10>

		NOVICE	APPRENTICE	PROFICIENT	DISTINGUISHED				
Student Name	Student ID	Reading		Mathematics					
		Alternate KSA ¹	Accommodated ²	Performance Level ³	Score	Accommodated ²	Performance Level ³	Score	
ALASTNAME, FIRSTNAME, I.	999999999			N	###			N	###
BLASTNAME, FIRSTNAME, I.	999999999	Y		D	###			P	###
CLASTNAME, FIRSTNAME, I.	999999999			N	###			N	###
DLASTNAME, FIRSTNAME, I.	999999999			D	###			D	###
ELASTNAME, FIRSTNAME, I.	999999999			P	###			A	###
FLASTNAME, FIRSTNAME, I.	999999999			N	###			A	###
GLASTNAME, FIRSTNAME, I.	999999999			P	###			A	###
HLASTNAME, FIRSTNAME, I.	999999999		Y	P	###			E	
ILASTNAME, FIRSTNAME, I.	999999999			D	###			P	###
JLASTNAME, FIRSTNAME, I.	999999999			D	###			P	###
KLASTNAME, FIRSTNAME, I.	999999999			P	###			E	
LLASTNAME, FIRSTNAME, I.	999999999			D	###			P	###
MLASTNAME, FIRSTNAME, I.	999999999			E				A	###
NLASTNAME, FIRSTNAME, I.	999999999			P	###			P	###
OLASTNAME, FIRSTNAME, I.	999999999			P	###			N	###
PLASTNAME, FIRSTNAME, I.	999999999			A	###			D	###
QLASTNAME, FIRSTNAME, I.	999999999			P	###			N	###
RLASTNAME, FIRSTNAME, I.	999999999			N	###			N	###
SLASTNAME, FIRSTNAME, I.	999999999			N	###			A	###
TLASTNAME, FIRSTNAME, I.	999999999			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

Kentucky Summative Assessments

Spring 2022
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
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 Items¹

Subject	Grade	$p < 0.30$	$0.30 \leq p < 0.55$	$0.55 \leq p < 0.75$	$0.75 \leq p < 0.95$	$p \geq 0.95$	Mean p	N
Reading	3	4	40	29	2	-	0.52	75
	4	2	29	26	5	-	0.55	62
	5	-	22	25	12	-	0.62	59
	6	2	21	29	8	-	0.59	60
	7	6	33	15	4	-	0.49	58
	8	-	23	31	2	-	0.55	56
	10	2	30	23	1	-	0.52	56
Mathematics	3	6	33	25	12	-	0.56	76
	4	2	37	30	12	-	0.57	81
	5	6	33	23	5	-	0.52	67
	6	11	43	19	-	-	0.44	73
	7	17	41	10	1	-	0.40	69
	8	13	45	10	2	-	0.42	70
	10	16	65	6	1	-	0.40	88
Science	4	5	25	11	2	-	0.47	43
	7	9	23	3	-	-	0.37	35
	11	10	25	7	-	-	0.41	42
Social Studies	5	1	44	21	8	-	0.52	74
	8	2	54	20	2	-	0.50	78
	11	9	47	29	1	-	0.49	86
Editing and Mechanics	5	-	5	18	9	-	0.67	32
	8	4	12	7	9	-	0.58	32
	11	1	6	14	3	-	0.60	24

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

Multi-Points Items²

Subject	Grade	2-Point Items				4-Point Items			
		<i>N</i>	<i>Mean</i>	<i>Min.</i>	<i>Max.</i>	<i>N</i>	<i>Mean</i>	<i>Min.</i>	<i>Max.</i>
Reading	3	30	1.03	0.49	1.52	-	-	-	-
	4	17	1.21	0.76	1.75	4	1.19	1.06	1.30
	5	23	1.25	0.60	1.57	4	1.17	0.81	1.57
	6	22	1.10	0.59	1.66	4	1.31	1.21	1.39
	7	23	1.09	0.58	1.49	4	1.55	1.37	1.71
	8	22	1.05	0.60	1.57	4	1.48	1.20	1.64
	10	16	1.13	0.55	1.58	3	1.23	1.11	1.43
Mathematics	3	18	1.20	0.84	1.90	-	-	-	-
	4	18	1.18	0.14	1.91	3	1.20	0.93	1.61
	5	19	0.96	0.23	1.63	2	1.30	1.29	1.30
	6	15	0.84	0.19	1.64	3	0.86	0.59	1.10
	7	13	0.97	0.28	1.44	1	1.39	1.39	1.39
	8	15	0.81	0.35	1.44	3	0.67	0.42	0.84
	10	17	0.84	0.09	1.55	2	0.70	0.60	0.80
Science	4	13	1.03	0.51	1.37	8	0.71	0.46	0.98
	7	7	1.05	0.91	1.21	6	0.89	0.55	1.20
	11	7	1.04	0.60	1.43	7	1.28	0.87	2.02
Social Studies	5	13	1.07	0.53	1.67	3	1.30	1.01	1.55
	8	13	1.03	0.63	1.47	3	1.28	0.89	1.58
	11	13	1.00	0.55	1.67	3	1.19	0.84	1.42
Editing and Mechanics	5	20	1.05	0.40	1.75	-	-	-	-
	8	20	1.07	0.28	1.82	-	-	-	-
	11	15	1.22	0.80	1.66	-	-	-	-

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 Items³

Subject	Grade	$r < 0.20$	$0.20 \leq r < 0.40$	$0.40 \leq r < 0.60$	$0.60 \leq r < 0.80$	$r \geq 0.80$	Median Pt. Bis	N
Reading	3	3	32	40	-	-	0.40	75
	4	1	25	35	1	-	0.43	62
	5	4	16	39	-	-	0.45	59
	6	4	24	32	-	-	0.41	60
	7	6	29	23	-	-	0.38	58
	8	2	33	21	-	-	0.37	56
	10	3	25	28	-	-	0.40	56
Mathematics	3	1	20	55	-	-	0.45	76
	4	1	27	53	-	-	0.44	81
	5	-	21	45	1	-	0.45	67
	6	9	26	37	1	-	0.42	73
	7	10	39	20	-	-	0.33	69
	8	4	32	33	1	-	0.39	70
	10	5	51	32	-	-	0.37	88
Science	4	5	23	15	-	-	0.37	43
	7	7	19	9	-	-	0.33	35
	11	12	17	13	-	-	0.29	42
Social Studies	5	3	40	31	-	-	0.37	74
	8	1	38	39	-	-	0.40	78
	11	7	32	46	1	-	0.40	86
Editing and Mechanics	5	-	13	19	-	-	0.41	32
	8	-	19	13	-	-	0.38	32
	11	2	4	18	-	-	0.46	24

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

Appendix D. Item-Total Correlation Summaries

Multi-Points Items⁴

Subject	Grade	2-Point Items				4-Point Items			
		<i>N</i>	<i>Median r</i>	<i>Min. r</i>	<i>Max. r</i>	<i>N</i>	<i>Median r</i>	<i>Min. r</i>	<i>Max. r</i>
Reading	3	30	0.56	0.27	0.68	–	–	–	–
	4	17	0.51	0.27	0.63	4	0.68	0.67	0.70
	5	23	0.49	0.27	0.67	4	0.69	0.59	0.72
	6	22	0.53	0.05	0.62	4	0.69	0.67	0.71
	7	23	0.50	0.28	0.67	4	0.72	0.71	0.75
	8	22	0.45	0.25	0.66	4	0.74	0.72	0.74
	10	16	0.49	0.29	0.63	3	0.73	0.72	0.74
Mathematics	3	18	0.55	0.27	0.69	–	–	–	–
	4	18	0.51	0.27	0.68	3	0.70	0.67	0.75
	5	19	0.51	0.23	0.69	2	0.72	0.71	0.72
	6	15	0.49	0.22	0.60	3	0.73	0.65	0.76
	7	13	0.46	0.15	0.67	1	0.73	0.73	0.73
	8	15	0.57	0.27	0.69	3	0.69	0.61	0.77
	10	17	0.44	0.14	0.63	2	0.70	0.64	0.75
Science	4	13	0.41	0.13	0.53	8	0.56	0.53	0.68
	7	7	0.45	0.39	0.53	6	0.63	0.61	0.70
	11	7	0.43	0.18	0.52	7	0.67	0.63	0.71
Social Studies	5	13	0.46	0.13	0.63	3	0.69	0.69	0.69
	8	13	0.47	0.33	0.65	3	0.70	0.63	0.72
	11	13	0.51	0.19	0.68	3	0.68	0.65	0.70
Editing and Mechanics	5	20	0.48	0.20	0.58	–	–	–	–
	8	20	0.54	0.31	0.63	–	–	–	–
	11	15	0.52	0.31	0.70	–	–	–	–

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	45	56	3	1	-	-
	White-Black	54	50	-	1	-	-
	White-Hispanic	56	47	-	2	-	-
4	Male-Female	25	53	1	3	1	-
	White-Black	32	51	-	-	-	-
	White-Hispanic	41	42	-	-	-	-
5	Male-Female	30	48	3	3	1	1
	White-Black	35	50	-	1	-	-
	White-Hispanic	43	42	-	1	-	-
6	Male-Female	31	43	6	3	2	1
	White-Black	41	43	-	2	-	-
	White-Hispanic	42	44	-	-	-	-
7	Male-Female	26	51	3	1	4	-
	White-Black	44	41	-	-	-	-
	White-Hispanic	41	44	-	-	-	-
8	Male-Female	23	49	5	2	3	-
	White-Black	34	47	-	1	-	-
	White-Hispanic	40	42	-	-	-	-
10	Male-Female	26	44	2	2	1	-
	White-Black	37	38	-	-	-	-
	White-Hispanic	40	35	-	-	-	-

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

Appendix E. Differential Item Functioning Summaries

Mathematics

Grade	Subgroups	DIF Categories					
		Negligible DIF		Moderate DIF		Substantial DIF	
		Focal	Reference	Focal	Reference	Focal	Reference
3	Male-Female	40	48	2	2	-	2
	White-Black	36	52	-	6	-	-
	White-Hispanic	40	54	-	-	-	-
4	Male-Female	46	51	1	3	-	1
	White-Black	45	54	-	3	-	-
	White-Hispanic	35	67	-	-	-	-
5	Male-Female	36	49	1	2	-	-
	White-Black	38	48	-	2	-	-
	White-Hispanic	34	54	-	-	-	-
6	Male-Female	41	44	1	4	-	1
	White-Black	49	37	-	4	-	1
	White-Hispanic	41	50	-	-	-	-
7	Male-Female	31	48	-	4	-	-
	White-Black	42	38	2	-	-	1
	White-Hispanic	38	44	-	-	-	1
8	Male-Female	41	44	2	1	-	-
	White-Black	43	43	1	1	-	-
	White-Hispanic	36	51	-	1	-	-
10	Male-Female	39	67	-	1	-	-
	White-Black	57	49	-	1	-	-
	White-Hispanic	48	59	-	-	-	-

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	DIF Categories					
		Negligible DIF		Moderate DIF		Substantial DIF	
		Focal	Reference	Focal	Reference	Focal	Reference
4	Male-Female	24	39	1	-	-	-
	White-Black	30	34	-	-	-	-
	White-Hispanic	21	43	-	-	-	-
7	Male-Female	13	32	1	1	1	-
	White-Black	27	20	-	1	-	-
	White-Hispanic	27	21	-	-	-	-
11	Male-Female	18	32	2	3	1	-
	White-Black	38	17	-	1	-	-
	White-Hispanic	29	27	-	-	-	-

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

Appendix E. Differential Item Functioning Summaries

Social Studies

Grade	Subgroups	DIF Categories					
		Negligible DIF		Moderate DIF		Substantial DIF	
		Focal	Reference	Focal	Reference	Focal	Reference
5	Male-Female	28	56	5	-	1	-
	White-Black	40	50	-	-	-	-
	White-Hispanic	42	48	-	-	-	-
8	Male-Female	24	60	-	3	6	1
	White-Black	44	50	-	-	-	-
	White-Hispanic	42	52	-	-	-	-
11	Male-Female	30	62	1	4	4	1
	White-Black	48	52	-	1	-	1
	White-Hispanic	52	50	-	-	-	-

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	27	22	2	-	1	-
	White-Black	21	30	-	1	-	-
	White-Hispanic	26	24	-	2	-	-
8	Male-Female	31	20	-	1	-	-
	White-Black	25	25	-	2	-	-
	White-Hispanic	26	24	1	-	-	1
11	Male-Female	22	12	1	2	-	2
	White-Black	16	19	3	1	-	-
	White-Hispanic	20	16	1	2	-	-

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	105	-1.4270	-0.4947	-0.0439	0.4166	1.5738	-	105	-	-	-	101	4	-
4	83	-1.7917	-0.5390	-0.0025	0.5645	2.1793	-	83	-	-	-	82	1	-
5	86	-1.8587	-0.6986	-0.0214	0.5697	2.2256	-	86	-	-	1	82	3	-
6	86	-2.0226	-0.6200	0.0080	0.5098	1.9215	-	86	-	-	-	85	1	-
7	85	-2.2867	-0.6051	0.1192	0.5257	1.5145	-	85	-	-	-	82	3	-
8	82	-1.3653	-0.4202	-0.0646	0.5528	1.3124	-	82	-	-	-	82	-	-
10	75	-1.4624	-0.3950	-0.0549	0.3431	1.3007	-	75	-	-	-	75	-	-

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	94	-2.4916	-0.6470	0.0817	0.6907	2.4097	-	94	-	-	-	93	1	-
4	102	-2.5098	-0.7180	0.0762	0.7871	2.6495	-	102	-	-	-	100	2	-
5	88	-2.0620	-0.6820	-0.0757	0.6439	3.0108	-	87	1	-	-	85	2	1
6	91	-1.8946	-0.6055	-0.0285	0.5316	2.6297	-	90	1	-	2	86	3	-
7	83	-2.2888	-0.4674	-0.0103	0.4342	1.9522	-	83	-	-	-	82	1	-
8	88	-1.8731	-0.5709	-0.0724	0.5214	3.5749	-	88	-	-	-	88	-	-
10	107	-2.0169	-0.4492	-0.0472	0.4503	2.3574	-	107	-	-	2	105	-	-

Appendix F. Item Response Theory Parameter Summary

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
7	64	-1.7202	-0.4562	0.0803	0.6709	1.9521	-	64	-	-	-	63	1	-
4	48	-1.3635	-0.5821	-0.1526	0.4245	1.3323	-	48	-	-	-	46	2	-
11	56	-2.0243	-1.0655	-0.3615	0.4529	2.3215	-	56	-	-	-	50	4	2

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	90	-2.3892	-0.3431	0.0894	0.6305	1.7815	-	90	-	-	-	90	-	-
8	94	-1.8147	-0.3747	-0.0018	0.3785	1.6679	-	94	-	-	-	94	-	-
11	102	-1.6051	-0.5770	0.0559	0.5525	1.7976	-	102	-	-	-	101	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	52	-2.1022	-0.5718	-0.1588	0.6916	1.9536	-	52	-	-	-	51	1	-
8	52	-2.1766	-0.9199	0.0795	0.7751	2.0155	-	52	-	-	-	52	-	-
11	39	-1.2562	-0.6503	-0.0152	0.6819	1.7558	-	39	-	-	-	37	2	-

Appendix G. Scoring Tables

Grade 3 Reading, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	442	17
01	2	455	12
01	3	462	10
01	4	468	9
01	5	472	8
01	6	476	8
01	7	479	7
01	8	482	7
01	9	485	7
01	10	488	6
01	11	490	6
01	12	493	6
01	13	495	6
01	14	497	6
01	15	499	6
01	16	501	6
01	17	503	6
01	18	505	6
01	19	507	6
01	20	509	6
01	21	511	6
01	22	513	6
01	23	515	6
01	24	517	6
01	25	520	6
01	26	522	6
01	27	524	6
01	28	526	6
01	29	529	6
01	30	531	7
01	31	534	7
01	32	537	7
01	33	540	8
01	34	544	8
01	35	548	9
01	36	554	10
01	37	561	12
01	38	574	17
01	39	597	34

Grade 3 Reading, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	443	17
02	2	455	12
02	3	463	10
02	4	469	9
02	5	473	8
02	6	477	8
02	7	480	7
02	8	483	7
02	9	486	7
02	10	488	6
02	11	491	6
02	12	493	6
02	13	495	6
02	14	497	6
02	15	499	6
02	16	501	6
02	17	503	6
02	18	505	6
02	19	507	6
02	20	508	6
02	21	510	6
02	22	512	6
02	23	514	6
02	24	516	6
02	25	518	6
02	26	521	6
02	27	523	6
02	28	525	6
02	29	528	7
02	30	531	7
02	31	534	7
02	32	537	8
02	33	541	8
02	34	545	9
02	35	551	10
02	36	559	12
02	37	571	17
02	38	595	34

Grade 3 Reading, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	444	17
03	2	456	12
03	3	464	10
03	4	469	9
03	5	474	8
03	6	477	8
03	7	481	7
03	8	484	7
03	9	487	7
03	10	489	6
03	11	492	6
03	12	494	6
03	13	496	6
03	14	499	6
03	15	501	6
03	16	503	6
03	17	505	6
03	18	507	6
03	19	509	6
03	20	511	6
03	21	513	6
03	22	515	6
03	23	517	6
03	24	519	6
03	25	521	6
03	26	523	6
03	27	525	6
03	28	528	7
03	29	531	7
03	30	533	7
03	31	537	7
03	32	540	8
03	33	544	9
03	34	549	9
03	35	555	11
03	36	563	13
03	37	576	17
03	38	600	34

Grade 3 Reading, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	33
04	1	446	17
04	2	458	12
04	3	466	10
04	4	471	9
04	5	475	8
04	6	479	8
04	7	482	7
04	8	485	7
04	9	488	7
04	10	491	6
04	11	493	6
04	12	495	6
04	13	498	6
04	14	500	6
04	15	502	6
04	16	504	6
04	17	506	6
04	18	508	6
04	19	510	6
04	20	511	6
04	21	513	6
04	22	515	6
04	23	517	6
04	24	519	6
04	25	521	6
04	26	523	6
04	27	525	6
04	28	528	6
04	29	530	7
04	30	533	7
04	31	536	7
04	32	539	8
04	33	543	8
04	34	547	9
04	35	553	10
04	36	560	12
04	37	572	17
04	38	596	34

Grade 3 Reading, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	33
05	1	448	17
05	2	460	12
05	3	467	10
05	4	473	9
05	5	477	8
05	6	481	8
05	7	484	7
05	8	487	7
05	9	490	7
05	10	492	6
05	11	495	6
05	12	497	6
05	13	499	6
05	14	501	6
05	15	503	6
05	16	505	6
05	17	507	6
05	18	509	6
05	19	511	6
05	20	513	6
05	21	515	6
05	22	517	6
05	23	519	6
05	24	522	6
05	25	524	6
05	26	526	6
05	27	529	7
05	28	532	7
05	29	535	7
05	30	538	8
05	31	542	8
05	32	547	9
05	33	553	10
05	34	560	13
05	35	573	17
05	36	597	34

Grade 3 Reading, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	34
06	1	441	17
06	2	454	12
06	3	462	10
06	4	467	9
06	5	472	8
06	6	476	8
06	7	479	7
06	8	482	7
06	9	485	7
06	10	488	6
06	11	490	6
06	12	492	6
06	13	495	6
06	14	497	6
06	15	499	6
06	16	501	6
06	17	503	6
06	18	505	6
06	19	507	6
06	20	509	6
06	21	511	6
06	22	513	6
06	23	515	6
06	24	517	6
06	25	519	6
06	26	522	6
06	27	524	6
06	28	527	7
06	29	529	7
06	30	532	7
06	31	535	7
06	32	539	8
06	33	543	8
06	34	547	9
06	35	553	10
06	36	560	12
06	37	573	17
06	38	596	34

Grade 4 Reading, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	443	17
01	2	456	12
01	3	463	10
01	4	469	9
01	5	473	8
01	6	477	8
01	7	481	7
01	8	484	7
01	9	487	7
01	10	489	7
01	11	492	6
01	12	495	6
01	13	497	6
01	14	499	6
01	15	502	6
01	16	504	6
01	17	506	6
01	18	508	6
01	19	510	6
01	20	513	6
01	21	515	6
01	22	517	6
01	23	519	6
01	24	521	6
01	25	524	6
01	26	526	6
01	27	529	6
01	28	531	7
01	29	534	7
01	30	537	7
01	31	540	7
01	32	543	8
01	33	547	8
01	34	551	9
01	35	557	10
01	36	565	12
01	37	577	17
01	38	600	34

Grade 4 Reading, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	443	17
02	2	455	12
02	3	463	10
02	4	468	9
02	5	473	8
02	6	477	8
02	7	480	7
02	8	483	7
02	9	486	7
02	10	489	7
02	11	491	6
02	12	494	6
02	13	496	6
02	14	498	6
02	15	500	6
02	16	502	6
02	17	504	6
02	18	506	6
02	19	509	6
02	20	511	6
02	21	513	6
02	22	515	6
02	23	517	6
02	24	519	6
02	25	521	6
02	26	523	6
02	27	525	6
02	28	527	6
02	29	530	6
02	30	532	7
02	31	535	7
02	32	538	7
02	33	541	8
02	34	545	8
02	35	549	9
02	36	555	10
02	37	562	12
02	38	574	17
02	39	598	34

Grade 4 Reading, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	33
03	1	439	17
03	2	452	12
03	3	459	10
03	4	464	9
03	5	469	8
03	6	473	8
03	7	476	7
03	8	479	7
03	9	482	7
03	10	484	6
03	11	487	6
03	12	489	6
03	13	492	6
03	14	494	6
03	15	496	6
03	16	498	6
03	17	500	6
03	18	502	6
03	19	504	6
03	20	506	6
03	21	508	6
03	22	511	6
03	23	513	6
03	24	515	6
03	25	517	6
03	26	519	6
03	27	522	6
03	28	524	6
03	29	527	7
03	30	529	7
03	31	532	7
03	32	535	7
03	33	539	8
03	34	542	8
03	35	547	9
03	36	552	9
03	37	558	11
03	38	565	13
03	39	578	17
03	40	600	34

Grade 4 Reading, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	33
04	1	443	17
04	2	455	12
04	3	462	10
04	4	468	9
04	5	472	8
04	6	476	8
04	7	480	7
04	8	483	7
04	9	486	7
04	10	488	7
04	11	491	6
04	12	493	6
04	13	496	6
04	14	498	6
04	15	500	6
04	16	502	6
04	17	504	6
04	18	506	6
04	19	508	6
04	20	510	6
04	21	512	6
04	22	514	6
04	23	517	6
04	24	519	6
04	25	521	6
04	26	523	6
04	27	525	6
04	28	528	6
04	29	530	6
04	30	533	7
04	31	535	7
04	32	538	7
04	33	542	7
04	34	545	8
04	35	549	8
04	36	554	9
04	37	560	10
04	38	568	12
04	39	580	17
04	40	600	34

Grade 5 Reading, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	440	17
01	2	453	12
01	3	461	10
01	4	466	9
01	5	471	8
01	6	475	8
01	7	479	8
01	8	482	7
01	9	485	7
01	10	488	7
01	11	490	7
01	12	493	6
01	13	495	6
01	14	498	6
01	15	500	6
01	16	502	6
01	17	504	6
01	18	507	6
01	19	509	6
01	20	511	6
01	21	513	6
01	22	515	6
01	23	518	6
01	24	520	6
01	25	522	6
01	26	525	6
01	27	527	7
01	28	530	7
01	29	533	7
01	30	536	7
01	31	539	7
01	32	542	8
01	33	546	8
01	34	551	9
01	35	556	10
01	36	562	11
01	37	570	12
01	38	581	16
01	39	600	32

Grade 5 Reading, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	440	17
02	2	453	12
02	3	460	10
02	4	466	9
02	5	470	8
02	6	474	8
02	7	477	7
02	8	480	7
02	9	483	7
02	10	486	7
02	11	488	6
02	12	491	6
02	13	493	6
02	14	495	6
02	15	498	6
02	16	500	6
02	17	502	6
02	18	504	6
02	19	506	6
02	20	508	6
02	21	510	6
02	22	512	6
02	23	514	6
02	24	516	6
02	25	519	6
02	26	521	6
02	27	523	6
02	28	525	6
02	29	528	6
02	30	530	6
02	31	533	7
02	32	535	7
02	33	538	7
02	34	541	7
02	35	544	8
02	36	548	8
02	37	552	9
02	38	557	9
02	39	563	11
02	40	571	13
02	41	583	17
02	42	600	34

Grade 5 Reading, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	33
03	1	444	17
03	2	456	12
03	3	464	10
03	4	469	9
03	5	473	8
03	6	477	8
03	7	480	7
03	8	483	7
03	9	486	7
03	10	489	6
03	11	491	6
03	12	493	6
03	13	496	6
03	14	498	6
03	15	500	6
03	16	502	6
03	17	504	6
03	18	506	6
03	19	508	6
03	20	510	6
03	21	512	6
03	22	514	6
03	23	516	6
03	24	518	6
03	25	520	6
03	26	522	6
03	27	524	6
03	28	526	6
03	29	528	6
03	30	531	6
03	31	533	6
03	32	536	7
03	33	538	7
03	34	541	7
03	35	545	8
03	36	549	8
03	37	553	9
03	38	559	10
03	39	566	12
03	40	578	17
03	41	600	34

Grade 5 Reading, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	439	17
04	2	451	12
04	3	459	10
04	4	465	9
04	5	469	8
04	6	473	8
04	7	477	7
04	8	480	7
04	9	483	7
04	10	486	7
04	11	488	7
04	12	491	6
04	13	493	6
04	14	496	6
04	15	498	6
04	16	500	6
04	17	502	6
04	18	504	6
04	19	506	6
04	20	509	6
04	21	511	6
04	22	513	6
04	23	515	6
04	24	517	6
04	25	519	6
04	26	521	6
04	27	523	6
04	28	526	6
04	29	528	6
04	30	531	6
04	31	533	7
04	32	536	7
04	33	539	7
04	34	542	8
04	35	546	8
04	36	550	9
04	37	555	9
04	38	561	11
04	39	569	13
04	40	582	18
04	41	600	34

Grade 6 Reading, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	438	17
01	2	451	12
01	3	458	10
01	4	464	9
01	5	469	8
01	6	473	8
01	7	476	7
01	8	479	7
01	9	482	7
01	10	485	7
01	11	488	6
01	12	490	6
01	13	492	6
01	14	495	6
01	15	497	6
01	16	499	6
01	17	501	6
01	18	504	6
01	19	506	6
01	20	508	6
01	21	510	6
01	22	512	6
01	23	514	6
01	24	517	6
01	25	519	6
01	26	521	6
01	27	524	6
01	28	526	7
01	29	529	7
01	30	532	7
01	31	535	7
01	32	538	8
01	33	542	8
01	34	546	9
01	35	551	9
01	36	557	10
01	37	565	12
01	38	577	17
01	39	600	33

Grade 6 Reading, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	447	17
02	2	459	12
02	3	466	10
02	4	472	9
02	5	476	8
02	6	480	8
02	7	484	7
02	8	487	7
02	9	489	7
02	10	492	6
02	11	494	6
02	12	497	6
02	13	499	6
02	14	501	6
02	15	503	6
02	16	505	6
02	17	507	6
02	18	509	6
02	19	511	6
02	20	513	6
02	21	515	6
02	22	518	6
02	23	520	6
02	24	522	6
02	25	524	6
02	26	526	6
02	27	529	6
02	28	531	7
02	29	534	7
02	30	537	7
02	31	540	7
02	32	543	7
02	33	547	8
02	34	551	8
02	35	555	9
02	36	560	10
02	37	566	11
02	38	574	13
02	39	588	18
02	40	600	34

Grade 6 Reading, 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	476	8
03	7	479	7
03	8	482	7
03	9	485	7
03	10	488	7
03	11	490	6
03	12	493	6
03	13	495	6
03	14	498	6
03	15	500	6
03	16	502	6
03	17	504	6
03	18	506	6
03	19	508	6
03	20	511	6
03	21	513	6
03	22	515	6
03	23	517	6
03	24	519	6
03	25	522	6
03	26	524	6
03	27	526	6
03	28	529	7
03	29	532	7
03	30	534	7
03	31	537	7
03	32	540	7
03	33	544	8
03	34	547	8
03	35	551	8
03	36	556	9
03	37	561	10
03	38	568	11
03	39	576	13
03	40	590	18
03	41	600	34

Grade 6 Reading, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	446	17
04	2	458	12
04	3	465	10
04	4	471	9
04	5	475	8
04	6	479	8
04	7	482	7
04	8	485	7
04	9	488	7
04	10	490	6
04	11	493	6
04	12	495	6
04	13	497	6
04	14	500	6
04	15	502	6
04	16	504	6
04	17	506	6
04	18	508	6
04	19	510	6
04	20	512	6
04	21	514	6
04	22	516	6
04	23	518	6
04	24	520	6
04	25	522	6
04	26	524	6
04	27	527	6
04	28	529	6
04	29	532	7
04	30	535	7
04	31	538	7
04	32	541	8
04	33	544	8
04	34	548	8
04	35	553	9
04	36	559	10
04	37	566	12
04	38	578	17
04	39	600	33

Grade 7 Reading, 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	8
01	6	472	8
01	7	475	7
01	8	478	7
01	9	481	7
01	10	484	7
01	11	487	6
01	12	489	6
01	13	491	6
01	14	494	6
01	15	496	6
01	16	498	6
01	17	500	6
01	18	502	6
01	19	504	6
01	20	506	6
01	21	508	6
01	22	511	6
01	23	513	6
01	24	515	6
01	25	517	6
01	26	519	6
01	27	521	6
01	28	524	6
01	29	526	6
01	30	529	7
01	31	531	7
01	32	534	7
01	33	538	7
01	34	541	8
01	35	545	8
01	36	550	9
01	37	556	10
01	38	563	12
01	39	576	17
01	40	600	34

Grade 7 Reading, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	441	17
02	2	453	12
02	3	461	10
02	4	466	9
02	5	471	8
02	6	475	8
02	7	478	7
02	8	481	7
02	9	484	7
02	10	487	6
02	11	489	6
02	12	491	6
02	13	494	6
02	14	496	6
02	15	498	6
02	16	500	6
02	17	502	6
02	18	504	6
02	19	506	6
02	20	508	6
02	21	510	6
02	22	511	6
02	23	513	6
02	24	515	6
02	25	517	6
02	26	519	6
02	27	521	6
02	28	523	6
02	29	526	6
02	30	528	6
02	31	531	7
02	32	533	7
02	33	536	7
02	34	539	7
02	35	543	8
02	36	546	8
02	37	551	9
02	38	557	10
02	39	565	12
02	40	577	17
02	41	600	34

Grade 7 Reading, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	441	17
03	2	454	12
03	3	462	10
03	4	468	9
03	5	472	8
03	6	476	8
03	7	480	7
03	8	483	7
03	9	486	7
03	10	489	7
03	11	491	6
03	12	494	6
03	13	496	6
03	14	498	6
03	15	500	6
03	16	502	6
03	17	505	6
03	18	507	6
03	19	509	6
03	20	511	6
03	21	513	6
03	22	515	6
03	23	517	6
03	24	519	6
03	25	521	6
03	26	523	6
03	27	525	6
03	28	527	6
03	29	530	6
03	30	532	7
03	31	535	7
03	32	537	7
03	33	541	7
03	34	544	8
03	35	548	8
03	36	552	9
03	37	558	10
03	38	566	12
03	39	578	17
03	40	600	34

Grade 7 Reading, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	440	17
04	2	453	13
04	3	461	11
04	4	467	9
04	5	472	9
04	6	476	8
04	7	479	7
04	8	482	7
04	9	485	7
04	10	488	7
04	11	491	6
04	12	493	6
04	13	495	6
04	14	497	6
04	15	500	6
04	16	502	6
04	17	504	6
04	18	506	6
04	19	508	6
04	20	510	6
04	21	512	6
04	22	514	6
04	23	516	6
04	24	518	6
04	25	521	6
04	26	523	6
04	27	525	6
04	28	528	6
04	29	530	7
04	30	533	7
04	31	536	7
04	32	539	7
04	33	542	8
04	34	546	8
04	35	551	9
04	36	557	10
04	37	564	12
04	38	577	17
04	39	600	34

Grade 8 Reading, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	444	17
01	2	457	12
01	3	464	10
01	4	470	9
01	5	475	8
01	6	479	8
01	7	482	7
01	8	485	7
01	9	488	7
01	10	491	7
01	11	493	6
01	12	496	6
01	13	498	6
01	14	500	6
01	15	503	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	7
01	30	535	7
01	31	538	7
01	32	541	8
01	33	545	8
01	34	549	9
01	35	555	10
01	36	562	12
01	37	575	17
01	38	598	34

Grade 8 Reading, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	444	17
02	2	456	12
02	3	464	10
02	4	470	9
02	5	474	8
02	6	478	8
02	7	481	7
02	8	484	7
02	9	487	7
02	10	490	6
02	11	492	6
02	12	495	6
02	13	497	6
02	14	499	6
02	15	501	6
02	16	503	6
02	17	505	6
02	18	507	6
02	19	509	6
02	20	511	6
02	21	513	6
02	22	515	6
02	23	517	6
02	24	519	6
02	25	520	6
02	26	522	6
02	27	525	6
02	28	527	6
02	29	529	6
02	30	531	6
02	31	534	7
02	32	536	7
02	33	539	7
02	34	542	8
02	35	546	8
02	36	550	9
02	37	556	10
02	38	563	12
02	39	576	17
02	40	599	34

Grade 8 Reading, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	446	17
03	2	458	12
03	3	466	10
03	4	471	9
03	5	476	8
03	6	480	8
03	7	483	7
03	8	486	7
03	9	489	7
03	10	492	6
03	11	494	6
03	12	496	6
03	13	499	6
03	14	501	6
03	15	503	6
03	16	505	6
03	17	507	6
03	18	509	6
03	19	511	6
03	20	512	6
03	21	514	6
03	22	516	6
03	23	518	6
03	24	520	6
03	25	522	6
03	26	524	6
03	27	526	6
03	28	528	6
03	29	530	6
03	30	533	6
03	31	535	7
03	32	538	7
03	33	541	7
03	34	544	8
03	35	548	8
03	36	552	9
03	37	558	10
03	38	565	12
03	39	577	17
03	40	600	34

Grade 8 Reading, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	440	17
04	2	453	12
04	3	461	10
04	4	466	9
04	5	471	8
04	6	475	8
04	7	478	7
04	8	482	7
04	9	485	7
04	10	487	7
04	11	490	6
04	12	492	6
04	13	495	6
04	14	497	6
04	15	499	6
04	16	501	6
04	17	503	6
04	18	505	6
04	19	507	6
04	20	509	6
04	21	511	6
04	22	513	6
04	23	516	6
04	24	518	6
04	25	520	6
04	26	522	6
04	27	524	6
04	28	527	6
04	29	529	7
04	30	532	7
04	31	535	7
04	32	538	7
04	33	541	8
04	34	545	8
04	35	549	9
04	36	554	9
04	37	560	11
04	38	568	13
04	39	580	17
04	40	600	34

Grade 10 Reading, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	444	17
01	2	457	13
01	3	464	11
01	4	470	9
01	5	475	9
01	6	479	8
01	7	483	8
01	8	486	7
01	9	489	7
01	10	492	7
01	11	494	6
01	12	497	6
01	13	499	6
01	14	501	6
01	15	503	6
01	16	506	6
01	17	508	6
01	18	510	6
01	19	512	6
01	20	514	6
01	21	516	6
01	22	518	6
01	23	520	6
01	24	522	6
01	25	524	6
01	26	527	6
01	27	529	6
01	28	531	7
01	29	534	7
01	30	537	7
01	31	540	7
01	32	544	8
01	33	548	9
01	34	553	9
01	35	559	11
01	36	566	13
01	37	579	17
01	38	600	34

Grade 10 Reading, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	443	17
02	2	455	12
02	3	463	10
02	4	468	9
02	5	473	8
02	6	476	8
02	7	480	7
02	8	483	7
02	9	485	7
02	10	488	6
02	11	490	6
02	12	493	6
02	13	495	6
02	14	497	6
02	15	499	6
02	16	501	6
02	17	503	6
02	18	505	6
02	19	507	6
02	20	509	6
02	21	511	6
02	22	513	6
02	23	515	6
02	24	517	6
02	25	519	6
02	26	521	6
02	27	523	6
02	28	525	6
02	29	527	6
02	30	530	6
02	31	532	6
02	32	535	7
02	33	537	7
02	34	540	7
02	35	544	8
02	36	547	8
02	37	552	9
02	38	558	10
02	39	565	12
02	40	578	17
02	41	600	34

