

# Kentucky Performance Rating for Educational Progress



## 2020–2021 Yearbook



Pearson

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## Glossary of Terms

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

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

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

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

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

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

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

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

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

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

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

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

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

**Scale score:** A score derived from a transformation of a raw score.

**Standard error of measurement:** A statistic, in classical test theory, expressing the interval of an examinee's true score.

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

**True score:** An examinee's expected score resulting from multiple replications of measurement.

## Appendix A. Participation Rates

### Reading

Students	Subgroup	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	Students Tested	39,139	42,129	42,399	42,956	43,220	43,042	39,305
Gender	Female	48.2%	48.6%	48.2%	49.0%	48.7%	48.7%	48.0%
	Male	51.8%	51.3%	51.8%	50.9%	51.3%	51.3%	51.9%
Ethnicity	Hispanic	7.8%	8.2%	8.0%	8.0%	8.1%	7.7%	7.1%
	Asian	2.1%	1.9%	1.8%	1.7%	1.7%	1.6%	1.8%
	Native Hawaiian/Pacific Islander	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%
	Black/African American	8.5%	9.3%	9.4%	9.1%	9.2%	9.4%	8.7%
	American Indian	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
	White	76.1%	75.3%	75.5%	76.2%	76.3%	76.7%	78.5%
Other	5.1%	4.9%	4.9%	4.8%	4.5%	4.4%	3.7%	
Migrant	Non-Migrant	99.3%	99.4%	99.5%	99.4%	99.5%	99.5%	99.5%
	Migrant	0.7%	0.6%	0.5%	0.6%	0.5%	0.5%	0.5%
LEP	Non-LEP	93.1%	93.5%	95.5%	96.6%	96.7%	96.8%	96.8%
	LEP	6.9%	6.5%	4.5%	3.4%	3.3%	3.2%	3.2%
Economic Disadvantage	Free Lunch	58.3%	57.3%	57.6%	56.7%	55.8%	54.8%	49.5%
	Reduced-Price Lunch	3.2%	3.5%	3.5%	3.3%	3.1%	3.3%	3.2%
	Regular Lunch	38.5%	39.2%	38.9%	40.0%	41.1%	41.9%	47.3%
IEP	Non-IEP	83.3%	84.5%	85.3%	86.8%	87.5%	88.5%	90.4%
	IEP	16.7%	15.5%	14.7%	13.2%	12.5%	11.5%	9.6%

**Mathematics**

Students	Subgroup	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
All	Students Tested	39,180	42,173	42,405	42,960	43,180	42,990	39,087
Gender	Female	48.2%	48.6%	48.2%	49.0%	48.7%	48.7%	48.0%
	Male	51.8%	51.3%	51.8%	50.9%	51.3%	51.3%	51.9%
Ethnicity	Hispanic	7.9%	8.3%	8.1%	8.0%	8.1%	7.7%	7.1%
	Asian	2.1%	1.9%	1.9%	1.7%	1.7%	1.6%	1.8%
	Native Hawaiian/Pacific Islander	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%
	Black/African American	8.5%	9.3%	9.5%	9.1%	9.2%	9.4%	8.6%
	American Indian	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
	White	76.0%	75.2%	75.4%	76.1%	76.3%	76.6%	78.5%
	Other	5.1%	4.9%	4.9%	4.8%	4.4%	4.4%	3.6%
Migrant	Non-Migrant	99.3%	99.4%	99.5%	99.4%	99.5%	99.5%	99.5%
	Migrant	0.7%	0.6%	0.5%	0.6%	0.5%	0.5%	0.5%
LEP	Non-LEP	92.9%	93.3%	95.4%	96.5%	96.6%	96.7%	96.8%
	LEP	7.1%	6.7%	4.6%	3.5%	3.4%	3.3%	3.2%
Economic Disadvantage	Free Lunch	58.2%	57.3%	57.6%	56.7%	55.8%	54.8%	49.5%
	Reduced-Price Lunch	3.2%	3.5%	3.5%	3.3%	3.1%	3.3%	3.2%
	Regular Lunch	38.5%	39.2%	38.9%	40.0%	41.1%	41.9%	47.3%
IEP	Non-IEP	83.3%	84.5%	85.3%	86.9%	87.5%	88.5%	90.5%
	IEP	16.7%	15.5%	14.7%	13.1%	12.5%	11.5%	9.5%

Science

Students	Subgroup	Grade 4	Grade 7	Grade 11
All	Students Tested	42,071	43,065	34,562
Gender	Female	48.6%	48.7%	48.5%
	Male	51.4%	51.3%	51.5%
Ethnicity	Hispanic	8.3%	8.1%	6.3%
	Asian	1.9%	1.7%	1.9%
	Native Hawaiian/Pacific Islander	0.2%	0.2%	0.1%
	Black/African American	9.3%	9.1%	7.8%
	American Indian	0.1%	0.1%	0.1%
	White	75.2%	76.3%	80.5%
	Other	4.9%	4.4%	3.2%
Migrant	Non-Migrant	99.4%	99.4%	99.6%
	Migrant	0.6%	0.6%	0.4%
LEP	Non-LEP	93.3%	96.6%	97.4%
	LEP	6.7%	3.4%	2.6%
Economic Disadvantage	Free Lunch	57.2%	55.7%	45.6%
	Reduced-Price Lunch	3.5%	3.1%	3.2%
	Regular Lunch	39.3%	41.2%	51.2%
IEP	Non-IEP	84.5%	87.5%	91.0%
	IEP	15.5%	12.5%	9.0%

**Writing**

Students	Subgroup	Grade 5	Grade 8	Grade 11
All	Students Tested	42,249	42,782	34,264
Gender	Female	48.1%	48.7%	48.4%
	Male	51.8%	51.3%	51.6%
Ethnicity	Hispanic	8.0%	7.6%	6.3%
	Asian	1.8%	1.6%	1.9%
	Native Hawaiian/Pacific Islander	0.1%	0.1%	0.1%
	Black/African American	9.4%	9.3%	7.7%
	American Indian	0.1%	0.1%	0.1%
	White	75.6%	76.8%	80.6%
	Other	4.9%	4.4%	3.1%
Migrant	Non-Migrant	99.5%	99.5%	99.6%
	Migrant	0.5%	0.5%	0.4%
LEP	Non-LEP	95.5%	96.8%	97.4%
	LEP	4.5%	3.2%	2.6%
Economic Disadvantage	Free Lunch	57.6%	54.7%	45.5%
	Reduced-Price Lunch	3.5%	3.3%	3.2%
	Regular Lunch	39.0%	42.0%	51.3%
IEP	Non-IEP	85.3%	88.5%	91.0%
	IEP	14.7%	11.5%	9.0%

## **Appendix B. Score Reports**





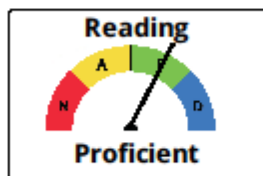
FIRSTNAME M. LASTNAME

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

Spring 2021  
Grade 4

State ID: 0123456789  
Sample School Name  
Sample District Name

### Kentucky Summative Assessments Student Scores



#### Performance Level

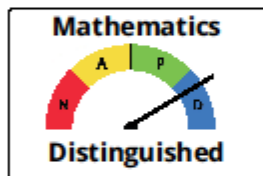


**Proficient**

###

Score Range ###-###

A **Proficient** student is able to determine word meaning and interpret literal and non-literal language; use explicit and implied information to interpret character traits, actions, and motivations; interpret meaning from text structures and explain how it contributes to a reader's understanding; use explicit and implied information from the text to summarize, determine main idea and supporting details, central idea, and theme; identify differences among prose, poetry and drama, using the structural elements of the genre for support.



#### Performance Level

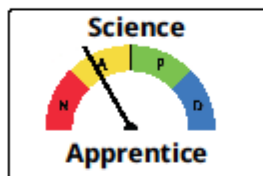


**Distinguished**

###

Score Range ###-###

A student scoring **Distinguished** can apply understanding of place value and the properties of operations to solve and explain problems with multi-digit whole numbers; use factors and multiples to solve word problems; show the relationship between multiplication and division using an unknown number; find equivalent fractions by multiplying; solve addition and subtraction problems with mixed numbers using common denominators; compare and order decimals through hundredths; solve problems involving addition and subtraction of fractions; interpret data from line plots; and solve for an unknown angle.



#### Performance Level



**Apprentice**

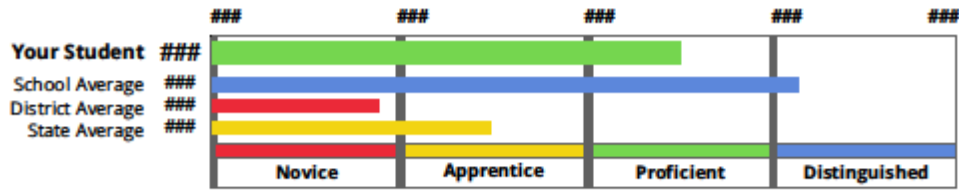
##

Score Range ##-##

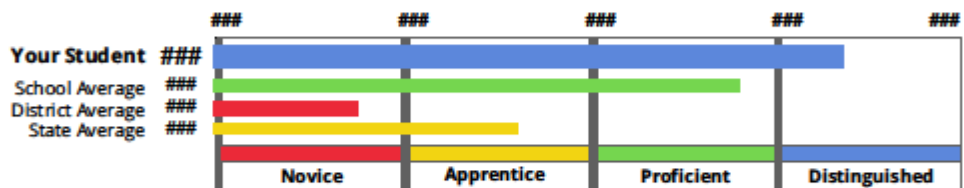
A student performing at the **Apprentice** level for grade 4 science has a basic understanding of science and engineering concepts and practices incorporated in the Kentucky Academic Standards for Science up to grade 4. The student communicates ideas about foundational concepts in a basic manner, but explanations, solutions or justifications may be unclear or ineffective. The student demonstrates some problem-solving and critical thinking skills using concepts/ideas from different areas of science, but they are not consistently applied.

PERFORMANCE LEVEL LEGEND			
	Novice (N)		Apprentice (A)
	Proficient (P)		Distinguished (D)

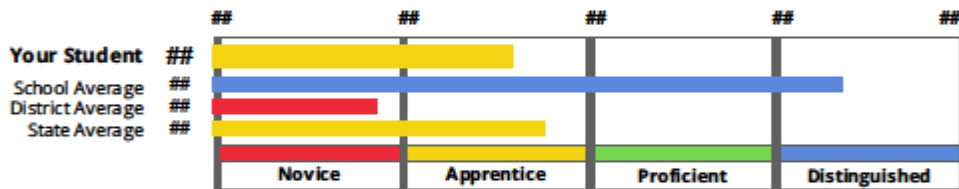
**Reading: FIRSTNAME'S OVERALL RESULTS - Proficient**



**Mathematics: FIRSTNAME'S OVERALL RESULTS - Distinguished**



**Science: FIRSTNAME'S OVERALL RESULTS - Apprentice**



**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. It also includes information for teachers and parents/guardians about how to support student learning. The Kentucky Summative Assessments are only one indication of how well students do in each subject tested; therefore, it is also important to consider how well students are doing on class work, special projects and assessments.

During 2020-2021, the novel coronavirus (COVID-19) caused unprecedented situations within Kentucky's schools and districts. School districts faced extraordinary circumstances, closing in-person classes to help contain the spread of the virus. These factors should be taken into consideration as student results are reviewed.

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



## TESTED STUDENTS SCHOOL LISTING

### Kentucky Summative Assessments

Spring 2021  
Grade <5 or 8>

School Name  
District Name

		NOVICE		APPRENTICE		PROFICIENT		DISTINGUISHED			
Student Name	Student ID	Alt <sup>1</sup>	ACC <sup>2</sup>	Reading		Mathematics		On-Demand Writing			
				Performance Level	Score	ACC <sup>2</sup>	Performance Level	Score	ACC <sup>2</sup>	Performance Level	Score
ALASTNAME, FIRSTNAME M.	0123456789			NOVICE	###		NOVICE	###		NOVICE	##
BLASTNAME, FIRSTNAME M.	0123456789	Y	Y	DISTINGUISHED	###		PROFICIENT	###		PROFICIENT	##
CLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###	Y	NOVICE	###		NOVICE	##
DLASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###		DISTINGUISHED	###		DISTINGUISHED	##
ELASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		DISTINGUISHED	###		PROFICIENT	##
FLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###		APPRENTICE	###		APPRENTICE	##
GLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		APPRENTICE	###		PROFICIENT	##
HLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		EXEMPTED			DISTINGUISHED	##
ILASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###		PROFICIENT	###		PROFICIENT	##
JLASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###		PROFICIENT	###		DISTINGUISHED	##
KLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		DID NOT TEST			PROFICIENT	##
LLASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###		PROFICIENT	###		EXEMPTED	
MLASTNAME, FIRSTNAME M.	0123456789			EXEMPTED			PROFICIENT	###		PROFICIENT	##
NLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		APPRENTICE	###		PROFICIENT	##
OLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		PROFICIENT	###	Y	APPRENTICE	##
PLASTNAME, FIRSTNAME M.	0123456789		Y	APPRENTICE	###		NOVICE	###		APPRENTICE	##
QLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		DISTINGUISHED	###		DISTINGUISHED	##
RLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###		NOVICE	###		NOVICE	##
SLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###	Y	NOVICE	###		APPRENTICE	##
TZASTNAME, FIRSTNAME M.	0123456789			APPRENTICE	###		APPRENTICE	###		NOVICE	##
VLASTNAME, FIRSTNAME M.	0123456789			APPRENTICE	###		PROFICIENT	###		APPRENTICE	##
WLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###		DISTINGUISHED	###		PROFICIENT	##
XLASTNAME, FIRSTNAME M.	0123456789			APPRENTICE	###		APPRENTICE	###		NOVICE	##

1 Y = Alternate K-PREP student  
2 Accommodated



# TESTED STUDENTS SCHOOL LISTING

## Kentucky Summative Assessments

Spring 2021  
Grade 11

School Name  
District Name

		NOVICE		APPRENTICE		PROFICIENT		DISTINGUISHED	
Student Name	Student ID	Alt <sup>1</sup>	ACC <sup>2</sup>	Science		On-Demand Writing		ACC <sup>2</sup>	Score
				Performance Level	Score	Performance Level	Score		
ALASTNAME, FIRSTNAME M.	0123456789			NOVICE	###	NOVICE	###		
BLASTNAME, FIRSTNAME M.	0123456789	Y	Y	DISTINGUISHED	###	PROFICIENT	###		
CLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###	NOVICE	###	Y	
DLASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###	DISTINGUISHED	###		
ELASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	DISTINGUISHED	###		
FLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###	APPRENTICE	###		
GLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	APPRENTICE	###		
HLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	EXEMPTED			
ILASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###	PROFICIENT	###		
JLASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###	PROFICIENT	###		
KLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	DID NOT TEST			
LLASTNAME, FIRSTNAME M.	0123456789			DISTINGUISHED	###	PROFICIENT	###		
MLASTNAME, FIRSTNAME M.	0123456789			EXEMPTED		PROFICIENT	###		
NLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	APPRENTICE	###		
OLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	PROFICIENT	###		
PLASTNAME, FIRSTNAME M.	0123456789		Y	APPRENTICE	###	NOVICE	###		
QLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	DISTINGUISHED	###		
RLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###	NOVICE	###		
SLASTNAME, FIRSTNAME M.	0123456789			NOVICE	###	NOVICE	###	Y	
TZASTNAME, FIRSTNAME M.	0123456789			APPRENTICE	###	APPRENTICE	###		
VLASTNAME, FIRSTNAME M.	0123456789			APPRENTICE	###	PROFICIENT	###		
WLASTNAME, FIRSTNAME M.	0123456789			PROFICIENT	###	DISTINGUISHED	###		
XLASTNAME, FIRSTNAME M.	0123456789			APPRENTICE	###	APPRENTICE	###		

<sup>1</sup> Y = Alternate K-PRP student  
<sup>2</sup> Accommodated



# TESTED STUDENTS SCHOOL SUMMARY

Kentucky Summative Assessments

School Name

District Name

Spring 2021

Grade 4

Science

## Grade 4 Science

Percent of Students by Performance Level

Performance Level	Number Students Tested	Percent of Students		
		School	District	State
Novice	#,###	###.#	###.#	###.#
Apprentice	#,###	###.#	###.#	###.#
Proficient	#,###	###.#	###.#	###.#
Distinguished	#,###	###.#	###.#	###.#
Total	#,###			

Students participating in the Kentucky Alternate Assessment are included in Performance Level.

School Name (456)

Page SC 1 of 1

District Name (123)

mmdyy 20000011-00000000-0000001



# TESTED STUDENTS SCHOOL SUMMARY

Kentucky Summative Assessments

School Name

District Name

Spring 2021

Grade 6

Mathematics

## Grade 6 Mathematics

Percent of Students by Performance Level

Performance Level	Number Students Tested	Percent of Students		
		School	District	State
Novice	#,###	###.#	###.#	###.#
Apprentice	#,###	###.#	###.#	###.#
Proficient	#,###	###.#	###.#	###.#
Distinguished	#,###	###.#	###.#	###.#
Total	#,###			

Students participating in the Kentucky Alternate Assessment are included in Performance Level.

School Name (456)

Page MA 1 of 1

District Name (123)

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# TESTED STUDENTS SCHOOL SUMMARY

Kentucky Summative Assessments

School Name

District Name

Spring 2021

Grade 11

On-Demand Writing

## Grade 11 On-Demand Writing

Percent of Students by Performance Level

Performance Level	Number Students Tested	Percent of Students		
		School	District	State
Novice	#,###	###.#	###.#	###.#
Apprentice	#,###	###.#	###.#	###.#
Proficient	#,###	###.#	###.#	###.#
Distinguished	#,###	###.#	###.#	###.#
Total	#,###			

Students participating in the Kentucky Alternate Assessment are included in Performance Level.

School Name (456)

Page WR 1 of 1

District Name (123)

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# TESTED STUDENTS DISTRICT SUMMARY

## Kentucky Summative Assessments

Spring 2021  
Grade 4  
Science

District Name

### Grade 4 Science

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

Students participating in the Kentucky Alternate Assessment are included in Performance Level.





# TESTED STUDENTS DISTRICT SUMMARY

## Kentucky Summative Assessments

Spring 2021  
Grade 6  
Reading

District Name

### Grade 6 Reading

DISTRICT NAME			Total Reading	Performance Level			
				Novice	Apprentice	Pref/icient	Distinguished
School Name	Code	Number Students Tested	Scale Score	Percent of Students			
State		###,###	###	###.#	###.#	###.#	###.#
District		###,###	###	###.#	###.#	###.#	###.#
School Name 1	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 2	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 3	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 4	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 5	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 6	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 7	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 8	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 9	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 10	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 11	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 12	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 13	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 14	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 15	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 16	#####	###,###	###	###.#	###.#	###.#	###.#

Students participating in the Kentucky Alternate Assessment are included in Performance Level.



# TESTED STUDENTS DISTRICT SUMMARY

## Kentucky Summative Assessments

Spring 2021  
Grade 6  
Mathematics

District Name

### Grade 6 Mathematics

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

Students participating in the Kentucky Alternate Assessment are included in Performance Level.



# TESTED STUDENTS DISTRICT SUMMARY

## Kentucky Summative Assessments

Spring 2021  
Grade 6  
Mathematics

District Name

### Grade 6 Mathematics

DISTRICT NAME			Total Mathematics	Performance Level			
School Name	Code	Number Students Tested		Scale Score	Novice	Apprentice	Proficient
State		###,###	###	###.#	###.#	###.#	###.#
District		###,###	###	###.#	###.#	###.#	###.#
School Name 17	#####	9	***	***	***	***	***
School Name 18	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 19	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 20	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 21	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 22	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 23	#####	40	###	***	***	***	***
School Name 24	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 25	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 26	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 27	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 28	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 29	#####	9	***	***	***	***	***
School Name 30	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 31	#####	###,###	###	###.#	###.#	###.#	###.#
School Name 32	#####	###,###	###	###.#	###.#	###.#	###.#

\*\*\* In order to protect student identification required by the Family Educational Rights and Privacy ACT (FERPA), performance results are suppressed for groups with fewer than 10 students or groups that scored at the same performance level. Students participating in the Kentucky Alternate Assessment are included in Performance Level.



# TESTED STUDENTS DISTRICT SUMMARY

## Kentucky Summative Assessments

Spring 2021  
Grade 11  
On-Demand Writing

District Name

### Grade 11 On-Demand Writing

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

Students participating in the Kentucky Alternate Assessment are included in Performance Level.



