# **TECHNICAL REPORT**

## PART I – SUMMATIVE ASSESSMENT

# Ohio English Language Proficiency Assessment – Listening, Reading, Speaking, and Writing

# Grades K-12

# 2021-2022 Administration

#### Submitted to:

Ohio Department of Education

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# **Chapter 1. Introduction**

The English Language Proficiency Assessment for the 21st Century (ELPA21) is a testing program that supports educators as they implement the 2014 English Language Proficiency (ELP) standards (Council of Chief State School Officers, 2014) and college- and career-readiness standards. The ELPA21 Program, called the Program in this report, provides an assessment system that measures growth based on the 2014 ELP Standards and provides valuable information to inform instruction and facilitate the development of academic English proficiency so that all English learners (ELs) leave high school prepared for college and career success. The assessment system includes tests on listening, reading, speaking, and writing for students in kindergarten, grade 1, grades 2–3, grades 4–5, grades 6–8, and grades 9–12. Ohio is a member of the ELPA21 Consortium, and the assessment is called the Ohio English Language Proficiency Assessment (OELPA).

The Program conducted test development and item development for the summative ELP assessment, as part of a U.S. Department of Education grant, commencing in 2013 and running through the first operational administration of the assessment in 2016. As part of the development process, Questar Assessment, Inc., built multiple fixed-length forms for each test. Items were field tested in spring 2015, and the first operational administration of ELPA21 was in spring 2016. Following this administration, the Center for Research on Evaluation, Standards, and Student Testing (CRESST) conducted item analyses, held data review meetings, and performed item calibration to obtain scoring parameters. Pacific Metrics, the organization contracted for standard setting, held a standard-setting workshop in July 2016. Based on recommendations from the workshop, the Program made decisions with respect to domain cut scores that further translated into performance levels for each grade. Cambium Assessment, Inc. (CAI) used the final item parameters, cut scores, and proficiency definitions to score and report the test results.

Details about test development, item development, field-test form building, item data review, item calibration, and standard setting can be found in their respective reports provided by the Program or the respective supporting vendors.

In 2017, the Program introduced the ELPA21 screener. The purpose of the screener is to determine students' eligibility for English language development services. It is an assessment of a student's English language proficiency in the required domains of listening, reading, writing, and speaking. The screener test items are drawn from the same item pools and are based on the same ELP Standards as the summative assessment. Ohio first administered the screener assessment in the 2018–2019 school year. The screener followed the same quality control procedures as the summative. Ohio has its own rules to decide if a student needs to take the summative assessment. All Ohio ELs who have not reached proficiency should take the OELPA.

This technical report focuses on the 2021–2022 test administration, test form reliability, validity, scoring, reporting, and quality control. This technical report has two parts. Part I includes chapters that delineate different aspects of the 2021–2022 administration of the summative assessment, including:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. Scoring

- Chapter 4. Standard Setting
- Chapter 5. 2021–2022 Summary
- Chapter 6. Reliability
- Chapter 7. Validity
- Chapter 8. Reporting
- Chapter 9. Quality Control
- Appendix Part I: Analysis for Summative Assessment—2021–2022 Summary

Part II includes chapters that delineate different aspects of the 2021–2022 administration of the screener assessment, including:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. 2021–2022 Summary
- Chapter 4. Reliability
- Chapter 5. Validity
- Chapter 6. Reporting
- Appendix Part II: Analysis for Screener Assessment—2021–2022 Summary

# Chapter 2. Test Administration

The 2021–2022 OELPA assessments include summative tests and screener tests. The Ohio English Language Proficiency Screener (OELPS) was used to identify students who qualify for English language development services. Each of the summative and screener tests were administered to students in kindergarten, grade 1, grades 2–3, grades 4–5, grades 6–8, and grades 9–12. The tests for kindergarten and grade 1 are grade specific. The tests for grades 2 and above are grade-band tests. The tests do not have a time limit.

Each form of both assessments involves four domain tests: reading, writing, listening, and speaking. Students could be exempted from as many as three domain tests.

#### 2.1 TESTING WINDOW

Due to the continued impact of the COVID-19 pandemic during 2021–2022, the Ohio Department of Education (ODE) emphasized that districts and schools first and foremost should be concerned about the safety of students and staff. Assessments should occur only if they can be safely administered. Safety may be determined locally at the student, teacher, building, district, or county level, depending on the circumstances. Parental determination relative to safety should be considered and respected. In 2021-2022, all students should have been screened with OELPS.

The OELPA is critical to the services schools must provide English learners (ELs). To support schools in meeting their obligation of annually assessing all ELs' English language proficiency with the OELPA, the ODE announced some changes for this year's administration:

- **OELPA Testing Window Extension.** The OELPA summative testing window was extended by four weeks and took place January 31–March 25, 2022. For the OELPS screener assessment, the 2021–2022 testing window was scheduled from August 23, 2021–June 30, 2022.
- **Group Administration of the Speaking Test.** ODE allowed districts to administer the 2022 OELPA speaking test to groups of students instead of requiring one-to-one administration of that domain.
  - When scheduling administrations, districts should consider that students taking the speaking test will speak their responses aloud. To maintain test validity and security, the speaking test must be administered so that students cannot hear one another and that recordings do not pick up others' voices. Thus, districts should test students in large quiet spaces and/or in groups as small as the testing window and scheduling allow. ODE recommends that schools continue to administer the speaking test, if possible, one-to-one, with one student and one test administrator (TA).

The Test Coordinator Manual (TCM) and Test Administration Manual (TAM) were updated to

include the testing window extension and group administration of the speaking test. Additional information about state testing this year is on ODE's Reset and Restart Education page.

#### 2.2 SUMMATIVE TESTS

The 2021–2022 summative assessment includes one online form, one paper-pencil form, and one braille form. Each form has separate tests for the four language domains. There were no field-test items in the 2021–2022 summative tests.

Table 2.1 through Table 2.3 list the number of operational items and score points in each online, paper-pencil, and braille form. The tables show that listening and reading have comparable numbers of items in each test. Writing and speaking have fewer but comparable numbers of items in each test.

Table 2.1 Number of Items and Score Points—Online Summative

		Grade/Grade Band										
	K		1		2–3		4–5		6–8		9–12	
Domain	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points
Listening	28	28	24	24	24	26	27	30	33	36	24	27
Reading	23	23	30	30	29	34	25	27	26	31	34	35
Speaking	11	27	9	25	9	25	8	30	7	27	7	27
Writing	18	18	20	20	14	24	13	30	8	28	8	28
Total	80	96	83	99	76	109	73	117	74	122	73	117

Table 2.2 Number of Items and Score Points—Paper-Pencil Summative

		Grade/Grade Band										
	K		1		2–3		4–5		6–8		9–12	
Domain	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points
Listening	28	28	22	22	23	24	24	27	30	31	21	23
Reading	23	23	29	29	26	28	26	28	28	32	35	38
Speaking	11	27	9	25	9	25	8	30	7	27	7	27
Writing	11	18	9	16	10	20	10	27	8	28	8	28
Total	73	96	69	92	68	97	68	112	73	118	71	116

Table 2.3 Number of Items and Score Points—Braille Summative

		Grade/Grade Band										
	ŀ	<b>(</b>		1		2–3		4–5		6–8		-12
Domain	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points
Listening	17	19	21	21	20	20	23	26	22	23	19	21
Reading	13	13	22	22	23	25	23	23	25	29	34	37
Speaking	4	12	7	17	8	20	7	25	6	22	5	19
Writing	10	23	7	19	9	24	10	30	8	28	8	28
Total	44	67	57	79	60	89	63	104	61	102	66	105

#### 2.3 TEST ADMINISTRATION MANUAL

#### 2.3.1 Directions for Administration

For the 2021–2022 administrations, the TAM was developed to guide TAs in test administration for the summative test. The TAM includes the following key points:

- Overview of the OELPA summative assessment
- TA qualifications
- Preliminary planning
- Materials required
- Administrative considerations
- Student preparation/guidance for practice tests
- Detailed instructions for preparing and administering the training tests and summative tests
- Test security instructions
- Contact information for user support

# 2.3.2 Training/Practice Tests

To help TAs and students familiarize themselves with the online registration system and the Test Delivery System (TDS), training or practice tests were provided before and during the testing windows. Training/practice tests can be accessed through a nonsecure or CAI Secure Browser.

The summative training tests have two components, one for TAs to create and manage the training/practice test sessions and the other for students to take an actual training/practice test.

The Practice Test Administration site introduces TAs to

- logging in;
- starting a test session;
- providing the session ID to the students signing in to the TA session;
- monitoring students' progress throughout their tests; and
- stopping the test.

The Practice Tests site introduces students to

- signing in;
- verifying student information;
- selecting a test;
- waiting for the TA to check the test settings and approve participation;
- starting the test (adjusting the audio sound, checking the microphone for recording speaking responses, and reviewing test instructions);
- taking the test; and
- submitting the test.

#### 2.3.3 Summative Tests

The instructions for summative tests include a brief direction for each domain test. They also provide the detailed instructions for

- logging in to the CAI Secure Browser;
- starting a test session;
- providing the session ID to the students;
- approving student test sessions, including reviewing and editing students' test settings and accommodations;
- monitoring students' progress throughout their tests by checking their testing statuses; and stopping the session and logging out.

# **Chapter 3. Scoring**

For summative tests, four domain scores and two composite scores were computed. The composite scores included a comprehension score for listening and reading and an overall score that comprises all four domains. However, Ohio does not use the overall composite score or the comprehension score for any purpose.

#### 3.1 ESTIMATING STUDENT ABILITY FOR SUMMATIVE ASSESSMENTS

The Ohio English Language Proficiency Assessment (OELPA) reported scale scores for each domain test, the overall scores for the whole test that includes four domains, and the comprehension scores for the partial test that includes reading and listening domains. Multidimensional item response theory (MIRT) was used to estimate domain scores. The bi-factor models were used to estimate the scores. The details of score estimations can be found in the *ELPA21 Scoring Specifications: School Year 2019–2020* (CRESST, 2019). The MIRT model precludes one-to-one correspondence between domain raw and scale scores and allows the same domain raw score to fall into different performance levels depending on performance on the off-domain items.

In addition, business rules were established to specify rules about domain exemptions and attemptedness at the item, domain, and test levels. The additional scoring rules for the 2021–2022 OELPA summative tests were outlined in the following section.

#### 3.2 SCORING RULES FOR SUMMATIVE ASSESSMENTS

The scoring rules applied to the 2021–2022 OELPA scoring included the following:

- 1. A domain test was considered attempted when a student was presented with the first operational item; it is not necessary for a student to actually respond to at least one item.
- 2. If a domain test was attempted, the items without responses in that domain were scored as 0.
- 3. If a domain test was not attempted and the student was not marked as exempt in that domain, the domain score and performance level were set to N (domain not-attempted).
- 4. If any domain tests were exempted before a student takes his or her first test, they were left out of the computation of the overall scores. If the exempted domain test was reading or listening, the test was left out of the computation of the comprehension score. In this case, the score and performance level were set to E (domain exempted). However, if a test in an exempt domain was started in CAI's Test Delivery System (TDS), the test was assumed to not be exempt.
- 5. If one or more of the domains was exempted and the other domains were not attempted, the overall score was set to N.

#### 3.3 THETA TO SCALE SCORE TRANSFORMATION

Students' performance was summarized in an individual domain score for each domain, a comprehension score that included listening and reading, and an overall score that included all four domains. Each theta score, obtained from the MIRT scoring model, was linearly transformed to the reporting scale using the formula  $SS = a * \theta + b$ , where a is the slope and b is the intercept. There was one set of scaling constants for the domain scores and another set of constants for the composite scores, as shown in Table 3.2. Scale scores were rounded to the nearest integer.

Subject	Grade	Slope (a)	Intercept (b)
Domain Scores (listening, reading, speaking, and writing)	K-12	80	550
Comprehension Scores	K–12	600	5500
Overall Scores	K-12	600	5500

Table 3.4 Scaling Constants on the Reporting Metric

#### 3.4 LOWEST/HIGHEST OBTAINABLE SCORES

The English Language Proficiency Assessment for the 21st Century (ELPA21) used expected a posteriori (EAP) scoring, which did not assign fixed minimum or maximum obtainable scale scores. The observed minimums, means, maximums, and standard deviations of scale scores by domain and by subgroup are presented in Section 3 of the Appendix Part I.

#### 3.5 HANDSCORING

For the OELPA summative tests, all speaking items and some writing items were handscored. Measurement Incorporated (MI) provided all handscoring except for screeners administered in Ohio, which were scored locally. The ELPA21 Program provided the procedure for handscoring items. Scoring rubrics and item content were reviewed by content experts as a part of the item review meetings. Consistency in handscoring required that scoring rules be applied with fidelity during scoring sessions.

# 3.5.1 Rules for Handscoring

The OELPA assessments contained constructed-response items that required handscoring. In the speaking and writing domains, short-text items were scored on 1-, 2-, 3-, 4-, or 5-point rubrics. The following procedures were employed to handscore these items: All constructed-response items were assigned to a human rater for a first read (R1). The score assigned in this first read was the item score of record and was used to compute scale scores. Twenty percent of constructed-response items for the summative assessment were randomly selected for a second read (R2) (i.e., 20% of student responses to any constructed-response item had both a first read and a second read). Ten percent of the constructed-response items for the screener assessment were randomly selected for a second read.

The scores from these two reads were used to compute rater consistency statistics (% exact agreement, % adjacent agreement) included in CAI's annual technical reports. CAI and MI used

second reads to monitor rater performance and provide ongoing feedback and training, as needed. Item scores from second reads were not used to compute scale scores.

First and second reads were performed by the same rater pool and occurred at approximately the same time. Raters did not know whether they were providing the first or second read.

If scores assigned in first and second reads differed by two or more score points (or if first and second raters differed in the selection of condition/scorability code), the student response was assigned to a supervisor for a third read (R3). The supervisor knew he or she was conducting a third read, had access to the results from the first and second reads, and would determine the score/code that should have been assigned. Third reads were performed only for the summative and not for the screener. CAI and used the results of the third read to provide ongoing feedback and training, as needed.

Scores from all reads (first read, as well as second and third reads, if applicable) were included in the item's data file. CAI (presumably with MI's help) included detailed descriptions of scoring procedures in the annual technical report, including descriptions of ongoing feedback and training that was provided within a program year. Table 3.3 presents nonscorable codes for handscored items.

DOMAIN	CODE	DESCRIPTION
Speaking	Α	Blank
Speaking	В	Technological Issue
Writing	Α	Blank

Table 3.3 Nonscorable Condition Codes for Handscored Items

The following rules were adhered to when evaluating a potential nonscorable response in the speaking domain:

- 1. When a student responded with a word or phrase that could be tied to the stimulus, the response could receive a score point of "1." The "0" score point responses followed the bulleted list contained in the rubric.
- 2. If no words were spoken by the student, it was considered a blank.
- 3. A teacher voice was not necessarily interpreted as interference; if the teacher was heard telling the student to speak but not telling them what to say, the scorer scored the student's response.
- 4. A student response of, "Yes, No, I don't know," was considered a refusal and should be scored a "0."
- 5. A nonscorable code of "B" should be given for responses with a technical difficulty (e.g., speaking too close to the microphone causing unintelligible speech or broken recording with speech cut up).