Grade 10 Reading, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	443	17
03	2	456	12
03	3	463	10
03	4	469	9
03	5	474	8
03	6	478	8
03	7	481	7
03	8	484	7
03	9	487	7
03	10	490	7
03	11	492	6
03	12	495	6
03	13	497	6
03	14	499	6
03	15	501	6
03	16	503	6
03	17	505	6
03	18	507	6
03	19	509	6
03	20	511	6
03	21	513	6
03	22	515	6
03	23	517	6
03	24	519	6
03	25	521	6
03	26	523	6
03	27	525	6
03	28	528	6
03	29	530	6
03	30	532	6
03	31	535	7
03	32	538	7
03	33	541	7
03	34	544	8
03	35	548	8
03	36	552	9
03	37	558	10
03	38	565	12
03	39	578	17
03	40	600	34

Grade 10 Reading, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	442	17
04	2	454	12
04	3	462	10
04	4	468	9
04	5	472	8
04	6	476	8
04	7	479	7
04	8	482	7
04	9	485	7
04	10	488	6
04	11	490	6
04	12	492	6
04	13	495	6
04	14	497	6
04	15	499	6
04	16	501	6
04	17	503	6
04	18	505	6
04	19	507	6
04	20	509	6
04	21	511	6
04	22	513	6
04	23	515	6
04	24	517	6
04	25	519	6
04	26	521	6
04	27	523	6
04	28	525	6
04	29	527	6
04	30	529	6
04	31	532	6
04	32	534	7
04	33	537	7
04	34	540	7
04	35	543	8
04	36	547	8
04	37	552	9
04	38	557	10
04	39	565	12
04	40	577	17
04	41	600	34

Grade 3 Mathematics, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	441	17
01	2	454	12
01	3	461	10
01	4	467	9
01	5	472	8
01	6	476	8
01	7	479	7
01	8	483	7
01	9	485	7
01	10	488	7
01	11	491	6
01	12	493	6
01	13	496	6
01	14	498	6
01	15	500	6
01	16	502	6
01	17	504	6
01	18	507	6
01	19	509	6
01	20	511	6
01	21	513	6
01	22	515	6
01	23	517	6
01	24	519	6
01	25	522	6
01	26	524	6
01	27	526	6
01	28	529	7
01	29	532	7
01	30	534	7
01	31	538	7
01	32	541	8
01	33	545	8
01	34	549	9
01	35	555	10
01	36	563	12
01	37	575	17
01	38	599	34

Grade 3 Mathematics, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	444	17
02	2	456	12
02	3	464	10
02	4	469	9
02	5	474	8
02	6	478	8
02	7	481	7
02	8	485	7
02	9	487	7
02	10	490	7
02	11	493	6
02	12	495	6
02	13	497	6
02	14	500	6
02	15	502	6
02	16	504	6
02	17	506	6
02	18	508	6
02	19	510	6
02	20	513	6
02	21	515	6
02	22	517	6
02	23	519	6
02	24	521	6
02	25	523	6
02	26	526	6
02	27	528	6
02	28	531	7
02	29	534	7
02	30	537	7
02	31	540	8
02	32	543	8
02	33	547	9
02	34	552	9
02	35	558	11
02	36	566	13
02	37	579	17
02	38	600	34

Grade 3 Mathematics, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	443	17
03	2	455	12
03	3	463	10
03	4	469	9
03	5	473	8
03	6	477	8
03	7	481	7
03	8	484	7
03	9	487	7
03	10	490	7
03	11	492	6
03	12	495	6
03	13	497	6
03	14	499	6
03	15	501	6
03	16	503	6
03	17	506	6
03	18	508	6
03	19	510	6
03	20	512	6
03	21	514	6
03	22	516	6
03	23	518	6
03	24	521	6
03	25	523	6
03	26	525	6
03	27	528	7
03	28	530	7
03	29	533	7
03	30	536	7
03	31	539	8
03	32	543	8
03	33	547	9
03	34	552	9
03	35	558	11
03	36	565	13
03	37	578	17
03	38	600	34

Grade 3 Mathematics, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	443	17
04	2	456	13
04	3	464	10
04	4	469	9
04	5	474	8
04	6	478	8
04	7	482	7
04	8	485	7
04	9	488	7
04	10	491	7
04	11	493	6
04	12	495	6
04	13	498	6
04	14	500	6
04	15	502	6
04	16	504	6
04	17	506	6
04	18	508	6
04	19	510	6
04	20	512	6
04	21	514	6
04	22	516	6
04	23	518	6
04	24	521	6
04	25	523	6
04	26	525	6
04	27	527	6
04	28	530	7
04	29	533	7
04	30	535	7
04	31	538	7
04	32	542	8
04	33	546	8
04	34	550	9
04	35	556	10
04	36	564	12
04	37	576	17
04	38	600	34

Grade 3 Mathematics, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	444	17
05	2	456	12
05	3	464	10
05	4	470	9
05	5	474	8
05	6	478	8
05	7	482	7
05	8	485	7
05	9	487	7
05	10	490	7
05	11	493	6
05	12	495	6
05	13	497	6
05	14	499	6
05	15	501	6
05	16	503	6
05	17	505	6
05	18	507	6
05	19	509	6
05	20	511	6
05	21	513	6
05	22	515	6
05	23	517	6
05	24	519	6
05	25	521	6
05	26	524	6
05	27	526	6
05	28	528	6
05	29	531	7
05	30	534	7
05	31	537	7
05	32	540	8
05	33	544	8
05	34	548	9
05	35	554	10
05	36	561	12
05	37	573	17
05	38	597	34

Grade 3 Mathematics, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	33
06	1	445	17
06	2	457	12
06	3	464	10
06	4	469	9
06	5	473	8
06	6	477	8
06	7	480	7
06	8	483	7
06	9	486	7
06	10	489	7
06	11	491	6
06	12	494	6
06	13	496	6
06	14	499	6
06	15	501	6
06	16	503	6
06	17	505	6
06	18	507	6
06	19	509	6
06	20	512	6
06	21	514	6
06	22	516	6
06	23	518	6
06	24	520	6
06	25	522	6
06	26	525	6
06	27	527	6
06	28	530	7
06	29	532	7
06	30	535	7
06	31	538	7
06	32	542	8
06	33	546	8
06	34	550	9
06	35	556	10
06	36	564	12
06	37	576	17
06	38	600	34

Grade 4 Mathematics, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	443	17
01	2	456	13
01	3	464	11
01	4	470	9
01	5	474	9
01	6	479	8
01	7	482	8
01	8	486	7
01	9	489	7
01	10	492	7
01	11	495	7
01	12	497	7
01	13	500	7
01	14	503	7
01	15	505	6
01	16	508	6
01	17	510	6
01	18	513	6
01	19	515	6
01	20	518	6
01	21	520	6
01	22	523	7
01	23	525	7
01	24	528	7
01	25	531	7
01	26	533	7
01	27	536	7
01	28	539	7
01	29	542	7
01	30	546	8
01	31	549	8
01	32	554	9
01	33	559	10
01	34	566	12
01	35	577	16
01	36	599	33

Grade 4 Mathematics, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	442	17
02	2	456	13
02	3	464	11
02	4	470	10
02	5	476	9
02	6	480	8
02	7	484	8
02	8	488	8
02	9	491	7
02	10	494	7
02	11	497	7
02	12	500	7
02	13	502	7
02	14	505	6
02	15	507	6
02	16	510	6
02	17	512	6
02	18	514	6
02	19	517	6
02	20	519	6
02	21	521	6
02	22	524	6
02	23	526	6
02	24	528	6
02	25	531	7
02	26	534	7
02	27	537	7
02	28	540	7
02	29	543	8
02	30	547	8
02	31	551	9
02	32	556	9
02	33	562	11
02	34	569	13
02	35	582	17
02	36	600	34

Grade 4 Mathematics, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	444	17
03	2	457	12
03	3	464	10
03	4	470	9
03	5	474	8
03	6	478	8
03	7	482	8
03	8	485	7
03	9	488	7
03	10	491	7
03	11	494	7
03	12	497	7
03	13	499	6
03	14	502	6
03	15	504	6
03	16	507	6
03	17	509	6
03	18	511	6
03	19	514	6
03	20	516	6
03	21	518	6
03	22	521	6
03	23	523	6
03	24	526	7
03	25	529	7
03	26	531	7
03	27	534	7
03	28	538	7
03	29	541	8
03	30	545	8
03	31	549	9
03	32	554	9
03	33	560	11
03	34	568	13
03	35	581	17
03	36	600	34

Grade 4 Mathematics, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	33
04	1	446	17
04	2	458	12
04	3	465	10
04	4	470	9
04	5	475	8
04	6	479	8
04	7	482	8
04	8	485	7
04	9	489	7
04	10	492	7
04	11	494	7
04	12	497	7
04	13	500	7
04	14	502	6
04	15	505	6
04	16	507	6
04	17	510	6
04	18	512	6
04	19	514	6
04	20	517	6
04	21	519	6
04	22	522	6
04	23	524	7
04	24	527	7
04	25	530	7
04	26	533	7
04	27	536	7
04	28	539	8
04	29	543	8
04	30	547	8
04	31	551	9
04	32	556	10
04	33	562	11
04	34	570	13
04	35	583	17
04	36	600	34

Grade 4 Mathematics, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	443	17
05	2	455	13
05	3	463	10
05	4	469	9
05	5	474	9
05	6	478	8
05	7	481	8
05	8	485	7
05	9	488	7
05	10	491	7
05	11	493	7
05	12	496	7
05	13	499	7
05	14	501	7
05	15	504	6
05	16	506	6
05	17	509	6
05	18	511	6
05	19	514	6
05	20	516	6
05	21	519	6
05	22	521	6
05	23	524	7
05	24	526	7
05	25	529	7
05	26	532	7
05	27	535	7
05	28	538	8
05	29	542	8
05	30	546	8
05	31	550	9
05	32	555	10
05	33	562	11
05	34	570	13
05	35	584	18
05	36	600	34

Grade 4 Mathematics, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	34
06	1	445	17
06	2	458	12
06	3	465	10
06	4	471	9
06	5	476	8
06	6	480	8
06	7	483	8
06	8	487	7
06	9	490	7
06	10	492	7
06	11	495	7
06	12	498	6
06	13	500	6
06	14	503	6
06	15	505	6
06	16	507	6
06	17	510	6
06	18	512	6
06	19	514	6
06	20	517	6
06	21	519	6
06	22	522	6
06	23	524	7
06	24	527	7
06	25	530	7
06	26	533	7
06	27	536	7
06	28	539	8
06	29	543	8
06	30	547	8
06	31	551	9
06	32	556	10
06	33	563	11
06	34	571	13
06	35	584	17
06	36	600	34

Grade 5 Mathematics, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	442	17
01	2	455	13
01	3	462	11
01	4	468	9
01	5	473	9
01	6	477	8
01	7	481	8
01	8	484	7
01	9	487	7
01	10	490	7
01	11	493	7
01	12	496	7
01	13	498	7
01	14	501	6
01	15	503	6
01	16	506	6
01	17	508	6
01	18	511	6
01	19	513	6
01	20	516	6
01	21	518	6
01	22	521	7
01	23	523	7
01	24	526	7
01	25	529	7
01	26	531	7
01	27	534	7
01	28	537	7
01	29	541	8
01	30	545	8
01	31	549	9
01	32	554	10
01	33	560	11
01	34	569	13
01	35	583	18
01	36	600	34

Grade 5 Mathematics, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	443	17
02	2	456	13
02	3	464	11
02	4	470	9
02	5	475	9
02	6	479	8
02	7	483	8
02	8	486	7
02	9	489	7
02	10	492	7
02	11	495	7
02	12	498	7
02	13	500	6
02	14	503	6
02	15	505	6
02	16	507	6
02	17	510	6
02	18	512	6
02	19	514	6
02	20	516	6
02	21	518	6
02	22	521	6
02	23	523	6
02	24	525	6
02	25	528	6
02	26	530	7
02	27	533	7
02	28	536	7
02	29	539	8
02	30	543	8
02	31	547	9
02	32	552	10
02	33	559	11
02	34	568	14
02	35	583	19
02	36	600	35

Grade 5 Mathematics, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	444	17
03	2	457	12
03	3	464	10
03	4	470	9
03	5	475	8
03	6	479	8
03	7	482	8
03	8	486	7
03	9	489	7
03	10	492	7
03	11	494	7
03	12	497	6
03	13	499	6
03	14	502	6
03	15	504	6
03	16	506	6
03	17	508	6
03	18	510	6
03	19	513	6
03	20	515	6
03	21	517	6
03	22	519	6
03	23	521	6
03	24	523	6
03	25	526	6
03	26	528	6
03	27	531	7
03	28	534	7
03	29	537	7
03	30	540	8
03	31	544	8
03	32	548	9
03	33	553	10
03	34	560	12
03	35	572	17
03	36	596	33

Grade 5 Mathematics, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	444	17
04	2	457	13
04	3	465	11
04	4	471	9
04	5	476	9
04	6	480	8
04	7	483	8
04	8	487	7
04	9	490	7
04	10	493	7
04	11	495	7
04	12	498	6
04	13	500	6
04	14	502	6
04	15	505	6
04	16	507	6
04	17	509	6
04	18	511	6
04	19	513	6
04	20	515	6
04	21	517	6
04	22	520	6
04	23	522	6
04	24	524	6
04	25	526	6
04	26	529	6
04	27	531	7
04	28	534	7
04	29	537	7
04	30	541	8
04	31	545	9
04	32	549	10
04	33	556	11
04	34	565	14
04	35	580	19
04	36	600	35

Grade 5 Mathematics, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	442	17
05	2	455	12
05	3	463	10
05	4	468	9
05	5	473	8
05	6	477	8
05	7	481	7
05	8	484	7
05	9	487	7
05	10	490	7
05	11	492	7
05	12	495	6
05	13	497	6
05	14	500	6
05	15	502	6
05	16	504	6
05	17	506	6
05	18	508	6
05	19	510	6
05	20	513	6
05	21	515	6
05	22	517	6
05	23	519	6
05	24	521	6
05	25	524	6
05	26	526	7
05	27	529	7
05	28	532	7
05	29	535	7
05	30	538	8
05	31	542	9
05	32	547	9
05	33	553	11
05	34	562	13
05	35	576	18
05	36	600	34

Grade 5 Mathematics, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	34
06	1	445	17
06	2	457	13
06	3	465	10
06	4	471	9
06	5	476	9
06	6	480	8
06	7	483	8
06	8	487	7
06	9	490	7
06	10	493	7
06	11	495	7
06	12	498	7
06	13	500	6
06	14	503	6
06	15	505	6
06	16	507	6
06	17	510	6
06	18	512	6
06	19	514	6
06	20	517	6
06	21	519	6
06	22	521	6
06	23	523	6
06	24	526	6
06	25	528	6
06	26	531	7
06	27	533	7
06	28	536	7
06	29	539	7
06	30	542	8
06	31	546	8
06	32	550	9
06	33	555	10
06	34	562	12
06	35	574	17
06	36	598	33

Grade 6 Mathematics, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	33
01	1	444	17
01	2	456	12
01	3	464	10
01	4	470	9
01	5	474	8
01	6	478	8
01	7	482	7
01	8	485	7
01	9	488	7
01	10	491	7
01	11	493	7
01	12	496	6
01	13	498	6
01	14	501	6
01	15	503	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	522	6
01	25	524	6
01	26	526	6
01	27	528	6
01	28	531	7
01	29	533	7
01	30	536	7
01	31	540	8
01	32	543	8
01	33	548	10
01	34	555	12
01	35	566	17
01	36	589	33

Grade 6 Mathematics, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	33
02	1	445	17
02	2	457	12
02	3	464	10
02	4	470	9
02	5	475	8
02	6	479	8
02	7	482	7
02	8	485	7
02	9	488	7
02	10	491	7
02	11	494	7
02	12	496	7
02	13	499	6
02	14	501	6
02	15	504	6
02	16	506	6
02	17	508	6
02	18	511	6
02	19	513	6
02	20	515	6
02	21	517	6
02	22	520	6
02	23	522	6
02	24	524	6
02	25	527	6
02	26	529	6
02	27	532	7
02	28	534	7
02	29	537	7
02	30	541	7
02	31	544	8
02	32	548	9
02	33	553	10
02	34	560	12
02	35	572	17
02	36	595	33

Grade 6 Mathematics, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	445	17
03	2	457	12
03	3	465	10
03	4	471	9
03	5	476	9
03	6	480	8
03	7	483	8
03	8	487	7
03	9	490	7
03	10	493	7
03	11	495	7
03	12	498	7
03	13	501	6
03	14	503	6
03	15	505	6
03	16	508	6
03	17	510	6
03	18	512	6
03	19	514	6
03	20	516	6
03	21	519	6
03	22	521	6
03	23	523	6
03	24	525	6
03	25	527	6
03	26	530	6
03	27	532	6
03	28	535	7
03	29	537	7
03	30	540	7
03	31	544	8
03	32	548	9
03	33	553	10
03	34	560	12
03	35	571	17
03	36	595	33

Grade 6 Mathematics, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	443	17
04	2	456	12
04	3	463	10
04	4	469	9
04	5	474	9
04	6	478	8
04	7	482	8
04	8	485	7
04	9	488	7
04	10	491	7
04	11	494	7
04	12	497	7
04	13	499	7
04	14	502	6
04	15	504	6
04	16	507	6
04	17	509	6
04	18	512	6
04	19	514	6
04	20	516	6
04	21	518	6
04	22	521	6
04	23	523	6
04	24	525	6
04	25	528	6
04	26	530	6
04	27	533	7
04	28	535	7
04	29	538	7
04	30	541	7
04	31	545	8
04	32	549	9
04	33	554	10
04	34	562	12
04	35	574	17
04	36	597	34

Grade 6 Mathematics, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	442	17
05	2	455	12
05	3	462	10
05	4	468	9
05	5	473	9
05	6	477	8
05	7	481	8
05	8	484	7
05	9	487	7
05	10	490	7
05	11	493	7
05	12	495	7
05	13	498	6
05	14	500	6
05	15	503	6
05	16	505	6
05	17	508	6
05	18	510	6
05	19	512	6
05	20	514	6
05	21	517	6
05	22	519	6
05	23	521	6
05	24	523	6
05	25	526	6
05	26	528	7
05	27	531	7
05	28	534	7
05	29	537	7
05	30	540	8
05	31	544	8
05	32	548	9
05	33	553	10
05	34	561	12
05	35	573	17
05	36	596	33

Grade 6 Mathematics, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	34
06	1	444	17
06	2	456	12
06	3	464	10
06	4	470	9
06	5	475	9
06	6	479	8
06	7	482	8
06	8	486	7
06	9	489	7
06	10	492	7
06	11	495	7
06	12	498	7
06	13	500	7
06	14	503	7
06	15	505	6
06	16	508	6
06	17	510	6
06	18	513	6
06	19	515	6
06	20	517	6
06	21	520	6
06	22	522	6
06	23	524	6
06	24	526	6
06	25	529	6
06	26	531	6
06	27	534	7
06	28	537	7
06	29	539	7
06	30	543	7
06	31	546	8
06	32	550	9
06	33	556	10
06	34	563	12
06	35	575	17
06	36	599	34

Grade 7 Mathematics, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	446	17
01	2	458	13
01	3	466	10
01	4	472	9
01	5	477	8
01	6	481	8
01	7	484	7
01	8	487	7
01	9	490	7
01	10	493	6
01	11	495	6
01	12	498	6
01	13	500	6
01	14	502	6
01	15	504	6
01	16	506	6
01	17	507	6
01	18	509	5
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	526	6
01	27	528	7
01	28	531	7
01	29	534	7
01	30	538	8
01	31	542	8
01	32	546	9
01	33	552	10
01	34	560	13
01	35	573	17
01	36	597	34

Grade 7 Mathematics, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	443	17
02	2	456	13
02	3	464	11
02	4	470	9
02	5	475	9
02	6	479	8
02	7	483	8
02	8	486	7
02	9	489	7
02	10	492	7
02	11	494	6
02	12	497	6
02	13	499	6
02	14	501	6
02	15	503	6
02	16	505	6
02	17	507	6
02	18	508	6
02	19	510	6
02	20	512	6
02	21	514	6
02	22	516	6
02	23	518	6
02	24	520	6
02	25	522	6
02	26	524	6
02	27	527	7
02	28	530	7
02	29	533	7
02	30	536	8
02	31	540	8
02	32	545	9
02	33	550	10
02	34	558	12
02	35	570	17
02	36	594	34

Grade 7 Mathematics, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	445	17
03	2	458	13
03	3	466	11
03	4	472	9
03	5	477	9
03	6	481	8
03	7	485	8
03	8	488	7
03	9	491	7
03	10	494	7
03	11	496	6
03	12	498	6
03	13	500	6
03	14	502	6
03	15	504	6
03	16	506	6
03	17	508	5
03	18	510	5
03	19	512	6
03	20	514	6
03	21	515	6
03	22	517	6
03	23	519	6
03	24	521	6
03	25	524	6
03	26	526	6
03	27	529	7
03	28	531	7
03	29	534	7
03	30	538	8
03	31	541	8
03	32	546	9
03	33	552	10
03	34	559	12
03	35	571	17
03	36	595	34

Grade 7 Mathematics, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	445	17
04	2	458	13
04	3	466	11
04	4	472	10
04	5	477	9
04	6	481	8
04	7	485	8
04	8	488	7
04	9	491	7
04	10	494	7
04	11	496	6
04	12	498	6
04	13	501	6
04	14	503	6
04	15	505	6
04	16	507	6
04	17	508	6
04	18	510	6
04	19	512	6
04	20	514	6
04	21	516	6
04	22	518	6
04	23	520	6
04	24	523	6
04	25	525	6
04	26	527	7
04	27	530	7
04	28	533	7
04	29	536	8
04	30	540	8
04	31	544	9
04	32	549	9
04	33	555	11
04	34	563	13
04	35	576	17
04	36	600	34

Grade 7 Mathematics, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	445	17
05	2	458	13
05	3	466	11
05	4	472	9
05	5	477	9
05	6	481	8
05	7	485	8
05	8	488	7
05	9	491	7
05	10	493	7
05	11	496	6
05	12	498	6
05	13	500	6
05	14	503	6
05	15	504	6
05	16	506	6
05	17	508	6
05	18	510	6
05	19	512	6
05	20	514	6
05	21	516	6
05	22	518	6
05	23	520	6
05	24	522	6
05	25	524	6
05	26	527	6
05	27	529	7
05	28	532	7
05	29	535	7
05	30	539	8
05	31	543	8
05	32	547	9
05	33	553	10
05	34	561	12
05	35	574	17
05	36	597	34

Grade 7 Mathematics, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	34
06	1	445	17
06	2	457	13
06	3	465	11
06	4	471	9
06	5	476	9
06	6	480	8
06	7	484	8
06	8	487	7
06	9	490	7
06	10	493	7
06	11	495	6
06	12	498	6
06	13	500	6
06	14	502	6
06	15	504	6
06	16	506	6
06	17	507	6
06	18	509	6
06	19	511	6
06	20	513	6
06	21	515	6
06	22	517	6
06	23	519	6
06	24	521	6
06	25	523	6
06	26	526	6
06	27	528	7
06	28	531	7
06	29	534	7
06	30	538	8
06	31	542	8
06	32	546	9
06	33	552	10
06	34	560	13
06	35	573	17
06	36	597	34

Grade 8 Mathematics, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	443	17
01	2	456	12
01	3	463	10
01	4	469	9
01	5	474	9
01	6	478	8
01	7	482	8
01	8	485	7
01	9	488	7
01	10	491	7
01	11	494	7
01	12	496	6
01	13	499	6
01	14	501	6
01	15	503	6
01	16	505	6
01	17	508	6
01	18	510	6
01	19	512	6
01	20	514	6
01	21	516	6
01	22	518	6
01	23	520	6
01	24	523	6
01	25	525	6
01	26	527	6
01	27	529	6
01	28	532	6
01	29	534	7
01	30	537	7
01	31	540	7
01	32	544	8
01	33	548	9
01	34	554	11
01	35	565	16
01	36	588	33

Grade 8 Mathematics, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	445	17
02	2	457	12
02	3	465	10
02	4	471	9
02	5	475	8
02	6	479	8
02	7	483	7
02	8	486	7
02	9	489	7
02	10	492	7
02	11	494	7
02	12	497	6
02	13	499	6
02	14	502	6
02	15	504	6
02	16	506	6
02	17	509	6
02	18	511	6
02	19	513	6
02	20	515	6
02	21	518	6
02	22	520	6
02	23	522	6
02	24	525	6
02	25	527	6
02	26	529	6
02	27	532	6
02	28	534	7
02	29	537	7
02	30	540	7
02	31	543	8
02	32	547	9
02	33	553	10
02	34	560	12
02	35	572	17
02	36	596	34

Grade 8 Mathematics, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	445	17
03	2	458	13
03	3	465	11
03	4	471	9
03	5	476	9
03	6	480	8
03	7	484	8
03	8	487	7
03	9	490	7
03	10	493	7
03	11	496	7
03	12	498	6
03	13	501	6
03	14	503	6
03	15	505	6
03	16	507	6
03	17	509	6
03	18	512	6
03	19	514	6
03	20	516	6
03	21	518	6
03	22	520	6
03	23	522	6
03	24	524	6
03	25	526	6
03	26	528	6
03	27	531	6
03	28	533	7
03	29	536	7
03	30	539	7
03	31	543	8
03	32	547	9
03	33	552	10
03	34	559	12
03	35	571	17
03	36	595	33

Grade 8 Mathematics, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	448	17
04	2	460	12
04	3	468	10
04	4	474	9
04	5	478	8
04	6	482	8
04	7	486	7
04	8	489	7
04	9	492	7
04	10	494	7
04	11	497	6
04	12	499	6
04	13	501	6
04	14	504	6
04	15	506	6
04	16	508	6
04	17	510	6
04	18	512	6
04	19	514	6
04	20	516	6
04	21	518	6
04	22	520	6
04	23	522	6
04	24	524	6
04	25	526	6
04	26	529	6
04	27	531	7
04	28	534	7
04	29	537	7
04	30	540	7
04	31	543	8
04	32	548	9
04	33	553	10
04	34	560	12
04	35	571	17
04	36	595	33

Grade 8 Mathematics, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	446	17
05	2	459	12
05	3	467	10
05	4	472	9
05	5	477	8
05	6	481	8
05	7	485	7
05	8	488	7
05	9	491	7
05	10	494	7
05	11	496	7
05	12	499	6
05	13	501	6
05	14	503	6
05	15	506	6
05	16	508	6
05	17	510	6
05	18	512	6
05	19	514	6
05	20	517	6
05	21	519	6
05	22	521	6
05	23	523	6
05	24	525	6
05	25	527	6
05	26	530	6
05	27	532	6
05	28	535	6
05	29	537	7
05	30	540	7
05	31	543	8
05	32	547	8
05	33	552	10
05	34	559	12
05	35	570	17
05	36	593	33

Grade 8 Mathematics, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	34
06	1	446	17
06	2	459	12
06	3	466	10
06	4	472	9
06	5	477	8
06	6	481	8
06	7	484	7
06	8	488	7
06	9	491	7
06	10	493	7
06	11	496	7
06	12	498	6
06	13	501	6
06	14	503	6
06	15	506	6
06	16	508	6
06	17	510	6
06	18	512	6
06	19	514	6
06	20	517	6
06	21	519	6
06	22	521	6
06	23	523	6
06	24	526	6
06	25	528	6
06	26	531	6
06	27	533	7
06	28	536	7
06	29	539	7
06	30	542	8
06	31	545	8
06	32	550	9
06	33	556	11
06	34	564	13
06	35	578	18
06	36	600	34

Grade 10 Mathematics, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	449	17
01	2	461	12
01	3	469	10
01	4	475	9
01	5	479	8
01	6	483	8
01	7	487	7
01	8	490	7
01	9	493	7
01	10	495	7
01	11	498	6
01	12	500	6
01	13	503	6
01	14	505	6
01	15	507	6
01	16	509	6
01	17	512	6
01	18	514	6
01	19	516	6
01	20	518	6
01	21	520	6
01	22	522	6
01	23	524	6
01	24	526	6
01	25	529	6
01	26	531	6
01	27	533	6
01	28	536	7
01	29	539	7
01	30	542	7
01	31	545	8
01	32	549	9
01	33	554	10
01	34	561	12
01	35	573	17
01	36	596	33

Grade 10 Mathematics, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	446	17
02	2	458	12
02	3	466	10
02	4	472	9
02	5	476	8
02	6	480	8
02	7	484	7
02	8	487	7
02	9	490	7
02	10	492	7
02	11	495	6
02	12	497	6
02	13	500	6
02	14	502	6
02	15	504	6
02	16	507	6
02	17	509	6
02	18	511	6
02	19	513	6
02	20	515	6
02	21	518	6
02	22	520	6
02	23	522	6
02	24	525	6
02	25	527	7
02	26	530	7
02	27	533	7
02	28	536	7
02	29	539	7
02	30	542	8
02	31	546	8
02	32	550	9
02	33	556	10
02	34	563	12
02	35	575	17
02	36	598	33

Grade 10 Mathematics, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	33
03	1	449	17
03	2	461	12
03	3	468	10
03	4	474	9
03	5	478	8
03	6	482	8
03	7	486	7
03	8	489	7
03	9	492	7
03	10	494	7
03	11	497	6
03	12	499	6
03	13	502	6
03	14	504	6
03	15	506	6
03	16	508	6
03	17	510	6
03	18	512	6
03	19	515	6
03	20	517	6
03	21	519	6
03	22	521	6
03	23	523	6
03	24	525	6
03	25	527	6
03	26	530	6
03	27	532	6
03	28	535	7
03	29	538	7
03	30	541	7
03	31	544	8
03	32	549	9
03	33	554	10
03	34	561	12
03	35	573	17
03	36	596	33

Grade 10 Mathematics, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	442	18
04	2	455	13
04	3	464	11
04	4	470	10
04	5	475	9
04	6	479	8
04	7	483	8
04	8	486	7
04	9	489	7
04	10	492	7
04	11	495	7
04	12	497	7
04	13	500	6
04	14	502	6
04	15	505	6
04	16	507	6
04	17	509	6
04	18	512	6
04	19	514	6
04	20	516	6
04	21	519	6
04	22	521	6
04	23	523	6
04	24	526	6
04	25	528	7
04	26	531	7
04	27	534	7
04	28	537	7
04	29	540	7
04	30	543	8
04	31	547	8
04	32	552	9
04	33	557	10
04	34	564	12
04	35	576	17
04	36	599	33

Grade 10 Mathematics, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	444	17
05	2	457	13
05	3	465	11
05	4	471	9
05	5	476	9
05	6	480	8
05	7	484	8
05	8	487	7
05	9	490	7
05	10	493	7
05	11	496	7
05	12	499	7
05	13	501	6
05	14	504	6
05	15	506	6
05	16	508	6
05	17	510	6
05	18	513	6
05	19	515	6
05	20	517	6
05	21	519	6
05	22	521	6
05	23	524	6
05	24	526	6
05	25	528	6
05	26	531	7
05	27	534	7
05	28	536	7
05	29	539	7
05	30	543	8
05	31	547	8
05	32	551	9
05	33	556	10
05	34	564	12
05	35	576	17
05	36	600	34

Grade 10 Mathematics, Form 6

Form	Raw Score	Scale Score	Conditional SEM
06	0	400	34
06	1	447	17
06	2	459	12
06	3	467	10
06	4	473	9
06	5	477	9
06	6	482	8
06	7	485	8
06	8	488	7
06	9	491	7
06	10	494	7
06	11	497	7
06	12	499	6
06	13	502	6
06	14	504	6
06	15	507	6
06	16	509	6
06	17	511	6
06	18	514	6
06	19	516	6
06	20	518	6
06	21	521	6
06	22	523	6
06	23	525	6
06	24	528	6
06	25	530	7
06	26	533	7
06	27	536	7
06	28	539	7
06	29	542	7
06	30	545	8
06	31	548	8
06	32	552	9
06	33	557	10
06	34	564	11
06	35	575	16
06	36	597	33

Grade 4 Science, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	448	17
01	2	460	13
01	3	468	11
01	4	475	10
01	5	480	9
01	6	484	8
01	7	488	8
01	8	491	7
01	9	494	7
01	10	498	7
01	11	500	7
01	12	503	7
01	13	506	7
01	14	508	7
01	15	511	6
01	16	513	6
01	17	516	6
01	18	518	6
01	19	521	6
01	20	523	6
01	21	526	6
01	22	528	6
01	23	531	6
01	24	533	6
01	25	535	6
01	26	538	6
01	27	540	6
01	28	543	6
01	29	545	6
01	30	548	7
01	31	550	7
01	32	553	7
01	33	557	8
01	34	561	8
01	35	565	10
01	36	572	12
01	37	584	17
01	38	600	33

Grade 4 Science, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	446	17
02	2	459	13
02	3	467	11
02	4	473	9
02	5	478	9
02	6	482	8
02	7	486	8
02	8	489	7
02	9	493	7
02	10	496	7
02	11	499	7
02	12	501	7
02	13	504	7
02	14	507	7
02	15	509	6
02	16	512	6
02	17	514	6
02	18	516	6
02	19	519	6
02	20	521	6
02	21	524	6
02	22	526	6
02	23	528	6
02	24	531	7
02	25	534	7
02	26	536	7
02	27	539	7
02	28	542	7
02	29	545	7
02	30	548	7
02	31	551	8
02	32	555	8
02	33	559	9
02	34	565	10
02	35	572	12
02	36	584	17
02	37	600	34

Grade 4 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	7
03	12	504	7
03	13	507	7
03	14	509	6
03	15	512	6
03	16	514	6
03	17	516	6
03	18	519	6
03	19	521	6
03	20	524	6
03	21	526	6
03	22	529	6
03	23	531	6
03	24	534	6
03	25	536	7
03	26	539	7
03	27	541	7
03	28	544	7
03	29	547	7
03	30	550	7
03	31	553	8
03	32	557	9
03	33	562	10
03	34	569	12
03	35	581	17
03	36	600	33

Grade 4 Science, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	448	17
04	2	460	12
04	3	468	10
04	4	474	9
04	5	478	8
04	6	482	8
04	7	486	8
04	8	489	7
04	9	492	7
04	10	495	7
04	11	498	7
04	12	500	6
04	13	503	6
04	14	505	6
04	15	507	6
04	16	509	6
04	17	512	6
04	18	514	6
04	19	516	6
04	20	518	6
04	21	520	6
04	22	522	6
04	23	524	6
04	24	526	6
04	25	528	6
04	26	531	6
04	27	533	6
04	28	535	6
04	29	537	6
04	30	540	6
04	31	542	6
04	32	545	7
04	33	547	7
04	34	550	7
04	35	553	7
04	36	557	8
04	37	561	9
04	38	566	10
04	39	573	12
04	40	585	17
04	41	600	33

Grade 7 Science, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	447	17
01	2	460	12
01	3	467	10
01	4	473	9
01	5	478	8
01	6	482	8
01	7	485	7
01	8	488	7
01	9	491	7
01	10	494	7
01	11	496	6
01	12	499	6
01	13	501	6
01	14	504	6
01	15	506	6
01	16	508	6
01	17	510	6
01	18	512	6
01	19	514	6
01	20	516	6
01	21	518	6
01	22	521	6
01	23	523	6
01	24	525	6
01	25	527	6
01	26	529	6
01	27	532	6
01	28	534	7
01	29	537	7
01	30	540	7
01	31	544	8
01	32	548	9
01	33	553	10
01	34	560	12
01	35	572	17
01	36	595	33

Grade 7 Science, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	449	17
02	2	461	12
02	3	469	10
02	4	475	9
02	5	479	8
02	6	483	8
02	7	487	7
02	8	490	7
02	9	493	7
02	10	495	7
02	11	498	6
02	12	500	6
02	13	503	6
02	14	505	6
02	15	507	6
02	16	510	6
02	17	512	6
02	18	514	6
02	19	516	6
02	20	518	6
02	21	520	6
02	22	522	6
02	23	524	6
02	24	527	6
02	25	529	6
02	26	531	6
02	27	533	6
02	28	536	7
02	29	539	7
02	30	542	7
02	31	545	8
02	32	549	9
02	33	554	10
02	34	562	12
02	35	573	17
02	36	597	33

Grade 7 Science, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	446	17
03	2	458	13
03	3	466	10
03	4	472	9
03	5	477	8
03	6	481	8
03	7	484	7
03	8	487	7
03	9	490	7
03	10	493	7
03	11	496	6
03	12	498	6
03	13	501	6
03	14	503	6
03	15	505	6
03	16	507	6
03	17	510	6
03	18	512	6
03	19	514	6
03	20	516	6
03	21	518	6
03	22	521	6
03	23	523	6
03	24	525	6
03	25	528	6
03	26	530	6
03	27	533	7
03	28	535	7
03	29	538	7
03	30	542	8
03	31	545	8
03	32	550	9
03	33	555	10
03	34	562	12
03	35	574	17
03	36	597	33