# TESTED STUDENTS STATE SUMMARY

## Kentucky Summative Assessments

Spring 2021  
Grade 6  
Mathematics

Commonwealth of Kentucky

### Grade 6 Mathematics

District Name	Code	Number Students Tested	Scale Score	Performance Level			
				Total Mathematics	Novice	Apprentice	Proficient
			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 Kentucky Alternate Assessment are included in Performance Level.



# TESTED STUDENTS STATE SUMMARY

## Kentucky Summative Assessments

Spring 2021  
Grade 6  
Mathematics

Commonwealth of Kentucky

### Grade 6 Mathematics

District Name	Code	Number Students Tested	Total Mathematics Scale Score	Performance Level			
				Novice	Apprentice	Proficient	Dist.ingished
				Percent of Students			
State		###,###	###	###.#	###.#	###.#	###.#
District Name 19	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 20	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 21	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 22	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 23	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 24	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 25	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 26	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 27	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 28	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 29	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 30	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 31	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 32	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 33	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 34	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 35	#####	###,###	###	###.#	###.#	###.#	###.#
District Name 36	#####	###,###	###	###.#	###.#	###.#	###.#

Students participating in the Kentucky Alternate Assessment are included in Performance Level.

## Appendix C. Item Mean Summaries

### Multiple-choice

Subject	Grade	$p < 0.30$	$0.30 \leq p < 0.55$	$0.55 \leq p < 0.75$	$0.75 \leq p < 0.95$	$p \geq 0.95$	Mean $p$	N
Reading	3	--	9	8	3	--	0.58	20
	4	2	9	6	--	--	0.49	17
	5	--	5	6	2	--	0.60	13
	6	1	11	6	--	--	0.50	18
	7	--	12	5	1	--	0.51	18
	8	2	8	6	4	--	0.56	20
	10	--	6	11	1	--	0.58	18
Mathematics	3	2	7	7	5	--	0.59	21
	4	2	9	5	2	--	0.53	18
	5	2	9	8	1	--	0.50	20
	6	1	11	4	2	--	0.50	18
	7	2	14	5	--	--	0.44	21
	8	--	10	3	1	--	0.49	14
	10	4	13	1	--	--	0.37	18
Science	4	3	17	6	1	--	0.46	27
	7	8	20	2	--	--	0.37	30
	11	5	20	5	1	--	0.43	31

### Multi-select/Constructed Response<sup>1</sup>

Subject	Grade	<i>Multi-select/Short Answer</i>				<i>Extended Response</i>			
		N	Mean	Min	Max	N	Mean	Min	Max
Science	4	8	0.96	0.46	1.39	4	0.69	0.51	0.95
	7	5	1.06	0.84	1.25	3	0.99	0.92	1.11
	11	4	1.09	0.77	1.33	5	1.20	0.95	1.50

<sup>1</sup> Science has multi-select items—not short answer items—scored 0, 1, and 2.

## Appendix D. Item-Total Correlation Summaries

### Multiple-choice

Subject	Grade	$r < 0.20$	$0.20 \leq r < 0.40$	$0.40 \leq r < 0.60$	$0.60 \leq r < 0.80$	$r \geq 0.80$	Median Pt. Bis	N
Reading	3	--	3	17	--	--	0.45	20
	4	--	8	9	--	--	0.42	17
	5	--	3	10	--	--	0.45	13
	6	--	8	10	--	--	0.42	18
	7	--	7	11	--	--	0.45	18
	8	--	7	13	--	--	0.43	20
	10	--	7	11	--	--	0.44	18
Mathematics	3	1	6	14	--	--	0.43	21
	4	--	6	12	--	--	0.44	18
	5	--	7	11	2	--	0.43	20
	6	2	3	13	--	--	0.45	18
	7	--	8	12	1	--	0.42	21
	8	--	4	9	1	--	0.46	14
	10	1	7	10	--	--	0.40	18
Science	4	1	17	9	--	--	0.37	27
	7	2	18	10	--	--	0.33	30
	11	6	13	12	--	--	0.37	31

### Multi-select/Constructed Response<sup>2</sup>

Subject	Grade	<i>Multi-select/Short Answer</i>				<i>Extended Response</i>			
		N	Median $r$	Min $r$	Max $r$	N	Median $r$	Min $r$	Max $r$
Science	4	8	0.38	0.22	0.51	4	0.56	0.55	0.61
	7	5	0.45	0.44	0.55	3	0.65	0.63	0.68
	11	4	0.49	0.30	0.58	5	0.71	0.67	0.76

<sup>2</sup> Science has multi-select items—not short answer items—scored 0, 1, and 2.



# 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	10	11	--	--	--	--
	White-Black	10	11	--	--	--	--
	White-Hispanic	9	11	--	1	--	--
4	Male-Female	10	8	--	--	--	--
	White-Black	11	7	--	--	--	--
	White-Hispanic	10	8	--	--	--	--
5	Male-Female	6	6	1	--	--	1
	White-Black	8	6	--	--	--	--
	White-Hispanic	9	5	--	--	--	--
6	Male-Female	10	7	1	1	--	--
	White-Black	10	8	--	1	--	--
	White-Hispanic	12	6	--	--	--	1
7	Male-Female	8	11	--	--	--	--
	White-Black	9	10	--	--	--	--
	White-Hispanic	10	9	--	--	--	--
8	Male-Female	10	11	--	--	--	--
	White-Black	13	8	--	--	--	--
	White-Hispanic	11	10	--	--	--	--
10	Male-Female	12	6	--	1	--	--
	White-Black	10	9	--	--	--	--
	White-Hispanic	9	10	--	--	--	--

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

## Mathematics

Grade	Subgroups	DIF Categories					
		Negligible DIF		Moderate DIF		Substantial DIF	
		Focal	Reference	Focal	Reference	Focal	Reference
3	Male-Female	11	8	--	2	--	--
	White-Black	11	10	--	--	--	--
	White-Hispanic	10	11	--	--	--	--
4	Male-Female	12	5	--	2	--	--
	White-Black	11	8	--	--	--	--
	White-Hispanic	10	9	--	--	--	--
5	Male-Female	11	8	--	1	--	--
	White-Black	11	9	--	--	--	--
	White-Hispanic	11	9	--	--	--	--
6	Male-Female	11	8	--	--	--	--
	White-Black	10	9	--	--	--	--
	White-Hispanic	6	13	--	--	--	--
7	Male-Female	8	12	1	--	--	--
	White-Black	13	7	--	1	--	--
	White-Hispanic	10	11	--	--	--	--
8	Male-Female	7	8	--	--	--	--
	White-Black	7	8	--	--	--	--
	White-Hispanic	8	7	--	--	--	--
10	Male-Female	9	9	--	--	--	--
	White-Black	13	5	--	--	--	--
	White-Hispanic	12	6	--	--	--	--

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	16	23	--	--	--	--
	White-Black	15	23	1	--	--	--
	White-Hispanic	19	20	--	--	--	--
7	Male-Female	12	24	--	2	--	--
	White-Black	22	16	--	--	--	--
	White-Hispanic	23	15	--	--	--	--
11	Male-Female	13	25	--	--	2	--
	White-Black	29	9	--	1	--	1
	White-Hispanic	28	12	--	--	--	--

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

			Item Difficulty					Infit				Outfit			
Subject	Grade	No. of Items	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
Reading	3	21	-1.4366	-0.5148	-0.0583	0.4615	1.4179	-	21	-	-	-	21	-	-
	4	18	-1.2576	-0.5727	-0.2014	0.5658	1.6842	-	18	-	-	-	18	-	-
	5	14	-1.6697	-0.3171	-0.0710	0.4838	1.4627	-	14	-	-	-	14	-	-
	6	19	-0.9197	-0.3788	-0.1158	0.2929	1.1828	-	19	-	-	-	19	-	-
	7	19	-1.4212	-0.4596	0.2079	0.5029	0.8978	-	19	-	-	-	19	-	-
	8	21	-1.9052	-0.7851	-0.0440	0.7791	1.7122	-	21	-	-	-	21	-	-
	10	19	-1.4143	-0.7716	-0.1112	0.7793	1.3912	-	19	-	-	-	19	-	-
Mathematics	3	22	-2.2287	-0.9150	-0.1213	0.7541	2.0711	-	22	-	-	-	21	1	-
	4	19	-2.0023	-0.7524	0.0907	0.7484	1.7012	-	19	-	-	-	19	-	-
	5	21	-1.4513	-0.7557	-0.2705	0.8796	1.4806	-	21	-	-	-	21	-	-
	6	19	-2.1062	-0.6509	0.0976	0.6419	1.9141	-	19	-	-	-	17	2	-
	7	21	-1.5206	-0.0756	0.0958	0.3785	1.1600	-	21	-	-	-	21	-	-
	8	15	-1.5328	-0.6077	0.1619	0.5106	0.8771	-	15	-	-	-	15	-	-
	10	19	-1.0691	-0.2136	0.0346	0.3562	1.0109	-	19	-	-	-	19	-	-
Science	4	39	-1.8338	-0.5953	-0.0259	0.5184	1.6113	-	39	-	-	-	39	-	-
	7	38	-1.2618	-0.4557	-0.0745	0.5039	1.3415	-	38	-	-	-	38	-	-
	11	40	-1.9774	-0.6167	0.0578	0.5218	2.4009	-	40	-	-	-	35	3	2

## Appendix G. Scoring Tables

### Grade 3 Reading

Scale Score	Conditional SEM
100	16
109	11
116	10
121	9
126	8
130	8
134	7
137	7
140	7
144	7
147	7
150	7
153	7
156	7
160	7
163	8
167	8
172	9
177	10
184	11
196	16
200	30

### Grade 4 Reading

Scale Score	Conditional SEM
100	30
114	16
126	12
133	10
139	9
144	8
148	8
152	8
156	7
159	7
163	7
166	7
170	7
174	8
178	8
183	9
188	10
196	11
200	16

### Grade 5 Reading

Scale Score	Conditional SEM
100	30
109	16
121	12
129	10
135	9
140	8
144	8
149	8
153	8
157	8
161	8
166	9
171	9
177	10
184	11
192	12
200	15

**Grade 6 Reading**

Scale Score	Conditional SEM
100	30
115	15
127	11
134	10
139	9
144	8
148	7
151	7
155	7
158	7
161	7
164	7
167	7
171	7
174	7
178	8
183	9
188	10
195	11
200	16

**Grade 7 Reading**

Scale Score	Conditional SEM
100	30
108	16
120	11
127	10
133	9
138	8
142	8
146	7
149	7
153	7
156	7
159	7
163	7
166	7
170	8
174	8
179	9
184	10
192	11
200	16

**Grade 8 Reading**

Scale Score	Conditional SEM
100	30
102	16
114	12
122	10
128	9
133	8
137	8
141	8
145	7
148	7
152	7
155	7
158	7
162	7
165	7
169	7
173	8
177	8
181	9
187	10
194	11
200	16

**Grade 10 Reading**

Scale Score	Conditional SEM
100	30
103	16
114	11
122	10
127	9
132	8
136	8
140	8
144	7
147	7
151	7
154	7
158	7
162	8
166	8
170	8
175	9
181	10
189	12
200	16

**Grade 3 Math**

Scale Score	Conditional SEM
100	16
108	12
116	10
122	9
127	8
131	8
135	8
139	7
143	7
146	7
149	7
153	7
156	7
160	7
164	8
168	8
172	8
177	9
182	9
189	11
197	12
200	17

**Grade 4 Math**

Scale Score	Conditional SEM
100	30
101	16
113	12
120	10
126	9
131	8
136	8
140	8
144	8
147	7
151	7
155	7
158	8
162	8
166	8
171	8
175	9
181	10
188	11
200	16

**Grade 5 Math**

Scale Score	Conditional SEM
100	30
101	16
113	11
120	10
126	9
131	8
135	8
139	7
142	7
146	7
149	7
153	7
156	7
159	7
163	7
166	8
170	8
175	8
179	9
185	10
192	11
200	16

**Grade 6 Math**

Scale Score	Conditional SEM
100	30
101	16
113	12
121	10
127	9
132	8
137	8
141	8
145	8
149	7
152	7
156	7
160	8
164	8
168	8
172	8
177	9
182	10
190	11
200	16

**Grade 7 Math**

Scale Score	Conditional SEM
100	30
103	16
115	11
122	10
128	9
132	8
136	8
140	7
144	7
147	7
150	7
153	7
156	7
160	7
163	7
167	8
171	8
175	9
181	10
188	11
199	15
200	30

### Grade 8 Math

Scale Score	Conditional SEM
100	31
107	16
119	12
127	10
133	9
138	8
143	8
147	8
151	8
155	8
159	8
163	8
167	9
173	9
180	11
191	15
200	30

### Grade 10 Math

Scale Score	Conditional SEM
100	30
104	15
115	11
122	10
128	9
132	8
136	7
140	7
143	7
146	7
149	7
152	7
155	7
158	7
161	7
164	7
168	7
171	8
175	8
180	9
187	11
197	15
200	30



## Grade 4 Science

Form	Scale Score	Conditional SEM
01	100	30
01	104	16
01	116	12
01	123	10
01	129	9
01	134	8
01	138	8
01	142	7
01	146	7
01	149	7
01	152	7
01	155	7
01	158	7
01	162	7
01	165	7
01	168	7
01	171	7
01	174	7
01	177	7
01	180	7
01	184	7
01	187	7
01	191	8
01	196	9
01	200	11
02	100	16
02	110	12
02	118	10
02	124	9
02	130	9
02	134	8
02	138	8
02	142	8
02	146	7

Form	Scale Score	Conditional SEM
02	150	7
02	153	7
02	157	7
02	160	7
02	164	7
02	167	8
02	171	8
02	176	8
02	180	8
02	185	9
02	191	10
02	198	11
02	200	16
03	100	16
03	113	12
03	121	10
03	127	9
03	132	8
03	136	8
03	140	8
03	144	7
03	147	7
03	150	7
03	153	7
03	156	7
03	159	7
03	162	7
03	165	7
03	168	7
03	171	7
03	175	7
03	178	7
03	181	7
03	185	7
03	189	8

Form	Scale Score	Conditional SEM
03	193	8
03	198	9
03	200	11
04	100	16
04	112	12
04	119	10
04	125	9
04	130	8
04	134	8
04	138	7
04	141	7
04	144	7
04	148	7
04	151	7
04	154	7
04	157	7
04	159	7
04	162	7
04	165	7
04	168	7
04	171	7
04	174	7
04	177	7
04	180	7
04	184	7
04	188	8
04	192	8
04	197	9
04	200	11

## Grade 7 Science

Form	Scale Score	Conditional SEM
01	100	30
01	103	16
01	115	12
01	122	10
01	128	9
01	133	8
01	137	8
01	141	7
01	144	7
01	148	7
01	151	7
01	155	7
01	158	7
01	162	7
01	165	8
01	170	8
01	174	9
01	180	10
01	187	11
01	198	15
01	200	30
02	100	16
02	109	11
02	116	10
02	122	9
02	127	8
02	131	8
02	134	7
02	138	7
02	141	7
02	144	7
02	146	6
02	149	6
02	152	6

Form	Scale Score	Conditional SEM
02	155	6
02	157	6
02	160	7
02	163	7
02	166	7
02	169	7
02	173	8
02	177	8
02	182	9
02	189	11
02	200	15
03	100	16
03	107	12
03	115	10
03	120	9
03	125	8
03	129	8
03	133	7
03	136	7
03	139	7
03	142	7
03	145	7
03	148	7
03	151	7
03	154	7
03	157	7
03	160	7
03	164	7
03	167	7
03	171	8
03	175	8
03	180	9
03	186	10
03	194	12
03	200	16

Form	Scale Score	Conditional SEM
04	100	16
04	112	12
04	119	10
04	125	9
04	130	8
04	134	8
04	138	7
04	141	7
04	145	7
04	148	7
04	151	7
04	154	7
04	157	7
04	161	7
04	165	8
04	169	8
04	173	9
04	178	10
04	186	11
04	197	15
04	200	30

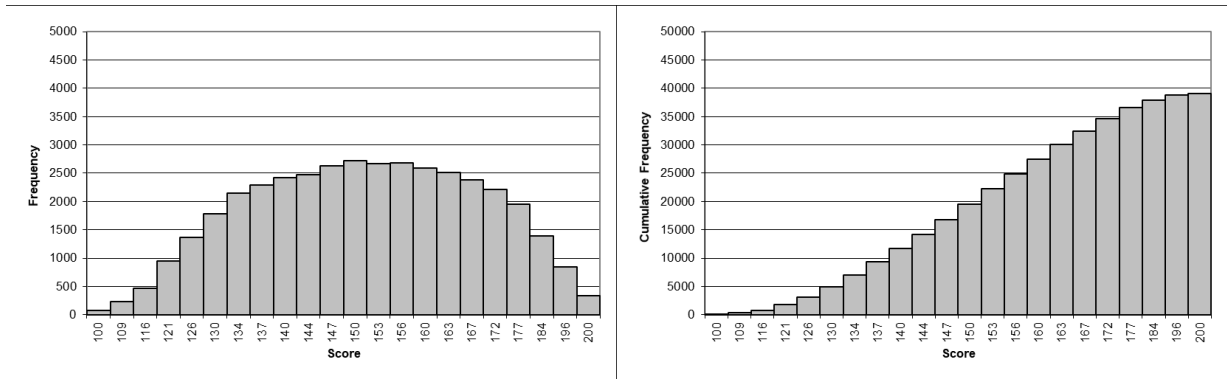
## Grade 11 Science

Form	Scale Score	Conditional SEM
01	100	16
01	108	12
01	116	10
01	122	9
01	127	8
01	131	8
01	135	8
01	139	8
01	143	8
01	147	8
01	150	8
01	154	8
01	158	8
01	163	8
01	167	8
01	172	9
01	177	9
01	183	10
01	191	11
01	200	14
02	100	16
02	107	12
02	115	10
02	120	9
02	125	8
02	130	8
02	134	8
02	138	7

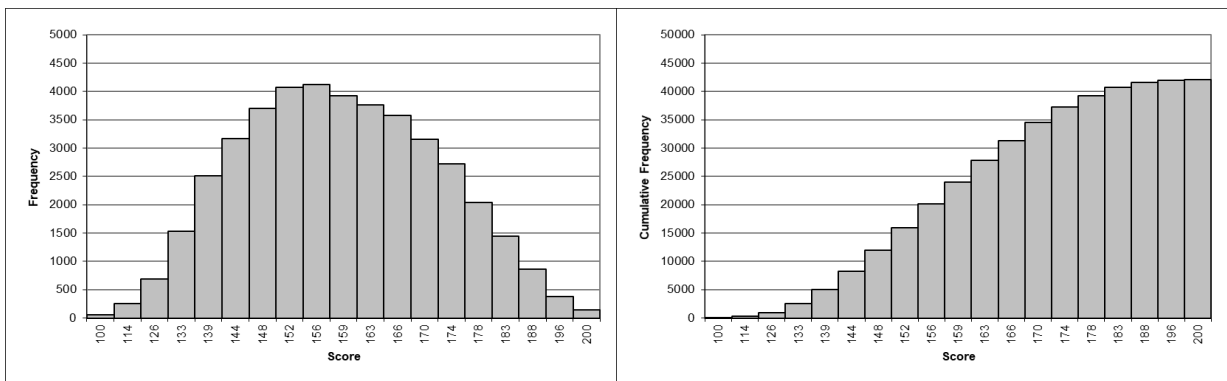
Form	Scale Score	Conditional SEM
02	141	7
02	145	7
02	149	7
02	152	7
02	156	8
02	160	8
02	164	8
02	168	8
02	173	9
02	178	9
02	184	10
02	192	11
02	200	14
03	100	16
03	108	11
03	116	10
03	121	9
03	126	8
03	130	8
03	134	7
03	137	7
03	140	7
03	143	7
03	146	7
03	149	7
03	153	7
03	156	7
03	159	7
03	163	8
03	168	8

Form	Scale Score	Conditional SEM
03	172	9
03	178	10
03	186	12
03	197	15
03	200	20
04	100	16
04	104	11
04	111	10
04	117	9
04	121	8
04	125	8
04	129	7
04	133	7
04	136	7
04	140	7
04	143	7
04	147	7
04	150	7
04	154	8
04	158	8
04	162	8
04	166	8
04	171	9
04	177	9
04	183	10
04	191	12
04	200	14