# Chapter 4. Standard Setting

For the summative assessment, the domain cut scores and the overall proficiency levels were set through a standard-setting meeting convened by the ELPA21 Program on July 19–22, 2016. Details about the standard-setting process can be found in the ELPA21 standard-setting technical report (CRESST & Pacific Metrics, 2016).

Five performance levels were established for each domain. The cut scores were set by grade, as listed in Table 4.1. The four cut scores set for each domain sorted students into Performance Levels 1–5. If a student scored below the first cut (Cut 1), the student was classified as Performance Level 1. If a student scored at or above the first cut but below the second cut (Cut 2), the student was classified as Performance Level 2. This approach continued for Performance Levels 3 and 4. If a student scored at or above the fourth cut, the student was classified as Performance Level 5.

Table 4.5 ELPA21 Domain Cut Scores by Grade

Grade	Domain	Cut 1	Cut 2	Cut 3	Cut 4	Grade	Domain	Cut 1	Cut 2	Cut 3	Cut 4
	Listening	467	507	613	645		Listening	413	455	498	581
K	Reading	473	514	592	627	5	Reading	468	511	588	627
	Speaking	487	535	598	625	5	Speaking	483	526	573	607
	Writing	497	562	651	673		Writing	438	486	598	628
	Listening	435	467	549	594		Listening	410	440	498	565
1	Reading	479	515	584	629	6	Reading	461	496	565	604
ı	Speaking	528	577	593	619	0	Speaking	465	511	562	595
	Writing	498	548	613	641		Writing	425	472	564	594
	Listening	ning 408 438 512 564		Listening	430	473	553	597			
2	Reading	457	489	555	595	7	Reading	486	534	609	642
2	Speaking	490	529	555	588	,	Speaking	475	527	582	611
	Writing	452	493	555	591		Writing	474	520	597	625
	Listening	409	448	536	598		Listening	432	478	565	613
3	Reading	495	541	610	644	8	Reading	494	547	640	669
3	Speaking	500	538	572	612	0	Speaking	476	528	590	619
	Writing	498	542	603	636		Writing	484	533	619	647
	Listening	398	431	492	563		Listening	451	491	571	613
4	Reading	453	488	550	594	9–12	Reading	488	539	631	662
4	Speaking	462	506	544	584	9-12	Speaking	481	536	593	619
	Writing	437	481	568	600		Writing	485	533	615	641

Overall proficiency, defined as *proficiency determination*, for a given student was established based on a profile of domain performance levels across all four tested domains. There were three proficiency determination levels: Emerging, Progressing, and Proficient. The following rules determined a student's overall proficiency (note that for the purpose of assigning overall proficiency, nonexempt domains that were not attempted were treated as Performance Level 1):

- Students whose domain performance levels were 1 or 2 across all nonexempt domains were identified as Emerging.
- Students whose domain performance levels were 4 or 5 across all nonexempt domains were identified as Proficient. Students could not be proficient if any domains were untested in the absence of a valid exemption or invalidated.
- Students with domain performance levels that did not fit with Emerging or Proficient (as defined previously) were identified as Progressing.

See details in the Appendix B (Overall Proficiency Determination Look-up Tables) in the <i>ELPA2 Scoring Specification: School Year 2019–2020</i> (CRESST, 2019).	ľ

## **Chapter 5. 2021–2022 Summary**

The 2021–2022 student participation and performance statistics for the OELPA summative assessment are presented in this chapter and in Sections 1–5 of the Appendix Part I. The figures and tables included in Sections 1–5 are listed here:

- Section 1. Summative Assessment—Raw Score Summary
  - O Tables S1.1–S1.13 present the number of students, minimum, maximum, average, and standard deviation of domain raw scores by each performance level in each grade. Tables S1.1–S1.13 also present the number of students, minimum, maximum, average, and standard deviation of the overall raw scores by each proficiency level in each grade.
- Section 2. Summative Assessment—Raw Score Distributions
  - Figures S2.1–S2.65 present the frequency of raw score distributions by performance level for each domain in each grade, and the frequency of overall raw score distributions by proficiency level in each grade.
- Section 3. Summative Assessment—Scale Score Summary
  - Tables S3.1–S3.13 present the number of students, minimum, maximum, average, and standard deviation of domain, overall, and comprehension scores by subgroups in each grade (K–12).
- Section 4. Summative Assessment—Percentage of Students by Domain Performance Level
  - Tables S4.1–S4.13 show the total number of students taking each domain test and the percentage of students in each performance level by domain test and by subgroups.
- Section 5. Summative Assessment—Percentage of Students by Overall Proficiency Level
  - Tables S5.1–S5.13 show the total number of students who are categorized in each of the overall proficiency levels by subgroup: Emerging, Progressing, or Proficient.

#### 5.1 2021–2022 STUDENT PARTICIPATION

Table 5.1 summarizes student participation in each mode of testing. One student tested with a braille form, 218 students tested with paper-pencil forms, and all other students tested with online forms. Table 5.2 shows student participation overall and by subgroups. It shows the number of students in each subgroup who took a particular test. Participation was up by about 14.4% compared to 2020–2021 due to the decreasing impact of the pandemic. Instruction had recovered for a full year by the time the OELPA was given in 2022. Although some districts were still on remote or hybrid instruction during the 2022 OELPA administration window, more and more

parents were willing to send their children to school even when in-person instruction was available. Generally, the number of students who participated in the 2021–2022 OELPA administration decreased as the grade level increased. More male students than female students took the test.

By test, the greatest number of students were in the Hispanic or Latino group (32.8%–40.7%), followed by African American students (18.2%–23.8%) and Asian students (13.4%–23.0%). The percentage of students who had Individualized Education Programs (IEPs) increased from 5.8% to 21.8% between kindergarten and middle school, and dropped to 15.2% in high school. Between kindergarten and middle school, the percentages of students with specific learning disabilities increased from 0.3% to 13.2% and dropped to 9.4% in high school. Most students identified as having a speech or language impairment were in kindergarten (2.3%), grade 1 (2.3%), and grades 2–3 (2.4%), while more students were identified as having a specific learning disability in upper grades, including 3.0% in grade band 2–3, 10.3% in grade band 4–5, 13.2% in middle school, and 9.4% in high school.

Table 5.6 Student Participation by Test Mode

Cuada	Total	Braille	<b>;</b>	Online	₽	Pape	r
Grade	Total	N	%	N	%	N	%
K	10,239	0	0.00	10,188	99.50	51	0.50
1	9,387	0	0.00	9,333	99.42	54	0.58
2	8,537	0	0.00	8,504	99.61	33	0.39
3	6,584	0	0.00	6,557	99.59	27	0.41
4	5,322	0	0.00	5,306	99.70	16	0.30
5	4,654	0	0.00	4,648	99.87	6	0.13
6	3,722	0	0.00	3,719	99.92	3	0.08
7	3,612	0	0.00	3,600	99.67	12	0.33
8	3,490	0	0.00	3,479	99.68	11	0.32
9	4,782	0	0.00	4,781	99.98	1	0.02
10	3,551	0	0.00	3,549	99.94	2	0.06
11	3,108	1	0.03	3,107	99.97	0	0.00
12	2,514	0	0.00	2,512	99.92	2	0.08
Total	69,502	1	0.00	69,283	99.68	218	0.31

Table 5.7 Student Participation by Subgroups in Each Test

Cubaraun	Status	K		1		2-3	3	4-	5	6-8	8	9-1	2
Subgroup	Status	N	%	N	%	N	%	N	%	N	%	N	%
Total		10,239	100.0	9,387	100.0	15,121	100.0	9,976	100.0	10,824	100.0	13,955	100.0
	К	10,239	100.0										
	1			9,387	100.0								
	2					8,537	56.5						
	3					6,584	43.5						
	4							5,322	53.3				
	5							4,654	46.7				
Grade	6									3,722	34.4		
	7									3,612	33.4		
	8									3,490	32.2		
	9											4,782	34.3
	10											3,551	25.4
	11											3,108	22.3
	12											2,514	18.0
Gender	Female	4,816	47.0	4,491	47.8	7,070	46.8	4,409	44.2	4,783	44.2	6,061	43.4
Centuer	Male	5,269	51.5	4,770	50.8	7,908	52.3	5,489	55.0	5,949	55.0	7,750	55.5

Cubavous	Status	K		1		2-	3	4-	5	6-	8	9-1	2
Subgroup	Status -	N	%	N	%	N	%	N	%	N	%	N	%
	Missing	154	1.5	126	1.3	143	0.9	78	0.8	92	0.8	144	1.0
	American Indian or Alaskan Native	35	0.3	36	0.4	41	0.3	22	0.2	30	0.3	40	0.3
	Asian	2,247	21.9	2,155	23.0	2,948	19.5	1,524	15.3	1,446	13.4	1,882	13.5
	Black or African American	1,859	18.2	1,808	19.3	2,908	19.2	2,048	20.5	2,240	20.7	3,320	23.8
Ethnicity	Hispanic or Latino	3,552	34.7	3,081	32.8	5,482	36.3	3,897	39.1	4,404	40.7	5,600	40.1
	Native Hawaiian or Other Pacific Islander	53	0.5	47	0.5	69	0.5	48	0.5	63	0.6	90	0.6
	Two or More Races	931	9.1	878	9.4	1,632	10.8	1,194	12.0	1,361	12.6	1,521	10.9
	White	1,516	14.8	1,352	14.4	2,008	13.3	1,225	12.3	1,265	11.7	1,483	10.6
	Other/Unknown	46	0.4	30	0.3	33	0.2	18	0.2	15	0.1	19	0.1
	Gifted	8	0.1	6	0.1	69	0.5	47	0.5	23	0.2	19	0.1
Other	IEP	598	5.8	631	6.7	1,533	10.1	1,830	18.3	2,357	21.8	2,115	15.2
	Migrant	13	0.1	23	0.2	46	0.3	36	0.4	42	0.4	57	0.4
	Autism	199	1.9	185	2.0	299	2.0	189	1.9	191	1.8	120	0.9

Subaraun	Status	K		1		2-3	3	4-5	5	6-8	8	9-1	2
Subgroup	Status	N	%	N	%	N	%	N	%	N	%	N	%
	Developmenta I delay	7	0.1	8	0.1	12	0.1	14	0.1	25	0.2	36	0.3
	Emotional disturbance	4	0.0	3	0.0	18	0.1	25	0.3	44	0.4	33	0.2
	Hearing Impaired	7	0.1	10	0.1	18	0.1	22	0.2	29	0.3	28	0.2
	Intellectual Disability	19	0.2	24	0.3	89	0.6	106	1.1	179	1.7	164	1.2
	Multiple disabilities	32	0.3	33	0.4	71	0.5	73	0.7	79	0.7	92	0.7
Primary Disability	Orthopedic impairment	5	0.0	8	0.1	14	0.1	7	0.1	12	0.1	11	0.1
Disability	Other health impairment	55	0.5	86	0.9	203	1.3	230	2.3	304	2.8	276	2.0
	Specific learning disability	31	0.3	60	0.6	447	3.0	1,031	10.3	1,426	13.2	1,309	9.4
	Speech or language impairment	233	2.3	212	2.3	356	2.4	98	1.0	60	0.6	28	0.2
	Traumatic brain injury	3	0.0	3	0.0	3	0.0	7	0.1	15	0.1	24	0.2
	Visual impairment	1	0.0	1	0.0	4	0.0	5	0.1	8	0.1	10	0.1

#### 5.2 2021–2022 STUDENT SCALE SCORE AND PERFORMANCE SUMMARY

Student performance in the 2021–2022 OELPA administration is summarized for the entire population and by subgroup. Table 5.3 shows the number and percentage of students who had domain exemption or not-attempted in each domain and grade. Table 5.4–Table 5.6 show the number of students, minimum, maximum, mean, and standard deviation of scale scores in each grade and domain. The tests are not vertically linked across all grades. Scale scores can be compared only within grade bands (grades 2–3, 4–5, 6–8, and 9–12). In general, the mean scale scores increased as grades increased within each grade band. A disaggregated summary based on scale scores by gender, ethnicity, and other subgroups is also available in Section 3 of Appendix Part I. In addition, students' raw score summary and distributions for each domain and overall by grade are also available in Sections 1 and 2 of Appendix Part I.

Table 5.7 and Table 5.8 display the percentage of students in each performance level in each grade and domain (see Section 4 of Appendix Part I for a disaggregated summary). In addition, Table 5.9 shows the percentage of students in each overall proficiency level in each grade. The percentages of students by performance level on each domain test and by overall proficiency level are also plotted in Figures 5.1 and 5.2, respectively. Section 5 of Appendix Part I displays the percentage of students by proficiency level by gender, ethnicity, and other subgroups.

For both reading and writing, Figure 5.1 shows that most students were in Performance Level 3 except for kindergarten and grade 1 writing and grade 1 reading tests. More middle school and high school students earned Performance Levels 1 or 2 than Performance Levels 4 or 5 in reading and writing, while more grade 2–8 students earned Performance Levels 4 or 5 than Performance Levels 1 or 2 in listening and speaking.

Figure 5.2 and Table 5.9 show that most students were in the Progressing category in all grades (69.2% to 78.5%). The percentage of students who were proficient increased from kindergarten to grade 2, then consistently decreased until grade 9, and slightly increased to grade 12. The percentage of students in the Emerging category decreased from kindergarten to grade 3, then increased (except for grade 6) until grade 9, and then consistently decreased to grade 12.

