

# Kentucky Summative Assessments



**2023–2024 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:** a test item that requires a form of written response by the examinee.

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

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

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

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

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

**Performance level:** a categorization of achievement from test performance.

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

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

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

**Reliability:** the consistency of results obtained from a measurement.

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

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

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

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

## Appendix A. Participation Rates

### Reading

Category	Group	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	Students Tested	45,966	46,662	47,156	43,336	46,177	46,995	49,449
Gender	Female	49.0%	48.7%	48.8%	48.1%	48.6%	48.0%	49.0%
	Male	51.0%	51.3%	51.2%	51.9%	51.4%	52.0%	51.0%
Ethnicity	Hispanic	9.3%	9.3%	9.2%	9.0%	9.5%	9.4%	9.8%
	Asian	2.1%	2.1%	2.2%	2.3%	2.1%	2.0%	1.9%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
	Black/African American	10.6%	10.5%	10.7%	10.1%	10.8%	10.8%	11.1%
	American Indian	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
	White	71.9%	72.0%	72.1%	72.8%	72.1%	72.4%	72.4%
	Two or More Races	5.8%	5.7%	5.5%	5.4%	5.1%	5.1%	4.5%
Migrant	Non-Migrant	99.5%	99.5%	99.5%	99.4%	99.5%	99.5%	99.5%
	Migrant	0.5%	0.5%	0.5%	0.6%	0.5%	0.5%	0.5%
LEP	Non-LEP	91.0%	91.4%	93.8%	95.0%	94.6%	95.0%	95.1%
	LEP	9.0%	8.6%	6.2%	5.0%	5.4%	5.0%	4.9%
Economic Disadvantage	Economically Disadvantaged	63.9%	63.5%	62.7%	61.5%	61.0%	60.4%	58.0%
	Not Economically Disadvantaged	36.1%	36.5%	37.3%	38.5%	39.0%	39.6%	42.0%
IEP	Non-IEP	81.5%	82.5%	84.3%	85.9%	87.1%	87.7%	89.4%
	IEP	18.5%	17.5%	15.7%	14.1%	12.9%	12.3%	10.6%

### Mathematics

Category	Group	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	Students Tested	45,992	46,677	47,195	43,350	46,177	46,997	49,430
Gender	Female	49.0%	48.7%	48.8%	48.1%	48.6%	48.0%	49.0%
	Male	51.0%	51.3%	51.2%	51.9%	51.4%	52.0%	51.0%
Ethnicity	Hispanic	9.4%	9.3%	9.3%	9.1%	9.5%	9.4%	9.9%
	Asian	2.1%	2.1%	2.2%	2.3%	2.1%	2.0%	1.9%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
	Black/African American	10.6%	10.5%	10.7%	10.1%	10.8%	10.8%	11.1%
	American Indian	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
	White	71.8%	72.0%	72.0%	72.8%	72.1%	72.3%	72.3%
	Two or More Races	5.8%	5.7%	5.5%	5.4%	5.1%	5.1%	4.5%
Migrant	Non-Migrant	99.4%	99.5%	99.4%	99.4%	99.5%	99.5%	99.5%
	Migrant	0.6%	0.5%	0.6%	0.6%	0.5%	0.5%	0.5%
LEP	Non-LEP	91.0%	91.4%	93.7%	94.9%	94.6%	94.9%	95.1%
	LEP	9.0%	8.6%	6.3%	5.1%	5.4%	5.1%	4.9%
Economic Disadvantage	Economically Disadvantaged	63.9%	63.5%	62.7%	61.5%	61.0%	60.4%	58.0%
	Not Economically Disadvantaged	36.1%	36.5%	37.3%	38.5%	39.0%	39.6%	42.0%
IEP	Non-IEP	81.5%	82.5%	84.4%	85.9%	87.1%	87.7%	89.4%
	IEP	18.5%	17.5%	15.6%	14.1%	12.9%	12.3%	10.6%

**Science**

Category	Group	Grade 4	Grade 7	Grade 11
All	Students Tested	46,667	46,158	46,066
Gender	Female	48.7%	48.6%	49.3%
	Male	51.3%	51.4%	50.7%
Ethnicity	Hispanic	9.3%	9.5%	9.2%
	Asian	2.1%	2.1%	2.0%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%
	Black/African American	10.5%	10.8%	10.7%
	American Indian	0.2%	0.1%	0.2%
	White	72.0%	72.1%	73.4%
	Two or More Races	5.7%	5.1%	4.4%
Migrant	Non-Migrant	99.5%	99.5%	99.6%
	Migrant	0.5%	0.5%	0.4%
LEP	Non-LEP	91.4%	94.6%	95.9%
	LEP	8.6%	5.4%	4.1%
Economic Disadvantage	Economically Disadvantaged	63.5%	61.0%	54.4%
	Not Economically Disadvantaged	36.5%	39.0%	45.6%
IEP	Non-IEP	82.5%	87.1%	90.5%
	IEP	17.5%	12.9%	9.5%

**Social Studies**

Category	Group	Grade 5	Grade 8	Grade 11
All	Students Tested	47,133	46,948	46,009
Gender	Female	48.8%	48.0%	49.3%
	Male	51.2%	52.0%	50.7%
Ethnicity	Hispanic	9.2%	9.4%	9.1%
	Asian	2.2%	2.0%	2.0%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%
	Black/African American	10.7%	10.8%	10.7%
	American Indian	0.1%	0.1%	0.2%
	White	72.1%	72.4%	73.4%
	Two or More Races	5.5%	5.1%	4.4%
Migrant	Non-Migrant	99.5%	99.5%	99.6%
	Migrant	0.5%	0.5%	0.4%
LEP	Non-LEP	93.8%	95.0%	95.9%
	LEP	6.2%	5.0%	4.1%
Economic Disadvantage	Economically Disadvantaged	62.7%	60.4%	54.3%
	Not Economically Disadvantaged	37.3%	39.6%	45.7%
IEP	Non-IEP	84.3%	87.7%	90.5%
	IEP	15.7%	12.3%	9.5%

**Editing and Mechanics**


<b>Category</b>	<b>Group</b>	<b>Grade 5</b>	<b>Grade 8</b>	<b>Grade 11</b>
All	Students Tested	47,127	46,919	45,921
Gender	Female	48.8%	48.0%	49.3%
	Male	51.2%	52.0%	50.6%
Ethnicity	Hispanic	9.2%	9.4%	9.1%
	Asian	2.2%	2.0%	2.0%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%
	Black/African American	10.7%	10.8%	10.7%
	American Indian	0.1%	0.1%	0.2%
	White	72.1%	72.4%	73.5%
	Two or More Races	5.5%	5.1%	4.4%
Migrant	Non-Migrant	99.5%	99.5%	99.6%
	Migrant	0.5%	0.5%	0.4%
LEP	Non-LEP	93.8%	95.0%	96.0%
	LEP	6.2%	5.0%	4.0%
Economic Disadvantage	Economically Disadvantaged	62.7%	60.4%	54.3%
	Not Economically Disadvantaged	37.3%	39.6%	45.7%
IEP	Non-IEP	84.4%	87.7%	90.6%
	IEP	15.6%	12.3%	9.4%

**On-Demand Writing**

<b>Category</b>	<b>Group</b>	<b>Grade 5</b>	<b>Grade 8</b>	<b>Grade 11</b>
All	Students Tested	47,099	46,816	45,585
Gender	Female	48.8%	48.1%	49.5%
	Male	51.2%	51.9%	50.5%
Ethnicity	Hispanic	9.2%	9.4%	9.1%
	Asian	2.2%	2.0%	2.0%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.2%
	Black/African American	10.7%	10.8%	10.6%
	American Indian	0.1%	0.1%	0.2%
	White	72.1%	72.4%	73.6%
	Two or More Races	5.5%	5.1%	4.4%
Migrant	Non-Migrant	99.5%	99.5%	99.6%
	Migrant	0.5%	0.5%	0.4%
LEP	Non-LEP	93.8%	95.0%	96.0%
	LEP	6.2%	5.0%	4.0%
Economic Disadvantage	Economically Disadvantaged	62.7%	60.4%	54.2%
	Not Economically Disadvantaged	37.3%	39.6%	45.8%
IEP	Non-IEP	84.4%	87.8%	90.6%
	IEP	15.6%	12.2%	9.4%

# Appendix B. Score Reports


## Individual Student Report (ISR)



**FIRSTNAME01 B. LASTNAME01**

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

**Spring 2024**  
**Grade 3**




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

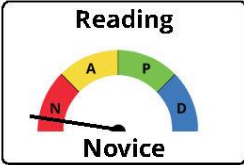
State ID: **3160000001**  
Sample School Name  
Sample District Name

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**Kentucky Summative Assessments Student Scores**



**Reading**



**Novice**

*Performance Level*


**Novice**

**420**

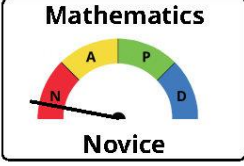
Score Range 400-499

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.

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**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)

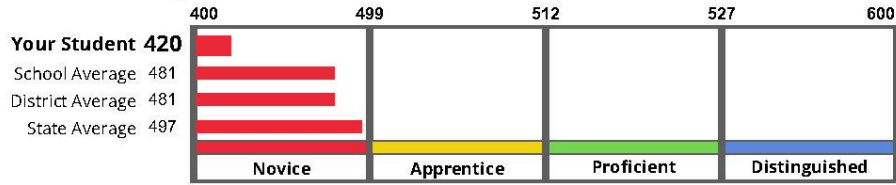
Page 1 of 2

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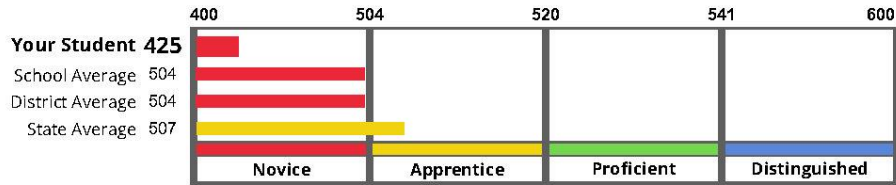
**Kentucky Summative Assessments Student Scores (continued)**

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.

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



School Summary Report



TESTED STUDENTS SCHOOL SUMMARY

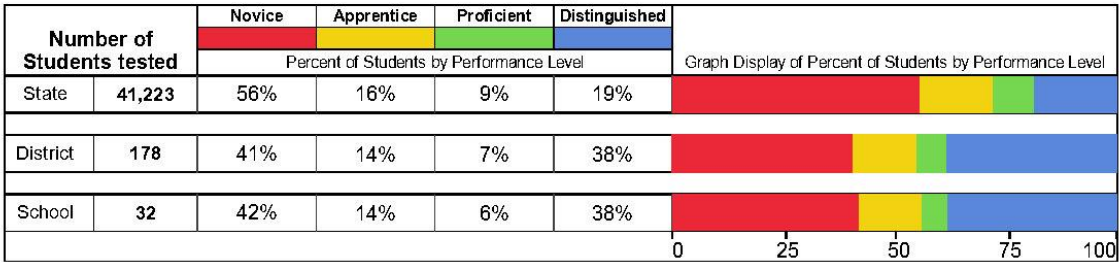
Kentucky Summative Assessments

School Name  
District Name

Spring 2024  
Grade 6  
Mathematics

Grade 6 Mathematics

Percent of Students by Performance Level\*



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 2024  
 Grade 3  
 Reading

District Name

**Grade 3 Reading**

DISTRICT NAME			Total Reading	Performance Level*			
School Name	Code	Number Students Tested		Scale Score	Novice	Apprentice	Proficient
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 2024  
 Grade 3  
 Reading

Commonwealth of Kentucky

**Grade 3 Reading**

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

Spring 2024  
 Grade <3 or 6 or 10>

School Name  
 District Name

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

1 Y = Participates in Alternate Kentucky Summative Assessments  
 2 Y = Participates in Kentucky Summative Assessments with accommodations  
 3 The performance level designations are D = Distinguished, P = Proficient, A = Apprentice, N = Novice, E = Exempted; "-" = Student did not test



# TESTED STUDENTS SCHOOL LISTING

## Kentucky Summative Assessments

Spring 2024  
Grade <3 or 6 or 10>

School Name  
District Name

NOVICE	APPRENTICE	PROFICIENT	DISTINGUISHED
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Student Name	Student ID	Alternate KSA <sup>1</sup>	Reading		Mathematics			
			Accommodated <sup>2</sup>	Performance Level <sup>3</sup>	Score	Accommodated <sup>2</sup>	Performance Level <sup>3</sup>	Score
			ZALASTNAME, FIRSTNAME I.	999999999			N	###
ZBLASTNAME, FIRSTNAME I.	999999999	Y		D	###	P	###	
ZCLASTNAME, FIRSTNAME I.	999999999			N	###	N	###	
ZDLASTNAME, FIRSTNAME I.	999999999			D	###	D	###	
ZELASTNAME, FIRSTNAME I.	999999999			P	###	D	###	
ZFLASTNAME, FIRSTNAME I.	999999999			N	###	A	###	
ZGLASTNAME, FIRSTNAME I.	999999999			P	###	A	###	
ZMLASTNAME, FIRSTNAME I.	999999999			P	###	E		
ZNLASTNAME, FIRSTNAME I.	999999999			D	###	P	###	
ZOLASTNAME, FIRSTNAME I.	999999999			D	###	P	###	
ZPLASTNAME, FIRSTNAME I.	999999999			P	###	E		
ZQLASTNAME, FIRSTNAME I.	999999999			D	###	A	###	
ZRLASTNAME, FIRSTNAME I.	999999999			E		D	###	
ZSLASTNAME, FIRSTNAME I.	999999999			P	###	A	###	
ZTLASTNAME, FIRSTNAME I.	999999999			P	###	P	###	

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

1 Y = Participates in Alternate Kentucky Summative Assessments  
 2 Y = Participates in Kentucky Summative Assessments with accommodations  
 3 The performance level designations are D = Distinguished, P = Proficient, A = Apprentice, N = Novice, E = Exempted; "—" = Student did not test

## Appendix C. Item Mean Summaries

### Single-Point Items<sup>1</sup>

Subject	Grade	$p < 0.30$	$0.30 = < p < 0.55$	$0.55 = < p < 0.75$	$0.75 = < p < 0.95$	$p \geq 0.95$	Mean of $p$	N
Reading	3	2	27	25	1	-	0.54	55
	4	2	20	32	3	-	0.58	57
	5	-	18	27	7	-	0.61	52
	6	3	25	21	6	-	0.56	55
	7	2	24	17	4	-	0.53	47
	8	2	19	28	1	-	0.54	50
	10	7	25	23	-	-	0.48	55
Mathematics	3	6	36	31	13	-	0.55	86
	4	5	34	34	13	-	0.57	86
	5	10	35	30	8	-	0.51	83
	6	21	41	19	1	-	0.41	82
	7	34	47	7	-	-	0.34	88
	8	24	51	11	1	-	0.38	87
	10	40	54	8	1	-	0.33	103
Science	4	3	14	6	2	-	0.48	25
	7	6	20	2	-	-	0.36	28
	11	9	10	4	-	-	0.39	23
Social Studies	5	6	42	24	8	-	0.52	80
	8	5	53	24	5	-	0.51	87
	11	11	58	27	1	-	0.48	97
Editing and Mechanics	5	1	6	11	6	-	0.61	24
	8	-	7	9	8	-	0.66	24
	11	3	5	7	9	-	0.62	24

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

**Multi-Points Items<sup>2</sup>**

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	25	0.99	0.29	1.62	-	-	-	-
	4	20	1.07	0.59	1.59	2	1.38	1.30	1.47
	5	20	1.10	0.77	1.62	2	1.49	1.15	1.83
	6	17	1.03	0.65	1.40	6	1.43	1.21	1.80
	7	19	1.03	0.57	1.46	2	1.46	0.93	2.00
	8	19	1.13	0.72	1.54	7	1.62	0.99	2.34
	10	15	0.94	0.52	1.28	4	1.26	1.12	1.47
Mathematics	3	27	0.97	0.28	1.59	-	-	-	-
	4	17	0.80	0.31	1.34	10	1.27	0.70	1.77
	5	16	1.02	0.17	1.57	5	1.30	0.73	1.57
	6	17	0.94	0.20	1.64	7	0.93	0.61	1.34
	7	18	0.61	0.08	1.53	6	0.57	0.20	1.36
	8	19	0.59	0.06	1.27	8	0.54	0.28	0.82
	10	23	0.47	0.02	1.08	7	0.38	0.11	0.76
Science	4	10	0.99	0.54	1.38	5	0.82	0.50	1.12
	7	7	1.10	0.86	1.24	5	0.87	0.42	1.07
	11	5	1.06	0.75	1.24	4	1.21	0.87	1.88
Social Studies	5	22	1.18	0.38	1.92	4	0.79	0.69	0.86
	8	18	1.06	0.61	1.51	4	1.26	1.07	1.36
	11	14	0.92	0.53	1.19	4	1.05	0.85	1.44
Editing and Mechanics	5	15	1.26	0.49	1.73	-	-	-	-
	8	15	1.09	0.74	1.75	-	-	-	-
	11	15	0.99	0.49	1.78	-	-	-	-

<sup>2</sup> Multi-points items include multi-select, short answer, multi-part, and technical enhanced items for 2-point items, and extended response 4-point items.

## Appendix D. Item-Total Correlation Summaries

### Single-Point Items<sup>3</sup>

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	4	21	30			0.41	55
	4	3	25	29	-	-	0.40	57
	5	1	18	33	-	-	0.43	52
	6	5	24	26	-	-	0.37	55
	7	3	29	15	-	-	0.36	47
	8	3	24	23	-	-	0.39	50
	10	8	22	25	-	-	0.35	55
Mathematics	3	-	21	63	2	-	0.46	86
	4	-	20	64	2	-	0.45	86
	5	1	20	61	1	-	0.46	83
	6	4	28	50	-	-	0.44	82
	7	7	38	43	-	-	0.39	88
	8	6	41	38	2	-	0.39	87
	10	13	55	35	-	-	0.36	103
Science	4	3	12	10	-	-	0.37	25
	7	7	13	8	-	-	0.34	28
	11	9	11	3	-	-	0.28	23
Social Studies	5	10	49	21	-	-	0.32	80
	8	8	50	29	-	-	0.36	87
	11	15	50	31	1	-	0.35	97
Editing and Mechanics	5	1	12	11	-	-	0.39	24
	8	-	9	15	-	-	0.41	24
	11	2	7	15	-	-	0.42	24

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



Appendix D. Item-Total Correlation Summaries

**Multi-Points Items<sup>4</sup>**

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	25	0.49	0.17	0.65	-	-	-	-
	4	20	0.48	0.30	0.62	2	0.61	0.56	0.65
	5	20	0.46	0.32	0.65	2	0.68	0.65	0.71
	6	17	0.44	0.27	0.60	6	0.62	0.58	0.68
	7	19	0.52	0.35	0.66	2	0.67	0.64	0.69
	8	19	0.46	0.25	0.66	7	0.67	0.63	0.74
	10	15	0.54	0.30	0.63	4	0.71	0.68	0.75
Mathematics	3	27	0.48	0.01	0.68	-	-	-	-
	4	17	0.53	0.37	0.65	10	0.65	0.58	0.76
	5	16	0.52	0.23	0.68	5	0.69	0.55	0.73
	6	17	0.46	0.08	0.65	7	0.62	0.50	0.78
	7	18	0.49	0.21	0.67	6	0.56	0.48	0.72
	8	19	0.51	0.26	0.69	8	0.63	0.48	0.77
	10	23	0.38	-0.01	0.61	7	0.55	0.39	0.70
Science	4	10	0.34	0.13	0.54	5	0.65	0.51	0.68
	7	7	0.42	0.30	0.57	5	0.69	0.56	0.72
	11	5	0.41	0.23	0.50	4	0.66	0.65	0.73
Social Studies	5	22	0.44	0.22	0.57	4	0.57	0.54	0.61
	8	18	0.47	0.16	0.65	4	0.66	0.62	0.71
	11	14	0.51	0.26	0.64	4	0.67	0.61	0.70
Editing and Mechanics	5	15	0.49	0.34	0.60	-	-	-	-
	8	15	0.47	0.24	0.65	-	-	-	-
	11	15	0.56	0.30	0.65	-	-	-	-

<sup>4</sup> 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	40	38	2	-	-	-
	White-Black	29	51	-	-	-	-
	White-Hispanic	35	42	1	2	-	-
4	Male-Female	29	45	3	1	1	-
	White-Black	28	51	-	-	-	-
	White-Hispanic	32	47	-	-	-	-
5	Male-Female	32	36	2	3	1	-
	White-Black	35	38	-	1	-	-
	White-Hispanic	39	34	-	1	-	-
6	Male-Female	32	36	7	2	1	-
	White-Black	28	47	-	3	-	-
	White-Hispanic	25	51	-	2	-	-
7	Male-Female	22	38	4	1	3	-
	White-Black	28	40	-	-	-	-
	White-Hispanic	32	36	-	-	-	-
8	Male-Female	29	35	4	2	6	-
	White-Black	24	49	-	3	-	-
	White-Hispanic	31	45	-	-	-	-
10	Male-Female	24	43	2	2	3	-
	White-Black	26	48	-	-	-	-
	White-Hispanic	31	43	-	-	-	-

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	60	47	2	2	-	2
	White-Black	44	65	-	3	-	1
	White-Hispanic	26	86	-	1	-	-
4	Male-Female	64	40	1	8	-	-
	White-Black	36	75	-	2	-	-
	White-Hispanic	32	79	-	2	-	-
5	Male-Female	52	49	1	2	-	-
	White-Black	39	62	-	2	-	1
	White-Hispanic	23	77	-	4	-	-
6	Male-Female	41	55	4	5	-	1
	White-Black	33	62	-	6	-	5
	White-Hispanic	32	69	-	4	-	1
7	Male-Female	44	63	1	4	-	-
	White-Black	45	57	-	5	-	5
	White-Hispanic	46	64	-	2	-	-
8	Male-Female	57	49	2	4	-	2
	White-Black	45	65	-	3	-	1
	White-Hispanic	35	77	-	1	-	1
10	Male-Female	55	69	2	7	-	-
	White-Black	46	72	2	7	2	4
	White-Hispanic	49	82	-	1	-	1

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

**Science**

Grade	Subgroups	DIF Categories					
		Negligible DIF		Moderate DIF		Substantial DIF	
		Focal	Reference	Focal	Reference	Focal	Reference
4	Male-Female	14	26	-	-	-	-
	White-Black	17	23	-	-	-	-
	White-Hispanic	10	29	-	1	-	-
7	Male-Female	15	24	-	1	-	-
	White-Black	23	17	-	-	-	-
	White-Hispanic	15	25	-	-	-	-
11	Male-Female	12	18	1	1	-	-
	White-Black	19	12	-	1	-	-
	White-Hispanic	15	17	-	-	-	-

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	39	61	3	3	-	-
	White-Black	38	61	-	5	-	2
	White-Hispanic	44	61	-	1	-	-
8	Male-Female	29	68	3	4	5	-
	White-Black	40	68	-	1	-	-
	White-Hispanic	34	73	-	2	-	-
11	Male-Female	26	75	2	6	5	1
	White-Black	45	68	-	2	-	-
	White-Hispanic	49	64	-	2	-	-

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	25	13	-	1	-	-
	White-Black	13	26	-	-	-	-
	White-Hispanic	18	21	-	-	-	-
8	Male-Female	23	13	1	1	-	1
	White-Black	16	23	-	-	-	-
	White-Hispanic	18	20	-	-	-	1
11	Male-Female	20	13	2	3	-	1
	White-Black	18	20	-	-	-	1
	White-Hispanic	16	19	2	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	78	-1.4444	-0.6532	0.0384	0.3780	2.1564	-	78	-	-	-	76	1	1
4	78	-1.1375	-0.5025	-0.0020	0.5223	1.7983	-	78	-	-	-	76	2	-
5	74	-2.3803	-0.4892	0.0692	0.8360	2.0253	-	74	-	-	-	74	-	-
6	78	-1.4706	-0.2217	0.3584	0.8860	2.1468	-	78	-	-	-	77	1	-
7	67	-2.2867	-0.6330	-0.0596	0.3850	1.6934	-	67	-	-	-	66	1	-
8	76	-1.4675	-0.5969	-0.1753	0.4145	1.7894	-	76	-	-	-	76	-	-
10	72	-0.7629	-0.2802	0.2115	0.8605	1.6345	-	72	-	-	-	72	-	-

### 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	112	-2.4916	-0.4316	0.3109	0.9690	3.3364	-	110	2	-	-	107	5	-
4	112	-2.5314	-0.4452	0.3747	1.2235	3.1693	-	112	-	-	-	111	1	-
5	102	-1.9302	-0.6283	0.0254	0.6234	3.7084	-	102	-	-	1	100	1	-
6	106	-2.5287	-0.4876	0.1288	0.8717	3.5536	-	106	-	-	4	100	2	-
7	111	-1.6127	-0.1667	0.3705	1.0898	2.7226	-	111	-	-	6	104	1	-
8	114	-1.8235	-0.3476	0.2491	0.8846	3.3096	-	114	-	-	5	108	1	-
10	131	-1.9921	-0.3034	0.3109	1.6996	4.3103	-	130	1	-	12	118	1	-

### Science

Grade	#Items	Item Difficulty					Infit				Outfit			
		Min.	P25	Median	P75	Max.	<0.5	0.5<=Infit<1.5	1.5<=Infit<2.0	>2.0	<0.5	0.5<=Outfit<1.5	1.5<=Outfit<2.0	>2.0
4	40	-1.7202	-0.3099	0.2415	0.8733	2.2558	-	40	-	-	-	38	2	-
7	40	-1.2352	-0.5338	0.1159	0.4596	1.5749	-	40	-	-	-	38	2	-
11	32	-1.8028	-1.1530	-0.6109	0.3522	1.1476	-	32	-	-	-	30	2	-

Appendix F. Item Response Theory Parameter Summary

**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	106	-2.4706	-0.5760	0.0551	0.6223	2.1478	-	106	-	-	-	105	1	-
8	109	-2.1373	-0.5244	-0.0888	0.3919	1.4325	-	109	-	-	-	108	1	-
11	114	-1.8195	-0.3813	0.1013	0.5954	1.6565	-	114	-	-	-	110	4	-

**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	39	-1.9278	-0.5954	-0.1380	0.7648	2.0023	-	39	-	-	-	39	-	-
8	39	-2.5212	-1.0653	-0.3132	0.6928	1.2680	-	39	-	-	-	38	1	-
11	39	-1.8547	-0.9625	0.1405	1.2315	2.1228	-	39	-	-	-	36	3	-

## Appendix G. Scoring Tables

### Grade 3 Reading, Forms 1 – 3

Form	Raw Score	Scale Score	Conditional SEM
01-03	0	400	34
01-03	1	441	17
01-03	2	453	12
01-03	3	460	10
01-03	4	466	9
01-03	5	470	8
01-03	6	474	8
01-03	7	477	7
01-03	8	480	7
01-03	9	482	7
01-03	10	485	6
01-03	11	487	6
01-03	12	489	6
01-03	13	491	6
01-03	14	493	6
01-03	15	495	6
01-03	16	497	6
01-03	17	499	6
01-03	18	501	5
01-03	19	503	5
01-03	20	504	5
01-03	21	506	5
01-03	22	508	5
01-03	23	510	5
01-03	24	512	5
01-03	25	513	6
01-03	26	515	6
01-03	27	517	6
01-03	28	519	6
01-03	29	521	6
01-03	30	523	6
01-03	31	525	6
01-03	32	528	6
01-03	33	530	7
01-03	34	533	7
01-03	35	536	7
01-03	36	539	8
01-03	37	543	8
01-03	38	547	9
01-03	39	553	10
01-03	40	560	12
01-03	41	573	17
01-03	42	596	34

### Grade 3 Reading, Forms 4 – 6

Form	Raw Score	Scale Score	Conditional SEM
04-06	0	400	34
04-06	1	441	17
04-06	2	453	12
04-06	3	460	10
04-06	4	466	9
04-06	5	470	8
04-06	6	474	8
04-06	7	477	7
04-06	8	480	7
04-06	9	483	7
04-06	10	485	6
04-06	11	488	6
04-06	12	490	6
04-06	13	492	6
04-06	14	494	6
04-06	15	496	6
04-06	16	498	6
04-06	17	500	5
04-06	18	502	5
04-06	19	503	5
04-06	20	505	5
04-06	21	507	5
04-06	22	508	5
04-06	23	510	5
04-06	24	512	5
04-06	25	514	5
04-06	26	515	5
04-06	27	517	5
04-06	28	519	6
04-06	29	521	6
04-06	30	523	6
04-06	31	525	6
04-06	32	527	6
04-06	33	530	6
04-06	34	532	7
04-06	35	535	7
04-06	36	538	8
04-06	37	542	8
04-06	38	546	9
04-06	39	552	10
04-06	40	559	12
04-06	41	571	17
04-06	42	595	34

**Grade 3 Reading, Braille Form**

<b>Raw Score</b>	<b>Scale Score</b>	<b>Conditional SEM</b>
0	400	34
1	441	17
2	453	12
3	460	10
4	466	9
5	470	8
6	474	8
7	477	7
8	480	7
9	483	7
10	485	6
11	488	6
12	490	6
13	492	6
14	494	6
15	496	6
16	498	6
17	500	6
18	502	6
19	503	6
20	505	6
21	507	6
22	509	6
23	511	6
24	513	6
25	514	6
26	516	6
27	518	6
28	520	6
29	523	6
30	525	6
31	527	6
32	530	7
33	532	7
34	535	7
35	539	8
36	542	8
37	547	9
38	552	10
39	560	12
40	572	17
41	596	34



**Grade 4 Reading, Forms 1 – 3**

Form	Raw Score	Scale Score	Conditional SEM
01-03	0	400	34
01-03	1	444	17
01-03	2	456	12
01-03	3	464	10
01-03	4	469	9
01-03	5	473	8
01-03	6	477	8
01-03	7	480	7
01-03	8	483	7
01-03	9	486	7
01-03	10	488	6
01-03	11	491	6
01-03	12	493	6
01-03	13	495	6
01-03	14	497	6
01-03	15	499	6
01-03	16	501	6
01-03	17	503	5
01-03	18	505	5
01-03	19	506	5
01-03	20	508	5
01-03	21	510	5
01-03	22	511	5
01-03	23	513	5
01-03	24	515	5
01-03	25	517	5
01-03	26	518	5
01-03	27	520	5
01-03	28	522	6
01-03	29	524	6
01-03	30	526	6
01-03	31	528	6
01-03	32	530	6
01-03	33	532	6
01-03	34	534	6
01-03	35	536	6
01-03	36	539	7
01-03	37	542	7
01-03	38	545	7
01-03	39	548	8
01-03	40	553	9
01-03	41	558	10
01-03	42	565	12
01-03	43	577	17
01-03	44	600	33

**Grade 4 Reading, Forms 4 – 6**

Form	Raw Score	Scale Score	Conditional SEM
04-06	0	400	34
04-06	1	442	17
04-06	2	455	12
04-06	3	462	10
04-06	4	468	9
04-06	5	472	8
04-06	6	476	8
04-06	7	480	7
04-06	8	482	7
04-06	9	485	7
04-06	10	488	6
04-06	11	490	6
04-06	12	492	6
04-06	13	495	6
04-06	14	497	6
04-06	15	499	6
04-06	16	500	6
04-06	17	502	6
04-06	18	504	5
04-06	19	506	5
04-06	20	508	5
04-06	21	509	5
04-06	22	511	5
04-06	23	513	5
04-06	24	515	5
04-06	25	516	5
04-06	26	518	5
04-06	27	520	5
04-06	28	522	5
04-06	29	523	5
04-06	30	525	6
04-06	31	527	6
04-06	32	529	6
04-06	33	531	6
04-06	34	533	6
04-06	35	535	6
04-06	36	538	7
04-06	37	541	7
04-06	38	544	7
04-06	39	547	8
04-06	40	551	9
04-06	41	557	10
04-06	42	564	12
04-06	43	576	17
04-06	44	599	33

**Grade 5 Reading, Forms 1 & 2**

Form	Raw Score	Scale Score	Conditional SEM
01-02	0	400	34
01-02	1	444	17
01-02	2	456	12
01-02	3	464	10
01-02	4	469	9
01-02	5	474	8
01-02	6	478	8
01-02	7	481	7
01-02	8	484	7
01-02	9	487	7
01-02	10	489	6
01-02	11	492	6
01-02	12	494	6
01-02	13	496	6
01-02	14	498	6
01-02	15	500	6
01-02	16	502	6
01-02	17	504	6
01-02	18	506	6
01-02	19	508	6
01-02	20	510	6
01-02	21	512	6
01-02	22	514	6
01-02	23	516	6
01-02	24	518	6
01-02	25	520	6
01-02	26	522	6
01-02	27	524	6
01-02	28	527	6
01-02	29	529	6
01-02	30	531	6
01-02	31	534	7
01-02	32	536	7
01-02	33	539	7
01-02	34	542	7
01-02	35	546	8
01-02	36	550	8
01-02	37	554	9
01-02	38	559	10
01-02	39	566	11
01-02	40	575	13
01-02	41	589	18
01-02	42	600	34

**Grade 5 Reading, Forms 3 & 4**

Form	Raw Score	Scale Score	Conditional SEM
03-04	0	400	34
03-04	1	442	17
03-04	2	455	12
03-04	3	463	10
03-04	4	468	9
03-04	5	473	8
03-04	6	477	8
03-04	7	480	7
03-04	8	483	7
03-04	9	486	7
03-04	10	489	7
03-04	11	491	6
03-04	12	493	6
03-04	13	496	6
03-04	14	498	6
03-04	15	500	6
03-04	16	502	6
03-04	17	504	6
03-04	18	506	6
03-04	19	508	6
03-04	20	510	6
03-04	21	512	6
03-04	22	514	6
03-04	23	516	6
03-04	24	518	6
03-04	25	520	6
03-04	26	522	6
03-04	27	524	6
03-04	28	526	6
03-04	29	528	6
03-04	30	530	6
03-04	31	533	6
03-04	32	535	7
03-04	33	538	7
03-04	34	541	7
03-04	35	544	8
03-04	36	548	8
03-04	37	552	9
03-04	38	557	9
03-04	39	563	11
03-04	40	571	13
03-04	41	584	17
03-04	42	600	34

**Grade 6 Reading, Forms 1 – 3**

<b>Form</b>	<b>Raw Score</b>	<b>Scale Score</b>	<b>Conditional SEM</b>
01-03	0	400	34
01-03	1	444	17
01-03	2	456	12
01-03	3	464	10
01-03	4	469	9
01-03	5	474	8
01-03	6	478	8
01-03	7	481	7
01-03	8	485	7
01-03	9	488	7
01-03	10	490	7
01-03	11	493	6
01-03	12	495	6
01-03	13	498	6
01-03	14	500	6
01-03	15	502	6
01-03	16	504	6
01-03	17	506	6
01-03	18	509	6
01-03	19	511	6
01-03	20	513	6
01-03	21	515	6
01-03	22	517	6
01-03	23	519	6
01-03	24	521	6
01-03	25	523	6
01-03	26	526	6
01-03	27	528	6
01-03	28	530	6
01-03	29	533	7
01-03	30	536	7
01-03	31	538	7
01-03	32	541	7
01-03	33	545	7
01-03	34	548	8
01-03	35	552	8
01-03	36	557	9
01-03	37	563	11
01-03	38	570	13
01-03	39	583	17
01-03	40	600	34

**Grade 6 Reading, Forms 4 – 6**

<b>Form</b>	<b>Raw Score</b>	<b>Scale Score</b>	<b>Conditional SEM</b>
04-06	0	400	34
04-06	1	448	17
04-06	2	460	12
04-06	3	468	10
04-06	4	473	9
04-06	5	478	8
04-06	6	482	8
04-06	7	485	7
04-06	8	488	7
04-06	9	491	7
04-06	10	493	6
04-06	11	496	6
04-06	12	498	6
04-06	13	500	6
04-06	14	503	6
04-06	15	505	6
04-06	16	507	6
04-06	17	509	6
04-06	18	511	6
04-06	19	513	6
04-06	20	515	6
04-06	21	517	6
04-06	22	519	6
04-06	23	521	6
04-06	24	523	6
04-06	25	525	6
04-06	26	527	6
04-06	27	529	6
04-06	28	531	6
04-06	29	534	6
04-06	30	536	7
04-06	31	539	7
04-06	32	542	7
04-06	33	545	7
04-06	34	549	8
04-06	35	553	8
04-06	36	558	9
04-06	37	563	10
04-06	38	571	12
04-06	39	584	17
04-06	40	600	34