Grade 7 Science, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	441	17
04	2	454	13
04	3	462	11
04	4	468	9
04	5	473	9
04	6	477	8
04	7	480	8
04	8	484	7
04	9	487	7
04	10	489	7
04	11	492	7
04	12	494	6
04	13	497	6
04	14	499	6
04	15	501	6
04	16	503	6
04	17	506	6
04	18	508	6
04	19	510	6
04	20	512	6
04	21	514	6
04	22	516	6
04	23	519	6
04	24	521	6
04	25	523	6
04	26	525	6
04	27	528	6
04	28	530	7
04	29	533	7
04	30	536	7
04	31	539	7
04	32	542	8
04	33	546	8
04	34	550	9
04	35	556	10
04	36	563	12
04	37	575	17
04	38	598	33

Grade 11 Science, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	436	17
01	2	448	12
01	3	456	10
01	4	461	9
01	5	466	8
01	6	470	8
01	7	473	7
01	8	477	7
01	9	480	7
01	10	482	7
01	11	485	7
01	12	488	6
01	13	490	6
01	14	493	6
01	15	495	6
01	16	498	6
01	17	500	6
01	18	502	6
01	19	505	6
01	20	507	6
01	21	510	7
01	22	512	7
01	23	515	7
01	24	518	7
01	25	521	7
01	26	524	7
01	27	528	8
01	28	531	8
01	29	535	8
01	30	540	9
01	31	545	9
01	32	550	10
01	33	557	11
01	34	566	13
01	35	580	18
01	36	600	34

Grade 11 Science, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	444	17
02	2	457	13
02	3	465	11
02	4	471	9
02	5	475	9
02	6	480	8
02	7	483	8
02	8	487	7
02	9	490	7
02	10	493	7
02	11	496	7
02	12	499	7
02	13	501	7
02	14	504	7
02	15	506	7
02	16	509	7
02	17	512	7
02	18	514	7
02	19	517	7
02	20	519	7
02	21	522	7
02	22	525	7
02	23	528	7
02	24	531	7
02	25	534	7
02	26	537	8
02	27	541	8
02	28	544	8
02	29	549	9
02	30	554	10
02	31	560	11
02	32	568	13
02	33	581	18
02	34	600	34

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	468	9
03	5	472	8
03	6	477	8
03	7	480	8
03	8	483	7
03	9	486	7
03	10	489	7
03	11	492	7
03	12	495	7
03	13	497	7
03	14	500	7
03	15	502	6
03	16	505	6
03	17	508	6
03	18	510	7
03	19	513	7
03	20	515	7
03	21	518	7
03	22	521	7
03	23	523	7
03	24	526	7
03	25	529	7
03	26	533	7
03	27	536	8
03	28	540	8
03	29	544	8
03	30	549	9
03	31	554	10
03	32	560	11
03	33	569	13
03	34	582	18
03	35	600	34

Grade 11 Science, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	443	17
04	2	455	12
04	3	462	10
04	4	468	9
04	5	472	8
04	6	476	8
04	7	479	7
04	8	482	7
04	9	485	7
04	10	487	7
04	11	490	6
04	12	492	6
04	13	494	6
04	14	497	6
04	15	499	6
04	16	501	6
04	17	504	6
04	18	506	6
04	19	508	6
04	20	511	6
04	21	513	6
04	22	516	7
04	23	518	7
04	24	521	7
04	25	524	7
04	26	527	7
04	27	530	8
04	28	534	8
04	29	538	8
04	30	542	9
04	31	548	10
04	32	554	11
04	33	563	13
04	34	577	18
04	35	600	34

Grade 5 Social Studies, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	449	17
01	2	461	13
01	3	469	10
01	4	475	9
01	5	480	9
01	6	484	8
01	7	488	8
01	8	491	7
01	9	494	7
01	10	497	7
01	11	499	7
01	12	502	6
01	13	504	6
01	14	507	6
01	15	509	6
01	16	512	6
01	17	514	6
01	18	516	6
01	19	518	6
01	20	521	6
01	21	523	6
01	22	526	6
01	23	528	7
01	24	531	7
01	25	534	7
01	26	537	7
01	27	540	8
01	28	544	8
01	29	548	9
01	30	552	9
01	31	558	10
01	32	566	12
01	33	578	17
01	34	600	33

Grade 5 Social Studies, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	446	17
02	2	459	12
02	3	466	10
02	4	472	9
02	5	477	8
02	6	481	8
02	7	484	7
02	8	488	7
02	9	491	7
02	10	493	7
02	11	496	6
02	12	498	6
02	13	501	6
02	14	503	6
02	15	505	6
02	16	508	6
02	17	510	6
02	18	512	6
02	19	514	6
02	20	516	6
02	21	519	6
02	22	521	6
02	23	523	6
02	24	526	6
02	25	528	7
02	26	531	7
02	27	534	7
02	28	537	7
02	29	541	8
02	30	545	8
02	31	549	9
02	32	555	10
02	33	563	12
02	34	575	17
02	35	599	34

Grade 5 Social Studies, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	449	17
03	2	461	12
03	3	469	10
03	4	474	9
03	5	479	8
03	6	483	8
03	7	487	7
03	8	490	7
03	9	493	7
03	10	495	7
03	11	498	7
03	12	501	6
03	13	503	6
03	14	506	6
03	15	508	6
03	16	510	6
03	17	513	6
03	18	515	6
03	19	517	6
03	20	520	6
03	21	522	6
03	22	525	7
03	23	527	7
03	24	530	7
03	25	533	7
03	26	536	7
03	27	540	8
03	28	544	8
03	29	548	9
03	30	553	10
03	31	560	11
03	32	568	13
03	33	581	18
03	34	600	34

Grade 5 Social Studies, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	448	17
04	2	460	12
04	3	468	10
04	4	474	9
04	5	478	8
04	6	482	8
04	7	486	7
04	8	489	7
04	9	492	7
04	10	494	7
04	11	497	6
04	12	499	6
04	13	502	6
04	14	504	6
04	15	506	6
04	16	508	6
04	17	510	6
04	18	512	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	529	7
04	26	531	7
04	27	534	7
04	28	537	7
04	29	541	8
04	30	545	8
04	31	549	9
04	32	555	10
04	33	562	12
04	34	575	17
04	35	598	34

Grade 5 Social Studies, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	440	18
05	2	453	13
05	3	462	11
05	4	468	10
05	5	473	9
05	6	478	8
05	7	482	8
05	8	485	8
05	9	489	7
05	10	492	7
05	11	495	7
05	12	497	7
05	13	500	7
05	14	503	7
05	15	505	6
05	16	508	6
05	17	510	6
05	18	513	6
05	19	515	6
05	20	518	6
05	21	520	6
05	22	523	7
05	23	525	7
05	24	528	7
05	25	531	7
05	26	534	7
05	27	537	8
05	28	541	8
05	29	545	9
05	30	550	9
05	31	556	10
05	32	564	12
05	33	576	17
05	34	600	34

Grade 8 Social Studies, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	451	17
01	2	463	12
01	3	470	10
01	4	476	9
01	5	480	8
01	6	484	8
01	7	488	7
01	8	491	7
01	9	493	7
01	10	496	6
01	11	498	6
01	12	501	6
01	13	503	6
01	14	505	6
01	15	507	6
01	16	509	6
01	17	511	6
01	18	514	6
01	19	516	6
01	20	518	6
01	21	520	6
01	22	522	6
01	23	524	6
01	24	527	6
01	25	529	6
01	26	532	7
01	27	534	7
01	28	537	7
01	29	541	8
01	30	544	8
01	31	548	9
01	32	553	9
01	33	559	10
01	34	567	12
01	35	579	17
01	36	600	33

Grade 8 Social Studies, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	33
02	1	450	17
02	2	462	12
02	3	469	10
02	4	475	9
02	5	479	8
02	6	483	8
02	7	486	7
02	8	489	7
02	9	492	7
02	10	494	6
02	11	497	6
02	12	499	6
02	13	501	6
02	14	503	6
02	15	505	6
02	16	507	6
02	17	509	6
02	18	511	6
02	19	513	6
02	20	515	6
02	21	517	6
02	22	519	6
02	23	521	6
02	24	523	6
02	25	525	6
02	26	528	6
02	27	530	6
02	28	533	7
02	29	535	7
02	30	539	7
02	31	542	8
02	32	546	8
02	33	550	9
02	34	556	10
02	35	564	12
02	36	576	17
02	37	600	34

Grade 8 Social Studies, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	446	17
03	2	458	12
03	3	466	10
03	4	471	9
03	5	476	8
03	6	480	8
03	7	483	7
03	8	487	7
03	9	489	7
03	10	492	7
03	11	495	6
03	12	497	6
03	13	499	6
03	14	501	6
03	15	504	6
03	16	506	6
03	17	508	6
03	18	510	6
03	19	512	6
03	20	513	6
03	21	515	6
03	22	517	6
03	23	519	6
03	24	522	6
03	25	524	6
03	26	526	6
03	27	528	6
03	28	531	7
03	29	534	7
03	30	537	7
03	31	540	8
03	32	543	8
03	33	547	9
03	34	552	9
03	35	558	10
03	36	566	12
03	37	578	17
03	38	600	33

Grade 8 Social Studies, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	452	17
04	2	464	12
04	3	472	10
04	4	477	9
04	5	482	8
04	6	485	8
04	7	488	7
04	8	491	7
04	9	494	7
04	10	496	6
04	11	499	6
04	12	501	6
04	13	503	6
04	14	505	6
04	15	507	6
04	16	509	6
04	17	511	6
04	18	512	6
04	19	514	6
04	20	516	6
04	21	518	6
04	22	520	6
04	23	522	6
04	24	524	6
04	25	526	6
04	26	528	6
04	27	530	6
04	28	532	6
04	29	535	7
04	30	538	7
04	31	541	7
04	32	544	8
04	33	548	8
04	34	553	9
04	35	559	11
04	36	567	13
04	37	581	18
04	38	600	34

Grade 8 Social Studies, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	445	17
05	2	457	12
05	3	465	10
05	4	470	9
05	5	475	8
05	6	479	8
05	7	483	7
05	8	486	7
05	9	489	7
05	10	491	7
05	11	494	6
05	12	496	6
05	13	498	6
05	14	501	6
05	15	503	6
05	16	505	6
05	17	507	6
05	18	509	6
05	19	511	6
05	20	513	6
05	21	515	6
05	22	517	6
05	23	519	6
05	24	521	6
05	25	523	6
05	26	525	6
05	27	528	6
05	28	530	7
05	29	533	7
05	30	536	7
05	31	539	7
05	32	542	8
05	33	546	9
05	34	551	9
05	35	557	11
05	36	565	12
05	37	577	17
05	38	600	33

Grade 11 Social Studies, Form 1

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	443	17
01	2	456	12
01	3	463	10
01	4	469	9
01	5	473	8
01	6	477	8
01	7	480	7
01	8	483	7
01	9	486	7
01	10	489	6
01	11	491	6
01	12	494	6
01	13	496	6
01	14	498	6
01	15	500	6
01	16	502	6
01	17	504	6
01	18	506	6
01	19	508	6
01	20	510	6
01	21	512	6
01	22	514	6
01	23	516	6
01	24	518	6
01	25	520	6
01	26	522	6
01	27	524	6
01	28	527	6
01	29	529	6
01	30	532	7
01	31	534	7
01	32	537	7
01	33	540	7
01	34	544	8
01	35	548	8
01	36	552	9
01	37	558	10
01	38	566	12
01	39	578	17
01	40	600	34

Grade 11 Social Studies, Form 2

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	446	17
02	2	458	12
02	3	466	10
02	4	471	9
02	5	476	8
02	6	480	8
02	7	483	7
02	8	486	7
02	9	489	7
02	10	491	6
02	11	494	6
02	12	496	6
02	13	498	6
02	14	500	6
02	15	502	6
02	16	504	6
02	17	506	6
02	18	508	6
02	19	510	6
02	20	512	6
02	21	514	6
02	22	516	6
02	23	518	6
02	24	520	6
02	25	522	6
02	26	524	6
02	27	527	6
02	28	529	6
02	29	531	7
02	30	534	7
02	31	537	7
02	32	540	7
02	33	543	8
02	34	547	8
02	35	552	9
02	36	557	10
02	37	565	12
02	38	577	17
02	39	600	34

Grade 11 Social Studies, Form 3

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	33
03	1	445	17
03	2	457	12
03	3	465	10
03	4	470	9
03	5	474	8
03	6	478	8
03	7	482	7
03	8	485	7
03	9	487	7
03	10	490	7
03	11	493	6
03	12	495	6
03	13	497	6
03	14	499	6
03	15	501	6
03	16	503	6
03	17	505	6
03	18	507	6
03	19	509	6
03	20	511	6
03	21	513	6
03	22	515	6
03	23	517	6
03	24	518	6
03	25	520	6
03	26	522	6
03	27	524	6
03	28	526	6
03	29	528	6
03	30	531	6
03	31	533	6
03	32	535	7
03	33	538	7
03	34	541	7
03	35	544	8
03	36	548	8
03	37	553	9
03	38	558	10
03	39	566	12
03	40	578	17
03	41	600	34

Grade 11 Social Studies, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	34
04	1	447	17
04	2	459	12
04	3	467	10
04	4	473	9
04	5	477	8
04	6	481	8
04	7	485	7
04	8	488	7
04	9	490	7
04	10	493	7
04	11	496	6
04	12	498	6
04	13	500	6
04	14	502	6
04	15	504	6
04	16	506	6
04	17	508	6
04	18	510	6
04	19	512	6
04	20	514	6
04	21	516	6
04	22	518	6
04	23	520	6
04	24	522	6
04	25	524	6
04	26	526	6
04	27	528	6
04	28	530	6
04	29	533	6
04	30	535	7
04	31	538	7
04	32	541	7
04	33	544	8
04	34	548	8
04	35	552	9
04	36	558	10
04	37	565	12
04	38	577	17
04	39	600	33

Grade 11 Social Studies, Form 5

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	33
05	1	442	17
05	2	454	12
05	3	462	10
05	4	467	9
05	5	471	8
05	6	475	8
05	7	478	7
05	8	481	7
05	9	484	7
05	10	486	6
05	11	489	6
05	12	491	6
05	13	493	6
05	14	495	6
05	15	498	6
05	16	500	6
05	17	502	6
05	18	504	6
05	19	506	6
05	20	507	6
05	21	509	6
05	22	511	6
05	23	513	6
05	24	515	6
05	25	517	6
05	26	519	6
05	27	522	6
05	28	524	6
05	29	526	6
05	30	528	6
05	31	531	7
05	32	534	7
05	33	536	7
05	34	540	7
05	35	543	8
05	36	547	8
05	37	552	9
05	38	557	10
05	39	565	12
05	40	577	17
05	41	600	34

**Grade 5 Editing and Mechanics,
Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	444	17
01	2	457	13
01	3	465	11
01	4	471	9
01	5	476	9
01	6	480	8
01	7	484	8
01	8	487	7
01	9	490	7
01	10	493	7
01	11	496	7
01	12	499	7
01	13	502	7
01	14	504	7
01	15	507	6
01	16	509	6
01	17	512	6
01	18	514	6
01	19	517	6
01	20	519	6
01	21	522	6
01	22	524	6
01	23	526	6
01	24	529	7
01	25	532	7
01	26	534	7
01	27	537	7
01	28	540	7
01	29	543	7
01	30	546	8
01	31	550	8
01	32	555	9
01	33	560	10
01	34	568	12
01	35	580	17
01	36	600	34

**Grade 5 Editing and Mechanics,
Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	442	17
02	2	454	13
02	3	462	11
02	4	468	9
02	5	473	9
02	6	477	8
02	7	481	8
02	8	485	7
02	9	488	7
02	10	491	7
02	11	494	7
02	12	496	7
02	13	499	7
02	14	502	7
02	15	504	7
02	16	507	7
02	17	509	6
02	18	512	6
02	19	515	6
02	20	517	7
02	21	520	7
02	22	522	7
02	23	525	7
02	24	527	7
02	25	530	7
02	26	533	7
02	27	536	7
02	28	539	7
02	29	542	8
02	30	546	8
02	31	550	8
02	32	554	9
02	33	560	10
02	34	567	12
02	35	580	17
02	36	600	34

**Grade 5 Editing and Mechanics,
Form 3**

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	445	17
03	2	458	13
03	3	466	11
03	4	472	9
03	5	477	9
03	6	481	8
03	7	485	8
03	8	489	8
03	9	492	7
03	10	495	7
03	11	498	7
03	12	501	7
03	13	504	7
03	14	506	7
03	15	509	7
03	16	512	7
03	17	514	6
03	18	517	6
03	19	519	6
03	20	521	6
03	21	524	6
03	22	526	6
03	23	529	6
03	24	531	7
03	25	534	7
03	26	537	7
03	27	539	7
03	28	542	7
03	29	545	7
03	30	549	8
03	31	553	8
03	32	557	9
03	33	563	10
03	34	570	12
03	35	582	17
03	36	600	34

**Grade 8 Editing and Mechanics,
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	470	10
01	5	475	9
01	6	480	9
01	7	484	8
01	8	487	8
01	9	491	8
01	10	494	7
01	11	497	7
01	12	500	7
01	13	503	7
01	14	506	7
01	15	509	7
01	16	511	6
01	17	514	6
01	18	516	6
01	19	518	6
01	20	520	6
01	21	523	6
01	22	525	6
01	23	527	6
01	24	529	6
01	25	531	6
01	26	534	6
01	27	536	7
01	28	539	7
01	29	542	7
01	30	545	8
01	31	549	8
01	32	553	9
01	33	558	10
01	34	566	12
01	35	578	17
01	36	600	34

**Grade 8 Editing and Mechanics,
Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	439	17
02	2	451	13
02	3	459	11
02	4	465	10
02	5	470	9
02	6	475	8
02	7	479	8
02	8	482	8
02	9	486	8
02	10	489	7
02	11	492	7
02	12	495	7
02	13	498	7
02	14	501	7
02	15	504	7
02	16	506	7
02	17	509	6
02	18	511	6
02	19	514	6
02	20	516	6
02	21	518	6
02	22	521	6
02	23	523	6
02	24	525	6
02	25	528	6
02	26	531	7
02	27	533	7
02	28	536	7
02	29	539	7
02	30	543	8
02	31	546	8
02	32	551	9
02	33	556	10
02	34	564	12
02	35	576	17
02	36	599	33

**Grade 8 Editing and Mechanics,
Form 3**

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	439	17
03	2	452	13
03	3	460	11
03	4	466	10
03	5	471	9
03	6	476	8
03	7	480	8
03	8	484	8
03	9	487	7
03	10	490	7
03	11	493	7
03	12	496	7
03	13	499	7
03	14	501	6
03	15	504	6
03	16	506	6
03	17	508	6
03	18	511	6
03	19	513	6
03	20	515	6
03	21	518	6
03	22	520	6
03	23	522	6
03	24	524	6
03	25	527	6
03	26	529	7
03	27	532	7
03	28	535	7
03	29	538	7
03	30	542	8
03	31	546	8
03	32	550	9
03	33	556	10
03	34	563	12
03	35	576	17
03	36	600	34

**Grade 11 Editing and Mechanics,
Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	438	17
01	2	451	13
01	3	459	11
01	4	465	10
01	5	470	9
01	6	474	8
01	7	478	8
01	8	482	7
01	9	485	7
01	10	488	7
01	11	491	7
01	12	494	7
01	13	497	7
01	14	499	7
01	15	502	7
01	16	504	7
01	17	507	7
01	18	509	7
01	19	512	7
01	20	515	7
01	21	517	7
01	22	520	7
01	23	523	7
01	24	525	7
01	25	528	7
01	26	531	7
01	27	534	7
01	28	538	8
01	29	541	8
01	30	545	8
01	31	550	9
01	32	555	10
01	33	561	11
01	34	569	13
01	35	582	17
01	36	600	34

**Grade 11 Editing and Mechanics,
Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	438	17
02	2	451	13
02	3	459	11
02	4	465	10
02	5	470	9
02	6	474	8
02	7	478	8
02	8	481	7
02	9	485	7
02	10	488	7
02	11	490	7
02	12	493	7
02	13	496	7
02	14	498	7
02	15	501	6
02	16	503	6
02	17	506	6
02	18	508	6
02	19	511	6
02	20	513	6
02	21	516	6
02	22	518	7
02	23	521	7
02	24	524	7
02	25	526	7
02	26	529	7
02	27	532	7
02	28	535	7
02	29	539	8
02	30	542	8
02	31	547	9
02	32	552	9
02	33	558	11
02	34	565	13
02	35	578	17
02	36	600	34

**Grade 11 Editing and Mechanics,
Form 3**

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	34
03	1	442	17
03	2	455	13
03	3	463	11
03	4	469	9
03	5	473	9
03	6	478	8
03	7	481	8
03	8	485	7
03	9	488	7
03	10	491	7
03	11	494	7
03	12	496	7
03	13	499	7
03	14	501	6
03	15	504	6
03	16	506	6
03	17	509	6
03	18	511	6
03	19	514	6
03	20	516	6
03	21	518	6
03	22	521	6
03	23	524	7
03	24	526	7
03	25	529	7
03	26	532	7
03	27	535	7
03	28	538	7
03	29	541	8
03	30	545	8
03	31	549	9
03	32	554	9
03	33	560	11
03	34	568	13
03	35	581	17
03	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	458	10
03	11	466	6
03	12	471	5
03	13	475	4
03	14	479	4
03	15	482	4
03	16	485	4
03	17	489	4
03	18	493	5
03	19	497	4
03	20	500	4
03	21	503	3
03	22	505	3
03	23	506	3
03	24	508	3
03	25	510	3
03	26	512	3
03	27	514	3
03	28	516	3
03	29	519	4
03	30	522	4
03	31	525	4
03	32	527	4
03	33	530	4
03	34	533	4
03	35	536	4
03	36	539	4
03	37	542	4
03	38	545	4
03	39	550	6
03	40	558	10

Grade 5 On-Demand Writing, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	.
04	10	460	10
04	11	468	6
04	12	473	4
04	13	476	4
04	14	479	4
04	15	482	4
04	16	485	4
04	17	489	5
04	18	494	5
04	19	499	4
04	20	502	4
04	21	504	3
04	22	506	3
04	23	508	3
04	24	509	3
04	25	511	3
04	26	513	3
04	27	515	3
04	28	518	4
04	29	520	4
04	30	523	4
04	31	525	4
04	32	528	3
04	33	530	3
04	34	532	3
04	35	535	3
04	36	537	4
04	37	540	4
04	38	544	5
04	39	550	7
04	40	560	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	447	11
03	13	456	6
03	14	462	5
03	15	466	4
03	16	469	4
03	17	473	4
03	18	475	4
03	19	478	4
03	20	481	4
03	21	484	4
03	22	487	4
03	23	491	4
03	24	495	4
03	25	498	4
03	26	501	4
03	27	504	3
03	28	506	3
03	29	508	3
03	30	510	3
03	31	513	3
03	32	515	3
03	33	517	4
03	34	520	4
03	35	523	4
03	36	526	4
03	37	529	4
03	38	532	4
03	39	535	4
03	40	538	4
03	41	542	4
03	42	546	5
03	43	551	4
03	44	554	4
03	45	558	4
03	46	561	4
03	47	566	6
03	48	574	10

Grade 8 On-Demand Writing, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	.
04	12	465	10
04	13	472	5
04	14	476	4
04	15	479	3
04	16	481	3
04	17	483	3
04	18	485	3
04	19	487	3
04	20	489	3
04	21	491	3
04	22	493	3
04	23	495	3
04	24	498	3
04	25	500	3
04	26	502	3
04	27	504	3
04	28	505	3
04	29	507	3
04	30	509	3
04	31	510	3
04	32	512	3
04	33	514	3
04	34	516	3
04	35	518	4
04	36	521	4
04	37	524	4
04	38	527	4
04	39	530	3
04	40	532	3
04	41	534	3
04	42	536	3
04	43	539	3
04	44	541	3
04	45	543	4
04	46	546	4
04	47	551	5
04	48	558	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	453	11
03	13	462	6
03	14	468	5
03	15	472	4
03	16	475	4
03	17	478	4
03	18	481	4
03	19	484	4
03	20	487	4
03	21	491	4
03	22	494	4
03	23	496	4
03	24	499	3
03	25	501	3
03	26	502	3
03	27	504	3
03	28	506	3
03	29	507	3
03	30	509	3
03	31	511	3
03	32	513	3
03	33	515	3
03	34	517	4
03	35	520	4
03	36	523	4
03	37	526	4
03	38	529	4
03	39	531	4
03	40	534	4
03	41	537	4
03	42	539	4
03	43	542	4
03	44	545	4
03	45	548	4
03	46	551	4
03	47	556	6
03	48	563	10

Grade 11 On-Demand Writing, Form 4

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	.
04	12	455	11
04	13	464	6
04	14	470	5
04	15	474	4
04	16	476	4
04	17	479	4
04	18	481	4
04	19	484	4
04	20	488	5
04	21	493	4
04	22	496	4
04	23	499	3
04	24	501	3
04	25	502	3
04	26	504	3
04	27	505	3
04	28	506	3
04	29	508	3
04	30	509	3
04	31	511	3
04	32	512	3
04	33	514	3
04	34	516	3
04	35	519	4
04	36	522	4
04	37	525	4
04	38	528	4
04	39	531	4
04	40	533	4
04	41	536	3
04	42	538	3
04	43	541	4
04	44	543	4
04	45	546	4
04	46	549	4
04	47	553	5
04	48	561	10

Appendix H. Score Frequency Distributions

Figure 1. Reading Grade 3 Score Frequency and Cumulative Frequency Distributions

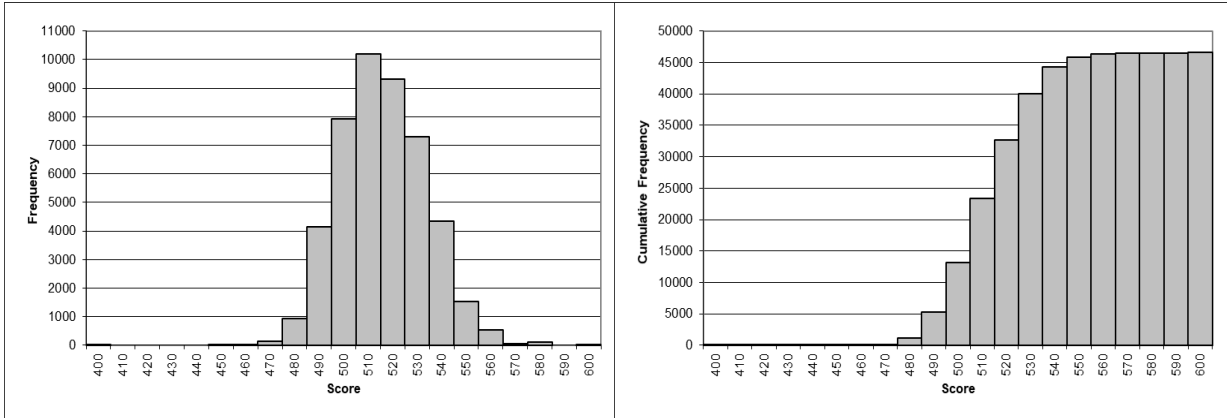


Figure 2. Reading Grade 4 Score Frequency and Cumulative Frequency Distributions

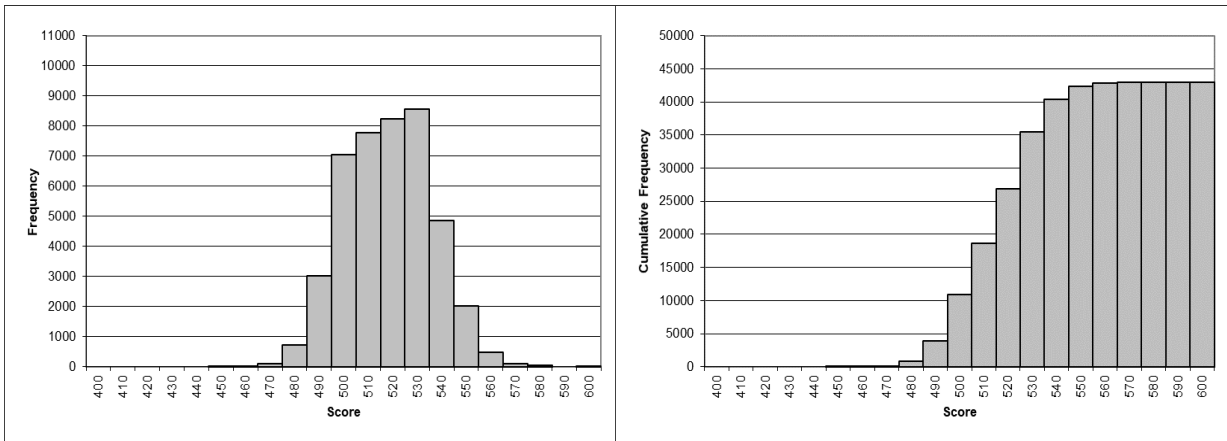


Figure 3. Reading Grade 5 Score Frequency and Cumulative Frequency Distributions

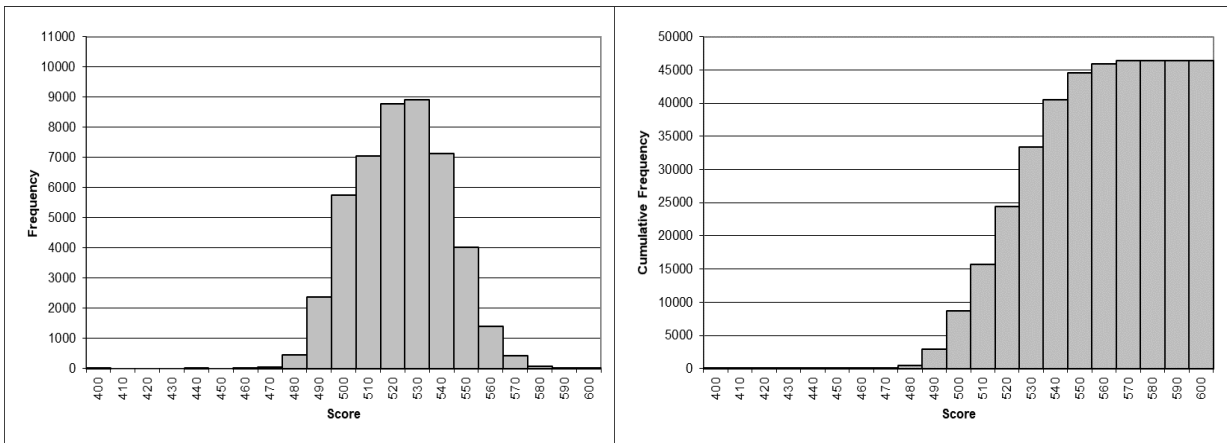


Figure 4. Reading Grade 6 Score Frequency and Cumulative Frequency Distributions

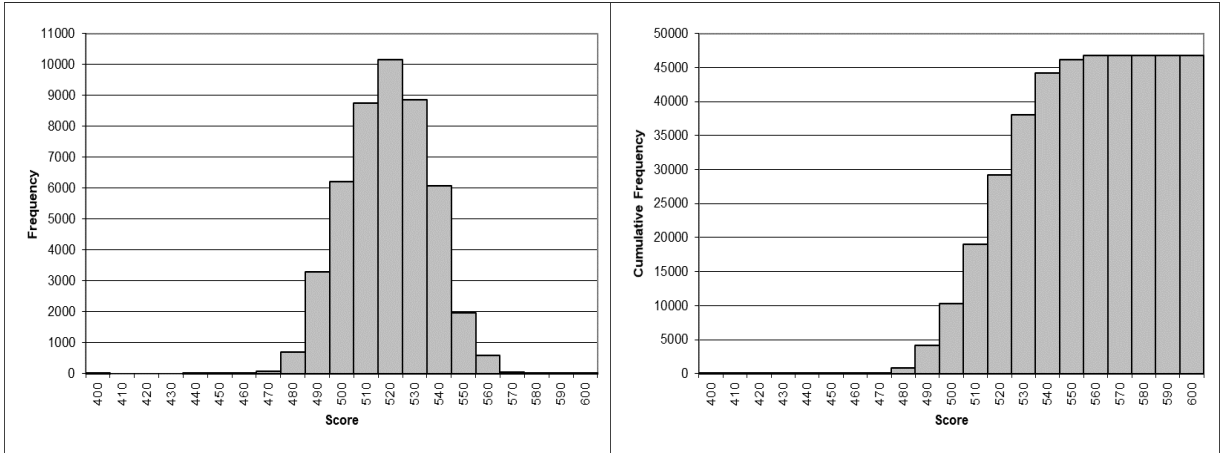


Figure 5. Reading Grade 7 Score Frequency and Cumulative Frequency Distributions

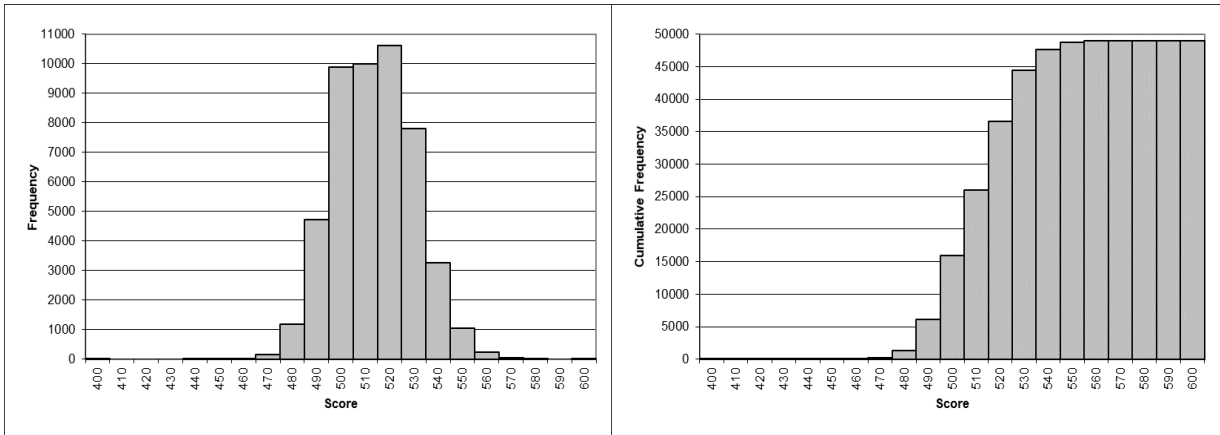


Figure 6. Reading Grade 8 Score Frequency and Cumulative Frequency Distributions

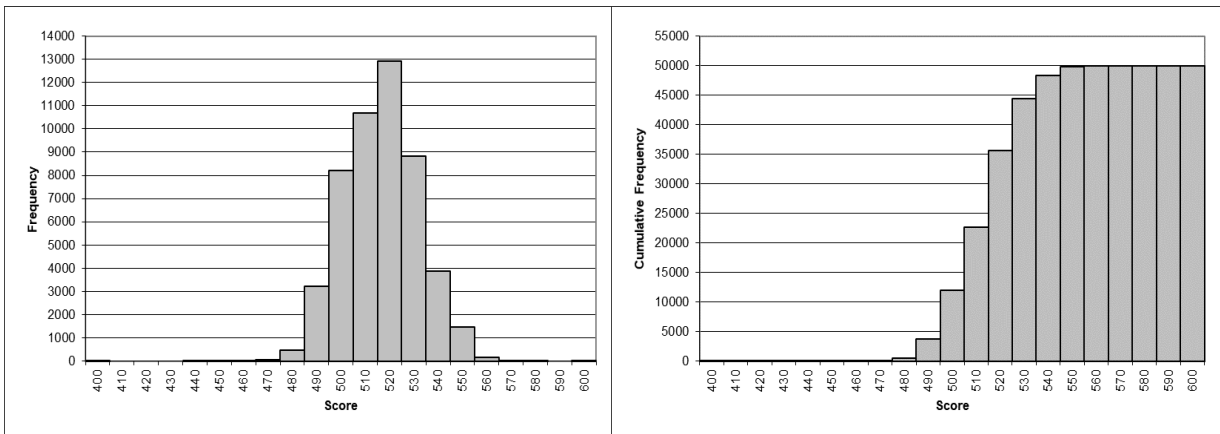


Figure 7. Reading Grade 10 Score Frequency and Cumulative Frequency Distributions

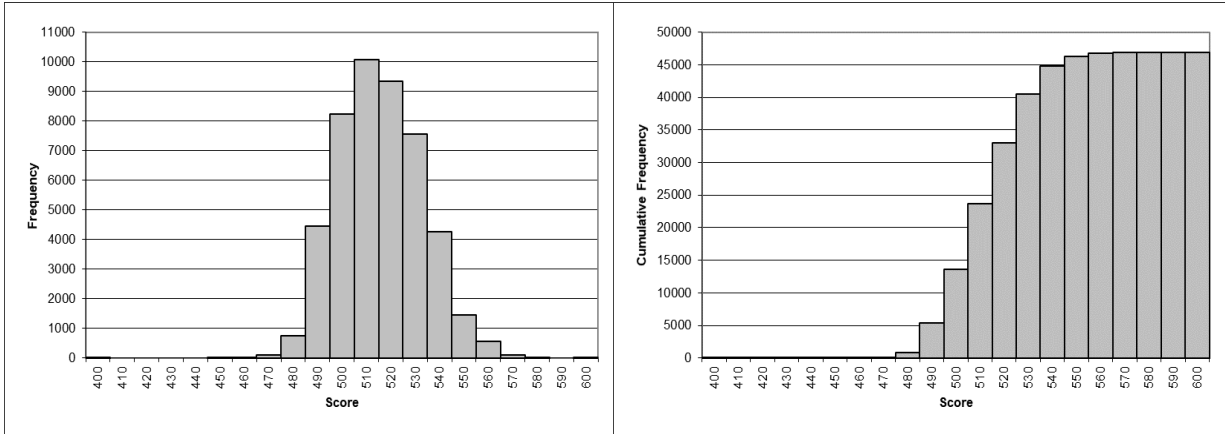


Figure 8. Mathematics Grade 3 Score Frequency and Cumulative Frequency Distributions