Table 5.8 Summary of Domain Exemptions and Non-Attempted

		Liste	ning	Rea	ding	Spea	aking	Wri	ting
Grade	Total	Exempted	Not Attempted	Exempted	Not Attempted	Exempted	Not Attempted	Exempted	Not Attempted
К	10,239	4 (0.0%)	11 (0.1%)	84 (0.8%)	33 (0.3%)	98 (1.0%)	65 (0.6%)	90 (0.9%)	48 (0.5%)
1	9,387	2 (0.0%)	9 (0.1%)	89 (0.9%)	30 (0.3%)	87 (0.9%)	39 (0.4%)	92 (1.0%)	32 (0.3%)
2	8,537	5 (0.1%)	10 (0.1%)	80 (0.9%)	30 (0.4%)	78 (0.9%)	35 (0.4%)	87 (1.0%)	37 (0.4%)
3	6,584	4 (0.1%)	9 (0.1%)	103 (1.6%)	30 (0.5%)	78 (1.2%)	32 (0.5%)	92 (1.4%)	32 (0.5%)
4	5,322	2 (0.0%)	5 (0.1%)	88 (1.7%)	27 (0.5%)	62 (1.2%)	25 (0.5%)	83 (1.6%)	26 (0.5%)
5	4,654	3 (0.1%)	7 (0.2%)	107 (2.3%)	28 (0.6%)	63 (1.4%)	34 (0.7%)	100 (2.1%)	33 (0.7%)
6	3,722	7 (0.2%)	17 (0.5%)	69 (1.9%)	31 (0.8%)	52 (1.4%)	32 (0.9%)	63 (1.7%)	35 (0.9%)
7	3,612	4 (0.1%)	13 (0.4%)	77 (2.1%)	31 (0.9%)	52 (1.4%)	33 (0.9%)	66 (1.8%)	34 (0.9%)
8	3,490	3 (0.1%)	14 (0.4%)	61 (1.7%)	37 (1.1%)	44 (1.3%)	36 (1.0%)	54 (1.5%)	43 (1.2%)
9	4,782	6 (0.1%)	60 (1.3%)	34 (0.7%)	76 (1.6%)	26 (0.5%)	89 (1.9%)	30 (0.6%)	84 (1.8%)
10	3,551	8 (0.2%)	28 (0.8%)	38 (1.1%)	31 (0.9%)	24 (0.7%)	62 (1.7%)	35 (1.0%)	46 (1.3%)
11	3,108	7 (0.2%)	19 (0.6%)	34 (1.1%)	31 (1.0%)	31 (1.0%)	41 (1.3%)	37 (1.2%)	44 (1.4%)
12	2,514	2 (0.1%)	23 (0.9%)	31 (1.2%)	33 (1.3%)	21 (0.8%)	56 (2.2%)	31 (1.2%)	42 (1.7%)

Table 5.9 Scale Score Summary–Listening and Reading\*

Od-		L	_istening	]				Reading		
Grade	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
K	10,224	237	545.7	775	77.4	10,122	247	549.1	770	73.9
1	9,376	239	547.1	712	75.4	9,268	241	538.6	744	80.4
2	8,522	229	528.2	742	72.2	8,427	228	513.3	766	72.4
3	6,571	229	550.0	742	75.4	6,451	228	543.8	766	75.6
4	5,315	213	513.5	715	74.3	5,207	228	510.4	712	67.6
5	4,644	213	523.8	725	78.8	4,519	228	526.8	736	71.7
6	3,698	232	510.7	680	69.6	3,622	247	512.2	716	62.5
7	3,595	253	518.9	734	76.4	3,504	272	525.4	744	67.9
8	3,473	232	532.1	717	85.5	3,392	247	539.3	732	77.8
9	4,716	253	512.2	721	79.8	4,672	258	513.9	740	71.4
10	3,515	253	535.8	735	77.2	3,482	258	536.2	749	73.3
11	3,082	253	545.9	746	76.8	3,043	258	545.1	760	73.3
12	2,489	294	553.6	758	73.7	2,450	296	553.6	762	71.1

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not-Attempted are excluded.

Table 5.10 Scale Score Summary-Speaking and Writing\*

Our de		8	Speaking	3					Writing		
Grade	N	Min	Mean	Max	SD		N	Min	Mean	Max	SD
К	10,076	291	558.6	756	85.1	-	10,101	309	523.6	727	75.3
1	9,261	265	566.5	736	77.2		9,263	245	530.2	733	88.8
2	8,424	252	542.6	747	73.3		8,413	235	508.3	765	76.6
3	6,474	252	564.8	747	75.7		6,460	235	541.4	765	77.4
4	5,235	237	540.4	736	79.8		5,213	221	506.7	719	75.0
5	4,557	237	547.0	758	83.6		4,521	221	522.6	730	79.2
6	3,638	268	535.6	728	73.1		3,624	243	505.7	686	72.2
7	3,527	283	543.4	731	78.4		3,512	285	516.9	733	78.1
8	3,410	268	551.1	740	87.5		3,393	243	528.0	733	87.8
9	4,667	297	528.7	701	81.5		4,668	263	503.6	713	86.2
10	3,465	297	554.6	729	71.4		3,470	263	528.9	733	80.0
11	3,036	297	565.1	722	67.1		3,027	263	540.2	749	75.7
12	2,437	329	572.2	718	64.6		2,441	292	548.4	767	70.8

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not-Attempted are excluded.

Table 5.11 Scale Score Summary–Comprehension and Overall\*

Cuada		Com	prehens	ion				Overall		
Grade	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
К	10,229	3377	5481.8	6865	553.3	10,239	3185	5441.5	7178	575.6
1	9,385	3428	5449.8	6633	527.9	9,387	3021	5460.6	6998	615.1
2	8,524	3300	5290.9	6729	526.0	8,537	2968	5272.7	7156	570.3
3	6,580	3300	5473.4	6729	551.2	6,584	2968	5491.2	7156	592.3
4	5,319	3298	5216.4	6776	515.0	5,322	2892	5232.1	6861	575.3
5	4,650	3298	5313.1	6878	552.7	4,654	2892	5329.9	6881	609.8
6	3,711	3361	5216.6	6825	483.7	3,722	3052	5219.9	6608	535.0
7	3,607	3361	5292.8	6938	532.9	3,612	3314	5298.7	6952	586.9
8	3,483	3361	5398.8	6835	601.5	3,490	3052	5394.7	6838	661.0
9	4,747	3505	5243.7	7012	543.3	4,782	3235	5216.8	6676	618.8
10	3,538	3505	5406.5	7148	558.3	3,551	3235	5410.3	6907	583.9
11	3,094	3505	5472.2	7148	566.9	3,108	3235	5490.5	6873	566.7
12	2,501	3747	5529.4	7148	555.0	2,514	3560	5549.8	6956	542.2

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table 5.12 Percentage of Students by Performance Level–Listening and Reading\*

Overde			Lister	ning					Read	ing		
Grade	N	1	2	3	4	5	N	1	2	3	4	5
K	10,224	16.1	14.4	49.9	9.4	10.3	10,122	15.5	16.1	39.7	13.5	15.2
1	9,376	8.1	7.6	30.9	24.5	28.9	9,268	26.5	18.6	26.1	12.0	16.8
2	8,522	6.9	4.7	25.5	28.8	34.1	8,427	25.9	15.9	27.2	16.0	15.0
3	6,571	6.5	4.6	24.2	36.1	28.6	6,451	28.4	16.2	34.2	13.1	8.1
4	5,315	8.1	6.3	20.3	38.2	27.1	5,207	21.3	16.6	32.7	17.6	11.8
5	4,644	11.0	8.5	13.4	41.8	25.4	4,519	22.9	17.1	37.8	14.5	7.6
6	3,698	9.9	6.9	22.0	37.9	23.4	3,622	21.5	20.2	37.8	12.1	8.4
7	3,595	15.0	12.1	34.1	23.2	15.6	3,504	29.4	24.9	34.1	7.3	4.3
8	3,473	17.0	9.4	31.3	24.3	18.0	3,392	29.9	22.8	37.1	6.2	4.0
9	4,716	27.3	11.2	34.3	16.9	10.3	4,672	38.3	23.9	32.4	3.3	2.1
10	3,515	17.3	11.8	33.7	20.2	17.0	3,482	28.8	21.6	38.7	6.7	4.2
11	3,082	13.8	12.4	31.0	20.4	22.5	3,043	25.5	21.5	39.0	8.4	5.7
12	2,489	10.4	11.1	32.7	22.2	23.5	2,450	20.3	22.3	41.8	9.4	6.2
Total	69,220	12.2	9.0	30.6	25.7	22.5	68,159	25.0	18.8	34.1	11.8	10.3

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

Table 5.13 Percentage of Students by Performance Level–Speaking and Writing\*

Oue de			Speal	king					Writi	ing		
Grade	N	1	2	3	4	5	N	1	2	3	4	5
K	10,076	18.7	13.5	30.5	14.8	22.5	10,101	44.5	25.6	22.5	3.6	3.8
1	9,261	24.9	24.5	10.0	16.0	24.6	9,263	35.0	19.4	26.8	7.5	11.2
2	8,424	18.1	17.5	15.7	21.4	27.3	8,413	25.2	15.3	29.0	15.9	14.6
3	6,474	14.2	12.0	20.3	27.1	26.4	6,460	26.6	17.2	33.9	14.4	8.0
4	5,235	14.2	10.9	16.9	26.5	31.6	5,213	18.4	12.9	48.4	12.1	8.1
5	4,557	17.5	11.7	25.7	22.0	23.2	4,521	16.1	11.0	57.7	9.6	5.6
6	3,638	14.2	12.8	32.0	22.1	18.9	3,624	14.0	11.5	54.4	12.5	7.6
7	3,527	17.3	13.3	34.2	19.0	16.2	3,512	23.5	19.3	44.9	7.6	4.6
8	3,410	18.0	11.6	31.1	18.3	20.9	3,393	25.6	18.1	43.8	7.5	5.1
9	4,667	26.6	16.3	35.0	12.5	9.6	4,668	35.3	19.4	38.6	4.7	1.9
10	3,465	15.4	16.1	36.0	15.9	16.6	3,470	25.1	18.5	44.9	6.9	4.7
11	3,036	11.0	16.0	35.1	17.3	20.7	3,027	21.8	19.1	43.0	9.9	6.2
12	2,437	8.3	14.1	35.7	19.5	22.5	2,441	16.1	21.4	45.5	9.9	7.1
Total	68,207	17.9	15.3	24.8	19.3	22.6	68,106	27.9	18.1	37.2	9.3	7.4

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

Table 5.14 Percentage of Students by Overall Proficiency Level

Grade	N	Emerging	Progressing	Proficient
K	10,239	20.9	74.3	4.8
1	9,387	13.2	71.5	15.3
2	8,537	10.9	65.3	23.8
3	6,584	10.7	72.9	16.4
4	5,322	13.4	69.0	17.6
5	4,654	17.2	70.5	12.3
6	3,722	15.2	72.3	12.5
7	3,612	22.7	70.7	6.7
8	3,490	23.3	69.8	6.9
9	4,782	35.0	62.1	2.9
10	3,551	25.0	68.9	6.1
11	3,108	22.2	69.2	8.5
12	2,514	17.1	73.3	9.6
Total	69,502	17.9	70.1	12.0

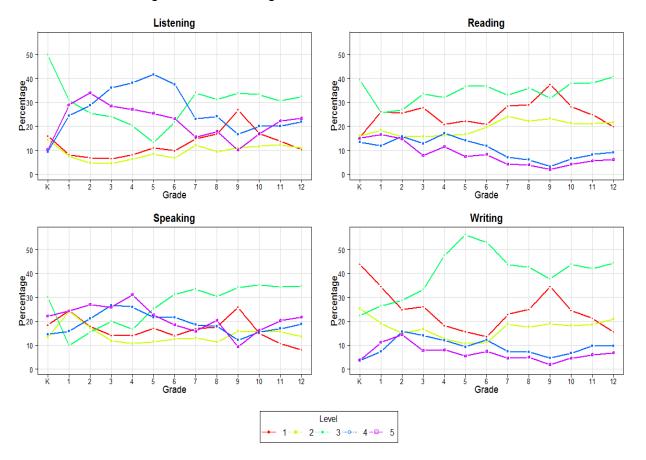


Figure 5.1 Percentage of Students in Performance Levels\*

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

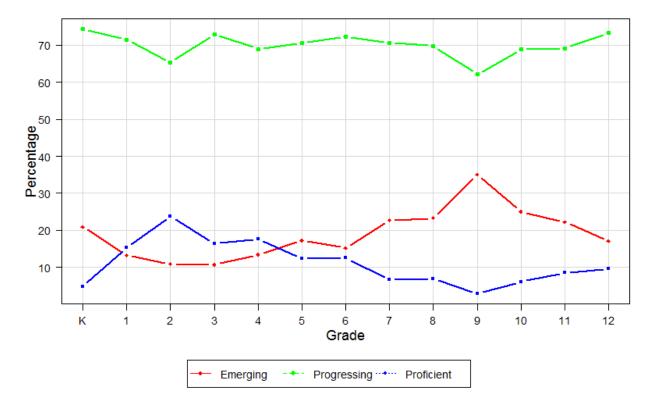


Figure 5.2 Percentage of Students in Proficiency Levels

## 5.3 2021–2022 TESTING TIME FOR ONLINE TESTS

Table 5.10 shows testing time per each grade or grade band. In general, higher-grade tests showed longer testing times than the lower grade. Testing time was computed based on page time for each item, which indicates the time a student spent on each item. The sum of the page time was used for testing time. In this analysis, only students who took online tests and had valid scores on all items were included.

Table 5.15 Testing Time for the 2021–2022 Online Summative Tests

Grade/Grade Band	N	N of				Testing	Time (N	linutes)			
Band	N	Items	Min	P10	P25	P50	P75	P90	Max	Mean	SD
K	9,955	80	4.8	40.0	46.0	54.6	66.5	80.1	214.7	58.1	17.6
1	9,146	83	4.6	41.9	47.8	55.7	66.5	79.2	187.9	58.7	16.1
2-3	14,696	76	11.6	50.1	58.9	71.2	87.2	107.0	398.4	75.9	25.5
4-5	9,635	73	3.5	55.7	66.2	80.9	101.1	126.7	401.7	87.1	31.1
6-8	10,336	74	2.6	63.9	80.5	105.9	141.7	189.8	696.5	118.6	56.3
9-12	13,337	73	4.0	65.2	86.7	119.4	162.9	212.8	651.1	132.1	64.7

## Chapter 6. RELIABILITY

Reliability can be defined as the degree to which individuals' deviation scores remain relatively consistent over repeated administrations of the same test or alternate test forms (Crocker & Algina, 1986). For example, if a person takes the same or parallel tests repeatedly, he or she should receive consistent results. The reliability coefficient refers to the ratio of true score variance to observed score variance:

$$\rho_{XX'} = \frac{\sigma_T^2}{\sigma_X^2}.$$

There are various approaches for estimating the reliability of scores. The conventional approaches used are characterized as follows:

- The *test-retest* method measures stability over time. With this method, the same test is administered twice to the same group at two different points in time. If test scores from the two administrations are highly correlated, then the test scores are deemed to have a high level of stability. For example, if the result is highly stable, those who scored high on the first administration tend to obtain a high score on the second administration. The critical factor, however, is the time interval. The time interval should not be too long, which could allow for changes in the test takers' true scores. Likewise, it should not be too short, in which case memory and practice may confound the results. The test-retest method is most effective for measuring constructs that are stable over time, such as intelligence or personality traits.
- The *parallel-forms* method is used for measuring equivalence. With this design, two parallel forms of the test are administered to the same group. This method requires two similar forms of a test. However, it is very difficult to create two strictly parallel forms. When this method is applied, the effects of memory or practice can be eliminated or reduced, since the tests are not purely identical as with the test-retest method. The reliability coefficient from this method indicates the degree to which the two tests are measuring the same construct. While there are a wide variety of possible items to administer to measure any particular construct, it is only feasible to administer a sample of items on any given test. If there is a high correlation between the scores of the two tests, then inferences regarding high reliability of scores can be substantiated. This method is commonly used to estimate the reliability of achievement or aptitude tests.
- The *split-half* method uses one test divided into two halves within a single test administration. It is crucial to make the two half-tests as parallel as possible, as the correlation between the two half-tests is used to estimate reliability of the whole test. In general, this method produces a coefficient that underestimates the reliability for the full test. To correct the estimate, the Spearman-Brown prophecy formula (Brown, 1910; Spearman, 1910) can be applied. While this method is convenient, varying splits of the items may yield different reliability estimates.

The *internal consistency* method can be employed when it is not possible to conduct repeated test administrations. Whereas other methods often compute the correlation between two separate tests, this method considers each item within a test to be a one-item test. Internal

consistency assesses the correlation/covariance between multiple items in a test that are intended to measure the same construct. There are several other statistical methods based on this idea: Coefficient alpha (Cronbach & Shavelson, 2004), Kuder-Richardson Formula 20 (Kuder & Richardson, 1937), Kuder-Richardson Formula 21 (Kuder & Richardson, 1937), stratified coefficient alpha (Qualls, 1995), and Feldt-Raju coefficient (Feldt & Qualls, 1996; Feldt & Brennan, 1989).