**Grade 7 Reading, Forms 1 & 2**

Form	Raw Score	Scale Score	Conditional SEM
01-02	0	400	34
01-02	1	435	17
01-02	2	447	13
01-02	3	455	11
01-02	4	461	9
01-02	5	466	9
01-02	6	470	8
01-02	7	473	7
01-02	8	477	7
01-02	9	480	7
01-02	10	482	7
01-02	11	485	6
01-02	12	487	6
01-02	13	490	6
01-02	14	492	6
01-02	15	494	6
01-02	16	496	6
01-02	17	498	6
01-02	18	500	6
01-02	19	502	6
01-02	20	504	6
01-02	21	506	6
01-02	22	508	6
01-02	23	510	6
01-02	24	512	6
01-02	25	514	6
01-02	26	516	6
01-02	27	518	6
01-02	28	520	6
01-02	29	522	6
01-02	30	524	6
01-02	31	526	6
01-02	32	529	6
01-02	33	531	7
01-02	34	534	7
01-02	35	537	7
01-02	36	540	8
01-02	37	544	8
01-02	38	548	9
01-02	39	553	10
01-02	40	560	11
01-02	41	568	13
01-02	42	582	18
01-02	43	600	34

**Grade 7 Reading, Forms 3 & 4**

Form	Raw Score	Scale Score	Conditional SEM
03-04	0	400	34
03-04	1	436	17
03-04	2	448	13
03-04	3	456	10
03-04	4	462	9
03-04	5	467	9
03-04	6	471	8
03-04	7	474	7
03-04	8	477	7
03-04	9	480	7
03-04	10	483	7
03-04	11	486	6
03-04	12	488	6
03-04	13	490	6
03-04	14	492	6
03-04	15	494	6
03-04	16	496	6
03-04	17	498	6
03-04	18	500	6
03-04	19	502	5
03-04	20	504	5
03-04	21	505	5
03-04	22	507	5
03-04	23	509	5
03-04	24	511	5
03-04	25	512	5
03-04	26	514	5
03-04	27	516	6
03-04	28	518	6
03-04	29	520	6
03-04	30	522	6
03-04	31	524	6
03-04	32	526	6
03-04	33	528	6
03-04	34	530	6
03-04	35	533	7
03-04	36	536	7
03-04	37	539	7
03-04	38	543	8
03-04	39	547	9
03-04	40	552	10
03-04	41	560	12
03-04	42	572	17
03-04	43	595	33

**Grade 7 Reading, Braille Form**

<b>Raw Score</b>	<b>Scale Score</b>	<b>Conditional SEM</b>
0	400	34
1	436	17
2	449	13
3	457	11
4	463	9
5	468	9
6	472	8
7	475	8
8	479	7
9	482	7
10	484	7
11	487	6
12	489	6
13	492	6
14	494	6
15	496	6
16	498	6
17	500	6
18	502	6
19	504	6
20	506	6
21	508	6
22	510	6
23	512	6
24	514	6
25	516	6
26	519	6
27	521	6
28	523	6
29	525	6
30	528	6
31	530	7
32	533	7
33	536	7
34	539	8
35	543	8
36	547	9
37	553	10
38	559	11
39	568	13
40	582	18
41	600	34

**Grade 8 Reading, Forms 1 – 3**

Form	Raw Score	Scale Score	Conditional SEM
01-03	0	400	34
01-03	1	436	17
01-03	2	449	13
01-03	3	457	11
01-03	4	463	9
01-03	5	467	9
01-03	6	471	8
01-03	7	475	8
01-03	8	478	7
01-03	9	481	7
01-03	10	484	7
01-03	11	487	6
01-03	12	489	6
01-03	13	491	6
01-03	14	494	6
01-03	15	496	6
01-03	16	498	6
01-03	17	500	6
01-03	18	502	6
01-03	19	504	6
01-03	20	506	6
01-03	21	508	6
01-03	22	510	6
01-03	23	512	6
01-03	24	514	6
01-03	25	516	6
01-03	26	518	6
01-03	27	520	6
01-03	28	523	6
01-03	29	525	6
01-03	30	527	6
01-03	31	530	7
01-03	32	532	7
01-03	33	535	7
01-03	34	538	7
01-03	35	542	8
01-03	36	546	8
01-03	37	550	9
01-03	38	555	10
01-03	39	562	11
01-03	40	571	13
01-03	41	585	18
01-03	42	600	34

**Grade 8 Reading, Forms 4 – 6**

Form	Raw Score	Scale Score	Conditional SEM
04-06	0	400	34
04-06	1	438	17
04-06	2	450	13
04-06	3	458	10
04-06	4	464	9
04-06	5	469	8
04-06	6	473	8
04-06	7	476	7
04-06	8	479	7
04-06	9	482	7
04-06	10	485	6
04-06	11	487	6
04-06	12	489	6
04-06	13	492	6
04-06	14	494	6
04-06	15	496	6
04-06	16	498	6
04-06	17	499	6
04-06	18	501	5
04-06	19	503	5
04-06	20	505	5
04-06	21	506	5
04-06	22	508	5
04-06	23	510	5
04-06	24	512	5
04-06	25	513	6
04-06	26	515	6
04-06	27	517	6
04-06	28	519	6
04-06	29	521	6
04-06	30	523	6
04-06	31	526	6
04-06	32	528	6
04-06	33	531	7
04-06	34	534	7
04-06	35	537	7
04-06	36	540	8
04-06	37	544	8
04-06	38	549	9
04-06	39	555	10
04-06	40	562	12
04-06	41	575	17
04-06	42	599	34

**Grade 10 Reading, Forms 1 & 2**

Form	Raw Score	Scale Score	Conditional SEM
01-02	0	400	34
01-02	1	447	17
01-02	2	460	12
01-02	3	467	10
01-02	4	473	9
01-02	5	477	8
01-02	6	481	8
01-02	7	485	7
01-02	8	488	7
01-02	9	491	7
01-02	10	493	6
01-02	11	496	6
01-02	12	498	6
01-02	13	500	6
01-02	14	502	6
01-02	15	504	6
01-02	16	506	6
01-02	17	508	6
01-02	18	510	5
01-02	19	511	5
01-02	20	513	5
01-02	21	515	5
01-02	22	517	5
01-02	23	518	5
01-02	24	520	5
01-02	25	522	5
01-02	26	523	5
01-02	27	525	6
01-02	28	527	6
01-02	29	529	6
01-02	30	531	6
01-02	31	533	6
01-02	32	535	6
01-02	33	538	6
01-02	34	540	7
01-02	35	543	7
01-02	36	546	7
01-02	37	549	8
01-02	38	553	8
01-02	39	557	9
01-02	40	562	10
01-02	41	570	12
01-02	42	582	17
01-02	43	600	34

**Grade 10 Reading, Forms 3 & 4**

Form	Raw Score	Scale Score	Conditional SEM
03-04	0	400	34
03-04	1	444	17
03-04	2	456	12
03-04	3	464	10
03-04	4	469	9
03-04	5	474	8
03-04	6	478	8
03-04	7	481	7
03-04	8	484	7
03-04	9	487	7
03-04	10	489	6
03-04	11	491	6
03-04	12	494	6
03-04	13	496	6
03-04	14	498	6
03-04	15	500	6
03-04	16	502	6
03-04	17	504	6
03-04	18	506	6
03-04	19	508	6
03-04	20	509	6
03-04	21	511	5
03-04	22	513	5
03-04	23	515	6
03-04	24	517	6
03-04	25	518	6
03-04	26	520	6
03-04	27	522	6
03-04	28	524	6
03-04	29	526	6
03-04	30	528	6
03-04	31	530	6
03-04	32	533	6
03-04	33	535	6
03-04	34	538	7
03-04	35	540	7
03-04	36	543	7
03-04	37	547	8
03-04	38	550	8
03-04	39	555	9
03-04	40	560	10
03-04	41	567	12
03-04	42	579	17
03-04	43	600	33

**Grade 3 Mathematics, Forms 1 & 2**

Form	Raw Score	Scale Score	Conditional SEM
01-02	0	400	34
01-02	1	443	17
01-02	2	455	12
01-02	3	463	10
01-02	4	469	9
01-02	5	474	8
01-02	6	477	8
01-02	7	481	7
01-02	8	484	7
01-02	9	487	7
01-02	10	490	7
01-02	11	492	6
01-02	12	495	6
01-02	13	497	6
01-02	14	499	6
01-02	15	501	6
01-02	16	503	6
01-02	17	505	6
01-02	18	507	6
01-02	19	509	6
01-02	20	511	6
01-02	21	513	6
01-02	22	515	6
01-02	23	517	6
01-02	24	519	6
01-02	25	521	6
01-02	26	523	6
01-02	27	525	6
01-02	28	527	6
01-02	29	529	6
01-02	30	532	6
01-02	31	534	7
01-02	32	537	7
01-02	33	540	7
01-02	34	543	8
01-02	35	547	8
01-02	36	551	9
01-02	37	556	10
01-02	38	564	12
01-02	39	576	17
01-02	40	599	33

**Grade 3 Mathematics, Form 3 & 4**

Form	Raw Score	Scale Score	Conditional SEM
03-04	0	400	34
03-04	1	442	17
03-04	2	455	13
03-04	3	463	11
03-04	4	469	9
03-04	5	474	9
03-04	6	478	8
03-04	7	481	8
03-04	8	485	7
03-04	9	487	7
03-04	10	490	7
03-04	11	493	6
03-04	12	495	6
03-04	13	497	6
03-04	14	499	6
03-04	15	501	6
03-04	16	503	6
03-04	17	505	6
03-04	18	507	6
03-04	19	509	6
03-04	20	511	5
03-04	21	513	5
03-04	22	514	6
03-04	23	516	6
03-04	24	518	6
03-04	25	520	6
03-04	26	522	6
03-04	27	524	6
03-04	28	526	6
03-04	29	528	6
03-04	30	531	6
03-04	31	533	7
03-04	32	536	7
03-04	33	539	7
03-04	34	542	8
03-04	35	546	8
03-04	36	550	9
03-04	37	556	10
03-04	38	563	12
03-04	39	575	17
03-04	40	599	34



**Grade 3 Mathematics, Form 5**

Form	Raw Score	Scale Score	Conditional SEM
05	0	400	34
05	1	441	17
05	2	453	12
05	3	461	10
05	4	467	9
05	5	472	9
05	6	476	8
05	7	479	8
05	8	483	7
05	9	486	7
05	10	488	7
05	11	491	6
05	12	493	6
05	13	496	6
05	14	498	6
05	15	500	6
05	16	502	6
05	17	504	6
05	18	506	6
05	19	508	6
05	20	510	6
05	21	512	6
05	22	514	6
05	23	516	6
05	24	518	6
05	25	520	6
05	26	522	6
05	27	525	6
05	28	527	6
05	29	529	6
05	30	532	6
05	31	534	7
05	32	537	7
05	33	540	7
05	34	543	8
05	35	547	8
05	36	552	9
05	37	557	10
05	38	565	12
05	39	577	17
05	40	600	34

**Grade 3 Mathematics, Forms 6 & 7**

Form	Raw Score	Scale Score	Conditional SEM
06-07	0	400	34
06-07	1	446	17
06-07	2	458	12
06-07	3	465	10
06-07	4	471	9
06-07	5	475	8
06-07	6	479	8
06-07	7	482	7
06-07	8	485	7
06-07	9	488	7
06-07	10	490	6
06-07	11	493	6
06-07	12	495	6
06-07	13	497	6
06-07	14	499	6
06-07	15	501	6
06-07	16	503	6
06-07	17	505	5
06-07	18	506	5
06-07	19	508	5
06-07	20	510	5
06-07	21	512	5
06-07	22	513	5
06-07	23	515	5
06-07	24	517	6
06-07	25	519	6
06-07	26	521	6
06-07	27	523	6
06-07	28	525	6
06-07	29	527	6
06-07	30	529	6
06-07	31	532	7
06-07	32	534	7
06-07	33	537	7
06-07	34	541	8
06-07	35	544	8
06-07	36	549	9
06-07	37	554	10
06-07	38	562	12
06-07	39	574	17
06-07	40	598	34

**Grade 4 Mathematics, Forms 1 – 3**

Form	Raw Score	Scale Score	Conditional SEM
01-03	0	400	34
01-03	1	443	17
01-03	2	456	13
01-03	3	464	11
01-03	4	470	9
01-03	5	475	9
01-03	6	479	8
01-03	7	483	8
01-03	8	486	7
01-03	9	489	7
01-03	10	492	7
01-03	11	495	7
01-03	12	498	7
01-03	13	500	6
01-03	14	503	6
01-03	15	505	6
01-03	16	507	6
01-03	17	510	6
01-03	18	512	6
01-03	19	514	6
01-03	20	516	6
01-03	21	518	6
01-03	22	520	6
01-03	23	522	6
01-03	24	525	6
01-03	25	527	6
01-03	26	529	6
01-03	27	531	6
01-03	28	533	6
01-03	29	535	6
01-03	30	537	6
01-03	31	540	6
01-03	32	542	7
01-03	33	545	7
01-03	34	548	7
01-03	35	551	8
01-03	36	555	9
01-03	37	560	10
01-03	38	568	12
01-03	39	580	17
01-03	40	600	33

**Grade 4 Mathematics, Forms 4 & 5**

Form	Raw Score	Scale Score	Conditional SEM
04-05	0	400	34
04-05	1	440	17
04-05	2	453	13
04-05	3	461	11
04-05	4	467	10
04-05	5	472	9
04-05	6	477	8
04-05	7	481	8
04-05	8	484	7
04-05	9	487	7
04-05	10	490	7
04-05	11	493	7
04-05	12	496	7
04-05	13	499	7
04-05	14	501	6
04-05	15	503	6
04-05	16	506	6
04-05	17	508	6
04-05	18	510	6
04-05	19	513	6
04-05	20	515	6
04-05	21	517	6
04-05	22	519	6
04-05	23	522	6
04-05	24	524	6
04-05	25	526	6
04-05	26	528	6
04-05	27	531	6
04-05	28	533	6
04-05	29	536	7
04-05	30	538	7
04-05	31	541	7
04-05	32	544	7
04-05	33	547	7
04-05	34	551	8
04-05	35	555	9
04-05	36	560	9
04-05	37	565	10
04-05	38	573	13
04-05	39	586	17
04-05	40	600	34

**Grade 4 Mathematics, Form 6 – 8**

Form	Raw Score	Scale Score	Conditional SEM
06-08	0	400	34
06-08	1	443	17
06-08	2	455	13
06-08	3	463	11
06-08	4	469	9
06-08	5	474	9
06-08	6	478	8
06-08	7	482	8
06-08	8	485	7
06-08	9	488	7
06-08	10	491	7
06-08	11	494	6
06-08	12	496	6
06-08	13	499	6
06-08	14	501	6
06-08	15	503	6
06-08	16	505	6
06-08	17	507	6
06-08	18	509	6
06-08	19	511	6
06-08	20	513	6
06-08	21	515	6
06-08	22	517	6
06-08	23	519	6
06-08	24	521	6
06-08	25	523	6
06-08	26	525	6
06-08	27	527	6
06-08	28	530	6
06-08	29	532	6
06-08	30	534	6
06-08	31	537	7
06-08	32	540	7
06-08	33	543	7
06-08	34	546	8
06-08	35	550	8
06-08	36	555	9
06-08	37	561	11
06-08	38	568	13
06-08	39	581	17
06-08	40	600	34

**Grade 4 Mathematics, Form 9 & 10**

Form	Raw Score	Scale Score	Conditional SEM
09-10	0	400	34
09-10	1	440	17
09-10	2	453	13
09-10	3	461	11
09-10	4	467	10
09-10	5	472	9
09-10	6	477	8
09-10	7	481	8
09-10	8	484	7
09-10	9	487	7
09-10	10	490	7
09-10	11	493	7
09-10	12	496	7
09-10	13	499	6
09-10	14	501	6
09-10	15	503	6
09-10	16	506	6
09-10	17	508	6
09-10	18	510	6
09-10	19	513	6
09-10	20	515	6
09-10	21	517	6
09-10	22	519	6
09-10	23	521	6
09-10	24	524	6
09-10	25	526	6
09-10	26	528	6
09-10	27	531	6
09-10	28	533	6
09-10	29	536	7
09-10	30	538	7
09-10	31	541	7
09-10	32	544	7
09-10	33	547	7
09-10	34	551	8
09-10	35	555	9
09-10	36	559	9
09-10	37	565	11
09-10	38	573	13
09-10	39	586	17
09-10	40	600	34

**Grade 5 Mathematics, Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	440	17
01	2	452	12
01	3	460	10
01	4	465	9
01	5	470	8
01	6	474	8
01	7	477	7
01	8	480	7
01	9	483	7
01	10	485	6
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	503	6
01	19	505	6
01	20	507	6
01	21	508	6
01	22	510	6
01	23	512	6
01	24	514	6
01	25	516	6
01	26	518	6
01	27	520	6
01	28	522	6
01	29	525	6
01	30	527	6
01	31	530	7
01	32	532	7
01	33	535	7
01	34	539	8
01	35	543	8
01	36	548	9
01	37	554	11
01	38	562	13
01	39	577	18
01	40	600	35

**Grade 5 Mathematics, Form 2 & 3**

Form	Raw Score	Scale Score	Conditional SEM
02-03	0	400	34
02-03	1	442	17
02-03	2	454	12
02-03	3	462	10
02-03	4	467	9
02-03	5	472	8
02-03	6	476	8
02-03	7	479	7
02-03	8	483	7
02-03	9	485	7
02-03	10	488	7
02-03	11	491	6
02-03	12	493	6
02-03	13	495	6
02-03	14	497	6
02-03	15	499	6
02-03	16	501	6
02-03	17	503	6
02-03	18	505	6
02-03	19	507	6
02-03	20	509	6
02-03	21	511	5
02-03	22	513	5
02-03	23	514	5
02-03	24	516	5
02-03	25	518	6
02-03	26	520	6
02-03	27	522	6
02-03	28	524	6
02-03	29	526	6
02-03	30	528	6
02-03	31	530	6
02-03	32	533	7
02-03	33	535	7
02-03	34	538	7
02-03	35	542	8
02-03	36	546	9
02-03	37	551	10
02-03	38	558	12
02-03	39	570	17
02-03	40	593	33

**Grade 5 Mathematics, Form 4 & 5**

Form	Raw Score	Scale Score	Conditional SEM
04-05	0	400	34
04-05	1	442	17
04-05	2	454	12
04-05	3	461	10
04-05	4	467	9
04-05	5	472	8
04-05	6	475	8
04-05	7	479	7
04-05	8	482	7
04-05	9	485	7
04-05	10	487	6
04-05	11	490	6
04-05	12	492	6
04-05	13	494	6
04-05	14	496	6
04-05	15	499	6
04-05	16	501	6
04-05	17	503	6
04-05	18	504	6
04-05	19	506	6
04-05	20	508	6
04-05	21	510	6
04-05	22	512	6
04-05	23	514	6
04-05	24	516	6
04-05	25	518	6
04-05	26	520	6
04-05	27	522	6
04-05	28	524	6
04-05	29	526	6
04-05	30	529	6
04-05	31	531	7
04-05	32	534	7
04-05	33	537	7
04-05	34	540	8
04-05	35	544	8
04-05	36	549	9
04-05	37	555	11
04-05	38	564	13
04-05	39	578	18
04-05	40	600	34

**Grade 5 Mathematics, Form 6 & 7**

Form	Raw Score	Scale Score	Conditional SEM
06-07	0	400	34
06-07	1	443	17
06-07	2	455	12
06-07	3	463	10
06-07	4	469	9
06-07	5	473	8
06-07	6	477	8
06-07	7	481	7
06-07	8	484	7
06-07	9	487	7
06-07	10	490	7
06-07	11	492	6
06-07	12	494	6
06-07	13	497	6
06-07	14	499	6
06-07	15	501	6
06-07	16	503	6
06-07	17	505	6
06-07	18	507	6
06-07	19	508	5
06-07	20	510	5
06-07	21	512	5
06-07	22	514	5
06-07	23	515	5
06-07	24	517	5
06-07	25	519	5
06-07	26	521	6
06-07	27	523	6
06-07	28	524	6
06-07	29	526	6
06-07	30	529	6
06-07	31	531	6
06-07	32	533	6
06-07	33	536	7
06-07	34	539	7
06-07	35	542	8
06-07	36	546	9
06-07	37	552	10
06-07	38	559	12
06-07	39	570	17
06-07	40	594	33

**Grade 6 Mathematics, Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	443	17
01	2	455	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	494	6
01	13	497	6
01	14	499	6
01	15	501	6
01	16	503	6
01	17	505	6
01	18	507	6
01	19	509	6
01	20	511	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	526	6
01	29	528	6
01	30	530	6
01	31	533	6
01	32	535	7
01	33	538	7
01	34	541	7
01	35	545	8
01	36	549	9
01	37	555	10
01	38	562	12
01	39	574	17
01	40	597	33

**Grade 6 Mathematics, Forms 2 & 3**

Form	Raw Score	Scale Score	Conditional SEM
02-03	0	400	33
02-03	1	444	17
02-03	2	456	12
02-03	3	464	10
02-03	4	469	9
02-03	5	474	8
02-03	6	478	8
02-03	7	481	7
02-03	8	484	7
02-03	9	487	7
02-03	10	490	7
02-03	11	492	6
02-03	12	495	6
02-03	13	497	6
02-03	14	499	6
02-03	15	501	6
02-03	16	503	6
02-03	17	505	6
02-03	18	507	6
02-03	19	509	6
02-03	20	511	6
02-03	21	513	6
02-03	22	514	6
02-03	23	516	6
02-03	24	518	6
02-03	25	520	6
02-03	26	522	6
02-03	27	524	6
02-03	28	526	6
02-03	29	528	6
02-03	30	530	6
02-03	31	533	6
02-03	32	536	7
02-03	33	538	7
02-03	34	542	8
02-03	35	545	8
02-03	36	549	9
02-03	37	555	10
02-03	38	562	12
02-03	39	574	17
02-03	40	597	33

**Grade 6 Mathematics, Forms 4 & 5**

Form	Raw Score	Scale Score	Conditional SEM
04-05	0	400	34
04-05	1	443	17
04-05	2	457	13
04-05	3	465	11
04-05	4	471	9
04-05	5	475	9
04-05	6	480	8
04-05	7	483	7
04-05	8	486	7
04-05	9	489	7
04-05	10	492	7
04-05	11	494	6
04-05	12	497	6
04-05	13	499	6
04-05	14	501	6
04-05	15	503	6
04-05	16	505	6
04-05	17	507	6
04-05	18	509	6
04-05	19	510	5
04-05	20	512	5
04-05	21	514	5
04-05	22	516	5
04-05	23	517	5
04-05	24	519	5
04-05	25	521	5
04-05	26	523	6
04-05	27	525	6
04-05	28	527	6
04-05	29	529	6
04-05	30	531	6
04-05	31	533	6
04-05	32	535	7
04-05	33	538	7
04-05	34	541	7
04-05	35	545	8
04-05	36	549	9
04-05	37	554	10
04-05	38	561	12
04-05	39	573	17
04-05	40	597	33

**Grade 6 Mathematics, Forms 6 & 7**

Form	Raw Score	Scale Score	Conditional SEM
06-07	0	400	34
06-07	1	444	17
06-07	2	457	13
06-07	3	465	11
06-07	4	471	9
06-07	5	476	9
06-07	6	480	8
06-07	7	484	7
06-07	8	487	7
06-07	9	490	7
06-07	10	492	7
06-07	11	495	6
06-07	12	497	6
06-07	13	499	6
06-07	14	501	6
06-07	15	503	6
06-07	16	505	6
06-07	17	507	6
06-07	18	509	5
06-07	19	511	5
06-07	20	513	5
06-07	21	514	5
06-07	22	516	5
06-07	23	518	5
06-07	24	520	5
06-07	25	521	5
06-07	26	523	6
06-07	27	525	6
06-07	28	527	6
06-07	29	529	6
06-07	30	531	6
06-07	31	533	6
06-07	32	536	7
06-07	33	538	7
06-07	34	542	7
06-07	35	545	8
06-07	36	549	9
06-07	37	554	10
06-07	38	562	12
06-07	39	574	17
06-07	40	597	33

**Grade 7 Mathematics, Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	450	17
01	2	462	12
01	3	470	10
01	4	475	9
01	5	480	8
01	6	484	8
01	7	487	7
01	8	490	7
01	9	492	6
01	10	495	6
01	11	497	6
01	12	499	6
01	13	501	6
01	14	503	6
01	15	505	5
01	16	507	5
01	17	508	5
01	18	510	5
01	19	512	5
01	20	513	5
01	21	515	5
01	22	517	5
01	23	518	5
01	24	520	5
01	25	522	6
01	26	524	6
01	27	526	6
01	28	528	6
01	29	530	6
01	30	532	6
01	31	535	6
01	32	537	7
01	33	540	7
01	34	543	8
01	35	547	8
01	36	551	9
01	37	557	10
01	38	564	12
01	39	577	17
01	40	600	34

**Grade 7 Mathematics, Forms 2 & 3**

Form	Raw Score	Scale Score	Conditional SEM
02-03	0	400	34
02-03	1	447	17
02-03	2	460	12
02-03	3	468	10
02-03	4	473	9
02-03	5	478	8
02-03	6	482	8
02-03	7	485	7
02-03	8	488	7
02-03	9	491	7
02-03	10	493	6
02-03	11	496	6
02-03	12	498	6
02-03	13	500	6
02-03	14	502	6
02-03	15	504	6
02-03	16	506	5
02-03	17	507	5
02-03	18	509	5
02-03	19	511	5
02-03	20	512	5
02-03	21	514	5
02-03	22	516	5
02-03	23	518	5
02-03	24	519	6
02-03	25	521	6
02-03	26	523	6
02-03	27	525	6
02-03	28	527	6
02-03	29	530	6
02-03	30	532	6
02-03	31	535	7
02-03	32	538	7
02-03	33	541	7
02-03	34	544	8
02-03	35	548	8
02-03	36	553	9
02-03	37	559	10
02-03	38	566	12
02-03	39	579	17
02-03	40	600	34



**Grade 7 Mathematics, Forms 4 & 5**

Form	Raw Score	Scale Score	Conditional SEM
04-05	0	400	34
04-05	1	449	17
04-05	2	461	12
04-05	3	469	10
04-05	4	475	9
04-05	5	479	8
04-05	6	483	8
04-05	7	487	7
04-05	8	490	7
04-05	9	492	7
04-05	10	495	7
04-05	11	497	6
04-05	12	500	6
04-05	13	502	6
04-05	14	504	6
04-05	15	506	6
04-05	16	509	6
04-05	17	511	6
04-05	18	513	6
04-05	19	515	6
04-05	20	517	6
04-05	21	519	6
04-05	22	521	6
04-05	23	523	6
04-05	24	525	6
04-05	25	527	6
04-05	26	529	6
04-05	27	531	6
04-05	28	533	6
04-05	29	536	6
04-05	30	538	6
04-05	31	540	6
04-05	32	543	7
04-05	33	546	7
04-05	34	549	7
04-05	35	552	8
04-05	36	556	9
04-05	37	561	10
04-05	38	568	12
04-05	39	580	17
04-05	40	600	33

**Grade 7 Mathematics, Forms 6 & 7**

Form	Raw Score	Scale Score	Conditional SEM
06-07	0	400	34
06-07	1	448	17
06-07	2	460	12
06-07	3	468	10
06-07	4	474	9
06-07	5	478	8
06-07	6	482	8
06-07	7	486	7
06-07	8	488	7
06-07	9	491	7
06-07	10	494	6
06-07	11	496	6
06-07	12	498	6
06-07	13	500	6
06-07	14	502	6
06-07	15	504	5
06-07	16	506	5
06-07	17	507	5
06-07	18	509	5
06-07	19	511	5
06-07	20	512	5
06-07	21	514	5
06-07	22	516	5
06-07	23	518	5
06-07	24	519	6
06-07	25	521	6
06-07	26	523	6
06-07	27	525	6
06-07	28	527	6
06-07	29	529	6
06-07	30	532	6
06-07	31	534	7
06-07	32	537	7
06-07	33	540	7
06-07	34	544	8
06-07	35	548	8
06-07	36	552	9
06-07	37	558	10
06-07	38	566	12
06-07	39	578	17
06-07	40	600	34

**Grade 8 Mathematics, Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	446	17
01	2	458	12
01	3	466	10
01	4	472	9
01	5	476	8
01	6	480	8
01	7	484	7
01	8	487	7
01	9	489	7
01	10	492	7
01	11	495	6
01	12	497	6
01	13	499	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	521	6
01	25	523	6
01	26	524	6
01	27	526	6
01	28	528	6
01	29	530	6
01	30	532	6
01	31	535	6
01	32	537	6
01	33	540	7
01	34	543	7
01	35	546	8
01	36	550	9
01	37	556	10
01	38	563	12
01	39	575	17
01	40	599	34

**Grade 8 Mathematics, Forms 2 & 3**

Form	Raw Score	Scale Score	Conditional SEM
02-03	0	400	34
02-03	1	444	17
02-03	2	456	12
02-03	3	464	10
02-03	4	470	9
02-03	5	474	8
02-03	6	478	8
02-03	7	482	7
02-03	8	485	7
02-03	9	488	7
02-03	10	490	7
02-03	11	493	6
02-03	12	495	6
02-03	13	497	6
02-03	14	500	6
02-03	15	502	6
02-03	16	504	6
02-03	17	506	6
02-03	18	508	6
02-03	19	509	6
02-03	20	511	6
02-03	21	513	6
02-03	22	515	6
02-03	23	517	6
02-03	24	519	6
02-03	25	521	6
02-03	26	522	6
02-03	27	524	6
02-03	28	526	6
02-03	29	529	6
02-03	30	531	6
02-03	31	533	6
02-03	32	536	7
02-03	33	538	7
02-03	34	542	8
02-03	35	545	8
02-03	36	550	9
02-03	37	555	10
02-03	38	563	12
02-03	39	575	17
02-03	40	599	34

**Grade 8 Mathematics, Forms 4 & 5**

Form	Raw Score	Scale Score	Conditional SEM
04-05	0	400	34
04-05	1	446	17
04-05	2	458	12
04-05	3	466	10
04-05	4	472	9
04-05	5	476	8
04-05	6	480	8
04-05	7	483	7
04-05	8	486	7
04-05	9	489	7
04-05	10	492	6
04-05	11	494	6
04-05	12	496	6
04-05	13	499	6
04-05	14	501	6
04-05	15	503	6
04-05	16	505	6
04-05	17	506	6
04-05	18	508	6
04-05	19	510	6
04-05	20	512	5
04-05	21	514	5
04-05	22	516	5
04-05	23	517	6
04-05	24	519	6
04-05	25	521	6
04-05	26	523	6
04-05	27	525	6
04-05	28	527	6
04-05	29	529	6
04-05	30	531	6
04-05	31	534	6
04-05	32	537	7
04-05	33	539	7
04-05	34	543	7
04-05	35	546	8
04-05	36	550	9
04-05	37	556	10
04-05	38	563	12
04-05	39	575	17
04-05	40	598	33

**Grade 8 Mathematics, Forms 6 & 7**

Form	Raw Score	Scale Score	Conditional SEM
06-07	0	400	34
06-07	1	444	17
06-07	2	457	12
06-07	3	465	10
06-07	4	470	9
06-07	5	475	8
06-07	6	479	8
06-07	7	482	7
06-07	8	485	7
06-07	9	488	7
06-07	10	491	7
06-07	11	493	6
06-07	12	496	6
06-07	13	498	6
06-07	14	500	6
06-07	15	502	6
06-07	16	504	6
06-07	17	506	6
06-07	18	508	6
06-07	19	510	6
06-07	20	512	6
06-07	21	513	5
06-07	22	515	5
06-07	23	517	5
06-07	24	519	6
06-07	25	521	6
06-07	26	523	6
06-07	27	525	6
06-07	28	526	6
06-07	29	529	6
06-07	30	531	6
06-07	31	533	6
06-07	32	535	7
06-07	33	538	7
06-07	34	541	7
06-07	35	545	8
06-07	36	549	9
06-07	37	554	10
06-07	38	562	12
06-07	39	574	17
06-07	40	597	34

**Grade 10 Mathematics, Forms 1 & 2**

Form	Raw Score	Scale Score	Conditional SEM
01-02	0	400	34
01-02	1	445	17
01-02	2	457	12
01-02	3	465	10
01-02	4	470	9
01-02	5	475	8
01-02	6	479	8
01-02	7	482	7
01-02	8	485	7
01-02	9	488	7
01-02	10	490	6
01-02	11	493	6
01-02	12	495	6
01-02	13	497	6
01-02	14	500	6
01-02	15	502	6
01-02	16	504	6
01-02	17	506	6
01-02	18	508	6
01-02	19	510	6
01-02	20	512	6
01-02	21	514	6
01-02	22	516	6
01-02	23	518	6
01-02	24	520	6
01-02	25	522	6
01-02	26	524	6
01-02	27	526	6
01-02	28	528	6
01-02	29	531	6
01-02	30	533	6
01-02	31	536	7
01-02	32	538	7
01-02	33	541	7
01-02	34	544	7
01-02	35	548	8
01-02	36	552	9
01-02	37	557	10
01-02	38	564	12
01-02	39	576	17
01-02	40	600	33

**Grade 10 Mathematics, Forms 3 & 4**

Form	Raw Score	Scale Score	Conditional SEM
03-04	0	400	33
03-04	1	447	17
03-04	2	459	12
03-04	3	467	10
03-04	4	472	9
03-04	5	477	8
03-04	6	481	8
03-04	7	484	7
03-04	8	487	7
03-04	9	490	7
03-04	10	492	6
03-04	11	495	6
03-04	12	497	6
03-04	13	499	6
03-04	14	501	6
03-04	15	503	6
03-04	16	505	6
03-04	17	507	6
03-04	18	509	6
03-04	19	511	6
03-04	20	513	6
03-04	21	515	6
03-04	22	517	6
03-04	23	519	6
03-04	24	521	6
03-04	25	523	6
03-04	26	525	6
03-04	27	527	6
03-04	28	529	6
03-04	29	532	6
03-04	30	534	6
03-04	31	536	6
03-04	32	539	7
03-04	33	542	7
03-04	34	545	7
03-04	35	548	8
03-04	36	552	9
03-04	37	558	10
03-04	38	565	12
03-04	39	577	17
03-04	40	600	34

**Grade 10 Mathematics, Forms 5 & 6**

Form	Raw Score	Scale Score	Conditional SEM
05-06	0	400	33
05-06	1	446	17
05-06	2	458	12
05-06	3	466	10
05-06	4	471	9
05-06	5	475	8
05-06	6	479	8
05-06	7	482	7
05-06	8	485	7
05-06	9	488	7
05-06	10	490	6
05-06	11	493	6
05-06	12	495	6
05-06	13	497	6
05-06	14	499	6
05-06	15	501	6
05-06	16	503	6
05-06	17	505	6
05-06	18	507	6
05-06	19	509	6
05-06	20	511	6
05-06	21	513	6
05-06	22	515	6
05-06	23	517	6
05-06	24	519	6
05-06	25	521	6
05-06	26	523	6
05-06	27	525	6
05-06	28	528	6
05-06	29	530	6
05-06	30	533	7
05-06	31	535	7
05-06	32	538	7
05-06	33	541	7
05-06	34	545	8
05-06	35	549	8
05-06	36	553	9
05-06	37	559	10
05-06	38	566	12
05-06	39	579	17
05-06	40	600	34

**Grade 10 Mathematics, Forms 7 – 9**

Form	Raw Score	Scale Score	Conditional SEM
07-09	0	400	34
07-09	1	444	17
07-09	2	457	12
07-09	3	464	10
07-09	4	470	9
07-09	5	474	8
07-09	6	478	8
07-09	7	481	7
07-09	8	484	7
07-09	9	487	7
07-09	10	489	6
07-09	11	492	6
07-09	12	494	6
07-09	13	496	6
07-09	14	498	6
07-09	15	500	6
07-09	16	502	6
07-09	17	504	6
07-09	18	506	6
07-09	19	508	6
07-09	20	510	6
07-09	21	512	6
07-09	22	514	6
07-09	23	516	6
07-09	24	518	6
07-09	25	520	6
07-09	26	523	6
07-09	27	525	6
07-09	28	527	6
07-09	29	530	6
07-09	30	532	7
07-09	31	535	7
07-09	32	538	7
07-09	33	541	7
07-09	34	544	8
07-09	35	548	8
07-09	36	553	9
07-09	37	558	10
07-09	38	566	12
07-09	39	579	17
07-09	40	600	34