## Appendix H. Score Frequency Distributions<sup>3</sup>

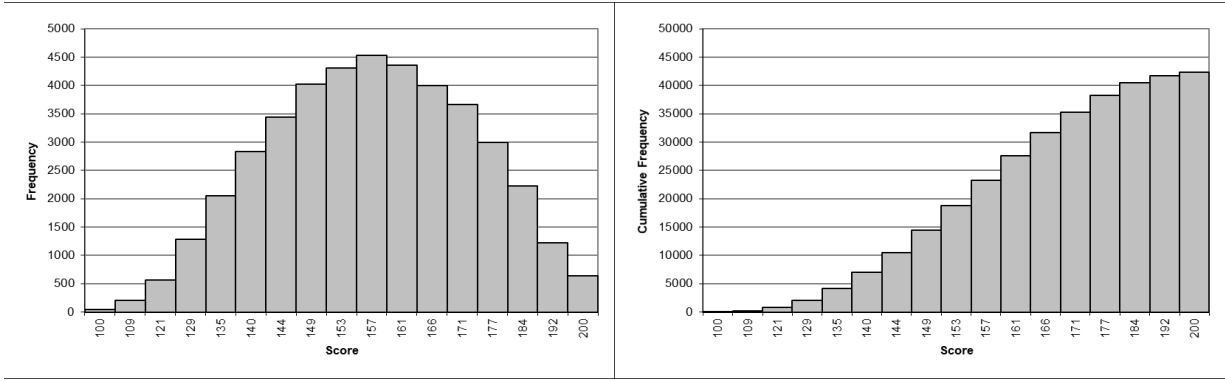


**Figure 1.** Reading Grade 3 Score Frequency and Cumulative Frequency Distributions

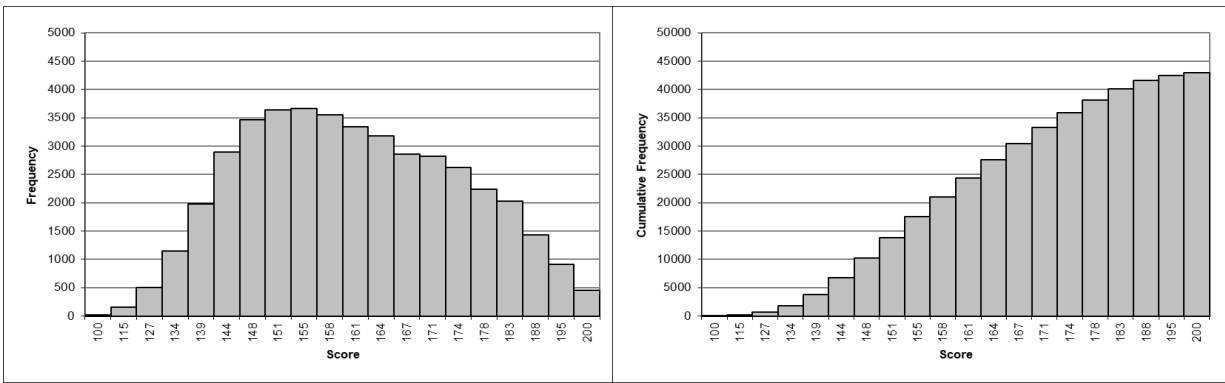


**Figure 2.** Reading Grade 4 Score Frequency and Cumulative Frequency Distributions

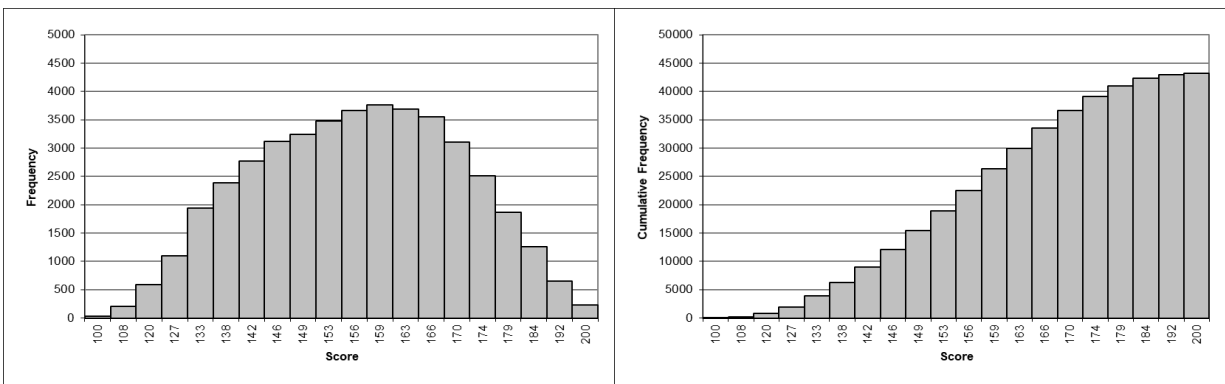
<sup>3</sup> On-Demand Writing is reported on a scale score metric of 0-8 points, while the other subjects are reported on a scale score metric of 100-200.



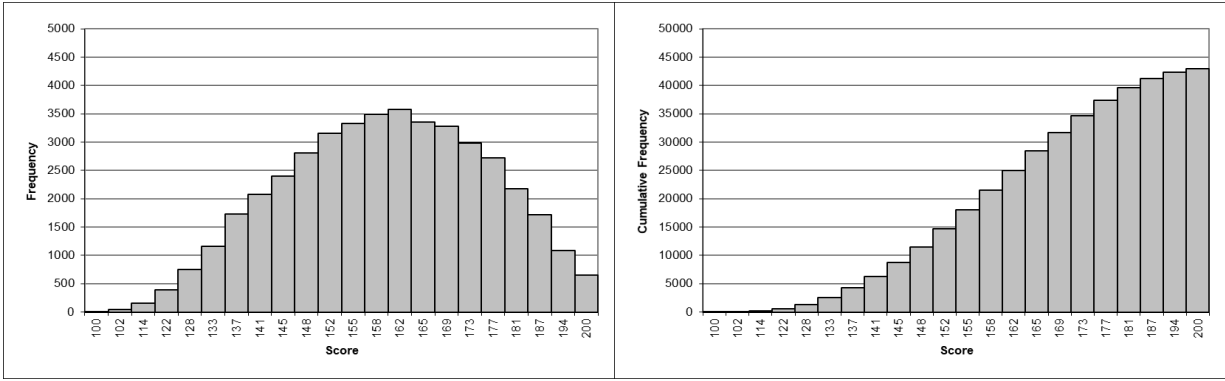
**Figure 3.** Reading Grade 5 Score Frequency and Cumulative Frequency Distributions



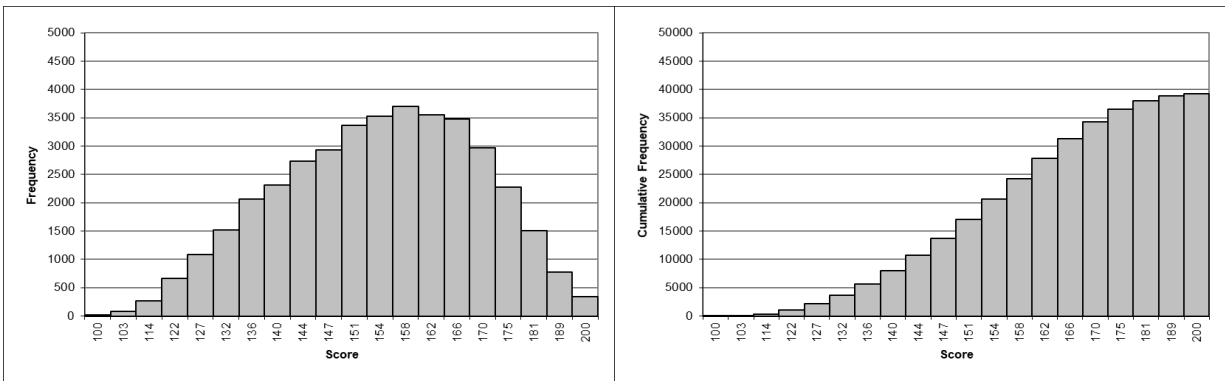
**Figure 4.** Reading Grade 6 Score Frequency and Cumulative Frequency Distributions



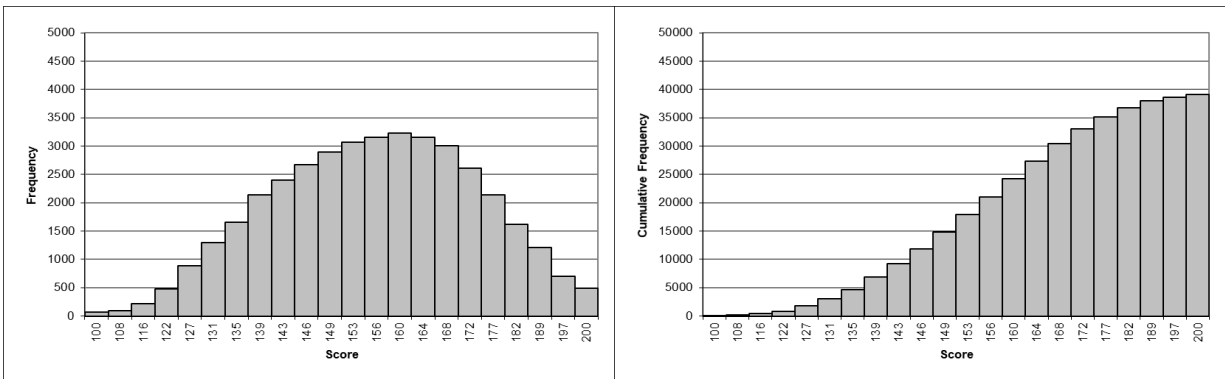
**Figure 5.** Reading Grade 7 Score Frequency and Cumulative Frequency Distributions



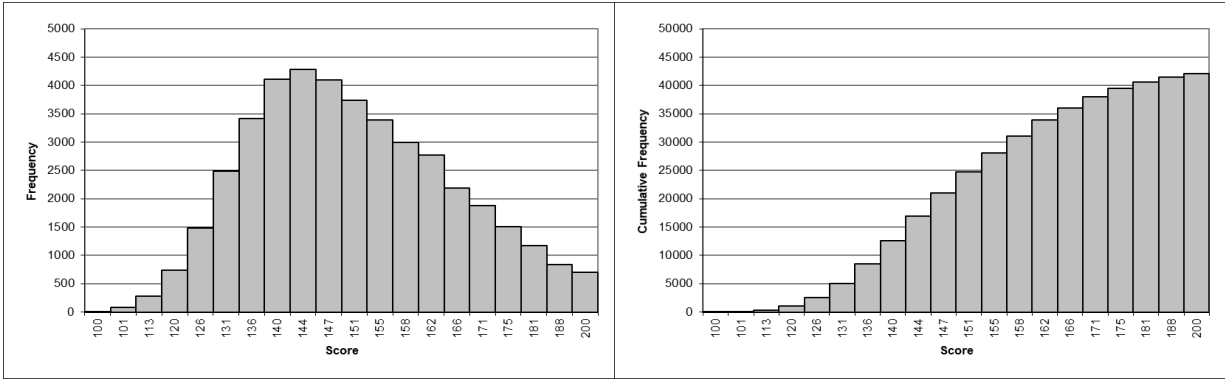
**Figure 6.** Reading Grade 8 Score Frequency and Cumulative Frequency Distributions



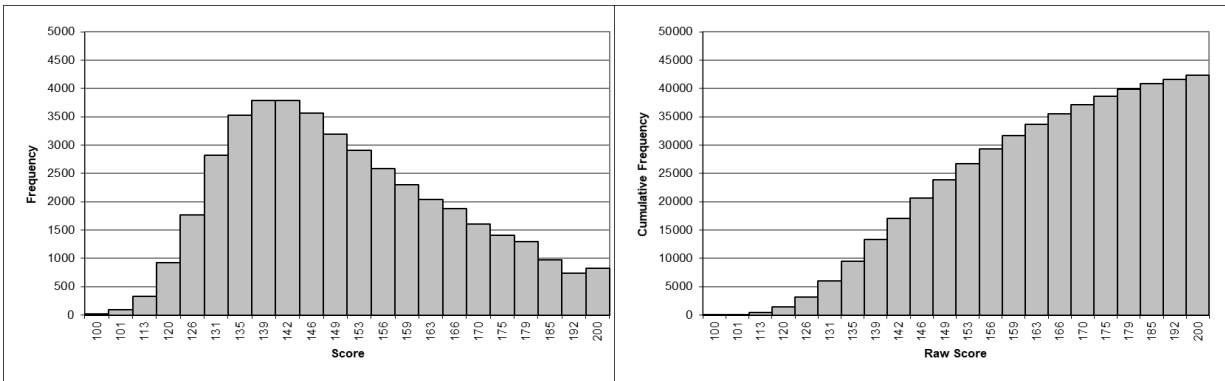
**Figure 7.** Reading Grade 10 Score Frequency and Cumulative Frequency Distributions



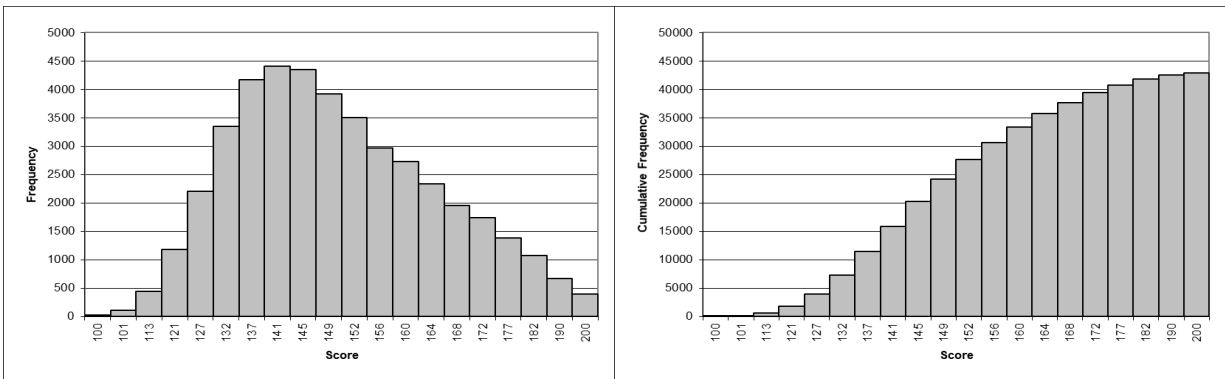
**Figure 8.** Mathematics Grade 3 Score Frequency and Cumulative Frequency Distributions



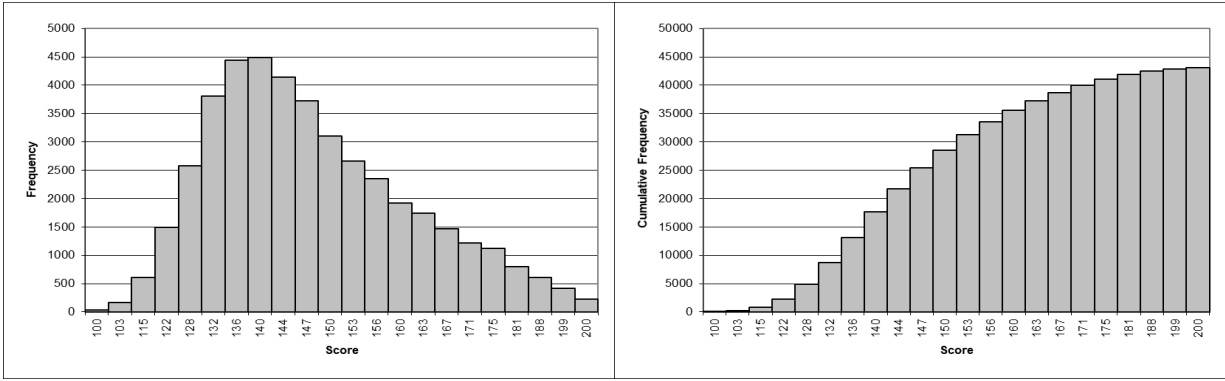
**Figure 9.** Mathematics Grade 4 Score Frequency and Cumulative Frequency Distributions



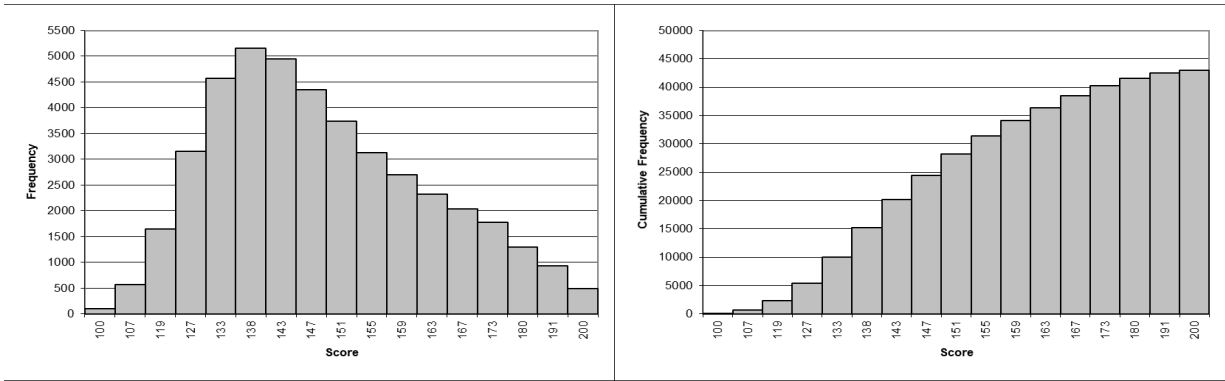
**Figure 10.** Mathematics Grade 5 Score Frequency and Cumulative Frequency Distributions



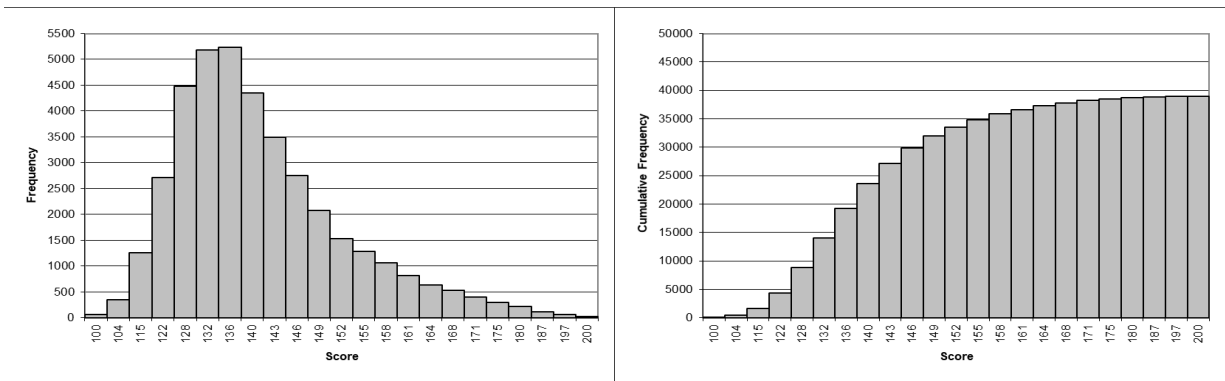
**Figure 11.** Mathematics Grade 6 Score Frequency and Cumulative Frequency Distributions