• *Inter-rater reliability* is the extent to which two or more individuals (coders or raters) agree. Inter-rater reliability addresses the consistency of the implementation of a rating system.

Another way to view reliability is to consider its relationship with the standard error of measurement (SEM)—the smaller the standard error, the higher the precision of the test scores. For example, classical test theory assumes that an observed score (X) of each individual can be expressed as a true score (T) plus some error (E), X = T + E. The variance of X can be shown to be the sum of two orthogonal variance components:

$$\sigma_X^2 = \sigma_T^2 + \sigma_E^2.$$

Returning to the definition of reliability as the ratio of true score variance to observed score variance, the following formula can be determined:

$$\rho_{XX'} = \frac{\sigma_T^2}{\sigma_T^2 + \sigma_E^2} = \frac{\sigma_T^2}{\sigma_X^2} = \frac{\sigma_x^2 - \sigma_E^2}{\sigma_X^2} = 1 - \frac{\sigma_E^2}{\sigma_X^2}.$$

As the fraction of error variance to observed score variance approaches 0, the reliability approaches 1.

In contrast to the homoscedastic (uniform) errors assumed in Classical Testing Theory (CTT), the SEMs in item response theory (IRT) vary over the ability continuum. These heterogeneous errors are a function of a test information function (TIF) that provides different information about test takers depending on their estimated abilities. Often, the TIF is maximized over an important performance cut, such as the proficient cut score.

Because the TIF indicates the amount of information provided by the test at different points along the ability scale, its inverse indicates the "lack" of information at different points along the ability scale. This lack of information is the uncertainty, or the SEM, of the score at various score points. Conventionally, fixed-form tests are maximized near the middle of the score distribution, or near an important classification cut, and have less information at the tails of the score distribution.

In this chapter, test reliability for the OELPA summative tests was provided using

- Cronbach's alpha;
- marginal SEM;
- marginal reliability;
- conditional standard error of measurement (CSEM);
- classification accuracy and consistency; and

• inter-rater analysis.

The following sections describe the methods used in the computation. The results for the 2021–2022 OELPA summative assessment were provided in this chapter and Sections 6–8 of Appendix Part I.

- Section 6. Summative Assessment—Marginal Reliability
  - Figure S6.1 presents the marginal reliability by gender for each domain test across grades.
  - Figure S6.2 presents the marginal reliability by ethnicity for each domain test across grades.
  - Figures S6.3 and S6.4 present the marginal reliability by Individualized Education Program (IEP) and primary disability for each domain test across grades, respectively.
- Section 7. Summative Assessment—CSEM
  - Figures S7.1–S7.13 show the CSEM plots for each domain, overall, and comprehension tests for each grade.
- Section 8. Summative Assessment—Inter-Rater Analysis
  - Tables S8.1–S8.6 display the inter-rater analysis result for each handscored item in each grade or grade band.

### **6.1 Internal Consistency**

Cronbach's alpha (Cronbach & Shavelson, 2004) is used to access the internal consistency of items in each test for each domain. In other words, Cronbach's alpha refers to the extent to which it is a consistent measure of a concept, in this case, each domain. A high Cronbach's alpha coefficient indicates that the items in the domain measure the same underlying concept (i.e., listening, reading, writing, and speaking).

The paper-pencil and braille forms are excluded from the analysis due to their small size.

Table 6.1 and Figure 6.1 show the result of analysis on Cronbach's alpha for each domain test. The Cronbach's alpha value for each domain was computed using the items from that domain. The reading domain in kindergarten has the lowest alpha coefficient, 0.77. According to Nunnally (1978), 0.7 is the minimum acceptable alpha coefficient, so all domain tests meet the minimum acceptable requirement.

Table 6.16 Cronbach's Alpha

Grade	Listening	Reading	Speaking	Writing	Overall
K	.82	.77	.90	.91	.94
1	.83	.87	.84	.94	.95
2	.84	.84	.82	.86	.94
3	.86	.85	.83	.86	.94
4	.85	.83	.87	.87	.94
5	.86	.85	.88	.87	.94
6	.90	.80	.85	.89	.94
7	.91	.83	.87	.90	.95
8	.93	.86	.88	.91	.96
9	.89	.81	.91	.90	.95
10	.88	.84	.87	.88	.95
11	.88	.85	.86	.86	.95
12	.87	.85	.84	.84	.94

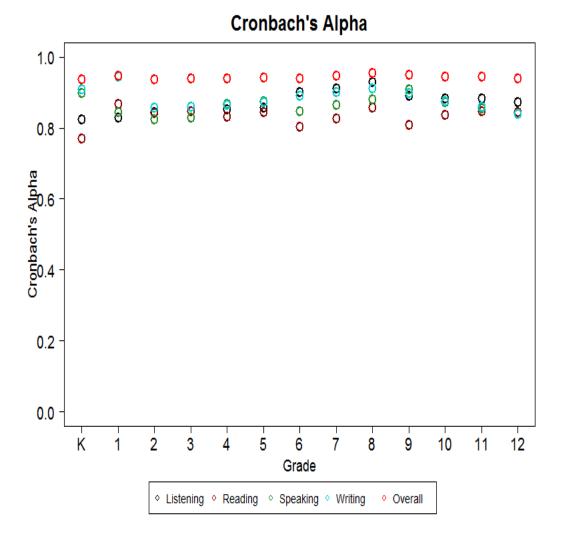


Figure 6.3 Cronbach's Alpha by Domain and Overall

### 6.2 MARGINAL STANDARD ERROR OF MEASUREMENT

Another way to examine score reliability is with the marginal standard error of measurement (MSEM) (or  $\bar{\sigma}_{error}^2$ ). MSEM is computed as the square root of  $\bar{\sigma}_{error}^2$ , which is the average of the squared standard errors measurement of the IRT-based scale scores obtained by applying the ELPA21 scoring procedures. Smaller values of MSEM indicate that the estimated test scores have greater precision, on average. The marginal reliability  $\bar{\rho} = 1 - \frac{\bar{\sigma}_{error}^2}{\sigma_{total}^2}$ , (see Section 6.3 on the following page), and the test MSEM are inversely related. The ratio of MSEM and the standard deviation of scale scores (i.e., signal-noise ratio) can also indicate the measurement errors. In other words, it shows the ratio of the error and total score ( $\frac{\sigma_{error}}{\sigma_{total}}$ ). The analysis for the ratio is displayed in Figure 6.2.

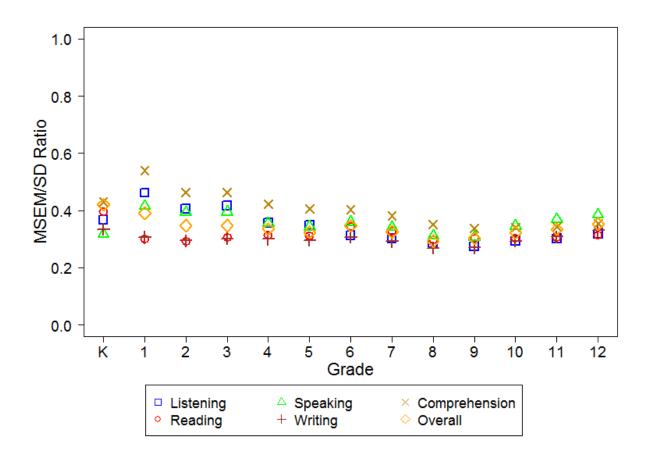


Figure 6.4 Ratio of Marginal Standard Error of Measurement to Standard Deviation of Estimated Scale Scores by Grade and Domain

# 6.3 MARGINAL RELIABILITY AND CONDITIONAL STANDARD ERROR OF MEASUREMENT

Marginal reliability (Sireci, Thissen, & Wainer, 1991) assesses scoring precision. It is based on the average of the CSEMs for the estimated theta scores. By definition, marginal reliability is the proportion of true score variance among the observed score variances. While Cronbach's alpha was computed using item-level scores, marginal reliability was estimated by using expected a posteriori (EAP) estimates, which were used to estimate the domain scores. EAP is the estimate of true score, but its variance underestimates the true score variance, so the marginal reliability within domain can be estimated by

$$\bar{\rho} = \left(\frac{\sigma_{EAP}^2}{\sigma_{total}^2}\right) = 1 - \frac{\bar{\sigma}_{error}^2}{\sigma_{total}^2}$$

where  $\bar{\sigma}_{error}^2$  is the average error variance (variance of the measurement error),  $\sigma_{total}^2 = \sigma_{EAP}^2 + \bar{\sigma}_{error}^2$ , and  $\sigma_{EAP}^2$  is the variance of the EAP estimate.

<sup>\*</sup> Domains tests with Exemption or Not-Attempted are excluded.

The maximum value for the marginal reliability is 1. A higher reliability coefficient indicates greater scoring precision. The marginal reliability for the 2021–2022 OELPA summative tests is presented in Table 6.2 and Figure 6.3. The marginal reliabilities by domain were obtained using the domain scores based on the MIRT models, and the overall/comprehension marginal reliabilities were obtained using the overall/comprehension scores based on the bi-factor models. The results show that the listening tests at grades 1–3 have the lowest reliabilities, followed by the speaking tests. The reliability for the speaking domain in the middle and high school tests are lower than the other domains. All the reliability indices are above 0.8, except for the listening tests in grade 1. In addition, Section 6 of Appendix Part I presents marginal reliability by gender, ethnicity, IEP, and primary disability, and Section 5 displays CSEM plots by grades. Groups with fewer than 50 students were excluded from the plots of marginal reliability by groups.

Table 6.17 Marginal Reliability\*

Grade	N	Listening	Reading	Speaking	Writing	Comprehension	Overall
К	10,050	.87	.84	.90	.89	.81	.82
1	9,227	.79	.91	.83	.91	.71	.85
2	8,386	.84	.91	.85	.91	.79	.88
3	6,412	.83	.91	.84	.91	.79	.88
4	5,186	.87	.90	.87	.91	.82	.89
5	4,491	.88	.90	.88	.91	.83	.90
6	3,581	.90	.88	.87	.91	.84	.88
7	3,471	.91	.89	.88	.91	.85	.89
8	3,350	.92	.91	.90	.93	.88	.91
9	4,590	.92	.91	.91	.93	.89	.91
10	3,416	.91	.91	.88	.91	.88	.90
11	2,996	.91	.91	.86	.91	.88	.89
12	2,407	.90	.90	.85	.89	.87	.88

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

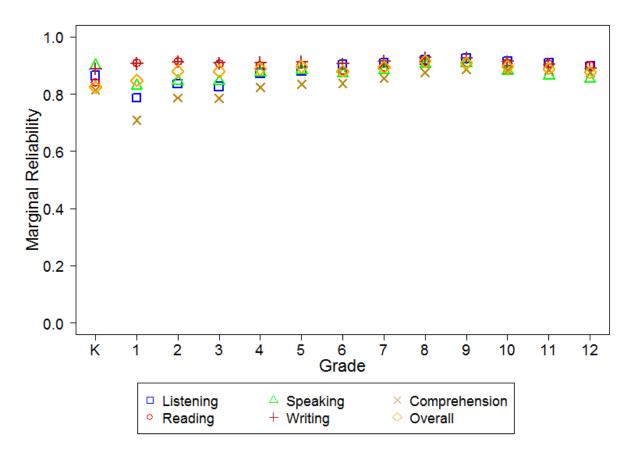


Figure 6.5 Marginal Reliability by Test\*

### **6.4 CLASSIFICATION ACCURACY AND CONSISTENCY**

When student performance is reported in terms of achievement levels, a reliability of achievement classification is computed in terms of the probabilities of consistent classification of students as specified in Standard 2.16 in the *Standards for Educational and Psychological Testing* (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014).

Classification accuracy (CA) analysis investigates how accurately students are classified into each performance level. The accuracy of proficiency classifications indicates the extent to which the proficiency classifications exactly agree with the classifications that might be made on test takers' true scores. The accuracy index is based on an estimated joint distribution of reported scores on the current form of the exam and the scores based on an all-forms average (true score).

Classification consistency (CC) analysis investigates how consistently students are classified into each performance level across two independent administrations of equivalent forms. The consistency of proficiency classifications indicates the extent to which the proficiency classifications agree exactly with the classification that might be made on an alternate version of

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

the exam. The consistency index is based on an estimated joint distribution of scores on the specified form of the exam and the scores on an alternate (parallel) form of the exam. Since obtaining test scores from two independent administrations is not feasible due to issues such as logistics and cost constraints, the CC index is computed with the assumption that the same test is independently administered twice to the same group of students. Classification consistency rates can be lower than classification accuracy because consistency is based on two tests with measurement errors, while accuracy is based on one test with a measurement error and the true score. The accuracy and consistency rates for each performance level are higher for the levels with smaller standard error.

For OELPA, since the overall proficiency is based on domain performance level, the CA and CC are examined at each cut score in each domain test. Five performance levels divided by four cut scores, cuts 1–4, are established for each domain test. Forms with an *n* count fewer than 50 are excluded from the analysis; for this reason, the paper-pencil and braille forms are excluded.

In general, the CA and CC can be estimated using the following approach.

At domain Level 1, the marginal posterior distribution of student i can be approximated as a normal distribution with mean equal to the estimated  $\hat{\theta}_i$  and standard deviation of SEM  $se(\hat{\theta}_i)$ . That is,  $\hat{\theta}_i \sim N\left(\theta_i, se(\hat{\theta}_i)\right)$ . Let  $p_{il}$  be the probability of the true score at Performance Level 1 for the  $i^{th}$  student, and  $p_{il}$  for student i can be estimated as follows:

$$\begin{split} p_{il} &= \ p(c_{l-1} \leq \theta_i < c_l) = p\left(\frac{c_{l-1} - \widehat{\theta}_i}{se(\widehat{\theta}_i)} \leq \frac{\theta_i - \widehat{\theta}_i}{se(\widehat{\theta}_i)} < \frac{c_l - \widehat{\theta}_i}{se(\widehat{\theta}_i)}\right) = p\left(\frac{\widehat{\theta}_i - c_l}{se(\widehat{\theta}_i)} < \frac{\widehat{\theta}_i - \theta_i}{se(\widehat{\theta}_i)} \leq \frac{\widehat{\theta}_i - c_{l-1}}{se(\widehat{\theta}_i)}\right) \\ &= \Phi\left(\frac{\widehat{\theta}_i - c_{l-1}}{se(\widehat{\theta}_i)}\right) - \Phi\left(\frac{\widehat{\theta}_i - c_l}{se(\widehat{\theta}_i)}\right). \end{split}$$

For Level 1,  $c_0 = -\infty$ , and for Level L,  $c_L = \infty$ . If scaled score is to be used, the formula provided can be used based on the scale score distribution.