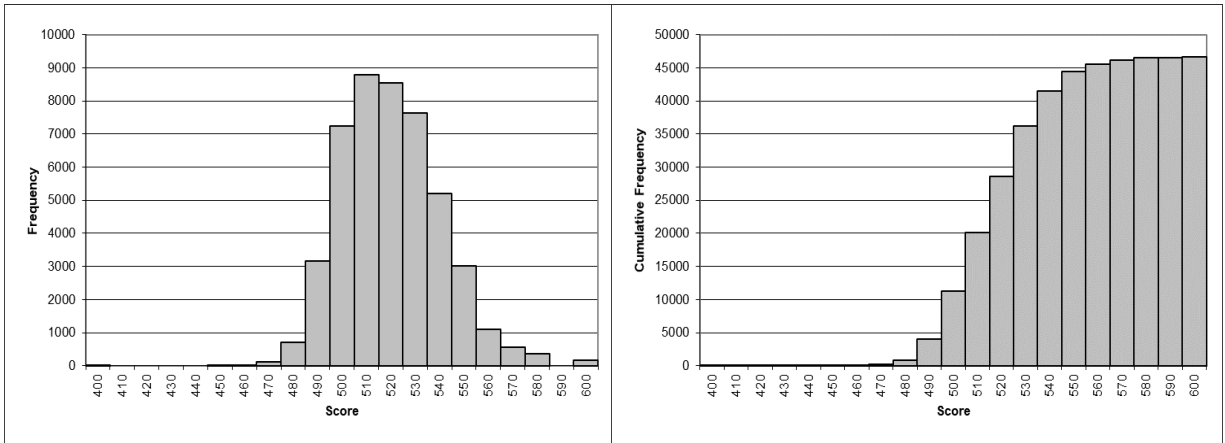


Figure 9. Mathematics Grade 4 Score Frequency and Cumulative Frequency Distributions

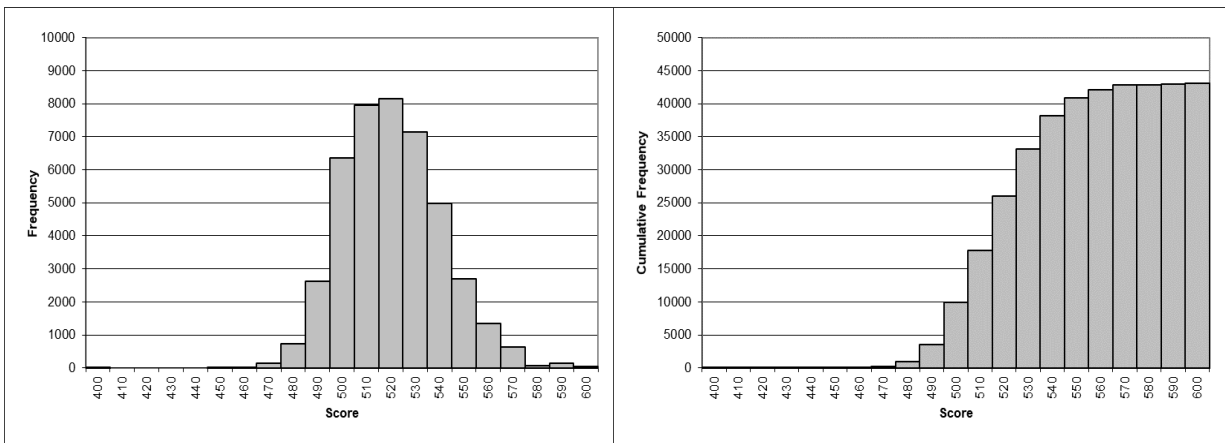


Figure 10. Mathematics Grade 5 Score Frequency and Cumulative Frequency Distributions

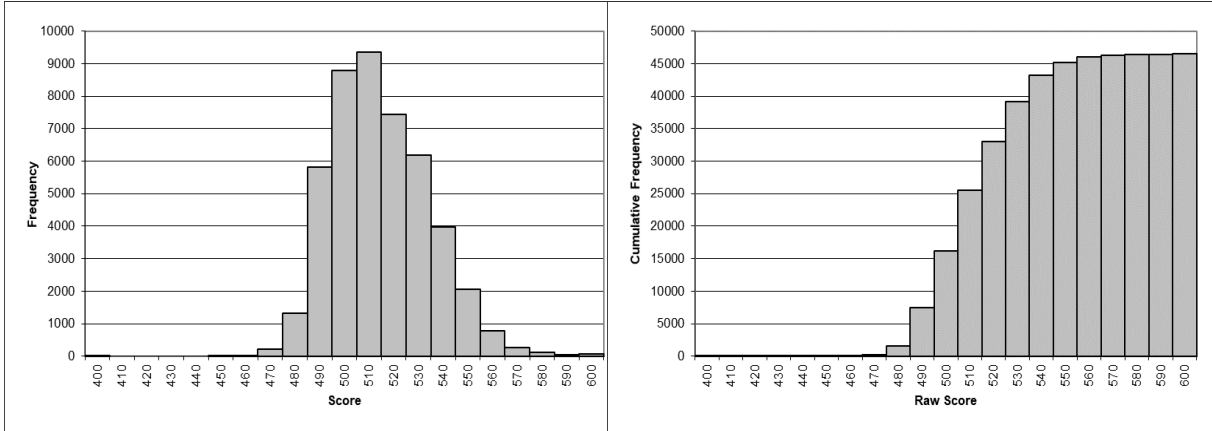


Figure 11. Mathematics Grade 6 Score Frequency and Cumulative Frequency Distributions

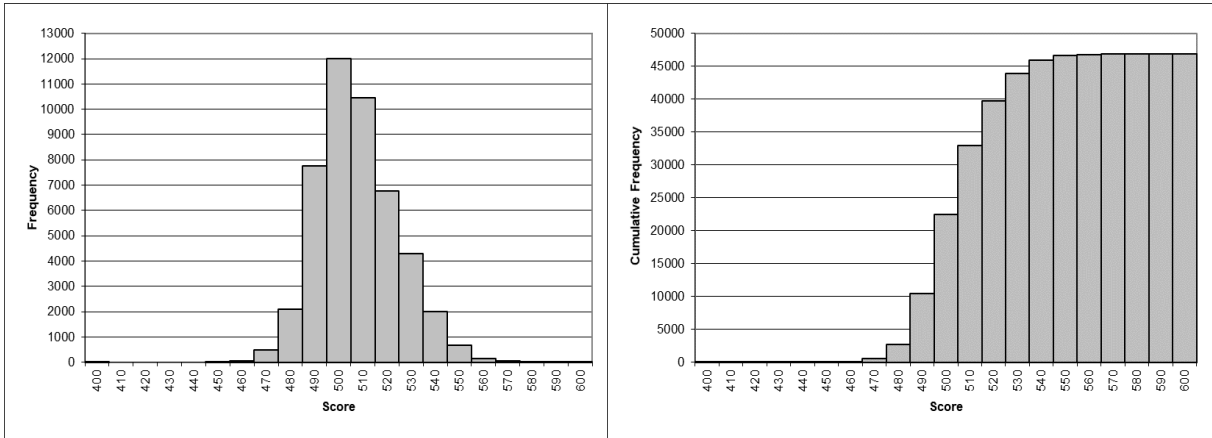


Figure 12. Mathematics Grade 7 Score Frequency and Cumulative Frequency Distributions

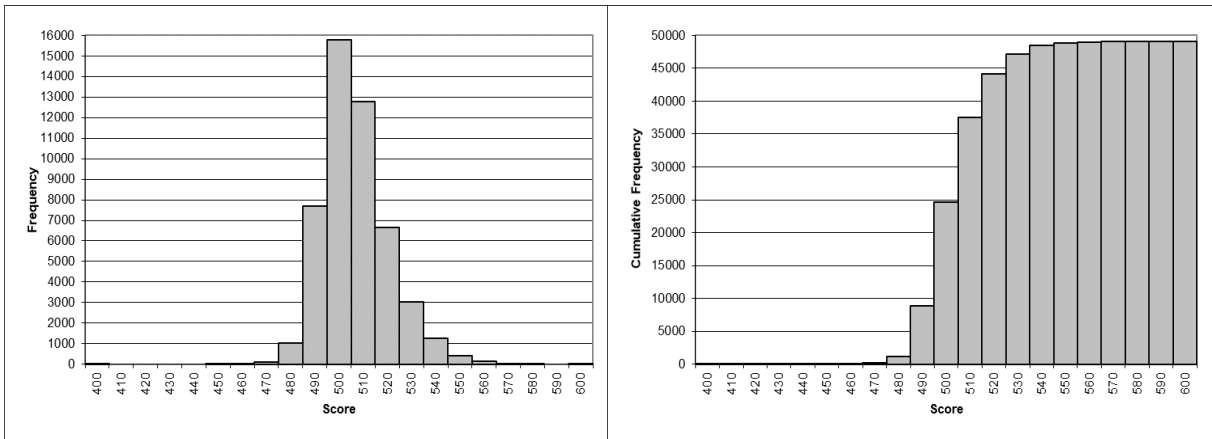


Figure 13. Mathematics Grade 8 Score Frequency and Cumulative Frequency Distributions

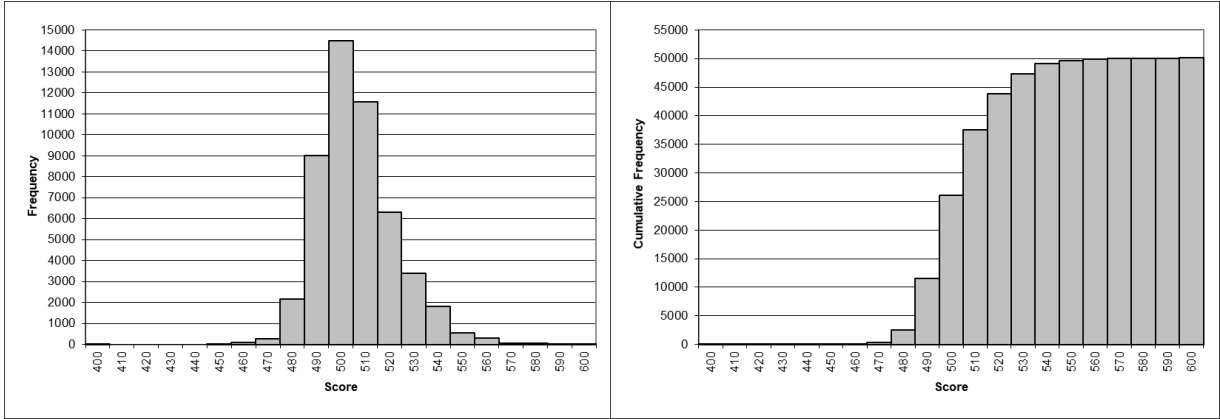


Figure 14. Mathematics Grade 10 Score Frequency and Cumulative Frequency Distributions

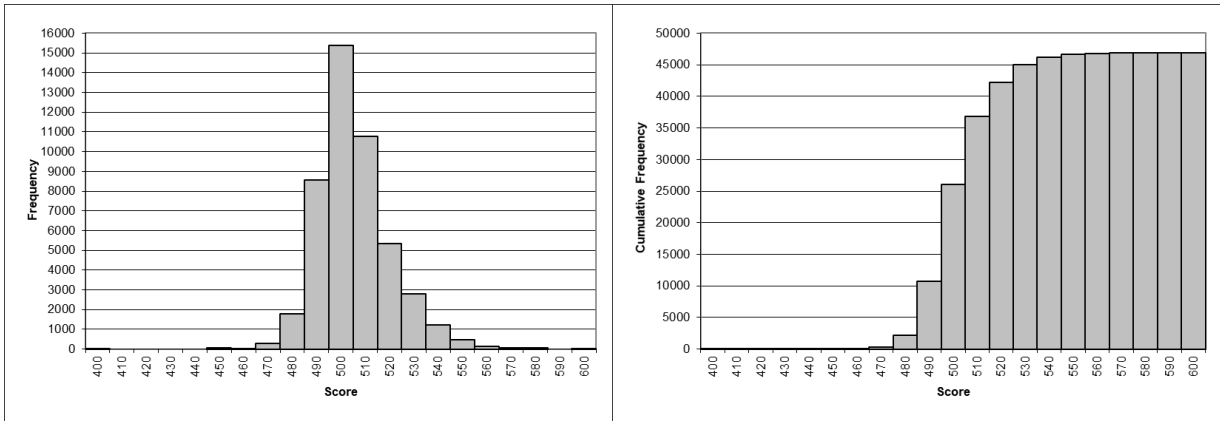


Figure 15. Science Grade 4 Score Frequency and Cumulative Frequency Distributions

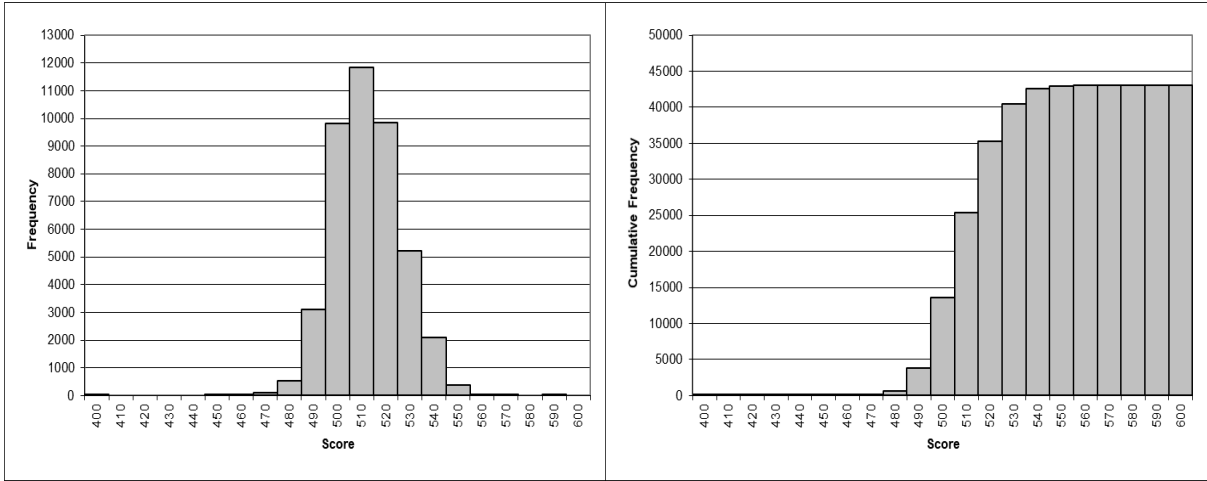


Figure 16. Science Grade 7 Score Frequency and Cumulative Frequency Distributions

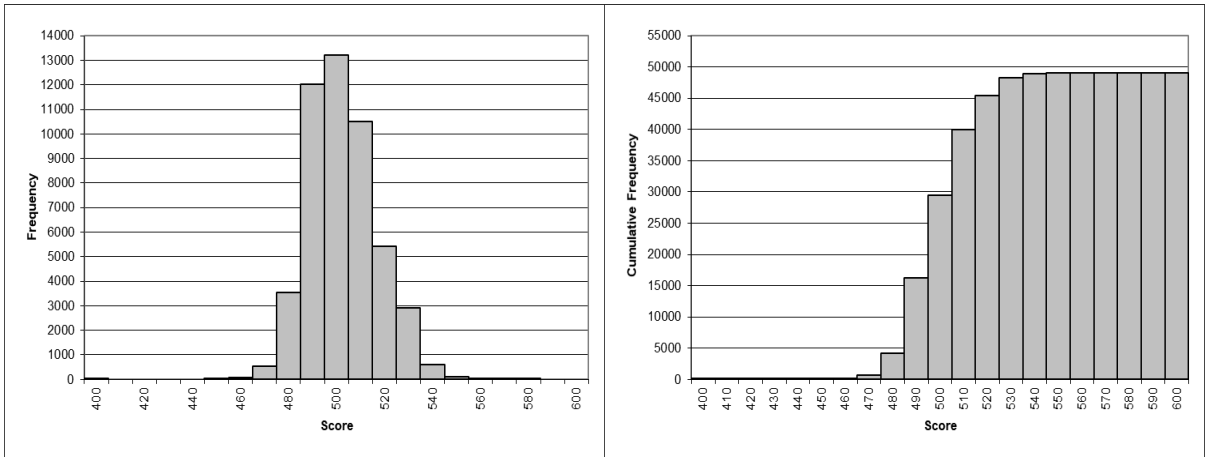


Figure 17. Science Grade 11 Score Frequency and Cumulative Frequency Distributions

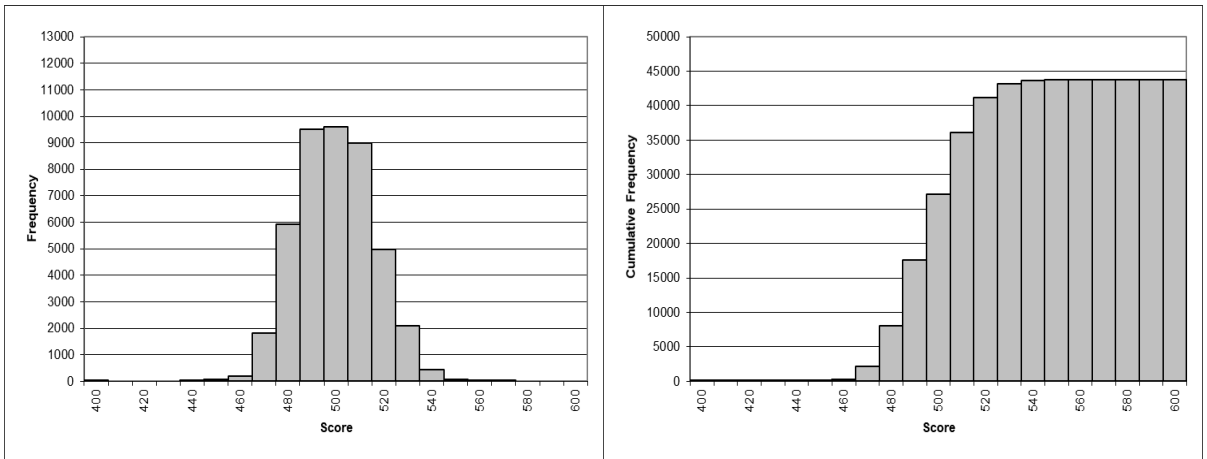


Figure 18. Social Studies Grade 5 Score Frequency and Cumulative Frequency Distributions

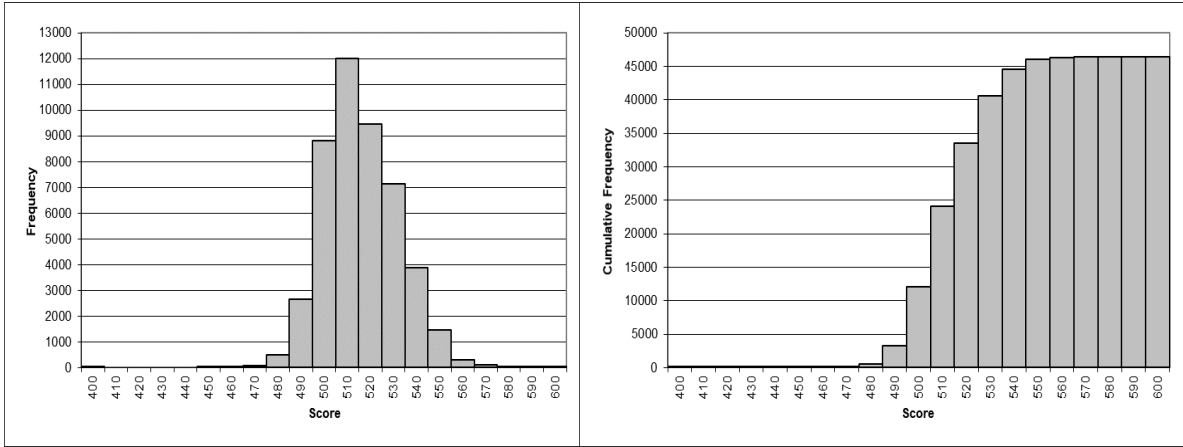


Figure 19. Social Studies Grade 8 Score Frequency and Cumulative Frequency Distributions

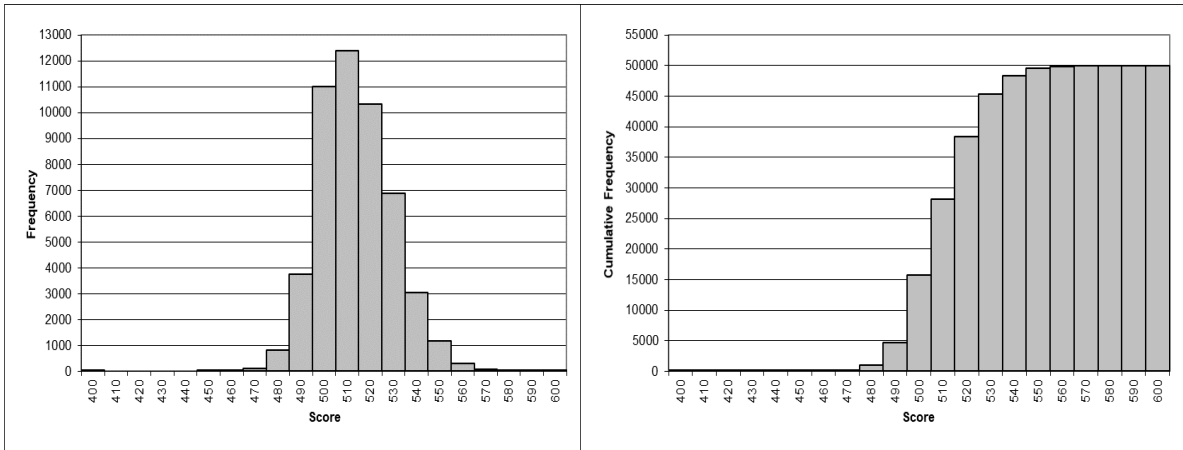


Figure 20. Social Studies Grade 11 Score Frequency and Cumulative Frequency Distributions

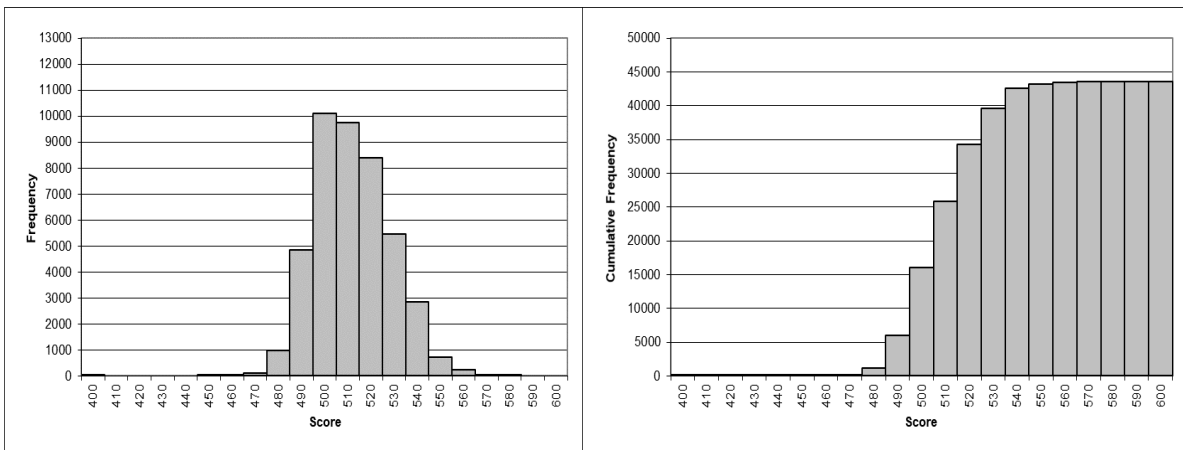


Figure 21. Editing and Mechanics Grade 5 Score Frequency and Cumulative Frequency Distributions

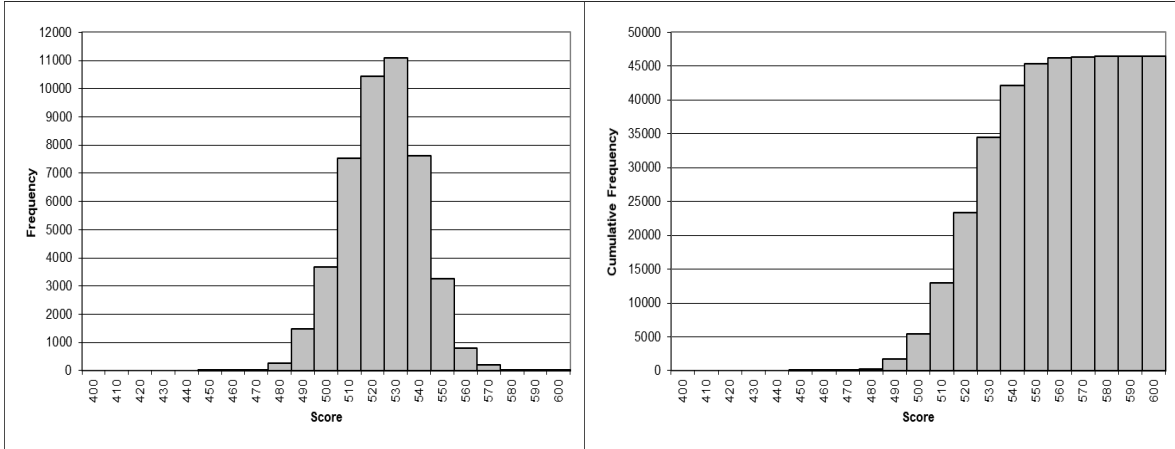


Figure 22. Editing and Mechanics Grade 8 Score Frequency and Cumulative Frequency Distributions

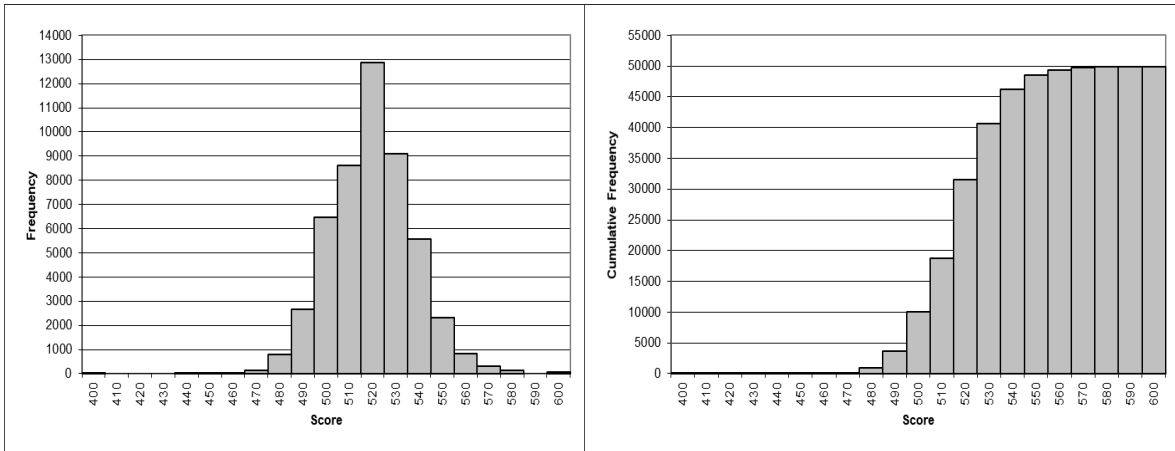


Figure 23. Editing and Mechanics Grade 11 Score Frequency and Cumulative Frequency Distributions

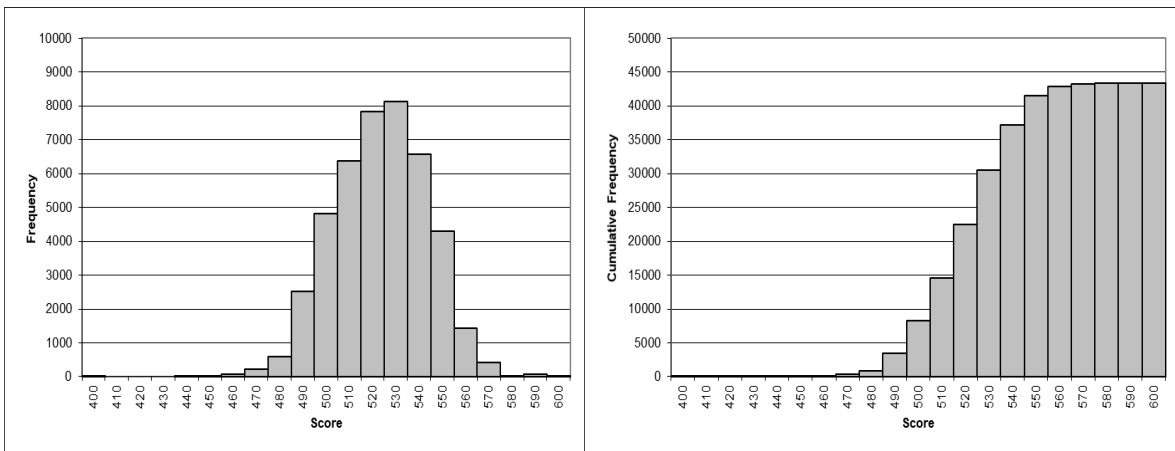


Figure 24. On-Demand Writing Grade 5 Score Frequency and Cumulative Frequency Distributions

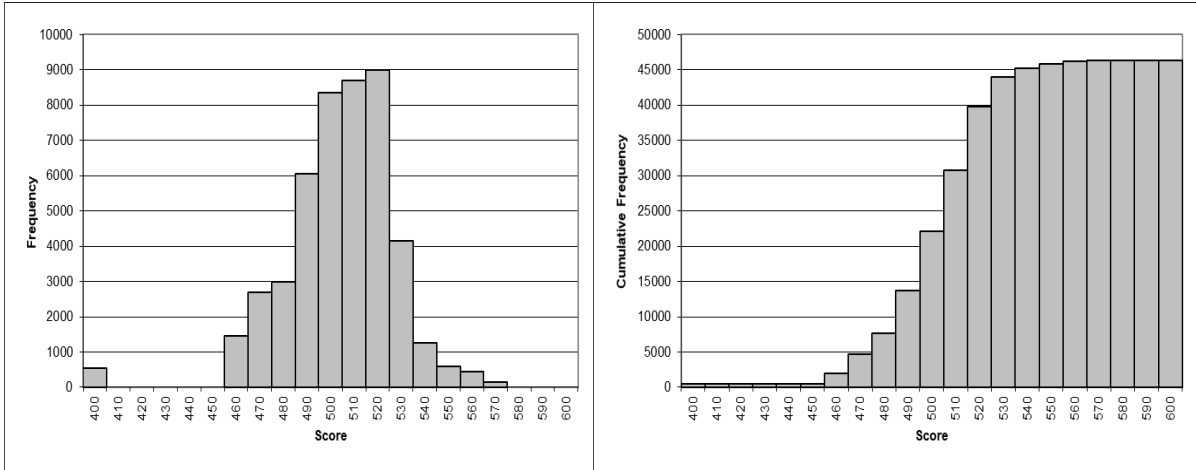


Figure 25. On-Demand Writing Grade 8 Score Frequency and Cumulative Frequency Distributions

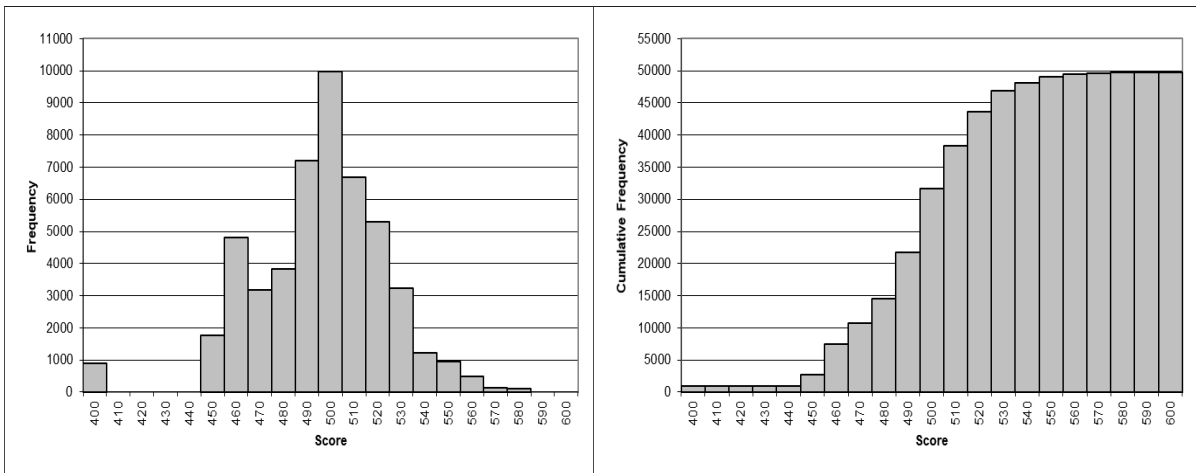
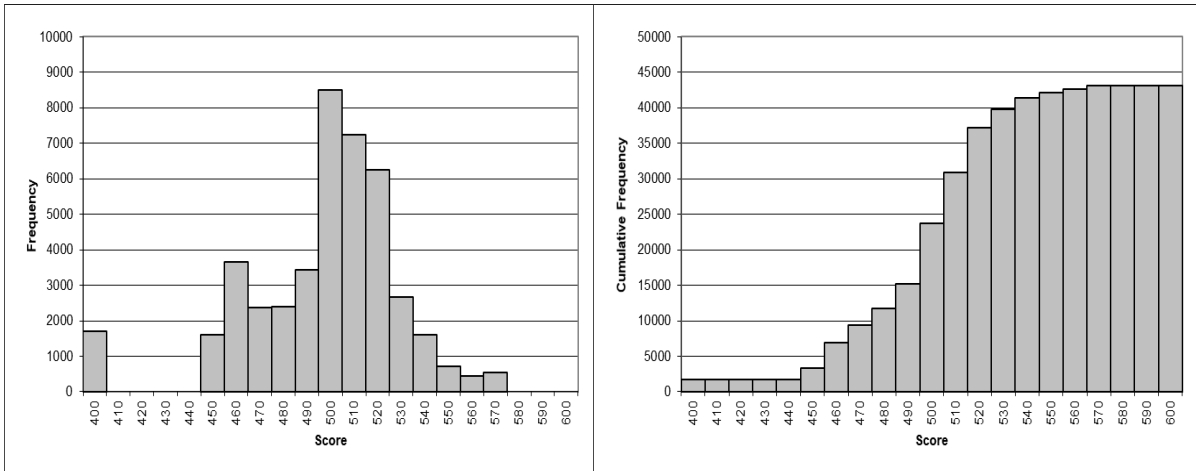


Figure 26. On-Demand Writing Grade 11 Score Frequency and Cumulative Frequency Distributions



Appendix I. Scale Score Descriptive Statistics⁵

Grade 3 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,565	511.13	17.4	499	510	523	600	0.29
Gender	Female	22,727	512.15	17.5	499	511	524	600	0.28
	Male	23,838	510.15	17.2	497	509	522	597	0.30
Ethnicity	Hispanic	3,842	507.46	16.0	496	506	517	573	0.34
	Asian	989	517.95	17.6	505	517	531	596	0.08
	Native Hawaiian/Pacific Islander	86	508.92	16.0	497	507	520	547	0.21
	Black/African American	4,954	502.70	15.5	492	501	513	595	0.40
	American Indian	53	507.17	17.0	497	507	517	541	-0.08
	White	34,135	512.68	17.3	501	512	524	600	0.27
	Two or More Races	2,506	509.77	16.7	497	509	522	597	0.31
Migrant	Non-Migrant	46,341	511.17	17.4	499	510	523	600	0.29
	Migrant	224	503.11	13.3	493	501	511	544	0.55
LEP	Non-LEP	42,826	511.65	17.5	499	511	524	600	0.27
	LEP	3,739	505.11	14.2	495	503	515	573	0.33
Economic Disadvantage	Economically Disadvantaged	28,934	507.51	16.3	495	507	519	596	0.30
	Not Economically Disadvantaged	17,631	517.06	17.4	505	517	529	600	0.21
IEP	Non-IEP	39,004	512.19	17.3	499	511	524	600	0.27
	IEP	7,561	505.68	16.6	494	503	516	574	0.41