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

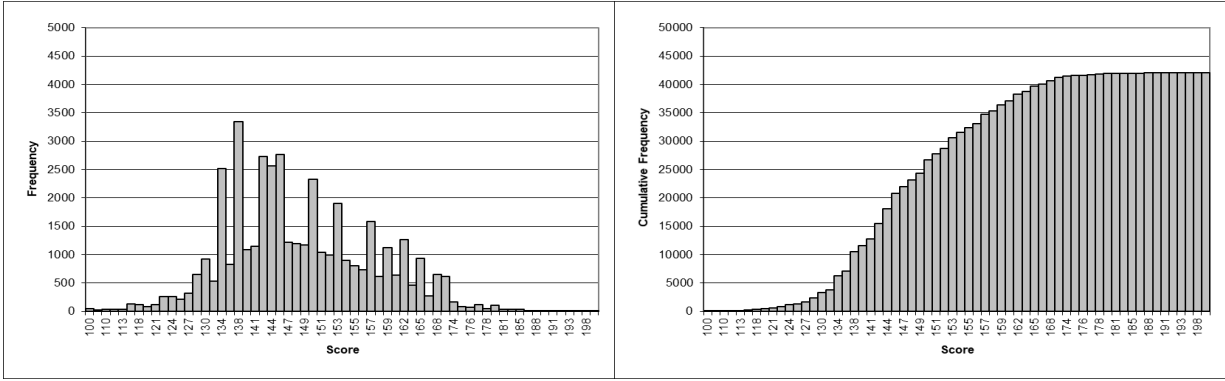


**Figure 13.** Mathematics Grade 8 Score Frequency and Cumulative Frequency Distributions

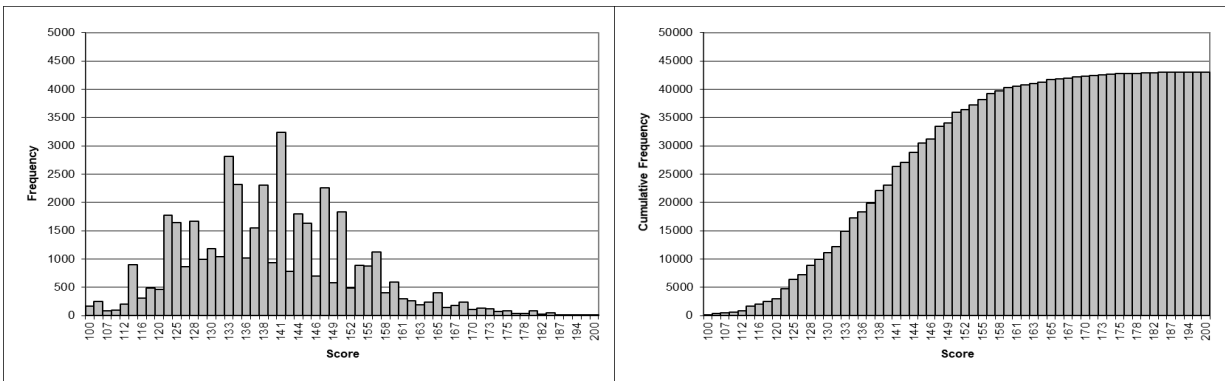


**Figure 14.** Mathematics Grade 10 Score Frequency and Cumulative Frequency Distributions

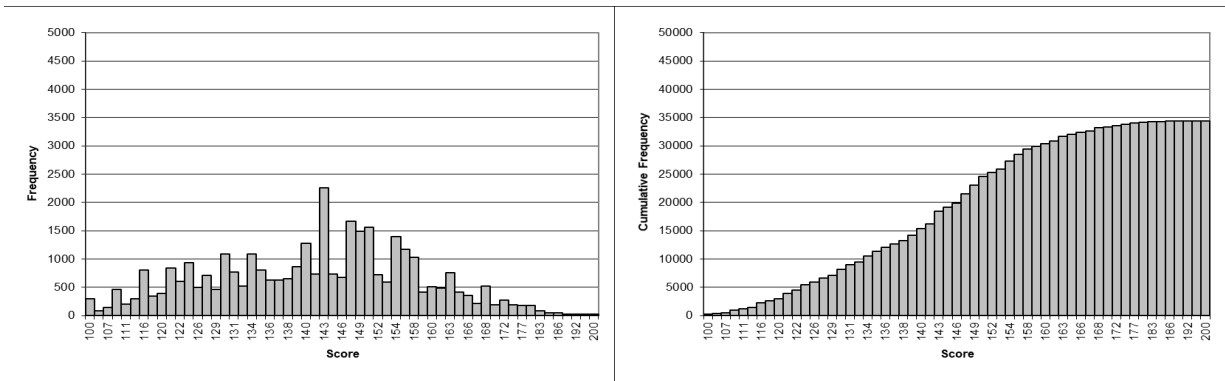




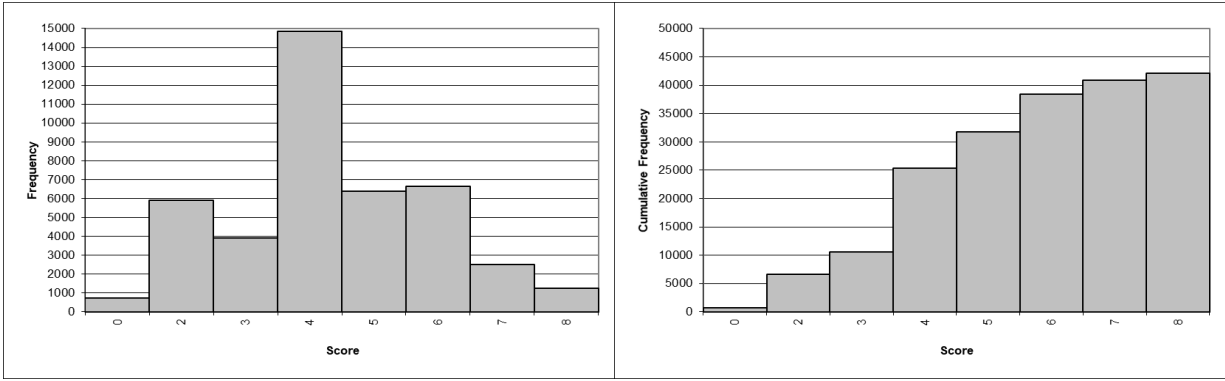
**Figure 15.** Science Grade 4 Score Frequency and Cumulative Frequency Distributions



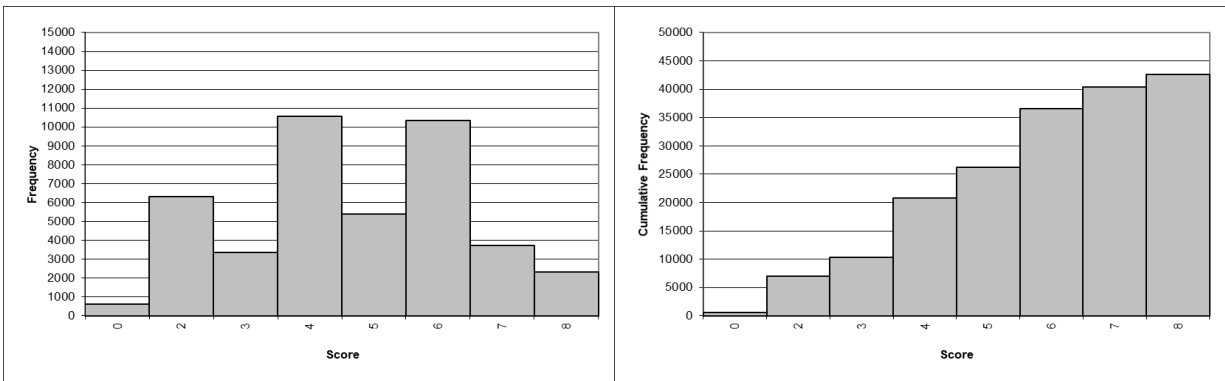
**Figure 16.** Science Grade 7 Score Frequency and Cumulative Frequency Distributions



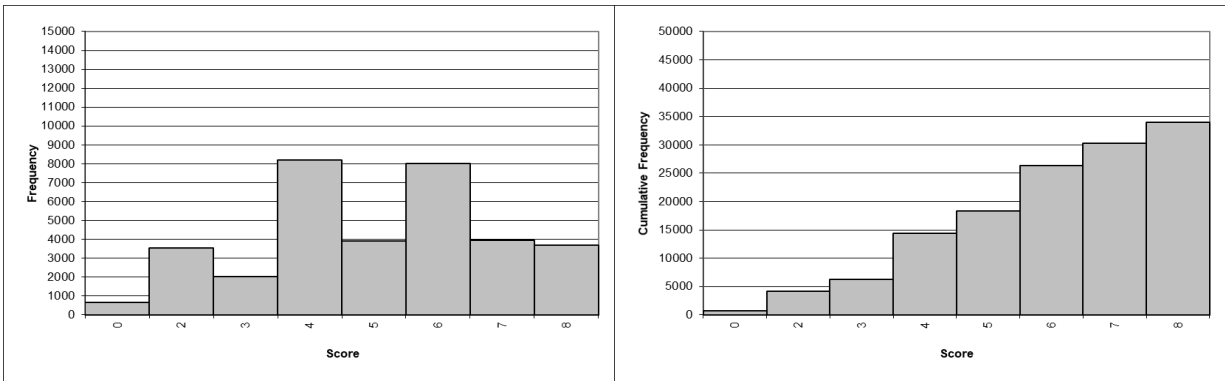
**Figure 17.** Science Grade 11 Score Frequency and Cumulative Frequency Distributions



**Figure 18.** On Demand Writing Grade 5 Cumulative Frequency Distributions



**Figure 19.** On Demand Writing Grade 8 Score Frequency and Cumulative Frequency Distributions



**Figure 20.** On Demand Writing Grade 11 Score Frequency and Cumulative Frequency Distributions

## Appendix I. Scale Score Descriptive Statistics<sup>4</sup>

### Grade 3 Reading

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	39,109	152.31	18.0	140	150	163	200	0.24
Gender	Female	18,840	153.43	18.1	140	153	167	200	0.23
	Male	20,252	151.27	17.8	137	150	163	200	0.25
Ethnicity	Hispanic	3,038	146.70	16.6	134	147	156	200	0.41
	Asian	831	156.20	19.3	140	153	167	200	0.30
	Native Hawaiian/Pacific Islander	56	148.46	17.8	134	147	162	196	0.21
	Black/African American	3,344	142.57	16.1	130	140	153	200	0.36
	American Indian	45	156.33	16.7	144	156	167	196	0.21
	White	29,772	153.99	17.9	140	153	167	200	0.20
	Other	2,003	150.44	17.3	137	150	163	200	0.26
Migrant	Non-Migrant	38,850	152.37	18.0	140	153	163	200	0.24
	Migrant	259	142.64	16.6	130	140	153	200	0.57
LEP	Non-LEP	36,400	153.05	18.0	140	153	163	200	0.21
	LEP	2,709	142.35	14.4	134	140	150	200	0.30
Economic Disadvantage	Free Lunch	22,780	147.94	17.0	137	147	160	200	0.33
	Reduced-Price Lunch	1,270	153.26	17.5	140	153	163	200	0.21
	Regular Lunch	15,059	158.83	17.6	147	160	172	200	0.11
IEP	Non-IEP	32,579	153.40	17.9	140	153	163	200	0.20
	IEP	6,530	146.84	17.5	134	147	156	200	0.46

### Grade 4 Reading

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,096	158.46	14.7	148	159	170	200	-0.07
Gender	Female	20,467	159.22	14.9	148	159	170	200	-0.07
	Male	21,606	157.73	14.6	148	159	166	200	-0.07
Ethnicity	Hispanic	3,452	154.84	14.2	144	156	163	200	-0.11
	Asian	789	161.66	14.3	152	163	170	200	-0.08
	Native Hawaiian/Pacific Islander	70	153.80	14.2	144	152	163	196	0.07
	Black/African American	3,920	150.80	13.8	144	152	159	196	-0.06
	American Indian	52	156.85	14.5	148	156	170	183	-0.31
	White	31,708	159.86	14.6	152	159	170	200	-0.07
	Other	2,081	156.46	14.7	148	156	166	200	-0.11
Migrant	Non-Migrant	41,861	158.51	14.7	148	159	170	200	-0.07
	Migrant	235	149.32	14.6	139	148	159	196	-0.14
LEP	Non-LEP	39,355	159.00	14.7	148	159	170	200	-0.08
	LEP	2,741	150.69	12.4	144	152	159	200	-0.25
Economic Disadvantage	Free Lunch	24,114	154.89	14.1	144	156	163	200	-0.05
	Reduced-Price Lunch	1,475	159.15	14.5	152	159	170	200	-0.18
	Regular Lunch	16,507	163.60	14.2	156	163	174	200	-0.15
IEP	Non-IEP	35,553	159.59	14.5	148	159	170	200	-0.08
	IEP	6,543	152.31	14.6	144	152	163	200	0.08

<sup>4</sup> Scale score statistics are not reported on n-counts less than 10.

## Grade 5 Reading

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,363	157.91	16.6	149	157	171	200	0.11
Gender	Female	20,409	158.87	16.6	149	157	171	200	0.12
	Male	21,943	157.02	16.5	144	157	166	200	0.11
Ethnicity	Hispanic	3,407	153.10	15.3	144	153	161	200	0.12
	Asian	771	163.83	17.0	153	161	177	200	-0.03
	Native Hawaiian/Pacific Islander	61	153.44	16.7	140	153	166	192	-0.07
	Black/African American	4,003	149.42	15.4	140	149	157	200	0.13
	American Indian	48	159.69	13.5	151	157	171	192	0.41
	White	32,000	159.44	16.4	149	157	171	200	0.10
	Other	2,061	156.56	16.1	144	157	166	200	0.19
Migrant	Non-Migrant	42,134	157.98	16.5	149	157	171	200	0.11
	Migrant	229	146.16	14.0	140	144	157	192	0.01
LEP	Non-LEP	40,463	158.48	16.5	149	157	171	200	0.11
	LEP	1,900	145.79	13.7	135	144	153	200	-0.04
Economic Disadvantage	Free Lunch	24,401	154.06	15.6	144	153	166	200	0.14
	Reduced-Price Lunch	1,466	159.57	16.5	149	157	171	200	0.09
	Regular Lunch	16,496	163.46	16.3	153	161	177	200	0.00
IEP	Non-IEP	36,137	159.14	16.3	149	157	171	200	0.11
	IEP	6,226	150.76	16.3	140	149	161	200	0.24

## Grade 6 Reading

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,919	160.89	15.3	151	161	171	200	0.16
Gender	Female	21,050	161.63	15.2	151	161	171	200	0.19
	Male	21,852	160.17	15.4	148	158	171	200	0.15
Ethnicity	Hispanic	3,413	157.28	14.3	148	155	167	200	0.24
	Asian	727	169.58	16.9	158	171	183	200	-0.32
	Native Hawaiian/Pacific Islander	54	158.46	14.1	148	157	167	195	0.38
	Black/African American	3,919	154.01	13.8	144	151	161	200	0.26
	American Indian	50	163.28	15.4	151	161	171	200	0.42
	White	32,694	161.98	15.2	151	161	171	200	0.14
	Other	2,046	159.43	15.1	148	158	171	200	0.16
Migrant	Non-Migrant	42,676	160.93	15.3	151	161	171	200	0.16
	Migrant	243	152.91	13.7	144	151	161	195	0.10
LEP	Non-LEP	41,453	161.34	15.2	151	161	171	200	0.16
	LEP	1,466	148.08	11.3	139	148	155	200	-0.11
Economic Disadvantage	Free Lunch	24,326	157.16	14.2	148	155	167	200	0.21
	Reduced-Price Lunch	1,435	161.49	15.0	151	161	171	200	0.22
	Regular Lunch	17,158	166.13	15.2	155	167	178	200	0.00
IEP	Non-IEP	37,275	162.09	15.1	151	161	171	200	0.15
	IEP	5,644	152.98	13.9	144	151	161	200	0.26

## Grade 7 Reading

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	43,165	156.41	15.5	146	156	166	200	-0.10
Gender	Female	21,021	157.55	15.3	146	159	166	200	-0.07
	Male	22,135	155.33	15.6	146	156	166	200	-0.12
Ethnicity	Hispanic	3,492	151.97	15.1	142	153	163	200	-0.04
	Asian	726	163.37	15.8	153	163	174	200	-0.15
	Native Hawaiian/Pacific Islander	67	151.78	13.4	142	153	166	174	-0.20
	Black/African American	3,966	148.26	15.1	138	149	159	200	0.00
	American Indian	47	149.77	14.7	142	153	159	184	-0.37
	White	32,933	157.78	15.2	149	159	166	200	-0.11
	Other	1,924	155.64	15.1	146	156	166	200	-0.14
Migrant	Non-Migrant	42,932	156.46	15.5	146	156	166	200	-0.10
	Migrant	233	147.68	13.7	138	149	156	179	-0.17
LEP	Non-LEP	41,724	156.93	15.3	146	156	166	200	-0.11
	LEP	1,441	141.55	12.3	133	142	149	192	-0.06
Economic Disadvantage	Free Lunch	24,086	152.55	14.8	142	153	163	200	-0.11
	Reduced-Price Lunch	1,344	157.45	14.7	149	159	166	200	-0.09
	Regular Lunch	17,735	161.58	14.9	153	163	170	200	-0.15
IEP	Non-IEP	37,757	157.86	15.1	149	159	166	200	-0.12
	IEP	5,408	146.29	14.4	138	146	156	200	0.07

## Grade 8 Reading

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,991	160.36	16.5	148	162	173	200	0.02
Gender	Female	20,917	162.49	16.0	152	162	173	200	0.03
	Male	22,067	158.34	16.8	148	158	169	200	0.05
Ethnicity	Hispanic	3,289	156.32	15.7	145	155	165	200	0.05
	Asian	676	168.05	16.7	158	169	181	200	-0.17
	Native Hawaiian/Pacific Islander	54	154.80	16.9	141	155	165	200	0.36
	Black/African American	4,032	151.15	15.9	141	152	162	200	0.23
	American Indian	56	161.39	17.1	152	162	171	200	0.31
	White	32,974	161.81	16.2	152	162	173	200	0.00
	Other	1,902	159.22	16.2	148	158	169	200	0.13
Migrant	Non-Migrant	42,775	160.42	16.5	148	162	173	200	0.02
	Migrant	216	148.86	15.6	137	148	158	194	0.21
LEP	Non-LEP	41,603	160.94	16.3	148	162	173	200	0.03
	LEP	1,388	143.08	12.9	137	145	152	200	-0.17
Economic Disadvantage	Free Lunch	23,537	156.14	15.7	145	155	165	200	0.09
	Reduced-Price Lunch	1,423	161.13	15.9	152	162	173	200	-0.02
	Regular Lunch	18,031	165.81	16.0	155	165	177	200	-0.10
IEP	Non-IEP	38,053	162.02	16.0	152	162	173	200	0.02
	IEP	4,938	147.60	14.8	137	148	158	200	0.24

## Grade 10 Reading

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	39,171	154.92	15.8	144	154	166	200	-0.02
Gender	Female	18,828	156.65	15.4	147	158	166	200	0.06
	Male	20,329	153.32	16.0	144	154	166	200	-0.05
Ethnicity	Hispanic	2,789	150.31	15.4	140	151	162	200	-0.02
	Asian	689	159.69	17.1	147	162	170	200	-0.13
	Native Hawaiian/Pacific Islander	45	152.02	15.6	144	154	166	189	-0.37
	Black/African American	3,414	147.20	15.5	136	147	158	200	0.19
	American Indian	48	156.88	12.7	151	158	166	181	-0.62
	White	30,737	156.16	15.5	147	158	166	200	-0.03
	Other	1,432	153.39	14.9	144	154	162	200	0.04
Migrant	Non-Migrant	38,966	154.99	15.8	144	154	166	200	-0.02
	Migrant	205	140.92	15.1	132	140	151	189	0.58
LEP	Non-LEP	37,921	155.50	15.6	144	154	166	200	-0.02
	LEP	1,250	137.23	11.7	132	136	144	175	-0.02
Economic Disadvantage	Free Lunch	19,371	150.73	15.0	140	151	162	200	0.03
	Reduced-Price Lunch	1,251	155.97	15.3	147	158	166	200	-0.05
	Regular Lunch	18,549	159.23	15.4	151	158	170	200	-0.10
IEP	Non-IEP	35,426	156.20	15.4	147	158	166	200	-0.04
	IEP	3,745	142.79	13.7	132	144	151	200	0.22

## Grade 3 Mathematics

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	39,149	157.10	17.4	146	156	168	200	0.14
Gender	Female	18,851	156.33	17.1	146	156	168	200	0.18
	Male	20,281	157.81	17.7	146	156	168	200	0.09
Ethnicity	Hispanic	3,079	151.37	16.4	139	153	164	200	-0.02
	Asian	841	165.00	19.5	153	164	177	200	-0.12
	Native Hawaiian/Pacific Islander	57	152.40	19.4	135	153	168	200	0.44
	Black/African American	3,346	146.24	15.5	135	146	156	200	0.23
	American Indian	45	162.13	16.9	149	160	177	200	0.09
	White	29,761	158.83	17.1	146	160	168	200	0.13
	Other	2,000	155.07	16.4	143	156	168	200	0.19
Migrant	Non-Migrant	38,883	157.16	17.4	146	156	168	200	0.14
	Migrant	266	147.38	17.3	139	149	160	200	-0.37
LEP	Non-LEP	36,364	157.80	17.3	146	156	168	200	0.16
	LEP	2,785	147.90	16.4	139	149	160	200	-0.10
Economic Disadvantage	Free Lunch	22,785	152.29	16.1	143	153	164	200	0.19
	Reduced-Price Lunch	1,272	157.97	16.9	146	156	168	200	0.07
	Regular Lunch	15,092	164.29	16.9	153	164	177	200	-0.03
IEP	Non-IEP	32,627	158.56	17.2	146	160	168	200	0.09
	IEP	6,522	149.77	16.5	139	149	160	200	0.41