For proficiency categories, the probability of a particular profile is obtained by integrating over the posterior distribution of the assessed domains. Similar to the case provided for individual domains, this posterior can be approximated as a multivariate normal distribution with means equal to the vector of score estimates  $\widehat{SS}_l$  and covariance equal to the error variance-covariance matrix  $\Sigma(\widehat{SS}_l)$ , the diagonal of which provides the squared SEMs for the estimated scores:

$$P(SS|y_i) \sim MVN(\widehat{SS}_i, \Sigma(\widehat{SS}_i)),$$

where  $y_i$  is the pattern of item responses across all domains. The  $4 \times 1$  vector of score estimates  $\widehat{\boldsymbol{\theta}}_i$  and the  $4 \times 4$  error covariance matrix  $\Sigma(\widehat{\boldsymbol{\theta}}_i)$  may be obtained from the scoring output from software capable of performing multidimensional IRT scoring;  $\widehat{\boldsymbol{SS}}_i$  and  $\Sigma(\widehat{\boldsymbol{SS}}_i)$  may, in turn, be obtained by applying the transformations described earlier. The probability of a specific performance profile is obtained by integrating over the multivariate posterior distribution over the ranges of scores defining the performance level in each domain. For most students (those without exemptions), the computation is as follows:

$$\hat{p}_{i,(e,f,g,h)} \underbrace{\text{cut}_{(e+1),\text{listening cut}_{(f+1),\text{listening cut}_{(g+1),\text{listening cut}_{(g+1),\text{listening cut}_{(h+1),\text{listening cut}_$$

where e, f, g, and h are the performance levels for listening, reading, speaking, and writing, respectively. Additionally,  $\text{cut}_{1,d} = -\infty$  and  $\text{cut}_{6,d} = \infty$ .

The probability of a particular overall determination, given the response pattern  $y_i$  can be estimated by adding up the probabilities associated with each profile receiving that determination:

$$\hat{p}_i = \Sigma_{L_i \in \mathfrak{I}_D} p_{i,(e,f,g,h)},$$

where  $\mathfrak{I}_D$  is the set of performance-level profiles that are assigned the overall determination D, as described in Chapter 3.

To compute CA and CC for domain performance levels, let  $p_{il}$  be the probability of the true score at Performance Level 1 for the  $i^{th}$  student, and define the following matrix based on L performance levels ( $L \times L$  matrix)

$$\begin{pmatrix} n_{a11} & \cdots & n_{a1m} \\ \vdots & \vdots & \vdots \\ n_{al1} & \cdots & n_{alm} \end{pmatrix}$$

where  $n_{alm}$  is the sum of the probabilities for each expected performance level at each observed performance level (the level actually assigned). In the matrix, the row represents the observed level, and the column represents the expected level.

Based on the previous matrix, the CA for the cut  $c_l$   $(l=1,\cdots,L-1)$  is

$$CA_{c_l} = \frac{\sum_{k,m=1}^{l} n_{akm} + \sum_{k,m=l+1}^{L} n_{akm}}{N}$$

where *N* is the total number of students.

The overall classification accuracy is computed as

$$CA = \frac{\sum_{i=1}^{L} n_{aii}}{N}.$$

The CA for a single cut, for example, the CA at cut 2, is the sum of the  $n_{alm}$  values in blue  $(\sum_{k,m=1}^{l} n_{akm})$  assigned in the levels equal to or below cut 2 at both expected and observed levels and in green  $(\sum_{k,m=l+1}^{L} n_{akm})$  assigned in the levels above cut 2 at both expected and observed levels divided by the total number of students.

$$\begin{pmatrix} n_{a11} & n_{a12} & n_{a13} & \cdots & n_{a1L} \\ n_{a21} & n_{a22} & n_{a23} & \cdots & n_{a2L} \\ n_{a31} & n_{a32} & n_{a33} & \cdots & n_{a3L} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ n_{a51} & n_{a52} & n_{a53} & \cdots & n_{a5L} \end{pmatrix}$$

For CC using  $p_{il}$ , similar to CA, a similar  $L \times L$  table is constructed by assuming the test is administered twice independently to the same student group,

$$\begin{pmatrix} n_{c11} & \cdots & n_{c1L} \\ dots & dots & dots \\ n_{cI1} & \cdots & n_{cII} \end{pmatrix}$$

where  $n_{clm} = \sum_{i=1}^{N} p_{il} p_{im}$ , which is the sum of the probabilities multiplied by each paired combination of performance.  $p_{im}$  can be computed based on the same equation for  $p_{il}$  described previously.

The CC for the cut  $c_l$   $(l = 1, \dots, L - 1)$  is:

$$CC_{c_l} = \frac{\sum_{k,m=1}^{l} n_{ckm} + \sum_{k,m=l+1}^{L} n_{ckm}}{N}.$$

Similarly, CC can be estimated for a single cut. The overall classification consistency is computed as:

$$CC = \frac{\sum_{i=1}^{L} n_{cii}}{N}.$$

The computation of CA and CC for overall proficiency categories follows the same procedure as that for domain performance levels, as described previously.

The CA and CC indices are affected by the interaction of the magnitude of se  $(\theta)$ , the distance between adjacent cuts, the location of the cuts on the ability scale, and the proportion of students around a cut point. The larger the se $(\theta)$ , the closer the two adjacent cuts, and the greater the proportion of students around a cut point, the lower the indices.

Table 6.3 shows overall classification accuracy and consistency for domain performance levels, and the analysis results for each cut are presented in Table 6.4 and Figure 6.4 as well as Table 6.5 and Figure 6.5. CC rates can be lower than CA because CC is based on two tests with measurement errors, while CA is based on one test with a measurement error and the estimated true score. The CA and CC rates for each performance level are higher for the levels with a smaller standard error. Also, the CA and CC indices for the overall proficiency categories are lower than that of each performance level due to multiple cuts. For each cut, all CAs are above 0.84 and all CCs are above 0.78. In listening and speaking, both indices for cut 3 and/or cut 4 are relatively lower in elementary grades, which indicates lack of difficult items.

The classification accuracy and consistency results for overall proficiency levels are summarized in Table 6.6 and Figure 6.6. All CAs and CCs are above 0.85 for overall and above 0.89 for each

proficiency level cut. The CA indices for proficiency cut 1 are higher than those for cut 2 in all grades except for grades K, 9, and 10. The CC indices for proficiency cut 1 are higher than those for cut 2 in all grades except for grades K, 9, and 10.

Table 6.18 Summative Overall Classification Accuracy and Consistency for Domain Performance Levels, by Grade and Domain

Crada		Accu	racy			Consis	tency	
Grade	Listening	Reading	Speaking	Writing	Listening	Reading	Speaking	Writing
К	.72	.66	.68	.79	.63	.56	.59	.71
1	.64	.73	.58	.73	.54	.64	.51	.65
2	.70	.72	.58	.72	.60	.63	.50	.63
3	.69	.72	.58	.70	.58	.63	.49	.61
4	.73	.71	.63	.75	.62	.61	.54	.67
5	.72	.73	.62	.79	.63	.64	.52	.71
6	.76	.70	.62	.76	.67	.60	.52	.68
7	.73	.74	.64	.74	.64	.65	.54	.66
8	.74	.77	.67	.76	.65	.69	.58	.68
9	.76	.80	.70	.78	.67	.72	.61	.70
10	.73	.77	.66	.75	.64	.69	.56	.67
11	.73	.76	.65	.72	.63	.67	.55	.64
12	.72	.74	.64	.71	.63	.65	.54	.62

Table 6.19 Classification Accuracy for Each Cut\*

		Liste	ning			Read	ding			Spea	ıking			Wri	ting	
Grade	Cut 1	Cut 2	Cut 3	Cut 4												
К	.95	.91	.90	.93	.94	.90	.88	.91	.96	.92	.88	.89	.91	.94	.95	.96
1	.97	.94	.85	.85	.92	.93	.94	.94	.90	.85	.84	.86	.95	.91	.91	.93
2	.98	.96	.88	.86	.93	.93	.92	.93	.92	.87	.85	.86	.94	.93	.91	.93
3	.98	.97	.88	.85	.95	.92	.90	.94	.95	.89	.84	.85	.94	.91	.90	.93
4	.97	.96	.91	.88	.93	.92	.91	.94	.96	.92	.87	.85	.96	.93	.90	.94
5	.97	.95	.92	.88	.95	.92	.91	.94	.95	.91	.85	.87	.97	.95	.91	.95
6	.98	.96	.92	.90	.92	.90	.92	.96	.96	.91	.85	.88	.97	.94	.90	.94
7	.97	.95	.89	.91	.92	.91	.94	.97	.96	.90	.86	.89	.95	.90	.92	.96
8	.98	.96	.89	.90	.94	.92	.94	.96	.96	.92	.87	.89	.95	.91	.93	.96
9	.95	.94	.92	.94	.93	.92	.97	.98	.95	.91	.89	.92	.95	.91	.95	.97
10	.96	.95	.90	.91	.93	.92	.94	.97	.96	.91	.87	.89	.95	.91	.93	.96
11	.96	.95	.91	.90	.93	.92	.93	.96	.96	.91	.86	.88	.94	.91	.91	.94
12	.97	.95	.90	.90	.94	.92	.93	.95	.97	.92	.85	.87	.94	.90	.91	.94

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

\* Cuts 1 to 4 fall between Performance Levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

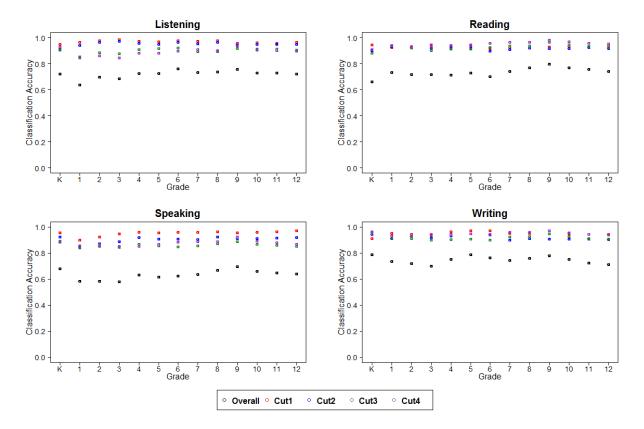


Figure 6.6 Domain Classification Accuracy\*

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

\* Cuts 1 to 4 fall between Performance Levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

Table 6.20 Classification Consistency for Each Cut\*

		Liste	ning			Rea	ding			Spea	ıking			Writ	ting	
Grade	Cut 1	Cut 2	Cut 3	Cut 4												
К	.92	.88	.87	.90	.92	.86	.84	.87	.94	.89	.84	.85	.87	.92	.94	.95
1	.95	.91	.79	.79	.89	.90	.91	.91	.85	.78	.78	.80	.93	.87	.88	.90
2	.97	.95	.83	.81	.90	.90	.89	.91	.89	.82	.79	.81	.92	.90	.88	.90
3	.97	.96	.83	.79	.92	.89	.86	.91	.92	.84	.78	.79	.92	.88	.86	.91
4	.96	.94	.87	.84	.91	.89	.88	.92	.94	.89	.81	.80	.95	.90	.87	.92
5	.96	.93	.88	.84	.92	.89	.88	.92	.93	.87	.80	.82	.96	.92	.87	.93
6	.97	.95	.89	.86	.88	.86	.89	.94	.94	.86	.79	.84	.96	.91	.86	.92
7	.96	.93	.85	.87	.89	.87	.91	.95	.94	.86	.80	.84	.93	.86	.89	.94
8	.97	.95	.85	.86	.91	.89	.91	.95	.95	.89	.82	.84	.93	.87	.90	.94
9	.94	.92	.88	.91	.90	.88	.95	.97	.93	.87	.84	.89	.92	.87	.92	.96
10	.94	.92	.87	.88	.91	.88	.92	.95	.94	.87	.82	.85	.92	.87	.90	.94
11	.94	.93	.88	.86	.91	.89	.91	.94	.95	.88	.81	.83	.92	.87	.88	.92
12	.95	.93	.86	.86	.91	.88	.90	.93	.96	.88	.79	.82	.92	.86	.87	.91

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

\* Cuts 1 to 4 fall between Performance Levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

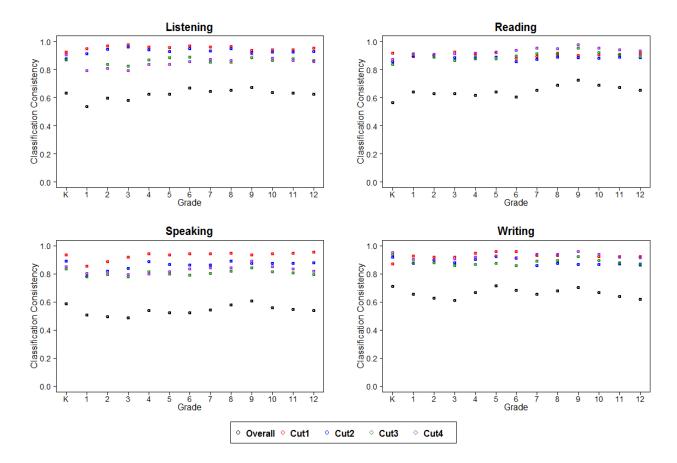


Figure 6.7 Domain Classification Consistency\*

<sup>\*</sup> Domain tests with Exemption or Not-Attempted are excluded.

\* Cuts 1 to 4 fall between Performance Levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

Table 6.21 Summative Classification for Proficiency Levels

		Accuracy			Consistency	
Grade	Overall	Between Emerging and Progressing	Between Progressing and Proficient	Overall	Between Emerging and Progressing	Between Progressing and Proficient
К	.92	.95	.97	.89	.93	.96
1	.88	.95	.93	.85	.94	.91
2	.88	.97	.91	.85	.96	.89
3	.89	.98	.92	.86	.97	.90
4	.89	.97	.92	.86	.96	.90
5	.90	.97	.93	.87	.96	.91
6	.91	.97	.94	.88	.96	.92
7	.92	.96	.96	.89	.95	.95
8	.92	.97	.96	.90	.96	.95
9	.93	.96	.98	.91	.94	.97
10	.91	.95	.96	.89	.94	.95
11	.90	.95	.95	.87	.94	.93
12	.90	.96	.94	.87	.94	.92

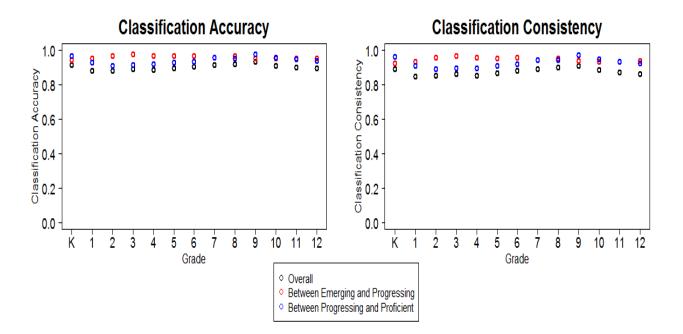


Figure 6.8 Proficiency Classification

### 6.5 INTER-RATER ANALYSIS

The fidelity of handscoring was monitored by having a subset of student responses independently scored by two raters. Each student response was scored holistically by a trained and qualified rater using the scoring criteria developed and approved by ELPA21, with a second read conducted on 20% of responses for the summative test for each task type. Responses were selected randomly for second readings and scored by raters who were not aware of the score assigned by the first rater or even that the response had been scored previously. The rater pool consisted of teachers, test administrators (TAs), school administrators, or other qualified school staff. The detailed information of handscoring QA, including scorer qualifications, is described in Section 9.2.2.