**Grade 4 Science, Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	445	17
01	2	458	13
01	3	466	11
01	4	472	9
01	5	477	9
01	6	481	8
01	7	485	8
01	8	489	7
01	9	492	7
01	10	495	7
01	11	498	7
01	12	500	7
01	13	503	7
01	14	505	6
01	15	508	6
01	16	510	6
01	17	513	6
01	18	515	6
01	19	517	6
01	20	519	6
01	21	522	6
01	22	524	6
01	23	526	6
01	24	528	6
01	25	531	6
01	26	533	6
01	27	536	6
01	28	538	6
01	29	541	7
01	30	543	7
01	31	546	7
01	32	549	7
01	33	552	7
01	34	555	8
01	35	559	8
01	36	563	9
01	37	569	10
01	38	576	12
01	39	588	17
01	40	600	33

**Grade 4 Science, Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	449	17
02	2	461	13
02	3	469	11
02	4	475	9
02	5	480	9
02	6	484	8
02	7	488	8
02	8	491	7
02	9	494	7
02	10	497	7
02	11	500	7
02	12	503	7
02	13	505	6
02	14	507	6
02	15	510	6
02	16	512	6
02	17	514	6
02	18	516	6
02	19	519	6
02	20	521	6
02	21	523	6
02	22	525	6
02	23	527	6
02	24	530	6
02	25	532	6
02	26	534	6
02	27	537	7
02	28	540	7
02	29	542	7
02	30	546	7
02	31	549	8
02	32	552	8
02	33	557	9
02	34	561	9
02	35	567	10
02	36	575	12
02	37	587	17
02	38	600	34

**Grade 7 Science, 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	475	9
01	6	479	8
01	7	483	8
01	8	486	7
01	9	489	7
01	10	492	7
01	11	495	7
01	12	497	7
01	13	500	6
01	14	502	6
01	15	505	6
01	16	507	6
01	17	509	6
01	18	511	6
01	19	513	6
01	20	516	6
01	21	518	6
01	22	520	6
01	23	522	6
01	24	524	6
01	25	526	6
01	26	528	6
01	27	531	6
01	28	533	6
01	29	536	7
01	30	538	7
01	31	541	7
01	32	544	8
01	33	548	8
01	34	552	9
01	35	558	10
01	36	565	12
01	37	577	17
01	38	600	33

**Grade 7 Science, Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	442	17
02	2	455	13
02	3	463	11
02	4	469	10
02	5	474	9
02	6	478	8
02	7	482	8
02	8	486	7
02	9	489	7
02	10	491	7
02	11	494	7
02	12	497	6
02	13	499	6
02	14	501	6
02	15	504	6
02	16	506	6
02	17	508	6
02	18	510	6
02	19	513	6
02	20	515	6
02	21	517	6
02	22	519	6
02	23	521	6
02	24	524	6
02	25	526	6
02	26	529	7
02	27	531	7
02	28	534	7
02	29	537	7
02	30	540	7
02	31	544	8
02	32	548	8
02	33	552	9
02	34	558	10
02	35	565	12
02	36	577	17
02	37	600	33

**Grade 11 Science, Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	432	17
01	2	445	13
01	3	454	11
01	4	460	10
01	5	465	9
01	6	469	8
01	7	473	8
01	8	476	7
01	9	479	7
01	10	482	7
01	11	485	7
01	12	488	7
01	13	490	7
01	14	493	6
01	15	495	6
01	16	498	6
01	17	500	6
01	18	503	6
01	19	505	6
01	20	507	6
01	21	510	6
01	22	512	6
01	23	515	7
01	24	517	7
01	25	520	7
01	26	523	7
01	27	526	7
01	28	529	7
01	29	532	8
01	30	536	8
01	31	539	8
01	32	544	9
01	33	549	10
01	34	555	11
01	35	563	13
01	36	576	17
01	37	600	34

**Grade 11 Science, Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	438	18
02	2	452	13
02	3	460	11
02	4	466	9
02	5	471	9
02	6	475	8
02	7	479	7
02	8	482	7
02	9	485	7
02	10	487	7
02	11	490	6
02	12	492	6
02	13	495	6
02	14	497	6
02	15	499	6
02	16	502	6
02	17	504	6
02	18	506	6
02	19	508	6
02	20	511	6
02	21	513	6
02	22	515	6
02	23	518	6
02	24	520	7
02	25	523	7
02	26	525	7
02	27	528	7
02	28	531	7
02	29	535	8
02	30	539	8
02	31	543	9
02	32	548	10
02	33	554	11
02	34	562	13
02	35	575	17
02	36	599	34



**Grade 5 Social Studies, Forms 1 – 5**

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	440	17
01 – 05	2	452	12
01 – 05	3	460	10
01 – 05	4	466	9
01 – 05	5	470	8
01 – 05	6	474	8
01 – 05	7	478	7
01 – 05	8	481	7
01 – 05	9	484	7
01 – 05	10	487	7
01 – 05	11	489	6
01 – 05	12	492	6
01 – 05	13	494	6
01 – 05	14	496	6
01 – 05	15	498	6
01 – 05	16	501	6
01 – 05	17	503	6
01 – 05	18	505	6
01 – 05	19	507	6
01 – 05	20	509	6
01 – 05	21	511	6
01 – 05	22	513	6
01 – 05	23	515	6
01 – 05	24	517	6
01 – 05	25	519	6
01 – 05	26	521	6
01 – 05	27	523	6
01 – 05	28	526	6
01 – 05	29	528	7
01 – 05	30	531	7
01 – 05	31	534	7
01 – 05	32	537	7
01 – 05	33	540	8
01 – 05	34	544	8
01 – 05	35	549	9
01 – 05	36	554	10
01 – 05	37	561	12
01 – 05	38	571	14
01 – 05	39	586	18
01 – 05	40	600	34

**Grade 5 Social Studies, Forms 6 – 10**

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	440	17
06 – 10	2	453	12
06 – 10	3	460	10
06 – 10	4	466	9
06 – 10	5	471	8
06 – 10	6	475	8
06 – 10	7	478	7
06 – 10	8	482	7
06 – 10	9	484	7
06 – 10	10	487	7
06 – 10	11	490	6
06 – 10	12	492	6
06 – 10	13	495	6
06 – 10	14	497	6
06 – 10	15	499	6
06 – 10	16	501	6
06 – 10	17	503	6
06 – 10	18	505	6
06 – 10	19	507	6
06 – 10	20	509	6
06 – 10	21	511	6
06 – 10	22	513	6
06 – 10	23	515	6
06 – 10	24	518	6
06 – 10	25	520	6
06 – 10	26	522	6
06 – 10	27	524	6
06 – 10	28	526	6
06 – 10	29	529	7
06 – 10	30	532	7
06 – 10	31	534	7
06 – 10	32	538	7
06 – 10	33	541	8
06 – 10	34	545	8
06 – 10	35	549	9
06 – 10	36	555	10
06 – 10	37	562	11
06 – 10	38	571	14
06 – 10	39	586	18
06 – 10	40	600	34

**Grade 8 Social Studies, Forms 1 – 5**

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	443	17
01 – 05	2	455	12
01 – 05	3	463	10
01 – 05	4	468	9
01 – 05	5	473	8
01 – 05	6	476	8
01 – 05	7	480	7
01 – 05	8	483	7
01 – 05	9	485	7
01 – 05	10	488	6
01 – 05	11	490	6
01 – 05	12	493	6
01 – 05	13	495	6
01 – 05	14	497	6
01 – 05	15	499	6
01 – 05	16	501	6
01 – 05	17	503	6
01 – 05	18	505	6
01 – 05	19	507	6
01 – 05	20	508	6
01 – 05	21	510	6
01 – 05	22	512	6
01 – 05	23	514	6
01 – 05	24	516	6
01 – 05	25	518	6
01 – 05	26	520	6
01 – 05	27	522	6
01 – 05	28	524	6
01 – 05	29	526	6
01 – 05	30	529	6
01 – 05	31	531	7
01 – 05	32	534	7
01 – 05	33	537	7
01 – 05	34	540	8
01 – 05	35	544	8
01 – 05	36	549	9
01 – 05	37	554	10
01 – 05	38	562	12
01 – 05	39	574	17
01 – 05	40	598	34

**Grade 8 Social Studies, Forms 6 – 10**

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	444	17
06 – 10	2	456	12
06 – 10	3	464	10
06 – 10	4	469	9
06 – 10	5	474	8
06 – 10	6	478	8
06 – 10	7	481	7
06 – 10	8	484	7
06 – 10	9	486	6
06 – 10	10	489	6
06 – 10	11	491	6
06 – 10	12	493	6
06 – 10	13	495	6
06 – 10	14	497	6
06 – 10	15	499	6
06 – 10	16	501	6
06 – 10	17	503	5
06 – 10	18	505	5
06 – 10	19	506	5
06 – 10	20	508	5
06 – 10	21	510	5
06 – 10	22	512	5
06 – 10	23	513	5
06 – 10	24	515	6
06 – 10	25	517	6
06 – 10	26	519	6
06 – 10	27	521	6
06 – 10	28	523	6
06 – 10	29	525	6
06 – 10	30	527	6
06 – 10	31	530	7
06 – 10	32	533	7
06 – 10	33	536	7
06 – 10	34	539	8
06 – 10	35	543	8
06 – 10	36	547	9
06 – 10	37	553	10
06 – 10	38	560	12
06 – 10	39	573	17
06 – 10	40	596	34

**Grade 11 Social Studies, Forms 1 – 5**

Form	Raw Score	Scale Score	Conditional SEM
01 – 05	0	400	34
01 – 05	1	443	17
01 – 05	2	455	12
01 – 05	3	463	10
01 – 05	4	468	9
01 – 05	5	473	8
01 – 05	6	477	8
01 – 05	7	480	7
01 – 05	8	483	7
01 – 05	9	486	7
01 – 05	10	488	6
01 – 05	11	491	6
01 – 05	12	493	6
01 – 05	13	495	6
01 – 05	14	497	6
01 – 05	15	499	6
01 – 05	16	501	6
01 – 05	17	503	6
01 – 05	18	505	6
01 – 05	19	507	6
01 – 05	20	508	6
01 – 05	21	510	6
01 – 05	22	512	6
01 – 05	23	514	6
01 – 05	24	516	6
01 – 05	25	518	6
01 – 05	26	520	6
01 – 05	27	522	6
01 – 05	28	524	6
01 – 05	29	527	6
01 – 05	30	529	6
01 – 05	31	532	7
01 – 05	32	535	7
01 – 05	33	538	7
01 – 05	34	541	8
01 – 05	35	545	8
01 – 05	36	549	9
01 – 05	37	555	10
01 – 05	38	562	12
01 – 05	39	574	17
01 – 05	40	598	33

**Grade 11 Social Studies, Forms 6 – 10**

Form	Raw Score	Scale Score	Conditional SEM
06 – 10	0	400	34
06 – 10	1	444	17
06 – 10	2	456	12
06 – 10	3	463	10
06 – 10	4	469	9
06 – 10	5	473	8
06 – 10	6	477	8
06 – 10	7	480	7
06 – 10	8	483	7
06 – 10	9	486	7
06 – 10	10	489	6
06 – 10	11	491	6
06 – 10	12	493	6
06 – 10	13	495	6
06 – 10	14	497	6
06 – 10	15	499	6
06 – 10	16	501	6
06 – 10	17	503	6
06 – 10	18	505	6
06 – 10	19	507	6
06 – 10	20	509	6
06 – 10	21	510	6
06 – 10	22	512	6
06 – 10	23	514	6
06 – 10	24	516	6
06 – 10	25	518	6
06 – 10	26	520	6
06 – 10	27	522	6
06 – 10	28	524	6
06 – 10	29	527	6
06 – 10	30	529	6
06 – 10	31	532	7
06 – 10	32	535	7
06 – 10	33	538	7
06 – 10	34	541	8
06 – 10	35	545	8
06 – 10	36	549	9
06 – 10	37	555	10
06 – 10	38	562	12
06 – 10	39	574	17
06 – 10	40	598	33

**Grade 5 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	469	9
01	5	473	9
01	6	478	8
01	7	481	8
01	8	484	7
01	9	487	7
01	10	490	7
01	11	493	7
01	12	495	6
01	13	498	6
01	14	500	6
01	15	502	6
01	16	505	6
01	17	507	6
01	18	509	6
01	19	512	6
01	20	514	6
01	21	516	6
01	22	519	6
01	23	521	6
01	24	523	6
01	25	526	7
01	26	529	7
01	27	531	7
01	28	534	7
01	29	537	7
01	30	541	8
01	31	544	8
01	32	549	9
01	33	554	10
01	34	562	12
01	35	574	17
01	36	598	34

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

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	34
02	1	440	18
02	2	453	13
02	3	461	11
02	4	467	10
02	5	473	9
02	6	477	8
02	7	481	8
02	8	484	7
02	9	487	7
02	10	490	7
02	11	493	7
02	12	496	7
02	13	498	6
02	14	501	6
02	15	503	6
02	16	506	6
02	17	508	6
02	18	510	6
02	19	513	6
02	20	515	6
02	21	518	6
02	22	520	6
02	23	523	6
02	24	525	6
02	25	528	6
02	26	530	7
02	27	533	7
02	28	535	7
02	29	538	7
02	30	541	7
02	31	545	8
02	32	549	9
02	33	554	10
02	34	561	12
02	35	573	17
02	36	596	33

**Grade 8 Editing and Mechanics,  
Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	436	17
01	2	448	13
01	3	457	11
01	4	463	10
01	5	468	9
01	6	472	8
01	7	476	8
01	8	480	8
01	9	483	7
01	10	486	7
01	11	489	7
01	12	492	7
01	13	495	7
01	14	497	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	514	6
01	22	516	6
01	23	518	6
01	24	520	6
01	25	523	6
01	26	525	6
01	27	528	7
01	28	531	7
01	29	534	7
01	30	537	8
01	31	541	8
01	32	546	9
01	33	552	11
01	34	560	13
01	35	573	17
01	36	597	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	452	13
02	3	460	11
02	4	466	10
02	5	471	9
02	6	475	8
02	7	479	8
02	8	482	7
02	9	486	7
02	10	489	7
02	11	491	7
02	12	494	7
02	13	497	6
02	14	499	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	522	6
02	25	524	6
02	26	527	7
02	27	530	7
02	28	533	7
02	29	536	8
02	30	540	8
02	31	544	9
02	32	550	10
02	33	556	11
02	34	565	13
02	35	579	18
02	36	600	34

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

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	34
01	1	447	17
01	2	460	13
01	3	468	11
01	4	474	9
01	5	479	9
01	6	483	8
01	7	487	8
01	8	490	8
01	9	494	7
01	10	497	7
01	11	500	7
01	12	503	7
01	13	505	7
01	14	508	7
01	15	511	7
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	7
01	24	533	7
01	25	536	7
01	26	539	7
01	27	542	7
01	28	545	7
01	29	548	8
01	30	552	8
01	31	556	9
01	32	561	10
01	33	567	11
01	34	576	13
01	35	589	18
01	36	600	34

**Grade 11 Editing and Mechanics,  
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	482	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	7
02	18	512	7
02	19	514	7
02	20	517	7
02	21	520	7
02	22	522	7
02	23	525	7
02	24	528	7
02	25	531	7
02	26	534	7
02	27	537	7
02	28	540	8
02	29	544	8
02	30	548	8
02	31	553	9
02	32	558	10
02	33	565	11
02	34	573	13
02	35	587	18
02	36	600	34

**Grade 5 On-Demand Writing,  
Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	.
01	10	457	10
01	11	465	6
01	12	471	5
01	13	475	4
01	14	478	4
01	15	481	4
01	16	484	4
01	17	488	5
01	18	494	5
01	19	499	5
01	20	502	4
01	21	505	3
01	22	507	3
01	23	509	3
01	24	511	3
01	25	513	3
01	26	515	3
01	27	518	3
01	28	520	4
01	29	523	4
01	30	525	4
01	31	528	4
01	32	531	4
01	33	534	4
01	34	537	4
01	35	540	4
01	36	544	4
01	37	548	4
01	38	552	5
01	39	559	7
01	40	569	11

**Grade 5 On-Demand Writing,  
Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	.
02	10	462	10
02	11	470	6
02	12	476	5
02	13	479	4
02	14	483	4
02	15	485	4
02	16	488	4
02	17	491	4
02	18	495	4
02	19	498	4
02	20	501	4
02	21	504	4
02	22	506	3
02	23	508	3
02	24	510	3
02	25	512	3
02	26	515	3
02	27	517	3
02	28	519	4
02	29	522	4
02	30	525	4
02	31	528	4
02	32	531	4
02	33	534	4
02	34	537	4
02	35	541	4
02	36	544	4
02	37	548	4
02	38	552	5
02	39	557	6
02	40	565	10

**Grade 5 On-Demand Writing,  
Form 3**

Form	Raw Score	Scale Score	Conditional SEM
03	0	400	.
03	10	452	11
03	11	461	6
03	12	467	5
03	13	472	4
03	14	475	4
03	15	478	4
03	16	481	4
03	17	485	4
03	18	488	4
03	19	492	4
03	20	495	4
03	21	498	4
03	22	501	3
03	23	503	3
03	24	505	3
03	25	507	3
03	26	509	3
03	27	512	4
03	28	515	4
03	29	518	4
03	30	523	5
03	31	527	4
03	32	530	4
03	33	534	4
03	34	538	4
03	35	542	4
03	36	546	4
03	37	550	4
03	38	554	5
03	39	559	6
03	40	568	11

**Grade 5 On-Demand Writing,  
Form 4**

Form	Raw Score	Scale Score	Conditional SEM
04	0	400	.
04	10	463	10
04	11	471	6
04	12	475	4
04	13	479	4
04	14	481	4
04	15	484	4
04	16	487	4
04	17	490	4
04	18	494	5
04	19	499	4
04	20	501	3
04	21	504	3
04	22	505	3
04	23	507	3
04	24	508	3
04	25	510	3
04	26	512	3
04	27	514	3
04	28	516	4
04	29	519	4
04	30	522	4
04	31	524	4
04	32	527	4
04	33	530	4
04	34	532	4
04	35	535	4
04	36	538	4
04	37	541	4
04	38	545	5
04	39	551	7
04	40	561	11



**Grade 8 On-Demand Writing,  
Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	.
01	12	460	10
01	13	468	6
01	14	473	4
01	15	476	4
01	16	479	4
01	17	481	3
01	18	483	3
01	19	485	3
01	20	487	3
01	21	490	3
01	22	492	4
01	23	495	4
01	24	498	4
01	25	500	3
01	26	502	3
01	27	504	3
01	28	506	3
01	29	508	3
01	30	509	3
01	31	511	3
01	32	513	3
01	33	515	3
01	34	517	3
01	35	519	3
01	36	521	3
01	37	524	3
01	38	526	3
01	39	528	3
01	40	530	3
01	41	532	3
01	42	535	3
01	43	537	3
01	44	539	3
01	45	542	4
01	46	545	4
01	47	549	5
01	48	557	10

**Grade 8 On-Demand Writing,  
Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	.
02	12	463	10
02	13	471	6
02	14	475	4
02	15	478	4
02	16	480	3
02	17	482	3
02	18	484	3
02	19	486	3
02	20	488	3
02	21	490	3
02	22	493	4
02	23	495	4
02	24	498	3
02	25	500	3
02	26	502	3
02	27	504	3
02	28	506	3
02	29	507	3
02	30	509	3
02	31	510	3
02	32	512	3
02	33	514	3
02	34	516	3
02	35	519	4
02	36	522	4
02	37	524	4
02	38	527	4
02	39	530	4
02	40	532	4
02	41	535	4
02	42	537	4
02	43	540	4
02	44	542	4
02	45	545	4
02	46	548	4
02	47	553	6
02	48	561	10

**Grade 8 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	467	5
03	15	471	4
03	16	474	4
03	17	476	3
03	18	478	3
03	19	481	3
03	20	483	4
03	21	486	4
03	22	489	4
03	23	493	4
03	24	496	4
03	25	499	4
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	518	4
03	35	521	4
03	36	524	4
03	37	527	4
03	38	530	4
03	39	533	4
03	40	536	4
03	41	538	4
03	42	541	4
03	43	544	4
03	44	547	4
03	45	550	4
03	46	553	5
03	47	559	6
03	48	567	10

**Grade 8 On-Demand Writing,  
Form 4**

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

**Grade 11 On-Demand Writing,  
Form 1**

Form	Raw Score	Scale Score	Conditional SEM
01	0	400	.
01	12	443	11
01	13	454	7
01	14	463	6
01	15	468	5
01	16	471	4
01	17	475	4
01	18	478	4
01	19	482	4
01	20	485	4
01	21	489	4
01	22	492	4
01	23	495	4
01	24	498	3
01	25	500	3
01	26	502	3
01	27	504	3
01	28	506	3
01	29	507	3
01	30	509	3
01	31	511	3
01	32	513	3
01	33	515	3
01	34	517	4
01	35	521	4
01	36	525	5
01	37	530	5
01	38	534	4
01	39	538	4
01	40	541	4
01	41	544	4
01	42	547	4
01	43	550	4
01	44	553	4
01	45	556	4
01	46	560	5
01	47	565	6
01	48	573	10

**Grade 11 On-Demand Writing,  
Form 2**

Form	Raw Score	Scale Score	Conditional SEM
02	0	400	.
02	12	450	11
02	13	458	6
02	14	464	5
02	15	468	4
02	16	472	4
02	17	475	4
02	18	478	4
02	19	481	4
02	20	485	4
02	21	489	4
02	22	492	4
02	23	495	3
02	24	497	3
02	25	499	3
02	26	500	3
02	27	502	3
02	28	503	3
02	29	505	3
02	30	506	3
02	31	508	3
02	32	510	3
02	33	512	3
02	34	515	4
02	35	518	4
02	36	521	4
02	37	524	4
02	38	527	4
02	39	530	4
02	40	533	4
02	41	536	4
02	42	539	4
02	43	542	4
02	44	545	4
02	45	549	4
02	46	553	5
02	47	558	6
02	48	566	10

**Grade 11 On-Demand Writing,  
Form 3**

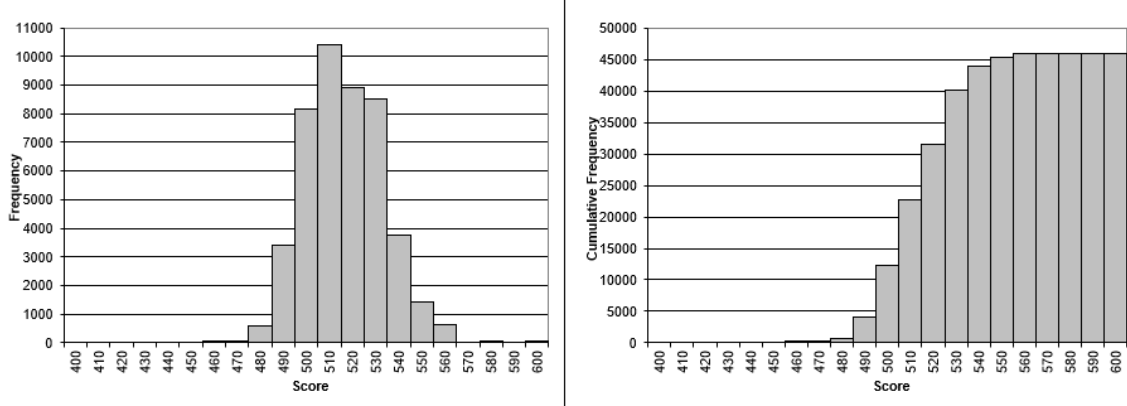
Form	Raw Score	Scale Score	Conditional SEM
03	0	400	.
03	12	449	11
03	13	459	7
03	14	466	5
03	15	471	4
03	16	474	4
03	17	477	4
03	18	481	4
03	19	484	4
03	20	488	4
03	21	492	4
03	22	495	4
03	23	498	3
03	24	500	3
03	25	502	3
03	26	503	3
03	27	505	3
03	28	506	3
03	29	508	3
03	30	509	3
03	31	511	3
03	32	513	3
03	33	515	3
03	34	518	4
03	35	520	4
03	36	524	4
03	37	527	4
03	38	530	4
03	39	533	4
03	40	535	4
03	41	538	4
03	42	541	4
03	43	543	4
03	44	546	4
03	45	549	4
03	46	552	4
03	47	557	6
03	48	565	10

**Grade 11 On-Demand Writing,  
Form 4**

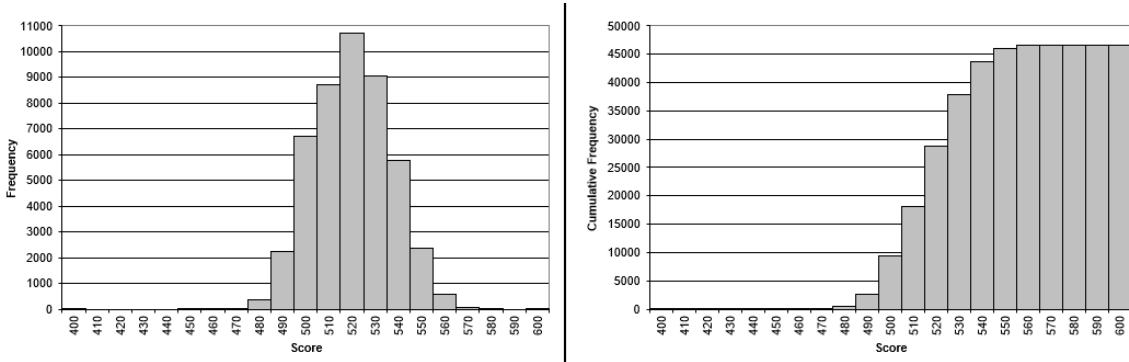
Form	Raw Score	Scale Score	Conditional SEM
04	0	400	.
04	12	457	10
04	13	465	6
04	14	471	5
04	15	475	4
04	16	478	4
04	17	480	3
04	18	483	4
04	19	486	4
04	20	489	4
04	21	493	4
04	22	496	3
04	23	498	3
04	24	500	3
04	25	501	3
04	26	503	3
04	27	504	3
04	28	505	3
04	29	506	3
04	30	508	3
04	31	509	3
04	32	511	3
04	33	513	3
04	34	515	4
04	35	519	4
04	36	522	4
04	37	526	4
04	38	529	4
04	39	532	4
04	40	535	3
04	41	537	3
04	42	539	3
04	43	542	3
04	44	544	4
04	45	547	4
04	46	550	4
04	47	555	6
04	48	563	10

## Appendix H. Score Frequency Distributions

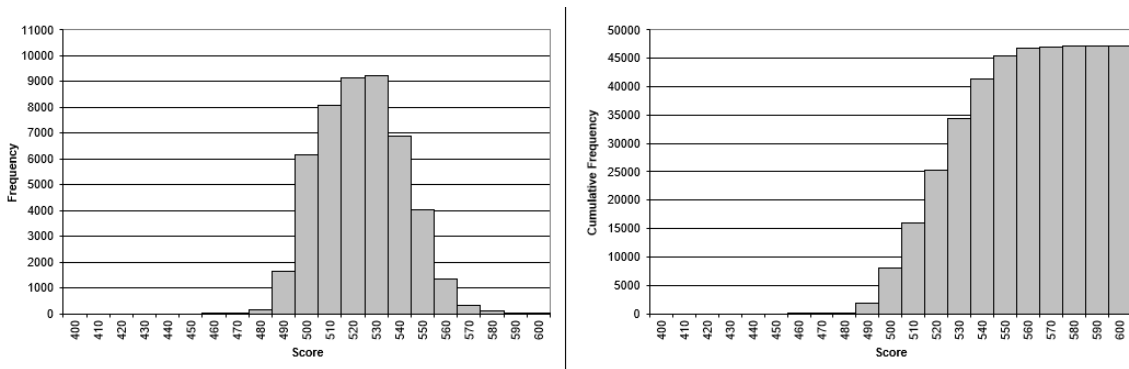
**Figure 1. Reading Grade 3 Score Frequency and Cumulative Frequency Distributions**



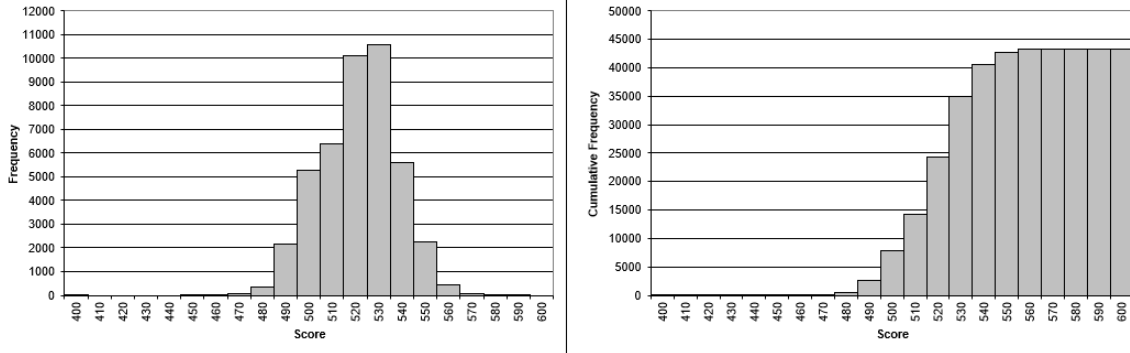
**Figure 2. Reading Grade 4 Score Frequency and Cumulative Frequency Distributions**



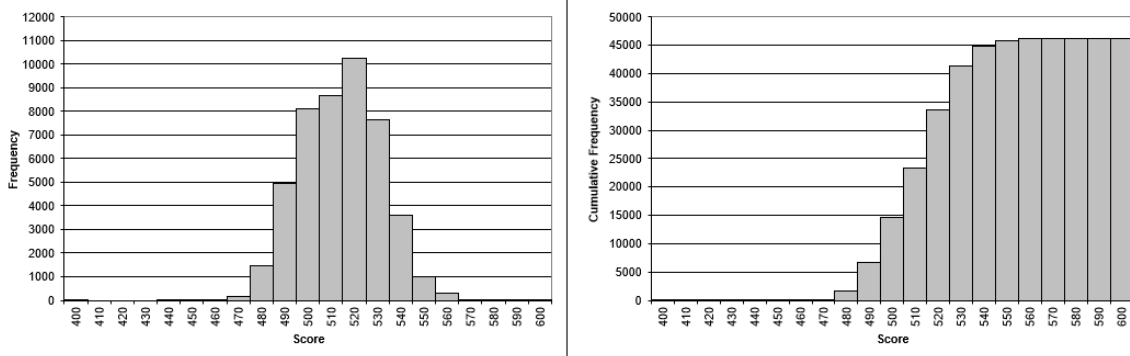
**Figure 3. Reading Grade 5 Score Frequency and Cumulative Frequency Distributions**



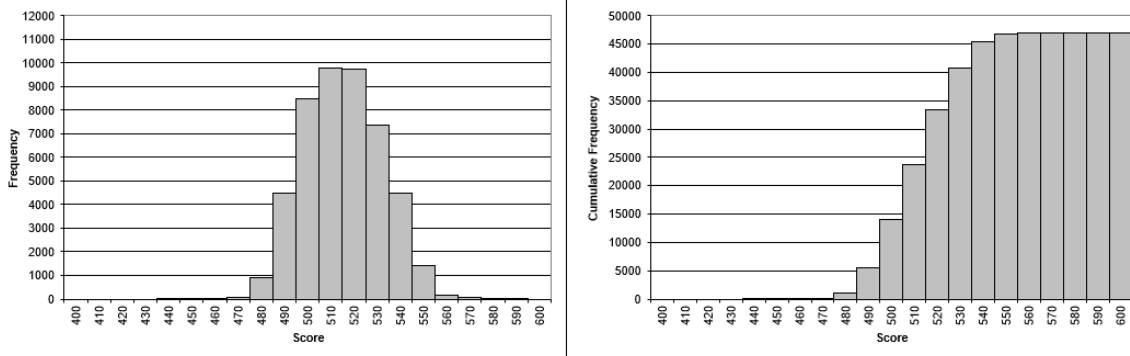
**Figure 4. Reading Grade 6 Score Frequency and Cumulative Frequency Distributions**



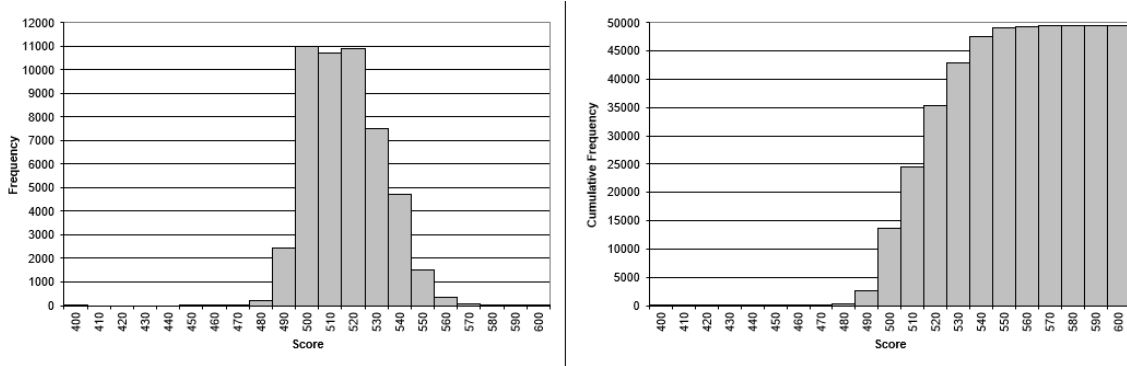
**Figure 5. Reading Grade 7 Score Frequency and Cumulative Frequency Distributions**



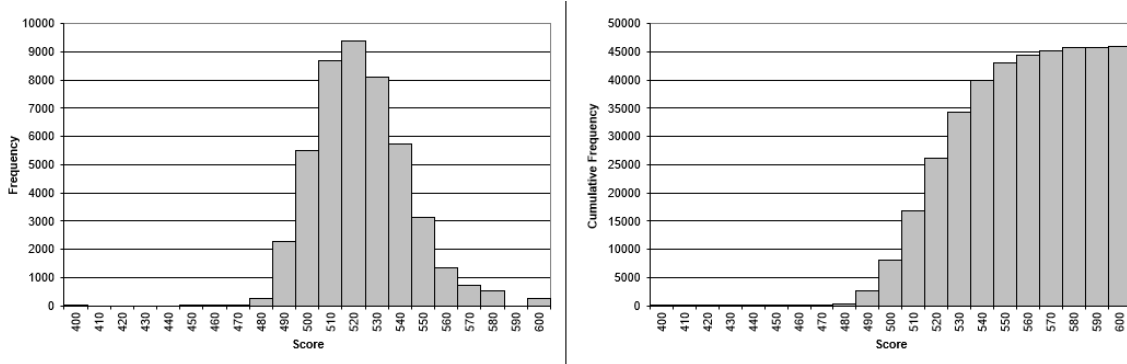
**Figure 6. Reading Grade 8 Score Frequency and Cumulative Frequency Distributions**



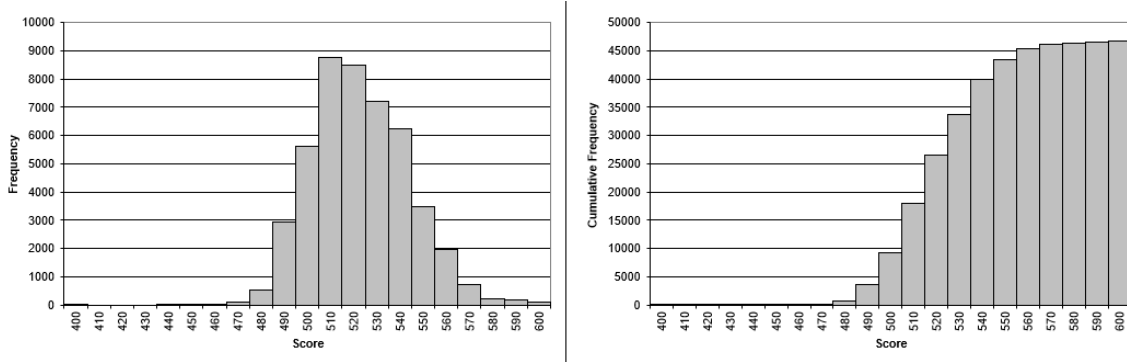
**Figure 7. Reading Grade 10 Score Frequency and Cumulative Frequency Distributions**