Grade 4 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	42,980	513.76	17.4	500	514	526	598	0.07
Gender	Female	20,713	514.97	17.4	502	515	527	598	0.06
	Male	22,265	512.63	17.3	500	513	525	598	0.07
Ethnicity	Hispanic	3,518	509.14	16.0	497	508	521	565	0.18
	Asian	918	519.21	17.8	506	520	532	574	-0.05
	Native Hawaiian/Pacific Islander	71	510.32	16.1	496	513	523	540	-0.21
	Black/African American	4,349	504.09	16.2	492	502	515	565	0.31
	American Indian	50	514.22	18.1	502	515	529	562	-0.15
	White	31,804	515.55	17.2	502	517	528	598	0.02
	Two or More Races	2,268	512.14	17.0	499	513	524	574	0.10
Migrant	Non-Migrant	42,751	513.81	17.4	500	514	526	598	0.07
	Migrant	229	503.56	14.8	494	502	514	545	0.23
LEP	Non-LEP	39,923	514.43	17.5	502	515	527	598	0.03
	LEP	3,057	504.93	13.7	495	504	515	547	0.18
Economic Disadvantage	Economically Disadvantaged	26,350	509.62	16.5	497	509	521	578	0.16
	Not Economically Disadvantaged	16,630	520.32	16.8	508	521	532	598	-0.12
IEP	Non-IEP	36,259	515.29	17.2	502	515	527	598	0.02
	IEP	6,721	505.49	16.4	494	504	517	574	0.40

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

Appendix I. Scale Score Descriptive Statistics

Grade 5 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,446	518.92	18.5	504	519	533	600	0.07
Gender	Female	22,611	520.47	18.6	507	521	533	600	0.05
	Male	23,835	517.44	18.3	504	518	531	600	0.07
Ethnicity	Hispanic	4,016	514.18	17.4	500	513	526	583	0.25
	Asian	895	525.68	19.0	513	527	539	600	-0.02
	Native Hawaiian/Pacific Islander	74	513.61	16.7	502	512	526	553	-0.00
	Black/African American	5,044	508.74	17.3	496	507	521	578	0.38
	American Indian	54	518.46	16.6	507	519	530	559	0.17
	White	33,975	520.96	18.2	508	521	533	600	0.01
	Two or More Races	2,387	517.03	18.0	504	517	530	600	0.08
Migrant	Non-Migrant	46,254	518.97	18.5	506	519	533	600	0.07
	Migrant	192	506.21	18.5	493	504	519	550	-0.57
LEP	Non-LEP	43,822	519.72	18.4	506	520	533	600	0.03
	LEP	2,624	505.50	14.0	495	504	514	578	0.33
Economic Disadvantage	Economically Disadvantaged	28,417	514.51	17.6	502	514	527	600	0.17
	Not Economically Disadvantaged	18,029	525.86	17.8	514	527	538	600	-0.12
IEP	Non-IEP	39,752	520.89	18.0	508	521	533	600	0.03
	IEP	6,694	507.21	17.1	495	504	519	600	0.50

Grade 6 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,770	514.53	16.8	502	515	526	600	-0.03
Gender	Female	22,577	516.41	16.5	504	517	529	600	-0.04
	Male	24,190	512.77	16.9	500	513	524	578	-0.01
Ethnicity	Hispanic	3,975	509.28	16.1	497	508	520	566	0.04
	Asian	877	521.38	16.4	511	522	534	565	-0.25
	Native Hawaiian/Pacific Islander	76	513.08	16.9	504	512	524	548	0.23
	Black/African American	5,095	504.74	15.8	493	504	515	561	0.17
	American Indian	61	513.84	16.3	502	514	524	555	0.14
	White	34,324	516.52	16.4	505	517	529	600	-0.07
	Two or More Races	2,359	513.00	16.3	501	513	524	577	0.10
Migrant	Non-Migrant	46,546	514.58	16.8	502	515	526	600	-0.03
	Migrant	224	504.20	14.7	494	502	515	548	0.44
LEP	Non-LEP	44,813	515.23	16.6	504	515	527	600	-0.05
	LEP	1,957	498.32	12.4	490	497	506	547	-0.16
Economic Disadvantage	Economically Disadvantaged	28,525	510.57	16.1	499	510	522	577	0.05
	Not Economically Disadvantaged	18,245	520.71	16.0	510	522	532	600	-0.19
IEP	Non-IEP	40,423	516.45	16.2	505	517	529	600	-0.06
	IEP	6,347	502.25	15.4	492	501	512	578	0.37

Appendix I. Scale Score Descriptive Statistics

Grade 7 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	48,968	509.02	16.1	497	509	521	600	0.08
Gender	Female	23,865	510.94	15.8	500	511	521	600	0.07
	Male	25,101	507.19	16.3	495	507	519	600	0.10
Ethnicity	Hispanic	4,079	504.77	15.5	494	504	515	576	0.08
	Asian	844	517.90	17.3	506	519	530	566	-0.07
	Native Hawaiian/Pacific Islander	70	506.47	15.3	496	507	515	545	0.35
	Black/African American	5,343	500.86	15.3	491	500	511	557	0.23
	American Indian	69	512.28	15.2	502	513	521	543	0.04
	White	36,191	510.59	15.8	500	511	521	600	0.04
	Two or More Races	2,370	507.60	16.2	496	507	519	600	0.27
Migrant	Non-Migrant	48,766	509.06	16.1	498	509	521	600	0.07
	Migrant	202	498.63	14.7	489	496	508	545	0.34
LEP	Non-LEP	47,197	509.60	16.0	498	510	521	600	0.06
	LEP	1,771	493.63	11.6	487	494	500	539	-0.16
Economic Disadvantage	Economically Disadvantaged	29,418	505.31	15.3	494	505	516	577	0.09
	Not Economically Disadvantaged	19,550	514.60	15.8	504	515	525	600	-0.01
IEP	Non-IEP	42,819	510.85	15.6	500	511	521	600	0.06
	IEP	6,149	496.28	13.9	487	494	504	564	0.43

Grade 8 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,982	511.99	15.3	501	511	522	599	0.08
Gender	Female	24,418	514.58	15.0	505	515	525	599	0.05
	Male	25,562	509.53	15.1	499	509	520	576	0.12
Ethnicity	Hispanic	4,257	508.85	14.5	499	509	519	563	0.00
	Asian	853	520.51	15.8	511	521	532	563	-0.20
	Native Hawaiian/Pacific Islander	82	510.11	15.4	497	512	522	545	0.22
	Black/African American	5,544	504.01	13.8	494	503	513	556	0.28
	American Indian	65	508.92	14.3	501	509	518	542	0.07
	White	36,882	513.43	15.1	503	513	524	599	0.05
	Two or More Races	2,297	511.09	15.0	501	511	521	563	0.08
Migrant	Non-Migrant	49,781	512.03	15.2	501	512	522	599	0.08
	Migrant	201	502.36	14.1	493	503	512	545	0.21
LEP	Non-LEP	48,232	512.49	15.2	501	513	523	599	0.06
	LEP	1,750	498.32	10.8	491	498	505	541	0.01
Economic Disadvantage	Economically Disadvantaged	29,622	508.34	14.4	498	507	518	599	0.12
	Not Economically Disadvantaged	20,360	517.31	14.9	507	518	527	580	-0.03
IEP	Non-IEP	44,093	513.66	14.8	503	513	524	599	0.05
	IEP	5,889	499.54	12.6	491	498	507	560	0.35

Appendix I. Scale Score Descriptive Statistics

Grade 10 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,926	511.14	17.1	499	510	523	600	0.28
Gender	Female	22,844	513.86	16.7	501	513	525	600	0.25
	Male	24,080	508.56	17.1	495	507	521	600	0.35
Ethnicity	Hispanic	3,701	507.04	16.6	495	506	517	577	0.15
	Asian	947	520.59	18.4	507	521	534	578	-0.03
	Native Hawaiian/Pacific Islander	52	506.02	17.3	493	503	522	544	0.29
	Black/African American	4,690	503.31	14.8	492	501	513	565	0.46
	American Indian	73	511.66	15.3	501	511	523	559	0.41
	White	35,563	512.42	17.0	499	511	524	600	0.27
	Two or More Races	1,898	509.75	16.8	497	509	521	578	0.21
Migrant	Non-Migrant	46,748	511.18	17.1	499	510	523	600	0.28
	Migrant	178	499.14	14.6	489	498	509	538	0.32
LEP	Non-LEP	45,417	511.67	17.0	499	511	523	600	0.27
	LEP	1,509	495.10	10.9	489	495	501	565	0.36
Economic Disadvantage	Economically Disadvantaged	25,564	507.07	15.9	495	505	518	600	0.33
	Not Economically Disadvantaged	21,362	516.01	17.3	503	516	528	600	0.15
IEP	Non-IEP	42,373	512.62	16.9	501	512	524	600	0.24
	IEP	4,553	497.34	12.5	489	497	503	558	0.66

Grade 3 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,629	515.72	20.3	501	514	528	600	0.49
Gender	Female	22,755	514.96	19.5	501	514	527	600	0.50
	Male	23,874	516.46	20.9	501	515	530	600	0.47
Ethnicity	Hispanic	3,878	509.65	18.8	497	507	521	600	0.23
	Asian	1,005	527.92	24.6	511	527	543	600	0.21
	Native Hawaiian/Pacific Islander	88	509.94	19.6	498	510	524	555	-0.36
	Black/African American	4,959	504.93	17.3	493	502	515	600	0.76
	American Indian	53	509.49	21.2	493	506	519	575	0.80
	White	34,140	517.83	20.0	503	516	531	600	0.46
	Two or More Races	2,506	513.32	19.6	500	511	525	600	0.63
Migrant	Non-Migrant	46,400	515.78	20.3	501	514	528	600	0.49
	Migrant	229	504.97	17.1	495	504	514	573	0.24
LEP	Non-LEP	42,822	516.46	20.3	502	515	530	600	0.53
	LEP	3,807	507.46	18.4	496	506	518	600	-0.22
Economic Disadvantage	Economically Disadvantaged	28,962	510.84	18.3	498	509	522	600	0.47
	Not Economically Disadvantaged	17,667	523.74	20.8	509	523	537	600	0.37
IEP	Non-IEP	39,069	517.50	20.0	503	516	530	600	0.47
	IEP	7,560	506.56	18.9	493	504	518	600	0.73

Appendix I. Scale Score Descriptive Statistics

Grade 4 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,026	516.24	19.9	502	514	529	600	0.36
Gender	Female	20,741	515.05	19.3	502	514	527	600	0.36
	Male	22,283	517.35	20.3	503	516	531	600	0.35
Ethnicity	Hispanic	3,544	510.22	18.6	497	510	522	600	0.06
	Asian	928	527.74	23.9	511	526	545	600	0.20
	Native Hawaiian/Pacific Islander	71	510.63	19.8	492	510	524	556	0.15
	Black/African American	4,354	504.35	16.7	492	503	514	583	0.39
	American Indian	50	518.64	21.9	505	514	533	584	0.96
	White	31,808	518.33	19.5	505	517	531	600	0.36
	Two or More Races	2,269	514.50	19.0	500	514	526	600	0.55
Migrant	Non-Migrant	42,792	516.31	19.9	502	515	529	600	0.37
	Migrant	234	503.18	17.5	492	503	514	559	0.30
LEP	Non-LEP	39,923	517.04	19.8	503	516	530	600	0.40
	LEP	3,103	505.98	17.7	495	505	517	577	-0.28
Economic Disadvantage	Economically Disadvantaged	26,374	511.12	18.0	499	510	523	600	0.35
	Not Economically Disadvantaged	16,652	524.35	19.9	510	524	537	600	0.26
IEP	Non-IEP	36,306	518.22	19.4	505	517	531	600	0.36
	IEP	6,720	505.53	18.8	492	503	518	600	0.65

Grade 5 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,494	510.24	19.5	496	508	523	600	0.55
Gender	Female	22,632	509.64	18.9	496	507	521	600	0.56
	Male	23,862	510.81	20.0	496	508	524	600	0.53
Ethnicity	Hispanic	4,045	505.34	18.2	493	503	517	600	0.34
	Asian	905	521.58	23.4	505	521	535	600	0.46
	Native Hawaiian/Pacific Islander	75	501.93	20.5	490	502	513	543	-1.38
	Black/African American	5,050	499.15	16.0	489	497	508	600	0.75
	American Indian	54	510.37	20.3	495	508	523	565	0.69
	White	33,976	512.36	19.3	498	510	525	600	0.52
	Two or More Races	2,388	507.81	18.6	495	506	519	600	0.65
Migrant	Non-Migrant	46,299	510.28	19.5	496	508	523	600	0.55
	Migrant	195	500.45	16.7	490	498	508	600	1.21
LEP	Non-LEP	43,817	511.01	19.5	497	509	523	600	0.57
	LEP	2,677	497.58	15.7	487	497	506	562	-0.22
Economic Disadvantage	Economically Disadvantaged	28,441	505.22	17.4	493	503	516	600	0.57
	Not Economically Disadvantaged	18,053	518.14	20.1	504	517	531	600	0.37
IEP	Non-IEP	39,800	512.02	19.3	498	510	524	600	0.51
	IEP	6,694	499.63	17.2	487	496	508	600	0.98

Appendix I. Scale Score Descriptive Statistics

Grade 6 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,867	503.05	16.6	491	501	513	599	0.42
Gender	Female	22,618	502.77	16.2	491	501	513	599	0.44
	Male	24,246	503.31	16.9	491	501	514	599	0.40
Ethnicity	Hispanic	4,039	497.42	15.5	488	496	507	574	-0.10
	Asian	880	513.95	21.0	498	512	526	597	0.52
	Native Hawaiian/Pacific Islander	76	501.37	15.9	491	499	512	546	0.16
	Black/African American	5,111	493.16	13.3	485	492	501	549	0.22
	American Indian	61	501.10	19.3	489	498	511	595	1.87
	White	34,335	505.04	16.3	493	503	515	599	0.42
	Two or More Races	2,362	501.13	15.5	490	499	511	589	0.58
Migrant	Non-Migrant	46,638	503.09	16.6	491	501	513	599	0.43
	Migrant	229	493.73	15.6	485	493	503	562	-0.65
LEP	Non-LEP	44,817	503.70	16.4	492	502	514	599	0.49
	LEP	2,050	488.71	13.9	482	489	496	571	-1.22
Economic Disadvantage	Economically Disadvantaged	28,577	498.79	14.7	489	498	508	596	0.36
	Not Economically Disadvantaged	18,290	509.70	17.2	498	508	521	599	0.28
IEP	Non-IEP	40,512	504.56	16.4	493	503	515	599	0.38
	IEP	6,355	493.39	14.0	485	491	501	589	0.82

Grade 7 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,069	502.36	14.1	493	500	510	600	0.74
Gender	Female	23,930	502.28	13.8	493	500	510	597	0.70
	Male	25,137	502.43	14.5	493	500	510	600	0.76
Ethnicity	Hispanic	4,159	498.63	13.2	491	498	506	576	-0.04
	Asian	850	513.94	21.1	500	512	526	600	0.76
	Native Hawaiian/Pacific Islander	70	501.23	13.8	492	500	508	549	0.95
	Black/African American	5,348	495.49	11.3	488	494	501	561	0.41
	American Indian	69	503.81	16.7	495	502	510	561	1.03
	White	36,200	503.64	14.0	494	502	512	600	0.75
	Two or More Races	2,371	500.73	13.7	492	499	508	576	0.68
Migrant	Non-Migrant	48,864	502.39	14.1	493	500	510	600	0.74
	Migrant	205	495.07	12.3	488	494	502	542	-0.10
LEP	Non-LEP	47,185	502.80	14.0	493	501	510	600	0.83
	LEP	1,884	491.19	12.1	487	492	498	542	-1.79
Economic Disadvantage	Economically Disadvantaged	29,479	498.89	12.3	491	498	506	576	0.55
	Not Economically Disadvantaged	19,590	507.57	15.1	498	506	516	600	0.70
IEP	Non-IEP	42,928	503.54	14.1	494	502	511	600	0.72
	IEP	6,141	494.09	11.0	487	493	500	555	0.83

Appendix I. Scale Score Descriptive Statistics

Grade 8 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	50,097	501.76	16.2	491	499	510	600	0.79
Gender	Female	24,476	501.79	15.5	491	499	510	596	0.71
	Male	25,619	501.72	16.9	491	499	511	600	0.85
Ethnicity	Hispanic	4,346	497.47	15.5	488	496	506	593	-0.09
	Asian	856	516.90	23.4	499	514	531	600	0.90
	Native Hawaiian/Pacific Islander	82	502.40	17.8	491	499	513	547	0.56
	Black/African American	5,570	493.34	12.3	486	492	499	572	0.42
	American Indian	65	497.15	14.2	488	494	503	542	0.96
	White	36,882	503.27	16.1	492	501	512	600	0.80
	Two or More Races	2,294	500.38	15.0	491	499	508	596	1.04
Migrant	Non-Migrant	49,890	501.79	16.2	491	499	511	600	0.80
	Migrant	207	493.37	13.5	485	494	501	534	-0.24
LEP	Non-LEP	48,219	502.27	16.1	491	499	512	600	0.90
	LEP	1,878	488.60	14.6	482	491	496	556	-1.73
Economic Disadvantage	Economically Disadvantaged	29,694	497.69	14.0	488	496	505	596	0.70
	Not Economically Disadvantaged	20,403	507.68	17.5	496	506	518	600	0.66
IEP	Non-IEP	44,209	503.08	16.3	492	501	512	600	0.75
	IEP	5,888	491.81	11.7	485	491	497	572	0.95

Grade 10 Mathematics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,933	501.16	14.8	492	499	509	600	0.76
Gender	Female	22,846	501.52	13.9	492	500	509	600	0.74
	Male	24,085	500.81	15.6	490	498	508	600	0.78
Ethnicity	Hispanic	3,788	496.79	14.7	490	497	504	598	-0.53
	Asian	949	514.33	21.8	499	511	526	599	0.74
	Native Hawaiian/Pacific Islander	52	498.21	13.8	490	495	503	537	0.91
	Black/African American	4,671	494.80	11.1	488	494	500	549	0.52
	American Indian	72	500.18	14.7	491	498	509	543	0.23
	White	35,503	502.18	14.6	492	500	509	600	0.81
	Two or More Races	1,896	499.90	14.3	490	498	507	564	0.66
Migrant	Non-Migrant	46,754	501.19	14.8	492	499	509	600	0.76
	Migrant	179	492.34	11.0	486	493	498	526	0.21
LEP	Non-LEP	45,326	501.60	14.6	492	499	509	600	0.90
	LEP	1,607	488.52	13.8	484	490	496	539	-2.33
Economic Disadvantage	Economically Disadvantaged	25,588	497.39	12.4	490	497	504	598	0.46
	Not Economically Disadvantaged	21,345	505.67	16.1	495	504	515	600	0.70
IEP	Non-IEP	42,394	502.20	14.8	492	500	509	600	0.74
	IEP	4,539	491.39	9.93	487	491	497	561	0.32

Appendix I. Scale Score Descriptive Statistics

Grade 4 Science

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,012	507.74	13.5	498	507	516	581	0.13
Gender	Female	20,733	507.30	13.2	498	507	516	581	0.13
	Male	22,277	508.16	13.8	498	507	516	565	0.12
Ethnicity	Hispanic	3,541	503.59	12.8	495	503	512	557	-0.31
	Asian	928	511.55	14.8	501	511	521	562	0.00
	Native Hawaiian/Pacific Islander	71	506.69	12.6	499	506	512	540	0.55
	Black/African American	4,353	500.20	11.4	492	500	507	548	0.16
	American Indian	50	507.78	12.6	501	507	516	536	-0.24
	White	31,799	509.24	13.4	500	509	518	581	0.13
	Two or More Races	2,268	506.17	12.7	498	506	514	555	0.21
Migrant	Non-Migrant	42,779	507.79	13.5	498	507	516	581	0.14
	Migrant	233	499.65	12.6	493	500	506	533	-2.15
LEP	Non-LEP	39,912	508.29	13.5	499	507	516	581	0.17
	LEP	3,100	500.69	11.9	494	500	508	545	-0.85
Economic Disadvantage	Economically Disadvantaged	26,364	504.73	12.6	496	504	513	557	0.15
	Not Economically Disadvantaged	16,648	512.51	13.5	503	512	521	581	-0.02
IEP	Non-IEP	36,294	508.58	13.4	500	508	518	581	0.08
	IEP	6,718	503.20	13.3	494	503	511	557	0.47

Grade 7 Science

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,024	497.86	14.2	488	496	507	572	0.26
Gender	Female	23,895	497.60	13.8	488	496	506	572	0.27
	Male	25,127	498.11	14.5	487	496	508	572	0.24
Ethnicity	Hispanic	4,153	493.39	13.7	485	493	501	546	-0.28
	Asian	849	505.37	16.4	493	505	516	560	0.04
	Native Hawaiian/Pacific Islander	69	493.94	13.4	484	492	503	532	0.62
	Black/African American	5,334	490.71	11.6	484	490	497	542	0.24
	American Indian	69	499.57	16.1	490	497	507	562	1.29
	White	36,178	499.36	14.1	489	498	510	572	0.27
	Two or More Races	2,370	496.38	13.6	487	495	505	545	0.27
Migrant	Non-Migrant	48,819	497.90	14.2	488	496	507	572	0.26
	Migrant	205	489.89	13.3	484	490	496	529	-1.48
LEP	Non-LEP	47,149	498.35	14.0	488	497	507	572	0.32
	LEP	1,875	485.69	11.9	481	487	493	525	-2.12
Economic Disadvantage	Economically Disadvantaged	29,441	494.60	12.9	487	493	503	572	0.24
	Not Economically Disadvantaged	19,583	502.77	14.6	493	503	512	572	0.09
IEP	Non-IEP	42,884	498.99	14.2	489	498	508	572	0.20
	IEP	6,140	490.01	11.6	482	488	496	544	0.46

Appendix I. Scale Score Descriptive Statistics

Grade 11 Science

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,753	495.56	15.7	485	495	506	568	-0.02
Gender	Female	21,705	497.03	14.9	487	497	507	557	-0.03
	Male	22,047	494.11	16.3	482	493	505	568	0.04
Ethnicity	Hispanic	3,265	491.05	15.3	480	490	501	540	-0.20
	Asian	919	503.29	18.0	492	504	515	568	-0.14
	Native Hawaiian/Pacific Islander	61	494.66	16.4	485	495	505	528	-0.21
	Black/African American	4,445	487.90	14.1	479	487	497	537	0.16
	American Indian	56	492.46	16.6	480	496	502	526	0.06
	White	33,407	496.90	15.4	486	497	508	560	-0.05
	Two or More Races	1,599	493.85	14.8	483	493	505	544	0.13
Migrant	Non-Migrant	43,618	495.61	15.6	485	495	506	568	-0.01
	Migrant	135	480.66	15.7	470	480	492	526	-0.78
LEP	Non-LEP	42,359	496.09	15.5	485	496	507	568	0.01
	LEP	1,394	479.56	13.2	472	480	487	519	-0.96
Economic Disadvantage	Economically Disadvantaged	22,278	491.89	14.8	482	492	502	557	0.03
	Not Economically Disadvantaged	21,475	499.37	15.7	489	500	510	568	-0.15
IEP	Non-IEP	39,949	496.80	15.3	486	497	507	568	-0.05
	IEP	3,804	482.58	13.0	473	482	490	541	0.33

Grade 5 Social Studies

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,434	511.43	15.7	500	510	522	600	0.38
Gender	Female	22,603	511.62	15.3	501	510	521	600	0.43
	Male	23,831	511.25	16.0	499	510	522	600	0.34
Ethnicity	Hispanic	4,013	508.29	14.4	498	507	517	599	0.54
	Asian	894	518.95	16.0	508	519	531	576	0.25
	Native Hawaiian/Pacific Islander	74	506.46	13.5	495	506	515	558	0.87
	Black/African American	5,043	503.29	13.8	494	502	512	563	0.50
	American Indian	54	510.65	14.2	502	513	521	540	-0.19
	White	33,967	512.96	15.7	502	512	523	600	0.36
	Two or More Races	2,388	509.63	15.0	499	508	520	564	0.10
Migrant	Non-Migrant	46,243	511.46	15.7	500	510	522	600	0.38
	Migrant	191	504.03	15.4	494	502	512	575	0.86
LEP	Non-LEP	43,813	511.96	15.7	501	510	523	600	0.35
	LEP	2,621	502.59	11.7	494	502	510	555	0.45
Economic Disadvantage	Economically Disadvantaged	28,408	507.84	14.4	497	507	517	600	0.39
	Not Economically Disadvantaged	18,026	517.10	15.9	506	517	528	600	0.27
IEP	Non-IEP	39,745	512.73	15.5	502	512	523	600	0.36
	IEP	6,689	503.75	14.7	494	502	512	599	0.66

Appendix I. Scale Score Descriptive Statistics

Grade 8 Social Studies

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,943	508.89	15.8	497	507	519	600	0.36
Gender	Female	24,397	509.64	15.2	498	509	519	600	0.36
	Male	25,544	508.18	16.3	496	507	519	600	0.39
Ethnicity	Hispanic	4,255	506.22	14.4	496	505	515	567	0.41
	Asian	853	520.27	17.5	507	521	533	581	0.09
	Native Hawaiian/Pacific Islander	81	509.16	14.8	496	507	518	547	0.48
	Black/African American	5,543	500.95	13.6	492	499	509	556	-0.00
	American Indian	65	503.54	14.0	493	503	512	534	0.14
	White	36,848	510.23	15.7	498	509	521	600	0.37
	Two or More Races	2,296	507.48	15.4	497	506	517	578	0.35
Migrant	Non-Migrant	49,743	508.92	15.8	497	507	519	600	0.36
	Migrant	200	501.15	12.5	493	499	508	544	0.68
LEP	Non-LEP	48,191	509.31	15.8	498	508	520	600	0.35
	LEP	1,752	497.31	10.7	491	497	503	553	-0.63
Economic Disadvantage	Economically Disadvantaged	29,594	504.99	14.3	495	503	514	581	0.32
	Not Economically Disadvantaged	20,349	514.57	16.1	503	514	525	600	0.27
IEP	Non-IEP	44,064	510.29	15.6	499	509	521	600	0.34
	IEP	5,879	498.42	12.3	491	496	505	559	0.34

Grade 11 Social Studies

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,525	507.70	15.9	496	506	518	578	0.25
Gender	Female	21,585	508.83	15.2	498	508	520	577	0.28
	Male	21,940	506.58	16.5	494	505	518	578	0.26
Ethnicity	Hispanic	3,222	503.82	14.8	493	502	514	566	0.34
	Asian	895	516.33	17.6	503	517	528	577	0.14
	Native Hawaiian/Pacific Islander	61	506.05	15.4	497	504	518	548	0.60
	Black/African American	4,419	500.66	14.0	491	498	509	565	0.45
	American Indian	56	504.48	14.7	491	502	517	533	0.31
	White	33,280	508.86	15.9	497	508	520	578	0.19
	Two or More Races	1,592	506.06	14.7	496	504	516	557	0.33
Migrant	Non-Migrant	43,392	507.74	15.9	496	506	518	578	0.25
	Migrant	133	494.38	12.7	486	493	500	537	0.60
LEP	Non-LEP	42,170	508.17	15.9	496	507	519	578	0.24
	LEP	1,355	493.12	10.4	486	493	499	534	0.01
Economic Disadvantage	Economically Disadvantaged	22,184	503.68	14.6	493	502	513	566	0.32
	Not Economically Disadvantaged	21,341	511.87	16.2	500	512	524	578	0.10
IEP	Non-IEP	39,725	508.90	15.7	498	508	520	578	0.22
	IEP	3,800	495.09	12.5	486	494	502	557	0.67

Appendix I. Scale Score Descriptive Statistics

Grade 5 Editing and Mechanics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,423	520.00	16.3	509	520	531	600	0.03
Gender	Female	22,599	521.92	16.1	512	522	533	600	-0.01
	Male	23,824	518.17	16.2	507	519	529	600	0.07
Ethnicity	Hispanic	4,012	515.34	15.1	504	515	526	567	0.01
	Asian	892	526.99	16.8	517	526	539	600	0.15
	Native Hawaiian/Pacific Islander	74	515.28	15.9	502	512	526	560	0.30
	Black/African American	5,040	511.83	15.3	501	512	522	568	0.12
	American Indian	54	520.22	15.3	512	522	529	550	-0.29
	White	33,964	521.69	16.0	512	522	533	600	0.00
	Two or More Races	2,386	518.55	16.0	509	519	529	600	0.10
Migrant	Non-Migrant	46,232	520.05	16.3	509	520	531	600	0.03
	Migrant	191	507.94	15.0	496	507	517	557	0.34
LEP	Non-LEP	43,803	520.66	16.2	509	521	532	600	0.02
	LEP	2,620	508.92	13.8	499	509	519	560	0.10
Economic Disadvantage	Economically Disadvantaged	28,400	516.30	15.6	506	517	526	600	0.06
	Not Economically Disadvantaged	18,023	525.83	15.5	517	526	537	600	-0.01
IEP	Non-IEP	39,739	521.91	15.5	512	522	532	600	0.06
	IEP	6,684	508.66	16.3	496	507	519	582	0.44

Grade 8 Editing and Mechanics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,899	515.28	17.6	504	515	527	600	0.27
Gender	Female	24,380	517.76	17.2	506	518	528	600	0.33
	Male	25,517	512.92	17.6	500	513	524	600	0.25
Ethnicity	Hispanic	4,254	510.88	16.1	500	511	521	599	0.16
	Asian	854	526.16	20.3	514	525	538	600	0.36
	Native Hawaiian/Pacific Islander	82	512.24	18.9	497	511	525	563	0.28
	Black/African American	5,526	506.36	15.8	495	506	516	600	0.30
	American Indian	65	512.14	17.2	501	514	522	550	-0.44
	White	36,824	516.95	17.4	506	516	528	600	0.25
	Two or More Races	2,292	514.40	17.1	503	515	525	599	0.20
Migrant	Non-Migrant	49,699	515.33	17.6	504	515	527	600	0.27
	Migrant	200	503.99	15.7	493	503	514	556	0.29
LEP	Non-LEP	48,153	515.88	17.4	504	516	527	600	0.27
	LEP	1,746	498.95	13.0	491	498	508	556	-0.10
Economic Disadvantage	Economically Disadvantaged	29,555	510.94	16.3	500	511	522	600	0.17
	Not Economically Disadvantaged	20,344	521.59	17.4	511	521	532	600	0.32
IEP	Non-IEP	44,025	517.30	16.9	506	518	528	600	0.30
	IEP	5,874	500.21	14.6	491	499	509	599	0.48

Appendix I. Scale Score Descriptive Statistics

Grade 11 Editing and Mechanics

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,427	518.71	19.9	504	520	532	600	-0.08
Gender	Female	21,537	522.65	18.6	509	524	535	600	-0.10
	Male	21,890	514.83	20.4	499	515	529	600	0.02
Ethnicity	Hispanic	3,213	512.55	19.0	499	513	526	581	-0.04
	Asian	890	526.48	20.8	512	526	541	600	-0.00
	Native Hawaiian/Pacific Islander	61	517.44	21.9	506	516	526	581	-0.11
	Black/African American	4,374	509.49	18.4	496	509	523	581	0.13
	American Indian	56	516.75	20.2	498	519	535	550	-0.31
	White	33,244	520.38	19.8	507	521	534	600	-0.13
	Two or More Races	1,589	517.26	19.0	504	517	531	582	-0.07
Migrant	Non-Migrant	43,295	518.77	19.9	504	520	532	600	-0.08
	Migrant	132	498.41	18.9	485	497	512	558	0.36
LEP	Non-LEP	42,095	519.43	19.7	506	520	534	600	-0.09
	LEP	1,332	495.98	14.3	488	496	504	539	-0.21
Economic Disadvantage	Economically Disadvantaged	22,104	513.78	18.9	499	514	526	600	0.00
	Not Economically Disadvantaged	21,323	523.81	19.7	511	525	538	600	-0.23
IEP	Non-IEP	39,651	520.42	19.4	507	521	534	600	-0.12
	IEP	3,776	500.71	16.3	491	499	509	569	0.37

Grade 5 On-Demand Writing

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,391	499.82	22.8	487	502	515	561	-0.90
Gender	Female	22,589	503.67	21.8	493	506	516	561	-0.83
	Male	23,802	496.17	23.1	483	497	512	561	-0.96
Ethnicity	Hispanic	4,009	496.05	22.5	484	497	512	561	-0.93
	Asian	893	507.62	22.5	496	510	520	561	-1.10
	Native Hawaiian/Pacific Islander	74	493.57	31.1	479	501	515	558	-1.36
	Black/African American	5,032	489.06	24.1	475	493	505	561	-1.11
	American Indian	54	500.76	17.7	493	504	512	542	-0.26
	White	33,941	501.80	22.1	490	504	516	561	-0.84
	Two or More Races	2,387	498.01	22.3	486	499	513	561	-1.04
Migrant	Non-Migrant	46,200	499.87	22.8	489	502	515	561	-0.89
	Migrant	191	487.63	27.4	473	493	504	552	-1.20
LEP	Non-LEP	43,775	500.56	22.6	489	502	515	561	-0.89
	LEP	2,616	487.38	22.7	473	490	502	552	-1.24
Economic Disadvantage	Economically Disadvantaged	28,381	495.11	23.0	482	496	511	561	-1.00
	Not Economically Disadvantaged	18,010	507.24	20.3	496	509	519	561	-0.67
IEP	Non-IEP	39,716	502.81	20.9	493	505	516	561	-0.78
	IEP	6,675	482.05	25.3	466	483	497	561	-0.95

Appendix I. Scale Score Descriptive Statistics

Grade 8 On-Demand Writing

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,768	491.35	27.4	476	493	509	574	-0.42
Gender	Female	24,329	497.51	25.9	484	498	514	574	-0.39
	Male	25,437	485.45	27.5	465	488	503	574	-0.44
Ethnicity	Hispanic	4,236	486.21	27.1	467	490	504	574	-0.55
	Asian	852	507.93	27.6	493	510	523	574	-0.32
	Native Hawaiian/Pacific Islander	82	492.52	29.9	479	491	513	574	-0.30
	Black/African American	5,501	477.49	26.9	460	479	495	574	-0.51
	American Indian	65	484.98	22.9	467	488	498	538	-0.76
	White	36,752	493.75	26.8	479	495	511	574	-0.42
	Two or More Races	2,278	489.60	27.1	473	492	507	574	-0.45
Migrant	Non-Migrant	49,570	491.40	27.4	476	493	509	574	-0.42
	Migrant	198	476.51	28.7	454	479	494	553	-0.32
LEP	Non-LEP	48,039	492.19	27.1	477	494	509	574	-0.41
	LEP	1,729	467.91	26.3	454	467	487	574	-0.70
Economic Disadvantage	Economically Disadvantaged	29,456	484.84	26.8	465	487	502	574	-0.48
	Not Economically Disadvantaged	20,312	500.78	25.5	487	501	517	574	-0.38
IEP	Non-IEP	43,917	495.01	25.5	481	495	511	574	-0.36
	IEP	5,851	463.84	25.5	454	460	481	558	-0.53

Grade 11 On-Demand Writing

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,155	492.77	31.8	476	498	512	565	-0.83
Gender	Female	21,455	500.42	27.8	489	503	517	565	-0.84
	Male	21,699	485.20	33.6	462	493	507	565	-0.72
Ethnicity	Hispanic	3,172	486.41	31.9	466	495	507	565	-0.84
	Asian	912	505.31	30.4	494	508	522	565	-0.89
	Native Hawaiian/Pacific Islander	59	492.24	25.4	474	493	509	552	0.07
	Black/African American	4,301	480.03	32.1	457	487	501	565	-0.63
	American Indian	54	483.61	40.3	457	493	511	553	-0.72
	White	33,072	494.88	31.2	481	500	513	565	-0.88
	Two or More Races	1,584	489.21	32.9	471	496	510	565	-0.90
Migrant	Non-Migrant	43,025	492.86	31.7	478	498	512	565	-0.83
	Migrant	130	463.50	34.3	441	462	492	542	-0.21
LEP	Non-LEP	41,835	493.72	31.4	478	499	513	565	-0.86
	LEP	1,320	462.77	30.1	441	461	487	545	-0.48
Economic Disadvantage	Economically Disadvantaged	21,889	486.46	31.7	466	494	507	565	-0.77
	Not Economically Disadvantaged	21,266	499.27	30.5	488	502	517	565	-0.98
IEP	Non-IEP	39,418	495.46	30.7	483	500	513	565	-0.95
	IEP	3,737	464.41	28.8	441	461	487	563	-0.17