## Grade 4 Mathematics

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,142	151.11	16.4	140	151	162	200	0.49
Gender	Female	20,488	150.03	16.0	140	147	158	200	0.50
	Male	21,631	152.12	16.7	140	151	162	200	0.47
Ethnicity	Hispanic	3,487	145.69	15.2	136	144	155	200	0.44
	Asian	805	156.56	19.2	144	155	171	200	0.17
	Native Hawaiian/Pacific Islander	70	144.91	16.0	136	144	155	200	0.51
	Black/African American	3,920	141.42	13.4	131	140	147	200	0.35
	American Indian	52	151.35	17.8	140	151	160	200	0.44
	White	31,703	152.93	16.3	140	151	162	200	0.49
	Other	2,081	148.72	15.2	140	147	158	200	0.57
Migrant	Non-Migrant	41,903	151.15	16.4	140	151	162	200	0.49
	Migrant	239	143.55	15.4	136	144	151	200	0.49
LEP	Non-LEP	39,334	151.82	16.3	140	151	162	200	0.50
	LEP	2,808	141.15	14.2	131	140	147	200	0.26
Economic Disadvantage	Free Lunch	24,127	146.61	14.6	136	144	155	200	0.51
	Reduced-Price Lunch	1,477	151.29	15.5	140	151	162	200	0.37
	Regular Lunch	16,538	157.65	16.8	147	155	166	200	0.33
IEP	Non-IEP	35,603	152.28	16.4	140	151	162	200	0.47
	IEP	6,539	144.71	14.8	136	144	151	200	0.59

## Grade 5 Mathematics

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,372	150.66	17.8	139	149	163	200	0.56
Gender	Female	20,409	149.75	17.1	139	149	159	200	0.56
	Male	21,952	151.51	18.4	139	149	163	200	0.54
Ethnicity	Hispanic	3,425	145.72	15.8	135	146	156	200	0.45
	Asian	791	160.41	22.7	146	159	175	200	0.04
	Native Hawaiian/Pacific Islander	61	146.46	15.5	135	142	156	192	0.85
	Black/African American	4,009	140.61	14.1	131	139	149	200	0.63
	American Indian	48	148.75	17.8	135	148	156	200	0.87
	White	31,966	152.36	17.8	139	149	163	200	0.53
	Other	2,060	148.61	16.6	139	146	159	200	0.61
Migrant	Non-Migrant	42,141	150.71	17.8	139	149	163	200	0.56
	Migrant	231	140.64	14.1	131	139	149	179	0.14
LEP	Non-LEP	40,417	151.23	17.8	139	149	163	200	0.56
	LEP	1,955	138.95	14.0	131	139	146	200	0.39
Economic Disadvantage	Free Lunch	24,393	145.92	15.6	135	142	156	200	0.59
	Reduced-Price Lunch	1,467	151.80	17.4	139	149	163	200	0.54
	Regular Lunch	16,512	157.56	18.6	142	156	170	200	0.34
IEP	Non-IEP	36,159	151.85	17.9	139	149	163	200	0.52
	IEP	6,213	143.70	15.3	135	142	153	200	0.76

## Grade 6 Mathematics

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,924	149.73	16.6	137	149	160	200	0.39
Gender	Female	21,048	149.46	16.6	137	149	160	200	0.38
	Male	21,859	149.99	16.5	137	149	160	200	0.41
Ethnicity	Hispanic	3,438	145.32	15.0	137	145	152	200	0.38
	Asian	739	160.63	20.9	145	160	177	200	-0.15
	Native Hawaiian/Pacific Islander	54	147.19	15.7	137	149	156	182	-0.42
	Black/African American	3,915	140.96	14.1	132	141	149	200	0.40
	American Indian	50	151.30	18.3	141	149	160	200	0.88
	White	32,670	151.12	16.5	141	149	160	200	0.37
	Other	2,042	147.76	15.6	137	145	156	200	0.41
Migrant	Non-Migrant	42,675	149.78	16.6	137	149	160	200	0.39
	Migrant	249	142.29	15.8	132	141	149	200	0.51
LEP	Non-LEP	41,405	150.22	16.5	137	149	160	200	0.40
	LEP	1,519	136.46	13.3	127	137	145	190	0.24
Economic Disadvantage	Free Lunch	24,329	145.30	14.9	137	145	152	200	0.41
	Reduced-Price Lunch	1,435	150.01	15.9	137	149	160	200	0.28
	Regular Lunch	17,160	156.00	16.9	145	156	168	200	0.24
IEP	Non-IEP	37,286	150.88	16.6	141	149	160	200	0.36
	IEP	5,638	142.16	14.3	132	141	149	200	0.54

## Grade 7 Mathematics

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	43,134	147.27	16.3	136	144	156	200	0.67
Gender	Female	21,000	146.30	15.9	136	144	156	200	0.69
	Male	22,125	148.18	16.7	136	147	156	200	0.64
Ethnicity	Hispanic	3,512	142.65	14.3	132	140	150	200	0.66
	Asian	736	159.71	21.8	144	156	175	200	0.29
	Native Hawaiian/Pacific Islander	68	144.53	13.1	136	144	153	181	0.03
	Black/African American	3,955	138.42	12.7	132	136	144	200	0.65
	American Indian	47	143.23	14.8	132	140	150	181	0.70
	White	32,888	148.66	16.3	136	147	156	200	0.61
	Other	1,918	145.46	15.4	136	144	153	200	0.84
Migrant	Non-Migrant	42,897	147.31	16.3	136	144	156	200	0.67
	Migrant	237	139.16	13.6	132	140	147	200	0.40
LEP	Non-LEP	41,654	147.70	16.3	136	147	156	200	0.67
	LEP	1,480	135.01	11.3	128	136	140	200	0.21
Economic Disadvantage	Free Lunch	24,049	142.66	13.9	132	140	150	200	0.61
	Reduced-Price Lunch	1,343	147.40	15.6	136	147	156	200	0.62
	Regular Lunch	17,742	153.50	17.4	140	150	163	200	0.49
IEP	Non-IEP	37,741	148.55	16.4	136	147	156	200	0.65
	IEP	5,393	138.30	12.8	132	136	144	200	0.62



## Grade 8 Mathematics

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,945	147.92	17.3	138	147	159	200	0.45
Gender	Female	20,893	148.20	17.1	138	147	159	200	0.44
	Male	22,045	147.67	17.5	138	147	159	200	0.47
Ethnicity	Hispanic	3,314	143.62	15.8	133	143	151	200	0.36
	Asian	682	159.50	20.8	143	159	173	200	0.06
	Native Hawaiian/Pacific Islander	55	141.85	15.0	133	143	147	191	0.23
	Black/African American	4,024	139.12	14.5	133	138	147	200	0.35
	American Indian	55	145.85	19.2	133	143	155	191	0.61
	White	32,911	149.31	17.3	138	147	159	200	0.43
	Other	1,896	146.20	16.4	138	143	155	200	0.60
Migrant	Non-Migrant	42,725	147.97	17.3	138	147	159	200	0.46
	Migrant	220	138.30	16.4	127	138	147	200	0.39
LEP	Non-LEP	41,509	148.39	17.3	138	147	159	200	0.46
	LEP	1,436	134.37	13.4	127	133	143	191	-0.02
Economic Disadvantage	Free Lunch	23,520	143.28	15.4	133	143	151	200	0.44
	Reduced-Price Lunch	1,420	148.50	17.0	138	147	159	200	0.51
	Regular Lunch	18,005	153.95	17.8	143	151	163	200	0.32
IEP	Non-IEP	38,021	149.22	17.3	138	147	159	200	0.44
	IEP	4,924	137.94	14.2	127	138	147	200	0.43

## Grade 10 Mathematics

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	38,947	139.48	13.6	132	140	146	200	0.55
Gender	Female	18,725	139.70	13.4	132	140	146	200	0.49
	Male	20,208	139.28	13.8	132	136	146	200	0.61
Ethnicity	Hispanic	2,769	136.27	12.1	128	136	143	200	0.47
	Asian	694	149.56	18.9	136	146	161	200	0.39
	Native Hawaiian/Pacific Islander	48	136.46	11.6	132	136	143	180	0.43
	Black/African American	3,368	133.61	11.1	128	132	140	197	0.40
	American Indian	48	141.73	13.5	132	140	152	171	0.36
	White	30,587	140.26	13.6	132	140	149	200	0.50
	Other	1,416	138.00	13.1	132	136	146	197	0.49
Migrant	Non-Migrant	38,740	139.52	13.6	132	140	146	200	0.55
	Migrant	207	132.92	10.9	128	132	140	164	0.17
LEP	Non-LEP	37,689	139.78	13.6	132	140	146	200	0.55
	LEP	1,258	130.66	9.62	128	132	136	175	-0.37
Economic Disadvantage	Free Lunch	19,242	135.65	11.5	128	136	143	197	0.26
	Reduced-Price Lunch	1,239	139.00	13.2	132	140	146	187	0.22
	Regular Lunch	18,466	143.51	14.5	132	143	152	200	0.51
IEP	Non-IEP	35,235	140.33	13.6	132	140	149	200	0.54
	IEP	3,712	131.43	10.1	128	132	136	187	0.04

## Grade 4 Science

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,039	147.16	11.8	140	147	154	200	0.06
Gender	Female	20,429	146.93	11.4	138	146	154	200	0.05
	Male	21,588	147.39	12.0	140	147	155	200	0.06
Ethnicity	Hispanic	3,483	143.73	10.9	138	144	150	189	-0.12
	Asian	802	147.90	12.4	141	148	156	193	-0.23
	Native Hawaiian/Pacific Islander	70	144.59	11.3	138	144	153	177	0.31
	Black/African American	3,910	140.91	10.7	134	141	148	177	-0.25
	American Indian	52	147.04	12.6	139	149	156	171	-0.39
	White	31,627	148.37	11.7	141	148	156	200	0.09
	Other	2,072	146.05	11.3	138	146	153	198	0.09
Migrant	Non-Migrant	41,801	147.19	11.7	140	147	155	200	0.06
	Migrant	238	141.58	11.3	136	142	147	180	-0.30
LEP	Non-LEP	39,241	147.64	11.7	140	147	155	200	0.08
	LEP	2,798	140.47	10.4	134	142	147	180	-0.59
Economic Disadvantage	Free Lunch	24,055	144.65	11.1	138	144	152	200	0.00
	Reduced-Price Lunch	1,474	147.26	11.3	140	147	155	185	0.10
	Regular Lunch	16,510	150.81	11.8	142	150	158	200	0.02
IEP	Non-IEP	35,513	147.78	11.7	140	148	155	200	0.04
	IEP	6,526	143.79	11.7	136	144	150	198	0.18

## Grade 7 Science

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	43,011	139.29	13.5	130	138	148	200	0.24
Gender	Female	20,940	139.22	13.3	130	138	148	200	0.29
	Male	22,062	139.34	13.7	130	138	148	200	0.19
Ethnicity	Hispanic	3,503	135.85	12.4	128	134	144	189	0.12
	Asian	734	145.81	16.3	134	145	157	200	0.17
	Native Hawaiian/Pacific Islander	68	135.53	11.0	128	134	145	158	-0.36
	Black/African American	3,924	132.63	11.4	125	133	139	186	0.06
	American Indian	47	136.09	12.9	127	136	144	173	0.32
	White	32,814	140.37	13.5	131	141	148	200	0.21
	Other	1,911	138.39	13.1	130	138	148	200	0.28
Migrant	Non-Migrant	42,774	139.32	13.5	130	138	148	200	0.24
	Migrant	237	133.42	11.8	127	133	141	165	-0.17
LEP	Non-LEP	41,540	139.64	13.5	131	138	148	200	0.24
	LEP	1,471	129.22	10.4	122	129	137	175	-0.43
Economic Disadvantage	Free Lunch	23,951	135.95	12.2	128	136	144	197	0.15
	Reduced-Price Lunch	1,341	139.99	12.8	131	141	148	186	0.11
	Regular Lunch	17,719	143.75	14.0	134	144	152	200	0.15
IEP	Non-IEP	37,649	140.25	13.5	131	139	148	200	0.23
	IEP	5,362	132.51	11.7	125	133	141	180	0.06

## Grade 11 Science

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	34,438	142.29	16.0	131	143	153	200	-0.06
Gender	Female	16,696	143.66	15.2	134	143	154	200	-0.09
	Male	17,733	140.99	16.7	130	141	152	200	0.00
Ethnicity	Hispanic	2,183	137.47	15.8	126	138	149	197	-0.02
	Asian	673	150.16	18.4	137	150	163	200	0.00
	Native Hawaiian/Pacific Islander	49	139.51	15.9	130	137	150	173	0.10
	Black/African American	2,672	133.12	15.0	122	133	143	184	0.12
	American Indian	48	141.67	14.8	131	142	152	168	-0.26
	White	27,716	143.40	15.7	134	143	154	200	-0.09
	Other	1,087	141.33	15.4	130	141	153	200	-0.02
Migrant	Non-Migrant	34,315	142.33	16.0	131	143	153	200	-0.06
	Migrant	123	129.71	13.5	121	127	140	168	0.17
LEP	Non-LEP	33,537	142.75	15.9	133	143	154	200	-0.06
	LEP	901	124.88	12.5	116	125	131	177	0.20
Economic Disadvantage	Free Lunch	15,685	138.02	15.2	127	139	149	200	-0.03
	Reduced-Price Lunch	1,094	143.05	15.8	134	143	154	200	-0.07
	Regular Lunch	17,659	146.02	15.8	136	147	156	200	-0.13
IEP	Non-IEP	31,337	143.52	15.7	134	143	154	200	-0.09
	IEP	3,101	129.82	13.4	121	130	139	178	0.15

## Grade 5 On-Demand Writing<sup>5</sup>

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,168	4.32	1.61	4	4	5	8	0.01
Gender	Female	20,317	4.59	1.60	4	4	6	8	-0.02
	Male	21,840	4.07	1.58	3	4	5	8	0.03
Ethnicity	Hispanic	3,385	3.94	1.56	3	4	5	8	0.09
	Asian	766	4.83	1.62	4	5	6	8	-0.16
	Native Hawaiian/Pacific Islander	60	4.28	1.58	3	4	5	8	0.47
	Black/African American	3,970	3.43	1.53	2	4	4	8	0.15
	American Indian	48	4.29	1.66	3	4	6	8	0.21
	White	31,872	4.47	1.59	4	4	6	8	-0.01
	Other	2,055	4.23	1.52	3	4	5	8	0.15
Migrant	Non-Migrant	41,942	4.33	1.61	4	4	5	8	0.01
	Migrant	226	3.31	1.60	2	3	4	7	0.05
LEP	Non-LEP	40,283	4.38	1.60	4	4	6	8	0.01
	LEP	1,885	3.14	1.43	2	3	4	8	0.07
Economic Disadvantage	Free Lunch	24,260	3.93	1.55	3	4	5	8	0.06
	Reduced-Price Lunch	1,461	4.44	1.58	4	4	6	8	-0.04
	Regular Lunch	16,447	4.89	1.54	4	5	6	8	-0.08
IEP	Non-IEP	35,973	4.52	1.55	4	4	6	8	0.00
	IEP	6,195	3.19	1.50	2	3	4	8	0.36

<sup>5</sup> On-Demand Writing is reported on a score metric of 0-8.

## Grade 8 On-Demand Writing

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	42,670	4.66	1.80	4	5	6	8	-0.16
Gender	Female	20,775	5.01	1.73	4	5	6	8	-0.31
	Male	21,888	4.32	1.79	3	4	6	8	-0.02
Ethnicity	Hispanic	3,248	4.12	1.79	3	4	6	8	-0.04
	Asian	666	5.30	1.80	4	6	7	8	-0.47
	Native Hawaiian/Pacific Islander	54	4.35	1.76	3	4	6	8	0.04
	Black/African American	3,970	3.59	1.69	2	4	5	8	0.20
	American Indian	55	4.51	1.97	3	4	6	8	-0.29
	White	32,782	4.84	1.75	4	5	6	8	-0.22
	Other	1,887	4.50	1.77	3	4	6	8	-0.04
Migrant	Non-Migrant	42,456	4.67	1.79	4	5	6	8	-0.16
	Migrant	214	3.17	1.92	2	3	4	8	0.21
LEP	Non-LEP	41,309	4.73	1.76	4	5	6	8	-0.16
	LEP	1,361	2.60	1.52	2	2	4	8	0.27
Economic Disadvantage	Free Lunch	23,310	4.17	1.75	3	4	6	8	0.03
	Reduced-Price Lunch	1,413	4.73	1.70	4	5	6	8	-0.02
	Regular Lunch	17,947	5.29	1.66	4	6	6	8	-0.43
IEP	Non-IEP	37,783	4.89	1.70	4	5	6	8	-0.23
	IEP	4,887	2.86	1.46	2	2	4	8	0.69

## Grade 11 On-Demand Writing

	Subgroup	N	Mean	SD	P25	Median	P75	Max	Skew
All	Students Tested	33,990	5.02	1.89	4	5	6	8	-0.31
Gender	Female	16,493	5.45	1.75	4	6	7	8	-0.45
	Male	17,488	4.62	1.93	4	4	6	8	-0.14
Ethnicity	Hispanic	2,136	4.50	1.92	3	4	6	8	-0.21
	Asian	665	5.74	1.86	4	6	7	8	-0.61
	Native Hawaiian/Pacific Islander	50	5.00	1.80	4	5	6	8	-0.02
	Black/African American	2,603	4.08	1.83	3	4	6	8	0.05
	American Indian	47	5.09	1.87	4	6	6	8	-0.54
	White	27,413	5.14	1.86	4	5	6	8	-0.36
	Other	1,066	4.84	1.89	4	5	6	8	-0.20
Migrant	Non-Migrant	33,868	5.03	1.89	4	5	6	8	-0.31
	Migrant	122	3.31	1.71	2	3	4	8	0.46
LEP	Non-LEP	33,130	5.08	1.87	4	5	6	8	-0.32
	LEP	860	2.83	1.54	2	3	4	8	0.08
Economic Disadvantage	Free Lunch	15,420	4.53	1.84	3	4	6	8	-0.11
	Reduced-Price Lunch	1,084	5.06	1.83	4	5	6	8	-0.28
	Regular Lunch	17,486	5.45	1.84	4	6	7	8	-0.54
IEP	Non-IEP	30,930	5.21	1.82	4	5	6	8	-0.40
	IEP	3,060	3.11	1.50	2	3	4	8	0.63

## Appendix J. Performance Level Rates

### Grade 3 Reading

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	39,109	43.1%	27.3%	18.2%	11.5%
Gender	Female	18,840	40.9%	27.3%	18.9%	12.9%
	Male	20,252	45.1%	27.2%	17.5%	10.2%
Ethnicity	Hispanic	3,038	56.8%	24.8%	12.4%	6.0%
	Asian	831	37.4%	24.8%	20.0%	17.8%
	Native Hawaiian/Pacific Islander	56	51.8%	23.2%	17.9%	7.1%
	Black/African American	3,344	66.8%	20.6%	9.2%	3.3%
	American Indian	45	40.0%	22.2%	20.0%	17.8%
	White	29,772	38.9%	28.3%	19.8%	13.0%
	Other	2,003	46.5%	28.1%	16.4%	9.0%
Migrant	Non-Migrant	38,850	42.9%	27.3%	18.2%	11.6%
	Migrant	259	65.6%	22.4%	7.7%	4.2%
LEP	Non-LEP	36,400	41.2%	27.6%	19.0%	12.2%
	LEP	2,709	67.7%	23.1%	7.3%	1.9%
Economic Disadvantage	Free Lunch	22,780	53.2%	26.2%	13.8%	6.7%
	Reduced-Price Lunch	1,270	41.1%	28.0%	19.0%	12%
	Regular Lunch	15,059	27.9%	28.8%	24.6%	18.7%
IEP	Non-IEP	32,579	40.3%	28.0%	19.3%	12.4%
	IEP	6,530	56.9%	23.7%	12.4%	7.0%