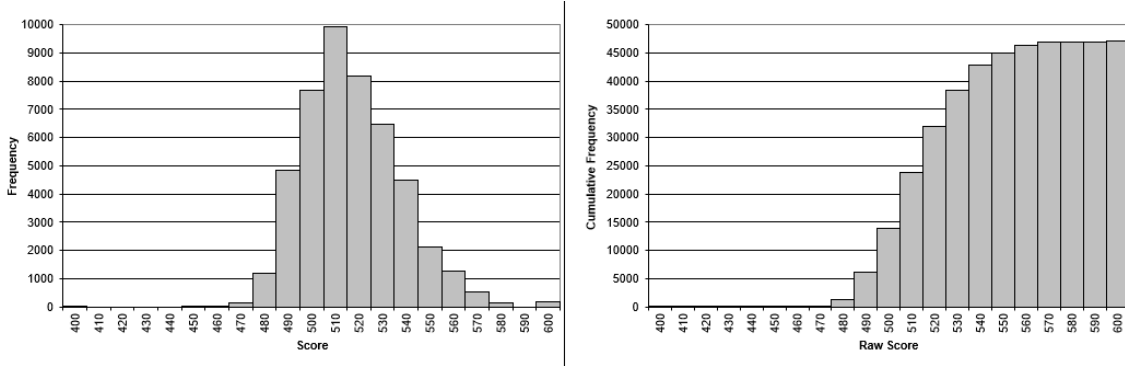
**Figure 8. Mathematics Grade 3 Score Frequency and Cumulative Frequency Distributions**



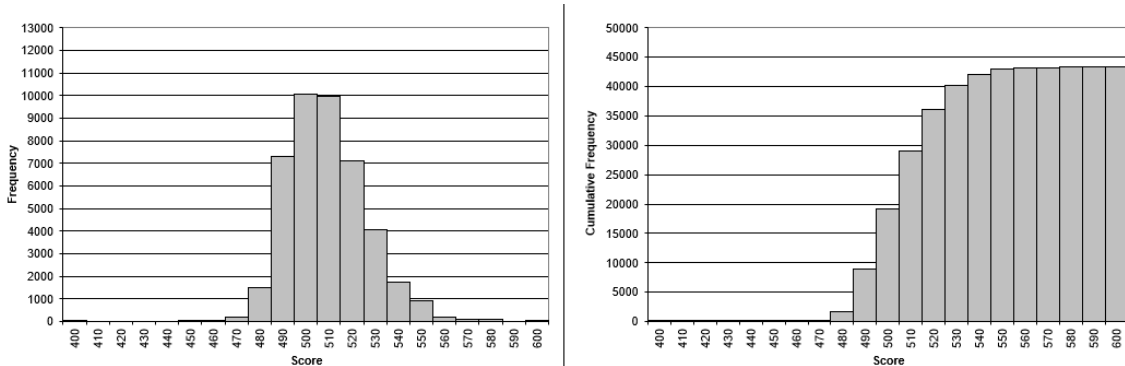
**Figure 9. Mathematics Grade 4 Score Frequency and Cumulative Frequency Distributions**



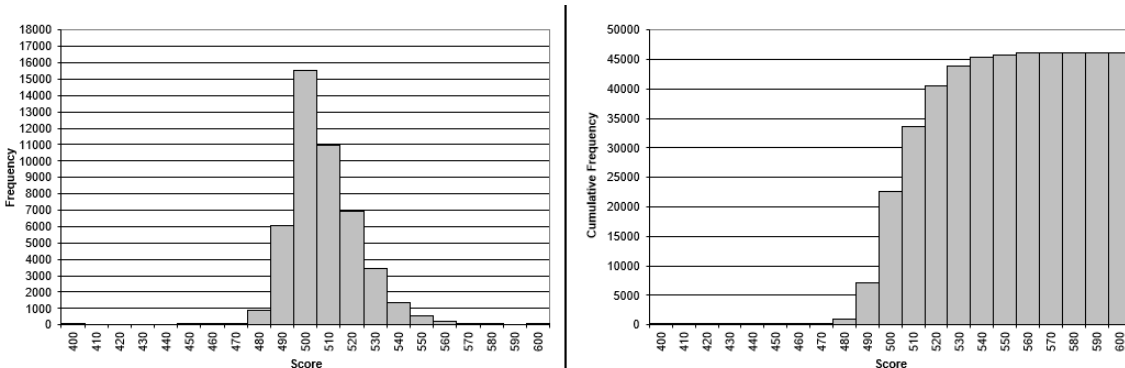
**Figure 10. Mathematics Grade 5 Score Frequency and Cumulative Frequency Distributions**



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

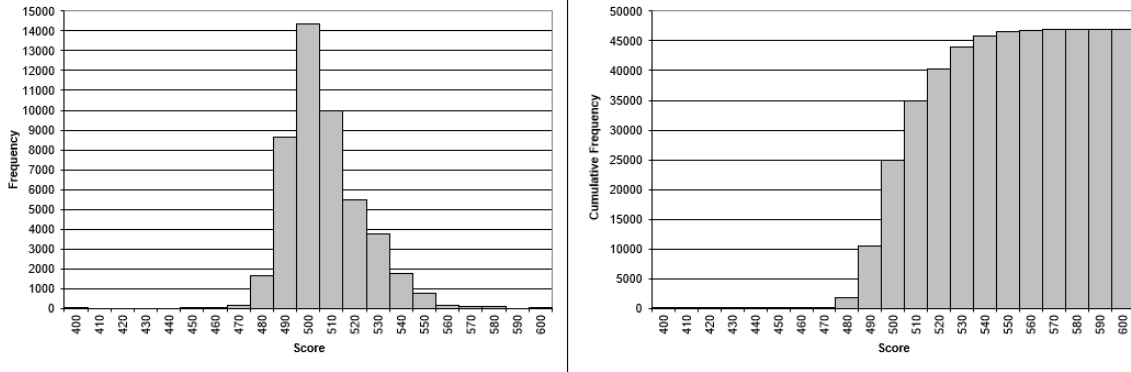


**Figure 12. Mathematics Grade 7 Score Frequency and Cumulative Frequency Distributions**

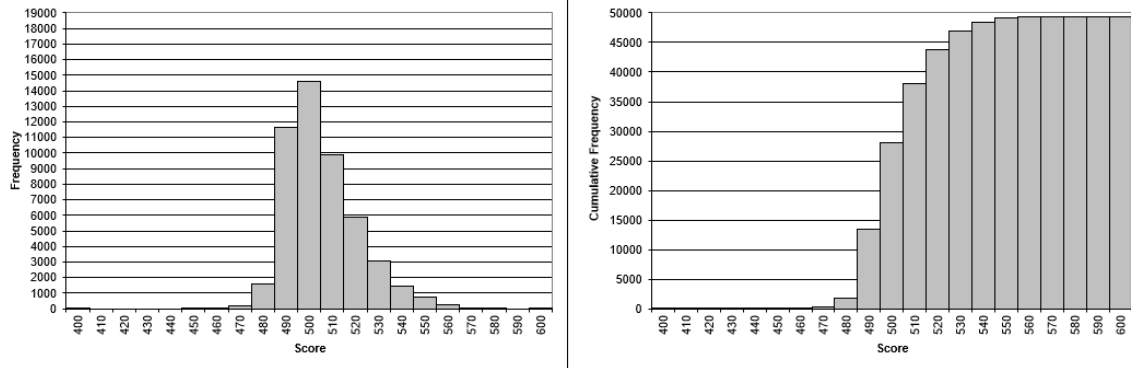




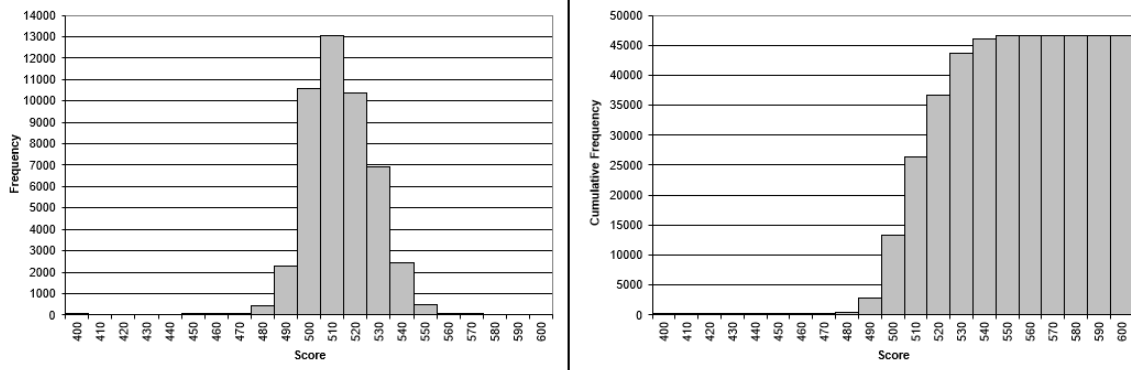
**Figure 13. Mathematics Grade 8 Score Frequency and Cumulative Frequency Distributions**



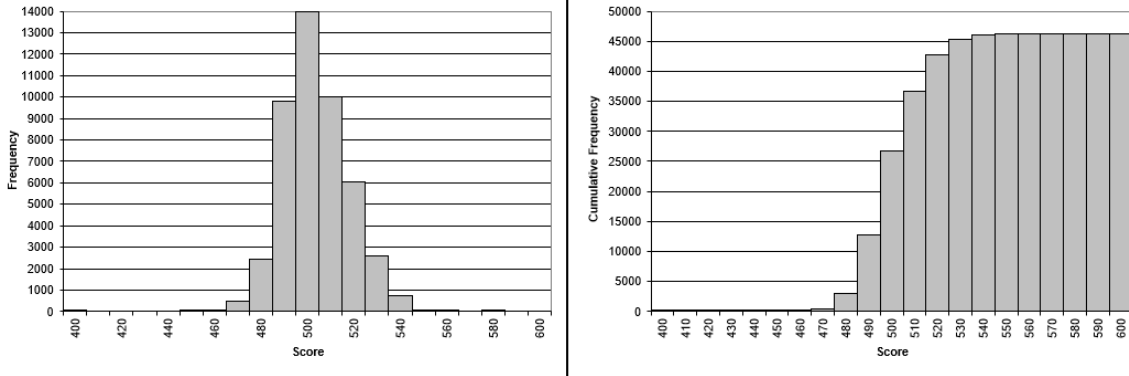
**Figure 14. Mathematics Grade 10 Score Frequency and Cumulative Frequency Distributions**



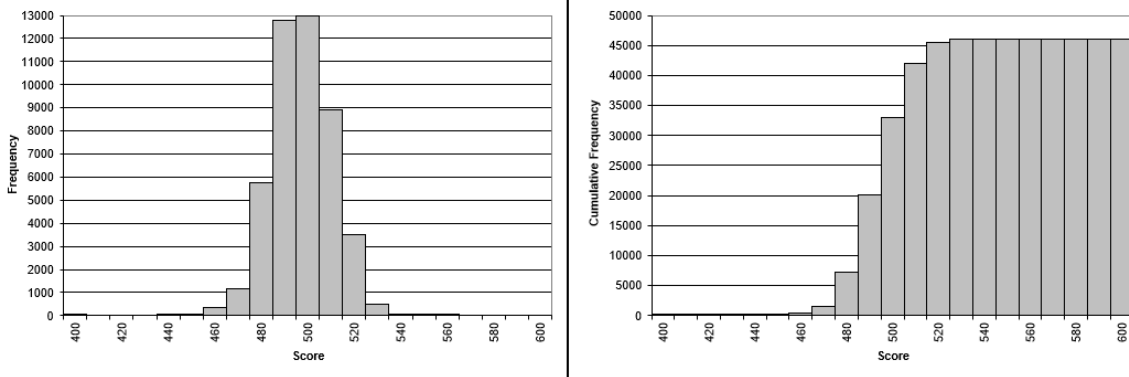
**Figure 15. Science Grade 4 Score Frequency and Cumulative Frequency Distributions**



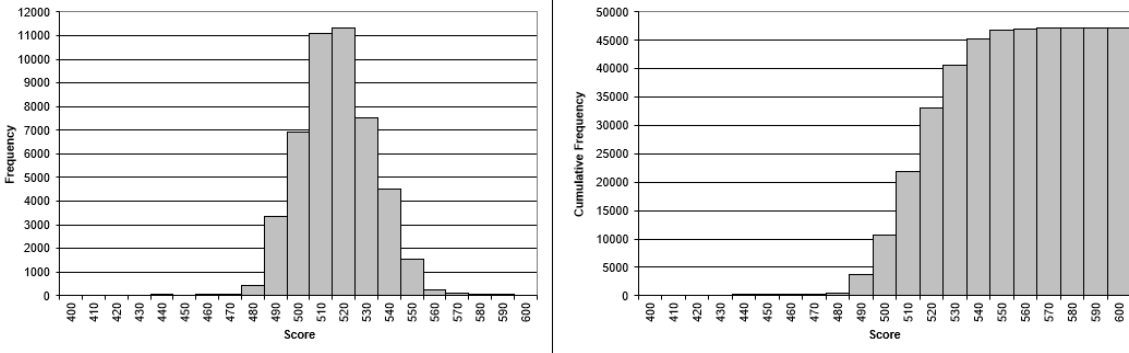
**Figure 16. Science Grade 7 Score Frequency and Cumulative Frequency Distributions**



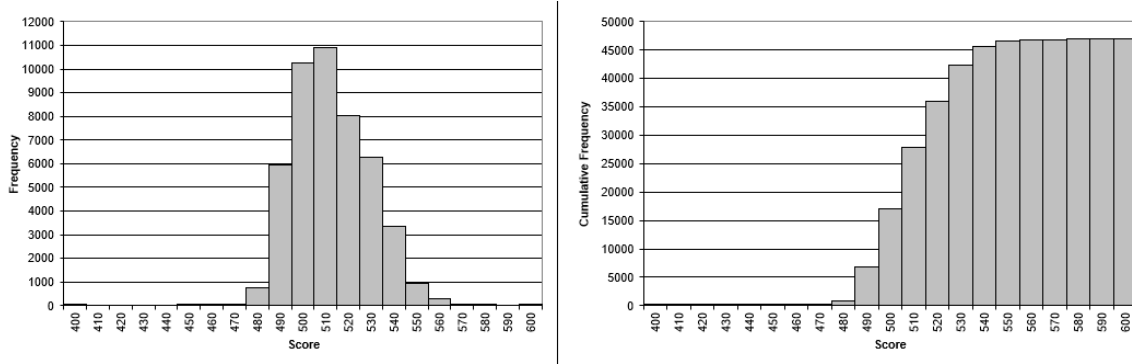
**Figure 17. Science Grade 11 Score Frequency and Cumulative Frequency Distributions**



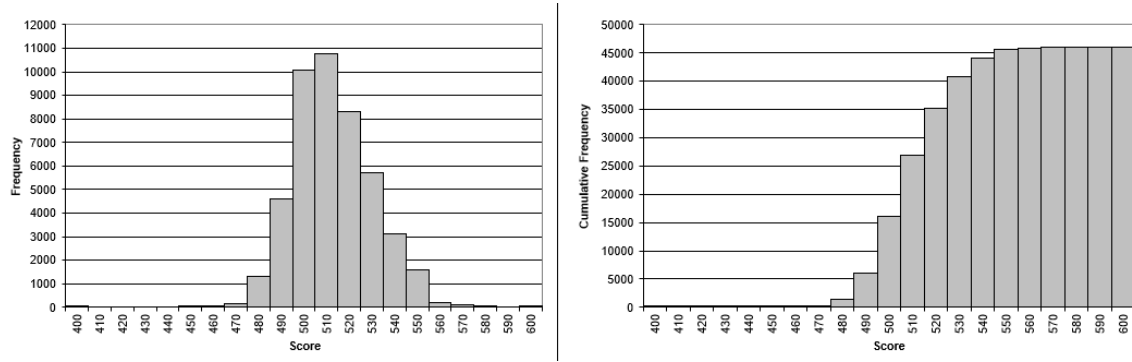
**Figure 18. Social Studies Grade 5 Score Frequency and Cumulative Frequency Distributions**



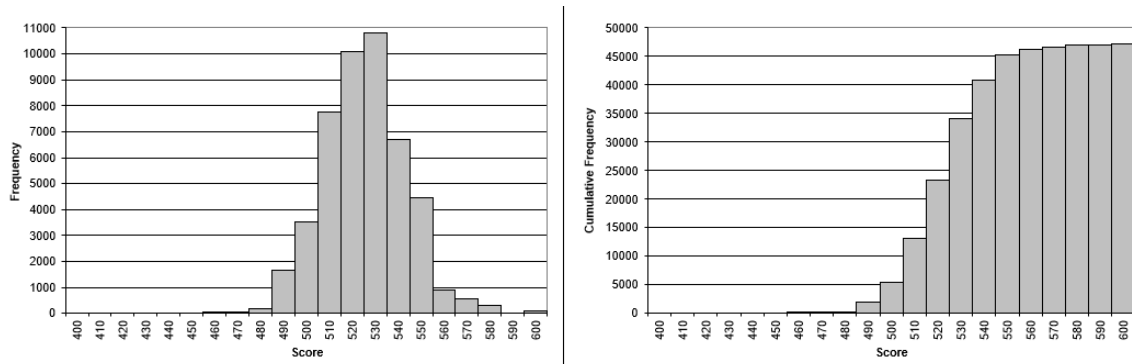
**Figure 19. Social Studies Grade 8 Score Frequency and Cumulative Frequency Distributions**



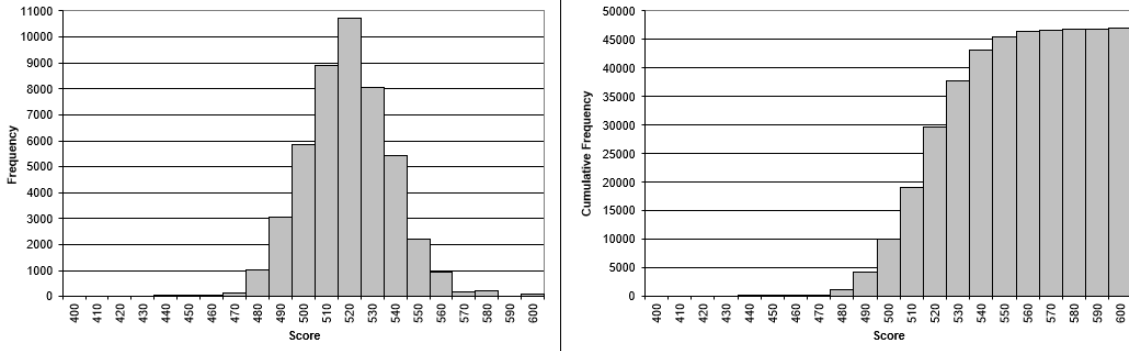
**Figure 20. Social Studies Grade 11 Score Frequency and Cumulative Frequency Distributions**



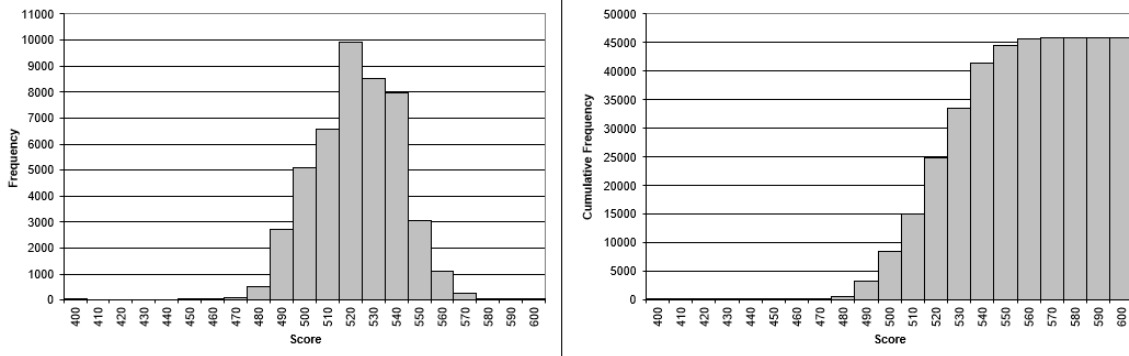
**Figure 21. Editing and Mechanics Grade 5 Score Frequency and Cumulative Frequency Distributions**



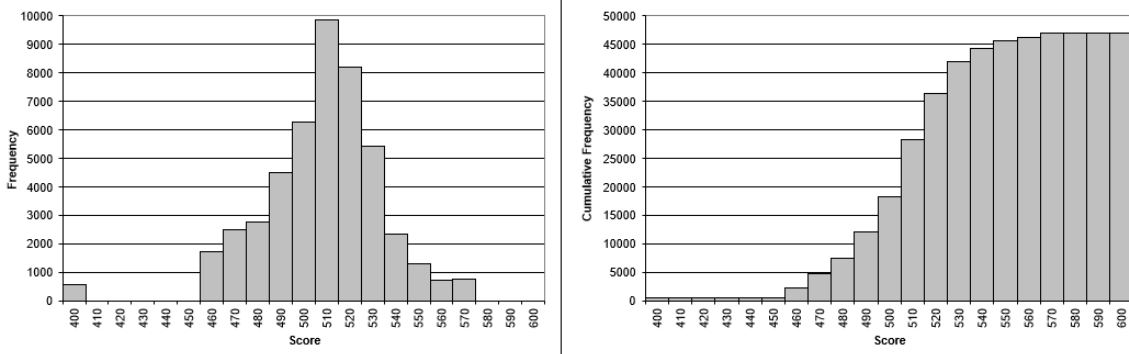
**Figure 22. Editing and Mechanics Grade 8 Score Frequency and Cumulative Frequency Distributions**



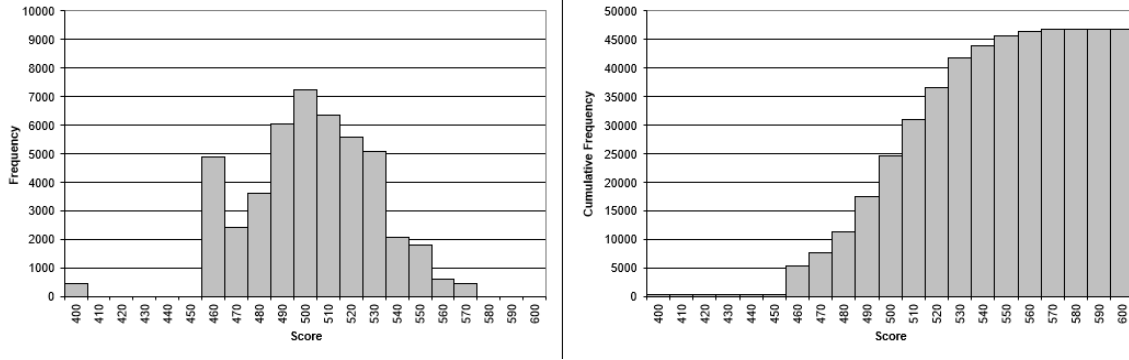
**Figure 23. Editing and Mechanics Grade 11 Score Frequency and Cumulative Frequency Distributions**



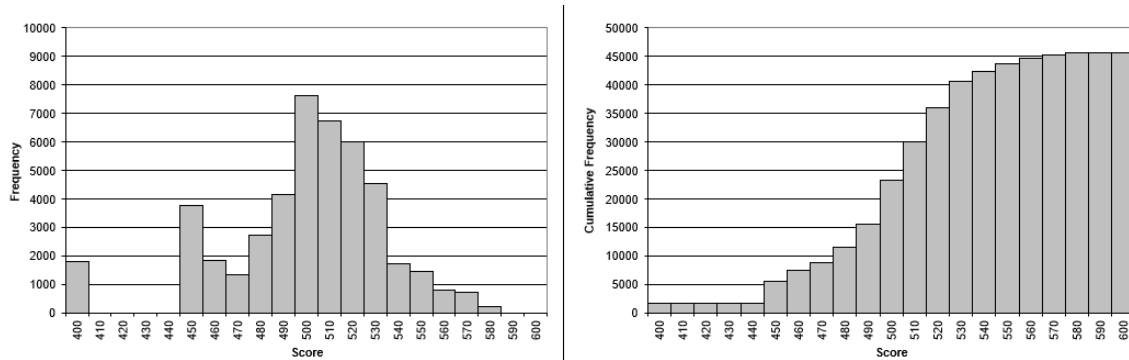
**Figure 24. On-Demand Writing Grade 5 Score Frequency and Cumulative Frequency Distributions**



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



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



## Appendix I. Scale Score Descriptive Statistics<sup>5</sup>

### Grade 3 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	45,966	511.97	16.5	500	512	523	596	0.33
Gender	Female	22,541	512.77	16.5	501	512	523	595	0.31
	Male	23,424	511.21	16.5	499	510	523	596	0.35
Ethnicity	Hispanic	4,294	507.36	15.1	496	506	517	573	0.42
	Asian	982	517.12	17.4	504	517	530	596	0.31
	Native Hawaiian/Pacific Islander	80	509.40	15.0	496	508	522	547	0.43
	Black/African American	4,867	504.19	14.7	493	503	514	573	0.53
	American Indian	54	511.83	18.0	499	514	523	552	0.15
	White	33,031	513.67	16.5	502	513	525	596	0.28
	Two or More Races	2,657	510.78	15.8	499	510	521	573	0.25
Migrant	Non-Migrant	45,722	512.01	16.5	500	512	523	596	0.32
	Migrant	244	505.11	14.2	494	503	515	547	0.58
LEP	Non-LEP	41,846	512.67	16.7	500	512	525	596	0.29
	LEP	4,120	504.88	13.2	495	504	513	560	0.34
Economic Disadvantage	Economically Disadvantaged	29,375	508.72	15.7	497	508	519	596	0.41
	Not Economically Disadvantaged	16,591	517.73	16.4	506	517	530	596	0.16
IEP	Non-IEP	37,440	513.25	16.3	501	513	525	596	0.27
	IEP	8,526	506.36	16.3	494	504	517	596	0.67

### Grade 4 Reading

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,662	515.50	16.3	503	516	527	600	0.08
Gender	Female	22,717	516.40	16.3	504	517	528	600	0.07
	Male	23,944	514.65	16.1	503	515	526	599	0.08
Ethnicity	Hispanic	4,334	510.24	15.2	499	509	520	565	0.31
	Asian	994	519.95	17.2	509	520	531	599	-0.31
	Native Hawaiian/Pacific Islander	96	513.11	16.5	501	513	524	553	0.06
	Black/African American	4,912	506.99	15.1	495	506	517	558	0.35
	American Indian	83	511.65	17.2	497	513	526	545	0.02
	White	33,590	517.42	16.0	506	518	529	600	0.02
	Two or More Races	2,651	514.14	15.6	503	513	525	564	0.12
Migrant	Non-Migrant	46,441	515.55	16.2	503	516	527	600	0.07
	Migrant	221	506.24	15.1	495	505	517	558	0.67
LEP	Non-LEP	42,656	516.36	16.2	505	517	528	600	0.04
	LEP	4,006	506.39	13.4	497	506	516	565	0.12
Economic Disadvantage	Economically Disadvantaged	29,635	512.19	15.6	500	511	523	600	0.17
	Not Economically Disadvantaged	17,027	521.26	15.8	511	522	532	600	-0.13
IEP	Non-IEP	38,494	517.01	15.9	506	518	528	600	0.01
	IEP	8,168	508.42	16.2	497	506	520	600	0.54

<sup>5</sup> 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	47,156	519.35	17.7	506	520	531	600	0.17
Gender	Female	23,008	520.42	17.4	508	520	533	600	0.13
	Male	24,148	518.33	17.8	504	518	531	600	0.21
Ethnicity	Hispanic	4,337	513.84	16.8	500	512	526	584	0.36
	Asian	1,049	526.11	18.7	512	527	539	589	-0.07
	Native Hawaiian/Pacific Islander	93	514.27	15.8	500	512	524	550	0.33
	Black/African American	5,037	510.00	16.0	498	508	520	571	0.54
	American Indian	64	514.50	15.7	502	517	527	548	-0.07
	White	33,983	521.38	17.4	508	522	534	600	0.11
	Two or More Races	2,593	517.76	17.1	504	518	529	575	0.21
Migrant	Non-Migrant	46,902	519.41	17.7	506	520	531	600	0.17
	Migrant	254	509.57	15.7	498	509	520	552	0.37
LEP	Non-LEP	44,239	520.31	17.5	508	520	533	600	0.14
	LEP	2,917	504.81	12.8	496	504	514	566	0.45
Economic Disadvantage	Economically Disadvantaged	29,562	515.54	16.8	502	514	528	600	0.25
	Not Economically Disadvantaged	17,594	525.75	17.3	514	527	538	600	0.01
IEP	Non-IEP	39,766	521.25	17.2	508	522	534	600	0.14
	IEP	7,390	509.14	16.6	496	506	520	589	0.59

**Grade 6 Reading**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,336	516.77	16.1	506	517	528	584	-0.13
Gender	Female	20,851	518.11	15.9	507	519	529	584	-0.11
	Male	22,485	515.53	16.2	504	517	527	584	-0.14
Ethnicity	Hispanic	3,917	511.33	16.1	500	511	523	571	-0.03
	Asian	997	522.86	16.9	513	523	536	571	-0.23
	Native Hawaiian/Pacific Islander	90	514.70	15.1	503	517	525	553	-0.03
	Black/African American	4,397	508.23	15.6	498	509	519	563	-0.11
	American Indian	48	517.27	11.9	508	517	526	548	0.16
	White	31,555	518.53	15.6	509	519	529	584	-0.14
	Two or More Races	2,332	515.63	15.7	505	515	526	571	0.01
Migrant	Non-Migrant	43,095	516.82	16.1	506	517	528	584	-0.13
	Migrant	241	508.11	15.3	496	507	519	553	0.22
LEP	Non-LEP	41,169	517.62	15.8	507	519	529	584	-0.15
	LEP	2,167	500.61	12.7	493	500	509	541	0.03
Economic Disadvantage	Economically Disadvantaged	26,671	513.22	15.5	502	513	523	584	-0.06
	Not Economically Disadvantaged	16,665	522.46	15.3	513	523	533	584	-0.29
IEP	Non-IEP	37,232	518.57	15.5	509	519	529	584	-0.18
	IEP	6,104	505.79	15.5	495	504	515	583	0.40

Appendix I. Scale Score Descriptive Statistics

**Grade 7 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	46,177	509.92	16.9	498	510	522	600	0.08
Gender	Female	22,448	511.93	16.6	500	512	524	595	0.05
	Male	23,729	508.01	16.8	494	508	520	600	0.13
Ethnicity	Hispanic	4,393	504.72	16.0	492	504	516	572	0.14
	Asian	953	516.96	17.5	505	518	529	572	-0.02
	Native Hawaiian/Pacific Islander	102	505.53	15.3	494	505	516	544	0.39
	Black/African American	5,008	501.01	15.5	490	500	512	560	0.20
	American Indian	56	508.84	17.4	498	507	520	560	0.51
	White	33,302	511.90	16.6	500	512	524	600	0.04
	Two or More Races	2,363	507.88	16.3	496	507	520	560	0.23
Migrant	Non-Migrant	45,944	509.97	16.8	498	510	522	600	0.08
	Migrant	233	499.89	16.5	487	498	512	572	0.64
LEP	Non-LEP	43,689	510.80	16.7	498	511	522	600	0.06
	LEP	2,488	494.30	12.0	486	494	502	533	0.11
Economic Disadvantage	Economically Disadvantaged	28,177	506.20	16.0	494	506	518	595	0.16
	Not Economically Disadvantaged	18,000	515.73	16.5	504	516	526	600	-0.09
IEP	Non-IEP	40,238	511.71	16.4	500	512	524	600	0.04
	IEP	5,939	497.77	14.7	487	496	507	568	0.52

**Grade 8 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	46,995	510.82	16.7	498	510	523	585	0.13
Gender	Female	22,575	512.54	16.3	500	512	523	585	0.10
	Male	24,420	509.22	16.9	496	508	521	585	0.16
Ethnicity	Hispanic	4,421	505.52	15.9	494	504	516	562	0.31
	Asian	924	517.86	17.2	506	518	531	571	-0.18
	Native Hawaiian/Pacific Islander	91	508.22	15.4	498	508	521	538	0.16
	Black/African American	5,079	501.97	14.8	491	500	512	555	0.33
	American Indian	66	508.80	15.9	498	508	519	550	0.26
	White	34,017	512.72	16.5	500	513	525	585	0.07
	Two or More Races	2,397	509.81	16.3	498	510	521	571	0.16
Migrant	Non-Migrant	46,754	510.87	16.7	498	510	523	585	0.12
	Migrant	241	501.23	14.9	489	501	512	546	0.27
LEP	Non-LEP	44,636	511.64	16.5	499	512	523	585	0.10
	LEP	2,359	495.27	11.3	487	494	502	542	0.26
Economic Disadvantage	Economically Disadvantaged	28,405	506.98	15.8	496	506	518	585	0.23
	Not Economically Disadvantaged	18,590	516.68	16.4	506	517	528	585	-0.08
IEP	Non-IEP	41,224	512.56	16.3	500	512	523	585	0.08
	IEP	5,771	498.37	14.2	489	496	506	562	0.60



Appendix I. Scale Score Descriptive Statistics

**Grade 10 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	49,449	512.10	15.8	500	511	523	600	0.35
Gender	Female	24,246	514.36	15.5	502	513	525	600	0.26
	Male	25,202	509.93	15.7	498	508	520	579	0.47
Ethnicity	Hispanic	4,867	507.74	14.8	496	506	518	560	0.47
	Asian	920	520.35	17.6	506	520	535	579	-0.04
	Native Hawaiian/Pacific Islander	95	510.76	14.9	498	511	522	547	0.37
	Black/African American	5,489	504.70	13.6	496	502	513	567	0.49
	American Indian	62	508.23	14.0	496	508	518	543	0.49
	White	35,786	513.69	15.7	502	513	524	600	0.30
	Two or More Races	2,227	511.17	15.7	500	510	522	570	0.47
Migrant	Non-Migrant	49,208	512.16	15.8	500	511	523	600	0.35
	Migrant	241	501.48	12.9	493	500	508	540	0.47
LEP	Non-LEP	47,043	512.86	15.6	500	511	523	600	0.33
	LEP	2,406	497.30	9.4	491	498	502	540	0.10
Economic Disadvantage	Economically Disadvantaged	28,701	508.59	14.5	498	506	518	582	0.44
	Not Economically Disadvantaged	20,748	516.96	16.1	504	517	528	600	0.16
IEP	Non-IEP	44,190	513.45	15.7	502	513	524	600	0.28
	IEP	5,259	500.78	11.1	493	500	506	553	0.84

**Grade 3 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	45,992	518.66	19.9	505	517	531	600	0.68
Gender	Female	22,558	517.14	19.0	503	515	529	600	0.63
	Male	23,433	520.12	20.7	505	518	532	600	0.70
Ethnicity	Hispanic	4,326	512.41	18.1	500	511	523	599	0.42
	Asian	986	529.08	23.4	513	528	543	600	0.45
	Native Hawaiian/Pacific Islander	79	515.00	17.0	500	513	528	563	0.47
	Black/African American	4,863	508.41	16.7	497	506	518	599	0.76
	American Indian	54	517.91	21.0	503	515	529	574	0.73
	White	33,027	520.83	19.9	507	519	532	600	0.69
	Two or More Races	2,656	516.84	18.7	503	515	528	600	0.72
Migrant	Non-Migrant	45,735	518.71	19.9	505	517	531	600	0.69
	Migrant	257	509.34	20.6	497	509	520	598	0.30
LEP	Non-LEP	41,835	519.48	20.0	505	518	532	600	0.70
	LEP	4,157	510.39	17.3	499	509	521	600	0.33
Economic Disadvantage	Economically Disadvantaged	29,384	514.31	18.1	501	513	525	600	0.69
	Not Economically Disadvantaged	16,608	526.35	20.7	512	525	539	600	0.58
IEP	Non-IEP	37,471	520.54	19.6	507	519	532	600	0.68
	IEP	8,521	510.39	19.5	497	507	521	600	0.98