In the 2021–2022 OELPA summative assessment, 11 handscored items in kindergarten, nine handscored items in grade 1, and 13 handscored items in each of the other grade-band online tests were scored by second raters. Twenty percent of handscores were monitored by second raters. For the screener assessment, OELPS used local TAs for scoring, and therefore, there were no second rater scores.

Handscorer score reliability was examined using Cohen's quadratic weighted Kappa coefficient. The coefficient is a measure of agreement corrected for chance and allows differential weighting of disagreement. In addition, the frequencies and percentages of the exact match between first rater and second rater, the exact match plus +1/-1 score differences, and +2/-2 and above differences were computed. Handscored items on paper and braille forms were not included in the results.

Table 6.7 contains the summary of Kappa coefficients for each test. The table shows that 55.4%—94.8% of handscores were consistent between the first rater and the second rater, and 0.2%—5.2% of handscores were off by two or more points across the six tests. Agreement tended to decrease

as the number of possible score points increased. The weighted Kappa coefficients ranged from 0.68 to 0.93.

The inter-rater consistencies were also assessed by item and are summarized in Section 8 of Appendix Part I.

Table 6.22 Overall Inter-Rater Analysis

Grade/Grade	Grade/Grade Score Number Band Points of Items		Weig Kar		% Ex		% wit Agree		% Not w Agree	
Banu	Points	or items	Min	Max	Min	Max	Min	Max	Min	Max
ĸ	2	6	.706	.825	73.2	91.7	96.3	99.0	1.0	3.7
, ,	3	5	.794	.837	66.7	75.9	98.4	99.3	0.7	1.6
	2	5	.680	.861	81.0	94.8	98.1	99.8	0.2	1.9
1	3	2	.703	.880	68.3	82.9	98.0	99.0	1.0	2.0
	4	1	.766	.766	64.9	64.9	96.8	96.8	3.2	3.2
	5	1	.854	.854	57.0	57.0	96.7	96.7	3.3	3.3
	2	5	.684	.773	84.0	91.8	98.9	99.8	0.2	1.1
2-3	3	4	.784	.886	67.0	80.7	98.5	98.8	1.2	1.5
2-3	4	3	.861	.872	70.6	73.3	95.0	99.4	0.6	5.0
	5	1	.824	.824	59.3	59.3	96.5	96.5	3.5	3.5
	3	8	.688	.930	64.9	92.7	97.9	99.5	0.5	2.1
4-5	4	1	.788	.788	59.0	59.0	96.1	96.1	3.9	3.9
	5	4	.779	.857	56.6	70.8	94.6	97.0	3.0	5.4
6-8	3	8	.741	.893	62.5	81.4	97.0	99.7	0.3	3.0
0-0	5	5	.826	.877	59.5	73.4	96.9	98.5	1.5	3.1
0.42	3	8	.766	.869	65.5	79.8	97.8	99.4	0.6	2.2
9-12	5	5	.836	.900	55.4	73.2	94.8	98.9	1.1	5.2

# Chapter 7. Validity

Validity refers to the degree to which "evidence and theory support the interpretations of test scores entailed by proposed uses of tests" (AERA, APA, & NCME, 2014). Messick (1989) defines validity as "an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales supports the adequacy and appropriateness of inferences and actions based on test scores and other modes of assessment." Both definitions emphasize evidence and theory to support inferences and interpretations of test scores. The Standards (AERA, APA, & NCME, 2014) suggests five sources of validity evidence that can be used in evaluating a proposed interpretation of test scores. When validating test scores, these sources of evidence should be carefully considered.

The first source of evidence for validity is the relationship between the test content and the intended test construct. For test score inferences to support a validity claim, the items should be representative of the content domain, and the content domain should be relevant to the proposed interpretation of test scores. To determine content representativeness, diverse panels of content experts conduct alignment studies, in which experts review individual items and rate them based on how well they match the test specifications or cognitive skills required for a particular construct (discussions about test development, form construction, scaling, equating, and standard setting can be found in related ELPA21 documents).

Test scores can be used to support an intended validity claim when they contain minimal construct-irrelevant variance. For example, a mathematics item targeting a specific mathematics skill that requires advanced reading proficiency and vocabulary has a high level of construct-irrelevant variance. Thus, the intended construct of measurement is confounded, which impedes the validity of the test scores. Statistical analyses, such as factor analysis or multidimensional scaling of relevance, are also used to evaluate content relevance. Evidence based on test content is a crucial component of validity because construct underrepresentation or irrelevancy could result in unfair advantages or disadvantages to one or more groups of test takers (see Section 7.1, Dimensionality Analysis).

The second source of evidence for validity is based on "the fit between the construct and the detailed nature of performance or response actually engaged in by examinees" (AERA, APA, & NCME, 2014). This evidence is collected by surveying test takers about their performance strategies or responses to particular items. Because items are developed to measure particular constructs and intellectual processes, evidence that test takers have engaged in relevant performance strategies to correctly answer the items supports the validity of the test scores.

The third source of evidence for validity is based on internal structure: the degree to which the relationships among test items and test components relate to the construct on which the proposed test scores are interpreted. Differential item functioning, which determines whether particular items may function differently for subgroups of test takers, is one method for analyzing the internal structure of tests. Other possible analyses to examine internal structure are dimensionality assessment, goodness-of-model-fit to data, and reliability analysis (see Chapter 6, Reliability, for details).

A fourth source of evidence for validity is the relationship of test scores to external variables. The Standards (AERA, APA, & NCME, 2014) divides this source of evidence into three parts:

convergent and discriminant evidence, test-criterion relationships, and validity generalization. Convergent evidence supports the relationship between the test and other measures intended to assess similar constructs. Conversely, discriminant evidence delineates the test from other measures intended to assess different constructs. To analyze both convergent and discriminant evidence, a multi-trait multi-method matrix can be used. Additionally, test-criterion relationships indicate how accurately test scores predict criterion performance. The degree of accuracy mainly depends upon the purpose of the test, such as classification, diagnosis, or selection. Test-criterion evidence is also used to investigate predictions of favoring different groups. Due to construct underrepresentation or construct-irrelevant components, the relation of test scores to a relevant criterion may differ from one group to another. Furthermore, validity generalization is related to whether the evidence is situation-specific or can be generalized across different settings and times. For example, sampling errors or range restriction may need to be considered to determine whether the conclusions of a test can be assumed for the larger population.

The fifth source of evidence for validity is based on whether the intended and unintended consequences of the test use should be included in the test validation process. Determining the validity of the test should depend upon evidence directly related to the test; this process should not be influenced by external factors. For example, if an employer administers a test to determine hiring rates for different groups of people, an unequal distribution of skills related to the measurement construct does not necessarily imply a lack of validity for the test. However, if the unequal distribution of scores is in fact due to an unintended, confounding aspect of the test, this would interfere with the test's validity. As described in this document, test use should align with the intended purpose of the test.

Supporting a validity argument requires multiple sources of validity evidence. This then allows for one to evaluate if sufficient evidence has been presented to support the intended uses and interpretations of the test scores. Thus, determining the validity of a test first requires an explicit statement regarding the intended uses of the test scores, and subsequently, evidence that the scores can be used to support these inferences. In this technical report, the standardized test administration can be found in Chapter 2, scoring in Chapter 3, reporting in Chapter 8, and quality control in Chapter 9.

In this chapter, validity for the summative assessment is measured by examining the internal structure of the items and the comparison of student abilities versus the difficulty of the items. The domain test internal structure is measured using domain dimensionality. The appropriateness of the assessment for the student population is assessed by comparing student abilities with test difficulties.

Additional results for assessing validity are summarized in the Sections 9–10 in Appendix Part I:

- Section 9. Summative Assessment—Dimensionality
  - o Figures S9.1–S9.6 present the scree plots for each domain test. If a test involves multiple forms, the plots are broken down by grade.
- Section 10. Summative Assessment—Ability vs. Difficulty

o Figures S10.1–S10.6 present the comparison of student ability vs. test difficulty on the logit scale for each domain test for each grade or grade band of students, respectively.

#### 7.1 DIMENSIONALITY ANALYSIS

The graded response model (Samejima, 1969) used for operational scoring of ELPA21 assumes that the domain tests are essentially unidimensional. For OELPA, a principal component analysis (PCA) with an orthogonal rotation method (Jolliffe, 2002; Cook, Kallen, & Amtmann, 2009) was used to investigate the dimensionality for each domain test.

The results are presented in the scree plots in Section 9 in Appendix Part I. at the domain level, the graphs show that the magnitude of the first eigenvalue is always noticeably larger than the magnitude of the second factor in all tests, which indicates that each domain test has one dominant factor, consistent with the assumption of essential unidimensionality within domains. At the overall test level, eigenvalues for the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> factors are all much larger than 1, which is the strong indicator of multidimensionality, consistent with the assumptions about multidimensionality at the overall test level.

### 7.2 STUDENT ABILITIES VS. TEST DIFFICULTIES

When student abilities are well matched to test difficulties, the measurement errors are reduced. Therefore, it is desired that the test difficulty matches student ability. To examine this aspect of the test, domain difficulties were plotted versus student abilities.

The results are included in Section 10 in Appendix Part I. It shows that student abilities are generally higher than test difficulties in all domain tests, except the writing test in kindergarten and the reading tests in grades 9–12. This leads to lower reliability (greater CSEM) at the higher ranges of the ability distribution. Adding more difficult items would alleviate this problem. In grades 9–12 writing, the test difficulties match student abilities well.

# **Chapter 8. Reporting**

The Ohio English Language Proficiency Assessment (OELPA) results were available in the Centralized Reporting System (CRS) for schools and districts to print out and CRS-generated paper family reports to be sent home with the students. Ohio also ordered summative paper score reports that were shipped to districts.

### 8.1 CENTRALIZED REPORTING SYSTEM

The CRS generates a set of online score reports describing student performance for students, parents, educators, and other stakeholders, for both the summative and screener assessments. Because the score reports on individual and aggregate student performance are updated each time students complete tests, authorized users (e.g., school principals, teachers) can view student performance on the tests and use the results to improve student learning. In addition to the individual student's score report, the CRS produces aggregate score reports for teachers, schools, districts, and states. Additionally, the CRS allows users to monitor the student participation rate.

Furthermore, to facilitate comparisons, each aggregate report contains summary results for the selected aggregate unit, as well as all aggregate units above the selected aggregate. For example, if a school is selected, the summary results of the district to which the school belong and the summary results of the state are also provided so that school performance could be compared with district and state performance. If a teacher is selected, the summary results for the school, the district, and the state are also provided for comparison purposes. Table 8.1 shows the typical types of online reports and the levels at which they can be viewed (student, roster, teacher, school, and district).

Table 8.23 Types of Online Score Reports by Level of Aggregation

Level of Aggregation	Types of Online Score Reports
State District School Teacher Roster	Number of students tested and percentage of students determined proficient (overall and by subgroup)  Average composite scale scores (overall and comprehension) and standard errors of the averages (overall and by subgroup)  Percentage of students at each domain performance level (overall and by subgroup)  Average domain scale scores (listening, reading, speaking, and writing) and standard errors of the averages (overall and by subgroup)  On-demand student roster report
Student	Overall and comprehension scale scores and standard errors of the scale scores Proficiency status based on the domain performance levels Domain scale scores with domain performance levels and level descriptors

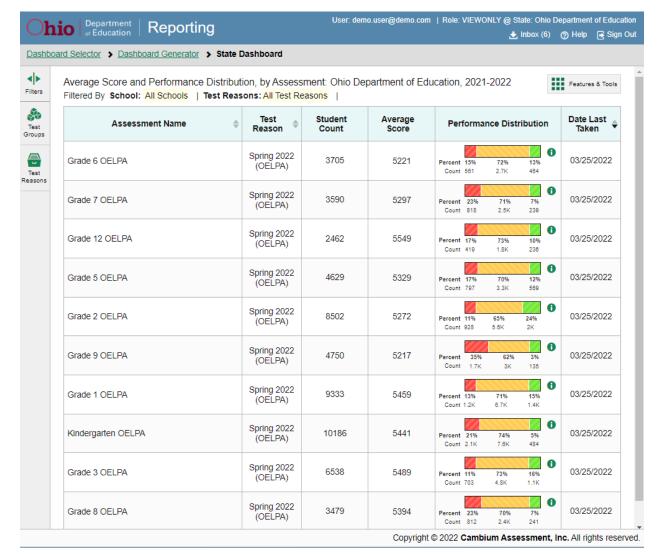
# **8.1.1** Types of Centralized Score Reports

The CRS was designed to help educators, students, and parents answer questions regarding how well students have performed on the assessment for each domain. The CRS was designed with great consideration for stakeholders who are not technical measurement experts (e.g., teachers, parents, students). It ensures that test results are easy to interpret and accessible. Simple language was used so that users can quickly understand assessment results and make valid inferences about student achievement. In addition, the CRS was designed to present student performance in a uniform format. For example, similar colors were used for groups of similar elements, such as achievement levels, throughout the design. This design strategy allows state-, district-, and school-level users to compare similar elements and to avoid comparing dissimilar elements.

Once authorized users log in to the CRS and select Score Reports, the online score reports are presented hierarchically. The CRS starts by presenting summaries on student performance by grade at a selected aggregate level. To view student performance for a specific aggregate unit, users can select the specific aggregate unit from a drop-down menu with a list of aggregate units (e.g., schools within a district, teachers within a school) to choose from. For more detailed student assessment results for a school, a teacher, and a roster, users can select the grade on the online score reports.

Generally, the CRS provides two categories of online score reports: aggregate score reports and student score reports. Table 8.1 summarizes the typical types of online score reports available at the aggregate level and the individual student level. Detailed information about the online score reports and instructions on how to navigate the online score reporting system can be found in the *Centralized Reporting System User Guide*. Figure 8.1 shows the online report for state overall performance, Figure 8.2 and Figure 8.3 show the online district report for overall performance and the domain performance, and Figure 8.4 shows the online student report.

Figure 8.9 CRS Page for State Overall Performance



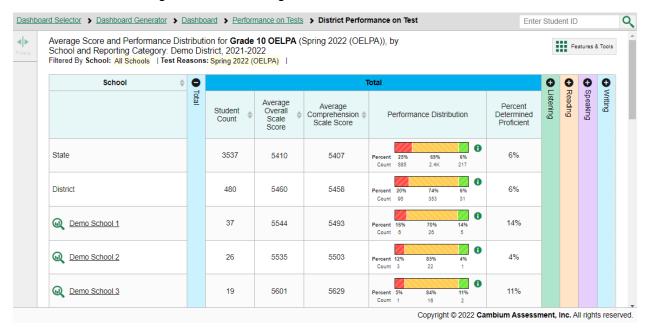
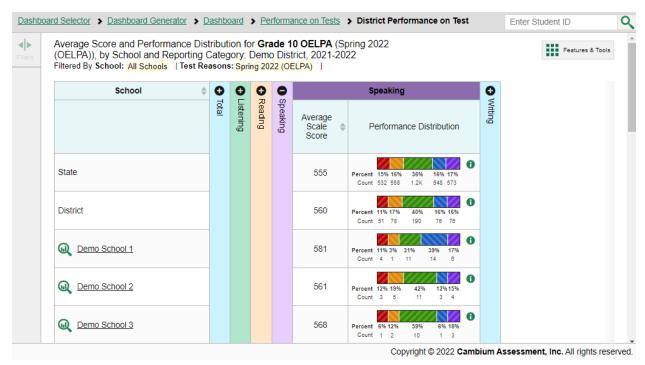


Figure 8.10 CRS Page for District Overall Performance

Figure 8.11 CRS Page for District Domain Performance



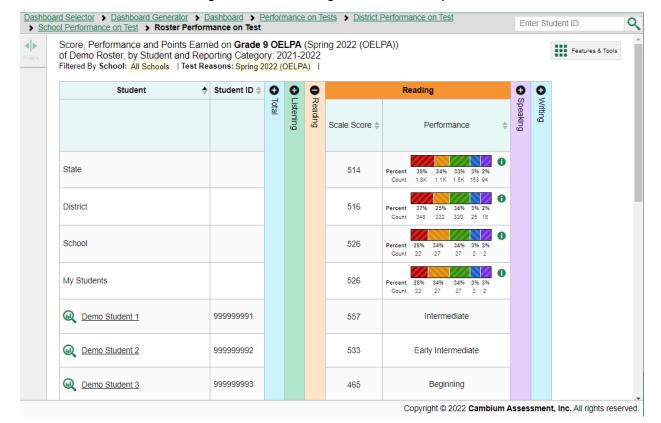


Figure 8.12 CRS Page for Student Report

# 8.1.2 Subgroup Reports

The aggregate score reports at a selected aggregate level were provided for students overall and by subgroup. Users can see student assessment results by any subgroup. Table 8.2 presents the typical subgroups and subgroup categories provided in the CRS. Figure 8.5 shows a mock-up for an online subgroup report.