### Grade 4 Reading

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,096	28.3%	28.8%	31.4%	11.6%
Gender	Female	20,467	26.8%	28.0%	32.2%	13.0%
	Male	21,606	29.7%	29.5%	30.6%	10.2%
Ethnicity	Hispanic	3,452	36.0%	32.5%	24.7%	6.7%
	Asian	789	20.5%	28.1%	34.9%	16.5%
	Native Hawaiian/Pacific Islander	70	40.0%	31.4%	22.9%	5.7%
	Black/African American	3,920	48.7%	29.6%	17.9%	3.8%
	American Indian	52	32.7%	21.2%	38.5%	7.7%
	White	31,708	24.8%	28.2%	33.9%	13.1%
	Other	2,081	32.4%	31.2%	27.5%	8.9%
Migrant	Non-Migrant	41,861	28.2%	28.8%	31.4%	11.6%
	Migrant	235	55.3%	25.1%	16.6%	3.0%
LEP	Non-LEP	39,355	27.0%	28.4%	32.4%	12.2%
	LEP	2,741	47.1%	34.0%	17.0%	1.9%
Economic Disadvantage	Free Lunch	24,114	36.6%	31.0%	25.8%	6.6%
	Reduced-Price Lunch	1,475	24.5%	30.3%	34.2%	11.0%
	Regular Lunch	16,507	16.6%	25.4%	39.2%	18.8%
IEP	Non-IEP	35,553	25.2%	28.8%	33.4%	12.7%
	IEP	6,543	45.5%	28.5%	20.4%	5.6%

## Grade 5 Reading

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,363	34.1%	20.9%	28.4%	16.7%
Gender	Female	20,409	31.8%	20.8%	29.6%	17.8%
	Male	21,943	36.2%	20.9%	27.3%	15.6%
Ethnicity	Hispanic	3,407	45.3%	22.0%	23.7%	9.0%
	Asian	771	21.5%	19.2%	31.6%	27.6%
	Native Hawaiian/Pacific Islander	61	42.6%	16.4%	29.5%	11.5%
	Black/African American	4,003	54.5%	21.1%	18.2%	6.2%
	American Indian	48	25.0%	29.2%	31.3%	14.6%
	White	32,000	30.4%	20.7%	30.1%	18.7%
	Other	2,061	36.9%	21.6%	27.3%	14.1%
Migrant	Non-Migrant	42,134	33.9%	20.9%	28.4%	16.8%
	Migrant	229	65.5%	18.3%	13.5%	2.6%
LEP	Non-LEP	40,463	32.6%	20.9%	29.2%	17.4%
	LEP	1,900	66.3%	19.5%	11.7%	2.4%
Economic Disadvantage	Free Lunch	24,401	42.8%	22.1%	24.7%	10.4%
	Reduced-Price Lunch	1,466	30.5%	19.6%	30.2%	19.6%
	Regular Lunch	16,496	21.5%	19.1%	33.6%	25.8%
IEP	Non-IEP	36,137	30.9%	21.0%	30.1%	18.1%
	IEP	6,226	52.9%	19.9%	18.6%	8.7%

## Grade 6 Reading

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,919	32.2%	24.6%	26.8%	16.4%
Gender	Female	21,050	30.3%	24.9%	27.3%	17.5%
	Male	21,852	34.0%	24.3%	26.3%	15.4%
Ethnicity	Hispanic	3,413	41.1%	26.5%	22.4%	10.0%
	Asian	727	18.2%	14.6%	29.6%	37.7%
	Native Hawaiian/Pacific Islander	54	40.7%	24.1%	25.9%	9.3%
	Black/African American	3,919	50.3%	25.5%	17.8%	6.4%
	American Indian	50	28.0%	26.0%	28.0%	18.0%
	White	32,694	29.2%	24.4%	28.4%	18.0%
	Other	2,046	35.7%	25.9%	24.8%	13.6%
Migrant	Non-Migrant	42,676	32.1%	24.6%	26.8%	16.5%
	Migrant	243	53.1%	27.2%	14.8%	4.9%
LEP	Non-LEP	41,453	30.9%	24.7%	27.5%	17.0%
	LEP	1,466	69.7%	22.0%	7.4%	1.0%
Economic Disadvantage	Free Lunch	24,326	40.9%	26.4%	23.0%	9.8%
	Reduced-Price Lunch	1,435	29.5%	26.2%	27.8%	16.5%
	Regular Lunch	17,158	20.1%	21.9%	32.1%	25.9%
IEP	Non-IEP	37,275	28.9%	24.7%	28.3%	18.1%
	IEP	5,644	53.8%	24.0%	16.4%	5.8%

## Grade 7 Reading

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,165	35.7%	25.3%	24.0%	15.1%
Gender	Female	21,021	32.8%	25.8%	24.8%	16.6%
	Male	22,135	38.4%	24.8%	23.2%	13.7%
Ethnicity	Hispanic	3,492	47.3%	25.4%	18.5%	8.9%
	Asian	726	22.0%	20.5%	26.0%	31.4%
	Native Hawaiian/Pacific Islander	67	49.3%	16.4%	31.3%	3.0%
	Black/African American	3,966	58.3%	21.5%	14.6%	5.6%
	American Indian	47	46.8%	31.9%	17.0%	4.3%
	White	32,933	31.9%	25.8%	25.6%	16.8%
	Other	1,924	37.2%	25.4%	25.1%	12.3%
Migrant	Non-Migrant	42,932	35.5%	25.3%	24.0%	15.2%
	Migrant	233	58.8%	24.9%	13.3%	3.0%
LEP	Non-LEP	41,724	34.1%	25.6%	24.6%	15.6%
	LEP	1,441	79.7%	14.6%	4.9%	0.7%
Economic Disadvantage	Free Lunch	24,086	45.2%	25.9%	20.0%	8.9%
	Reduced-Price Lunch	1,344	32.6%	26.8%	26.0%	14.6%
	Regular Lunch	17,735	22.9%	24.3%	29.2%	23.6%
IEP	Non-IEP	37,757	31.5%	26.1%	25.7%	16.7%
	IEP	5,408	64.9%	19.5%	11.6%	4.0%

## Grade 8 Reading

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,991	26.8%	23.2%	30.7%	19.4%
Gender	Female	20,917	21.5%	23.5%	32.8%	22.2%
	Male	22,067	31.8%	22.8%	28.6%	16.7%
Ethnicity	Hispanic	3,289	35.1%	24.1%	28.9%	11.8%
	Asian	676	13.9%	18.3%	31.1%	36.7%
	Native Hawaiian/Pacific Islander	54	44.4%	24.1%	18.5%	13.0%
	Black/African American	4,032	49.0%	23.8%	19.8%	7.5%
	American Indian	56	23.2%	25.0%	30.4%	21.4%
	White	32,974	23.3%	23.0%	32.2%	21.4%
	Other	1,902	28.9%	24.2%	30.0%	16.9%
Migrant	Non-Migrant	42,775	26.6%	23.2%	30.7%	19.5%
	Migrant	216	55.1%	20.4%	19.9%	4.6%
LEP	Non-LEP	41,603	25.3%	23.3%	31.4%	20.0%
	LEP	1,388	71.5%	19.5%	8.2%	0.7%
Economic Disadvantage	Free Lunch	23,537	35.4%	25.5%	27.2%	12.0%
	Reduced-Price Lunch	1,423	22.4%	26.3%	32.5%	18.8%
	Regular Lunch	18,031	15.9%	19.9%	35.1%	29.1%
IEP	Non-IEP	38,053	22.7%	23.3%	32.7%	21.4%
	IEP	4,938	58.5%	22.3%	14.9%	4.3%

## Grade 10 Reading

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	39,171	35%	27%	25.5%	12.5%
Gender	Female	18,828	30.6%	28.1%	27.0%	14.3%
	Male	20,329	39.0%	26.1%	24.1%	10.8%
Ethnicity	Hispanic	2,789	46.5%	25.9%	20.3%	7.2%
	Asian	689	26.3%	21.2%	31.1%	21.5%
	Native Hawaiian/Pacific Islander	45	37.8%	28.9%	28.9%	4.4%
	Black/African American	3,414	56.1%	23.8%	14.7%	5.4%
	American Indian	48	20.8%	39.6%	29.2%	10.4%
	White	30,737	31.6%	27.5%	27.1%	13.7%
	Other	1,432	38.3%	28.4%	24.0%	9.3%
Migrant	Non-Migrant	38,966	34.8%	27.1%	25.6%	12.6%
	Migrant	205	73.2%	16.1%	7.3%	3.4%
LEP	Non-LEP	37,921	33.3%	27.6%	26.2%	12.9%
	LEP	1,250	85.8%	10.8%	3.3%	0.2%
Economic Disadvantage	Free Lunch	19,371	45.4%	27.8%	20.0%	6.9%
	Reduced-Price Lunch	1,251	31.1%	27.7%	28.1%	13.2%
	Regular Lunch	18,549	24.3%	26.2%	31.1%	18.4%
IEP	Non-IEP	35,426	31.3%	27.9%	27.2%	13.6%
	IEP	3,745	69.7%	19.2%	9.0%	2.0%

## Grade 3 Mathematics

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	39,149	30.4%	39.6%	23.9%	6.1%
Gender	Female	18,851	32.0%	39.9%	22.8%	5.4%
	Male	20,281	28.9%	39.3%	25.0%	6.8%
Ethnicity	Hispanic	3,079	41.0%	41.5%	15.4%	2.1%
	Asian	841	19.0%	32.8%	31.5%	16.6%
	Native Hawaiian/Pacific Islander	57	43.9%	29.8%	22.8%	3.5%
	Black/African American	3,346	56.1%	33.1%	9.7%	1.1%
	American Indian	45	24.4%	33.3%	33.3%	8.9%
	White	29,761	26.4%	40.3%	26.4%	6.9%
	Other	2,000	34.2%	40.7%	21.2%	4.0%
Migrant	Non-Migrant	38,883	30.3%	39.6%	24.0%	6.1%
	Migrant	266	48.1%	41.0%	10.2%	0.8%
LEP	Non-LEP	36,364	28.9%	39.7%	24.9%	6.5%
	LEP	2,785	49.4%	37.7%	11.5%	1.5%
Economic Disadvantage	Free Lunch	22,785	40.2%	40.4%	16.7%	2.7%
	Reduced-Price Lunch	1,272	28.0%	40.7%	25.6%	5.7%
	Regular Lunch	15,092	15.8%	38.3%	34.6%	11.3%
IEP	Non-IEP	32,627	26.9%	40.3%	26.1%	6.8%
	IEP	6,522	47.9%	36.0%	13.2%	2.9%



## Grade 4 Mathematics

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,142	29.9%	36.8%	23.3%	10%
Gender	Female	20,488	32.1%	37.1%	22.3%	8.6%
	Male	21,631	27.8%	36.5%	24.4%	11.3%
Ethnicity	Hispanic	3,487	42.3%	36.2%	17.0%	4.5%
	Asian	805	22.0%	30.4%	27.1%	20.5%
	Native Hawaiian/Pacific Islander	70	45.7%	31.4%	20.0%	2.9%
	Black/African American	3,920	54.5%	33.5%	10.1%	2.0%
	American Indian	52	38.5%	21.2%	26.9%	13.5%
	White	31,703	25.3%	37.4%	25.8%	11.5%
	Other	2,081	34.7%	38.1%	20.7%	6.5%
Migrant	Non-Migrant	41,903	29.8%	36.8%	23.4%	10.0%
	Migrant	239	47.7%	37.2%	10.5%	4.6%
LEP	Non-LEP	39,334	28.1%	37.2%	24.2%	10.5%
	LEP	2,808	55.3%	31.5%	10.9%	2.4%
Economic Disadvantage	Free Lunch	24,127	39.3%	38.6%	17.4%	4.7%
	Reduced-Price Lunch	1,477	27.5%	38.7%	24.8%	9.1%
	Regular Lunch	16,538	16.4%	34.0%	31.9%	17.7%
IEP	Non-IEP	35,603	26.9%	37.0%	25.1%	11.0%
	IEP	6,539	45.9%	35.5%	14.0%	4.6%

## Grade 5 Mathematics

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,372	31.3%	37.9%	18.5%	12.3%
Gender	Female	20,409	32.2%	39.0%	18.3%	10.5%
	Male	21,952	30.5%	36.8%	18.6%	14.1%
Ethnicity	Hispanic	3,425	40.3%	39.4%	14.4%	6.0%
	Asian	791	20.1%	27.2%	23.6%	29.1%
	Native Hawaiian/Pacific Islander	61	37.7%	42.6%	14.8%	4.9%
	Black/African American	4,009	54.2%	35.1%	8.0%	2.6%
	American Indian	48	33.3%	43.8%	14.6%	8.3%
	White	31,966	27.5%	38.2%	20.2%	14.0%
	Other	2,060	34.8%	39.3%	16.7%	9.2%
Migrant	Non-Migrant	42,141	31.2%	37.9%	18.5%	12.4%
	Migrant	231	54.5%	35.9%	6.9%	2.6%
LEP	Non-LEP	40,417	30.0%	38.1%	19.1%	12.8%
	LEP	1,955	58.8%	33.1%	6.3%	1.7%
Economic Disadvantage	Free Lunch	24,393	40.2%	39.5%	13.9%	6.4%
	Reduced-Price Lunch	1,467	27.9%	39.5%	20.7%	11.9%
	Regular Lunch	16,512	18.6%	35.3%	25.0%	21.2%
IEP	Non-IEP	36,159	28.6%	38.0%	19.9%	13.5%
	IEP	6,213	47.1%	37.1%	10.4%	5.5%

## Grade 6 Mathematics

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,924	26.8%	44.6%	20.4%	8.2%
Gender	Female	21,048	27.5%	44.1%	20.5%	7.9%
	Male	21,859	26.0%	45.2%	20.4%	8.4%
Ethnicity	Hispanic	3,438	34.8%	47.1%	14.3%	3.8%
	Asian	739	16.4%	28.0%	26.9%	28.7%
	Native Hawaiian/Pacific Islander	54	29.6%	46.3%	20.4%	3.7%
	Black/African American	3,915	46.4%	42.0%	9.7%	2.0%
	American Indian	50	24.0%	48.0%	18.0%	10%
	White	32,670	23.6%	45.0%	22.3%	9.1%
	Other	2,042	30.2%	46.0%	18.3%	5.5%
Migrant	Non-Migrant	42,675	26.7%	44.6%	20.5%	8.2%
	Migrant	249	42.6%	43.8%	10.4%	3.2%
LEP	Non-LEP	41,405	25.6%	45.0%	21.0%	8.4%
	LEP	1,519	59.6%	35.4%	4.0%	1.1%
Economic Disadvantage	Free Lunch	24,329	34.9%	46.9%	14.4%	3.9%
	Reduced-Price Lunch	1,435	25.2%	45.4%	21.9%	7.5%
	Regular Lunch	17,160	15.4%	41.4%	28.9%	14.3%
IEP	Non-IEP	37,286	24.2%	44.7%	22.1%	9.0%
	IEP	5,638	43.8%	44.1%	9.2%	2.9%

## Grade 7 Mathematics

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,134	30.4%	42.0%	20.2%	7.4%
Gender	Female	21,000	32.2%	42.7%	18.6%	6.6%
	Male	22,125	28.8%	41.4%	21.7%	8.2%
Ethnicity	Hispanic	3,512	39.4%	44.5%	13.1%	3.0%
	Asian	736	16.7%	28.9%	27.2%	27.2%
	Native Hawaiian/Pacific Islander	68	30.9%	48.5%	17.6%	2.9%
	Black/African American	3,955	53.2%	38.0%	7.0%	1.7%
	American Indian	47	38.3%	44.7%	10.6%	6.4%
	White	32,888	26.9%	42.3%	22.6%	8.2%
	Other	1,918	33.3%	44.8%	16.3%	5.6%
Migrant	Non-Migrant	42,897	30.3%	42.0%	20.3%	7.4%
	Migrant	237	47.7%	43.9%	6.8%	1.7%
LEP	Non-LEP	41,654	29.3%	42.3%	20.8%	7.6%
	LEP	1,480	63.6%	32.9%	3.1%	0.4%
Economic Disadvantage	Free Lunch	24,049	39.3%	44.2%	13.7%	2.8%
	Reduced-Price Lunch	1,343	27.3%	45.5%	20.5%	6.7%
	Regular Lunch	17,742	18.6%	38.7%	29.0%	13.6%
IEP	Non-IEP	37,741	27.2%	42.6%	22.0%	8.2%
	IEP	5,393	53.1%	37.9%	7.5%	1.6%

## Grade 8 Mathematics

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,945	35.4%	37.7%	20.6%	6.3%
Gender	Female	20,893	34.3%	38.3%	21.1%	6.3%
	Male	22,045	36.4%	37.0%	20.2%	6.4%
Ethnicity	Hispanic	3,314	43.8%	38.3%	14.9%	3.0%
	Asian	682	18.9%	27.9%	33.0%	20.2%
	Native Hawaiian/Pacific Islander	55	43.6%	45.5%	9.1%	1.8%
	Black/African American	4,024	56.9%	33.5%	8.3%	1.3%
	American Indian	55	45.5%	30.9%	14.5%	9.1%
	White	32,911	32.1%	38.1%	22.8%	7.0%
	Other	1,896	38.0%	40.9%	15.3%	5.8%
Migrant	Non-Migrant	42,725	35.3%	37.7%	20.7%	6.3%
	Migrant	220	60.5%	28.2%	8.6%	2.7%
LEP	Non-LEP	41,509	34.2%	38.0%	21.2%	6.5%
	LEP	1,436	68.9%	27.1%	3.6%	0.4%
Economic Disadvantage	Free Lunch	23,520	45.3%	38.1%	13.9%	2.8%
	Reduced-Price Lunch	1,420	32.7%	40.9%	19.7%	6.6%
	Regular Lunch	18,005	22.7%	36.9%	29.5%	10.9%
IEP	Non-IEP	38,021	32.1%	38.5%	22.4%	7.0%
	IEP	4,924	60.7%	31.1%	6.9%	1.3%

## Grade 10 Mathematics

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	38,947	36.1%	33.6%	24.5%	5.9%
Gender	Female	18,725	34.9%	34.0%	25.4%	5.7%
	Male	20,208	37.1%	33.2%	23.6%	6.1%
Ethnicity	Hispanic	2,769	44.3%	35.9%	17.1%	2.7%
	Asian	694	21.6%	22.6%	31.0%	24.8%
	Native Hawaiian/Pacific Islander	48	37.5%	41.7%	18.8%	2.1%
	Black/African American	3,368	53.7%	33.8%	10.9%	1.6%
	American Indian	48	33.3%	29.2%	31.3%	6.3%
	White	30,587	33.6%	33.5%	26.7%	6.3%
	Other	1,416	38.9%	35.7%	20.6%	4.8%
Migrant	Non-Migrant	38,740	36.0%	33.6%	24.5%	5.9%
	Migrant	207	57.5%	30.9%	10.1%	1.4%
LEP	Non-LEP	37,689	35.2%	33.6%	25.1%	6.1%
	LEP	1,258	63.8%	32.0%	3.9%	0.3%
Economic Disadvantage	Free Lunch	19,242	45.5%	35.9%	16.7%	1.9%
	Reduced-Price Lunch	1,239	36.3%	33.3%	25.5%	4.9%
	Regular Lunch	18,466	26.2%	31.2%	32.5%	10.1%
IEP	Non-IEP	35,235	33.4%	33.9%	26.3%	6.4%
	IEP	3,712	61.7%	30.5%	7.1%	0.6%

## Grade 4 Science

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,039	17.0%	58.0%	21.7%	3.3%
Gender	Female	20,429	17.0%	59.4%	20.7%	2.9%
	Male	21,588	17.0%	56.7%	22.7%	3.6%
Ethnicity	Hispanic	3,483	23.2%	62.0%	13.6%	1.3%
	Asian	802	14.6%	57.6%	23.4%	4.4%
	Native Hawaiian/Pacific Islander	70	24.3%	55.7%	17.1%	2.9%
	Black/African American	3,910	31.6%	59.2%	8.8%	0.3%
	American Indian	52	19.2%	51.9%	26.9%	1.9%
	White	31,627	14.5%	57.3%	24.4%	3.9%
	Other	2,072	18.6%	60.9%	18.1%	2.4%
Migrant	Non-Migrant	41,801	17.0%	58.0%	21.8%	3.3%
	Migrant	238	26.1%	62.6%	10.9%	0.4%
LEP	Non-LEP	39,241	16.0%	57.7%	22.7%	3.5%
	LEP	2,798	30.6%	62.3%	6.9%	0.3%
Economic Disadvantage	Free Lunch	24,055	21.7%	61.0%	15.7%	1.6%
	Reduced-Price Lunch	1,474	16.5%	58.4%	22.4%	2.7%
	Regular Lunch	16,510	10.2%	53.6%	30.4%	5.8%
IEP	Non-IEP	35,513	15.5%	57.9%	23.1%	3.5%
	IEP	6,526	25.1%	58.7%	14.0%	2.2%