Appendix J. Performance Level Rates

Grade 3 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,565	27.7%	26.7%	27.4%	18.2%
Gender	Female	22,727	25.8%	26.0%	28.6%	19.6%
	Male	23,838	29.6%	27.3%	26.3%	16.8%
Ethnicity	Hispanic	3,842	33.8%	31.0%	23.7%	11.5%
	Asian	989	16.4%	22.4%	30.4%	30.7%
	Native Hawaiian/Pacific Islander	86	32.6%	25.6%	31.4%	10.5%
	Black/African American	4,954	46.8%	27.8%	18.7%	6.8%
	American Indian	53	34.0%	24.5%	24.5%	17.0%
	White	34,135	24.5%	26.0%	29.1%	20.5%
	Two or More Races	2,506	29.3%	28.7%	27.1%	14.9%
Migrant	Non-Migrant	46,341	27.7%	26.6%	27.5%	18.2%
	Migrant	224	42.9%	35.3%	17.0%	4.9%
LEP	Non-LEP	42,826	26.9%	26.1%	27.8%	19.2%
	LEP	3,739	37.7%	33.2%	22.6%	6.5%
Economic Disadvantage	Economically Disadvantaged	28,934	34.5%	28.8%	24.6%	12.2%
	Not Economically Disadvantaged	17,631	16.6%	23.2%	32.1%	28.0%
IEP	Non-IEP	39,004	25.3%	26.4%	28.7%	19.6%
	IEP	7,561	40.1%	28.0%	21.0%	11.0%

Grade 4 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,980	29.0%	24.8%	28.7%	17.4%
Gender	Female	20,713	26.7%	24.5%	29.4%	19.4%
	Male	22,265	31.2%	25.1%	28.1%	15.6%
Ethnicity	Hispanic	3,518	37.5%	28.2%	24.7%	9.6%
	Asian	918	18.4%	25.3%	27.3%	29.0%
	Native Hawaiian/Pacific Islander	71	32.4%	23.9%	33.8%	9.9%
	Black/African American	4,349	51.3%	24.4%	18.1%	6.3%
	American Indian	50	26.0%	26.0%	28.0%	20.0%
	White	31,804	25.2%	24.5%	30.6%	19.7%
	Two or More Races	2,268	31.2%	25.5%	28.7%	14.6%
Migrant	Non-Migrant	42,751	28.9%	24.8%	28.8%	17.5%
	Migrant	229	52.4%	25.8%	16.6%	5.2%
LEP	Non-LEP	39,923	27.7%	24.3%	29.5%	18.5%
	LEP	3,057	45.7%	32.6%	18.1%	3.6%
Economic Disadvantage	Economically Disadvantaged	26,350	37.1%	27.0%	25.0%	10.9%
	Not Economically Disadvantaged	16,630	16.3%	21.5%	34.5%	27.8%
IEP	Non-IEP	36,259	25.4%	24.7%	30.7%	19.2%
	IEP	6,721	48.3%	25.7%	18.1%	7.9%

Grade 5 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,446	27.3%	27.5%	28.1%	17.1%
Gender	Female	22,611	24.7%	26.9%	28.7%	19.7%
	Male	23,835	29.7%	28.1%	27.6%	14.6%
Ethnicity	Hispanic	4,016	36.1%	29.7%	24.3%	10.0%
	Asian	895	16.3%	22.6%	33.1%	28.0%
	Native Hawaiian/Pacific Islander	74	40.5%	23.0%	28.4%	8.1%
	Black/African American	5,044	49.3%	27.2%	17.2%	6.3%
	American Indian	54	22.2%	33.3%	31.5%	13.0%
	White	33,975	23.1%	27.3%	30.2%	19.5%
	Two or More Races	2,387	29.8%	29.5%	26.7%	14.0%
Migrant	Non-Migrant	46,254	27.2%	27.5%	28.2%	17.2%
	Migrant	192	57.3%	22.4%	15.6%	4.7%
LEP	Non-LEP	43,822	25.6%	27.3%	29.1%	18.1%
	LEP	2,624	55.7%	30.5%	12.3%	1.5%
Economic Disadvantage	Economically Disadvantaged	28,417	35.1%	29.7%	24.7%	10.5%
	Not Economically Disadvantaged	18,029	14.9%	23.9%	33.6%	27.6%
IEP	Non-IEP	39,752	23.0%	27.7%	30.2%	19.1%
	IEP	6,694	52.8%	26.4%	15.6%	5.3%

Grade 6 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,770	26.4%	29.1%	26.9%	17.6%
Gender	Female	22,577	22.2%	29.2%	28.5%	20.1%
	Male	24,190	30.4%	28.9%	25.5%	15.2%
Ethnicity	Hispanic	3,975	37.3%	31.5%	21.4%	9.9%
	Asian	877	15.2%	22.9%	31.5%	30.4%
	Native Hawaiian/Pacific Islander	76	22.4%	43.4%	19.7%	14.5%
	Black/African American	5,095	49.1%	29.3%	15.5%	6.1%
	American Indian	61	29.5%	26.2%	32.8%	11.5%
	White	34,324	21.9%	28.7%	29.3%	20.1%
	Two or More Races	2,359	29.0%	31.1%	25.6%	14.3%
Migrant	Non-Migrant	46,546	26.3%	29.1%	27.0%	17.6%
	Migrant	224	51.8%	29.0%	15.2%	4.0%
LEP	Non-LEP	44,813	24.7%	29.1%	27.9%	18.3%
	LEP	1,957	66.7%	27.3%	5.2%	0.8%
Economic Disadvantage	Economically Disadvantaged	28,525	34.1%	31.3%	23.5%	11.1%
	Not Economically Disadvantaged	18,245	14.5%	25.6%	32.3%	27.7%
IEP	Non-IEP	40,423	21.8%	29.3%	29.2%	19.6%
	IEP	6,347	55.7%	27.4%	12.2%	4.7%

Appendix J. Performance Level Rates

Grade 7 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	48,968	32.6%	23.9%	27.7%	15.8%
Gender	Female	23,865	27.6%	24.4%	29.8%	18.1%
	Male	25,101	37.3%	23.5%	25.6%	13.7%
Ethnicity	Hispanic	4,079	42.8%	24.4%	23.5%	9.3%
	Asian	844	17.3%	19.5%	27.8%	35.3%
	Native Hawaiian/Pacific Islander	70	37.1%	28.6%	24.3%	10.0%
	Black/African American	5,343	53.6%	22.8%	17.3%	6.3%
	American Indian	69	23.2%	26.1%	31.9%	18.8%
	White	36,191	28.5%	24.0%	29.9%	17.6%
	Two or More Races	2,370	35.7%	25.4%	24.6%	14.3%
Migrant	Non-Migrant	48,766	32.4%	24.0%	27.7%	15.9%
	Migrant	202	60.9%	19.3%	14.9%	5.0%
LEP	Non-LEP	47,197	30.9%	24.2%	28.5%	16.4%
	LEP	1,771	75.6%	17.9%	6.0%	0.5%
Economic Disadvantage	Economically Disadvantaged	29,418	40.9%	25.2%	24.0%	9.9%
	Not Economically Disadvantaged	19,550	20.0%	22.0%	33.2%	24.8%
IEP	Non-IEP	42,819	27.6%	24.7%	30.0%	17.7%
	IEP	6,149	67.3%	18.6%	11.0%	3.1%

Grade 8 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,982	31.3%	24.6%	28.9%	15.3%
Gender	Female	24,418	24.8%	24.1%	32.1%	19.0%
	Male	25,562	37.4%	25.0%	25.8%	11.8%
Ethnicity	Hispanic	4,257	38.1%	26.8%	25.3%	9.9%
	Asian	853	15.8%	19.1%	30.6%	34.5%
	Native Hawaiian/Pacific Islander	82	41.5%	13.4%	35.4%	9.8%
	Black/African American	5,544	52.7%	25.1%	17.0%	5.2%
	American Indian	65	32.3%	35.4%	23.1%	9.2%
	White	36,882	27.5%	24.3%	31.0%	17.2%
	Two or More Races	2,297	32.1%	25.7%	29.0%	13.1%
Migrant	Non-Migrant	49,781	31.2%	24.6%	28.9%	15.3%
	Migrant	201	57.2%	22.9%	16.9%	3.0%
LEP	Non-LEP	48,232	29.8%	24.7%	29.7%	15.8%
	LEP	1,750	71.3%	21.6%	6.6%	0.5%
Economic Disadvantage	Economically Disadvantaged	29,622	39.7%	26.4%	24.7%	9.2%
	Not Economically Disadvantaged	20,360	19.0%	21.9%	34.9%	24.2%
IEP	Non-IEP	44,093	26.6%	25.1%	31.3%	17.1%
	IEP	5,889	66.5%	20.5%	10.9%	2.1%

Grade 10 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,926	28.9%	25.4%	29.0%	16.7%
Gender	Female	22,844	22.0%	25.8%	32.3%	19.8%
	Male	24,080	35.5%	25.0%	25.8%	13.6%
Ethnicity	Hispanic	3,701	36.8%	28.2%	23.8%	11.2%
	Asian	947	15.0%	18.4%	30.6%	36.0%
	Native Hawaiian/Pacific Islander	52	42.3%	25.0%	21.2%	11.5%
	Black/African American	4,690	46.8%	26.9%	20.4%	5.9%
	American Indian	73	24.7%	30.1%	27.4%	17.8%
	White	35,563	26.0%	25.1%	30.7%	18.3%
	Two or More Races	1,898	31.6%	26.2%	28.0%	14.2%
Migrant	Non-Migrant	46,748	28.8%	25.4%	29.1%	16.7%
	Migrant	178	55.6%	25.3%	15.7%	3.4%
LEP	Non-LEP	45,417	27.6%	25.4%	29.8%	17.2%
	LEP	1,509	69.9%	24.9%	4.8%	0.5%
Economic Disadvantage	Economically Disadvantaged	25,564	36.8%	27.9%	25.0%	10.3%
	Not Economically Disadvantaged	21,362	19.5%	22.4%	33.8%	24.3%
IEP	Non-IEP	42,373	25.0%	25.7%	31.1%	18.2%
	IEP	4,553	65.8%	22.5%	9.6%	2.1%

Grade 3 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,629	32.0%	29.4%	28.0%	10.6%
Gender	Female	22,755	32.7%	30.5%	27.6%	9.2%
	Male	23,874	31.3%	28.3%	28.5%	11.9%
Ethnicity	Hispanic	3,878	43.7%	30.4%	20.8%	5.1%
	Asian	1,005	16.2%	22.4%	34.2%	27.2%
	Native Hawaiian/Pacific Islander	88	44.3%	26.1%	26.1%	3.4%
	Black/African American	4,959	55.3%	26.9%	14.6%	3.2%
	American Indian	53	47.2%	28.3%	15.1%	9.4%
	White	34,140	27.4%	29.7%	30.9%	12.0%
	Two or More Races	2,506	36.1%	30.7%	24.9%	8.3%
Migrant	Non-Migrant	46,400	31.9%	29.4%	28.1%	10.7%
	Migrant	229	52.0%	31.9%	12.7%	3.5%
LEP	Non-LEP	42,822	30.6%	29.2%	28.9%	11.2%
	LEP	3,807	47.3%	30.9%	18.1%	3.7%
Economic Disadvantage	Economically Disadvantaged	28,962	40.5%	31.0%	22.8%	5.7%
	Not Economically Disadvantaged	17,667	18.0%	26.7%	36.6%	18.7%
IEP	Non-IEP	39,069	27.9%	30.2%	30.1%	11.8%
	IEP	7,560	52.9%	25.2%	17.2%	4.7%

Grade 4 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,026	32.6%	27.8%	29.6%	10.0%
Gender	Female	20,741	34.6%	28.3%	28.5%	8.6%
	Male	22,283	30.8%	27.2%	30.6%	11.3%
Ethnicity	Hispanic	3,544	43.4%	29.0%	23.1%	4.5%
	Asian	928	19.2%	20.7%	33.0%	27.2%
	Native Hawaiian/Pacific Islander	71	43.7%	21.1%	31.0%	4.2%
	Black/African American	4,354	57.3%	26.6%	14.1%	2.0%
	American Indian	50	32.0%	32.0%	22.0%	14.0%
	White	31,808	28.2%	27.9%	32.5%	11.4%
	Two or More Races	2,269	35.8%	29.0%	27.5%	7.7%
Migrant	Non-Migrant	42,792	32.5%	27.8%	29.7%	10.0%
	Migrant	234	59.4%	24.8%	13.7%	2.1%
LEP	Non-LEP	39,923	31.1%	27.7%	30.6%	10.6%
	LEP	3,103	52.6%	28.1%	17.2%	2.1%
Economic Disadvantage	Economically Disadvantaged	26,374	41.7%	29.5%	23.6%	5.2%
	Not Economically Disadvantaged	16,652	18.3%	25.0%	39.1%	17.6%
IEP	Non-IEP	36,306	28.0%	28.8%	32.0%	11.1%
	IEP	6,720	57.5%	21.9%	16.5%	4.1%

Grade 5 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,494	30.9%	30.8%	28.3%	10.0%
Gender	Female	22,632	31.2%	32.1%	27.9%	8.9%
	Male	23,862	30.7%	29.6%	28.7%	11.0%
Ethnicity	Hispanic	4,045	39.7%	32.3%	22.3%	5.6%
	Asian	905	16.6%	23.9%	35.6%	24.0%
	Native Hawaiian/Pacific Islander	75	46.7%	29.3%	21.3%	2.7%
	Black/African American	5,050	55.5%	28.6%	13.3%	2.6%
	American Indian	54	37.0%	18.5%	33.3%	11.1%
	White	33,976	26.2%	31.1%	31.3%	11.4%
	Two or More Races	2,388	36.0%	31.3%	25.5%	7.2%
Migrant	Non-Migrant	46,299	30.8%	30.8%	28.4%	10.0%
	Migrant	195	55.4%	26.7%	15.4%	2.6%
LEP	Non-LEP	43,817	29.3%	30.8%	29.4%	10.5%
	LEP	2,677	57.1%	30.9%	10.3%	1.6%
Economic Disadvantage	Economically Disadvantaged	28,441	39.8%	32.7%	22.4%	5.1%
	Not Economically Disadvantaged	18,053	16.9%	27.8%	37.6%	17.7%
IEP	Non-IEP	39,800	26.5%	31.8%	30.7%	11.0%
	IEP	6,694	57.3%	25.0%	13.8%	3.9%

Grade 6 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,867	32.5%	29.4%	28.2%	9.8%
Gender	Female	22,618	32.9%	29.9%	28.2%	9.1%
	Male	24,246	32.2%	28.9%	28.3%	10.5%
Ethnicity	Hispanic	4,039	45.0%	29.9%	20.6%	4.5%
	Asian	880	16.9%	23.1%	33.2%	26.8%
	Native Hawaiian/Pacific Islander	76	42.1%	25.0%	26.3%	6.6%
	Black/African American	5,111	58.0%	27.7%	12.6%	1.7%
	American Indian	61	39.3%	23.0%	32.8%	4.9%
	White	34,335	27.4%	29.7%	31.4%	11.5%
	Two or More Races	2,362	36.7%	29.5%	27.1%	6.6%
Migrant	Non-Migrant	46,638	32.4%	29.4%	28.3%	9.9%
	Migrant	229	56.3%	25.3%	17.9%	0.4%
LEP	Non-LEP	44,817	30.8%	29.7%	29.3%	10.3%
	LEP	2,050	70.0%	23.4%	6.0%	0.6%
Economic Disadvantage	Economically Disadvantaged	28,577	41.3%	31.5%	22.5%	4.7%
	Not Economically Disadvantaged	18,290	18.8%	26.1%	37.2%	17.9%
IEP	Non-IEP	40,512	28.3%	30.1%	30.7%	10.9%
	IEP	6,355	59.8%	24.9%	12.3%	2.9%

Grade 7 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,069	33.8%	28.4%	28.7%	9.2%
Gender	Female	23,930	33.2%	29.1%	29.2%	8.5%
	Male	25,137	34.3%	27.6%	28.3%	9.8%
Ethnicity	Hispanic	4,159	43.1%	29.3%	23.0%	4.5%
	Asian	850	17.1%	19.5%	31.9%	31.5%
	Native Hawaiian/Pacific Islander	70	37.1%	30.0%	24.3%	8.6%
	Black/African American	5,348	54.9%	28.1%	14.6%	2.4%
	American Indian	69	30.4%	26.1%	34.8%	8.7%
	White	36,200	29.7%	28.4%	31.6%	10.3%
	Two or More Races	2,371	37.4%	29.6%	25.5%	7.5%
Migrant	Non-Migrant	48,864	33.6%	28.4%	28.8%	9.2%
	Migrant	205	58.0%	23.9%	16.1%	2.0%
LEP	Non-LEP	47,185	32.3%	28.6%	29.6%	9.5%
	LEP	1,884	69.9%	22.3%	6.8%	1.0%
Economic Disadvantage	Economically Disadvantaged	29,479	42.4%	30.4%	22.6%	4.6%
	Not Economically Disadvantaged	19,590	20.8%	25.2%	37.8%	16.2%
IEP	Non-IEP	42,928	29.6%	28.9%	31.3%	10.2%
	IEP	6,141	62.9%	24.5%	10.3%	2.3%

Grade 8 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	50,097	37.9%	25.6%	26.7%	9.8%
Gender	Female	24,476	36.4%	26.9%	27.9%	8.8%
	Male	25,619	39.3%	24.3%	25.6%	10.7%
Ethnicity	Hispanic	4,346	46.9%	26.3%	21.5%	5.4%
	Asian	856	16.1%	17.9%	33.3%	32.7%
	Native Hawaiian/Pacific Islander	82	42.7%	23.2%	17.1%	17.1%
	Black/African American	5,570	61.5%	24.1%	12.4%	1.9%
	American Indian	65	55.4%	21.5%	18.5%	4.6%
	White	36,882	33.6%	25.8%	29.5%	11.1%
	Two or More Races	2,294	40.3%	27.6%	24.8%	7.3%
Migrant	Non-Migrant	49,890	37.8%	25.6%	26.8%	9.8%
	Migrant	207	57.0%	28.5%	12.6%	1.9%
LEP	Non-LEP	48,219	36.6%	25.8%	27.5%	10.1%
	LEP	1,878	71.2%	21.8%	6.4%	0.5%
Economic Disadvantage	Economically Disadvantaged	29,694	47.4%	26.9%	20.9%	4.8%
	Not Economically Disadvantaged	20,403	24.1%	23.7%	35.2%	17.0%
IEP	Non-IEP	44,209	33.9%	26.4%	29.0%	10.8%
	IEP	5,888	68.0%	20.1%	10.1%	1.9%

Grade 10 Mathematics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,933	31.9%	30.4%	27.6%	10.1%
Gender	Female	22,846	29.0%	31.6%	29.9%	9.5%
	Male	24,085	34.6%	29.2%	25.4%	10.8%
Ethnicity	Hispanic	3,788	40.0%	32.1%	22.8%	5.1%
	Asian	949	14.9%	19.8%	31.3%	34.0%
	Native Hawaiian/Pacific Islander	52	42.3%	34.6%	15.4%	7.7%
	Black/African American	4,671	48.5%	33.2%	15.6%	2.7%
	American Indian	72	33.3%	31.9%	25.0%	9.7%
	White	35,503	29.1%	30.0%	29.8%	11.1%
	Two or More Races	1,896	34.4%	32.6%	23.9%	9.0%
Migrant	Non-Migrant	46,754	31.8%	30.4%	27.7%	10.2%
	Migrant	179	57.0%	30.2%	11.7%	1.1%
LEP	Non-LEP	45,326	30.7%	30.5%	28.4%	10.5%
	LEP	1,607	65.3%	28.3%	6.1%	0.4%
Economic Disadvantage	Economically Disadvantaged	25,588	39.7%	33.5%	22.4%	4.4%
	Not Economically Disadvantaged	21,345	22.5%	26.6%	33.8%	17.0%
IEP	Non-IEP	42,394	28.6%	30.6%	29.8%	11.1%
	IEP	4,539	62.9%	28.8%	7.2%	1.1%

Grade 4 Science

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,012	16.1%	55.1%	23.0%	5.8%
Gender	Female	20,733	16.2%	56.7%	22.1%	5.0%
	Male	22,277	16.0%	53.7%	23.8%	6.6%
Ethnicity	Hispanic	3,541	23.7%	58.8%	15.0%	2.5%
	Asian	928	10.5%	50.1%	27.9%	11.5%
	Native Hawaiian/Pacific Islander	71	15.5%	63.4%	15.5%	5.6%
	Black/African American	4,353	31.0%	58.7%	9.3%	0.9%
	American Indian	50	14.0%	60.0%	22.0%	4.0%
	White	31,799	13.3%	54.0%	25.8%	6.8%
	Two or More Races	2,268	16.8%	59.9%	19.7%	3.6%
Migrant	Non-Migrant	42,779	16.0%	55.1%	23.1%	5.8%
	Migrant	233	33.9%	57.5%	8.2%	0.4%
LEP	Non-LEP	39,912	15.0%	54.7%	24.1%	6.2%
	LEP	3,100	29.2%	60.9%	9.1%	0.8%
Economic Disadvantage	Economically Disadvantaged	26,364	20.7%	59.1%	17.1%	3.1%
	Not Economically Disadvantaged	16,648	8.7%	48.9%	32.3%	10.1%
IEP	Non-IEP	36,294	14.1%	55.1%	24.7%	6.2%
	IEP	6,718	26.9%	55.5%	13.7%	3.9%

Grade 7 Science

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,024	35.8%	42.2%	19.9%	2.2%
Gender	Female	23,895	35.7%	43.7%	18.7%	2.0%
	Male	25,127	35.9%	40.7%	21.0%	2.4%
Ethnicity	Hispanic	4,153	47.2%	40.1%	11.6%	1.1%
	Asian	849	21.6%	35.8%	35.0%	7.7%
	Native Hawaiian/Pacific Islander	69	49.3%	39.1%	10.1%	1.4%
	Black/African American	5,334	56.9%	36.2%	6.6%	0.4%
	American Indian	69	36.2%	42.0%	17.4%	4.3%
	White	36,178	31.4%	43.5%	22.7%	2.5%
	Two or More Races	2,370	40.4%	41.4%	16.8%	1.4%
Migrant	Non-Migrant	48,819	35.7%	42.2%	19.9%	2.2%
	Migrant	205	60.0%	34.1%	5.4%	0.5%
LEP	Non-LEP	47,149	34.4%	42.8%	20.6%	2.3%
	LEP	1,875	72.1%	26.6%	1.3%	0.0%
Economic Disadvantage	Economically Disadvantaged	29,441	44.0%	41.9%	13.3%	0.8%
	Not Economically Disadvantaged	19,583	23.4%	42.6%	29.8%	4.2%
IEP	Non-IEP	42,884	32.0%	43.7%	21.8%	2.4%
	IEP	6,140	62.1%	31.2%	6.2%	0.5%

Grade 11 Science

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,753	43.0%	42.5%	13.6%	0.9%
Gender	Female	21,705	38.7%	45.9%	14.5%	0.9%
	Male	22,047	47.2%	39.1%	12.8%	0.9%
Ethnicity	Hispanic	3,265	53.8%	38.3%	7.7%	0.2%
	Asian	919	27.0%	43.3%	25.1%	4.6%
	Native Hawaiian/Pacific Islander	61	45.9%	37.7%	16.4%	0.0%
	Black/African American	4,445	64.6%	30.3%	5.0%	0.1%
	American Indian	56	46.4%	44.6%	8.9%	0.0%
	White	33,407	39.3%	44.5%	15.2%	1.0%
	Two or More Races	1,599	47.1%	42.1%	10.2%	0.6%
Migrant	Non-Migrant	43,618	42.9%	42.5%	13.7%	0.9%
	Migrant	135	77.0%	21.5%	1.5%	0.0%
LEP	Non-LEP	42,359	41.6%	43.4%	14.0%	0.9%
	LEP	1,394	85.0%	14.4%	0.6%	0.0%
Economic Disadvantage	Economically Disadvantaged	22,278	52.6%	38.8%	8.3%	0.4%
	Not Economically Disadvantaged	21,475	33.0%	46.3%	19.2%	1.5%
IEP	Non-IEP	39,949	39.6%	44.7%	14.7%	1.0%
	IEP	3,804	78.8%	19.3%	1.8%	0.1%

Grade 5 Social Studies

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,434	33.7%	28.8%	24.4%	13.2%
Gender	Female	22,603	32.5%	30.2%	24.4%	12.9%
	Male	23,831	34.8%	27.5%	24.3%	13.4%
Ethnicity	Hispanic	4,013	40.9%	30.7%	20.4%	8.0%
	Asian	894	18.0%	26.5%	29.0%	26.5%
	Native Hawaiian/Pacific Islander	74	47.3%	31.1%	17.6%	4.1%
	Black/African American	5,043	55.4%	26.9%	13.5%	4.2%
	American Indian	54	31.5%	29.6%	29.6%	9.3%
	White	33,967	29.7%	28.9%	26.4%	15.0%
	Two or More Races	2,388	37.2%	29.0%	23.7%	10.1%
Migrant	Non-Migrant	46,243	33.6%	28.8%	24.4%	13.2%
	Migrant	191	55.5%	24.6%	14.1%	5.8%
LEP	Non-LEP	43,813	32.3%	28.7%	25.2%	13.8%
	LEP	2,621	56.7%	30.4%	11.0%	2.0%
Economic Disadvantage	Economically Disadvantaged	28,408	41.8%	30.2%	20.2%	7.8%
	Not Economically Disadvantaged	18,026	20.9%	26.6%	30.9%	21.6%
IEP	Non-IEP	39,745	30.0%	29.5%	26.1%	14.4%
	IEP	6,689	55.4%	24.6%	14.1%	5.9%

Grade 8 Social Studies

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,943	37.1%	26.8%	22.8%	13.4%
Gender	Female	24,397	33.8%	28.9%	24.0%	13.2%
	Male	25,544	40.1%	24.7%	21.7%	13.5%
Ethnicity	Hispanic	4,255	43.0%	28.6%	20.3%	8.2%
	Asian	853	16.4%	19.5%	28.3%	35.9%
	Native Hawaiian/Pacific Islander	81	37.0%	28.4%	17.3%	17.3%
	Black/African American	5,543	58.7%	24.7%	12.5%	4.1%
	American Indian	65	46.2%	32.3%	15.4%	6.2%
	White	36,848	33.4%	26.9%	24.6%	15.0%
	Two or More Races	2,296	39.7%	28.4%	21.5%	10.5%
Migrant	Non-Migrant	49,743	37.0%	26.8%	22.8%	13.4%
	Migrant	200	62.0%	20.5%	14.5%	3.0%
LEP	Non-LEP	48,191	35.8%	26.9%	23.4%	13.8%
	LEP	1,752	71.6%	22.0%	5.8%	0.6%
Economic Disadvantage	Economically Disadvantaged	29,594	46.5%	27.5%	18.5%	7.4%
	Not Economically Disadvantaged	20,349	23.4%	25.6%	29.0%	22.0%
IEP	Non-IEP	44,064	32.8%	27.7%	24.7%	14.8%
	IEP	5,879	68.6%	20.1%	8.6%	2.7%

Grade 11 Social Studies

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,525	37.0%	27.9%	23.2%	11.9%
Gender	Female	21,585	33.0%	30.1%	24.9%	12.1%
	Male	21,940	40.9%	25.8%	21.6%	11.7%
Ethnicity	Hispanic	3,222	46.2%	27.9%	19.4%	6.5%
	Asian	895	20.9%	23.2%	29.1%	26.8%
	Native Hawaiian/Pacific Islander	61	44.3%	26.2%	19.7%	9.8%
	Black/African American	4,419	56.3%	25.3%	14.0%	4.3%
	American Indian	56	48.2%	21.4%	23.2%	7.1%
	White	33,280	33.8%	28.2%	24.8%	13.2%
	Two or More Races	1,592	38.4%	31.8%	21.9%	7.9%
Migrant	Non-Migrant	43,392	36.8%	28.0%	23.3%	11.9%
	Migrant	133	75.9%	15.0%	7.5%	1.5%
LEP	Non-LEP	42,170	35.6%	28.3%	23.9%	12.3%
	LEP	1,355	80.2%	16.1%	3.5%	0.2%
Economic Disadvantage	Economically Disadvantaged	22,184	46.6%	28.7%	18.2%	6.5%
	Not Economically Disadvantaged	21,341	26.9%	27.2%	28.5%	17.4%
IEP	Non-IEP	39,725	33.4%	28.9%	24.8%	12.8%
	IEP	3,800	73.9%	17.5%	6.6%	2.0%

Grade 5 Editing and Mechanics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,423	23.1%	29.2%	27.3%	20.5%
Gender	Female	22,599	19.0%	28.4%	28.8%	23.9%
	Male	23,824	26.9%	30.0%	25.8%	17.2%
Ethnicity	Hispanic	4,012	31.1%	33.2%	24.2%	11.5%
	Asian	892	12.4%	23.5%	28.7%	35.3%
	Native Hawaiian/Pacific Islander	74	35.1%	28.4%	23.0%	13.5%
	Black/African American	5,040	41.2%	31.4%	19.3%	8.2%
	American Indian	54	18.5%	29.6%	33.3%	18.5%
	White	33,964	19.6%	28.4%	28.9%	23.2%
	Two or More Races	2,386	24.9%	32.0%	25.5%	17.5%
Migrant	Non-Migrant	46,232	22.9%	29.2%	27.3%	20.5%
	Migrant	191	51.8%	27.7%	15.7%	4.7%
LEP	Non-LEP	43,803	21.6%	28.9%	28.0%	21.4%
	LEP	2,620	47.0%	33.6%	15.4%	4.0%
Economic Disadvantage	Economically Disadvantaged	28,400	29.8%	32.0%	24.7%	13.5%
	Not Economically Disadvantaged	18,023	12.4%	24.9%	31.3%	31.4%
IEP	Non-IEP	39,739	18.1%	29.8%	29.5%	22.6%
	IEP	6,684	52.3%	25.9%	14.3%	7.6%

Grade 8 Editing and Mechanics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,899	24.8%	29.3%	31.1%	14.8%
Gender	Female	24,380	19.3%	29.0%	34.3%	17.4%
	Male	25,517	30.0%	29.6%	28.0%	12.4%
Ethnicity	Hispanic	4,254	32.1%	33.3%	26.5%	8.2%
	Asian	854	12.9%	20.0%	31.6%	35.5%
	Native Hawaiian/Pacific Islander	82	37.8%	18.3%	32.9%	11.0%
	Black/African American	5,526	43.6%	31.5%	20.2%	4.7%
	American Indian	65	27.7%	36.9%	23.1%	12.3%
	White	36,824	21.3%	28.7%	33.2%	16.8%
	Two or More Races	2,292	25.4%	29.3%	32.4%	12.9%
Migrant	Non-Migrant	49,699	24.7%	29.3%	31.1%	14.9%
	Migrant	200	50.5%	29.0%	17.0%	3.5%
LEP	Non-LEP	48,153	23.3%	29.4%	31.9%	15.4%
	LEP	1,746	65.2%	27.3%	6.9%	0.6%
Economic Disadvantage	Economically Disadvantaged	29,555	32.6%	32.1%	26.5%	8.8%
	Not Economically Disadvantaged	20,344	13.5%	25.3%	37.6%	23.6%
IEP	Non-IEP	44,025	19.6%	30.0%	33.9%	16.5%
	IEP	5,874	63.7%	23.8%	10.1%	2.3%

Grade 11 Editing and Mechanics

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,427	23.1%	28.5%	29.2%	19.1%
Gender	Female	21,537	15.6%	28.1%	33.0%	23.3%
	Male	21,890	30.6%	29.0%	25.5%	15.0%
Ethnicity	Hispanic	3,213	32.1%	32.3%	25.3%	10.3%
	Asian	890	14.2%	23.7%	28.5%	33.6%
	Native Hawaiian/Pacific Islander	61	19.7%	37.7%	32.8%	9.8%
	Black/African American	4,374	39.6%	31.9%	20.9%	7.6%
	American Indian	56	28.6%	23.2%	26.8%	21.4%
	White	33,244	20.3%	27.7%	30.8%	21.3%
	Two or More Races	1,589	24.2%	32.5%	27.1%	16.2%
Migrant	Non-Migrant	43,295	23.0%	28.6%	29.3%	19.2%
	Migrant	132	65.9%	23.5%	6.8%	3.8%
LEP	Non-LEP	42,095	21.6%	28.7%	30.0%	19.7%
	LEP	1,332	71.2%	24.1%	4.6%	0.2%
Economic Disadvantage	Economically Disadvantaged	22,104	30.4%	32.1%	25.7%	11.7%
	Not Economically Disadvantaged	21,323	15.6%	24.9%	32.8%	26.8%
IEP	Non-IEP	39,651	19.6%	28.6%	31.2%	20.7%
	IEP	3,776	60.6%	28.3%	8.3%	2.8%

Grade 5 On-Demand Writing

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,391	22.4%	44.8%	24.7%	8.0%
Gender	Female	22,589	16.9%	43.6%	28.9%	10.5%
	Male	23,802	27.7%	45.9%	20.8%	5.6%
Ethnicity	Hispanic	4,009	27.0%	47.7%	20.2%	5.1%
	Asian	893	12.8%	39.0%	34.0%	14.2%
	Native Hawaiian/Pacific Islander	74	33.8%	33.8%	28.4%	4.1%
	Black/African American	5,032	39.6%	43.7%	14.1%	2.6%
	American Indian	54	20.4%	51.9%	22.2%	5.6%
	White	33,941	19.5%	44.6%	26.8%	9.1%
	Two or More Races	2,387	23.7%	47.8%	22.7%	5.8%
Migrant	Non-Migrant	46,200	22.4%	44.8%	24.8%	8.0%
	Migrant	191	36.1%	46.1%	14.1%	3.7%
LEP	Non-LEP	43,775	21.3%	44.7%	25.5%	8.4%
	LEP	2,616	41.1%	46.0%	11.7%	1.2%
Economic Disadvantage	Economically Disadvantaged	28,381	29.0%	46.4%	19.9%	4.7%
	Not Economically Disadvantaged	18,010	12.1%	42.3%	32.4%	13.2%
IEP	Non-IEP	39,716	17.1%	46.5%	27.3%	9.1%
	IEP	6,675	54.1%	34.7%	9.5%	1.7%

Grade 8 On-Demand Writing

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,768	26.1%	35.5%	32.6%	5.8%
Gender	Female	24,329	18.1%	34.3%	39.6%	8.0%
	Male	25,437	33.7%	36.7%	25.9%	3.7%
Ethnicity	Hispanic	4,236	31.4%	39.1%	26.4%	3.2%
	Asian	852	12.7%	21.9%	47.8%	17.6%
	Native Hawaiian/Pacific Islander	82	23.2%	37.8%	29.3%	9.8%
	Black/African American	5,501	46.9%	34.3%	17.4%	1.4%
	American Indian	65	27.7%	49.2%	21.5%	1.5%
	White	36,752	22.5%	35.6%	35.3%	6.6%
	Two or More Races	2,278	28.1%	35.6%	31.9%	4.5%
Migrant	Non-Migrant	49,570	26.0%	35.5%	32.7%	5.8%
	Migrant	198	48.0%	33.3%	16.7%	2.0%
LEP	Non-LEP	48,039	24.8%	35.7%	33.5%	6.0%
	LEP	1,729	60.4%	31.6%	7.8%	0.2%
Economic Disadvantage	Economically Disadvantaged	29,456	34.1%	37.6%	25.3%	2.9%
	Not Economically Disadvantaged	20,312	14.4%	32.5%	43.1%	9.9%
IEP	Non-IEP	43,917	20.2%	37.1%	36.1%	6.5%
	IEP	5,851	69.9%	23.6%	6.3%	0.3%

Grade 11 On-Demand Writing

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,155	20.2%	42.1%	31.8%	5.8%
Gender	Female	21,455	12.5%	40.5%	39.3%	7.7%
	Male	21,699	27.9%	43.7%	24.4%	4.0%
Ethnicity	Hispanic	3,172	25.8%	44.4%	27.0%	2.9%
	Asian	912	11.1%	32.7%	42.2%	14.0%
	Native Hawaiian/Pacific Islander	59	20.3%	49.2%	23.7%	6.8%
	Black/African American	4,301	34.7%	43.7%	19.7%	1.8%
	American Indian	54	31.5%	35.2%	27.8%	5.6%
	White	33,072	17.9%	41.9%	33.7%	6.5%
	Two or More Races	1,584	22.9%	43.7%	29.4%	4.0%
Migrant	Non-Migrant	43,025	20.1%	42.1%	31.9%	5.9%
	Migrant	130	56.2%	31.5%	10.8%	1.5%
LEP	Non-LEP	41,835	19.1%	42.2%	32.7%	6.0%
	LEP	1,320	56.2%	38.3%	5.4%	0.1%
Economic Disadvantage	Economically Disadvantaged	21,889	26.3%	45.0%	25.3%	3.5%
	Not Economically Disadvantaged	21,266	14.0%	39.2%	38.5%	8.3%
IEP	Non-IEP	39,418	16.8%	42.6%	34.2%	6.3%
	IEP	3,737	56.4%	36.8%	6.2%	0.6%