Table 8.24 Types of Subgroups

Breakdown by Category	Displayed Category
Ethnicity	Hispanic or Latino
	American Indian or Alaska Native
	Asian
	Black or African American
	White
	Native Hawaiian or Other Pacific Islander
	Two or More Races
Gender	Male
	Female
Limited English Proficiency Status	Yes
	No
IDEA Indicator	Yes
	No
Enrolled Grade	Kindergarten
	Grade 01
	Grade 02
	Grade 03
	Grade 04
	Grade 05
	Grade 06
	Grade 07
	Grade 08
	Grade 09
	Grade 10
	Grade 11
	Grade 12

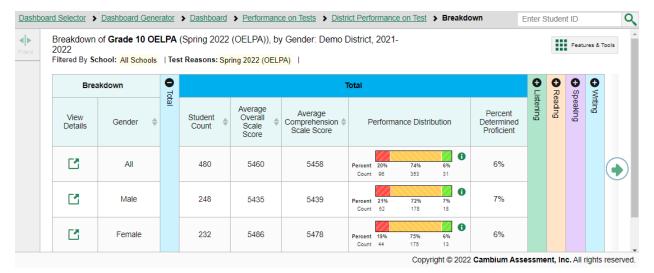


Figure 8.13 CRS Page for Subgroup Report

### **8.2PAPER REPORTS**

The CRS provided the functionality for users to print reports described earlier. The CRS also allowed users to print the family report for each student. Figure 8.6 shows the mock-up of the individual student report (ISR).

### Figure 8.14 Mock-up for Individual Student Report

Ohio Department: Reporting

Individual Student Report

Demo Student Kindergarten OELPA 2021-2022

Student ID: 999999999 | Student DOB: 12/12/2015 | Enrolled Grade: N/A Date Taken: 2/7/2022

Demo District Demo School

Scale Score: 5967 Comprehension Scale Score: 5872 Proficiency Status: Progressing

#### Proficiency Determination

Proficient - Students are Proficient when they attain a level of English language skill necessary to independently produce, interpret, collaborate on, and succeed in grade-level content-related academic tasks in English. This is indicated on OELPA by attaining a profile of Level 4 or higher in all domains. Once Proficient on OELPA, students can be considered for reclassification.

Progressing - Students are Progressing when, with support, they approach a level of English language skill necessary to produce, interpret, and collaborate, on grade-level content-related academic tasks in English. This is indicated on OELPA by attaining a profile with one or more domain scores above Level 2 that does not meet the requirements to be Proficient. Students scoring Progressing on OELPA are eligible for ongoing program support.

Emerging - Students are Emerging when they have not yet attained a level of English language skill necessary to produce, interpret, and collaborate on grade-level content-related academic tasks in English. This is indicated on OELPA by attaining a profile of Levels 1 and 2 in all four domains. Students scoring Emerging on OELPA are eligible for ongoing program support.

Scale Scores Scores from different domains have different ranges and should not be directly compared. The same, or similar, scale score on two or more domains might not result in the same performance level on these domains.

#### How Does Your Child's Score Compare?

Name Proficient%		Average Overall Scale Score	Average Comprehension Scale Score		
Ohio Department of Education	5	5441	5481		
Demo District	1	5223	5298		
Demo School	0	5335	5401		

How Did Your Child Perform on Different Areas of the Test?

Beginning 2 Early Intermediate 3 Intermediate 4 Early Advanced 5 Advanced

Domain	Scale Score	Performance	Domain Description
Listening	603	3	When listening, the student at Level 3 is working on: responding to conversations and identifying key words and phrases from read-alouds and oral presentations; answering questions about the meanings of words and phrases; making inferences and comparisons; responding to yes/no and wh- questions; comprehending details and following longer directions.
Reading	612	4	When reading grade-appropriate text, the student at Level 4 is working on: categorizing words and phrases in read-atouds of texts and dialogues; answering questions about key details in a variety of text types; recognizing words and phrases in read-atouds that may have multiple meanings in context.
Speaking	635	5	When speaking, the student at Level 5 is working on: responding to conversations, questions and prompts on a variety of topics by identifying items and explaining choices; answering questions about key details on a variety of topics; expressing an opinion or a preference about a variety of topics; reteiling stories and multiple step directions in an event using sequencing.
Writing	579	3	When writing, the student at Level 3 is working on: recognizing and using frequently occurring nouns, verbs, and short phrases in writing, writing and completing words with missing letters; using question words to create simple questions; expressing an opinion or preference; creating complete simple sentences by placing words in the correct order.

# **Chapter 9. Quality Control**

Thorough quality control has been integrated into every aspect of the English Language Proficiency Assessment of the 21<sup>st</sup> Century (ELPA21) (including the Ohio English Language Proficiency Assessment [OELPA]) summative and screener tests. ELPA21, the states (including the Ohio Department of Education [ODE]), Questar, Cambium Assessment, Inc. (CAI), and Measurement Incorporated (MI) have built in multiple layers of reviews and verifications to ensure that outputs are of the highest quality in areas such as materials prepared for item-writing workshops, test form constructions, test booklet development and printing, post-test score quality control processes, and reporting. Quality control for item-writing workshops, test form construction, and test booklet development and printing can be found in the related documents prepared by ELPA21 and associated vendors. This chapter describes CAI and MI quality control procedures related to test administration, scoring, and reporting.

# 9.1 QUALITY CONTROL IN TEST CONFIGURATION

For online summative and screener testing, the test configuration files contained the complete information required for test administration and scoring, such as the test blueprint specifications, slopes, and intercepts for theta-to-scale score transformation, cut scores, and item information (i.e., answer keys, item attributes, item parameters, passage information). The accuracy of the configuration file was checked and confirmed independently numerous times by multiple teams prior to the testing window. Scoring was also verified before the testing windows opened.

### 9.1.1 Platform Review

CAI's online Test Delivery System supports a variety of item layouts for online test administration to many populations of students, including students who need designated supports and accommodations to test online. Each item on the assessment went through an extensive platform device review on different operating systems, including Windows, Linux, and iOS, to ensure that the item displayed consistently across all platforms.

Platform review is a process in which each item was checked to ensure that it was displayed appropriately (i.e., rendered) on each tested platform. A platform is a combination of a hardware device and an operating system. In recent years, the number of platforms has proliferated, and platform review now takes place on various platforms that are significantly different from one another.

Platform review was conducted by CAI's quality assurance (QA) team. The team leader projected every item from CAI's Item Tracking System (ITS<sup>1</sup>), and team members, each behind a different platform, viewed the same item to ensure that it rendered as expected.

# 9.1.2 User Acceptance Testing and Final Review

Both internal and external (i.e., the state) user acceptance testing (UAT) were conducted before the testing window opened. Detailed protocols were developed for the review process of the TDS,

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<sup>&</sup>lt;sup>1</sup> ITS is CAI's item bank for ELPA21. It contains all information that relates to each item, such as item content categories at all levels, item type, maximum score points, item statistics from each administration, etc.

and reviewers were given thorough instructions to note or report issues related to system functionality, item display, and scoring.

During the internal UAT, CAI staff took all OELPA online tests that covered the entire range of possibilities of item responses and the complete set of scoring rules in TDS. When issues were found, CAI took immediate actions to address them. The examples of issues identified and the actions taken during the internal UAT are presented here:

- Item layout issues: Some items were not rendering as anticipated in the TDS, and the test was not moving. Item layouts were updated for these items to render correctly.
- Item drop-down zoom issue: A zoom issue with the Editing Task Choice (ETC: Student identifies an incorrect word or phrase and chooses the replacement from several options) items where the drop-down content was not enlarged was identified. The items were updated to support different zoom levels in the drop-down menus.
- Student eligibility issues: Braille eligibilities were not working as expected. Test IDs needed to be updated in TDS to resolve the issue.
- User eligibility issues: User eligibilities were not working as expected and were updated based on state rules.
- Tool configuration issues: Some tools were not consistent across the tests and were updated based on state and ELPA21 guidelines.

When the TDS was updated, the tests were administered again to ensure that the issues were fixed. The process was repeated until all issues were resolved during the UAT period prior to operational testing.

State staff also conducted a hands-on review of the system prior to the testing window opening. The states approved the TDS before the system was opened for testing.

Before the Centralized Reporting System (CRS) opened, CAI and state staff conducted internal and external UAT of the system similar with that of TDS to ensure that the Online Reporting System (ORS) would function as intended when opened to the public for score reporting. ORS was the predecessor of CRS.

# 9.2 QUALITY ASSURANCE IN SCORING

The QA of scoring includes assurance of the online data, precision of handscoring, correctness of machine scoring, and fidelity when applying the business rules in scoring. This section describes the details of scoring QA.

MI handscored the writing constructed-response items and speaking items. For online tests, responses to the handscored items were transferred between CAI and MI on a rolling basis via Ledger.<sup>2</sup> Therefore, as soon as a student submitted a test to the TDS, the responses to handscored

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<sup>&</sup>lt;sup>2</sup> Ledger is an electronic system that CAI and MI use to transmit data from one vendor to the other for purposes of transmitting and reporting handscored item scores. Individual responses can be tracked at all times through Ledger before a record is reported.

items were transformed into XML format, and were then sent to Ledger, from which MI retrieved responses for handscoring. When scoring was complete, the record was sent to Ledger, from which CAI downloaded the record for final scoring. The data transmission process was automatic.

For paper-pencil tests, after test administration, student responses were entered into the CAI Data Entry Interface (DEI) on the state testing portal for all ELPA21 domain tests, except for writing constructed-response items. The item responses of the writing constructed-response items were mailed to MI for scoring via secure shipping. After scoring, MI transmitted the scores to the Ledger system, from which CAI retrieved the item scores for final scoring. To answer speaking items, students who took paper-pencil tests spoke into the DEI directly, and the item responses followed the online procedure for scoring.

For braille tests, TAs entered item responses into the braille DEI. The data were processed following the online data processing procedure, and the secure testing materials were returned to MI.

# 9.2.1 Quality Assurance in Online Data

CAI's TDS has a real-time, built-in quality monitoring component. After a test was administered to a student, TDS passed the resulting data to CAI's Quality Monitor (QM) System<sup>3</sup>. The QM System conducted a series of data integrity checks, ensuring, for example, that the record for each test contains information for each item, keys for multiple-choice items, score points in each item, and total number of items, and that the test record contained no data from items that had been invalidated.

Data passed directly from the QM System to the Database of Record (DOR), which serves as the repository for all test information and from which all test information for reporting is retrieved. The Data Extract Generator (DEG) is the tool that is used to retrieve data from the DOR for delivery to each state. CAI staff ensured that data in the extracted files matched the DOR prior to delivery to the state.

# 9.2.2 Quality Assurance in Handscoring

MI's scoring process was designed to employ a high level of quality control. The quality control procedures were implemented at each stage of the scoring process, which includes scorer recruitment, leader recruitment, training, and various reports that helped to ensure scoring quality.

### **Scorer Recruitment/Qualifications**

MI retains scorers who have years of experience in handscoring, and those scorers make up approximately 65% of the scorer pool. To complete the scorer staffing for this project, MI placed advertisements on various job boards, in local papers, in publications, and at regional colleges and universities. Recruiting events were held, and applications for scorer positions were screened by MI recruiting staff. Candidates were personally interviewed, and references and proof of a four-year college degree were collected. Candidates completed placement tests for English language arts (reading and writing). In this screening process, preference was given to candidates

<sup>&</sup>lt;sup>3</sup> The QM System is CAI's Quality Monitoring System. It ensures that the information in a student record, such as item key or score point, is correct.

with previous experience scoring large-scale assessments. The scorer pool consisted of educators, writers, editors, and other professionals who were valued for their experience, but who were also required to set aside their own biases about student performance and accept the scoring standards.

### Leadership Recruitment/Qualifications

Scoring directors and team leaders had experience as successful scorers and leaders on previous MI projects and had strong backgrounds in scoring content-specific projects. These individuals demonstrated strong organizational, leadership, and management skills. All scoring directors, team leaders, and scorers were required to sign confidentiality agreements prior to training with ELPA21 materials or handling secure materials.

Each room of scorers was assigned a scoring director or assistant scoring director. This individual led the handscoring for the duration of the project and was monitored by the scoring project manager. The scoring director conducted the team leader training and was responsible for training the scorers.

In general, team leaders assisted the scoring directors/assistant scoring directors with scorer training and monitoring by working with their teams in small group discussions and answering individual questions that scorers may not have felt comfortable asking in a large group. Once scorers were qualified, the team leaders were responsible for maintaining the accuracy and workload of team members. The ongoing monitoring identified scorers who were having difficulty scoring and resulted in individual scorers receiving one-on-one retraining. If this process did not correct inaccuracies in scoring, individual scorers were released from the project.

### **Training**

In rangefinding meetings, the full range of responses that represent each score point and produce scoring training materials including qualification, anchor, practice, and validity sets, were identified. The rangefinding process first involved MI review and selection of responses for rangefinding. During rangefinding, participants review items and rubrics; iteratively score, discuss, and reach consensus on responses; and identify which ones to use as anchor and training responses.

To train ELPA21 scorers, MI scoring staff used approved rubrics and training materials. The ELPA21 Program provided training materials composed of anchor, qualifying, and training responses. Training materials included a comprehensive annotated scoring guide for each item. The guide contained the anchor set scorers referenced while evaluating live student responses. The scoring guides also contained several typical student responses presented in score point order.

Guides included detailed annotations explaining how the scoring criteria applied to each response's specific features and why the response merited a particular score. Guides included responses that were the most useful in making scoring decisions, including some that fell within the upper and lower ranges of the score point to help scorers define the lines between score points.

Anchor and qualifying sets were designed to help the scorers learn to apply the criteria illustrated in the scoring guide, ensure that they become familiar with the process of scoring student responses, and assess the scorers' understanding of the ELPA21 scoring criteria before they could begin live scoring.