## Grade 7 Science

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	43,011	34.7%	44.4%	18%	2.8%
Gender	Female	20,940	34.4%	45.4%	17.4%	2.8%
	Male	22,062	35.0%	43.5%	18.6%	2.9%
Ethnicity	Hispanic	3,503	44.1%	43.5%	11.3%	1.1%
	Asian	734	23.3%	37.3%	29.7%	9.7%
	Native Hawaiian/Pacific Islander	68	48.5%	42.6%	8.8%	0.0%
	Black/African American	3,924	54.1%	39.3%	6.2%	0.4%
	American Indian	47	44.7%	44.7%	8.5%	2.1%
	White	32,814	31.5%	45.3%	20.0%	3.2%
	Other	1,911	36.7%	45.5%	15.8%	2.1%
Migrant	Non-Migrant	42,774	34.6%	44.5%	18.1%	2.8%
	Migrant	237	52.3%	39.7%	8.0%	0.0%
LEP	Non-LEP	41,540	33.6%	44.9%	18.6%	2.9%
	LEP	1,471	68.0%	30.3%	1.6%	0.1%
Economic Disadvantage	Free Lunch	23,951	43.4%	44.2%	11.4%	1.0%
	Reduced-Price Lunch	1,341	30.8%	47.3%	19.3%	2.6%
	Regular Lunch	17,719	23.3%	44.6%	26.8%	5.3%
IEP	Non-IEP	37,649	31.5%	45.7%	19.6%	3.2%
	IEP	5,362	57.2%	35.6%	6.8%	0.4%

## Grade 11 Science

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	34,438	30.7%	42.7%	22.8%	3.7%
Gender	Female	16,696	26.5%	45.0%	24.8%	3.7%
	Male	17,733	34.6%	40.6%	21.0%	3.8%
Ethnicity	Hispanic	2,183	42.1%	40.6%	15.4%	1.8%
	Asian	673	20.1%	32.7%	34.3%	12.9%
	Native Hawaiian/Pacific Islander	49	40.8%	34.7%	22.4%	2.0%
	Black/African American	2,672	54.9%	34.4%	10.0%	0.7%
	American Indian	48	31.3%	43.8%	25.0%	0.0%
	White	27,716	27.6%	44.0%	24.4%	4.0%
	Other	1,087	32.8%	41.2%	23.1%	2.9%
Migrant	Non-Migrant	34,315	30.6%	42.8%	22.9%	3.7%
	Migrant	123	66.7%	28.5%	4.9%	0.0%
LEP	Non-LEP	33,537	29.4%	43.4%	23.4%	3.8%
	LEP	901	78.6%	19.3%	2.0%	0.1%
Economic Disadvantage	Free Lunch	15,685	40.4%	42.6%	15.4%	1.7%
	Reduced-Price Lunch	1,094	27.2%	45.3%	23.8%	3.7%
	Regular Lunch	17,659	22.4%	42.7%	29.3%	5.6%
IEP	Non-IEP	31,337	27.4%	43.9%	24.6%	4.1%
	IEP	3,101	63.7%	31.3%	4.8%	0.2%

## Grade 5 On-Demand Writing

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,168	15.7%	44.6%	30.9%	8.9%
Gender	Female	20,317	11.4%	42.1%	34.8%	11.7%
	Male	21,840	19.6%	46.8%	27.3%	6.2%
Ethnicity	Hispanic	3,385	21.2%	49.7%	23.8%	5.3%
	Asian	766	8.9%	37.6%	38.6%	14.9%
	Native Hawaiian/Pacific Islander	60	16.7%	46.7%	28.3%	8.3%
	Black/African American	3,970	32.9%	48.2%	16.2%	2.7%
	American Indian	48	20.8%	39.6%	29.2%	10.4%
	White	31,872	13.1%	43.5%	33.4%	10.0%
	Other	2,055	14.9%	48.9%	29.0%	7.2%
Migrant	Non-Migrant	41,942	15.6%	44.6%	31.0%	8.9%
	Migrant	226	36.7%	42.5%	18.1%	2.7%
LEP	Non-LEP	40,283	14.6%	44.4%	31.8%	9.2%
	LEP	1,885	39.0%	47.6%	12.2%	1.1%
Economic Disadvantage	Free Lunch	24,260	21.5%	48.8%	24.6%	5.1%
	Reduced-Price Lunch	1,461	13.5%	44.1%	33.2%	9.2%
	Regular Lunch	16,447	7.3%	38.3%	40.0%	14.5%
IEP	Non-IEP	35,973	11.3%	44.7%	34.0%	10.0%
	IEP	6,195	41.0%	44.0%	12.8%	2.3%

## Grade 8 On-Demand Writing

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	42,670	16.3%	32.6%	36.9%	14.2%
Gender	Female	20,775	11.0%	29.4%	41.2%	18.4%
	Male	21,888	21.3%	35.6%	32.8%	10.3%
Ethnicity	Hispanic	3,248	23.1%	38.5%	29.8%	8.7%
	Asian	666	10.5%	23.0%	41.4%	25.1%
	Native Hawaiian/Pacific Islander	54	18.5%	38.9%	29.6%	13.0%
	Black/African American	3,970	33.5%	40.3%	22.3%	3.9%
	American Indian	55	21.8%	29.1%	36.4%	12.7%
	White	32,782	13.6%	31.1%	39.4%	15.9%
	Other	1,887	17.9%	35.7%	34.6%	11.9%
Migrant	Non-Migrant	42,456	16.1%	32.6%	37.0%	14.3%
	Migrant	214	46.3%	30.4%	19.6%	3.7%
LEP	Non-LEP	41,309	14.9%	32.6%	37.8%	14.7%
	LEP	1,361	57.6%	32.9%	8.8%	0.7%
Economic Disadvantage	Free Lunch	23,310	23.0%	37.8%	31.1%	8.2%
	Reduced-Price Lunch	1,413	13.2%	36.0%	36.4%	14.4%
	Regular Lunch	17,947	7.8%	25.6%	44.5%	22.0%
IEP	Non-IEP	37,783	11.2%	32.6%	40.3%	15.9%
	IEP	4,887	55.6%	32.6%	10.5%	1.4%

## Grade 11 On-Demand Writing

	Test Group	N	Novice	Apprentice	Proficient	Distinguished
All	Students Tested	33,990	12.4%	30.1%	35.0%	22.5%
Gender	Female	16,493	6.9%	25.8%	39.1%	28.2%
	Male	17,488	17.5%	34.2%	31.3%	17.0%
Ethnicity	Hispanic	2,136	18.3%	34.9%	32.0%	14.8%
	Asian	665	5.9%	22.7%	33.1%	38.3%
	Native Hawaiian/Pacific Islander	50	10.0%	34.0%	36.0%	20.0%
	Black/African American	2,603	24.3%	40.5%	25.7%	9.5%
	American Indian	47	12.8%	25.5%	40.4%	21.3%
	White	27,413	10.9%	28.7%	36.4%	24.0%
	Other	1,066	13.2%	35.3%	31.4%	20.1%
Migrant	Non-Migrant	33,868	12.3%	30.1%	35.1%	22.5%
	Migrant	122	41.8%	36.1%	18.0%	4.1%
LEP	Non-LEP	33,130	11.4%	29.8%	35.7%	23.0%
	LEP	860	47.9%	41.2%	10.1%	0.8%
Economic Disadvantage	Free Lunch	15,420	17.3%	36.3%	32.4%	14.0%
	Reduced-Price Lunch	1,084	11.2%	30.3%	37.4%	21.2%
	Regular Lunch	17,486	8.0%	24.7%	37.3%	30.0%
IEP	Non-IEP	30,930	9.0%	29.2%	37.4%	24.5%
	IEP	3,060	46.2%	39.9%	11.7%	2.2%

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

### Grade 3 Reading

	Test Group	N	Reliability	SEM
All	Students Tested	38,767	0.79	8.02
Gender	Female	18,647	0.79	8.05
	Male	20,103	0.79	7.97
Ethnicity	Hispanic	3,030	0.78	7.70
	Asian	813	0.80	8.24
	Native Hawaiian/Pacific Islander	56	0.80	7.95
	Black/African American	3,336	0.76	7.78
	American Indian	45	0.77	8.00
	White	29,472	0.79	7.95
	Other	1,995	0.79	7.82
Migrant	Non-Migrant	38,509	0.79	8.02
	Migrant	258	0.77	7.80
LEP	Non-LEP	36,060	0.79	8.03
	LEP	2,707	0.72	7.57
Economic Disadvantage	Free Lunch	22,680	0.78	7.82
	Reduced-Price Lunch	1,262	0.78	8.04
	Regular Lunch	14,825	0.76	8.28
IEP	Non-IEP	32,273	0.79	7.98
	IEP	6,494	0.79	7.82

### Grade 4 Reading

	Test Group	N	Reliability	SEM
All	Students Tested	42,024	0.70	7.99
Gender	Female	20,438	0.70	8.07
	Male	21,563	0.69	8.02
Ethnicity	Hispanic	3,440	0.66	8.09
	Asian	788	0.69	7.93
	Native Hawaiian/Pacific Islander	70	0.67	8.14
	Black/African American	3,907	0.62	8.30
	American Indian	52	0.70	7.97
	White	31,666	0.70	7.91
	Other	2,077	0.69	8.07
Migrant	Non-Migrant	41,791	0.70	7.98
	Migrant	233	0.63	8.49
LEP	Non-LEP	39,289	0.70	7.99
	LEP	2,735	0.55	8.15
Economic Disadvantage	Free Lunch	24,064	0.66	8.08
	Reduced-Price Lunch	1,472	0.69	7.94
	Regular Lunch	16,488	0.68	7.99
IEP	Non-IEP	35,502	0.69	7.99
	IEP	6,522	0.67	8.24

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

## Grade 5 Reading

	Test Group	N	Reliability	SEM
All	Students Tested	42,164	0.70	8.92
Gender	Female	20,291	0.70	8.91
	Male	21,862	0.70	8.91
Ethnicity	Hispanic	3,397	0.67	8.69
	Asian	766	0.71	9.07
	Native Hawaiian/Pacific Islander	61	0.71	8.97
	Black/African American	3,994	0.66	8.86
	American Indian	48	0.59	8.67
	White	31,833	0.70	8.83
	Other	2,053	0.69	8.82
Migrant	Non-Migrant	41,935	0.70	8.92
	Migrant	229	0.60	8.86
LEP	Non-LEP	40,269	0.70	8.87
	LEP	1,895	0.58	8.78
Economic Disadvantage	Free Lunch	24,325	0.68	8.71
	Reduced-Price Lunch	1,461	0.70	8.92
	Regular Lunch	16,378	0.68	9.07
IEP	Non-IEP	35,961	0.69	8.93
	IEP	6,203	0.69	8.92

## Grade 6 Reading

	Test Group	N	Reliability	SEM
All	Students Tested	42,812	0.74	7.72
Gender	Female	20,990	0.74	7.66
	Male	21,805	0.74	7.76
Ethnicity	Hispanic	3,411	0.71	7.67
	Asian	715	0.75	8.18
	Native Hawaiian/Pacific Islander	54	0.71	7.59
	Black/African American	3,909	0.68	7.69
	American Indian	50	0.75	7.69
	White	32,617	0.74	7.69
	Other	2,040	0.73	7.70
Migrant	Non-Migrant	42,570	0.74	7.72
	Migrant	242	0.66	7.74
LEP	Non-LEP	41,351	0.74	7.69
	LEP	1,461	0.46	8.04
Economic Disadvantage	Free Lunch	24,289	0.70	7.72
	Reduced-Price Lunch	1,431	0.73	7.75
	Regular Lunch	17,092	0.73	7.82
IEP	Non-IEP	37,176	0.74	7.64
	IEP	5,636	0.68	7.80



## Grade 7 Reading

	Test Group	N	Reliability	SEM
All	Students Tested	43,100	0.74	7.84
Gender	Female	20,986	0.73	7.92
	Male	22,105	0.74	7.88
Ethnicity	Hispanic	3,487	0.72	7.91
	Asian	726	0.74	8.05
	Native Hawaiian/Pacific Islander	67	0.67	7.68
	Black/African American	3,961	0.71	8.06
	American Indian	47	0.70	8.03
	White	32,880	0.73	7.83
	Other	1,922	0.73	7.83
Migrant	Non-Migrant	42,867	0.74	7.84
	Migrant	233	0.66	7.97
LEP	Non-LEP	41,661	0.73	7.91
	LEP	1,439	0.52	8.46
Economic Disadvantage	Free Lunch	24,051	0.71	7.91
	Reduced-Price Lunch	1,343	0.71	7.87
	Regular Lunch	17,706	0.72	7.85
IEP	Non-IEP	37,697	0.73	7.79
	IEP	5,403	0.67	8.21

## Grade 8 Reading

	Test Group	N	Reliability	SEM
All	Students Tested	42,846	0.77	7.85
Gender	Female	20,835	0.75	7.90
	Male	22,004	0.78	7.80
Ethnicity	Hispanic	3,283	0.76	7.65
	Asian	667	0.75	8.20
	Native Hawaiian/Pacific Islander	53	0.76	7.74
	Black/African American	4,025	0.76	7.74
	American Indian	56	0.78	8.04
	White	32,858	0.76	7.87
	Other	1,896	0.76	7.86
Migrant	Non-Migrant	42,630	0.77	7.84
	Migrant	216	0.75	7.81
LEP	Non-LEP	41,460	0.76	7.92
	LEP	1,386	0.62	7.91
Economic Disadvantage	Free Lunch	23,499	0.76	7.65
	Reduced-Price Lunch	1,421	0.76	7.78
	Regular Lunch	17,926	0.74	8.04
IEP	Non-IEP	37,912	0.75	7.92
	IEP	4,934	0.72	7.77

## Grade 10 Reading

	Test Group	N	Reliability	SEM
All	Students Tested	39,099	0.73	8.14
Gender	Female	18,789	0.71	8.20
	Male	20,296	0.74	8.11
Ethnicity	Hispanic	2,787	0.73	7.96
	Asian	687	0.75	8.47
	Native Hawaiian/Pacific Islander	45	0.74	7.96
	Black/African American	3,407	0.72	8.11
	American Indian	48	0.62	7.83
	White	30,678	0.72	8.15
	Other	1,430	0.71	8.00
Migrant	Non-Migrant	38,894	0.73	8.12
	Migrant	205	0.70	8.28
LEP	Non-LEP	37,850	0.72	8.17
	LEP	1,249	0.50	8.24
Economic Disadvantage	Free Lunch	19,337	0.71	8.02
	Reduced-Price Lunch	1,249	0.72	8.05
	Regular Lunch	18,513	0.71	8.25
IEP	Non-IEP	35,361	0.72	8.11
	IEP	3,738	0.65	8.05

## Grade 3 Mathematics

	Test Group	N	Reliability	SEM
All	Students Tested	39,032	0.79	7.90
Gender	Female	18,797	0.78	7.94
	Male	20,218	0.79	8.03
Ethnicity	Hispanic	3,070	0.77	7.75
	Asian	831	0.80	8.59
	Native Hawaiian/Pacific Islander	56	0.82	7.83
	Black/African American	3,339	0.74	7.83
	American Indian	45	0.77	8.11
	White	29,672	0.78	7.95
	Other	1,999	0.77	7.84
Migrant	Non-Migrant	38,769	0.79	7.90
	Migrant	263	0.78	7.82
LEP	Non-LEP	36,261	0.78	8.04
	LEP	2,771	0.76	7.89
Economic Disadvantage	Free Lunch	22,758	0.76	7.84
	Reduced-Price Lunch	1,265	0.77	7.94
	Regular Lunch	15,009	0.76	8.17
IEP	Non-IEP	32,516	0.78	7.99
	IEP	6,516	0.78	7.71

## Grade 4 Mathematics

	Test Group	N	Reliability	SEM
All	Students Tested	41,919	0.74	8.18
Gender	Female	20,405	0.73	8.18
	Male	21,491	0.75	8.14
Ethnicity	Hispanic	3,477	0.71	8.07
	Asian	796	0.79	8.55
	Native Hawaiian/Pacific Islander	69	0.69	8.15
	Black/African American	3,915	0.62	8.21
	American Indian	51	0.76	8.12
	White	31,513	0.74	8.10
	Other	2,074	0.71	8.06
Migrant	Non-Migrant	41,681	0.74	8.18
	Migrant	238	0.70	8.31
LEP	Non-LEP	39,117	0.74	8.14
	LEP	2,802	0.66	8.18
Economic Disadvantage	Free Lunch	24,076	0.69	8.02
	Reduced-Price Lunch	1,473	0.72	8.11
	Regular Lunch	16,370	0.74	8.30
IEP	Non-IEP	35,390	0.74	8.17
	IEP	6,529	0.69	8.17

## Grade 5 Mathematics

	Test Group	N	Reliability	SEM
All	Students Tested	42,091	0.80	7.78
Gender	Female	20,304	0.78	7.85
	Male	21,776	0.81	7.82
Ethnicity	Hispanic	3,409	0.74	7.86
	Asian	750	0.84	8.52
	Native Hawaiian/Pacific Islander	61	0.75	7.77
	Black/African American	3,999	0.67	7.97
	American Indian	47	0.77	7.81
	White	31,762	0.80	7.79
	Other	2,051	0.77	7.81
Migrant	Non-Migrant	41,861	0.80	7.78
	Migrant	230	0.67	7.98
LEP	Non-LEP	40,147	0.80	7.77
	LEP	1,944	0.65	8.08
Economic Disadvantage	Free Lunch	24,338	0.75	7.70
	Reduced-Price Lunch	1,462	0.79	7.89
	Regular Lunch	16,291	0.80	8.07
IEP	Non-IEP	35,899	0.80	7.83
	IEP	6,192	0.73	7.82

## Grade 6 Mathematics

	Test Group	N	Reliability	SEM
All	Students Tested	42,814	0.75	8.21
Gender	Female	20,992	0.75	8.23
	Male	21,805	0.75	8.19
Ethnicity	Hispanic	3,430	0.69	8.27
	Asian	731	0.81	8.98
	Native Hawaiian/Pacific Islander	54	0.72	8.32
	Black/African American	3,912	0.64	8.44
	American Indian	49	0.76	8.34
	White	32,583	0.75	8.16
	Other	2,039	0.72	8.17
Migrant	Non-Migrant	42,565	0.75	8.21
	Migrant	249	0.71	8.49
LEP	Non-LEP	41,305	0.75	8.17
	LEP	1,509	0.55	8.75
Economic Disadvantage	Free Lunch	24,296	0.69	8.24
	Reduced-Price Lunch	1,432	0.73	8.21
	Regular Lunch	17,086	0.75	8.34
IEP	Non-IEP	37,181	0.75	8.21
	IEP	5,633	0.66	8.32

## Grade 7 Mathematics

	Test Group	N	Reliability	SEM
All	Students Tested	42,874	0.75	7.94
Gender	Female	20,897	0.74	7.90
	Male	21,968	0.76	7.93
Ethnicity	Hispanic	3,496	0.68	7.87
	Asian	689	0.81	8.59
	Native Hawaiian/Pacific Islander	68	0.66	7.63
	Black/African American	3,952	0.59	8.10
	American Indian	47	0.72	7.85
	White	32,701	0.75	7.95
	Other	1,911	0.73	7.86
Migrant	Non-Migrant	42,641	0.75	7.94
	Migrant	233	0.58	7.96
LEP	Non-LEP	41,404	0.75	7.93
	LEP	1,470	0.43	8.24
Economic Disadvantage	Free Lunch	23,998	0.67	7.85
	Reduced-Price Lunch	1,339	0.74	7.82
	Regular Lunch	17,537	0.77	8.03
IEP	Non-IEP	37,489	0.75	7.95
	IEP	5,385	0.59	8.12