Appendix K. Reliability⁶

Grade 3 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,540	0.86	6.45
Gender	Female	22,711	0.86	6.48
	Male	23,829	0.86	6.40
Ethnicity	Hispanic	3,841	0.84	6.35
	Asian	988	0.85	6.77
	Native Hawaiian/Pacific Islander	86	0.84	6.38
	Black/African American	4,952	0.83	6.33
	American Indian	53	0.86	6.36
	White	34,116	0.86	6.45
	Two or More Races	2,504	0.85	6.42
Migrant	Non-Migrant	46,316	0.86	6.45
	Migrant	224	0.79	6.10
LEP	Non-LEP	42,801	0.86	6.50
	LEP	3,739	0.81	6.18
Economic Disadvantage	Economically Disadvantaged	28,928	0.85	6.29
	Not Economically Disadvantaged	17,612	0.85	6.67
IEP	Non-IEP	38,979	0.86	6.42
	IEP	7,561	0.85	6.41

Grade 4 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	42,977	0.86	6.51
Gender	Female	20,711	0.86	6.52
	Male	22,264	0.86	6.46
Ethnicity	Hispanic	3,518	0.84	6.40
	Asian	918	0.86	6.65
	Native Hawaiian/Pacific Islander	71	0.84	6.46
	Black/African American	4,349	0.84	6.47
	American Indian	50	0.87	6.53
	White	31,801	0.86	6.42
	Two or More Races	2,268	0.86	6.37
Migrant	Non-Migrant	42,748	0.86	6.50
	Migrant	229	0.81	6.44
LEP	Non-LEP	39,920	0.86	6.53
	LEP	3,057	0.79	6.30
Economic Disadvantage	Economically Disadvantaged	26,350	0.85	6.39
	Not Economically Disadvantaged	16,627	0.84	6.70
IEP	Non-IEP	36,256	0.86	6.41
	IEP	6,721	0.85	6.34

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

Grade 5 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,430	0.87	6.65
Gender	Female	22,603	0.87	6.70
	Male	23,827	0.87	6.56
Ethnicity	Hispanic	4,016	0.86	6.51
	Asian	892	0.86	6.94
	Native Hawaiian/Pacific Islander	74	0.86	6.26
	Black/African American	5,044	0.86	6.49
	American Indian	54	0.85	6.42
	White	33,963	0.86	6.78
	Two or More Races	2,386	0.87	6.48
Migrant	Non-Migrant	46,239	0.87	6.65
	Migrant	191	0.86	6.32
LEP	Non-LEP	43,806	0.87	6.63
	LEP	2,624	0.80	6.25
Economic Disadvantage	Economically Disadvantaged	28,413	0.87	6.34
	Not Economically Disadvantaged	18,017	0.85	6.83
IEP	Non-IEP	39,737	0.86	6.71
	IEP	6,693	0.86	6.37

Grade 6 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,767	0.85	6.50
Gender	Female	22,575	0.85	6.39
	Male	24,189	0.86	6.32
Ethnicity	Hispanic	3,974	0.84	6.39
	Asian	877	0.84	6.57
	Native Hawaiian/Pacific Islander	76	0.86	6.32
	Black/African American	5,094	0.84	6.31
	American Indian	61	0.85	6.30
	White	34,323	0.84	6.56
	Two or More Races	2,359	0.85	6.31
Migrant	Non-Migrant	46,543	0.85	6.50
	Migrant	224	0.82	6.25
LEP	Non-LEP	44,811	0.85	6.43
	LEP	1,956	0.73	6.37
Economic Disadvantage	Economically Disadvantaged	28,523	0.84	6.44
	Not Economically Disadvantaged	18,244	0.83	6.58
IEP	Non-IEP	40,420	0.84	6.47
	IEP	6,347	0.83	6.35

Grade 7 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	48,959	0.85	6.23
Gender	Female	23,861	0.84	6.29
	Male	25,096	0.85	6.27
Ethnicity	Hispanic	4,077	0.83	6.33
	Asian	844	0.86	6.46
	Native Hawaiian/Pacific Islander	70	0.84	6.14
	Black/African American	5,342	0.83	6.27
	American Indian	69	0.83	6.25
	White	36,187	0.84	6.30
	Two or More Races	2,368	0.85	6.20
Migrant	Non-Migrant	48,757	0.85	6.22
	Migrant	202	0.81	6.42
LEP	Non-LEP	47,189	0.85	6.17
	LEP	1,770	0.68	6.44
Economic Disadvantage	Economically Disadvantaged	29,412	0.83	6.26
	Not Economically Disadvantaged	19,547	0.84	6.30
IEP	Non-IEP	42,810	0.84	6.21
	IEP	6,149	0.79	6.37

Grade 8 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	49,979	0.83	6.28
Gender	Female	24,417	0.83	6.18
	Male	25,560	0.83	6.21
Ethnicity	Hispanic	4,256	0.82	6.10
	Asian	853	0.84	6.32
	Native Hawaiian/Pacific Islander	82	0.84	6.15
	Black/African American	5,544	0.80	6.16
	American Indian	65	0.82	6.07
	White	36,880	0.83	6.21
	Two or More Races	2,297	0.83	6.20
Migrant	Non-Migrant	49,778	0.83	6.28
	Migrant	201	0.80	6.33
LEP	Non-LEP	48,229	0.83	6.24
	LEP	1,750	0.65	6.39
Economic Disadvantage	Economically Disadvantaged	29,619	0.82	6.10
	Not Economically Disadvantaged	20,360	0.82	6.30
IEP	Non-IEP	44,091	0.83	6.09
	IEP	5,888	0.74	6.40

Grade 10 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,916	0.86	6.38
Gender	Female	22,840	0.86	6.22
	Male	24,074	0.86	6.39
Ethnicity	Hispanic	3,698	0.85	6.32
	Asian	947	0.87	6.64
	Native Hawaiian/Pacific Islander	52	0.87	6.24
	Black/African American	4,690	0.82	6.28
	American Indian	73	0.84	6.13
	White	35,557	0.86	6.36
	Two or More Races	1,897	0.86	6.22
Migrant	Non-Migrant	46,738	0.86	6.38
	Migrant	178	0.80	6.54
LEP	Non-LEP	45,407	0.86	6.35
	LEP	1,509	0.65	6.46
Economic Disadvantage	Economically Disadvantaged	25,558	0.84	6.31
	Not Economically Disadvantaged	21,358	0.86	6.46
IEP	Non-IEP	42,363	0.86	6.29
	IEP	4,553	0.73	6.52

Grade 3 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,464	0.88	6.81
Gender	Female	22,696	0.87	6.86
	Male	23,768	0.88	6.99
Ethnicity	Hispanic	3,870	0.87	6.59
	Asian	980	0.87	7.88
	Native Hawaiian/Pacific Islander	88	0.88	6.78
	Black/African American	4,953	0.85	6.58
	American Indian	53	0.89	7.04
	White	34,021	0.87	7.00
	Two or More Races	2,499	0.87	6.88
Migrant	Non-Migrant	46,235	0.88	6.81
	Migrant	229	0.85	6.63
LEP	Non-LEP	42,667	0.88	6.81
	LEP	3,797	0.86	6.60
Economic Disadvantage	Economically Disadvantaged	28,924	0.87	6.49
	Not Economically Disadvantaged	17,540	0.86	7.41
IEP	Non-IEP	38,912	0.87	6.98
	IEP	7,552	0.87	6.72

Grade 4 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	42,967	0.87	7.07
Gender	Female	20,713	0.86	7.12
	Male	22,252	0.87	7.24
Ethnicity	Hispanic	3,539	0.85	7.02
	Asian	921	0.88	8.02
	Native Hawaiian/Pacific Islander	71	0.88	6.86
	Black/African American	4,352	0.83	6.84
	American Indian	50	0.88	7.58
	White	31,767	0.86	7.23
	Two or More Races	2,265	0.86	7.00
Migrant	Non-Migrant	42,733	0.87	7.07
	Migrant	234	0.84	7.02
LEP	Non-LEP	39,871	0.87	7.06
	LEP	3,096	0.83	6.99
Economic Disadvantage	Economically Disadvantaged	26,362	0.85	6.93
	Not Economically Disadvantaged	16,605	0.86	7.31
IEP	Non-IEP	36,250	0.86	7.16
	IEP	6,717	0.86	6.99

Grade 5 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,430	0.87	6.93
Gender	Female	22,603	0.86	6.98
	Male	23,827	0.88	6.84
Ethnicity	Hispanic	4,039	0.85	6.87
	Asian	897	0.88	7.75
	Native Hawaiian/Pacific Islander	74	0.84	6.72
	Black/African American	5,049	0.81	6.93
	American Indian	54	0.88	7.02
	White	33,930	0.87	6.88
	Two or More Races	2,386	0.86	6.89
Migrant	Non-Migrant	46,236	0.87	6.94
	Migrant	194	0.79	6.91
LEP	Non-LEP	43,759	0.87	6.92
	LEP	2,671	0.78	7.03
Economic Disadvantage	Economically Disadvantaged	28,428	0.85	6.68
	Not Economically Disadvantaged	18,002	0.87	7.07
IEP	Non-IEP	39,740	0.87	6.85
	IEP	6,690	0.83	7.04

Grade 6 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,835	0.83	6.75
Gender	Female	22,604	0.82	6.81
	Male	24,228	0.84	6.67
Ethnicity	Hispanic	4,031	0.79	6.83
	Asian	877	0.88	7.10
	Native Hawaiian/Pacific Islander	76	0.81	6.92
	Black/African American	5,107	0.71	7.02
	American Indian	60	0.80	6.76
	White	34,320	0.83	6.67
	Two or More Races	2,361	0.81	6.71
Migrant	Non-Migrant	46,607	0.83	6.75
	Migrant	228	0.76	7.04
LEP	Non-LEP	44,795	0.83	6.70
	LEP	2,040	0.65	7.35
Economic Disadvantage	Economically Disadvantaged	28,560	0.78	6.80
	Not Economically Disadvantaged	18,275	0.85	6.57
IEP	Non-IEP	40,483	0.83	6.69
	IEP	6,352	0.74	7.06

Grade 7 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	49,044	0.79	6.40
Gender	Female	23,917	0.78	6.37
	Male	25,125	0.80	6.41
Ethnicity	Hispanic	4,155	0.74	6.56
	Asian	843	0.88	6.88
	Native Hawaiian/Pacific Islander	70	0.78	6.47
	Black/African American	5,347	0.65	6.63
	American Indian	69	0.84	6.69
	White	36,188	0.79	6.35
	Two or More Races	2,370	0.77	6.50
Migrant	Non-Migrant	48,839	0.79	6.40
	Migrant	205	0.69	6.85
LEP	Non-LEP	47,166	0.79	6.37
	LEP	1,878	0.58	7.08
Economic Disadvantage	Economically Disadvantaged	29,474	0.72	6.47
	Not Economically Disadvantaged	19,570	0.82	6.29
IEP	Non-IEP	42,903	0.79	6.40
	IEP	6,141	0.62	6.77

Grade 8 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	50,032	0.82	6.74
Gender	Female	24,452	0.81	6.64
	Male	25,578	0.83	6.81
Ethnicity	Hispanic	4,335	0.78	6.92
	Asian	838	0.88	7.17
	Native Hawaiian/Pacific Islander	82	0.86	6.65
	Black/African American	5,567	0.66	7.05
	American Indian	65	0.77	6.82
	White	36,852	0.82	6.74
	Two or More Races	2,291	0.79	6.71
Migrant	Non-Migrant	49,825	0.82	6.75
	Migrant	207	0.72	7.14
LEP	Non-LEP	48,166	0.82	6.71
	LEP	1,866	0.65	7.56
Economic Disadvantage	Economically Disadvantaged	29,680	0.76	6.76
	Not Economically Disadvantaged	20,352	0.85	6.55
IEP	Non-IEP	44,144	0.82	6.75
	IEP	5,888	0.64	7.04

Grade 10 Mathematics

Category	Group	N	Reliability	SEM
All	Students Tested	46,903	0.78	6.83
Gender	Female	22,838	0.76	6.75
	Male	24,063	0.80	6.83
Ethnicity	Hispanic	3,777	0.74	6.99
	Asian	942	0.88	7.10
	Native Hawaiian/Pacific Islander	52	0.76	6.77
	Black/African American	4,671	0.61	6.95
	American Indian	72	0.78	6.89
	White	35,492	0.79	6.63
	Two or More Races	1,895	0.77	6.79
Migrant	Non-Migrant	46,724	0.78	6.84
	Migrant	179	0.58	7.14
LEP	Non-LEP	45,307	0.78	6.79
	LEP	1,596	0.56	7.75
Economic Disadvantage	Economically Disadvantaged	25,575	0.69	6.80
	Not Economically Disadvantaged	21,328	0.82	6.72
IEP	Non-IEP	42,365	0.79	6.69
	IEP	4,538	0.47	7.16

Grade 4 Science

Category	Group	N	Reliability	SEM
All	Students Tested	43,009	0.75	6.73
Gender	Female	20,731	0.74	6.70
	Male	22,276	0.76	6.74
Ethnicity	Hispanic	3,539	0.70	6.90
	Asian	928	0.80	6.62
	Native Hawaiian/Pacific Islander	71	0.72	6.65
	Black/African American	4,353	0.63	6.96
	American Indian	50	0.72	6.68
	White	31,798	0.75	6.69
	Two or More Races	2,268	0.72	6.70
Migrant	Non-Migrant	42,777	0.75	6.73
	Migrant	232	0.58	7.00
LEP	Non-LEP	39,912	0.75	6.73
	LEP	3,097	0.63	7.00
Economic Disadvantage	Economically Disadvantaged	26,362	0.71	6.78
	Not Economically Disadvantaged	16,647	0.76	6.59
IEP	Non-IEP	36,291	0.75	6.66
	IEP	6,718	0.73	6.92

Grade 7 Science

Category	Group	N	Reliability	SEM
All	Students Tested	49,012	0.77	6.76
Gender	Female	23,888	0.75	6.86
	Male	25,122	0.78	6.77
Ethnicity	Hispanic	4,146	0.71	7.07
	Asian	849	0.84	6.55
	Native Hawaiian/Pacific Islander	69	0.73	6.96
	Black/African American	5,332	0.61	7.18
	American Indian	69	0.82	6.84
	White	36,176	0.77	6.74
	Two or More Races	2,369	0.74	6.89
Migrant	Non-Migrant	48,808	0.77	6.76
	Migrant	204	0.61	7.35
LEP	Non-LEP	47,146	0.77	6.72
	LEP	1,866	0.45	7.69
Economic Disadvantage	Economically Disadvantaged	29,432	0.70	6.99
	Not Economically Disadvantaged	19,580	0.80	6.52
IEP	Non-IEP	42,873	0.77	6.74
	IEP	6,139	0.60	7.32

Grade 11 Science

Category	Group	N	Reliability	SEM
All	Students Tested	43,737	0.80	6.96
Gender	Female	21,700	0.79	6.79
	Male	22,036	0.81	7.03
Ethnicity	Hispanic	3,262	0.78	7.06
	Asian	918	0.85	6.87
	Native Hawaiian/Pacific Islander	61	0.81	7.13
	Black/African American	4,444	0.73	7.31
	American Indian	56	0.81	7.22
	White	33,396	0.80	6.86
	Two or More Races	1,599	0.78	6.93
Migrant	Non-Migrant	43,603	0.80	6.95
	Migrant	134	0.70	7.72
LEP	Non-LEP	42,349	0.80	6.88
	LEP	1,388	0.59	7.77
Economic Disadvantage	Economically Disadvantaged	22,271	0.77	7.03
	Not Economically Disadvantaged	21,466	0.81	6.77
IEP	Non-IEP	39,934	0.79	6.97
	IEP	3,803	0.67	7.40

Grade 5 Social Studies

Category	Group	N	Reliability	SEM
All	Students Tested	46,421	0.82	6.63
Gender	Female	22,596	0.81	6.65
	Male	23,825	0.82	6.76
Ethnicity	Hispanic	4,011	0.78	6.69
	Asian	894	0.82	6.79
	Native Hawaiian/Pacific Islander	74	0.76	6.62
	Black/African American	5,043	0.76	6.78
	American Indian	54	0.78	6.67
	White	33,957	0.81	6.79
	Two or More Races	2,387	0.80	6.65
Migrant	Non-Migrant	46,230	0.82	6.62
	Migrant	191	0.80	6.87
LEP	Non-LEP	43,800	0.82	6.65
	LEP	2,621	0.68	6.61
Economic Disadvantage	Economically Disadvantaged	28,406	0.79	6.61
	Not Economically Disadvantaged	18,015	0.81	6.87
IEP	Non-IEP	39,734	0.81	6.72
	IEP	6,687	0.78	6.86

Grade 8 Social Studies

Category	Group	N	Reliability	SEM
All	Students Tested	49,928	0.83	6.46
Gender	Female	24,390	0.83	6.22
	Male	25,536	0.84	6.46
Ethnicity	Hispanic	4,254	0.80	6.39
	Asian	853	0.85	6.79
	Native Hawaiian/Pacific Islander	81	0.82	6.27
	Black/African American	5,536	0.76	6.44
	American Indian	65	0.79	6.43
	White	36,842	0.84	6.27
	Two or More Races	2,295	0.83	6.29
Migrant	Non-Migrant	49,728	0.83	6.46
	Migrant	200	0.73	6.48
LEP	Non-LEP	48,178	0.84	6.26
	LEP	1,750	0.59	6.55
Economic Disadvantage	Economically Disadvantaged	29,583	0.80	6.33
	Not Economically Disadvantaged	20,345	0.84	6.40
IEP	Non-IEP	44,054	0.83	6.42
	IEP	5,874	0.70	6.56

Grade 11 Social Studies

Category	Group	N	Reliability	SEM
All	Students Tested	43,516	0.85	6.14
Gender	Female	21,584	0.84	6.08
	Male	21,932	0.86	6.14
Ethnicity	Hispanic	3,222	0.82	6.29
	Asian	895	0.87	6.35
	Native Hawaiian/Pacific Islander	61	0.84	6.18
	Black/African American	4,418	0.80	6.21
	American Indian	56	0.83	6.08
	White	33,272	0.85	6.14
	Two or More Races	1,592	0.82	6.22
Migrant	Non-Migrant	43,383	0.85	6.14
	Migrant	133	0.74	6.49
LEP	Non-LEP	42,161	0.85	6.11
	LEP	1,355	0.61	6.48
Economic Disadvantage	Economically Disadvantaged	22,179	0.82	6.16
	Not Economically Disadvantaged	21,337	0.85	6.24
IEP	Non-IEP	39,717	0.84	6.25
	IEP	3,799	0.73	6.42

Grade 5 Editing and Mechanics

Category	Group	N	Reliability	SEM
All	Students Tested	46,409	0.82	6.88
Gender	Female	22,590	0.82	6.80
	Male	23,819	0.82	6.86
Ethnicity	Hispanic	4,012	0.80	6.77
	Asian	891	0.82	7.04
	Native Hawaiian/Pacific Islander	74	0.82	6.76
	Black/African American	5,040	0.81	6.69
	American Indian	54	0.80	6.82
	White	33,952	0.82	6.77
	Two or More Races	2,385	0.82	6.75
Migrant	Non-Migrant	46,218	0.82	6.87
	Migrant	191	0.79	6.87
LEP	Non-LEP	43,789	0.82	6.83
	LEP	2,620	0.76	6.74
Economic Disadvantage	Economically Disadvantaged	28,397	0.81	6.81
	Not Economically Disadvantaged	18,012	0.80	6.89
IEP	Non-IEP	39,725	0.80	6.89
	IEP	6,684	0.82	6.92

Grade 8 Editing and Mechanics

Category	Group	N	Reliability	SEM
All	Students Tested	49,833	0.84	6.92
Gender	Female	24,340	0.83	6.97
	Male	25,491	0.84	6.94
Ethnicity	Hispanic	4,251	0.82	6.73
	Asian	848	0.85	7.51
	Native Hawaiian/Pacific Islander	82	0.86	7.09
	Black/African American	5,524	0.81	6.84
	American Indian	65	0.84	6.89
	White	36,771	0.84	6.84
	Two or More Races	2,290	0.84	6.79
Migrant	Non-Migrant	49,633	0.84	6.91
	Migrant	200	0.80	7.04
LEP	Non-LEP	48,088	0.84	6.86
	LEP	1,745	0.69	7.09
Economic Disadvantage	Economically Disadvantaged	29,546	0.82	6.88
	Not Economically Disadvantaged	20,287	0.83	6.98
IEP	Non-IEP	43,961	0.83	6.86
	IEP	5,872	0.76	7.09

Grade 11 Editing and Mechanics

Category	Group	N	Reliability	SEM
All	Students Tested	43,405	0.87	7.15
Gender	Female	21,528	0.85	7.18
	Male	21,877	0.88	7.02
Ethnicity	Hispanic	3,213	0.86	7.09
	Asian	889	0.86	7.72
	Native Hawaiian/Pacific Islander	61	0.88	7.58
	Black/African American	4,373	0.86	6.86
	American Indian	56	0.88	6.99
	White	33,225	0.86	7.34
	Two or More Races	1,588	0.86	7.03
Migrant	Non-Migrant	43,273	0.87	7.14
	Migrant	132	0.86	7.09
LEP	Non-LEP	42,073	0.86	7.31
	LEP	1,332	0.76	7.02
Economic Disadvantage	Economically Disadvantaged	22,099	0.86	7.05
	Not Economically Disadvantaged	21,306	0.86	7.30
IEP	Non-IEP	39,629	0.86	7.21
	IEP	3,776	0.82	6.91

Grade 5 On-Demand Writing

Category	Group	N	Reliability	SEM
All	Students Tested	45,359	0.94	4.74
Gender	Female	22,062	0.94	4.59
	Male	23,297	0.93	5.14
Ethnicity	Hispanic	3,929	0.93	5.02
	Asian	864	0.95	4.14
	Native Hawaiian/Pacific Islander	69	0.94	5.14
	Black/African American	4,883	0.92	5.36
	American Indian	54	0.93	4.69
	White	33,226	0.94	4.68
	Two or More Races	2,333	0.93	4.87
Migrant	Non-Migrant	45,178	0.94	4.74
	Migrant	181	0.91	5.77
LEP	Non-LEP	42,810	0.94	4.72
	LEP	2,549	0.90	5.68
Economic Disadvantage	Economically Disadvantaged	27,756	0.93	5.07
	Not Economically Disadvantaged	17,603	0.94	4.38
IEP	Non-IEP	38,969	0.94	4.48
	IEP	6,390	0.89	6.28

Grade 8 On-Demand Writing

Category	Group	N	Reliability	SEM
All	Students Tested	48,432	0.95	5.34
Gender	Female	23,787	0.96	4.64
	Male	24,643	0.94	5.74
Ethnicity	Hispanic	4,109	0.94	5.63
	Asian	813	0.97	4.25
	Native Hawaiian/Pacific Islander	79	0.96	4.98
	Black/African American	5,276	0.91	6.60
	American Indian	64	0.92	5.77
	White	35,875	0.95	5.28
	Two or More Races	2,214	0.94	5.74
Migrant	Non-Migrant	48,243	0.95	5.34
	Migrant	189	0.92	6.74
LEP	Non-LEP	46,828	0.95	5.31
	LEP	1,604	0.85	7.30
Economic Disadvantage	Economically Disadvantaged	28,602	0.94	5.61
	Not Economically Disadvantaged	19,830	0.96	4.57
IEP	Non-IEP	43,021	0.95	5.10
	IEP	5,411	0.81	8.07

Grade 11 On-Demand Writing

Category	Group	N	Reliability	SEM
All	Students Tested	40,905	0.96	5.03
Gender	Female	20,713	0.96	4.68
	Male	20,191	0.95	5.73
Ethnicity	Hispanic	3,000	0.95	5.62
	Asian	869	0.97	4.40
	Native Hawaiian/Pacific Islander	59	0.96	5.08
	Black/African American	4,027	0.94	6.18
	American Indian	48	0.96	5.76
	White	31,421	0.96	4.94
	Two or More Races	1,480	0.95	5.50
Migrant	Non-Migrant	40,791	0.96	5.02
	Migrant	114	0.92	7.45
LEP	Non-LEP	39,727	0.96	4.97
	LEP	1,178	0.88	7.60
Economic Disadvantage	Economically Disadvantaged	20,706	0.95	5.61
	Not Economically Disadvantaged	20,199	0.96	4.80
IEP	Non-IEP	37,426	0.96	4.76
	IEP	3,479	0.90	7.47

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
RE03918949721	Overall	14,446	2,890	79.7	19.2	1.1	73.5	40.3	40.8	15.3	-	-	1.4	0.1	0.0	1.4	0.8
RE03918950488	Overall	17,739	3,550	79.8	19.4	0.8	79.8	22.2	61.1	14.0	-	-	1.0	0.1	0.0	0.9	0.7
RE03919738525	Overall	14,520	2,905	79.8	18.9	1.3	91.9	19.5	46.0	32.1	-	-	0.9	0.0	0.0	0.9	0.5
RE03920746586	Overall	7,247	1,450	79.8	17.8	2.4	91.1	43.5	40.4	13.1	-	-	1.3	0.1	0.0	1.1	0.6
RE03922546844	Overall	7,165	1,435	79.7	19.0	1.4	94.2	40.1	33.7	23.1	-	-	1.1	0.1	0.0	1.1	0.8
RE03923952762	Overall	10,315	2,064	86.1	11.0	2.9	92.5	65.2	15.3	15.1	-	-	1.5	0.4	0.1	1.5	1.1
RE03925248540	Overall	7,253	1,452	79.7	18.1	2.2	96.2	31.6	51.2	13.1	-	-	1.2	0.2	0.0	1.4	1.2
RE03925251463	Overall	7,427	1,486	84.2	14.7	1.1	98.1	48.7	40.6	6.5	-	-	1.8	0.2	0.0	1.3	1.0
RE03925548036	Overall	7,252	1,452	80.1	18.5	1.4	90.0	28.6	53.9	13.4	-	-	1.5	0.1	0.0	1.6	0.9

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

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
RE04919046871	Overall	10,014	2,003	67.2	29.6	3.2	85.3	27.0	30.9	22.7	11.3	3.5	1.2	0.0	0.0	0.5	2.8
RE04919850241	Overall	43,017	8,608	79.5	19.6	0.9	87.3	27.3	43.6	27.4	-	-	0.7	0.0	0.0	0.4	0.4
RE04920352801	Overall	10,053	2,011	65.3	31.9	2.8	80.5	30.4	29.8	19.6	10.2	7.4	0.9	0.1	0.0	0.6	1.1
RE04923143124	Overall	10,003	2,001	81.9	15.1	3.0	76.3	30.3	32.4	21.3	10.4	2.6	1.2	0.0	0.0	0.5	1.3
RE04923247753	Overall	12,968	2,594	67.3	28.0	4.7	81.6	38.8	30.4	14.1	8.3	3.2	1.2	0.1	0.0	0.9	3.0

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

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
RE05918512740	Overall	14,264	2,853	67.6	28.3	4.1	74.0	50.2	23.8	19.5	2.5	1.6	1.1	0.1	0.0	0.5	0.6
RE05919938465	Overall	10,777	2,156	65.9	28.4	5.7	89.3	28.7	22.5	20.3	17.9	8.5	0.9	0.0	0.0	0.4	0.8
RE05920736924	Overall	10,776	2,156	80.2	19.4	0.4	84.7	21.0	39.9	38.1	-	-	0.5	0.0	0.0	0.3	0.2
RE05924235958	Overall	10,794	2,160	80.1	19.2	0.7	82.1	52.1	29.9	16.4	-	-	0.8	0.0	0.0	0.4	0.4
RE05924237059	Overall	10,797	2,160	72.4	24.9	2.7	74.2	26.4	34.6	22.5	10.2	2.6	1.4	0.0	0.0	0.6	1.5
RE05924952030	Overall	10,688	2,138	65.8	27.3	6.9	82.1	45.1	20.3	17.1	11.0	5.0	0.7	0.0	0.0	0.3	0.4
RE05925354894	Overall	24,942	4,991	80.1	19.6	0.4	96.5	30.0	34.6	33.8	-	-	0.6	0.1	0.0	0.3	0.5

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

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
RE06921439309	Overall	10,793	2,160	81.4	18.3	0.3	80.8	22.0	47.5	28.6	-	-	0.8	0.0	0.0	0.2	0.9
RE06922753172	Overall	14,444	2,890	80.8	18.3	0.9	88.6	21.5	56.5	19.4	-	-	0.9	0.0	0.0	0.4	1.3
RE06922754649	Overall	14,447	2,890	65.3	32.5	2.2	81.4	30.3	32.1	24.2	6.7	2.1	1.2	0.0	0.0	0.7	2.6
RE06923445067	Overall	10,896	2,181	88.3	11.3	0.4	84.0	21.4	53.8	21.7	-	-	1.5	0.0	0.0	0.7	0.8
RE06923446732	Overall	10,904	2,181	68.5	29.3	2.2	59.5	23.3	38.3	27.1	6.9	1.2	1.7	0.0	0.0	0.7	0.8
RE06924248746	Overall	10,718	2,144	81.3	17.1	1.6	78.1	25.2	28.3	32.4	7.4	3.8	1.5	0.0	0.0	0.6	0.8
RE06924251082	Overall	10,712	2,144	79.8	20.2	0.0	96.3	15.0	59.6	24.2	-	-	0.7	0.0	0.0	0.3	0.3
RE06926140209	Overall	10,796	2,160	77.2	22.1	0.7	84.0	17.7	37.1	31.2	8.5	2.4	1.1	0.0	0.0	0.5	1.6

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

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
RE07919136296	Overall	15,106	3,022	66.9	30.0	3.1	70.1	33.1	25.4	21.8	10.7	3.3	2.0	0.1	0.0	0.9	2.6
RE07921776226	Overall	11,442	2,289	67.7	30.5	1.8	74.7	23.7	24.0	30.9	11.8	6.0	1.8	0.0	0.0	0.7	1.0
RE07923248501	Overall	22,612	4,525	79.8	19.8	0.3	87.3	24.1	61.0	12.6	-	-	1.1	0.0	0.0	0.4	0.8
RE07924159911	Overall	11,335	2,268	87.4	11.4	1.2	84.9	20.2	43.8	32.9	-	-	1.1	0.0	0.0	0.5	1.4
RE07924164063	Overall	11,340	2,268	68.5	29.4	2.2	68.6	23.5	21.3	24.3	18.4	8.4	1.8	0.0	0.0	0.6	1.6
RE07925650480	Overall	11,181	2,237	65.5	31.8	2.7	83.0	18.8	24.2	29.9	15.1	8.4	1.7	0.0	0.0	0.5	1.4
RE07925656243	Overall	15,101	3,022	80.0	19.3	0.7	87.3	37.6	46.9	11.8	-	-	1.7	0.0	0.0	0.6	1.4

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

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
RE08919847105	Overall	15,372	3,075	67.5	29.4	3.1	72.0	35.8	19.7	19.0	11.0	8.1	1.9	0.0	0.0	1.0	3.3
RE08922149369	Overall	11,576	2,316	75.2	23.7	1.2	74.8	17.8	23.9	30.9	19.1	4.6	1.9	0.0	0.0	0.7	1.1
RE08922537341	Overall	11,581	2,318	80.7	18.8	0.6	85.6	33.7	48.6	15.9	-	-	0.6	0.0	0.0	0.3	0.8
RE08922538979	Overall	15,363	3,075	90.1	9.7	0.2	88.5	37.5	43.0	16.2	-	-	1.2	0.0	0.0	0.7	1.5
RE08923139885	Overall	11,533	2,307	79.7	18.8	1.5	88.6	42.4	36.8	18.0	-	-	1.3	0.0	0.0	0.5	0.9
RE08923255095	Overall	11,534	2,307	67.9	29.5	2.6	78.7	22.3	23.2	24.5	18.5	7.5	1.9	0.0	0.0	0.6	1.5
RE08924146642	Overall	11,589	2,318	70.2	27.2	2.6	65.4	33.8	25.4	18.4	11.3	6.1	2.0	0.0	0.0	0.8	2.2
RE08924648904	Overall	11,574	2,316	80.5	18.9	0.6	89.3	20.8	61.6	15.7	-	-	0.9	0.0	0.0	0.5	0.6

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

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
RE10920458634	Overall	47,124	9,763	79.9	18.6	1.5	88.3	51.3	32.1	10.5	-	-	3.1	0.2	0.0	1.1	1.7
RE10922855267	Overall	13,970	2,794	70.4	28.3	1.3	85.2	27.5	24.8	17.8	14.0	4.1	5.7	0.0	0.0	1.8	4.1
RE10924246807	Overall	22,138	4,428	73.9	25.4	0.7	76.8	35.6	23.0	16.3	9.3	5.8	5.3	0.1	0.0	1.7	3.0
RE10925560320	Overall	11,022	2,205	72.1	27.0	0.9	79.0	33.1	21.1	21.7	11.3	3.5	5.2	0.2	0.0	1.8	2.1

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

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	17,577	3,516	87.9	11.6	0.5	96.3	29.8	32.2	35.9	-	-	1.4	0.0	0.0	0.0	0.7
MA0320092	Overall	7,306	1,462	91.6	8.1	0.3	97.2	53.6	42.5	-	-	-	2.2	0.0	0.0	0.0	1.7
MA0320093	Overall	7,286	1,458	96.9	2.9	0.1	93.9	42.6	54.0	-	-	-	2.5	0.0	0.0	0.0	0.9
MA0320147	Overall	21,984	4,397	95.0	4.9	0.1	96.7	73.0	24.4	-	-	-	2.0	0.0	0.0	0.0	0.7
MA0320173	Overall	17,479	3,496	93.4	6.5	0.1	98.8	36.4	43.3	18.9	-	-	1.0	0.0	0.0	0.0	0.4

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

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	26,764	5,353	83.1	16.0	0.9	95.4	38.2	28.9	24.7	4.4	-	2.9	0.0	0.0	0.0	0.8
MA0420064	Overall	6,755	1,351	91.8	8.2	0.0	97.6	76.5	21.3	-	-	-	1.6	0.0	0.0	0.0	0.6
MA0420066	Overall	9,727	1,946	80.1	17.5	2.4	77.7	57.7	17.5	10.4	6.3	6.2	1.5	0.0	0.0	0.0	0.3
MA0420086	Overall	9,727	1,946	98.3	1.6	0.1	91.1	90.3	2.7	4.6	-	-	1.8	0.0	0.0	0.0	0.7
MA0420093	Overall	6,755	1,351	79.0	20.0	1.0	91.0	26.1	46.6	15.2	5.6	1.5	2.8	0.0	0.0	0.0	2.2
MA0420110	Overall	26,764	5,353	92.2	7.1	0.7	96.2	79.7	10.5	6.7	-	-	2.0	0.0	0.0	0.0	1.2
MA0420C4_02	Overall	23,096	4,620	93.3	6.3	0.5	97.7	36.3	50.4	12.0	-	-	1.1	0.0	0.0	0.0	0.2

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

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
MA0520019	Overall	24,997	5,000	77.2	21.2	1.7	86.1	27.4	36.7	19.3	8.8	5.3	1.7	0.0	0.0	0.0	0.8
MA0520060	Overall	21,708	4,342	98.2	1.7	0.1	99.5	66.7	31.6	-	-	-	1.3	0.0	0.0	0.0	0.3
MA0520062	Overall	21,727	4,346	75.1	22.1	2.8	91.1	42.3	14.8	21.3	9.1	11.3	1.0	0.0	0.0	0.1	0.1
MA0520083	Overall	10,474	2,095	92.4	7.3	0.4	95.9	76.5	14.1	7.1	-	-	1.6	0.0	0.0	0.0	0.6
MA0520109	Overall	21,749	4,350	94.0	6.0	0.0	97.5	45.3	53.0	-	-	-	1.2	0.0	0.0	0.0	0.4
MA0520132	Overall	7,226	1,446	93.4	6.6	0.0	95.2	39.5	54.7	4.6	-	-	1.0	0.0	0.0	0.0	0.3
MA0520C4_02	Overall	17,659	3,532	95.4	4.5	0.1	97.8	57.9	37.9	2.5	-	-	1.1	0.0	0.0	0.1	0.4
MA0520C6_02	Overall	7,316	1,464	97.6	2.3	0.1	95.8	80.3	6.8	9.6	-	-	2.1	0.0	0.0	0.0	1.1
MA0521C1_02	Overall	7,316	1,464	99.3	0.6	0.1	99.2	75.6	19.9	1.4	-	-	1.9	0.0	0.0	0.0	1.2