Appendix I. Scale Score Descriptive Statistics

**Grade 4 Mathematics**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,677	518.35	20.7	503	517	532	600	0.41
Gender	Female	22,728	516.71	20.1	503	515	530	600	0.46
	Male	23,948	519.91	21.1	505	519	533	600	0.35
Ethnicity	Hispanic	4,357	511.96	19.7	499	510	524	600	0.29
	Asian	996	530.24	24.9	513	530	546	600	0.28
	Native Hawaiian/Pacific Islander	96	516.70	19.2	505	514	528	600	1.05
	Black/African American	4,910	506.64	18.0	494	505	517	600	0.66
	American Indian	83	516.02	22.5	499	514	535	581	0.32
	White	33,585	520.75	20.3	506	519	534	600	0.38
	Two or More Races	2,648	515.80	19.6	503	514	527	600	0.48
Migrant	Non-Migrant	46,451	518.40	20.7	503	517	532	600	0.41
	Migrant	226	507.37	22.2	495	507	519	600	-0.09
LEP	Non-LEP	42,647	519.29	20.7	505	518	533	600	0.42
	LEP	4,030	508.39	18.2	496	507	519	600	0.12
Economic Disadvantage	Economically Disadvantaged	29,637	513.87	19.2	500	513	526	600	0.45
	Not Economically Disadvantaged	17,040	526.14	20.9	512	526	540	600	0.26
IEP	Non-IEP	38,510	520.45	20.2	506	519	533	600	0.41
	IEP	8,167	508.44	19.9	494	505	521	600	0.67

**Grade 5 Mathematics**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	47,195	512.61	20.5	497	510	526	600	0.61
Gender	Female	23,028	511.62	19.6	497	510	524	600	0.65
	Male	24,167	513.55	21.3	497	512	527	600	0.56
Ethnicity	Hispanic	4,373	506.26	18.6	493	504	518	593	0.28
	Asian	1,054	525.58	24.5	508	524	542	600	0.41
	Native Hawaiian/Pacific Islander	92	508.74	16.4	497	506	518	548	0.57
	Black/African American	5,039	501.10	16.7	490	499	510	600	0.91
	American Indian	64	504.11	16.5	492	503	512	552	0.72
	White	33,979	514.94	20.3	501	514	528	600	0.59
	Two or More Races	2,594	510.28	19.6	496	508	522	593	0.65
Migrant	Non-Migrant	46,927	512.68	20.4	497	510	526	600	0.63
	Migrant	268	500.54	21.2	490	501	514	558	-1.16
LEP	Non-LEP	44,236	513.57	20.4	499	512	526	600	0.61
	LEP	2,959	498.24	15.2	488	497	507	578	0.11
Economic Disadvantage	Economically Disadvantaged	29,577	507.85	18.4	494	506	520	600	0.64
	Not Economically Disadvantaged	17,618	520.60	21.2	505	520	533	600	0.45
IEP	Non-IEP	39,810	514.65	20.2	501	513	527	600	0.59
	IEP	7,385	501.60	18.3	488	499	512	594	0.99

Appendix I. Scale Score Descriptive Statistics

**Grade 6 Mathematics**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	43,350	504.58	16.8	492	503	514	597	0.66
Gender	Female	20,858	503.97	16.2	492	501	514	597	0.65
	Male	22,492	505.15	17.3	492	503	516	597	0.65
Ethnicity	Hispanic	3,940	499.05	15.7	489	497	509	574	0.24
	Asian	999	515.57	22.6	499	513	530	597	0.64
	Native Hawaiian/Pacific Islander	90	502.06	18.0	489	501	511	545	0.57
	Black/African American	4,395	495.27	13.0	487	494	501	574	0.65
	American Indian	48	503.23	15.3	495	504	512	538	-0.20
	White	31,547	506.36	16.6	495	505	516	597	0.64
	Two or More Races	2,331	502.76	15.9	492	501	512	597	0.74
Migrant	Non-Migrant	43,103	504.63	16.8	492	503	514	597	0.66
	Migrant	247	496.62	14.4	487	497	505	549	0.26
LEP	Non-LEP	41,160	505.32	16.7	494	503	516	597	0.70
	LEP	2,190	490.61	12.6	484	489	497	545	-0.42
Economic Disadvantage	Economically Disadvantaged	26,678	500.49	14.9	490	499	509	597	0.64
	Not Economically Disadvantaged	16,672	511.12	17.6	499	510	522	597	0.52
IEP	Non-IEP	37,254	506.12	16.6	495	505	516	597	0.65
	IEP	6,096	495.19	14.7	486	492	501	574	1.03

**Grade 7 Mathematics**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,177	503.53	14.5	494	501	511	600	0.84
Gender	Female	22,444	503.23	14.1	494	501	511	600	0.85
	Male	23,733	503.81	14.9	494	502	512	600	0.83
Ethnicity	Hispanic	4,408	499.31	12.7	491	497	506	577	0.17
	Asian	956	513.14	20.5	499	511	525	600	0.41
	Native Hawaiian/Pacific Islander	102	499.16	12.8	492	497	504	559	1.61
	Black/African American	4,997	496.24	11.1	490	495	502	579	0.30
	American Indian	56	502.27	15.1	491	501	509	548	1.05
	White	33,293	505.05	14.5	495	502	513	600	0.86
	Two or More Races	2,365	501.73	13.6	493	500	509	579	1.17
Migrant	Non-Migrant	45,935	503.58	14.5	494	501	511	600	0.88
	Migrant	242	493.96	16.6	488	495	500	544	-2.79
LEP	Non-LEP	43,673	504.10	14.5	494	502	512	600	0.90
	LEP	2,504	493.59	10.8	488	494	499	566	-1.69
Economic Disadvantage	Economically Disadvantaged	28,173	500.09	12.5	492	498	506	579	0.69
	Not Economically Disadvantaged	18,004	508.91	15.8	498	507	518	600	0.74
IEP	Non-IEP	40,242	504.57	14.6	495	502	512	600	0.82
	IEP	5,935	496.49	11.5	490	495	501	579	0.88

Appendix I. Scale Score Descriptive Statistics

**Grade 8 Mathematics**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,997	502.57	16.0	492	500	511	599	1.00
Gender	Female	22,575	502.46	15.5	492	500	511	599	0.95
	Male	24,422	502.67	16.5	492	499	512	599	1.03
Ethnicity	Hispanic	4,437	498.00	14.2	489	496	505	575	0.69
	Asian	926	515.99	23.0	499	513	529	599	0.82
	Native Hawaiian/Pacific Islander	91	500.81	14.7	489	499	509	538	0.83
	Black/African American	5,084	494.67	11.4	488	493	500	575	0.82
	American Indian	66	502.26	13.2	493	499	508	556	1.57
	White	33,998	504.07	16.1	493	501	513	599	0.92
	Two or More Races	2,395	501.27	14.9	491	499	509	575	0.99
Migrant	Non-Migrant	46,752	502.61	16.1	492	500	511	599	1.00
	Migrant	245	494.54	11.9	488	494	501	536	0.31
LEP	Non-LEP	44,619	503.11	16.1	492	500	512	599	1.00
	LEP	2,378	492.37	10.4	487	492	497	563	-0.45
Economic Disadvantage	Economically Disadvantaged	28,396	498.85	13.8	489	496	506	599	1.04
	Not Economically Disadvantaged	18,601	508.24	17.5	496	506	519	599	0.77
IEP	Non-IEP	41,226	503.72	16.2	492	501	513	599	0.95
	IEP	5,771	494.33	11.5	488	493	499	598	1.14

**Grade 10 Mathematics**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	49,430	501.14	15.5	490	498	509	600	0.96
Gender	Female	24,228	501.21	14.8	490	499	509	600	0.89
	Male	25,201	501.07	16.2	490	497	509	600	1.01
Ethnicity	Hispanic	4,883	496.61	13.7	488	495	503	600	0.71
	Asian	921	514.45	22.8	497	511	528	600	0.76
	Native Hawaiian/Pacific Islander	95	499.83	16.3	488	495	510	553	1.01
	Black/African American	5,483	493.82	11.4	487	493	499	576	0.82
	American Indian	62	498.37	11.9	490	497	504	527	0.55
	White	35,761	502.66	15.6	492	500	511	600	0.88
	Two or More Races	2,222	499.41	14.2	490	497	506	566	1.08
Migrant	Non-Migrant	49,182	501.19	15.5	490	498	509	600	0.97
	Migrant	248	492.05	13.1	487	493	497	541	-1.66
LEP	Non-LEP	46,988	501.75	15.6	490	499	510	600	0.97
	LEP	2,442	489.48	9.4	484	490	495	548	-0.84
Economic Disadvantage	Economically Disadvantaged	28,685	497.32	13.1	489	495	504	600	0.99
	Not Economically Disadvantaged	20,745	506.43	17.0	494	504	517	600	0.72
IEP	Non-IEP	44,180	502.28	15.6	492	499	511	600	0.92
	IEP	5,250	491.52	10.9	485	490	495	577	1.42

Appendix I. Scale Score Descriptive Statistics

**Grade 4 Science**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	46,667	509.45	13.3	500	510	519	569	0.11
Gender	Female	22,722	508.97	13.0	500	508	517	569	0.06
	Male	23,944	509.91	13.6	500	510	519	569	0.14
Ethnicity	Hispanic	4,354	505.37	13.1	497	505	513	555	-0.44
	Asian	996	513.40	14.0	503	513	523	561	0.00
	Native Hawaiian/Pacific Islander	96	505.66	11.8	498	504	514	530	0.10
	Black/African American	4,909	502.15	11.3	495	500	510	543	0.25
	American Indian	83	507.33	13.5	495	507	519	536	-0.02
	White	33,580	511.06	13.1	503	510	519	569	0.13
	Two or More Races	2,647	508.06	12.6	500	507	516	549	0.13
Migrant	Non-Migrant	46,442	509.49	13.3	500	510	519	569	0.11
	Migrant	225	501.95	13.3	495	500	510	542	-0.75
LEP	Non-LEP	42,638	510.09	13.3	500	510	519	569	0.16
	LEP	4,029	502.73	11.8	495	503	510	549	-0.85
Economic Disadvantage	Economically Disadvantaged	29,629	507.02	12.7	498	505	515	563	0.24
	Not Economically Disadvantaged	17,038	513.68	13.2	505	514	523	569	-0.16
IEP	Non-IEP	38,506	510.17	13.0	500	510	519	569	0.03
	IEP	8,161	506.06	14.1	497	505	515	563	0.51

**Grade 7 Science**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	46,158	499.26	13.7	489	497	508	577	0.27
Gender	Female	22,432	498.46	13.2	489	497	507	577	0.29
	Male	23,726	500.02	14.0	489	499	509	558	0.25
Ethnicity	Hispanic	4,407	495.07	12.4	486	494	502	538	0.15
	Asian	956	505.17	15.0	495	505	516	548	-0.01
	Native Hawaiian/Pacific Islander	102	496.23	11.7	486	495	505	531	0.68
	Black/African American	4,990	492.26	11.5	486	491	497	548	-0.05
	American Indian	56	497.07	14.2	489	495	505	536	0.29
	White	33,284	500.82	13.6	491	500	510	577	0.26
	Two or More Races	2,363	497.72	13.1	489	497	506	548	0.47
Migrant	Non-Migrant	45,916	499.30	13.7	489	497	508	577	0.27
	Migrant	242	491.75	12.2	486	492	497	529	-0.14
LEP	Non-LEP	43,656	499.84	13.6	489	499	509	577	0.27
	LEP	2,502	489.10	10.0	483	489	495	529	-0.65
Economic Disadvantage	Economically Disadvantaged	28,154	496.18	12.5	489	495	504	552	0.31
	Not Economically Disadvantaged	18,004	504.09	14.0	494	504	515	577	0.07
IEP	Non-IEP	40,218	500.30	13.6	491	499	509	577	0.24
	IEP	5,940	492.26	11.5	486	491	497	544	0.33

Appendix I. Scale Score Descriptive Statistics

**Grade 11 Science**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	46,066	493.30	12.7	485	493	503	555	-0.10
Gender	Female	22,709	494.15	12.1	485	495	503	549	-0.12
	Male	23,353	492.47	13.3	482	492	502	555	-0.04
Ethnicity	Hispanic	4,219	489.67	12.6	482	490	498	539	-0.15
	Asian	904	499.15	14.0	490	499	510	555	-0.29
	Native Hawaiian/Pacific Islander	72	491.17	13.5	482	489	499	526	0.34
	Black/African American	4,933	486.61	11.4	479	487	495	526	0.06
	American Indian	73	490.52	12.8	482	490	498	518	-0.32
	White	33,824	494.67	12.5	487	495	504	549	-0.11
	Two or More Races	2,036	492.01	12.8	485	492	500	531	-0.42
Migrant	Non-Migrant	45,881	493.34	12.7	485	493	503	555	-0.10
	Migrant	185	484.51	13.0	475	482	495	520	0.31
LEP	Non-LEP	44,182	493.84	12.6	485	495	503	555	-0.09
	LEP	1,884	480.73	10.2	475	482	487	515	-0.54
Economic Disadvantage	Economically Disadvantaged	25,052	490.47	12.2	482	490	499	539	-0.06
	Not Economically Disadvantaged	21,014	496.69	12.5	488	497	505	555	-0.20
IEP	Non-IEP	41,710	494.26	12.5	485	495	503	555	-0.12
	IEP	4,356	484.11	11.5	476	485	490	531	0.11

**Grade 5 Social Studies**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	47,133	512.22	15.7	501	511	523	586	0.23
Gender	Female	22,999	512.12	15.1	501	511	522	586	0.25
	Male	24,134	512.33	16.3	501	511	523	586	0.21
Ethnicity	Hispanic	4,336	507.95	14.6	497	507	518	586	0.34
	Asian	1,049	519.26	16.7	507	519	531	586	0.15
	Native Hawaiian/Pacific Islander	92	510.36	12.0	503	510	520	541	0.18
	Black/African American	5,037	503.79	13.8	494	503	513	562	0.43
	American Indian	64	508.14	14.8	498	510	519	540	-0.22
	White	33,963	513.96	15.6	503	513	524	586	0.17
	Two or More Races	2,592	510.33	15.2	499	509	521	571	0.24
Migrant	Non-Migrant	46,879	512.26	15.7	501	511	523	586	0.23
	Migrant	254	505.23	12.8	496	505	513	538	0.25
LEP	Non-LEP	44,217	512.94	15.7	501	513	523	586	0.20
	LEP	2,916	501.32	11.6	494	501	509	545	0.32
Economic Disadvantage	Economically Disadvantaged	29,539	508.92	14.9	498	509	519	586	0.29
	Not Economically Disadvantaged	17,594	517.78	15.6	507	518	528	586	0.08
IEP	Non-IEP	39,755	513.59	15.4	503	513	524	586	0.21
	IEP	7,378	504.84	15.6	494	503	515	562	0.58

Appendix I. Scale Score Descriptive Statistics

**Grade 8 Social Studies**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,948	508.10	16.5	495	506	520	598	0.47
Gender	Female	22,542	508.98	16.3	497	507	520	598	0.44
	Male	24,406	507.28	16.6	495	505	519	598	0.50
Ethnicity	Hispanic	4,423	503.77	15.0	493	501	514	562	0.52
	Asian	924	518.49	18.0	506	519	531	596	0.12
	Native Hawaiian/Pacific Islander	91	506.63	15.2	493	506	519	539	0.29
	Black/African American	5,066	500.11	13.9	490	497	508	573	0.61
	American Indian	66	505.08	14.8	493	505	515	544	0.47
	White	33,988	509.65	16.5	497	508	521	598	0.43
	Two or More Races	2,390	507.03	16.2	495	505	518	573	0.37
Migrant	Non-Migrant	46,707	508.14	16.5	495	506	520	598	0.47
	Migrant	241	500.01	13.3	490	497	508	549	0.51
LEP	Non-LEP	44,588	508.77	16.5	495	507	520	598	0.44
	LEP	2,360	495.44	10.4	488	495	501	537	0.43
Economic Disadvantage	Economically Disadvantaged	28,367	504.29	15.0	493	503	514	574	0.54
	Not Economically Disadvantaged	18,581	513.91	16.9	501	513	525	598	0.28
IEP	Non-IEP	41,186	509.57	16.4	497	508	521	598	0.41
	IEP	5,762	497.56	13.2	489	495	503	562	0.99

**Grade 11 Social Studies**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,009	508.47	17.1	495	507	520	598	0.37
Gender	Female	22,693	509.56	16.2	497	509	520	598	0.38
	Male	23,312	507.41	17.9	493	505	520	598	0.39
Ethnicity	Hispanic	4,207	503.99	15.7	493	501	514	562	0.47
	Asian	900	517.96	18.1	503	518	532	598	0.19
	Native Hawaiian/Pacific Islander	72	505.28	17.2	494	501	516	555	0.82
	Black/African American	4,928	499.55	14.4	491	497	508	562	0.42
	American Indian	73	507.78	18.4	495	503	520	555	0.86
	White	33,788	510.19	17.1	497	509	522	598	0.32
	Two or More Races	2,035	506.82	16.2	495	505	518	574	0.44
Migrant	Non-Migrant	45,826	508.51	17.1	495	507	520	598	0.37
	Migrant	183	498.69	14.9	488	495	508	541	0.59
LEP	Non-LEP	44,134	509.12	17.0	497	508	520	598	0.35
	LEP	1,875	493.14	10.3	486	493	499	532	-0.45
Economic Disadvantage	Economically Disadvantaged	25,004	504.46	15.6	493	503	514	574	0.45
	Not Economically Disadvantaged	21,005	513.24	17.5	501	512	524	598	0.20
IEP	Non-IEP	41,661	509.78	16.9	497	509	522	598	0.33
	IEP	4,348	495.96	13.4	486	493	503	562	0.94

Appendix I. Scale Score Descriptive Statistics

**Grade 5 Editing and Mechanics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	47,127	521.00	17.3	509	521	531	598	0.26
Gender	Female	23,000	523.07	17.1	512	523	534	598	0.25
	Male	24,127	519.02	17.3	507	519	530	598	0.29
Ethnicity	Hispanic	4,335	514.59	16.4	503	514	525	598	0.34
	Asian	1,048	527.33	18.6	515	527	538	598	0.33
	Native Hawaiian/Pacific Islander	92	517.98	14.3	510	519	529	554	-0.16
	Black/African American	5,034	511.86	15.5	501	512	521	596	0.30
	American Indian	64	518.83	16.4	508	521	529	574	0.30
	White	33,962	523.09	17.0	512	523	534	598	0.24
	Two or More Races	2,592	519.64	17.0	509	520	530	598	0.36
Migrant	Non-Migrant	46,873	521.05	17.3	509	521	533	598	0.26
	Migrant	254	511.61	14.4	502	510	521	554	0.28
LEP	Non-LEP	44,211	521.95	17.1	510	521	533	598	0.26
	LEP	2,916	506.50	13.6	498	506	515	561	0.18
Economic Disadvantage	Economically Disadvantaged	29,535	517.44	16.5	506	518	529	598	0.23
	Not Economically Disadvantaged	17,592	526.96	17.0	516	526	537	598	0.29
IEP	Non-IEP	39,752	522.99	16.6	512	523	534	598	0.32
	IEP	7,375	510.26	17.3	498	509	521	598	0.53

**Grade 8 Editing and Mechanics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>	<b>Max.</b>	<b>Skew</b>
All	Students Tested	46,919	515.23	18.5	502	515	527	600	0.29
Gender	Female	22,534	517.98	18.0	506	517	530	600	0.31
	Male	24,385	512.69	18.5	500	513	524	600	0.31
Ethnicity	Hispanic	4,415	508.98	17.5	497	509	520	600	0.30
	Asian	924	524.32	20.9	511	524	537	600	0.27
	Native Hawaiian/Pacific Islander	91	513.37	16.9	502	514	524	556	0.04
	Black/African American	5,056	506.16	16.6	495	506	517	600	0.29
	American Indian	66	511.06	17.4	502	513	524	544	-0.31
	White	33,978	517.19	18.2	506	517	528	600	0.28
	Two or More Races	2,389	514.82	18.2	502	515	525	600	0.34
Migrant	Non-Migrant	46,678	515.29	18.5	502	515	527	600	0.29
	Migrant	241	504.07	15.6	492	504	515	550	0.06
LEP	Non-LEP	44,563	516.13	18.3	504	516	528	600	0.29
	LEP	2,356	498.16	13.6	489	497	507	560	0.15
Economic Disadvantage	Economically Disadvantaged	28,345	511.05	17.3	499	511	522	600	0.25
	Not Economically Disadvantaged	18,574	521.61	18.4	510	522	533	600	0.28
IEP	Non-IEP	41,165	517.28	17.8	506	517	528	600	0.33
	IEP	5,754	500.56	16.6	489	499	511	579	0.61



Appendix I. Scale Score Descriptive Statistics

**Grade 11 Editing and Mechanics**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	45,921	517.91	18.1	505	518	531	600	-0.10
Gender	Female	22,659	520.85	17.2	509	521	533	600	-0.09
	Male	23,258	515.03	18.4	502	516	528	589	-0.06
Ethnicity	Hispanic	4,183	511.78	16.9	500	512	523	567	0.09
	Asian	898	525.22	18.6	512	526	539	576	-0.06
	Native Hawaiian/Pacific Islander	72	514.21	17.8	501	513	526	556	0.16
	Black/African American	4,903	508.24	16.1	497	508	518	567	0.12
	American Indian	73	516.55	17.4	505	514	528	548	-0.15
	White	33,756	519.96	17.8	508	521	533	600	-0.19
	Two or More Races	2,031	516.56	17.4	505	517	528	573	-0.18
Migrant	Non-Migrant	45,740	517.96	18.0	505	518	531	600	-0.10
	Migrant	181	504.10	16.6	494	503	516	548	0.09
LEP	Non-LEP	44,071	518.72	17.8	507	520	531	600	-0.13
	LEP	1,850	498.47	11.8	490	497	507	542	-0.05
Economic Disadvantage	Economically Disadvantaged	24,941	513.72	17.2	502	513	525	587	-0.02
	Not Economically Disadvantaged	20,980	522.88	17.8	512	523	536	600	-0.28
IEP	Non-IEP	41,585	519.47	17.6	508	520	531	600	-0.15
	IEP	4,336	502.89	15.1	494	500	512	565	0.43

**Grade 5 On-Demand Writing**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	47,099	503.33	25.9	490	506	519	569	-0.68
Gender	Female	22,995	507.62	24.5	494	509	522	569	-0.55
	Male	24,104	499.23	26.5	485	502	515	569	-0.75
Ethnicity	Hispanic	4,327	497.15	26.6	481	501	514	569	-0.74
	Asian	1,046	513.61	25.7	501	515	527	569	-0.74
	Native Hawaiian/Pacific Islander	92	506.73	20.0	494	507	519	569	0.30
	Black/African American	5,027	490.89	25.8	475	494	507	569	-0.64
	American Indian	64	497.16	32.3	482	499	517	554	-1.05
	White	33,952	505.78	25.0	494	508	522	569	-0.69
	Two or More Races	2,591	501.44	26.1	488	504	517	569	-0.73
Migrant	Non-Migrant	46,846	503.38	25.9	490	506	519	569	-0.68
	Migrant	253	493.06	26.6	478	495	510	568	-0.75
LEP	Non-LEP	44,193	504.46	25.4	492	507	519	569	-0.65
	LEP	2,906	486.11	26.9	471	488	504	568	-0.96
Economic Disadvantage	Economically Disadvantaged	29,513	498.60	26.0	484	501	515	569	-0.71
	Not Economically Disadvantaged	17,586	511.25	23.6	499	512	523	569	-0.61
IEP	Non-IEP	39,734	507.06	23.6	494	508	522	569	-0.58
	IEP	7,365	483.19	28.2	463	484	502	569	-0.52

Appendix I. Scale Score Descriptive Statistics

**Grade 8 On-Demand Writing**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	46,816	498.53	27.4	481	498	517	569	-0.25
Gender	Female	22,505	504.10	26.3	487	506	521	569	-0.24
	Male	24,311	493.36	27.4	474	493	512	569	-0.24
Ethnicity	Hispanic	4,404	490.42	27.7	468	492	509	569	-0.27
	Asian	924	511.61	26.5	495	513	530	569	-0.40
	Native Hawaiian/Pacific Islander	91	499.22	24.6	481	499	518	562	0.12
	Black/African American	5,039	483.27	25.3	463	483	499	567	-0.14
	American Indian	65	491.51	24.6	474	493	508	539	-0.75
	White	33,911	501.65	26.7	485	502	519	569	-0.28
	Two or More Races	2,382	496.40	26.6	479	497	514	569	-0.25
Migrant	Non-Migrant	46,575	498.59	27.4	481	498	517	569	-0.25
	Migrant	241	485.77	27.1	463	490	504	550	-0.58
LEP	Non-LEP	44,470	499.72	27.0	483	500	518	569	-0.25
	LEP	2,346	475.89	24.6	460	476	492	567	-0.44
Economic Disadvantage	Economically Disadvantaged	28,263	492.43	26.7	474	493	510	569	-0.20
	Not Economically Disadvantaged	18,553	507.81	25.7	493	509	524	569	-0.37
IEP	Non-IEP	41,088	501.74	26.3	486	502	519	569	-0.28
	IEP	5,728	475.48	23.7	460	473	490	569	-0.21

**Grade 11 On-Demand Writing**

Category	Group	N	Mean	SD	P25	Median	P75	Max.	Skew
All	Students Tested	45,585	495.82	34.0	480	500	518	573	-0.71
Gender	Female	22,555	502.81	30.7	489	506	521	573	-0.74
	Male	23,027	488.96	35.7	468	495	511	573	-0.61
Ethnicity	Hispanic	4,139	487.57	34.5	465	495	511	573	-0.61
	Asian	895	508.78	30.7	495	510	525	573	-0.67
	Native Hawaiian/Pacific Islander	72	487.75	41.1	472	495	513	563	-0.73
	Black/African American	4,818	479.83	33.5	457	486	502	573	-0.52
	American Indian	73	493.81	27.4	478	495	511	565	-0.13
	White	33,573	498.96	33.2	485	503	519	573	-0.78
	Two or More Races	2,011	493.22	34.2	475	498	515	573	-0.70
Migrant	Non-Migrant	45,407	495.91	34.0	480	500	518	573	-0.71
	Migrant	178	471.80	39.2	443	473	504	565	-0.10
LEP	Non-LEP	43,766	497.17	33.5	482	501	518	573	-0.74
	LEP	1,819	463.22	31.1	443	463	488	566	-0.41
Economic Disadvantage	Economically Disadvantaged	24,707	489.09	33.8	471	495	511	573	-0.64
	Not Economically Disadvantaged	20,878	503.78	32.5	492	507	522	573	-0.87
IEP	Non-IEP	41,292	498.99	32.7	485	503	519	573	-0.81
	IEP	4,293	465.27	31.2	443	464	489	573	-0.20

## Appendix J. Performance Level Rates

### Grade 3 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	45,966	24.8%	28.3%	28.8%	18.1%
Gender	Female	22,541	22.9%	28.0%	29.9%	19.1%
	Male	23,424	26.6%	28.5%	27.7%	17.1%
Ethnicity	Hispanic	4,294	33.4%	31.7%	24.8%	10.0%
	Asian	982	17.0%	24.1%	29.8%	29.0%
	Native Hawaiian/Pacific Islander	80	30.0%	32.5%	22.5%	15.0%
	Black/African American	4,867	42.5%	30.5%	19.7%	7.3%
	American Indian	54	27.8%	20.4%	33.3%	18.5%
	White	33,031	21.1%	27.6%	30.7%	20.6%
	Two or More Races	2,657	26.5%	29.4%	28.5%	15.7%
Migrant	Non-Migrant	45,722	24.7%	28.3%	28.9%	18.2%
	Migrant	244	40.2%	32.0%	19.7%	8.2%
LEP	Non-LEP	41,846	23.5%	27.6%	29.5%	19.3%
	LEP	4,120	37.5%	35.3%	21.5%	5.6%
Economic Disadvantage	Economically Disadvantaged	29,375	30.9%	30.5%	26.2%	12.4%
	Not Economically Disadvantaged	16,591	14.0%	24.3%	33.4%	28.2%
IEP	Non-IEP	37,440	21.6%	28.0%	30.7%	19.7%
	IEP	8,526	38.8%	29.5%	20.7%	11.0%

### Grade 4 Reading

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,662	23.3%	26.5%	31.3%	18.9%
Gender	Female	22,717	21.9%	25.8%	31.5%	20.8%
	Male	23,944	24.7%	27.1%	31.1%	17.1%
Ethnicity	Hispanic	4,334	33.8%	30.5%	25.4%	10.2%
	Asian	994	15.1%	23.1%	34.9%	26.9%
	Native Hawaiian/Pacific Islander	96	27.1%	27.1%	32.3%	13.5%
	Black/African American	4,912	43.2%	28.5%	20.7%	7.6%
	American Indian	83	32.5%	26.5%	24.1%	16.9%
	White	33,590	19.2%	25.5%	33.6%	21.7%
	Two or More Races	2,651	24.6%	29.4%	30.1%	15.9%
Migrant	Non-Migrant	46,441	23.2%	26.5%	31.4%	18.9%
	Migrant	221	43.4%	29.9%	20.8%	5.9%
LEP	Non-LEP	42,656	21.7%	25.8%	32.3%	20.2%
	LEP	4,006	40.9%	34.1%	20.7%	4.3%
Economic Disadvantage	Economically Disadvantaged	29,635	29.2%	29.2%	28.8%	12.8%
	Not Economically Disadvantaged	17,027	13.1%	21.7%	35.8%	29.4%
IEP	Non-IEP	38,494	19.7%	26.1%	33.6%	20.7%
	IEP	8,168	40.6%	28.1%	20.8%	10.4%

Appendix J. Performance Level Rates

**Grade 5 Reading**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	47,156	26.9%	26.6%	30.3%	16.3%
Gender	Female	23,008	24.5%	26.3%	31.7%	17.5%
	Male	24,148	29.2%	26.8%	28.9%	15.1%
Ethnicity	Hispanic	4,337	38.2%	28.4%	24.3%	9.0%
	Asian	1,049	18.1%	19.0%	33.3%	29.6%
	Native Hawaiian/Pacific Islander	93	33.3%	33.3%	22.6%	10.8%
	Black/African American	5,037	48.7%	26.6%	18.8%	5.8%
	American Indian	64	35.9%	23.4%	34.4%	6.3%
	White	33,983	22.3%	26.4%	32.8%	18.5%
	Two or More Races	2,593	29.3%	28.3%	28.7%	13.8%
Migrant	Non-Migrant	46,902	26.8%	26.5%	30.3%	16.3%
	Migrant	254	46.1%	30.7%	17.7%	5.5%
LEP	Non-LEP	44,239	24.7%	26.5%	31.5%	17.3%
	LEP	2,917	60.9%	27.1%	11.0%	1.0%
Economic Disadvantage	Economically Disadvantaged	29,562	34.0%	28.5%	27.1%	10.5%
	Not Economically Disadvantaged	17,594	15.0%	23.3%	35.7%	26.0%
IEP	Non-IEP	39,766	22.4%	26.8%	32.7%	18.1%
	IEP	7,390	51.1%	25.2%	17.3%	6.4%

**Grade 6 Reading**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,336	21.4%	29.8%	31.5%	17.3%
Gender	Female	20,851	18.5%	29.7%	32.6%	19.3%
	Male	22,485	24.1%	29.9%	30.4%	15.5%
Ethnicity	Hispanic	3,917	31.7%	33.2%	24.8%	10.3%
	Asian	997	13.9%	22.0%	33.8%	30.3%
	Native Hawaiian/Pacific Islander	90	25.6%	26.7%	34.4%	13.3%
	Black/African American	4,397	40.2%	32.5%	21.1%	6.3%
	American Indian	48	12.5%	41.7%	35.4%	10.4%
	White	31,555	17.7%	29.0%	33.8%	19.5%
	Two or More Races	2,332	22.4%	32.8%	29.7%	15.1%
Migrant	Non-Migrant	43,095	21.3%	29.8%	31.5%	17.4%
	Migrant	241	38.6%	34.9%	19.9%	6.6%
LEP	Non-LEP	41,169	19.4%	29.7%	32.7%	18.2%
	LEP	2,167	58.9%	32.5%	7.8%	0.7%
Economic Disadvantage	Economically Disadvantaged	26,671	27.7%	33.2%	27.8%	11.3%
	Not Economically Disadvantaged	16,665	11.4%	24.3%	37.3%	27.0%
IEP	Non-IEP	37,232	17.0%	29.7%	34.1%	19.2%
	IEP	6,104	48.1%	30.7%	15.2%	6.0%

**Grade 7 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Novice</b>	<b>Apprentice</b>	<b>Proficient</b>	<b>Distinguished</b>
All	Students Tested	46,177	31.8%	20.5%	28.4%	19.3%
Gender	Female	22,448	27.1%	20.5%	30.2%	22.2%
	Male	23,729	36.3%	20.5%	26.6%	16.6%
Ethnicity	Hispanic	4,393	42.7%	22.4%	23.7%	11.1%
	Asian	953	19.7%	15.8%	31.5%	32.9%
	Native Hawaiian/Pacific Islander	102	44.1%	18.6%	26.5%	10.8%
	Black/African American	5,008	52.9%	21.2%	18.9%	6.9%
	American Indian	56	30.4%	28.6%	26.8%	14.3%
	White	33,302	27.2%	20.1%	30.5%	22.2%
	Two or More Races	2,363	36.0%	22.7%	26.2%	15.1%
Migrant	Non-Migrant	45,944	31.7%	20.5%	28.4%	19.4%
	Migrant	233	55.8%	18.9%	18.5%	6.9%
LEP	Non-LEP	43,689	29.5%	20.5%	29.6%	20.4%
	LEP	2,488	71.9%	19.8%	7.4%	0.9%
Economic Disadvantage	Economically Disadvantaged	28,177	39.6%	22.3%	25.4%	12.7%
	Not Economically Disadvantaged	18,000	19.7%	17.6%	32.9%	29.8%
IEP	Non-IEP	40,238	27.1%	21.0%	30.4%	21.5%
	IEP	5,939	63.8%	17.1%	14.6%	4.5%

**Grade 8 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Novice</b>	<b>Apprentice</b>	<b>Proficient</b>	<b>Distinguished</b>
All	Students Tested	46,995	34.9%	24.0%	24.3%	16.8%
Gender	Female	22,575	30.4%	24.9%	26.1%	18.6%
	Male	24,420	39.0%	23.3%	22.7%	15.1%
Ethnicity	Hispanic	4,421	47.8%	24.4%	18.2%	9.6%
	Asian	924	21.0%	19.6%	29.3%	30.1%
	Native Hawaiian/Pacific Islander	91	39.6%	28.6%	20.9%	11.0%
	Black/African American	5,079	57.6%	22.3%	14.8%	5.3%
	American Indian	66	39.4%	25.8%	24.2%	10.6%
	White	34,017	30.1%	24.3%	26.4%	19.2%
	Two or More Races	2,397	36.2%	24.7%	24.8%	14.3%
Migrant	Non-Migrant	46,754	34.8%	24.0%	24.4%	16.8%
	Migrant	241	57.3%	24.5%	13.7%	4.6%
LEP	Non-LEP	44,636	32.6%	24.4%	25.4%	17.6%
	LEP	2,359	77.3%	17.8%	4.5%	0.5%
Economic Disadvantage	Economically Disadvantaged	28,405	43.4%	25.3%	20.8%	10.5%
	Not Economically Disadvantaged	18,590	21.9%	22.1%	29.7%	26.3%
IEP	Non-IEP	41,224	30.2%	24.9%	26.3%	18.6%
	IEP	5,771	68.2%	18.1%	9.9%	3.7%

**Grade 10 Reading**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,449	27.7%	25.6%	30.6%	16.1%
Gender	Female	24,246	21.5%	25.5%	34.1%	18.9%
	Male	25,202	33.6%	25.7%	27.2%	13.4%
Ethnicity	Hispanic	4,867	37.8%	26.8%	25.6%	9.8%
	Asian	920	16.1%	18.8%	29.8%	35.3%
	Native Hawaiian/Pacific Islander	95	27.4%	27.4%	30.5%	14.7%
	Black/African American	5,489	45.1%	29.4%	19.3%	6.2%
	American Indian	62	37.1%	24.2%	29.0%	9.7%
	White	35,786	23.8%	25.1%	33.0%	18.1%
	Two or More Races	2,227	30.0%	24.9%	30.8%	14.2%
Migrant	Non-Migrant	49,208	27.6%	25.6%	30.7%	16.2%
	Migrant	241	53.1%	28.6%	15.4%	2.9%
LEP	Non-LEP	47,043	25.6%	25.6%	31.9%	16.9%
	LEP	2,406	68.5%	25.2%	6.1%	0.2%
Economic Disadvantage	Economically Disadvantaged	28,701	34.6%	28.4%	27.0%	10.0%
	Not Economically Disadvantaged	20,748	18.1%	21.8%	35.6%	24.5%
IEP	Non-IEP	44,190	24.0%	25.3%	32.9%	17.7%
	IEP	5,259	58.4%	27.8%	11.4%	2.4%