## Grade 8 Mathematics

	Test Group	N	Reliability	SEM
All	Students Tested	42,355	0.69	9.11
Gender	Female	20,621	0.69	9.02
	Male	21,727	0.70	9.04
Ethnicity	Hispanic	3,283	0.64	9.07
	Asian	642	0.73	9.68
	Native Hawaiian/Pacific Islander	54	0.58	9.03
	Black/African American	3,992	0.56	9.28
	American Indian	55	0.75	9.60
	White	32,444	0.70	8.95
	Other	1,877	0.67	8.93
Migrant	Non-Migrant	42,139	0.69	9.10
	Migrant	216	0.61	9.60
LEP	Non-LEP	40,942	0.69	9.07
	LEP	1,413	0.42	9.71
Economic Disadvantage	Free Lunch	23,342	0.63	9.03
	Reduced-Price Lunch	1,401	0.69	8.90
	Regular Lunch	17,612	0.70	9.10
IEP	Non-IEP	37,468	0.70	8.92
	IEP	4,887	0.53	9.43

## Grade 10 Mathematics

	Test Group	N	Reliability	SEM
All	Students Tested	38,862	0.66	7.84
Gender	Female	18,692	0.65	7.85
	Male	20,156	0.66	7.93
Ethnicity	Hispanic	2,758	0.54	8.02
	Asian	685	0.81	7.91
	Native Hawaiian/Pacific Islander	48	0.52	8.07
	Black/African American	3,358	0.43	8.29
	American Indian	48	0.68	7.61
	White	30,539	0.66	7.85
	Other	1,409	0.62	7.90
Migrant	Non-Migrant	38,656	0.66	7.84
	Migrant	206	0.39	8.37
LEP	Non-LEP	37,616	0.66	7.85
	LEP	1,246	0.13	8.56
Economic Disadvantage	Free Lunch	19,200	0.49	8.12
	Reduced-Price Lunch	1,237	0.64	7.85
	Regular Lunch	18,425	0.71	7.69
IEP	Non-IEP	35,163	0.67	7.75
	IEP	3,699	0.27	8.54

## Grade 4 Science

	Test Group	N	Reliability	SEM
All	Students Tested	42,028	0.60	7.42
Gender	Female	20,422	0.58	7.39
	Male	21,584	0.62	7.41
Ethnicity	Hispanic	3,478	0.51	7.55
	Asian	800	0.62	7.53
	Native Hawaiian/Pacific Islander	70	0.56	7.52
	Black/African American	3,909	0.47	7.77
	American Indian	52	0.66	7.33
	White	31,624	0.60	7.36
	Other	2,072	0.56	7.48
Migrant	Non-Migrant	41,790	0.60	7.42
	Migrant	238	0.52	7.81
LEP	Non-LEP	39,237	0.60	7.39
	LEP	2,791	0.42	7.76
Economic Disadvantage	Free Lunch	24,048	0.54	7.50
	Reduced-Price Lunch	1,474	0.57	7.41
	Regular Lunch	16,506	0.62	7.25
IEP	Non-IEP	35,504	0.59	7.45
	IEP	6,524	0.58	7.56

## Grade 7 Science

	Test Group	N	Reliability	SEM
All	Students Tested	42,941	0.72	7.12
Gender	Female	20,910	0.71	7.13
	Male	22,022	0.73	7.09
Ethnicity	Hispanic	3,492	0.65	7.26
	Asian	731	0.80	7.17
	Native Hawaiian/Pacific Islander	67	0.54	6.92
	Black/African American	3,909	0.54	7.60
	American Indian	47	0.72	6.82
	White	32,775	0.73	6.99
	Other	1,910	0.70	7.15
Migrant	Non-Migrant	42,707	0.72	7.12
	Migrant	234	0.55	7.52
LEP	Non-LEP	41,492	0.72	7.11
	LEP	1,449	0.33	8.06
Economic Disadvantage	Free Lunch	23,903	0.64	7.29
	Reduced-Price Lunch	1,341	0.70	7.01
	Regular Lunch	17,697	0.75	6.93
IEP	Non-IEP	37,596	0.72	7.10
	IEP	5,345	0.54	7.88

## Grade 11 Science

	Test Group	N	Reliability	SEM
All	Students Tested	34,404	0.76	7.83
Gender	Female	16,692	0.74	7.73
	Male	17,703	0.77	7.97
Ethnicity	Hispanic	2,181	0.74	8.02
	Asian	673	0.81	8.03
	Native Hawaiian/Pacific Islander	49	0.76	7.80
	Black/African American	2,664	0.70	8.19
	American Indian	48	0.74	7.52
	White	27,694	0.76	7.68
	Other	1,085	0.74	7.82
Migrant	Non-Migrant	34,281	0.76	7.83
	Migrant	123	0.61	8.40
LEP	Non-LEP	33,507	0.76	7.75
	LEP	897	0.50	8.81
Economic Disadvantage	Free Lunch	15,661	0.73	7.89
	Reduced-Price Lunch	1,092	0.75	7.83
	Regular Lunch	17,651	0.76	7.73
IEP	Non-IEP	31,313	0.76	7.69
	IEP	3,091	0.61	8.34

## Appendix L. Scoring Metrics for K-PREP Constructed-Response Items

Subject	Grade	Item Type	Validity <sup>7</sup>		Reliability		Score Distribution									
			Perfect	Non-Adj	Perfect	Non-Adj	0	1	2	3	4	B	A	F	I	O
Reading	3	SA	97.0 <span style="color: blue;">97</span>	0.1 <span style="color: blue;">0</span>	83.8 <span style="color: blue;">86</span>	0.9 <span style="color: blue;">0</span>	38.4 <span style="color: blue;">21</span>	30.0 <span style="color: blue;">38</span>	26.6 <span style="color: blue;">40</span>	-	-	1.7 <span style="color: blue;">1</span>	0.9 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.6 <span style="color: blue;">0</span>	1.8 <span style="color: blue;">0</span>
	4	SA	98.7 <span style="color: blue;">95</span>	0.0 <span style="color: blue;">0</span>	87.7 <span style="color: blue;">84</span>	1.2 <span style="color: blue;">2</span>	49.2 <span style="color: blue;">42</span>	34.5 <span style="color: blue;">33</span>	11.8 <span style="color: blue;">23</span>	-	-	1.4 <span style="color: blue;">0</span>	1.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.2 <span style="color: blue;">0</span>	2.0 <span style="color: blue;">2</span>
	5	ER	93.7 <span style="color: blue;">80</span>	0.5 <span style="color: blue;">2</span>	74.9 <span style="color: blue;">68</span>	0.5 <span style="color: blue;">8</span>	27.1 <span style="color: blue;">18</span>	28.8 <span style="color: blue;">16</span>	32.6 <span style="color: blue;">41</span>	5.8 <span style="color: blue;">13</span>	3.6 <span style="color: blue;">7</span>	1.4 <span style="color: blue;">2</span>	0.1 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.7 <span style="color: blue;">3</span>
	6	SA	95.7 <span style="color: blue;">92</span>	0.5 <span style="color: blue;">0</span>	79.6 <span style="color: blue;">83</span>	0.6 <span style="color: blue;">0</span>	34.7 <span style="color: blue;">31</span>	36.7 <span style="color: blue;">45</span>	26.7 <span style="color: blue;">22</span>	-	-	1.3 <span style="color: blue;">2</span>	0.1 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.5 <span style="color: blue;">0</span>
	7	SA	96.0 <span style="color: blue;">94</span>	0.2 <span style="color: blue;">0</span>	79.8 <span style="color: blue;">86</span>	0.5 <span style="color: blue;">0</span>	26.8 <span style="color: blue;">15</span>	52.0 <span style="color: blue;">70</span>	17.3 <span style="color: blue;">12</span>	-	-	2.0 <span style="color: blue;">1</span>	0.2 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.1 <span style="color: blue;">0</span>	1.6 <span style="color: blue;">2</span>
	8	SA	97.8 <span style="color: blue;">98</span>	0.1 <span style="color: blue;">0</span>	81.4 <span style="color: blue;">85</span>	1.1 <span style="color: blue;">2</span>	14.2 <span style="color: blue;">10</span>	41.0 <span style="color: blue;">54</span>	41.5 <span style="color: blue;">36</span>	-	-	1.5 <span style="color: blue;">0</span>	0.2 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.1 <span style="color: blue;">0</span>	1.4 <span style="color: blue;">0</span>
	10	SA	81.1 -	0.5 -	84.2 -	0.3 -	40.3 -	39.4 -	10.4 -	-	-	3.7 -	1.3 -	0.0 -	0.4 -	4.5 -
Mathematics	3	SA	98.0 <span style="color: blue;">97</span>	0.0 <span style="color: blue;">0</span>	88.2 <span style="color: blue;">89</span>	0.2 <span style="color: blue;">0</span>	49.3 <span style="color: blue;">22</span>	42.7 <span style="color: blue;">68</span>	5.1 <span style="color: blue;">8</span>	-	-	2.2 <span style="color: blue;">2</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.2 <span style="color: blue;">0</span>	0.4 <span style="color: blue;">0</span>
	4	SA	99.0 <span style="color: blue;">93</span>	0.0 <span style="color: blue;">0</span>	97.0 <span style="color: blue;">92</span>	0.1 <span style="color: blue;">0</span>	65.0 <span style="color: blue;">67</span>	24.5 <span style="color: blue;">24</span>	8.2 <span style="color: blue;">8</span>	-	-	1.5 <span style="color: blue;">1</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.2 <span style="color: blue;">0</span>	0.6 <span style="color: blue;">0</span>
	5	SA	94.0 <span style="color: blue;">96</span>	0.1 <span style="color: blue;">0</span>	89.1 <span style="color: blue;">85</span>	0.4 <span style="color: blue;">0</span>	62.1 <span style="color: blue;">36</span>	26.0 <span style="color: blue;">36</span>	9.1 <span style="color: blue;">27</span>	-	-	2.0 <span style="color: blue;">1</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.9 <span style="color: blue;">0</span>
	6	SA	96.0 <span style="color: blue;">95</span>	0.0 <span style="color: blue;">0</span>	95.5 <span style="color: blue;">86</span>	0.3 <span style="color: blue;">0</span>	67.4 <span style="color: blue;">27</span>	19.9 <span style="color: blue;">67</span>	9.6 <span style="color: blue;">5</span>	-	-	2.0 <span style="color: blue;">1</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	1.1 <span style="color: blue;">0</span>
	7 <sup>8</sup>	SA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8	SA	99.0 <span style="color: blue;">95</span>	0.0 <span style="color: blue;">0</span>	97.3 <span style="color: blue;">84</span>	0.1 <span style="color: blue;">0</span>	63.4 <span style="color: blue;">48</span>	14.1 <span style="color: blue;">34</span>	19.9 <span style="color: blue;">16</span>	-	-	1.6 <span style="color: blue;">1</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	1.0 <span style="color: blue;">0</span>
	10	ER	96.4 -	0.0 -	92.7 -	0.7 <span style="color: blue;">0</span>	42.0 -	32.3 -	12.3 -	3.6 -	2.5 -	5.3 -	0.0 -	0.0 -	0.0 -	1.9 -
Science	4	ER	88.7 <span style="color: blue;">85</span>	0.5 <span style="color: blue;">3</span>	78.7 <span style="color: blue;">72</span>	0.8 <span style="color: blue;">2</span>	54.6 <span style="color: blue;">45</span>	36.5 <span style="color: blue;">40</span>	5.0 <span style="color: blue;">8</span>	1.0 <span style="color: blue;">3</span>	0.5 <span style="color: blue;">3</span>	0.8 <span style="color: blue;">1</span>	0.3 <span style="color: blue;">0</span>	0.1 <span style="color: blue;">0</span>	0.4 <span style="color: blue;">0</span>	0.9 <span style="color: blue;">0</span>
		ER	85.0 -	0.8 -	75.0 -	1.5 -	46.3 -	41.2 -	9.8 -	1.2 -	0.3 -	0.6 -	0.1 -	0.0 -	0.1 -	0.4 -
		ER	85.7 -	0.5 -	76.5 -	2.3 -	53.7 -	25.0 -	14.0 -	2.3 -	0.6 -	1.8 -	0.5 -	0.0 -	0.5 -	1.7 -
		ER	93.2 <span style="color: blue;">86</span>	0.3 <span style="color: blue;">1</span>	69.8 <span style="color: blue;">70</span>	1.3 <span style="color: blue;">0</span>	28.1 <span style="color: blue;">27</span>	46.6 <span style="color: blue;">44</span>	19.1 <span style="color: blue;">22</span>	2.4 <span style="color: blue;">4</span>	0.8 <span style="color: blue;">1</span>	1.5 <span style="color: blue;">1</span>	0.2 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.3 <span style="color: blue;">0</span>	1.0 <span style="color: blue;">0</span>
	7	ER	84.2 -	0.3 -	69.3 -	0.9 -	27.6 -	41.4 -	18.9 -	7.7 -	2.5 -	1.0 -	0.1 -	0.0 -	0.2 -	0.6 -
		ER	88.3 <span style="color: blue;">88</span>	0.4 <span style="color: blue;">0</span>	74.5 <span style="color: blue;">67</span>	1.7 <span style="color: blue;">2</span>	41.6 <span style="color: blue;">33</span>	25.2 <span style="color: blue;">26</span>	18.7 <span style="color: blue;">24</span>	7.0 <span style="color: blue;">12</span>	2.3 <span style="color: blue;">4</span>	2.9 <span style="color: blue;">1</span>	0.3 <span style="color: blue;">0</span>	0.0 <span style="color: blue;">0</span>	0.4 <span style="color: blue;">0</span>	1.7 <span style="color: blue;">0</span>
		ER	82 -	0.5 -	69.9 -	0.2 -	30.0 -	45.7 -	18.0 -	2.8 -	0.4 -	1.6 -	0.2 -	0.0 -	0.2 -	1.1 -

<sup>7</sup> Validity statistics (highlighted in blue) are captured for items' most recent operational use.

<sup>8</sup> Item was removed from scoring.



Subject	Grade	Item Type	Validity <sup>7</sup>		Reliability		Score Distribution									
			Perfect	Non-Adj	Perfect	Non-Adj	0	1	2	3	4	B	A	F	I	O
	11	ER	84.8 -	0.5 -	67.8 -	1.8 -	26.5 -	45.2 -	20.7 -	2.6 -	0.1 -	2.5 -	0.2 -	0.0 -	0.5 -	1.8 -
		ER	86.1 -	0.6 -	71.9 -	2.8 -	20.4 -	37.2 -	27.7 -	7.2 -	1.8 -	2.9 -	0.3 -	0.0 -	0.6 -	2.0 -
		ER	81.1 91	0.8 0	65.5 66	5.0 4	30.6 22	20.9 28	25.5 30	12.6 13	4.3 4	3.7 2	0.2 0	0.0 0	0.5 0	1.8 1
		ER	82.7 -	0.6 -	67.7 -	1.8 -	15.3 -	30.6 -	32.7 -	12.9 -	3.4 -	2.3 -	0.2 -	0.0 -	0.5 -	2.0 -
		ER	85.4 90	0.0 0	73.1 76	1.0 0	23.9 16	42.6 51	20.5 23	5.2 5	1.4 1	3.0 2	0.2 0	0.0 0	0.7 1	2.6 1
On Demand Writing	5	Prompt	88.2 93	0.0 0	68.8 66	0.9 1	-	18.6 12	47.3 51	26.1 30	6.1 7	0.2 0	1.0 0	0.0 0	0.1 0	0.6 0
	8	Prompt	89.0 93	0.0 0	70.3 68	0.6 1	-	18.7 12	34.9 35	34.7 39	9.9 13	0.3 1	0.0 0	0.0 0	0.2 0	1.2 0
	11	Prompt	90.1 89	0.0 0	70.8 66	0.4 1	-	13.3 9	32.6 34	34.8 46	16.7 10	0.8 1	0.4 0	0.0 0	0.2 0	1.3 0

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

Grade	Final Prompt Score									Condition Code					Rater Agreement		
	0	1	2	3	4	5	6	7	8	A	B	F	I	O	Perfect	Adjacent	Non-Adjacent
5	2%	0%	14%	9%	35%	15%	16%	6%	3%	424	80	7	39	246	69%	30%	1%
8	2%	0%	15%	8%	25%	13%	24%	9%	5%	18	112	7	67	529	70%	29%	1%
11	3%	0%	10%	6%	24%	11%	23%	12%	11%	135	274	0	71	453	71%	29%	0%

A = Insufficient Amount to Score; B = Non-Response; 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	70.06%	88.88%	61.11%	0.44
	4	60.93%	82.35%	50.59%	0.32
	5	60.28%	82.75%	51.11%	0.33
	6	63.10%	84.82%	53.41%	0.37
	7	60.39%	82.82%	51.21%	0.33
	8	63.33%	84.49%	53.48%	0.37
	10	61.73%	83.43%	52.12%	0.34
Math	3	71.30%	88.92%	61.31%	0.44
	4	63.89%	86.73%	53.11%	0.34
	5	68.48%	89.90%	57.95%	0.41
	6	67.99%	88.26%	56.96%	0.37
	7	66.14%	89.19%	55.38%	0.36
	8	64.07%	87.33%	53.46%	0.32
	10	61.93%	84.56%	51.67%	0.30
Science	4	67.61%	83.65%	55.02%	0.26
	7	67.61%	87.23%	56.78%	0.33
	11	69.07%	85.72%	58.50%	0.38

## Appendix O. Principal Components Analysis

Subject	Grade	Unexplained Variance in 1st Contrast (Eigenvalue Units) <sup>9</sup>
Reading	3	1.3
	4	1.4
	5	1.3
	6	1.3
	7	1.4
	8	1.4
	10	1.4
Mathematics	3	1.5
	4	1.4
	5	1.4
	6	1.5
	7	1.5
	8	1.4
	10	1.5
Science	4	1.8
	7	1.5
	11	1.7

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<sup>9</sup> Values over 2 may indicate a possible second dimension.

## Appendix P. Model Fit Indices for Confirmatory Factor Analysis

Subject	Grade (set)	SRMR	RMSEA	RMSEA 90% Lower CL	RMSEA 90% Upper CL
Reading	3	0.0210	0.0259	0.0253	0.0266
	4	0.0170	0.0214	0.0207	0.0221
	5	0.0169	0.0220	0.0211	0.0230
	6	0.0127	0.0157	0.0151	0.0164
	7	0.0210	0.0251	0.0244	0.0257
	8	0.0217	0.0251	0.0245	0.0257
	10	0.0175	0.0216	0.0208	0.0223
Mathematics	3	0.0201	0.0246	0.0240	0.0252
	4	0.0239	0.0294	0.0287	0.0300
	5	0.0186	0.0235	0.0229	0.0241
	6	0.0257	0.0327	0.0320	0.0334
	7	0.0195	0.0230	0.0225	0.0236
	8	0.0119	0.0158	0.0149	0.0167
	10	0.0145	0.0190	0.0183	0.0197
Science <sup>10</sup>	4(a)	0.0314	0.0358	0.0343	0.0374
	4(b)	0.0347	0.0405	0.0388	0.0423
	4(c)	0.0334	0.0391	0.0374	0.0408
	4(d)	0.0373	0.0429	0.0413	0.0446
	7(a)	0.0145	0.0163	0.0146	0.0181
	7(b)	0.0243	0.0285	0.0268	0.0302
	7(c)	0.0180	0.0233	0.0216	0.0251
	7(d)	0.0188	0.0210	0.0191	0.0228
	11(a)	0.0203	0.0252	0.0234	0.0270
	11(b)	0.0220	0.0274	0.0255	0.0294
	11(c)	0.0193	0.0250	0.0231	0.0269
	11(d)	0.0226	0.0306	0.0287	0.0325

<sup>10</sup> *a, b, c, and d* represent the multiple operational sets administered.

## Appendix Q. Operational Constructed-Response Item Omit Rates

Subject	Grade	Item Type	Omit Rate
Reading	3	Short Answer	2%
	4	Short Answer	1%
	5	Extended Response	1%
	6	Short Answer	1%
	7	Short Answer	2%
	8	Short Answer	1%
	10	Short Answer	4%
Mathematics	3	Short Answer	2%
	4	Short Answer	2%
	5	Short Answer	2%
	6	Short Answer	2%
	7 <sup>11</sup>	--	--
	8	Short Answer	2%
	10	Extended Response	5%
Science	4	Extended Response	1%
		Extended Response	2%
		Extended Response	1%
		Extended Response	2%
	7	Extended Response	3%
		Extended Response	1%
		Extended Response	1%
	11	Extended Response	2%
		Extended Response	3%
		Extended Response	3%
Extended Response		3%	
Extended Response		2%	

<sup>11</sup> The constructed response item was removed from scoring.