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

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	17,992	3,599	83.2	15.1	1.6	86.1	48.5	20.3	11.0	9.4	6.7	2.7	0.0	0.0	0.0	1.3
MA0620035	Overall	21,909	4,382	94.6	5.0	0.4	96.2	81.5	8.4	5.2	-	-	2.8	0.0	0.0	0.1	2.1
MA0620058	Overall	18,224	3,645	91.7	7.8	0.5	91.6	77.8	7.4	11.2	-	-	2.5	0.0	0.0	0.0	1.0
MA0620059	Overall	21,745	4,349	88.3	10.9	0.9	92.2	71.9	12.4	11.4	-	-	2.8	0.0	0.0	0.2	1.3
MA0620188	Overall	7,102	1,421	94.4	5.1	0.4	96.3	83.3	7.3	6.8	-	-	1.5	0.0	0.0	0.0	1.2
MA0620C4_01	Overall	25,094	5,019	93.2	6.2	0.6	96.5	81.3	7.1	7.7	-	-	2.6	0.0	0.0	0.2	1.2
MA0620C6_03	Overall	7,266	1,454	95.1	3.8	1.1	98.8	69.8	2.5	14.5	2.3	4.9	3.2	0.0	0.0	0.2	2.6

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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	26,318	5,264	90.0	9.3	0.7	91.9	58.0	29.1	5.6	-	-	3.6	0.0	0.0	0.0	3.7
MA0720037	Overall	49,237	9,848	84.6	11.1	4.3	96.1	48.3	6.8	16.3	7.3	17.0	1.8	0.0	0.0	0.0	2.5
MA0720C3_03	Overall	34,317	6,864	91.2	8.4	0.4	95.5	68.6	19.8	2.5	-	-	4.1	0.0	0.0	0.0	5.0

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

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	7,732	1,547	87.7	11.9	0.4	95.6	64.2	27.0	3.9	-	-	1.8	0.0	0.0	0.0	3.0
MA0820071	Overall	15,398	3,080	86.2	12.6	1.2	96.6	57.1	29.0	10.1	-	-	1.5	0.0	0.0	0.0	2.3
MA0820082	Overall	7,680	1,536	79.5	18.6	1.9	92.8	46.6	25.3	9.3	5.4	5.1	4.5	0.0	0.0	0.0	3.8
MA0820140	Overall	11,751	2,351	91.7	7.9	0.4	95.8	69.5	11.5	11.2	-	-	4.3	0.0	0.1	0.0	3.5
MA0820142	Overall	34,803	6,961	89.4	9.5	1.0	98.0	68.0	12.6	4.9	1.4	2.6	5.3	0.0	0.0	0.0	5.2
MA0820161	Overall	11,751	2,351	95.9	4.0	0.1	96.9	75.7	6.6	11.6	-	-	3.5	0.0	0.0	0.0	2.5
MA0820162	Overall	7,757	1,552	89.6	10.1	0.4	95.9	54.8	19.8	16.5	3.9	2.0	1.4	0.0	0.0	0.0	1.7
MA0820C09_01	Overall	30,887	6,178	90.7	9.2	0.0	97.7	68.9	24.7	-	-	-	4.1	0.0	0.0	0.0	2.3
MA0820C1_03	Overall	7,602	1,521	96.1	3.7	0.1	97.0	56.1	36.6	3.9	-	-	1.7	0.0	0.0	0.0	1.7

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

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
MA1020008	Overall	7,270	1,454	95.4	2.7	1.9	94.5	74.6	4.5	1.8	-	-	7.5	0.6	0.0	0.0	10.9
MA1020024	Overall	10,198	2,040	95.8	3.6	0.6	91.0	75.6	7.4	4.2	-	-	7.0	0.0	0.0	0.0	5.8
MA1020045	Overall	39,869	7,974	95.8	2.7	1.4	97.5	62.1	13.9	6.3	-	-	8.5	0.0	0.0	0.0	9.2
MA1020048	Overall	25,061	5,013	88.6	9.8	1.6	88.1	50.3	16.3	10.1	3.0	1.4	9.9	0.0	0.0	0.0	8.9
MA1020091	Overall	7,428	1,486	90.9	8.4	0.7	94.0	68.0	13.5	9.1	-	-	4.1	0.0	0.0	0.0	5.3
MA1020185	Overall	22,078	4,416	91.1	7.9	1.0	90.2	66.2	12.0	2.0	1.1	-	10.5	0.0	0.0	0.0	8.2
MA1020C3_02	Overall	7,270	1,454	96.1	3.4	0.4	96.7	67.9	6.1	6.3	-	-	10.3	0.0	0.0	0.0	9.4

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

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
SC041601_08	Overall	9,970	1,994	75.1	23.3	1.6	92.3	40.3	35.9	16.6	3.5	0.8	1.3	0.3	0.0	0.5	0.8
SC041602_08	Overall	23,184	4,637	77.3	20.6	2.1	89.6	62.3	26.3	6.1	1.1	0.4	1.8	0.3	0.0	0.7	1.1
SC041603_08	Overall	23,028	4,606	77.3	21.4	1.3	87.3	50.1	40.0	4.8	1.3	0.8	1.2	0.3	0.0	0.6	0.7
SC041607_08	Overall	9,970	1,994	71.3	26.8	2.0	88.9	45.9	35.7	13.4	3.0	0.4	0.8	0.2	0.0	0.3	0.2
SC041609_05	Overall	23,135	4,627	76.2	21.5	2.3	88.0	54.0	22.6	15.2	2.7	0.7	1.8	0.4	0.0	0.7	1.8
SC041614_05	Overall	20,203	4,041	75.8	23.2	1.0	93.5	28.3	44.6	19.8	2.8	1.1	1.7	0.3	0.0	0.6	0.9
SC041623_07	Overall	10,077	2,016	71.5	25.3	3.1	90.9	54.1	27.3	12.2	3.2	1.0	1.0	0.2	0.0	0.4	0.5
SC041624_08	Overall	10,126	2,026	86.7	12.3	1.0	97.9	55.0	18.3	15.3	5.4	0.5	2.4	0.6	0.0	0.7	1.7

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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	37,762	7,553	65.9	31.1	3.0	86.9	46.5	32.3	10.5	3.3	1.2	2.5	0.3	0.0	0.5	2.8
SC071603_06	Overall	15,162	3,033	68.9	28.6	2.5	89.3	34.0	38.4	14.2	5.5	2.2	2.4	0.5	0.0	0.7	2.1
SC071613_03	Overall	49,195	9,839	67.5	28.8	3.7	92.6	34.7	23.4	26.1	7.8	3.2	2.2	0.3	0.0	0.5	1.9
SC071616_08	Overall	11,115	2,223	68.5	27.6	3.9	89.6	55.9	25.2	8.2	2.6	0.7	3.9	0.5	0.0	0.5	2.5
SC071625_08	Overall	22,918	4,584	71.1	27.0	1.9	87.4	41.2	35.9	14.3	3.3	0.6	2.1	0.6	0.0	0.4	1.6
SC071627_08	Overall	11,433	2,287	72.5	26.0	1.5	83.6	37.2	32.2	19.7	4.9	1.2	2.4	0.4	0.0	0.4	1.5

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

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	44,007	8,802	68.4	29.5	2.1	90.4	32.8	35.0	18.3	2.6	0.1	5.5	0.9	0.0	1.0	3.7
SC111617_08	Overall	23,270	4,654	73.4	25.4	1.2	89.0	28.8	37.9	19.6	4.2	0.6	4.2	0.9	0.0	0.9	2.8
SC111620_08	Overall	20,737	4,148	65.9	31.2	2.8	89.8	15.0	42.1	24.4	7.8	1.6	4.7	0.6	0.0	1.0	2.9
SC111701_08	Overall	10,420	2,084	66.3	32.1	1.5	91.5	12.8	26.4	33.5	16.9	3.2	3.4	0.7	0.0	0.5	2.5
SC111704_03	Overall	12,782	2,557	72.8	25.6	1.6	91.4	34.0	33.7	20.4	3.1	0.3	3.5	0.7	0.0	0.7	3.7
SC111711_08	Overall	10,317	2,064	71.1	27.5	1.4	88.1	17.0	42.6	25.4	5.3	1.2	4.1	0.6	0.0	0.8	2.9
SC111712_08	Overall	10,488	2,098	67.9	29.4	2.7	89.6	8.5	13.2	33.0	25.1	9.3	5.4	1.0	0.0	0.9	3.5

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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
SS0520043_08	Overall	8,622	1,725	80.3	18.8	0.8	92.2	28.1	41.5	27.8	-	-	1.3	0.3	0.0	0.2	0.8
SS0520043_09	Overall	8,768	1,754	71.0	28.0	1.0	79.5	16.0	29.8	31.4	14.8	3.6	1.8	0.6	0.0	0.6	1.4
SS0520045_08	Overall	29,165	5,838	81.0	18.4	0.6	71.7	39.7	42.5	12.6	-	-	2.2	0.4	0.0	1.2	1.2
SS0520047_09	Overall	29,074	5,820	74.3	21.8	3.9	66.9	35.8	27.6	20.5	6.1	1.6	3.6	0.4	0.0	1.5	2.9
SS0521091_08	Overall	8,693	1,739	80.5	19.3	0.2	93.2	21.4	37.4	38.1	-	-	1.2	0.2	0.0	0.5	1.3
SS0521091_09	Overall	8,636	1,728	72.3	26.8	0.9	72.8	24.5	28.2	27.6	10.2	4.1	2.2	0.3	0.0	0.9	2.1

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

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
SS0820005_09	Overall	31,531	6,310	74.6	24.2	1.2	82.4	34.1	32.7	16.9	3.7	1.3	4.4	0.4	0.0	1.8	4.8
SS0820043_08	Overall	9,139	1,828	79.9	19.9	0.2	94.5	31.3	48.1	15.7	2.9	0.0	0.0	0.9	1.1	2.9	0.0
SS0820043_09	Overall	9,199	1,840	72.0	27.9	0.2	73.8	21.2	27.5	27.1	13.0	2.8	4.8	0.1	0.0	1.3	2.3
SS0820044_08	Overall	9,373	1,875	81.1	18.9	0.1	94.7	24.0	43.6	26.4	-	-	3.3	0.1	0.0	1.0	1.6
SS0820044_09	Overall	9,265	1,853	77.3	22.6	0.1	94.7	17.3	22.7	30.0	20.7	1.9	3.7	0.0	0.0	1.2	2.4
SS0820047_08	Overall	31,481	6,300	80.3	19.5	0.2	88.6	24.9	50.7	17.2	-	-	2.9	0.4	0.0	1.4	2.6

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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	27,064	5,417	80.2	18.2	1.6	88.7	26.3	44.2	13.4	-	-	6.8	0.4	0.0	3.1	5.7
SS1120002_09	Overall	27,283	5,462	79.8	18.3	1.9	74.2	19.3	22.1	23.6	11.8	2.7	9.3	0.5	0.0	4.3	6.2
SS1121087_08	Overall	8,317	1,664	86.2	11.8	2.0	95.0	49.8	20.8	15.3	-	-	7.0	0.5	0.0	2.7	3.9
SS1121087_09	Overall	8,237	1,648	78.0	20.0	2.0	81.9	41.1	15.9	14.6	6.8	2.6	9.2	0.5	0.0	3.6	5.7
SS1122172_08	Overall	8,335	1,667	80.2	19.7	0.1	85.1	24.1	37.1	25.1	-	-	5.5	0.6	0.0	3.0	4.6
SS1122172_09	Overall	8,204	1,641	75.9	23.6	0.4	83.2	13.9	22.8	27.7	12.6	3.4	9.4	0.8	0.0	3.4	6.1

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

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
EM05922059680	Overall	46,489	9,298	88.6	10.1	1.3	96.0	70.6	16.3	11.4	-	-	0.5	0.4	0.0	0.2	0.6
EM05922060199	Overall	46,489	9,298	80.1	17.7	2.2	89.5	55.2	25.0	17.3	-	-	0.6	0.7	0.0	0.0	1.1
EM05924037919	Overall	14,506	2,902	87.1	10.1	2.8	97.5	39.5	25.4	33.8	-	-	0.3	0.4	0.0	0.0	0.6
EM05924038025	Overall	14,506	2,902	88.9	10.5	0.6	96.4	10.8	30.8	56.1	-	-	0.3	0.4	0.0	0.1	1.5
EM05925232702	Overall	14,649	2,930	87.7	10.6	1.7	94.6	47.9	19.5	30.7	-	-	0.5	0.5	0.0	0.0	0.9
EM05925233762	Overall	14,649	2,930	81.5	15.9	2.6	94.7	54.9	30.1	12.3	-	-	0.6	0.7	0.0	0.2	1.3
EM05925444403	Overall	17,334	3,467	79.8	16.5	3.7	93.2	36.6	29.9	30.3	-	-	0.4	0.5	0.0	0.0	2.2
EM05925446971	Overall	17,334	3,467	87.0	11.5	1.5	98.5	49.3	26.6	20.1	-	-	0.5	0.6	0.0	0.2	2.6

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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
EM08923137182	Overall	15,487	3,098	92.9	6.2	0.9	94.0	55.5	6.8	34.9	-	-	1.3	0.3	0.0	0.3	0.9
EM08923138777	Overall	15,487	3,098	88.3	10.9	0.8	96.1	24.6	11.4	61.2	-	-	1.3	0.3	0.0	0.2	0.9
EM08923233129	Overall	49,978	9,996	96.2	3.2	0.5	99.2	79.5	8.2	9.3	-	-	1.3	0.3	0.0	0.3	1.2
EM08923233691	Overall	49,978	9,996	92.3	6.6	1.1	97.5	55.1	6.8	34.9	-	-	1.4	0.2	0.0	0.4	1.1
EM08923523006	Overall	19,274	3,855	95.0	4.2	0.9	98.0	65.8	4.5	24.9	-	-	1.8	0.8	0.0	0.5	1.6
EM08923523114	Overall	19,274	3,855	95.1	4.1	0.8	97.3	66.6	4.0	25.5	-	-	1.7	0.3	0.0	0.4	1.3
EM08925454757	Overall	15,217	3,044	90.1	9.4	0.5	96.8	38.0	10.1	49.2	-	-	1.1	0.3	0.0	0.3	0.9
EM08925454946	Overall	15,217	3,044	89.2	9.4	1.4	98.2	52.6	13.5	30.8	-	-	1.4	0.3	0.0	0.3	1.0

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

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
EM11924574349	Overall	29,822	5,965	91.8	7.9	0.3	92.7	11.2	54.1	26.5	-	-	3.1	1.0	0.0	1.0	3.1
EM11924576402	Overall	29,822	5,965	80.8	19.1	0.1	94.0	27.5	48.4	12.6	-	-	4.1	1.4	0.0	1.4	4.6
EM11925338576	Overall	30,010	6,002	81.5	18.1	0.4	92.3	23.0	50.7	18.2	-	-	3.1	0.9	0.0	1.0	3.1
EM11925339340	Overall	30,010	6,002	84.1	15.9	0.0	94.6	12.8	47.8	30.4	-	-	3.3	1.0	0.0	1.0	3.6
EM11926132910	Overall	27,414	5,483	80.3	19.7	0.1	94.2	19.9	37.5	30.1	-	-	4.7	1.6	0.0	1.4	4.8
EM11926133164	Overall	27,414	5,483	87.9	12.0	0.1	97.2	14.9	53.0	19.8	-	-	4.5	1.5	0.0	1.6	4.6

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

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	
WR05914242321	Clarity/Coherence	0.9%	0.0%	13.2%	7.3%	32.9%	12.4%	20.9%	7.8%	4.7%	11	0	0	22	86	71.9	27.4	0.7	84.3	
WR05914242321	Language/Conventions	0.9%	0.0%	9.5%	5.1%	37.7%	11.6%	24.7%	6.4%	4.0%	11	0	0	22	86	76.5	23.1	0.4	85.5	
WR05914242321	Organization	0.9%	0.0%	18.3%	7.4%	29.8%	11.6%	22.0%	6.3%	3.7%	11	0	0	22	86	74.2	25.2	0.6	87.2	
WR05914242321	Sourcing	0.9%	0.0%	48.2%	14.3%	16.0%	7.2%	7.8%	3.8%	1.8%	11	0	0	22	86	71.8	25.3	2.9	87.2	
WR05914242321	Support	0.9%	0.0%	15.6%	8.0%	33.8%	12.5%	19.8%	5.7%	3.6%	11	0	0	22	86	73.3	26.2	0.5	84.5	
WR05914256189	Clarity/Coherence	0.7%	0.0%	10.3%	9.7%	31.3%	14.2%	21.7%	7.4%	4.9%	11	0	0	11	65	68.0	31.2	0.8	79.6	
WR05914256189	Language/Conventions	0.7%	0.0%	9.2%	7.9%	30.2%	13.8%	26.0%	7.4%	4.8%	11	0	0	11	65	70.4	29.0	0.6	80.5	
WR05914256189	Organization	0.7%	0.0%	16.2%	8.9%	26.4%	13.3%	22.7%	6.9%	4.9%	11	0	0	11	65	70.1	29.0	0.9	75.6	
WR05914256189	Sourcing	0.7%	0.0%	38.1%	18.6%	15.1%	9.0%	10.7%	4.8%	3.1%	11	0	0	11	65	64.2	32.3	3.5	77.3	
WR05914256189	Support	0.7%	0.0%	12.9%	10.9%	33.6%	14.4%	16.9%	6.4%	4.1%	11	0	0	11	65	67.3	31.8	1.0	76.9	
WR05914856509	Clarity/Coherence	1.1%	0.0%	11.1%	7.9%	33.7%	13.0%	24.9%	5.5%	2.8%	11	0	0	11	99	72.8	26.3	0.9	86.1	
WR05914856509	Language/Conventions	1.1%	0.0%	8.4%	5.8%	36.2%	13.4%	26.0%	5.9%	3.2%	11	0	0	11	99	74.6	25.1	0.3	85.5	
WR05914856509	Organization	1.1%	0.0%	16.4%	9.1%	28.4%	12.5%	23.6%	5.7%	3.1%	11	0	0	11	99	72.1	27.3	0.6	87.4	
WR05914856509	Sourcing	1.1%	0.0%	52.0%	18.7%	11.6%	7.0%	6.4%	2.4%	0.8%	11	0	0	11	99	70.3	28.1	1.6	86.3	
WR05914856509	Support	1.1%	0.0%	11.6%	7.4%	37.6%	14.0%	20.6%	5.0%	2.6%	11	0	0	11	99	73.2	26.4	0.4	84.8	
WR05920439458	Clarity/Coherence	1.8%	0.0%	13.3%	5.3%	35.7%	10.1%	24.4%	5.2%	4.3%	14	14	0	14	206	78.9	20.6	0.6	83.5	
WR05920439458	Language/Conventions	1.8%	0.0%	15.2%	4.1%	35.2%	8.3%	26.1%	4.9%	4.3%	14	14	0	14	206	82.3	17.3	0.3	84.9	
WR05920439458	Organization	1.8%	0.0%	23.7%	5.9%	26.6%	9.4%	23.5%	4.8%	4.3%	14	14	0	14	206	79.2	20.0	0.8	81.6	
WR05920439458	Sourcing	1.8%	0.0%	79.9%	3.4%	7.4%	2.8%	2.3%	1.6%	0.8%	14	14	0	14	206	90.7	7.8	1.5	94.8	
WR05920439458	Support	1.8%	0.0%	15.7%	4.9%	37.8%	9.3%	22.6%	4.1%	3.8%	14	14	0	14	206	81.3	18.3	0.4	80.1	

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

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

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	
WR08912757251	Clarity/Coherence	0.9%	0.0%	11.7%	7.5%	37.4%	12.8%	18.9%	6.5%	4.2%	23	11	0	34	57	72.5	26.7	0.8	78.1	
WR08912757251	Counterclaims	0.9%	0.0%	38.1%	16.4%	22.6%	9.9%	6.0%	3.8%	2.3%	23	11	0	34	57	66.9	30.0	3.1	76.9	
WR08912757251	Language/Conventions	0.9%	0.0%	13.5%	7.7%	36.4%	13.7%	18.3%	5.7%	3.8%	23	11	0	34	57	72.1	27.1	0.8	80.0	
WR08912757251	Organization	0.9%	0.0%	20.4%	9.3%	32.7%	13.2%	15.2%	5.2%	3.1%	23	11	0	34	57	71.5	27.7	0.8	82.6	
WR08912757251	Sourcing	0.9%	0.0%	26.4%	10.5%	28.7%	11.6%	13.4%	5.3%	3.1%	23	11	0	34	57	71.6	27.4	1.1	81.0	
WR08912757251	Support	0.9%	0.0%	19.3%	11.5%	34.4%	11.7%	14.0%	4.9%	3.3%	23	11	0	34	57	71.0	28.0	1.0	81.0	
WR08914237248	Clarity/Coherence	1.0%	0.0%	17.0%	10.7%	33.0%	15.8%	15.5%	5.0%	1.9%	35	12	0	23	81	67.2	31.4	1.4	77.7	
WR08914237248	Counterclaims	1.0%	0.0%	35.4%	20.9%	23.7%	9.4%	5.6%	2.8%	1.3%	35	12	0	23	81	63.6	33.0	3.4	79.9	
WR08914237248	Language/Conventions	1.0%	0.0%	19.2%	11.6%	29.7%	17.3%	14.7%	4.8%	1.8%	35	12	0	23	81	65.0	33.5	1.5	76.6	
WR08914237248	Organization	1.0%	0.0%	21.9%	10.5%	28.5%	16.6%	15.3%	4.6%	1.6%	35	12	0	23	81	67.0	31.5	1.4	82.0	
WR08914237248	Sourcing	1.0%	0.0%	26.8%	15.4%	24.6%	14.0%	12.0%	4.5%	1.7%	35	12	0	23	81	64.0	33.8	2.2	80.3	
WR08914237248	Support	1.0%	0.0%	21.6%	11.7%	32.2%	15.4%	12.0%	4.4%	1.8%	35	12	0	23	81	67.2	31.3	1.5	81.4	
WR08914276258	Clarity/Coherence	1.2%	0.0%	16.8%	8.9%	34.7%	11.8%	18.7%	4.7%	3.2%	35	0	0	12	116	74.0	25.3	0.7	81.6	
WR08914276258	Counterclaims	1.2%	0.0%	35.3%	15.5%	23.1%	9.7%	9.0%	3.5%	2.6%	35	0	0	12	116	68.6	28.7	2.7	80.3	
WR08914276258	Language/Conventions	1.2%	0.0%	18.4%	9.0%	33.3%	11.5%	18.2%	5.2%	3.3%	35	0	0	12	116	73.7	25.6	0.7	84.7	
WR08914276258	Organization	1.2%	0.0%	21.9%	8.6%	31.8%	11.7%	17.8%	4.3%	2.7%	35	0	0	12	116	74.9	24.5	0.6	84.3	
WR08914276258	Sourcing	1.2%	0.0%	33.7%	11.6%	22.7%	9.7%	14.2%	4.2%	2.7%	35	0	0	12	116	73.6	25.4	1.1	82.8	
WR08914276258	Support	1.2%	0.0%	23.7%	10.2%	32.8%	11.4%	14.4%	3.9%	2.4%	35	0	0	12	116	73.9	25.5	0.6	81.5	
WR08914936433	Clarity/Coherence	3.5%	0.0%	25.6%	9.2%	29.6%	10.2%	16.8%	3.0%	2.1%	31	46	0	61	414	76.9	22.3	0.8	87.4	
WR08914936433	Counterclaims	3.5%	0.0%	45.5%	14.9%	18.2%	8.0%	6.7%	2.0%	1.2%	31	46	0	61	414	73.3	24.8	1.9	84.5	
WR08914936433	Language/Conventions	3.5%	0.0%	26.5%	9.9%	29.0%	10.4%	15.2%	3.3%	2.0%	31	46	0	61	414	75.7	23.6	0.8	82.4	
WR08914936433	Organization	3.5%	0.0%	30.2%	9.0%	27.6%	10.0%	15.0%	2.8%	1.8%	31	46	0	61	414	77.4	21.8	0.8	89.4	
WR08914936433	Sourcing	3.5%	0.0%	41.5%	15.7%	17.3%	8.1%	10.3%	2.1%	1.5%	31	46	0	61	414	72.4	25.8	1.8	88.2	
WR08914936433	Support	3.5%	0.0%	30.1%	9.8%	28.6%	9.9%	13.7%	2.6%	1.8%	31	46	0	61	414	76.9	22.2	0.8	89.2	

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

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

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	
WR11913555816	Clarity/Coherence	4.6%	0.0%	16.6%	4.8%	31.8%	10.9%	22.6%	5.2%	3.5%	115	21	0	94	355	78.3	20.7	1.0	91.7	
WR11913555816	Counterclaims	4.6%	0.0%	30.7%	14.6%	24.3%	10.1%	9.7%	3.5%	2.6%	115	21	0	94	355	69.0	27.8	3.2	85.2	
WR11913555816	Language/Conventions	4.6%	0.0%	12.3%	5.0%	32.8%	11.4%	24.6%	5.6%	3.8%	115	21	0	94	355	77.3	21.7	1.0	87.1	
WR11913555816	Organization	4.6%	0.0%	19.0%	4.7%	30.5%	10.9%	22.1%	4.9%	3.3%	115	21	0	94	355	78.6	20.2	1.1	90.6	
WR11913555816	Sourcing	4.6%	0.0%	47.9%	8.1%	12.9%	7.9%	11.7%	4.3%	2.7%	115	21	0	94	355	77.4	20.0	2.6	93.1	
WR11913555816	Support	4.6%	0.0%	18.9%	4.8%	33.5%	10.8%	19.2%	5.1%	3.2%	115	21	0	94	355	78.6	20.4	1.0	91.2	
WR11914052116	Clarity/Coherence	4.4%	0.0%	18.9%	7.7%	26.2%	12.9%	21.0%	5.2%	3.6%	126	25	0	101	404	73.6	25.5	0.9	88.6	
WR11914052116	Counterclaims	4.4%	0.0%	36.4%	16.6%	17.5%	10.6%	9.6%	2.9%	2.0%	126	25	0	101	404	66.8	29.7	3.5	84.0	
WR11914052116	Language/Conventions	4.4%	0.0%	14.1%	8.2%	28.9%	13.2%	23.1%	4.8%	3.4%	126	25	0	101	404	73.4	25.8	0.8	84.4	
WR11914052116	Organization	4.4%	0.0%	22.7%	7.9%	24.8%	11.9%	21.0%	4.2%	3.1%	126	25	0	101	404	75.5	23.7	0.9	90.0	
WR11914052116	Sourcing	4.4%	0.0%	52.1%	10.6%	9.5%	8.0%	9.8%	3.7%	1.9%	126	25	0	101	404	75.5	22.0	2.5	86.2	
WR11914052116	Support	4.4%	0.0%	23.0%	8.7%	25.8%	11.9%	17.2%	5.5%	3.5%	126	25	0	101	404	73.3	25.7	1.0	88.6	
WR11914952612	Clarity/Coherence	3.4%	0.0%	13.3%	7.5%	28.3%	14.5%	21.0%	6.7%	5.3%	114	21	0	62	249	70.3	28.4	1.3	79.1	
WR11914952612	Counterclaims	3.4%	0.0%	25.9%	17.0%	23.1%	12.4%	10.6%	4.7%	3.0%	114	21	0	62	249	63.3	33.6	3.1	82.9	
WR11914952612	Language/Conventions	3.4%	0.0%	11.9%	8.6%	28.4%	13.9%	22.9%	6.5%	4.4%	114	21	0	62	249	70.1	28.7	1.3	81.2	
WR11914952612	Organization	3.4%	0.0%	18.1%	8.3%	27.1%	13.3%	20.2%	5.8%	3.7%	114	21	0	62	249	71.4	27.2	1.4	84.6	
WR11914952612	Sourcing	3.4%	0.0%	39.5%	11.8%	14.8%	10.5%	11.3%	5.2%	3.5%	114	21	0	62	249	69.5	27.2	3.3	83.9	
WR11914952612	Support	3.4%	0.0%	17.1%	8.5%	29.6%	12.9%	18.5%	6.2%	3.9%	114	21	0	62	249	71.6	27.2	1.2	82.2	
WR11915549113	Clarity/Coherence	3.3%	0.0%	16.8%	4.6%	33.5%	9.9%	24.2%	4.4%	3.3%	113	20	10	72	235	80.6	18.8	0.6	85.3	
WR11915549113	Counterclaims	3.3%	0.0%	34.9%	14.4%	24.0%	9.4%	9.0%	3.0%	1.8%	113	20	10	72	235	71.5	26.6	2.0	74.4	
WR11915549113	Language/Conventions	3.3%	0.0%	11.6%	4.2%	33.9%	10.3%	28.5%	4.5%	3.8%	113	20	10	72	235	80.6	18.8	0.6	79.8	
WR11915549113	Organization	3.3%	0.0%	19.6%	5.1%	31.3%	9.2%	24.2%	4.3%	3.0%	113	20	10	72	235	80.9	18.4	0.8	86.9	
WR11915549113	Sourcing	3.3%	0.0%	43.0%	7.8%	15.1%	7.3%	17.0%	4.0%	2.4%	113	20	10	72	235	79.5	18.9	1.6	88.0	
WR11915549113	Support	3.3%	0.0%	18.9%	5.2%	33.6%	9.1%	22.6%	4.3%	2.9%	113	20	10	72	235	80.9	18.4	0.7	88.0	

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	71.21%	88.64%	61.53%	0.48
	4	71.15%	88.50%	61.55%	0.48
	5	72.74%	89.10%	63.21%	0.50
	6	70.55%	88.13%	60.71%	0.47
	7	70.41%	88.17%	60.95%	0.47
	8	68.66%	87.14%	58.86%	0.44
	10	71.54%	88.59%	61.99%	0.49
Mathematics	3	75.08%	90.20%	65.81%	0.53
	4	73.99%	89.32%	64.77%	0.51
	5	74.24%	89.93%	64.74%	0.51
	6	70.38%	87.87%	60.54%	0.45
	7	66.11%	86.23%	55.93%	0.38
	8	69.13%	88.07%	59.33%	0.43
	10	64.84%	86.05%	54.38%	0.37
Science	4	72.39%	87.00%	61.66%	0.38
	7	73.38%	89.98%	63.68%	0.44
	11	77.16%	92.19%	68.47%	0.49
Social Studies	5	68.88%	87.86%	58.93%	0.43
	8	69.99%	88.50%	60.53%	0.45
	11	72.75%	89.68%	63.38%	0.49
Editing and Mechanics	5	66.76%	86.11%	56.56%	0.42
	8	69.03%	86.70%	58.64%	0.44
	11	72.47%	88.76%	62.80%	0.50
On-Demand Writing	5	79.06%	91.04%	71.66%	0.59
	8	83.05%	92.58%	76.49%	0.66
	11	83.50%	93.13%	79.03%	0.69

Appendix O. Principal Components Analysis

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

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	0.0224	0.0259	0.0249	0.0268
3	2	0.0217	0.0254	0.0243	0.0264
3	3	0.0180	0.0198	0.0187	0.0209
3	4	0.0205	0.0239	0.0228	0.0249
3	5	0.0211	0.0249	0.0238	0.0259
3	6	0.0211	0.0231	0.0221	0.0242
4	1	0.0203	0.0269	0.0261	0.0277
4	2	0.0231	0.0313	0.0305	0.0322
4	3	0.0182	0.0243	0.0234	0.0252
4	4	0.0218	0.0298	0.0289	0.0306
5	1	0.0203	0.0242	0.0235	0.0250
5	2	0.0227	0.0293	0.0285	0.0301
5	3	0.0190	0.0237	0.0229	0.0245
5	4	0.0225	0.0309	0.0301	0.0317
6	1	0.0202	0.0269	0.0261	0.0277
6	2	0.0190	0.0233	0.0224	0.0241
6	3	0.0198	0.0271	0.0263	0.0279
6	4	0.0183	0.0227	0.0219	0.0235
7	1	0.0196	0.0244	0.0236	0.0251
7	2	0.0257	0.0329	0.0321	0.0337
7	3	0.0240	0.0292	0.0284	0.0300
7	4	0.0208	0.0253	0.0244	0.0261
8	1	0.0183	0.0226	0.0218	0.0234
8	2	0.0179	0.0231	0.0223	0.0239
8	3	0.0167	0.0206	0.0198	0.0214
8	4	0.0188	0.0242	0.0234	0.0250
10	1	0.0184	0.0231	0.0223	0.0240
10	2	0.0190	0.0246	0.0238	0.0255
10	3	0.0169	0.0214	0.0205	0.0223
10	4	0.0205	0.0264	0.0255	0.0272

Appendix P. Model Fit Indices for Confirmatory Factor Analysis

Mathematics

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
3	1	0.0233	0.0262	0.0254	0.0270
3	2	0.0227	0.0248	0.0239	0.0257
3	3	0.0313	0.0369	0.0361	0.0378
3	4	0.0195	0.0220	0.0211	0.0229
3	5	0.0191	0.0212	0.0203	0.0221
3	6	0.0213	0.0235	0.0226	0.0244
4	1	0.0214	0.0243	0.0233	0.0253
4	2	0.0185	0.0198	0.0187	0.0210
4	3	0.0230	0.0257	0.0246	0.0268
4	4	0.0290	0.0330	0.0319	0.0341
4	5	0.0190	0.0206	0.0195	0.0218
4	6	0.0251	0.0274	0.0263	0.0285
5	1	0.0274	0.0327	0.0318	0.0337
5	2	0.0215	0.0264	0.0253	0.0275
5	3	0.0279	0.0353	0.0342	0.0363
5	4	0.0347	0.0406	0.0396	0.0417
5	5	0.0286	0.0346	0.0335	0.0356
5	6	0.0190	0.0215	0.0204	0.0226
6	1	0.0215	0.0235	0.0225	0.0246
6	2	0.0210	0.0238	0.0227	0.0249
6	3	0.0191	0.0201	0.0190	0.0212
6	4	0.0269	0.0294	0.0283	0.0305
6	5	0.0207	0.0224	0.0213	0.0235
6	6	0.0273	0.0291	0.0281	0.0302
7	1	0.0178	0.0179	0.0168	0.0190
7	2	0.0227	0.0242	0.0231	0.0253
7	3	0.0201	0.0208	0.0197	0.0219
7	4	0.0211	0.0214	0.0203	0.0225
7	5	0.0198	0.0200	0.0189	0.0211
7	6	0.0188	0.0179	0.0168	0.0190
8	1	0.0185	0.0203	0.0193	0.0214
8	2	0.0159	0.0156	0.0145	0.0168
8	3	0.0167	0.0175	0.0164	0.0187
8	4	0.0183	0.0195	0.0184	0.0206
8	5	0.0191	0.0196	0.0185	0.0207
8	6	0.0158	0.0159	0.0147	0.0170
10	1	0.0192	0.0193	0.0181	0.0205
10	2	0.0197	0.0202	0.0190	0.0215
10	3	0.0233	0.0248	0.0236	0.0260
10	4	0.0191	0.0189	0.0177	0.0202
10	5	0.0218	0.0228	0.0216	0.0240
10	6	0.0253	0.0272	0.0260	0.0285

Appendix P. Model Fit Indices for Confirmatory Factor Analysis

Science

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
4	1	0.0279	0.0306	0.0296	0.0316
4	2	0.0174	0.0188	0.0177	0.0200
4	3	0.0168	0.0175	0.0164	0.0186
4	4	0.0274	0.0293	0.0282	0.0304
7	1	0.0196	0.0214	0.0204	0.0224
7	2	0.0166	0.0176	0.0165	0.0187
7	3	0.0150	0.0170	0.0159	0.0181
7	4	0.0165	0.0188	0.0178	0.0199
11	1	0.0185	0.0218	0.0207	0.0230
11	2	0.0214	0.0247	0.0236	0.0259
11	3	0.0208	0.0255	0.0244	0.0266
11	4	0.0181	0.0213	0.0201	0.0225

Social Studies

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
5	1	0.0184	0.0215	0.0205	0.0225
5	2	0.0221	0.0256	0.0246	0.0267
5	3	0.0166	0.0178	0.0167	0.0189
5	4	0.0175	0.0211	0.0200	0.0222
5	5	0.0174	0.0188	0.0177	0.0199
8	1	0.0198	0.0252	0.0243	0.0261
8	2	0.0174	0.0215	0.0206	0.0225
8	3	0.0179	0.0218	0.0208	0.0227
8	4	0.0169	0.0206	0.0197	0.0216
8	5	0.0197	0.0225	0.0216	0.0235
11	1	0.0215	0.0245	0.0236	0.0255
11	2	0.0177	0.0191	0.0181	0.0201
11	3	0.0198	0.0207	0.0197	0.0217
11	4	0.0193	0.0215	0.0205	0.0225
11	5	0.0211	0.0239	0.0229	0.0248

Appendix P. Model Fit Indices for Confirmatory Factor Analysis

Editing and Mechanics

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
5	1	0.0340	0.0415	0.0407	0.0423
5	2	0.0325	0.0383	0.0374	0.0391
5	3	0.0377	0.0443	0.0435	0.0452
8	1	0.0401	0.0504	0.0496	0.0512
8	2	0.0404	0.0466	0.0458	0.0474
8	3	0.0350	0.0447	0.0440	0.0455
11	1	0.0227	0.0286	0.0277	0.0295
11	2	0.0185	0.0215	0.0206	0.0225
11	3	0.0247	0.0311	0.0302	0.0320