**Grade 3 Mathematics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	45,992	24.5%	32.4%	31.0%	12.1%
Gender	Female	22,558	26.3%	33.7%	29.8%	10.2%
	Male	23,433	22.7%	31.2%	32.2%	13.9%
Ethnicity	Hispanic	4,326	34.6%	35.0%	24.3%	6.1%
	Asian	986	13.6%	23.5%	36.1%	26.8%
	Native Hawaiian/Pacific Islander	79	30.4%	36.7%	25.3%	7.6%
	Black/African American	4,863	45.2%	33.1%	18.1%	3.7%
	American Indian	54	27.8%	33.3%	27.8%	11.1%
	White	33,027	20.3%	32.1%	33.8%	13.9%
	Two or More Races	2,656	26.5%	34.6%	29.4%	9.5%
Migrant	Non-Migrant	45,735	24.4%	32.4%	31.1%	12.1%
	Migrant	257	38.5%	36.6%	19.1%	5.8%
LEP	Non-LEP	41,835	23.1%	32.1%	31.9%	12.9%
	LEP	4,157	38.3%	35.4%	22.0%	4.3%
Economic Disadvantage	Economically Disadvantaged	29,384	31.0%	35.1%	26.6%	7.3%
	Not Economically Disadvantaged	16,608	13.0%	27.7%	38.7%	20.6%
IEP	Non-IEP	37,471	20.1%	33.1%	33.6%	13.2%
	IEP	8,521	43.7%	29.7%	19.4%	7.1%

**Grade 4 Mathematics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,677	30.4%	26.4%	30.7%	12.5%
Gender	Female	22,728	33.0%	27.4%	29.0%	10.5%
	Male	23,948	27.9%	25.4%	32.4%	14.4%
Ethnicity	Hispanic	4,357	41.9%	27.5%	23.8%	6.8%
	Asian	996	16.4%	20.4%	33.7%	29.5%
	Native Hawaiian/Pacific Islander	96	29.2%	32.3%	30.2%	8.3%
	Black/African American	4,910	54.9%	24.6%	16.7%	3.8%
	American Indian	83	37.3%	21.7%	28.9%	12.0%
	White	33,585	25.4%	26.5%	33.8%	14.3%
	Two or More Races	2,648	33.5%	29.0%	28.1%	9.4%
Migrant	Non-Migrant	46,451	30.3%	26.4%	30.8%	12.5%
	Migrant	226	48.2%	30.1%	17.3%	4.4%
LEP	Non-LEP	42,647	28.7%	26.2%	31.8%	13.3%
	LEP	4,030	48.1%	28.4%	19.8%	3.7%
Economic Disadvantage	Economically Disadvantaged	29,637	37.8%	28.1%	26.5%	7.6%
	Not Economically Disadvantaged	17,040	17.4%	23.5%	38.2%	20.9%
IEP	Non-IEP	38,510	25.7%	27.3%	33.1%	13.9%
	IEP	8,167	52.3%	22.0%	19.6%	6.1%

**Grade 5 Mathematics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	47,195	25.6%	32.6%	29.5%	12.3%
Gender	Female	23,028	25.9%	34.6%	29.0%	10.5%
	Male	24,167	25.2%	30.7%	30.0%	14.0%
Ethnicity	Hispanic	4,373	35.4%	35.4%	22.8%	6.4%
	Asian	1,054	12.5%	21.6%	36.1%	29.8%
	Native Hawaiian/Pacific Islander	92	28.3%	41.3%	22.8%	7.6%
	Black/African American	5,039	48.3%	33.3%	15.4%	3.0%
	American Indian	64	40.6%	39.1%	15.6%	4.7%
	White	33,979	21.0%	32.4%	32.5%	14.1%
	Two or More Races	2,594	29.5%	33.4%	27.0%	10.1%
Migrant	Non-Migrant	46,927	25.5%	32.6%	29.6%	12.3%
	Migrant	268	44.4%	33.6%	19.0%	3.0%
LEP	Non-LEP	44,236	23.7%	32.5%	30.7%	13.0%
	LEP	2,959	52.9%	34.3%	11.4%	1.4%
Economic Disadvantage	Economically Disadvantaged	29,577	32.6%	35.5%	24.9%	7.0%
	Not Economically Disadvantaged	17,618	13.7%	27.8%	37.3%	21.1%
IEP	Non-IEP	39,810	21.2%	33.1%	32.0%	13.7%
	IEP	7,385	49.2%	30.1%	16.0%	4.7%

**Grade 6 Mathematics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,350	29.6%	28.5%	30.5%	11.4%
Gender	Female	20,858	30.0%	29.7%	30.0%	10.3%
	Male	22,492	29.3%	27.4%	30.9%	12.5%
Ethnicity	Hispanic	3,940	43.0%	27.5%	23.7%	5.8%
	Asian	999	17.7%	19.7%	31.0%	31.5%
	Native Hawaiian/Pacific Islander	90	41.1%	20.0%	25.6%	13.3%
	Black/African American	4,395	52.4%	30.3%	14.7%	2.7%
	American Indian	48	25.0%	27.1%	39.6%	8.3%
	White	31,547	24.9%	28.5%	33.7%	12.9%
	Two or More Races	2,331	32.8%	31.1%	27.6%	8.6%
Migrant	Non-Migrant	43,103	29.5%	28.5%	30.5%	11.4%
	Migrant	247	47.4%	28.7%	21.1%	2.8%
LEP	Non-LEP	41,160	27.6%	28.9%	31.6%	11.9%
	LEP	2,190	68.9%	21.4%	8.7%	1.1%
Economic Disadvantage	Economically Disadvantaged	26,678	37.5%	31.2%	25.1%	6.2%
	Not Economically Disadvantaged	16,672	17.0%	24.1%	39.1%	19.8%
IEP	Non-IEP	37,254	25.0%	29.4%	33.1%	12.5%
	IEP	6,096	58.1%	22.9%	14.1%	4.9%

**Grade 7 Mathematics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,177	30.7%	29.9%	28.6%	10.8%
Gender	Female	22,444	31.0%	30.4%	28.7%	10.0%
	Male	23,733	30.5%	29.5%	28.4%	11.6%
Ethnicity	Hispanic	4,408	40.5%	32.1%	22.6%	4.8%
	Asian	956	18.0%	19.8%	33.1%	29.2%
	Native Hawaiian/Pacific Islander	102	45.1%	31.4%	17.6%	5.9%
	Black/African American	4,997	51.2%	32.1%	14.1%	2.6%
	American Indian	56	37.5%	26.8%	23.2%	12.5%
	White	33,293	26.4%	29.3%	31.7%	12.5%
	Two or More Races	2,365	33.9%	33.5%	24.7%	7.9%
Migrant	Non-Migrant	45,935	30.6%	29.9%	28.6%	10.8%
	Migrant	242	55.0%	28.1%	14.9%	2.1%
LEP	Non-LEP	43,673	29.1%	29.9%	29.7%	11.4%
	LEP	2,504	59.5%	31.2%	8.5%	0.9%
Economic Disadvantage	Economically Disadvantaged	28,173	38.3%	32.7%	23.4%	5.7%
	Not Economically Disadvantaged	18,004	18.9%	25.6%	36.7%	18.8%
IEP	Non-IEP	40,242	27.5%	29.8%	30.8%	11.8%
	IEP	5,935	52.4%	30.6%	13.3%	3.7%



**Grade 8 Mathematics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,997	33.9%	28.9%	26.5%	10.7%
Gender	Female	22,575	33.1%	29.3%	27.6%	10.0%
	Male	24,422	34.6%	28.5%	25.5%	11.4%
Ethnicity	Hispanic	4,437	44.8%	30.0%	19.8%	5.4%
	Asian	926	17.1%	19.2%	30.2%	33.5%
	Native Hawaiian/Pacific Islander	91	40.7%	30.8%	17.6%	11.0%
	Black/African American	5,084	53.5%	31.2%	13.3%	2.0%
	American Indian	66	28.8%	36.4%	28.8%	6.1%
	White	33,998	29.9%	28.6%	29.3%	12.3%
	Two or More Races	2,395	35.4%	30.2%	25.9%	8.5%
Migrant	Non-Migrant	46,752	33.8%	28.9%	26.5%	10.8%
	Migrant	245	52.2%	31.8%	13.1%	2.9%
LEP	Non-LEP	44,619	32.5%	28.7%	27.5%	11.2%
	LEP	2,378	59.6%	32.3%	7.1%	1.0%
Economic Disadvantage	Economically Disadvantaged	28,396	41.6%	31.3%	21.4%	5.7%
	Not Economically Disadvantaged	18,601	22.1%	25.3%	34.2%	18.4%
IEP	Non-IEP	41,226	31.1%	28.3%	28.7%	11.9%
	IEP	5,771	53.6%	33.0%	10.8%	2.6%

**Grade 10 Mathematics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	49,430	35.1%	28.9%	24.8%	11.3%
Gender	Female	24,228	33.4%	29.6%	26.7%	10.3%
	Male	25,201	36.7%	28.2%	22.9%	12.2%
Ethnicity	Hispanic	4,883	46.1%	29.9%	18.5%	5.5%
	Asian	921	18.2%	19.4%	26.0%	36.4%
	Native Hawaiian/Pacific Islander	95	45.3%	18.9%	25.3%	10.5%
	Black/African American	5,483	54.3%	30.3%	12.6%	2.7%
	American Indian	62	33.9%	38.7%	21.0%	6.5%
	White	35,761	30.8%	28.6%	27.7%	12.9%
	Two or More Races	2,222	38.3%	31.2%	22.2%	8.3%
Migrant	Non-Migrant	49,182	34.9%	28.9%	24.9%	11.3%
	Migrant	248	56.9%	30.6%	11.7%	0.8%
LEP	Non-LEP	46,988	33.2%	29.1%	25.8%	11.8%
	LEP	2,442	70.2%	24.9%	4.5%	0.5%
Economic Disadvantage	Economically Disadvantaged	28,685	43.5%	31.1%	19.8%	5.7%
	Not Economically Disadvantaged	20,745	23.4%	25.8%	31.7%	19.0%
IEP	Non-IEP	44,180	31.4%	29.4%	26.8%	12.4%
	IEP	5,250	65.8%	24.3%	8.0%	1.9%

**Grade 4 Science**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,667	12.4%	53.2%	28.0%	6.4%
Gender	Female	22,722	12.5%	54.7%	27.2%	5.5%
	Male	23,944	12.3%	51.7%	28.7%	7.3%
Ethnicity	Hispanic	4,354	17.3%	60.0%	19.6%	3.1%
	Asian	996	8.2%	45.6%	34.3%	11.8%
	Native Hawaiian/Pacific Islander	96	15.6%	60.4%	24.0%	0.0%
	Black/African American	4,909	24.8%	61.8%	12.2%	1.2%
	American Indian	83	19.3%	48.2%	28.9%	3.6%
	White	33,580	10.0%	51.0%	31.4%	7.6%
	Two or More Races	2,647	14.1%	55.9%	25.9%	4.2%
Migrant	Non-Migrant	46,442	12.4%	53.1%	28.0%	6.4%
	Migrant	225	22.2%	61.3%	14.7%	1.8%
LEP	Non-LEP	42,638	11.7%	52.0%	29.4%	6.9%
	LEP	4,029	20.6%	65.2%	13.4%	0.9%
Economic Disadvantage	Economically Disadvantaged	29,629	15.7%	57.4%	22.7%	4.1%
	Not Economically Disadvantaged	17,038	6.7%	45.7%	37.2%	10.3%
IEP	Non-IEP	38,506	10.9%	52.7%	29.8%	6.5%
	IEP	8,161	19.5%	55.2%	19.3%	6.0%

**Grade 7 Science**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,158	31.2%	46.3%	20.3%	2.2%
Gender	Female	22,432	32.6%	47.4%	18.1%	1.9%
	Male	23,726	29.8%	45.3%	22.3%	2.6%
Ethnicity	Hispanic	4,407	41.4%	46.3%	11.5%	0.9%
	Asian	956	18.6%	43.4%	32.1%	5.9%
	Native Hawaiian/Pacific Islander	102	38.2%	50.0%	10.8%	1.0%
	Black/African American	4,990	50.6%	42.0%	7.0%	0.4%
	American Indian	56	32.1%	50.0%	14.3%	3.6%
	White	33,284	27.0%	47.0%	23.4%	2.6%
	Two or More Races	2,363	34.7%	47.7%	15.9%	1.7%
Migrant	Non-Migrant	45,916	31.1%	46.4%	20.3%	2.2%
	Migrant	242	49.6%	43.8%	6.2%	0.4%
LEP	Non-LEP	43,656	29.5%	46.9%	21.3%	2.3%
	LEP	2,502	60.4%	37.2%	2.4%	0.0%
Economic Disadvantage	Economically Disadvantaged	28,154	38.5%	46.9%	13.6%	1.0%
	Not Economically Disadvantaged	18,004	19.8%	45.4%	30.7%	4.2%
IEP	Non-IEP	40,218	28.4%	47.0%	22.2%	2.5%
	IEP	5,940	50.0%	42.2%	7.4%	0.4%

**Grade 11 Science**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,066	47.6%	46.5%	5.9%	0.1%
Gender	Female	22,709	44.4%	49.8%	5.7%	0.0%
	Male	23,353	50.6%	43.3%	6.0%	0.1%
Ethnicity	Hispanic	4,219	58.6%	38.6%	2.8%	0.0%
	Asian	904	30.1%	54.0%	15.6%	0.3%
	Native Hawaiian/Pacific Islander	72	56.9%	37.5%	5.6%	0.0%
	Black/African American	4,933	71.2%	27.6%	1.2%	0.0%
	American Indian	73	56.2%	38.4%	5.5%	0.0%
	White	33,824	42.9%	50.2%	6.8%	0.1%
	Two or More Races	2,036	51.5%	44.2%	4.3%	0.0%
Migrant	Non-Migrant	45,881	47.5%	46.6%	5.9%	0.1%
	Migrant	185	71.4%	27.0%	1.6%	0.0%
LEP	Non-LEP	44,182	45.8%	48.0%	6.1%	0.1%
	LEP	1,884	88.6%	11.2%	0.2%	0.0%
Economic Disadvantage	Economically Disadvantaged	25,052	57.1%	39.7%	3.2%	0.0%
	Not Economically Disadvantaged	21,014	36.2%	54.7%	9.1%	0.1%
IEP	Non-IEP	41,710	44.5%	49.1%	6.4%	0.1%
	IEP	4,356	77.3%	21.9%	0.8%	0.0%

**Grade 5 Social Studies**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	47,133	31.8%	29.1%	25.4%	13.7%
Gender	Female	22,999	31.0%	30.8%	25.7%	12.5%
	Male	24,134	32.6%	27.4%	25.1%	14.9%
Ethnicity	Hispanic	4,336	42.1%	30.5%	19.6%	7.7%
	Asian	1,049	19.4%	23.8%	31.0%	25.8%
	Native Hawaiian/Pacific Islander	92	34.8%	34.8%	22.8%	7.6%
	Black/African American	5,037	53.9%	28.3%	13.4%	4.4%
	American Indian	64	39.1%	28.1%	26.6%	6.3%
	White	33,963	27.3%	29.1%	27.9%	15.7%
	Two or More Races	2,592	35.7%	30.1%	23.4%	10.8%
Migrant	Non-Migrant	46,879	31.7%	29.1%	25.5%	13.8%
	Migrant	254	48.4%	33.1%	14.6%	3.9%
LEP	Non-LEP	44,217	29.9%	29.1%	26.5%	14.5%
	LEP	2,916	61.2%	28.7%	8.8%	1.3%
Economic Disadvantage	Economically Disadvantaged	29,539	39.4%	30.2%	21.6%	8.8%
	Not Economically Disadvantaged	17,594	19.0%	27.2%	31.7%	22.0%
IEP	Non-IEP	39,755	27.7%	30.0%	27.4%	14.9%
	IEP	7,378	53.8%	24.1%	14.6%	7.5%

**Grade 8 Social Studies**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,948	40.6%	24.0%	22.7%	12.8%
Gender	Female	22,542	37.5%	25.4%	24.0%	13.1%
	Male	24,406	43.5%	22.7%	21.4%	12.4%
Ethnicity	Hispanic	4,423	51.2%	23.3%	18.7%	6.9%
	Asian	924	20.2%	18.0%	31.4%	30.4%
	Native Hawaiian/Pacific Islander	91	42.9%	23.1%	23.1%	11.0%
	Black/African American	5,066	62.2%	21.2%	12.3%	4.3%
	American Indian	66	45.5%	25.8%	21.2%	7.6%
	White	33,988	36.4%	24.6%	24.6%	14.4%
	Two or More Races	2,390	43.0%	24.7%	21.0%	11.3%
Migrant	Non-Migrant	46,707	40.5%	24.0%	22.7%	12.8%
	Migrant	241	61.4%	22.8%	13.7%	2.1%
LEP	Non-LEP	44,588	38.7%	24.3%	23.6%	13.4%
	LEP	2,360	76.6%	18.0%	5.0%	0.4%
Economic Disadvantage	Economically Disadvantaged	28,367	50.0%	24.0%	18.5%	7.5%
	Not Economically Disadvantaged	18,581	26.3%	24.0%	28.9%	20.8%
IEP	Non-IEP	41,186	36.3%	25.1%	24.5%	14.1%
	IEP	5,762	71.4%	16.1%	9.3%	3.1%

**Grade 11 Social Studies**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,009	35.1%	27.0%	23.9%	13.9%
Gender	Female	22,693	30.7%	29.7%	26.2%	13.5%
	Male	23,312	39.4%	24.4%	21.8%	14.4%
Ethnicity	Hispanic	4,207	45.7%	26.6%	19.7%	8.1%
	Asian	900	18.9%	21.6%	29.3%	30.2%
	Native Hawaiian/Pacific Islander	72	48.6%	23.6%	18.1%	9.7%
	Black/African American	4,928	57.3%	25.4%	13.2%	4.0%
	American Indian	73	42.5%	26.0%	16.4%	15.1%
	White	33,788	30.8%	27.2%	26.1%	15.9%
	Two or More Races	2,035	37.2%	30.3%	21.6%	10.8%
Migrant	Non-Migrant	45,826	35.0%	27.0%	24.0%	14.0%
	Migrant	183	61.2%	18.6%	15.8%	4.4%
LEP	Non-LEP	44,134	33.3%	27.4%	24.8%	14.5%
	LEP	1,875	78.3%	18.5%	3.0%	0.2%
Economic Disadvantage	Economically Disadvantaged	25,004	43.9%	28.2%	19.5%	8.4%
	Not Economically Disadvantaged	21,005	24.7%	25.5%	29.3%	20.5%
IEP	Non-IEP	41,661	31.5%	27.8%	25.6%	15.1%
	IEP	4,348	69.8%	19.4%	7.9%	3.0%

**Grade 5 Editing and Mechanics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	47,127	21.7%	30.7%	24.9%	22.6%
Gender	Female	23,000	17.5%	29.6%	27.2%	25.6%
	Male	24,127	25.8%	31.7%	22.8%	19.8%
Ethnicity	Hispanic	4,335	33.9%	34.1%	19.7%	12.2%
	Asian	1,048	14.3%	23.1%	26.2%	36.4%
	Native Hawaiian/Pacific Islander	92	20.7%	39.1%	28.3%	12.0%
	Black/African American	5,034	40.3%	34.7%	16.9%	8.1%
	American Indian	64	25.0%	32.8%	25.0%	17.2%
	White	33,962	17.6%	29.6%	26.8%	26.0%
	Two or More Races	2,592	22.6%	33.9%	24.7%	18.8%
Migrant	Non-Migrant	46,873	21.6%	30.7%	25.0%	22.7%
	Migrant	254	41.7%	34.3%	16.1%	7.9%
LEP	Non-LEP	44,211	19.6%	30.5%	25.9%	23.9%
	LEP	2,916	53.9%	33.4%	9.8%	2.9%
Economic Disadvantage	Economically Disadvantaged	29,535	27.7%	33.6%	22.8%	16.0%
	Not Economically Disadvantaged	17,592	11.8%	25.8%	28.6%	33.8%
IEP	Non-IEP	39,752	17.0%	31.0%	27.1%	25.0%
	IEP	7,375	47.5%	29.2%	13.5%	9.8%

**Grade 8 Editing and Mechanics**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,919	25.2%	28.0%	29.8%	17.1%
Gender	Female	22,534	19.2%	28.1%	32.5%	20.2%
	Male	24,385	30.7%	27.8%	27.2%	14.3%
Ethnicity	Hispanic	4,415	37.1%	30.6%	23.1%	9.2%
	Asian	924	15.0%	20.0%	31.5%	33.4%
	Native Hawaiian/Pacific Islander	91	26.4%	33.0%	27.5%	13.2%
	Black/African American	5,056	43.0%	31.0%	20.5%	5.6%
	American Indian	66	28.8%	36.4%	25.8%	9.1%
	White	33,978	21.2%	27.3%	32.0%	19.5%
	Two or More Races	2,389	26.0%	28.1%	29.6%	16.2%
Migrant	Non-Migrant	46,678	25.0%	27.9%	29.8%	17.2%
	Migrant	241	46.1%	33.2%	17.0%	3.7%
LEP	Non-LEP	44,563	23.1%	28.0%	30.9%	18.0%
	LEP	2,356	63.9%	27.2%	8.1%	0.8%
Economic Disadvantage	Economically Disadvantaged	28,345	32.1%	30.8%	26.2%	10.9%
	Not Economically Disadvantaged	18,574	14.5%	23.7%	35.1%	26.7%
IEP	Non-IEP	41,165	20.2%	28.7%	32.3%	18.9%
	IEP	5,754	60.8%	22.9%	11.9%	4.4%

**Grade 11 Editing and Mechanics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Novice</b>	<b>Apprentice</b>	<b>Proficient</b>	<b>Distinguished</b>
All	Students Tested	45,921	22.1%	32.2%	32.2%	13.4%
Gender	Female	22,659	16.0%	32.0%	36.1%	15.9%
	Male	23,258	28.1%	32.4%	28.5%	11.1%
Ethnicity	Hispanic	4,183	33.1%	35.8%	24.5%	6.6%
	Asian	898	12.8%	26.4%	34.5%	26.3%
	Native Hawaiian/Pacific Islander	72	29.2%	31.9%	26.4%	12.5%
	Black/African American	4,903	40.1%	37.7%	18.2%	4.0%
	American Indian	73	21.9%	34.2%	31.5%	12.3%
	White	33,756	18.4%	30.9%	35.3%	15.5%
	Two or More Races	2,031	22.7%	35.7%	30.2%	11.3%
Migrant	Non-Migrant	45,740	22.0%	32.2%	32.3%	13.5%
	Migrant	181	51.9%	32.6%	13.3%	2.2%
LEP	Non-LEP	44,071	20.2%	32.3%	33.4%	14.0%
	LEP	1,850	68.1%	28.4%	3.4%	0.1%
Economic Disadvantage	Economically Disadvantaged	24,941	28.6%	36.1%	27.2%	8.1%
	Not Economically Disadvantaged	20,980	14.5%	27.5%	38.2%	19.8%
IEP	Non-IEP	41,585	18.5%	32.4%	34.5%	14.6%
	IEP	4,336	56.9%	30.1%	10.7%	2.3%

**Grade 5 On-Demand Writing**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Novice</b>	<b>Apprentice</b>	<b>Proficient</b>	<b>Distinguished</b>
All	Students Tested	47,099	21.5%	39.6%	25.1%	13.9%
Gender	Female	22,995	16.2%	38.1%	28.2%	17.5%
	Male	24,104	26.5%	41.0%	22.1%	10.4%
Ethnicity	Hispanic	4,327	29.1%	41.6%	19.9%	9.5%
	Asian	1,046	11.7%	31.6%	31.0%	25.7%
	Native Hawaiian/Pacific Islander	92	12.0%	51.1%	23.9%	13.0%
	Black/African American	5,027	39.4%	41.0%	14.0%	5.6%
	American Indian	64	29.7%	37.5%	18.8%	14.1%
	White	33,952	18.0%	39.2%	27.3%	15.5%
	Two or More Races	2,591	23.0%	41.7%	23.7%	11.6%
Migrant	Non-Migrant	46,846	21.4%	39.6%	25.1%	13.9%
	Migrant	253	35.6%	40.7%	19.0%	4.7%
LEP	Non-LEP	44,193	19.9%	39.5%	26.0%	14.6%
	LEP	2,906	45.4%	40.2%	11.3%	3.1%
Economic Disadvantage	Economically Disadvantaged	29,513	27.2%	41.8%	21.2%	9.9%
	Not Economically Disadvantaged	17,586	11.9%	35.9%	31.7%	20.6%
IEP	Non-IEP	39,734	15.6%	41.0%	27.7%	15.7%
	IEP	7,365	53.3%	32.0%	10.9%	3.8%

**Grade 8 On-Demand Writing**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	46,816	21.3%	29.3%	38.6%	10.7%
Gender	Female	22,505	15.0%	27.2%	43.6%	14.2%
	Male	24,311	27.2%	31.3%	34.0%	7.5%
Ethnicity	Hispanic	4,404	31.3%	31.2%	31.1%	6.4%
	Asian	924	10.3%	20.3%	47.3%	22.1%
	Native Hawaiian/Pacific Islander	91	20.9%	28.6%	41.8%	8.8%
	Black/African American	5,039	41.8%	33.1%	22.3%	2.8%
	American Indian	65	29.2%	30.8%	35.4%	4.6%
	White	33,911	17.2%	28.5%	41.9%	12.3%
	Two or More Races	2,382	22.0%	32.1%	37.2%	8.7%
Migrant	Non-Migrant	46,575	21.3%	29.3%	38.7%	10.8%
	Migrant	241	36.1%	31.1%	29.0%	3.7%
LEP	Non-LEP	44,470	19.7%	29.2%	39.9%	11.2%
	LEP	2,346	52.7%	32.1%	14.1%	1.1%
Economic Disadvantage	Economically Disadvantaged	28,263	27.9%	32.7%	32.8%	6.6%
	Not Economically Disadvantaged	18,553	11.4%	24.2%	47.5%	17.0%
IEP	Non-IEP	41,088	16.6%	29.2%	42.2%	12.0%
	IEP	5,728	55.6%	30.2%	13.0%	1.3%

**Grade 11 On-Demand Writing**

Category	Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	45,585	19.3%	37.1%	34.9%	8.8%
Gender	Female	22,555	12.7%	35.0%	41.2%	11.1%
	Male	23,027	25.7%	39.1%	28.6%	6.5%
Ethnicity	Hispanic	4,139	26.6%	39.8%	28.7%	4.8%
	Asian	895	9.1%	30.6%	44.5%	15.9%
	Native Hawaiian/Pacific Islander	72	22.2%	40.3%	27.8%	9.7%
	Black/African American	4,818	34.4%	43.6%	19.3%	2.7%
	American Indian	73	17.8%	46.6%	31.5%	4.1%
	White	33,573	16.3%	35.9%	37.7%	10.1%
	Two or More Races	2,011	21.8%	37.3%	33.7%	7.2%
Migrant	Non-Migrant	45,407	19.2%	37.1%	34.9%	8.8%
	Migrant	178	48.3%	28.1%	20.8%	2.8%
LEP	Non-LEP	43,766	17.8%	37.0%	36.0%	9.1%
	LEP	1,819	54.5%	38.3%	6.9%	0.3%
Economic Disadvantage	Economically Disadvantaged	24,707	24.9%	40.8%	28.8%	5.5%
	Not Economically Disadvantaged	20,878	12.7%	32.6%	42.0%	12.7%
IEP	Non-IEP	41,292	15.7%	37.0%	37.6%	9.6%
	IEP	4,293	53.7%	37.4%	8.2%	0.8%

## Appendix K. Reliability<sup>6</sup>

### Grade 3 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	45,953	0.86	6.16
Gender	Female	22,534	0.86	6.17
	Male	23,418	0.86	6.15
Ethnicity	Hispanic	4,294	0.85	5.84
	Asian	981	0.86	6.46
	Native Hawaiian/Pacific Islander	80	0.84	6.02
	Black/African American	4,867	0.84	5.88
	American Indian	54	0.88	6.22
	White	33,019	0.86	6.16
	Two or More Races	2,657	0.86	5.92
Migrant	Non-Migrant	45,709	0.86	6.16
	Migrant	244	0.83	5.84
LEP	Non-LEP	41,833	0.86	6.21
	LEP	4,120	0.81	5.77
Economic Disadvantage	Economically Disadvantaged	29,371	0.85	6.05
	Not Economically Disadvantaged	16,582	0.85	6.33
IEP	Non-IEP	37,430	0.86	6.08
	IEP	8,523	0.86	6.08

### Grade 4 Reading

Category	Group	N	Reliability	SEM
All	Students Tested	46,656	0.87	5.85
Gender	Female	22,714	0.87	5.88
	Male	23,941	0.87	5.80
Ethnicity	Hispanic	4,334	0.85	5.88
	Asian	992	0.87	5.98
	Native Hawaiian/Pacific Islander	96	0.87	5.94
	Black/African American	4,912	0.85	5.84
	American Indian	83	0.88	5.96
	White	33,586	0.86	5.98
	Two or More Races	2,651	0.86	5.82
Migrant	Non-Migrant	46,435	0.87	5.85
	Migrant	221	0.85	5.84
LEP	Non-LEP	42,651	0.87	5.84
	LEP	4,005	0.81	5.81
Economic Disadvantage	Economically Disadvantaged	29,633	0.86	5.82
	Not Economically Disadvantaged	17,023	0.85	6.09
IEP	Non-IEP	38,490	0.86	5.93
	IEP	8,166	0.87	5.81

<sup>6</sup> Students with '0' or perfect scores are excluded from calculation of reliability.



**Grade 5 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	47,152	0.87	6.36
Gender	Female	23,007	0.86	6.52
	Male	24,145	0.87	6.42
Ethnicity	Hispanic	4,337	0.86	6.29
	Asian	1,049	0.87	6.76
	Native Hawaiian/Pacific Islander	93	0.85	6.10
	Black/African American	5,037	0.85	6.19
	American Indian	64	0.85	6.09
	White	33,979	0.86	6.50
	Two or More Races	2,593	0.86	6.39
Migrant	Non-Migrant	46,898	0.87	6.36
	Migrant	254	0.85	6.09
LEP	Non-LEP	44,235	0.87	6.31
	LEP	2,917	0.78	6.02
Economic Disadvantage	Economically Disadvantaged	29,561	0.86	6.27
	Not Economically Disadvantaged	17,591	0.85	6.68
IEP	Non-IEP	39,762	0.86	6.43
	IEP	7,390	0.86	6.21

**Grade 6 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	43,334	0.85	6.22
Gender	Female	20,851	0.84	6.36
	Male	22,483	0.85	6.25
Ethnicity	Hispanic	3,917	0.85	6.23
	Asian	997	0.85	6.56
	Native Hawaiian/Pacific Islander	90	0.83	6.23
	Black/African American	4,395	0.83	6.35
	American Indian	48	0.74	6.06
	White	31,555	0.84	6.24
	Two or More Races	2,332	0.84	6.29
Migrant	Non-Migrant	43,093	0.85	6.22
	Migrant	241	0.83	6.31
LEP	Non-LEP	41,167	0.84	6.31
	LEP	2,167	0.74	6.45
Economic Disadvantage	Economically Disadvantaged	26,669	0.84	6.20
	Not Economically Disadvantaged	16,665	0.83	6.31
IEP	Non-IEP	37,230	0.83	6.36
	IEP	6,104	0.83	6.39

**Grade 7 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,171	0.87	6.06
Gender	Female	22,446	0.86	6.22
	Male	23,725	0.87	6.05
Ethnicity	Hispanic	4,393	0.86	5.97
	Asian	953	0.87	6.32
	Native Hawaiian/Pacific Islander	102	0.85	5.94
	Black/African American	5,006	0.84	6.13
	American Indian	56	0.87	6.29
	White	33,298	0.86	6.19
	Two or More Races	2,363	0.86	6.09
Migrant	Non-Migrant	45,938	0.87	6.06
	Migrant	233	0.86	6.18
LEP	Non-LEP	43,683	0.86	6.22
	LEP	2,488	0.74	6.14
Economic Disadvantage	Economically Disadvantaged	28,175	0.86	5.98
	Not Economically Disadvantaged	17,996	0.86	6.16
IEP	Non-IEP	40,233	0.86	6.13
	IEP	5,938	0.82	6.19

**Grade 8 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,995	0.86	6.24
Gender	Female	22,575	0.86	6.11
	Male	24,420	0.86	6.31
Ethnicity	Hispanic	4,421	0.85	6.15
	Asian	924	0.86	6.44
	Native Hawaiian/Pacific Islander	91	0.84	6.15
	Black/African American	5,079	0.83	6.09
	American Indian	66	0.85	6.17
	White	34,017	0.86	6.16
	Two or More Races	2,397	0.86	6.09
Migrant	Non-Migrant	46,754	0.86	6.24
	Migrant	241	0.83	6.14
LEP	Non-LEP	44,636	0.86	6.18
	LEP	2,359	0.70	6.21
Economic Disadvantage	Economically Disadvantaged	28,405	0.85	6.10
	Not Economically Disadvantaged	18,590	0.85	6.34
IEP	Non-IEP	41,224	0.85	6.30
	IEP	5,771	0.81	6.17

**Grade 10 Reading**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	49,444	0.86	5.88
Gender	Female	24,243	0.85	5.98
	Male	25,200	0.86	5.87
Ethnicity	Hispanic	4,867	0.84	5.91
	Asian	920	0.88	6.09
	Native Hawaiian/Pacific Islander	95	0.84	5.96
	Black/African American	5,487	0.80	6.02
	American Indian	62	0.83	5.79
	White	35,783	0.86	5.85
	Two or More Races	2,227	0.86	5.87
Migrant	Non-Migrant	49,203	0.86	5.88
	Migrant	241	0.78	6.07
LEP	Non-LEP	47,038	0.86	5.84
	LEP	2,406	0.56	6.22
Economic Disadvantage	Economically Disadvantaged	28,698	0.83	5.97
	Not Economically Disadvantaged	20,746	0.86	6.01
IEP	Non-IEP	44,185	0.86	5.85
	IEP	5,259	0.70	6.10

**Grade 3 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	45,720	0.87	6.84
Gender	Female	22,469	0.87	6.61
	Male	23,250	0.88	6.76
Ethnicity	Hispanic	4,316	0.87	6.33
	Asian	964	0.87	7.60
	Native Hawaiian/Pacific Islander	79	0.86	6.37
	Black/African American	4,858	0.85	6.35
	American Indian	54	0.88	7.29
	White	32,801	0.87	6.79
	Two or More Races	2,647	0.87	6.53
Migrant	Non-Migrant	45,464	0.87	6.84
	Migrant	256	0.89	6.58
LEP	Non-LEP	41,573	0.87	6.86
	LEP	4,147	0.86	6.24
Economic Disadvantage	Economically Disadvantaged	29,302	0.87	6.33
	Not Economically Disadvantaged	16,418	0.86	7.20
IEP	Non-IEP	37,226	0.87	6.68
	IEP	8,494	0.88	6.53

**Grade 4 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,564	0.89	6.74
Gender	Female	22,681	0.89	6.57
	Male	23,882	0.89	6.86
Ethnicity	Hispanic	4,350	0.88	6.68
	Asian	974	0.89	7.49
	Native Hawaiian/Pacific Islander	95	0.86	6.45
	Black/African American	4,907	0.86	6.69
	American Indian	83	0.90	7.12
	White	33,508	0.88	6.91
	Two or More Races	2,645	0.88	6.73
Migrant	Non-Migrant	46,340	0.89	6.73
	Migrant	224	0.88	6.97
LEP	Non-LEP	42,539	0.89	6.73
	LEP	4,025	0.86	6.67
Economic Disadvantage	Economically Disadvantaged	29,607	0.88	6.58
	Not Economically Disadvantaged	16,957	0.88	7.02
IEP	Non-IEP	38,404	0.88	6.86
	IEP	8,160	0.88	6.85

**Grade 5 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	47,005	0.89	6.57
Gender	Female	22,953	0.88	6.58
	Male	24,052	0.89	6.81
Ethnicity	Hispanic	4,366	0.88	6.30
	Asian	1,029	0.88	7.72
	Native Hawaiian/Pacific Islander	92	0.86	6.13
	Black/African American	5,033	0.85	6.36
	American Indian	64	0.86	6.18
	White	33,831	0.88	6.79
	Two or More Races	2,590	0.89	6.40
Migrant	Non-Migrant	46,740	0.89	6.57
	Migrant	265	0.87	6.64
LEP	Non-LEP	44,051	0.89	6.55
	LEP	2,954	0.82	6.23
Economic Disadvantage	Economically Disadvantaged	29,534	0.88	6.28
	Not Economically Disadvantaged	17,471	0.88	6.98
IEP	Non-IEP	39,628	0.88	6.75
	IEP	7,377	0.87	6.50

**Grade 6 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	43,317	0.86	6.21
Gender	Female	20,846	0.85	6.23
	Male	22,471	0.86	6.38
Ethnicity	Hispanic	3,935	0.82	6.49
	Asian	989	0.90	6.71
	Native Hawaiian/Pacific Islander	90	0.87	6.49
	Black/African American	4,394	0.74	6.61
	American Indian	48	0.83	6.32
	White	31,533	0.86	6.16
	Two or More Races	2,328	0.84	6.21
Migrant	Non-Migrant	43,070	0.86	6.21
	Migrant	247	0.79	6.61
LEP	Non-LEP	41,132	0.85	6.39
	LEP	2,185	0.67	6.83
Economic Disadvantage	Economically Disadvantaged	26,670	0.82	6.27
	Not Economically Disadvantaged	16,647	0.87	6.24
IEP	Non-IEP	37,221	0.85	6.35
	IEP	6,096	0.80	6.60

**Grade 7 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,158	0.81	6.27
Gender	Female	22,434	0.80	6.25
	Male	23,724	0.82	6.26
Ethnicity	Hispanic	4,403	0.73	6.35
	Asian	952	0.89	6.46
	Native Hawaiian/Pacific Islander	102	0.75	6.42
	Black/African American	4,993	0.64	6.47
	American Indian	56	0.82	6.41
	White	33,287	0.82	6.15
	Two or More Races	2,365	0.79	6.25
Migrant	Non-Migrant	45,920	0.81	6.27
	Migrant	238	0.66	6.65
LEP	Non-LEP	43,662	0.81	6.29
	LEP	2,496	0.50	6.66
Economic Disadvantage	Economically Disadvantaged	28,163	0.74	6.30
	Not Economically Disadvantaged	17,995	0.85	6.07
IEP	Non-IEP	40,226	0.82	6.16
	IEP	5,932	0.67	6.50

**Grade 8 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,956	0.84	6.32
Gender	Female	22,558	0.83	6.31
	Male	24,398	0.85	6.28
Ethnicity	Hispanic	4,433	0.78	6.50
	Asian	916	0.90	6.77
	Native Hawaiian/Pacific Islander	91	0.81	6.39
	Black/African American	5,083	0.67	6.51
	American Indian	66	0.78	6.19
	White	33,972	0.84	6.37
	Two or More Races	2,395	0.82	6.33
Migrant	Non-Migrant	46,711	0.84	6.32
	Migrant	245	0.69	6.63
LEP	Non-LEP	44,581	0.84	6.35
	LEP	2,375	0.54	6.69
Economic Disadvantage	Economically Disadvantaged	28,386	0.78	6.41
	Not Economically Disadvantaged	18,570	0.86	6.41
IEP	Non-IEP	41,188	0.84	6.40
	IEP	5,768	0.66	6.60

**Grade 10 Mathematics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	49,411	0.83	6.36
Gender	Female	24,222	0.82	6.26
	Male	25,188	0.84	6.41
Ethnicity	Hispanic	4,879	0.77	6.42
	Asian	916	0.90	6.94
	Native Hawaiian/Pacific Islander	95	0.84	6.50
	Black/African American	5,482	0.67	6.51
	American Indian	62	0.72	6.28
	White	35,752	0.84	6.21
	Two or More Races	2,222	0.80	6.37
Migrant	Non-Migrant	49,164	0.83	6.36
	Migrant	247	0.66	6.82
LEP	Non-LEP	46,971	0.83	6.37
	LEP	2,440	0.45	6.74
Economic Disadvantage	Economically Disadvantaged	28,680	0.76	6.39
	Not Economically Disadvantaged	20,731	0.86	6.29
IEP	Non-IEP	44,162	0.83	6.38
	IEP	5,249	0.62	6.67

**Grade 4 Science**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,663	0.76	6.49
Gender	Female	22,718	0.75	6.46
	Male	23,944	0.77	6.50
Ethnicity	Hispanic	4,350	0.72	6.70
	Asian	996	0.79	6.42
	Native Hawaiian/Pacific Islander	96	0.69	6.59
	Black/African American	4,909	0.64	6.76
	American Indian	83	0.76	6.62
	White	33,580	0.76	6.43
	Two or More Races	2,647	0.73	6.56
Migrant	Non-Migrant	46,438	0.76	6.49
	Migrant	225	0.72	7.02
LEP	Non-LEP	42,638	0.76	6.49
	LEP	4,025	0.65	6.71
Economic Disadvantage	Economically Disadvantaged	29,628	0.73	6.61
	Not Economically Disadvantaged	17,035	0.76	6.41
IEP	Non-IEP	38,502	0.75	6.48
	IEP	8,161	0.78	6.61

**Grade 7 Science**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,150	0.76	6.66
Gender	Female	22,428	0.74	6.71
	Male	23,722	0.77	6.69
Ethnicity	Hispanic	4,405	0.68	6.95
	Asian	956	0.81	6.53
	Native Hawaiian/Pacific Islander	102	0.66	6.85
	Black/African American	4,985	0.60	7.01
	American Indian	56	0.77	6.81
	White	33,283	0.76	6.67
	Two or More Races	2,363	0.73	6.79
Migrant	Non-Migrant	45,908	0.76	6.66
	Migrant	242	0.65	7.21
LEP	Non-LEP	43,650	0.76	6.64
	LEP	2,500	0.43	7.28
Economic Disadvantage	Economically Disadvantaged	28,148	0.70	6.79
	Not Economically Disadvantaged	18,002	0.78	6.55
IEP	Non-IEP	40,213	0.76	6.66
	IEP	5,937	0.61	7.09

**Grade 11 Science**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,062	0.72	6.73
Gender	Female	22,707	0.70	6.62
	Male	23,351	0.74	6.76
Ethnicity	Hispanic	4,218	0.70	6.85
	Asian	904	0.77	6.70
	Native Hawaiian/Pacific Islander	72	0.74	6.87
	Black/African American	4,933	0.63	6.96
	American Indian	73	0.72	6.76
	White	33,823	0.72	6.59
	Two or More Races	2,034	0.70	6.81
Migrant	Non-Migrant	45,877	0.72	6.72
	Migrant	185	0.69	7.23
LEP	Non-LEP	44,179	0.72	6.64
	LEP	1,883	0.46	7.38
Economic Disadvantage	Economically Disadvantaged	25,050	0.69	6.78
	Not Economically Disadvantaged	21,012	0.72	6.62
IEP	Non-IEP	41,707	0.71	6.71
	IEP	4,355	0.61	7.11

**Grade 5 Social Studies**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	47,133	0.84	6.29
Gender	Female	22,999	0.83	6.24
	Male	24,134	0.85	6.31
Ethnicity	Hispanic	4,336	0.82	6.18
	Asian	1,049	0.84	6.70
	Native Hawaiian/Pacific Islander	92	0.74	6.11
	Black/African American	5,037	0.80	6.17
	American Indian	64	0.82	6.27
	White	33,963	0.83	6.43
	Two or More Races	2,592	0.83	6.27
Migrant	Non-Migrant	46,879	0.84	6.30
	Migrant	254	0.77	6.12
LEP	Non-LEP	44,217	0.84	6.28
	LEP	2,916	0.72	6.13
Economic Disadvantage	Economically Disadvantaged	29,539	0.82	6.31
	Not Economically Disadvantaged	17,594	0.83	6.43
IEP	Non-IEP	39,755	0.83	6.34
	IEP	7,378	0.84	6.22



**Grade 8 Social Studies**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,939	0.86	6.15
Gender	Female	22,536	0.86	6.06
	Male	24,403	0.86	6.21
Ethnicity	Hispanic	4,423	0.84	6.00
	Asian	923	0.86	6.68
	Native Hawaiian/Pacific Islander	91	0.84	6.09
	Black/African American	5,064	0.81	6.01
	American Indian	66	0.84	5.90
	White	33,983	0.86	6.15
	Two or More Races	2,389	0.85	6.23
Migrant	Non-Migrant	46,698	0.86	6.15
	Migrant	241	0.79	6.07
LEP	Non-LEP	44,579	0.86	6.15
	LEP	2,360	0.65	6.13
Economic Disadvantage	Economically Disadvantaged	28,364	0.84	6.00
	Not Economically Disadvantaged	18,575	0.86	6.29
IEP	Non-IEP	41,177	0.86	6.10
	IEP	5,762	0.78	6.17

**Grade 11 Social Studies**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	45,997	0.87	6.14
Gender	Female	22,690	0.85	6.26
	Male	23,303	0.88	6.15
Ethnicity	Hispanic	4,207	0.85	6.07
	Asian	898	0.87	6.39
	Native Hawaiian/Pacific Islander	72	0.87	6.20
	Black/African American	4,926	0.81	6.21
	American Indian	73	0.88	6.36
	White	33,780	0.87	6.13
	Two or More Races	2,035	0.86	6.06
Migrant	Non-Migrant	45,814	0.87	6.14
	Migrant	183	0.82	6.31
LEP	Non-LEP	44,124	0.87	6.12
	LEP	1,873	0.60	6.24
Economic Disadvantage	Economically Disadvantaged	25,001	0.85	6.04
	Not Economically Disadvantaged	20,996	0.87	6.28
IEP	Non-IEP	41,649	0.86	6.30
	IEP	4,348	0.78	6.31

**Grade 5 Editing and Mechanics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	47,022	0.83	6.99
Gender	Female	22,937	0.82	7.07
	Male	24,085	0.84	6.79
Ethnicity	Hispanic	4,328	0.83	6.62
	Asian	1,040	0.82	7.46
	Native Hawaiian/Pacific Islander	92	0.79	6.57
	Black/African American	5,031	0.82	6.54
	American Indian	64	0.82	6.96
	White	33,882	0.82	7.05
	Two or More Races	2,585	0.83	6.82
Migrant	Non-Migrant	46,768	0.83	6.99
	Migrant	254	0.79	6.58
LEP	Non-LEP	44,106	0.83	6.89
	LEP	2,916	0.77	6.50
Economic Disadvantage	Economically Disadvantaged	29,505	0.83	6.72
	Not Economically Disadvantaged	17,517	0.80	7.34
IEP	Non-IEP	39,654	0.81	7.05
	IEP	7,368	0.85	6.61

**Grade 8 Editing and Mechanics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	46,845	0.85	7.05
Gender	Female	22,490	0.84	7.08
	Male	24,355	0.86	6.84
Ethnicity	Hispanic	4,413	0.85	6.72
	Asian	919	0.85	7.82
	Native Hawaiian/Pacific Islander	91	0.84	6.75
	Black/African American	5,054	0.83	6.80
	American Indian	66	0.85	6.75
	White	33,918	0.84	7.16
	Two or More Races	2,384	0.85	6.91
Migrant	Non-Migrant	46,604	0.85	7.05
	Migrant	241	0.82	6.61
LEP	Non-LEP	44,489	0.85	6.96
	LEP	2,356	0.75	6.79
Economic Disadvantage	Economically Disadvantaged	28,330	0.84	6.88
	Not Economically Disadvantaged	18,515	0.83	7.38
IEP	Non-IEP	41,091	0.84	6.99
	IEP	5,754	0.83	6.84

**Grade 11 Editing and Mechanics**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	45,912	0.85	6.97
Gender	Female	22,657	0.83	7.07
	Male	23,251	0.85	7.10
Ethnicity	Hispanic	4,183	0.83	6.96
	Asian	898	0.85	7.21
	Native Hawaiian/Pacific Islander	72	0.85	6.90
	Black/African American	4,902	0.81	6.98
	American Indian	73	0.84	6.96
	White	33,749	0.84	7.10
	Two or More Races	2,030	0.84	6.88
Migrant	Non-Migrant	45,731	0.85	6.96
	Migrant	181	0.81	7.24
LEP	Non-LEP	44,062	0.84	7.10
	LEP	1,850	0.64	7.07
Economic Disadvantage	Economically Disadvantaged	24,937	0.84	6.85
	Not Economically Disadvantaged	20,975	0.84	7.09
IEP	Non-IEP	41,577	0.84	7.02
	IEP	4,335	0.78	7.07

**Grade 5 On-Demand Writing**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	45,746	0.95	4.95
Gender	Female	22,334	0.96	4.29
	Male	23,412	0.95	4.98
Ethnicity	Hispanic	4,207	0.95	5.00
	Asian	990	0.96	4.24
	Native Hawaiian/Pacific Islander	91	0.95	4.25
	Black/African American	4,893	0.94	5.33
	American Indian	61	0.96	4.91
	White	32,991	0.95	4.82
	Two or More Races	2,513	0.95	4.90
Migrant	Non-Migrant	45,500	0.95	4.95
	Migrant	246	0.94	5.43
LEP	Non-LEP	42,954	0.95	4.90
	LEP	2,792	0.93	5.57
Economic Disadvantage	Economically Disadvantaged	28,758	0.95	4.95
	Not Economically Disadvantaged	16,988	0.95	4.56
IEP	Non-IEP	38,697	0.95	4.59
	IEP	7,049	0.92	6.40

**Grade 8 On-Demand Writing**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	45,757	0.96	4.96
Gender	Female	21,997	0.96	4.86
	Male	23,760	0.95	5.46
Ethnicity	Hispanic	4,288	0.94	5.95
	Asian	890	0.97	4.21
	Native Hawaiian/Pacific Islander	91	0.96	4.91
	Black/African American	4,933	0.92	6.35
	American Indian	64	0.95	4.89
	White	33,155	0.96	4.86
	Two or More Races	2,336	0.95	5.40
Migrant	Non-Migrant	45,523	0.96	4.96
	Migrant	234	0.93	6.08
LEP	Non-LEP	43,498	0.96	4.92
	LEP	2,259	0.88	6.89
Economic Disadvantage	Economically Disadvantaged	27,689	0.95	5.37
	Not Economically Disadvantaged	18,068	0.96	4.72
IEP	Non-IEP	40,209	0.96	4.81
	IEP	5,548	0.87	7.11

**Grade 11 On-Demand Writing**

<b>Category</b>	<b>Group</b>	<b>N</b>	<b>Reliability</b>	<b>SEM</b>
All	Students Tested	42,916	0.96	5.41
Gender	Female	21,571	0.97	4.45
	Male	21,342	0.96	5.50
Ethnicity	Hispanic	3,882	0.96	5.51
	Asian	836	0.97	4.33
	Native Hawaiian/Pacific Islander	63	0.97	4.74
	Black/African American	4,472	0.94	6.39
	American Indian	72	0.96	5.25
	White	31,689	0.97	4.58
	Two or More Races	1,898	0.96	5.48
Migrant	Non-Migrant	42,758	0.96	5.41
	Migrant	158	0.94	7.71
LEP	Non-LEP	41,300	0.96	5.33
	LEP	1,616	0.89	7.55
Economic Disadvantage	Economically Disadvantaged	23,269	0.96	5.39
	Not Economically Disadvantaged	19,647	0.97	4.44
IEP	Non-IEP	39,000	0.96	5.15
	IEP	3,916	0.91	7.42

## 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
RE03920746586	Overall	45,705	9,204	72.6	27.4	0.0	72.5	33.7	41.3	22.6	-	-	0.7	0.0	0.0	1.0	0.7
RE03921257833	Overall	23,933	4,805	80.3	19.7	0.0	62.2	21.9	38.3	38.4	-	-	0.4	0.0	0.0	0.7	0.4
RE03924056085	Overall	21,859	4,399	75.9	24.1	0.0	74.8	31.6	40.7	25.7	-	-	0.6	0.0	0.0	0.8	0.5
RE03008763125	Overall	2,476	875	84.2	12.0	3.8	-	64.9	19.8	4.7	-	-	1.0	2.4	0.0	1.2	6.0
RE03008763717	Overall	2,484	875	80.9	18.9	0.2	-	56.8	30.1	3.9	-	-	0.5	2.9	0.1	1.5	4.3
RE03012850965	Overall	2,483	875	80.6	19.3	0.1	-	48.1	34.1	11.3	-	-	0.5	2.2	0.1	0.8	2.8
RE03012851152	Overall	2,484	875	88.6	9.7	1.7	-	61.4	21.7	9.8	-	-	0.6	1.9	0.1	1.5	3.1
RE03920049835	Overall	2,488	875	79.9	19.8	0.3	-	50.4	31.8	16.4	-	-	0.5	0.4	0.0	0.2	0.3

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

**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
RE04013320233	Overall	24,606	4,941	70.7	29.3	0.0	73.7	50.3	27.2	21.1	-	-	0.5	0.0	0.0	0.4	0.4
RE04918441324	Overall	21,949	4,400	72.5	26.7	0.8	59.6	19.4	49.2	30.4	-	-	0.3	0.0	0.0	0.3	0.3
RE04919046871	Overall	46,481	9,342	65.6	31.5	2.9	65.6	26.0	29.9	22.5	14.2	5.7	0.5	0.0	0.0	0.6	0.6
RE04008555118	Overall	2,491	875	70.9	28.5	0.6	-	28.6	46.5	23.9	-	-	0.3	0.2	0.1	0.3	0.3
RE04008557195	Overall	2,499	875	69.0	30.7	0.3	-	26.8	39.1	33.0	-	-	0.1	0.2	0.0	0.3	0.6
RE04011524811	Overall	2,490	875	80.5	19.4	0.1	-	31.6	46.3	18.8	-	-	0.4	1.1	0.0	0.3	1.5
RE04011527818	Overall	2,489	875	72.2	27.6	0.2	-	21.4	38.9	24.8	10.4	2.9	0.4	0.3	0.1	0.4	0.4
RE04921747069	Overall	2,497	875	64.0	35.8	0.2	-	23.8	35.7	38.6	-	-	0.2	0.1	0.1	0.4	1.1
RE04921747502	Overall	2,495	875	72.1	27.6	0.3	-	20.0	38.5	39.8	-	-	0.2	0.3	0.0	0.4	0.7

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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
RE05009356341	Overall	24,662	4,942	74.4	25.6	0.0	61.0	19.9	38.6	40.8	-	-	0.2	0.0	0.0	0.2	0.2
RE05009460220	Overall	24,587	4,942	60.2	36.5	3.3	60.9	29.7	35.9	24.0	7.7	1.1	0.6	0.1	0.0	0.4	0.5
RE05919938465	Overall	22,392	4,498	55.2	38.0	6.8	34.4	21.8	21.2	21.4	23.1	11.4	0.5	0.0	0.0	0.3	0.3
RE05924235958	Overall	22,431	4,498	76.0	24.0	0.0	73.1	38.0	37.4	23.7	-	-	0.3	0.0	0.0	0.2	0.3
RE05917638411	Overall	2,492	875	79.2	20.8	0.0	-	33.3	53.6	12.3	-	-	0.5	0.1	0.1	0.0	0.2
RE05917639123	Overall	2,493	875	76.8	22.5	0.7	-	34.6	45.8	18.7	-	-	0.4	0.1	0.0	0.1	0.2
RE05919243393	Overall	2,491	875	75.3	24.7	0.0	-	35.0	45.1	18.5	-	-	0.4	0.3	0.1	0.1	0.3
RE05919245732	Overall	2,491	875	74.6	25.4	0.0	-	35.3	38.2	25.7	-	-	0.5	0.0	0.0	0.0	0.1

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

**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
RE06012945433	Overall	23,072	4,636	58.3	41.7	0.0	65.4	6.5	27.5	43.1	14.5	7.0	0.5	0.0	0.1	0.4	0.4
RE06014267019	Overall	20,208	4,055	66.1	31.4	2.5	82.5	19.2	34.7	45.2	-	-	0.4	0.0	0.0	0.2	0.3
RE06922754649	Overall	20,172	4,054	64.8	35.1	0.1	66.4	15.6	30.6	33.9	13.4	4.9	0.7	0.0	0.1	0.4	0.5
RE06924251082	Overall	23,046	4,636	74.4	24.8	0.8	84.8	21.7	51.2	25.3	-	-	0.7	0.0	0.1	0.6	0.5
RE06011265586	Overall	2,489	875	73.9	25.2	0.9	-	42.3	41.8	14.5	-	-	0.5	0.3	0.0	0.1	0.5
RE06011268430	Overall	2,478	875	62.6	36.4	1.0	-	27.0	31.8	27.8	6.3	3.8	1.3	0.7	0.1	0.0	1.3
RE06012045420	Overall	2,485	875	72.2	27.6	0.2	-	14.7	42.9	40.4	-	-	0.6	0.2	0.1	0.1	1.0
RE06012048779	Overall	2,488	875	62.4	36.2	1.4	-	25.6	31.3	25.5	10.8	4.6	0.6	0.1	0.0	0.5	1.0
RE06925929524	Overall	2,489	875	67.8	30.6	1.6	-	22.4	30.7	35.5	6.8	3.0	0.4	0.3	0.1	0.2	0.6
RE06925931076	Overall	2,482	875	67.2	30.3	2.5	-	23.5	28.2	35.7	8.0	2.9	0.7	0.5	0.1	0.2	0.3

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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
RE07008837693	Overall	21,015	4,253	69.5	27.8	2.7	92.4	34.7	35.0	27.0	-	-	1.5	0.0	0.0	0.8	1.0
RE07008839279	Overall	24,710	5,005	66.3	29.7	4.0	69.9	45.9	27.3	15.5	6.2	1.4	1.5	0.0	0.1	1.0	1.2
RE07009145845	Overall	24,725	5,005	74.8	23.3	1.9	78.3	45.7	46.7	3.6	-	-	1.3	0.0	0.0	1.0	1.6
RE07924164063	Overall	21,127	4,253	58.7	37.5	3.8	71.6	16.5	17.1	24.1	24.6	15.8	0.7	0.0	0.0	0.5	0.7
RE07012455173	Overall	2,473	875	73.9	25.9	0.2	-	49.3	33.2	14.2	-	-	1.0	0.4	0.0	0.5	1.4
RE07012455681	Overall	2,479	875	74.4	25.3	0.3	-	45.7	33.7	18.0	-	-	1.1	0.5	0.0	0.4	0.7
RE07924140427	Overall	2,476	875	74.3	25.1	0.6	-	32.3	49.1	16.4	-	-	0.9	0.3	0.0	0.1	0.8
RE07924140566	Overall	2,479	875	70.1	29.3	0.6	-	49.2	39.0	9.4	-	-	0.7	0.4	0.1	0.4	0.8

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

**Grade 8 Reading**

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non- Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
RE08009731111	Overall	21,875	4,395	79.7	20.3	0.0	86.5	16.8	38.2	43.7	-	-	0.5	0.0	0.0	0.3	0.5
RE08009732251	Overall	24,841	5,021	86.8	12.9	0.3	88.5	24.0	43.4	29.4	-	-	1.1	0.0	0.0	0.8	1.2
RE08011258174	Overall	21,577	4,395	56.6	43.2	0.2	68.8	16.0	17.3	18.8	15.5	27.9	1.7	0.1	0.0	1.1	1.6
RE08012254883	Overall	24,698	5,021	65.6	34.4	0.0	62.3	41.3	23.9	23.0	6.6	0.9	1.7	0.0	0.1	1.1	1.4
RE08011151395	Overall	2,473	875	78.4	21.5	0.1	-	22.3	41.6	32.1	-	-	1.8	0.3	0.0	0.2	1.6
RE08011155456	Overall	2,478	875	65.0	34.9	0.1	-	12.1	22.9	37.0	17.7	7.5	0.8	0.6	0.0	0.4	1.0
RE08012848869	Overall	2,462	875	66.7	32.5	0.8	-	22.1	23.8	28.0	14.3	8.0	1.3	0.5	0.0	0.2	1.8
RE08012849596	Overall	2,454	875	65.9	33.4	0.7	-	22.0	29.9	25.2	11.8	6.9	1.8	0.4	0.0	0.3	1.7
RE08917144017	Overall	2,470	875	63.0	36.4	0.6	-	23.0	24.7	28.9	13.5	5.7	1.4	0.3	0.1	0.6	1.8
RE08917144182	Overall	2,458	875	59.4	39.9	0.7	-	15.6	21.9	28.1	18.3	11.8	2.4	0.3	0.1	0.2	1.3

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

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
RE10009854344	Overall	22,600	4,660	73.4	26.1	0.5	88.0	29.8	29.0	22.9	8.9	3.0	2.9	0.1	0.0	1.4	2.1
RE10924246912	Overall	25,472	5,261	66.0	33.9	0.1	71.6	33.5	18.8	19.0	13.7	8.2	3.0	0.0	0.1	1.5	2.2
RE10925560529	Overall	46,389	9,922	81.3	13.8	4.9	85.6	50.3	24.8	13.0	-	-	6.3	0.0	0.0	2.5	3.1
RE10011329071	Overall	2,407	875	67.9	31.8	0.3	-	26.9	27.6	24.5	9.4	5.4	2.8	1.0	0.0	1.5	1.1
RE10011333270	Overall	2,393	875	68.1	31.6	0.3	-	31.8	24.5	22.3	9.6	4.5	3.6	1.0	0.1	1.8	0.9
RE10011333373	Overall	2,393	875	82.6	17.3	0.1	-	42.2	27.2	24.0	-	-	3.2	0.1	0.1	2.1	1.1
RE10011335520	Overall	2,408	875	80.3	19.2	0.5	-	41.7	29.0	23.8	-	-	2.9	0.4	0.0	1.2	1.0

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

**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
MA0320093	Part B	24,812	5,026	94.2	5.8	0.0	98.3	35.9	61.5	-	-	-	2.2	0.0	0.0	0.1	0.3
MA0320173	Overall	21,119	4,294	91.1	8.5	0.4	96.7	32.8	43.7	21.7	-	-	1.4	0.0	0.0	0.1	0.3
MA0320C3_02	Overall	14,955	3,046	83.6	15.6	0.8	91.7	60.7	13.2	24.1	-	-	1.6	0.0	0.0	0.1	0.3
MA0321003	Overall	2,481	875	85.6	13.0	1.4	-	26.2	46.0	26.8	-	-	0.5	0.0	0.0	0.1	0.3
MA0321036	Part B	2,473	875	94.2	5.8	0.0	-	83.4	13.4	-	-	-	1.6	0.0	0.0	0.1	1.4
MA0321042	Part B	2,467	875	92.5	7.5	0.0	-	67.0	30.5	-	-	-	1.5	0.0	0.0	0.0	1.0
MA0321055	Overall	2,463	875	93.0	6.3	0.7	-	66.5	23.6	7.8	-	-	1.0	0.0	0.0	0.1	1.0
MA0321151	Overall	2,465	875	91.1	8.8	0.1	-	37.4	34.9	26.5	-	-	1.0	0.0	0.0	0.1	0.2
MA0321173	Overall	2,461	875	91.8	7.1	1.1	-	77.4	9.0	11.4	-	-	1.3	0.0	0.0	0.1	0.8

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

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	Part B	13,413	2,710	75.4	22.9	1.7	91.1	38.3	26.2	26.5	6.8	-	1.7	0.0	0.0	0.2	0.4
MA0420066	Overall	15,843	3,235	73.4	20.4	6.2	80.9	55.6	19.8	9.5	5.9	7.1	1.7	0.0	0.0	0.1	0.3
MA0420093	Overall	17,320	3,510	76.5	21.4	2.1	84.1	17.3	51.5	19.4	7.3	2.1	1.4	0.0	0.0	0.1	0.7
MA0420C2_01	Overall	46,456	9,456	93.1	6.2	0.7	94.9	65.1	11.8	21.1	-	-	1.5	0.0	0.0	0.1	0.4
MA0420C4_02	Overall	46,632	9,456	91.1	8.5	0.4	94.6	32.6	50.4	15.6	-	-	1.2	0.0	0.0	0.1	0.1
MA0421022	Overall	2,483	875	80.9	17.4	1.7	-	41.9	13.8	19.3	7.3	16.9	0.6	0.0	0.0	0.0	0.2
MA0421047	Overall	2,489	875	91.4	7.6	1.0	-	76.2	14.2	8.6	-	-	0.4	0.0	0.0	0.0	0.6
MA0421079	Part B	2,469	875	86.4	12.5	1.1	-	42.7	30.4	23.8	1.3	-	1.2	0.0	0.0	0.0	0.6
MA0421084	Overall	2,443	881	91.9	7.6	0.5	-	50.9	22.4	23.5	-	-	1.8	0.0	0.0	0.0	1.4
MA0421085	Part B	2,472	875	86.4	10.4	3.2	-	66.7	14.8	12.5	3.0	-	1.2	0.0	0.0	0.0	1.7
MA0421086	Overall	2,428	864	93.1	6.2	0.7	-	59.4	19.7	16.2	-	-	3.2	0.0	0.0	0.1	1.4
MA0421091	Overall	2,458	837	92.0	7.0	1.0	-	48.0	33.7	15.6	-	-	1.8	0.0	0.0	0.0	0.8
MA0421095	Overall	2,418	855	93.3	6.5	0.2	-	57.3	34.1	5.1	-	-	2.4	0.0	0.0	0.1	0.9
MA0421169	Overall	2,462	885	82.1	17.6	0.3	-	51.9	27.3	17.7	-	-	2.2	0.0	0.0	0.1	0.7
MA0421227	Overall	2,427	862	80.0	15.7	4.3	-	43.4	12.9	18.9	5.9	15.3	2.1	0.0	0.0	0.0	1.5
MA0421231	Overall	2,441	865	75.7	22.9	1.4	-	45.4	36.1	13.6	2.6	0.0	1.7	0.0	0.0	0.0	0.6
MA0421247	Overall	2,468	875	84.7	14.3	1.0	-	57.6	22.8	17.1	-	-	1.1	0.0	0.0	0.0	1.4
MA0421251	Overall	2,460	878	85.6	12.9	1.5	-	39.8	19.5	19.2	9.8	10.0	1.1	0.0	0.0	0.1	0.5
MA0421259	Overall	2,465	875	78.1	20.6	1.3	-	25.2	17.8	25.4	9.7	20.4	1.0	0.0	0.0	0.1	0.4

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

**Grade 5 Mathematics**

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non- Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA0520060	Part B	25,662	5,178	96.2	3.8	0.0	98.6	61.2	37.2	-	-	-	1.2	0.0	0.0	0.0	0.4
MA0520062	Overall	46,996	9,553	77.3	20.3	2.4	82.8	40.3	14.6	19.8	9.9	13.6	1.5	0.0	0.0	0.0	0.3
MA0520132	Overall	21,451	4,374	87.5	12.3	0.2	94.0	44.2	49.5	4.1	-	-	1.8	0.0	0.0	0.0	0.4
MA0521057	Overall	47,055	9,553	88.2	11.3	0.5	90.9	37.7	22.1	38.4	-	-	1.4	0.0	0.0	0.1	0.4
MA0521004	Overall	2,490	875	87.5	11.5	1.0	-	86.3	8.8	3.9	-	-	0.6	0.0	0.0	0.0	0.3
MA0521031	Overall	2,457	875	73.8	22.9	3.3	-	62.9	14.9	9.5	4.5	6.6	1.3	0.0	0.0	0.0	0.2
MA0521049	Overall	2,489	875	82.1	17.4	0.5	-	26.2	38.5	34.8	-	-	0.5	0.0	0.0	0.0	0.1
MA0521053	Overall	2,494	875	93.0	6.7	0.3	-	62.2	12.1	25.3	-	-	0.2	0.0	0.0	0.0	0.1
MA0521062	Overall	2,470	875	77.3	18.9	3.8	-	35.5	14.2	22.6	10.9	15.6	0.9	0.0	0.0	0.0	0.3
MA0521076	Overall	2,465	875	71.7	22.5	5.8	-	27.0	29.1	17.0	10.3	15.4	1.1	0.0	0.0	0.0	0.1
MA0521077	Overall	2,462	875	71.1	27.1	1.8	-	37.5	25.1	16.2	10.5	9.2	1.1	0.0	0.0	0.0	0.3

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

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	20,289	4,164	76.3	21.1	2.6	89.1	47.3	18.7	11.3	10.3	8.3	2.7	0.0	0.1	0.1	1.3
MA0620059	Part B	22,812	4,613	83.3	14.8	1.9	92.3	71.8	12.4	13.8	-	-	1.4	0.0	0.0	0.0	0.7
MA0621014	Overall	43,590	8,777	86.7	13.0	0.3	89.0	64.0	23.9	10.6	-	-	0.8	0.0	0.1	0.0	0.6
MA0621040	Overall	20,251	4,164	89.0	10.0	1.0	93.5	77.2	13.4	5.1	-	-	2.7	0.0	0.1	0.1	1.5
MA0621103	Overall	22,904	4,613	87.6	11.6	0.8	92.8	58.2	17.5	23.3	-	-	0.7	0.0	0.0	0.0	0.2
MA0620131	Part B	2,468	875	90.3	9.7	0.0	-	67.6	29.4	-	-	-	2.1	0.0	0.1	0.2	0.6
MA0621008	Part B	2,475	875	95.0	4.5	0.5	-	76.5	4.8	10.0	5.4	-	2.1	0.0	0.0	0.1	1.1
MA0621047	Part B	2,464	874	90.4	9.4	0.2	-	51.4	17.6	22.7	3.4	-	3.2	0.0	0.0	0.0	1.7
MA0621060	Overall	2,477	875	88.5	11.3	0.2	-	30.7	27.3	39.7	-	-	1.5	0.0	0.0	0.0	0.6
MA0621064	Overall	2,476	875	76.2	21.6	2.2	-	27.1	33.5	19.8	7.1	9.8	1.6	0.0	0.0	0.0	1.1
MA0621089	Overall	2,440	891	70.7	26.5	2.8	-	44.5	32.4	13.0	4.9	2.1	1.7	0.0	0.1	0.1	1.3
MA0621098	Overall	2,420	854	87.1	11.8	1.1	-	64.2	26.9	4.5	-	-	2.5	0.0	0.0	0.2	1.7
MA0621100	Overall	2,435	874	92.4	7.0	0.6	-	76.4	19.1	0.6	-	-	1.9	0.0	0.0	0.0	2.0
MA0621101	Overall	2,448	875	81.0	16.0	3.0	-	55.6	21.4	12.3	3.2	4.1	1.7	0.0	0.0	0.2	1.5

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

Appendix L. Scoring Metrics for KSA Constructed-Response Items

**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
MA0720037	Overall	33,791	6,867	83.2	11.5	5.3	92.3	50.6	5.7	18.5	6.3	15.9	1.7	0.0	0.0	0.0	1.3
MA0720109	Overall	9,546	1,939	95.2	4.4	0.4	92.6	85.7	5.0	5.7	-	-	1.8	0.0	0.1	0.4	1.4
MA0720C3_03	Overall	12,124	2,497	89.5	10.1	0.4	89.0	72.8	19.2	2.2	-	-	3.2	0.0	0.0	0.0	2.6
MA0721019	Overall	33,323	6,842	88.2	11.3	0.5	93.4	61.6	30.7	3.2	-	-	2.8	0.0	0.0	0.0	1.7
MA0721033	Overall	12,142	2,472	94.6	4.6	0.8	91.7	85.9	4.5	4.5	0.8	1.0	1.9	0.0	0.0	0.0	1.4
MA0720055	Part C	2,441	875	85.0	10.5	4.5	-	85.0	5.8	2.6	-	-	3.3	0.0	0.0	0.2	3.1
MA0721027	Overall	2,417	852	86.6	11.5	1.9	-	73.5	10.2	10.5	-	-	3.0	0.0	0.0	0.3	2.5
MA0721032	Overall	2,445	875	89.7	8.9	1.4	-	76.1	11.8	7.3	-	-	2.5	0.0	0.1	0.1	2.0
MA0721059	Overall	2,471	875	84.8	14.3	0.9	-	71.8	16.6	8.1	-	-	1.3	0.0	0.1	0.1	2.1
MA0721093	Overall	2,475	852	90.6	9.2	0.2	-	58.8	30.0	9.3	-	-	1.0	0.0	0.0	0.0	0.8
MA0721100	Overall	2,424	867	95.2	4.7	0.1	-	88.7	5.3	1.4	-	-	2.6	0.0	0.0	0.1	1.9
MA0721122	Overall	2,411	864	94.0	5.4	0.6	-	85.2	3.1	7.3	-	-	2.8	0.0	0.0	0.0	1.5
MA0721129	Overall	2,397	875	82.3	16.6	1.1	-	68.3	20.6	3.0	0.9	1.2	3.6	0.0	0.0	0.3	2.2
MA0721130	Overall	2,394	869	73.6	22.4	4.0	-	69.4	14.3	5.2	2.2	1.8	4.5	0.0	0.0	0.1	2.3
MA0721136	Overall	2,449	875	83.1	15.8	1.1	-	35.1	39.3	13.7	3.7	4.1	2.8	0.0	0.1	0.2	1.0

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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	22,004	4,491	84.6	13.9	1.5	90.8	67.8	25.0	2.9	-	-	2.3	0.0	0.0	0.1	1.9
MA0820082	Overall	24,325	5,057	78.8	18.4	2.8	79.7	50.8	23.8	8.9	5.9	3.8	4.1	0.0	0.0	0.4	2.4
MA0820142	Overall	9,421	1,961	90.5	8.9	0.6	83.1	72.5	11.3	4.2	2.0	2.2	4.2	0.0	0.1	0.4	3.3
MA0820161	Overall	9,455	1,961	96.2	3.7	0.1	94.9	78.2	5.7	10.5	-	-	3.6	0.0	0.0	0.0	2.0
MA0820162	Overall	12,240	2,481	86.7	12.7	0.6	90.0	54.2	20.9	15.3	4.5	2.7	1.6	0.0	0.0	0.1	0.7
MA0820C09_01	Part B	37,194	7,539	90.6	9.4	0.0	97.8	68.1	28.4	-	-	-	1.8	0.0	0.0	0.2	1.4
MA0820194	Overall	2,391	869	88.4	11.4	0.2	-	34.0	35.5	23.8	-	-	4.0	0.0	0.0	0.6	2.1
MA0821041	Overall	2,330	861	89.0	10.9	0.1	-	76.8	10.9	0.9	-	-	6.0	0.0	0.0	0.2	5.2
MA0821059	Overall	2,416	862	81.0	17.0	2.0	-	47.3	28.0	4.7	7.5	6.0	3.6	0.0	0.0	0.2	2.6
MA0821060	Overall	2,366	858	86.2	11.5	2.3	-	75.1	7.8	3.6	3.4	1.5	5.2	0.0	0.0	0.2	3.2
MA0821071	Overall	2,395	870	92.5	7.2	0.3	-	80.4	7.2	6.6	-	-	3.5	0.0	0.1	0.3	2.0
MA0821080	Overall	2,392	861	83.7	15.8	0.5	-	64.7	24.0	6.1	-	-	3.6	0.0	0.0	0.3	1.4
MA0821093	Overall	2,383	856	81.9	17.5	0.6	-	52.1	27.4	14.5	-	-	4.0	0.0	0.0	0.5	1.4
MA0821133	Overall	2,432	884	96.0	3.3	0.7	-	89.8	4.2	1.3	-	-	2.5	0.0	0.0	0.3	2.0
MA0821141	Overall	2,429	875	84.5	14.1	1.4	-	65.8	15.9	9.5	1.2	1.2	2.5	0.0	0.1	0.9	2.8
MA0821158	Overall	2,382	853	84.8	13.2	2.0	-	66.9	16.1	6.9	2.5	0.8	4.4	0.0	0.0	0.3	2.1
MA0821159	Overall	2,250	815	85.4	13.0	1.6	-	63.9	12.0	9.9	-	-	8.8	0.0	0.0	0.3	5.0
MA0821160	Overall	2,356	861	83.0	16.1	0.9	-	55.6	31.1	3.8	1.1	0.5	5.2	0.0	0.0	0.4	2.3
MA0821162	Overall	2,431	856	91.1	8.8	0.1	-	78.9	13.0	4.3	-	-	2.5	0.0	0.0	0.1	1.3

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Appendix L. Scoring Metrics for KSA Constructed-Response Items

**Grade 10 Mathematics**

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non- Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
MA1019056	Overall	46,679	9,993	88.5	9.7	1.8	87.3	42.5	28.4	13.4	2.3	2.5	6.4	0.0	0.0	1.2	3.2
MA1020024	Overall	12,784	2,706	91.5	6.2	2.3	92.3	77.2	8.1	4.5	-	-	5.4	0.0	0.0	0.6	4.1
MA1020153	Overall	35,883	7,939	95.9	2.9	1.2	97.8	65.9	14.7	1.7	-	-	9.7	0.0	0.0	1.7	6.3
MA1020C3_02	Overall	9,287	2,053	93.1	5.8	1.1	94.9	71.0	7.0	6.0	-	-	9.6	0.0	0.0	1.5	4.8
MA1020164	Overall	2,187	840	95.7	3.8	0.5	-	70.3	5.0	1.6	-	-	10.0	0.0	0.0	2.9	10.3
MA1021004	Part B	2,032	800	97.0	0.8	2.2	-	63.3	6.3	0.7	-	-	17.3	0.0	0.0	1.9	10.4
MA1021014	Overall	2,157	824	94.5	5.0	0.5	-	77.0	5.3	0.4	-	-	10.8	0.0	0.0	0.3	6.2
MA1021019	Overall	2,246	841	70.9	25.3	3.8	-	42.6	21.6	9.8	8.1	3.0	8.3	0.0	0.0	1.7	4.9
MA1021028	Overall	2,114	813	97.8	2.0	0.2	-	78.2	1.3	0.3	-	-	12.1	0.0	0.0	0.5	7.6
MA1021042	Overall	1,971	796	94.5	2.7	2.8	-	66.6	4.2	1.6	1.4	0.2	16.2	0.0	0.0	1.9	7.7
MA1021048	Overall	2,198	860	91.4	7.6	1.0	-	75.3	5.8	1.1	-	-	10.0	0.0	0.0	0.3	7.5
MA1021068	Overall	2,190	875	90.3	6.2	3.5	-	67.0	4.6	3.1	0.8	1.0	11.2	0.0	0.1	2.4	9.8
MA1021072	Overall	2,171	838	88.5	10.7	0.8	-	44.8	28.4	7.6	2.1	1.6	10.0	0.0	0.0	0.0	5.5
MA1021090	Overall	2,302	849	96.6	2.7	0.7	-	82.8	3.7	0.6	-	-	6.7	0.0	0.1	0.9	5.3
MA1021110	Overall	2,207	833	87.2	11.5	1.3	-	69.7	10.9	3.2	-	-	9.6	0.0	0.0	1.6	4.9
MA1021140	Overall	2,082	825	96.5	2.2	1.3	-	74.2	2.2	3.1	-	-	14.0	0.0	0.0	0.3	6.2
MA1021153	Overall	2,180	831	96.5	2.9	0.6	-	77.5	4.5	0.2	-	-	11.0	0.0	0.1	0.3	6.4
MA1021160	Overall	2,200	875	94.4	3.8	1.8	-	73.6	5.7	2.2	0.4	0.5	8.8	0.1	0.0	2.0	6.7

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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
SC041602_08	Overall	24,563	5,005	73.5	23.3	3.2	76.7	62.2	25.8	7.0	1.5	0.4	1.6	0.1	0.1	0.7	0.6
SC041606_08	Overall	21,968	4,443	70.4	25.5	4.1	85.8	36.7	26.3	19.6	13.2	1.6	1.1	0.1	0.0	0.4	1.0
SC041609_05	Overall	24,521	5,005	71.5	24.5	4.0	75.9	54.1	21.5	15.3	3.9	0.6	1.9	0.4	0.1	0.8	1.4
SC041614_05	Overall	46,503	9,448	69.2	27.1	3.7	83.5	30.3	42.0	19.9	3.4	0.8	1.6	0.0	0.1	0.7	1.1
SC041624_08	Overall	21,871	4,443	72.9	20.9	6.2	89.5	49.4	21.5	17.0	6.8	0.8	2.0	0.5	0.0	0.6	1.4

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

**Grade 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
SC071603_06	Overall	24,502	4,994	66.2	30.3	3.5	85.8	31.7	39.9	15.1	5.8	2.2	1.9	0.7	0.1	0.6	2.0
SC071610_08	Overall	21,363	4,338	65.2	30.8	4.0	83.6	34.0	26.6	26.0	7.1	1.8	1.7	0.5	0.0	0.4	1.8
SC071618_07	Overall	24,529	4,994	77.6	19.9	2.5	81.1	66.0	22.2	5.2	1.4	0.3	1.9	0.6	0.1	0.4	2.0
SC071625_08	Overall	21,356	4,338	68.1	29.3	2.6	75.8	38.5	37.4	16.2	3.2	0.4	1.8	0.5	0.0	0.4	1.7
SC071627_08	Overall	45,732	9,333	66.2	28.5	5.3	78.4	39.8	27.0	19.7	7.0	1.7	2.2	0.4	0.1	0.6	1.4

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

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
SC111608_05	Overall	44,271	9,279	78.9	19.5	1.6	79.4	28.8	43.6	15.0	3.6	0.3	4.1	0.7	0.1	0.9	2.9
SC111620_08	Overall	44,474	9,279	65.5	30.2	4.3	78.3	20.6	34.8	28.6	6.9	0.7	3.8	0.8	0.1	0.9	2.9
SC111704_03	Overall	23,832	4,892	67.2	32.2	0.6	77.9	36.4	33.0	19.6	3.4	0.4	2.5	0.7	0.1	0.8	3.2
SC111712_08	Overall	20,996	4,387	66.6	33.1	0.3	86.6	9.3	14.6	33.2	25.0	8.4	4.3	0.9	0.1	0.9	3.4

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

**Grade 5 Social Studies**

Item	Trait	Inter-Rater Reliability						Frequency Distribution of Total Read %									
		Total # 1st Scored	Total # 2nd Scored	%Perfect Agreement	%Adjacent	%Non- Adjacent	Validity %Perfect Agreement	0	1	2	3	4	B	A	F	I	O
SS0520045_08	Overall	46,988	9,433	80.7	18.6	0.7	89.7	30.9	42.9	24.0	-	-	0.5	0.2	0.0	0.5	0.8
SS0522179_09	Overall	46,804	9,433	74.7	22.0	3.3	83.6	38.2	30.7	22.2	4.7	0.4	1.2	0.2	0.0	0.8	1.4
SS0520046_08	Overall	2,474	875	79.7	19.0	1.3	-	64.1	27.4	4.6	-	-	1.2	0.0	0.1	0.5	2.1
SS0520046_09	Overall	2,487	875	75.0	22.5	2.5	-	48.3	33.0	14.4	2.0	0.3	0.9	0.0	0.0	0.2	0.9
SS0520048_08	Overall	2,487	875	83.2	16.0	0.8	-	65.0	25.8	6.8	-	-	0.8	0.2	0.0	0.3	1.2
SS0520048_09	Overall	2,480	875	75.0	21.6	3.4	-	47.2	29.9	16.4	2.7	0.5	1.1	0.2	0.0	0.6	1.3
SS0522247_08	Overall	2,492	875	69.7	29.0	1.3	-	33.9	41.7	22.5	-	-	0.5	0.1	0.0	0.3	1.0
SS0522247_09	Overall	2,487	875	69.4	25.9	4.7	-	43.0	28.5	20.6	4.3	1.2	0.6	0.1	0.1	0.3	1.1

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

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
SS0820004_08	Overall	46,380	9,401	79.6	18.9	1.5	95.6	16.9	45.5	32.2	-	-	1.5	0.1	0.0	1.3	2.3
SS0820048_09	Overall	45,886	9,401	67.3	28.1	4.6	80.1	28.7	23.8	23.5	11.7	3.4	2.7	0.2	0.0	1.9	4.0
SS0821086_08	Overall	2,466	875	84.7	15.2	0.1	-	27.2	45.1	22.5	-	-	1.3	1.3	0.0	0.0	2.5
SS0821086_09	Overall	2,447	875	69.6	29.1	1.3	-	20.7	27.9	31.1	12.7	1.7	1.9	1.2	0.0	0.0	2.7
SS0821088_08	Overall	2,446	875	85.7	14.1	0.2	-	36.6	36.6	21.3	-	-	2.2	1.2	0.0	0.0	2.1
SS0821088_09	Overall	2,445	875	73.7	24.8	1.5	-	33.9	24.6	28.4	7.2	0.9	2.0	0.9	0.0	0.0	2.0
SS0822243_08	Overall	2,460	875	82.2	17.1	0.7	-	31.6	41.9	21.8	-	-	1.7	0.9	0.0	0.1	2.0
SS0822243_09	Overall	2,462	875	68.2	30.7	1.1	-	20.5	26.9	31.7	14.0	0.8	1.7	1.1	0.0	0.0	3.2

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

**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	43,903	9,222	80.1	17.6	2.3	94.3	24.5	45.1	19.3	-	-	4.5	0.2	0.0	3.0	3.3
SS1120044_09	Overall	43,227	9,221	67.8	29.4	2.8	77.7	17.8	18.4	33.2	12.1	4.1	5.9	0.3	0.0	4.0	4.1
SS1120043_08	Overall	2,381	875	85.6	14.2	0.2	-	31.2	36.0	17.3	-	-	4.2	0.3	0.1	5.3	5.6
SS1120043_09	Overall	2,356	875	72.2	26.0	1.8	-	25.4	28.8	20.4	6.2	1.5	5.1	0.6	0.0	5.5	6.5
SS1120081_08	Overall	2,364	875	83.0	15.9	1.1	-	41.1	30.0	10.7	-	-	4.8	0.6	0.1	5.0	7.7
SS1120081_09	Overall	2,341	875	77.0	21.5	1.5	-	30.9	22.8	18.2	5.1	1.6	5.5	0.5	0.0	6.6	8.7
SS1121085_08	Overall	2,375	875	82.6	17.2	0.2	-	28.0	36.9	21.1	-	-	4.0	0.6	0.0	4.2	5.1
SS1121085_09	Overall	2,354	875	74.5	24.8	0.7	-	26.1	31.0	21.4	4.7	0.9	5.1	0.6	0.0	5.2	5.0

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

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
EM05003141582	Overall	25,046	5,015	80.4	19.5	0.1	73.2	13.8	20.8	64.7	-	-	0.3	0.0	0.1	0.1	0.2
EM05003144402	Overall	25,031	5,015	85.5	12.1	2.4	87.1	52.2	19.0	27.8	-	-	0.3	0.1	0.0	0.2	0.4
EM05004935664	Overall	22,036	4,416	88.6	8.5	2.9	85.9	66.8	14.1	17.5	-	-	0.4	0.3	0.0	0.1	0.8
EM05004938419	Overall	22,039	4,416	89.1	9.5	1.4	89.1	60.8	12.0	26.5	-	-	0.3	0.0	0.0	0.1	0.2
EM05916555623	Overall	47,096	9,431	90.5	7.3	2.2	88.7	58.5	14.2	26.6	-	-	0.2	0.0	0.0	0.1	0.3
EM05916556401	Overall	47,110	9,431	89.7	8.8	1.5	86.2	10.7	7.6	81.1	-	-	0.2	0.0	0.0	0.1	0.2

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

**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
EM08005235556	Overall	24,851	5,000	92.3	5.5	2.2	92.1	57.0	4.9	34.7	-	-	1.3	0.6	0.0	0.3	1.3
EM08005235664	Overall	24,823	5,000	76.3	23.4	0.3	86.2	28.2	50.8	16.6	-	-	0.9	1.2	0.1	0.3	1.9
EM08006348645	Overall	21,873	4,396	92.7	6.0	1.3	85.5	42.6	6.9	48.4	-	-	0.6	0.5	0.0	0.1	0.9
EM08006349819	Overall	21,849	4,396	89.1	10.5	0.4	93.3	43.3	33.5	20.2	-	-	0.8	0.9	0.0	0.1	1.2
EM08923137182	Overall	46,678	9,396	89.0	9.0	2.0	92.9	48.6	8.4	38.4	-	-	1.0	1.0	0.0	0.4	2.2
EM08923138777	Overall	46,657	9,396	85.8	12.7	1.5	94.4	22.7	15.5	56.8	-	-	0.9	1.3	0.1	0.5	2.2

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

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
EM11003034244	Overall	23,532	4,846	80.0	20.0	0.0	89.0	43.0	34.5	11.8	-	-	3.4	1.9	0.0	1.3	4.1
EM11003041982	Overall	23,358	4,846	80.1	19.7	0.2	89.9	48.8	24.7	9.9	-	-	4.0	2.5	0.0	1.5	8.6
EM11003043177	Overall	23,454	4,846	78.8	20.8	0.4	83.9	42.1	30.7	16.3	-	-	4.0	1.7	0.0	1.4	3.8
EM11005544630	Overall	21,169	4,357	82.1	17.1	0.8	89.5	40.4	37.7	12.6	-	-	3.3	1.4	0.0	1.2	3.4
EM11005548211	Overall	21,100	4,357	80.9	18.6	0.5	82.2	34.8	32.9	22.3	-	-	3.9	1.5	0.0	1.2	3.3
EM11923434868	Overall	44,991	9,205	77.9	21.7	0.4	91.9	42.8	26.8	23.1	-	-	2.5	1.1	0.0	1.2	2.4
EM11923436225	Overall	44,890	9,205	77.0	23.0	0.0	82.1	47.6	40.2	4.8	-	-	2.7	1.1	0.0	1.0	2.5

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

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

### Grade 5 On-Demand Writing

Prompt	Trait	Frequency Distribution of 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	0.8	0.0	10.9	9.7	21.7	17.0	19.6	12.0	8.2	0.0	0.4	0.0	0.0	0.3	57.8	38.7	3.5	80.9	
WR05914242321	Language/Conventions	0.8	0.0	7.7	9.0	25.1	17.2	22.7	10.1	7.4	0.0	0.4	0.0	0.0	0.3	61.8	36.3	1.9	77.9	
WR05914242321	Organization	0.8	0.0	12.9	8.8	21.9	16.1	22.8	9.5	7.2	0.0	0.4	0.0	0.0	0.3	63.7	34.4	1.9	84.2	
WR05914242321	Sourcing	0.8	0.0	33.9	14.3	15.3	12.2	12.7	7.1	3.7	0.0	0.4	0.0	0.0	0.3	61.2	33.5	5.3	79.4	
WR05914242321	Support	0.8	0.0	13.7	11.1	22.6	16.6	19.5	9.3	6.4	0.0	0.4	0.0	0.0	0.3	60.3	37.0	2.7	78.2	
WR05914242464	Clarity/Coherence	0.7	0.0	9.7	8.8	24.9	21.1	21.5	8.8	4.4	0.0	0.2	0.0	0.0	0.4	58.5	38.7	2.8	86.7	
WR05914242464	Language/Conventions	0.7	0.0	10.8	8.3	24.0	20.3	23.5	8.5	3.9	0.0	0.2	0.0	0.0	0.4	60.8	37.1	2.1	86.3	
WR05914242464	Organization	0.7	0.0	12.9	8.9	23.7	20.5	21.4	8.0	4.0	0.0	0.2	0.0	0.0	0.4	60.0	37.4	2.6	89.9	
WR05914242464	Sourcing	0.7	0.0	27.2	22.7	19.1	13.4	9.4	5.0	2.4	0.0	0.2	0.0	0.0	0.4	53.2	41.0	5.8	87.2	
WR05914242464	Support	0.7	0.0	13.9	9.5	26.9	20.0	17.6	7.6	3.8	0.0	0.2	0.0	0.0	0.4	60.2	37.1	2.7	87.4	
WR05914856380	Clarity/Coherence	2.2	0.0	13.7	9.8	29.2	15.7	18.3	7.8	3.3	0.1	0.6	0.1	0.2	1.3	64.4	33.3	2.3	81.6	
WR05914856380	Language/Conventions	2.2	0.0	11.7	9.4	30.9	15.1	18.8	8.6	3.3	0.1	0.6	0.1	0.2	1.3	65.1	33.1	1.8	82.8	
WR05914856380	Organization	2.2	0.0	18.9	10.3	23.6	14.2	19.4	8.1	3.2	0.1	0.6	0.1	0.2	1.3	65.2	32.6	2.2	86.3	
WR05914856380	Sourcing	2.2	0.0	39.3	18.8	17.2	10.9	6.4	3.4	1.8	0.1	0.6	0.1	0.2	1.3	62.9	33.2	3.9	92.1	
WR05914856380	Support	2.2	0.0	16.0	9.7	29.3	16.2	16.4	7.1	3.1	0.1	0.6	0.1	0.2	1.3	64.6	33.0	2.4	83.0	
WR05914942744	Clarity/Coherence	1.0	0.0	8.3	9.0	21.5	17.0	29.3	9.8	4.1	0.1	0.4	0.0	0.1	0.5	62.5	35.8	1.7	87.6	
WR05914942744	Language/Conventions	1.0	0.0	5.0	5.2	24.2	15.6	33.7	10.4	4.9	0.1	0.4	0.0	0.1	0.5	67.7	31.3	1.0	88.1	
WR05914942744	Organization	1.0	0.0	9.1	6.5	21.9	15.3	32.0	9.9	4.4	0.1	0.4	0.0	0.1	0.5	67.1	31.7	1.2	89.0	
WR05914942744	Sourcing	1.0	0.0	19.9	18.9	20.2	14.8	16.3	6.4	2.5	0.1	0.4	0.0	0.1	0.5	57.0	40.1	2.9	78.8	
WR05914942744	Support	1.0	0.0	8.3	10.0	23.6	17.6	26.3	8.9	4.2	0.1	0.4	0.0	0.1	0.5	62.0	36.5	1.5	87.6	

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 8 On-Demand Writing**

Prompt	Trait	Frequency Distribution of 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	1.3	0.0	18.4	10.4	25.6	13.6	17.5	8.2	4.9	0.3	0.0	0.1	0.3	1.0	65.8	32.1	2.1	67.9	
WR08912757251	Counterclaims	1.3	0.0	39.4	15.8	16.4	11.6	8.5	4.6	2.4	0.3	0.0	0.1	0.3	1.0	63.2	31.9	4.9	68.6	
WR08912757251	Language/Conventions	1.3	0.0	18.8	11.8	24.8	14.2	16.6	8.0	4.7	0.3	0.0	0.1	0.3	1.0	63.9	33.9	2.2	72.1	
WR08912757251	Organization	1.3	0.0	25.2	11.3	22.3	13.7	14.6	7.6	4.0	0.3	0.0	0.1	0.3	1.0	65.3	32.5	2.2	64.0	
WR08912757251	Sourcing	1.3	0.0	27.9	11.4	20.9	13.1	13.9	7.5	4.0	0.3	0.0	0.1	0.3	1.0	65.7	31.9	2.4	67.6	
WR08912757251	Support	1.3	0.0	24.6	11.3	24.4	13.3	13.6	7.2	4.2	0.3	0.0	0.1	0.3	1.0	66.2	31.7	2.1	66.4	
WR08914237493	Clarity/Coherence	1.1	0.0	13.2	8.5	25.4	14.9	21.0	9.7	6.3	0.3	0.1	0.0	0.2	0.8	65.3	33.0	1.7	82.9	
WR08914237493	Counterclaims	1.1	0.0	28.1	15.9	18.2	13.1	13.4	6.8	3.4	0.3	0.1	0.0	0.2	0.8	58.0	35.7	6.3	71.3	
WR08914237493	Language/Conventions	1.1	0.0	16.5	7.2	24.9	12.3	21.6	9.6	6.8	0.3	0.1	0.0	0.2	0.8	69.3	29.0	1.7	80.5	
WR08914237493	Organization	1.1	0.0	19.9	7.0	22.0	11.1	23.0	9.6	6.4	0.3	0.1	0.0	0.2	0.8	70.7	27.7	1.6	81.4	
WR08914237493	Sourcing	1.1	0.0	20.6	10.4	20.0	13.7	18.7	9.9	5.7	0.3	0.1	0.0	0.2	0.8	64.2	33.8	2.0	82.0	
WR08914237493	Support	1.1	0.0	16.7	8.5	24.9	13.8	19.5	9.5	6.0	0.3	0.1	0.0	0.2	0.8	66.8	31.8	1.4	80.8	
WR08914941248	Clarity/Coherence	0.7	0.0	14.9	9.9	29.5	15.6	19.5	7.1	2.8	0.2	0.0	0.0	0.2	0.5	65.4	32.6	2.0	75.6	
WR08914941248	Counterclaims	0.7	0.0	29.2	16.2	23.3	13.9	11.1	4.3	1.3	0.2	0.0	0.0	0.2	0.5	61.9	34.3	3.8	74.4	
WR08914941248	Language/Conventions	0.7	0.0	17.8	10.4	28.3	15.8	18.6	6.0	2.2	0.2	0.0	0.0	0.2	0.5	66.1	32.2	1.7	79.3	
WR08914941248	Organization	0.7	0.0	20.8	10.8	26.3	15.4	18.1	5.9	1.9	0.2	0.0	0.0	0.2	0.5	66.1	32.0	1.9	79.9	
WR08914941248	Sourcing	0.7	0.0	24.7	12.6	22.9	14.3	16.5	6.1	2.1	0.2	0.0	0.0	0.2	0.5	65.1	33.0	1.9	72.5	
WR08914941248	Support	0.7	0.0	20.3	10.4	30.1	14.5	16.6	5.4	2.0	0.2	0.0	0.0	0.2	0.5	68.2	30.3	1.5	78.7	
WR08920654758	Clarity/Coherence	0.7	0.0	14.5	10.6	24.9	14.8	21.4	8.7	4.4	0.1	0.0	0.0	0.3	0.4	64.4	33.9	1.7	81.3	
WR08920654758	Counterclaims	0.7	0.0	35.7	12.0	21.2	11.8	11.7	4.8	2.1	0.1	0.0	0.0	0.3	0.4	66.8	28.6	4.6	73.3	
WR08920654758	Language/Conventions	0.7	0.0	16.5	6.8	27.3	12.3	21.5	9.7	5.3	0.1	0.0	0.0	0.3	0.4	69.6	28.7	1.7	80.7	
WR08920654758	Organization	0.7	0.0	18.7	8.2	25.2	13.8	20.1	9.3	4.1	0.1	0.0	0.0	0.3	0.4	66.8	31.2	2.0	82.2	
WR08920654758	Sourcing	0.7	0.0	24.3	7.5	25.0	11.6	20.3	7.1	3.4	0.1	0.0	0.0	0.3	0.4	72.3	26.2	1.5	80.4	
WR08920654758	Support	0.7	0.0	19.6	8.6	28.2	12.7	19.4	7.1	3.7	0.1	0.0	0.0	0.3	0.4	70.0	28.4	1.6	77.0	

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	Frequency Distribution of 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	
WR11915031558	Clarity/Coherence	4.7	0.0	18.3	8.6	23.8	11.9	21.5	6.2	5.0	0.6	0.3	0.1	0.9	3.4	70.6	26.6	2.8	89.1	
WR11915031558	Counterclaims	4.7	0.0	30.8	14.5	16.1	12.7	14.7	4.2	2.5	0.6	0.3	0.1	0.9	3.4	62.8	31.1	6.1	80.6	
WR11915031558	Language/Conventions	4.7	0.0	16.7	8.6	24.8	12.6	21.2	6.5	4.8	0.6	0.3	0.1	0.9	3.4	69.6	27.6	2.8	87.8	
WR11915031558	Organization	4.7	0.0	22.2	8.9	21.0	11.4	21.1	6.2	4.6	0.6	0.3	0.1	0.9	3.4	70.9	26.2	2.9	88.3	
WR11915031558	Sourcing	4.7	0.0	37.0	12.1	12.3	9.9	16.2	4.9	3.0	0.6	0.3	0.1	0.9	3.4	69.6	26.6	3.8	87.3	
WR11915031558	Support	4.7	0.0	20.8	9.9	22.6	11.5	19.3	6.6	4.5	0.6	0.3	0.1	0.9	3.4	69.5	27.8	2.7	88.3	
WR11915549113	Clarity/Coherence	3.1	0.0	13.9	6.6	27.8	13.8	24.5	6.3	3.9	0.7	0.3	0.0	0.6	2.3	72.5	26.6	0.9	84.6	
WR11915549113	Counterclaims	3.1	0.0	30.0	18.0	19.1	13.0	10.2	4.5	2.2	0.7	0.3	0.0	0.6	2.3	62.0	35.1	2.9	75.3	
WR11915549113	Language/Conventions	3.1	0.0	10.2	6.1	28.0	13.5	28.2	6.6	4.4	0.7	0.3	0.0	0.6	2.3	73.2	26.0	0.8	82.7	
WR11915549113	Organization	3.1	0.0	17.1	7.0	25.3	13.3	24.6	6.2	3.5	0.7	0.3	0.0	0.6	2.3	72.9	26.2	0.9	85.3	
WR11915549113	Sourcing	3.1	0.0	32.9	10.0	14.8	11.6	18.2	6.0	3.3	0.7	0.3	0.0	0.6	2.3	70.6	27.5	1.9	83.7	
WR11915549113	Support	3.1	0.0	16.5	7.3	28.2	12.7	22.5	6.2	3.5	0.7	0.3	0.0	0.6	2.3	73.1	25.9	1.0	84.9	
WR11915549534	Clarity/Coherence	3.8	0.0	12.5	6.0	24.7	13.1	26.6	7.1	6.3	0.7	0.4	0.0	0.7	2.7	73.1	26.0	0.9	88.4	
WR11915549534	Counterclaims	3.8	0.0	29.6	17.3	17.1	11.8	11.7	4.6	4.0	0.7	0.4	0.0	0.7	2.7	60.3	33.5	6.2	79.9	
WR11915549534	Language/Conventions	3.8	0.0	10.0	5.8	25.3	13.1	28.4	7.2	6.4	0.7	0.4	0.0	0.7	2.7	73.3	25.9	0.8	82.2	
WR11915549534	Organization	3.8	0.0	15.7	7.1	24.3	12.5	24.0	6.5	6.1	0.7	0.4	0.0	0.7	2.7	73.1	26.0	0.9	89.4	
WR11915549534	Sourcing	3.8	0.0	33.8	11.6	11.7	10.6	16.3	7.0	5.2	0.7	0.4	0.0	0.7	2.7	67.9	29.0	3.1	92.1	
WR11915549534	Support	3.8	0.0	14.9	7.3	27.3	12.4	21.7	6.8	5.7	0.7	0.4	0.0	0.7	2.7	72.8	26.2	1.0	89.8	
WR11928456761	Clarity/Coherence	4.2	0.0	11.0	6.4	24.1	11.8	26.9	9.9	5.6	0.9	0.5	0.0	0.8	3.0	71.0	27.9	1.1	85.0	
WR11928456761	Counterclaims	4.2	0.0	21.7	16.6	20.9	14.5	13.4	6.0	2.6	0.9	0.5	0.0	0.8	3.0	59.6	36.8	3.6	76.0	
WR11928456761	Language/Conventions	4.2	0.0	9.4	6.2	26.0	12.2	26.1	10.2	5.8	0.9	0.5	0.0	0.8	3.0	70.4	28.3	1.3	85.3	
WR11928456761	Organization	4.2	0.0	13.7	7.6	22.4	12.8	26.0	8.9	4.4	0.9	0.5	0.0	0.8	3.0	69.5	29.0	1.5	85.9	
WR11928456761	Sourcing	4.2	0.0	34.8	10.4	11.7	11.4	16.8	7.4	3.4	0.9	0.5	0.0	0.8	3.0	65.9	28.9	5.2	81.8	
WR11928456761	Support	4.2	0.0	12.7	6.9	25.9	12.9	23.0	8.6	5.6	0.9	0.5	0.0	0.8	3.0	70.7	28.2	1.1	86.6	

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%	88.32%	61.34%	0.48
	4	72.71%	88.90%	63.08%	0.50
	5	72.87%	89.01%	63.32%	0.50
	6	70.63%	87.40%	60.38%	0.46
	7	72.16%	89.23%	63.11%	0.50
	8	71.07%	88.69%	61.90%	0.48
	10	72.09%	88.96%	62.53%	0.49
Mathematics	3	71.84%	89.00%	61.70%	0.47
	4	75.21%	89.93%	66.22%	0.54
	5	74.66%	89.99%	65.13%	0.52
	6	71.97%	88.75%	62.23%	0.48
	7	65.90%	86.48%	55.62%	0.39
	8	68.75%	88.57%	58.75%	0.43
	10	68.24%	88.48%	58.08%	0.42
Science	4	72.95%	86.10%	62.30%	0.39
	7	72.64%	89.44%	62.52%	0.42
	11	77.72%	95.38%	69.09%	0.44
Social Studies	5	69.98%	87.96%	60.11%	0.45
	8	73.16%	89.81%	64.25%	0.50
	11	73.32%	89.74%	64.08%	0.51
Editing and Mechanics	5	67.01%	86.35%	56.82%	0.42
	8	69.23%	87.02%	59.09%	0.45
	11	71.71%	87.47%	61.49%	0.47
On-Demand Writing	5	80.59%	91.57%	72.81%	0.62
	8	85.63%	93.54%	79.67%	0.71
	11	81.05%	93.62%	76.23%	0.66

## Appendix O. Principal Components Analysis

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

<sup>7</sup> 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	0.0165	0.0201	0.0196	0.0206
	2	0.0169	0.0219	0.0214	0.0224
4	1	0.0204	0.0272	0.0267	0.0277
	2	0.0171	0.0231	0.0226	0.0236
5	1	0.0185	0.0241	0.0236	0.0246
	2	0.0182	0.0250	0.0245	0.0256
6	1	0.0169	0.0210	0.0204	0.0216
	2	0.0185	0.0241	0.0235	0.0247
7	1	0.0200	0.0259	0.0254	0.0264
	2	0.0245	0.0344	0.0339	0.0350
8	1	0.0170	0.0234	0.0228	0.0239
	2	0.0188	0.0257	0.0252	0.0262
10	1	0.0183	0.0247	0.0243	0.0252
	2	0.0204	0.0286	0.0281	0.0291

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	0.0268	0.0261	0.0274
	2	0.0226	0.0257	0.0250	0.0263
	3	0.0248	0.0278	0.0268	0.0287
	4	0.0213	0.0266	0.0260	0.0273
4	1	0.0287	0.0327	0.0320	0.0333
	2	0.0269	0.0297	0.0289	0.0306
	3	0.0275	0.0317	0.0310	0.0323
	4	0.0275	0.0299	0.0291	0.0307
5	1	0.0248	0.0294	0.0284	0.0304
	2	0.0286	0.0343	0.0336	0.0350
	3	0.0255	0.0310	0.0303	0.0317
	4	0.0286	0.0344	0.0338	0.0351
6	1	0.0185	0.0195	0.0185	0.0206
	2	0.0179	0.0211	0.0203	0.0218
	3	0.0160	0.0170	0.0163	0.0177
	4	0.0147	0.0157	0.0149	0.0164
7	1	0.0223	0.0237	0.0227	0.0247
	2	0.0213	0.0228	0.0221	0.0235
	3	0.0244	0.0279	0.0272	0.0286
	4	0.0223	0.0249	0.0242	0.0256
8	1	0.0226	0.0249	0.0239	0.0258
	2	0.0210	0.0238	0.0231	0.0245
	3	0.0162	0.0182	0.0175	0.0189
	4	0.0188	0.0213	0.0206	0.0220
10	1	0.0250	0.0271	0.0264	0.0279
	2	0.0234	0.0258	0.0251	0.0266
	3	0.0224	0.0247	0.0240	0.0254
	4	0.0225	0.0256	0.0249	0.0262

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	0.0290	0.0323	0.0316	0.0330
	2	0.0180	0.0219	0.0212	0.0226
7	1	0.0194	0.0226	0.0219	0.0233
	2	0.0176	0.0209	0.0202	0.0217
11	1	0.0193	0.0227	0.0220	0.0234
	2	0.0197	0.0225	0.0218	0.0232

**Social Studies**

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
5	1	0.0220	0.0262	0.0257	0.0268
	2	0.0200	0.0252	0.0247	0.0258
8	1	0.0171	0.0235	0.0229	0.0240
	2	0.0157	0.0219	0.0214	0.0225
11	1	0.0206	0.0272	0.0267	0.0277
	2	0.0198	0.0257	0.0252	0.0262

**Editing and Mechanics**

Grade	Operational Set	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
5	1	0.0322	0.0410	0.0404	0.0417
	2	0.0428	0.0529	0.0522	0.0535
8	1	0.0264	0.0308	0.0301	0.0315
	2	0.0439	0.0529	0.0523	0.0535
11	1	0.0269	0.0332	0.0325	0.0339
	2	0.0315	0.0380	0.0374	0.0387