The item-specific rubrics served as the scorers' constant reference. Scorers were instructed on how to apply the rubrics and were required to demonstrate a clear comprehension of each anchor set by performing well on the training materials that were presented for each grade and item.

Team leaders assisted the scoring directors with the training and monitoring of scorers. The scoring director conducted the team leader training before the scorer training. This training followed much the same process as the scorer training, but additional time was allotted for review, discussion, and addressing anticipated scorer questions and concerns. To facilitate scoring consistency, it was imperative that each team leader imparted the same rationale for each response that other team leaders used. Once team leaders qualified, leadership responsibilities were reviewed and team assignments were given. A ratio of one team leader for 8–10 scorers ensured adequate monitoring of the scorers.

Scorer training involved an intensive review of the rubric and anchor responses, provided by the scoring director, to help the scorers internalize the scoring criteria. The scoring director and team leaders led a thorough discussion of the training materials with the entire group. All responses were discussed using the annotations from rangefinding. A similar process was followed in training for writing and speaking items.

Once the scoring guidelines were discussed, scorers were required to apply the scoring criteria by qualifying (i.e., scoring with acceptable agreement to the "true" scores decided upon at range finding) on at least one of the qualifying sets. Scorers who failed to achieve the qualifying criteria were given additional training. Scorers who did not perform at the required level of agreement for a given item or related group of items by the end of the qualifying process were not permitted to score live student work. The required level at the end of the qualifying process is the qualifying set in which the reader must score a 70% or higher with no nonadjacent scores.

Training was an ongoing process that did not end after the qualifying rounds. Feedback was an integral part of several reliability checks that were performed throughout the project. Primarily, team leaders monitored scorers' reliability by conducting read-behinds/listen-behinds on an asneeded basis. This is a process whereby team leaders reread and check scores of each scorer on their team. This is to catch potential scorer drift (i.e., shifts in scoring over time) so that the scorer can have immediate feedback and be retrained in a timely fashion, if needed. The percentage of read-behinds conducted for an individual scorer is not fixed but varied based on current levels of performance. Scorers receive one-on-one retraining based on monitoring results. Scorers are removed from scoring an item or related group of items if they cannot score consistently with the rubric and the anchor responses after retraining. When live scoring began, one of the team leader's primary jobs was to do read-behinds for their team members to ensure that they were scoring accurately. As this process continued, the team leader could start to recognize if individual readers had a firm grasp of the criteria for the particular task type that was being scored or who may need some additional coaching. Once this was established using the read-behinds, the reader's notes that were sent for score clarifications, and reader reliability reports, the team leader could determine who needed less read-behinds or who needed more monitoring.

Development and rangefinding of the materials used with the 2017 administration were completed by a previous vendor. For 2021–2022, MI conducted a field-test score validation of the new short-response speaking items. This information is available from the Program.

# 9.2.3 Handscoring Quality Assurance Monitoring Reports

MI scorer accuracy was monitored throughout the scoring sessions by producing real-time, ondemand reports to ensure that an acceptable level of scoring accuracy was maintained. Interscorer reliability was tracked and monitored with multiple quality control reports that were reviewed by MI scoring staff. The program manager, scoring project director, scoring directors, and team leaders reviewed these reports. The following reports, available in daily, cumulative, and summary formats, were used during handscoring:

- Interscorer Reliability Reports displayed how often scorers were in exact agreement and supported maintaining an acceptable agreement rate. These reports provided exact, adjacent (raters match within one point), and nonadjacent (raters match within one point) interscorer agreement, as well as mismatches between scores and nonscorable codes and within nonscorable codes. They also indicated the number of responses read by each scorer.
- Score Point Distribution Reports displayed the percentage of responses that had been assigned each of the score points and nonscorable codes.
- Validity Reports tracked how the scorers performed by comparing predetermined scored responses to scores assigned by the selected scorer on the same set of responses. If the assigned score of the selected scorer fell outside of a determined percentage of agreement, remediation occurred and additional responses were reviewed by the team leader of the individual(s) who needed to be monitored more closely.
- *Item Status Reports* tracked each item and indicated the status (e.g., "first read complete," "tabled"). This report was used to monitor the overall status and progress of handscoring.

#### **Maintaining Consistency**

MI used numerous processes to ensure scorer accuracy and detect drift. The objective of the scoring process is to ensure that scorers rate student responses in a manner consistent with ELPA21 standards, within a single administration of ELPA21, as well as across multiple administrations.

The validity selection process involved MI scoring staff selecting 30–75 responses per item from live responses from the current administration to serve as validity responses. Validity responses were selected to illustrate trends identified by leadership in live responses but not strongly reflected in the anchor sets, represent particular types of responses identified as challenging to score during training, and assess transfer of scorers' knowledge of the anchor responses. Vetting of new validity responses involved identification and recommendation by team leaders while conducting readbehinds/listen-behinds, review and approval by scoring directors, and review and approval by the scoring project director.

The validity responses were used during handscoring to verify scorer accuracy. Validity responses were dispersed intermittently to the scorers throughout scoring at a rate of at least 10% of the total responses. These validity responses were blind reads, meaning that scorers saw these responses the same as they saw the actual live student responses; there was no distinguishable difference. This helped ensure the internal validity of the process. All scorers who received validity responses had already successfully completed the training and qualifying process.

Next, the scores that the scorers assigned to the validity responses were compared to the predetermined scores. For each item, the percentage of exact agreement and the percentage of high and low scores were computed. The same data were also computed for each specific scorer. Using these pieces of data, various validity reports could be produced in real time and used to monitor for potential drift.

If results indicated that there was drift, or shifts in scoring over time, for a particular response, item, or scorer, action was taken to correct it. This action could include individual scorer retraining, room-wide retraining/recalibration, and/or rescoring responses where it was determined a scorer had been errantly assigning scores. Sometimes, when a particular validity response generated low agreement, an example of a similar response could be found in the existing training materials. If this was the case, a review of that particular training response was pursued in order to realign the scorer.

In most cases, including the 2021–2022 administration, there was not a room drift. Leadership can review particular types of responses and determine if there is a possible or potential shift in the scoring of those responses by using the questions provided by notes, reader reliability reports, and readbehinds. The scoring directors create recalibration sets that consist of commonly seen response types. These recalibration sets are given to the teams at the beginning of every week to help deter any negative trends or drifts. Additional recalibration sets are created if the scoring director starts to see a trend of a drift and can be given at any time it is determined warranted. All recalibration sets are approved by the scoring management before given to the scoring teams.

Recalibration sets consisting of a validation set representing a variety of score points in random score point order were also used to maintain consistency. Sets varied in size from three to five responses based on particular issues observed during scoring. The recalibration sets were distributed at the beginning of the morning on a weekly basis. MI also recalibrated approximately once a week with scorers who had missed a required day's scoring session and were required to recalibrate. Scorers achieving less than an acceptable percentage of correct scores on these responses were monitored closely throughout that day. Scorers who did not demonstrate improvement received personal and extensive retraining. These scorers continued to be monitored on an individual basis until the next recalibration round took place.

By implementing these scoring procedures—using the same training materials whenever possible, using a suite of real-time reports, and making training decisions based on report data—MI maximized scoring reliability and validity.

# 9.2.4 Quality Control on Final Scores

CAI's scoring engine was used to produce final scores upon receiving handscores. Before operational scoring, CAI created mock-ups of student records to verify the accuracy of the scoring engine. Both CAI's analysis team (responsible for the scoring engine) and psychometricians independently computed scores on the mock-ups of student records. The Psychometrics and Statistics Team performed score verification using a different software and compared the scoring results with those from CAI's scoring engine. Specifically, if the Psychometrics and Statistics Team found score discrepancies from the scoring engine, they discussed the issue with the analysis team to find out the causes of discrepancies. After the analysis team updated the scores in the

scoring engine, the Psychometrics and Statistics Team compared the scores again. The process was performed iteratively until a 100% match was reached.

During operational scoring, CAI's psychometricians independently scored students and compared the scores with the results from the scoring engine. Discrepancies were iteratively resolved until a 100% match was reached.

Before final scores were delivered to the state, they were also compared with the unofficial scores from CRESST, if needed. Discrepancies were again investigated and resolved until a 100% match was reached.

### 9.3 QUALITY ASSURANCE IN REPORTING

In 2021–2022, two types of score reports were produced for both summative and screener tests: online reports and printed reports (family reports only).

### 9.3.1 Online Report Quality Assurance

Every test underwent a series of validation checks. Once the QM System signs off, data were passed to the DOR, which served as the centralized location for all student scores and responses, ensuring that there is only one place where the official record was stored. Only after scores passed the QA checks and were uploaded to the DOR were they passed to the CRS, which was responsible for presenting individual-level results and calculating and presenting aggregate results. Absolutely no score was reported in the CRS until it passed all of the QM System's validation checks.

## 9.3.2 Paper Report Quality Assurance

#### **Statistical Programming**

The family reports contained custom programming and required rigorous QA processes to ensure their accuracy. All custom programming was guided by detailed and precise specifications in CAI's reporting specifications document. Upon approval of the specifications, analytic rules were programmed and each program was extensively tested on test decks and real data from other programs. Two senior statisticians and one senior programmer reviewed the final programs to ensure that they implemented agreed-on procedures. Custom programming was implemented independently by two statistical programming teams working from the specifications. The scripts were released for production only when the output from both teams matched exactly. Quality control, however, did not stop there.

Much of the statistical processing was repeated, and CAI implemented a structured software development process to ensure that the repeated tasks were implemented correctly and identically each time. CAI's software developers wrote small programs called *macros* that took specified data as input and produced data sets containing derived variables as output. Approximately 30 such macros reside in CAI's library. Each macro was extensively tested and stored in a central development server. Once a macro was tested and stored, changes to the macro must be approved by the director of score reporting and the director of psychometrics, as well as by the project directors for affected projects.

Each change was followed by a complete retesting with the entire collection of scenarios on which the macro was originally tested. The main statistical program was made up mostly of calls to various macros, including macros that read-in and verify the data and conversion tables and macros that perform the many complex calculations. This program was developed and tested using artificial data generated to test both typical and extreme cases. In addition, the program went through a rigorous code review by a senior statistician.

#### **Display Programming**

The paper report development process used graphical programming, which took place in a Xerox-developed programming language called Variable Data Intelligent PostScript Printware (VIPP) and allowed virtually infinite control of the visual appearance of the reports. After designers at CAI created backgrounds, VIPP programmers wrote code that indicated where to place all variable information (i.e., data, graphics, and text) on the reports. The VIPP code was tested using both artificial and real data. CAI's data generation utilities can read the output layout specifications and generate artificial data for direct input into the VIPP programs. This allowed the testing of these programs to begin before the statistical programming was complete. In later stages, artificial data were generated according to the input layout and ran through the score reporting statistical programs, and the output was formatted as VIPP input; this enabled CAI to test the entire system. Programmed output went through multiple stages of review and revision by graphics editors and the Communications and Reporting Team to ensure that design elements were accurately reproduced and data were correctly displayed.

Once CAI received the final data and VIPP programs, the CAI Communications and Reporting Team reviewed proofs that contained actual data based on CAI's standard QA documentation. In addition, CAI compared data independently calculated by CAI psychometricians with data on the reports. A large sample of reports was reviewed by several CAI staff members to ensure that all data were correctly placed on reports. This rigorous review was typically conducted over several days and took place in a secure location at CAI. All reports containing actual data were stored in a locked storage area. Prior to printing the reports, CAI provided a live data file and individual student reports (ISRs) with sample districts for the state staff review. CAI worked closely with each state to resolve questions and correct any problems. The reports were not delivered until the state approved the sample reports and data file.

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**Section 1: Summative Assessment - Raw Score Statistics** 

Table S1.1: Summative Raw Score Summary - Kindergarten

Domain	Level	N	Min	Mean	Max	SD
	1	1,642	0	10.6	19	3.4
	2	1,469	11	15.9	22	1.7
Listening	3	5,070	14	21.1	27	2.2
	4	957	21	24.8	28	1.2
	5	1,035	23	26.4	28	1.1
	1	1,567	0	9.5	16	2.9
	2	1,627	10	14.2	19	1.5
Reading	3	3,999	12	17.3	23	1.7
	4	1,364	16	19.6	23	1.2
	5	1,514	18	21.2	23	1.2
	1	1,882	0	5.2	12	3.7
	2	1,352	9	13.5	17	1.5
Speaking	3	3,051	13	18.5	22	1.7
	4	1,486	18	21.7	24	0.9
	5	2,254	20	24.1	27	1.3
	1	4,488	0	3.9	8	1.6
	2	2,580	5	9.4	14	2.0
Writing	3	2,252	12	15.4	18	1.5
	4	356	17	17.9	18	0.3
	5	373	17	18.0	18	0.1
	Emerging	2,000	0	35.1	60	10.7
Overall	Progressing	7,515	33	67.7	94	11.3
	Proficient	484	79	88.5	96	3.4

Table S1.2: Summative Raw Score Summary - Grade 1

Domain	Level	N	Min	Mean	Max	SD
	1	758	0	9.4	16	3.3
	2	709	11	15.0	19	1.6
Listening	3	2,901	14	19.3	23	1.7
	4	2,284	19	21.9	24	0.9
	5	2,670	21	23.2	24	0.8
	1	2,454	0	11.9	18	2.7
	2	1,727	11	16.4	22	1.7
Reading	3	2,407	15	20.8	27	2.1
	4	1,090	22	25.5	30	1.5
	5	1,536	24	28.5	30	1.2
	1	2,268	0	11.4	19	5.2
	2	2,261	14	18.6	22	1.3
Speaking	3	921	14	20.4	23	1.0
	4	1,479	18	21.5	24	0.9
	5	2,278	18	23.1	25	1.1
	1	3,239	0	6.9	16	4.3
	2	1,794	12	16.5	19	1.2
Writing	3	2,460	16	18.9	20	0.8
	4	688	18	19.6	20	0.5
	5	1,028	19	19.9	20	0.3
	Emerging	1,118	0	39.5	72	13.3
Overall	Progressing	6,627	26	73.7	97	12.1
	Proficient	1,428	85	93.0	99	2.8

Table S1.3: Summative Raw Score Summary - Grade 2

Domain	Level	N	Min	Mean	Max	SD
	1	588	0	7.5	13	2.7
	2	397	9	12.9	17	1.4
Listening	3	2,175	12	18.2	23	1.9
	4	2,452	18	21.9	25	1.3
	5	2,877	21	24.3	26	1.0
	1	2,181	0	13.1	25	2.9
	2	1,342	12	17.7	26	2.1
Reading	3	2,287	16	23.0	31	2.7
	4	1,339	21	27.8	33	1.8
	5	1,245	24	31.1	34	1.7
	1	1,522	0	8.6	15	4.7
	2	1,474	11	15.6	19	1.3
Speaking	3	1,318	12	17.9	21	1.1
	4	1,794	16	19.8	23	1.1
	5	2,283	17	22.2	25	1.4
	1	2,115	0	3.6	11	2.3
	2	1,285	5	10.0	15	1.8
Writing	3	2,433	6	14.3	19	2.0
	4	1,328	12	17.5	22	1.4
	5	1,217	16	20.1	24	1.4
	Emerging	829	0	33.0	61	11.2
Overall	Progressing	5,513	29	69.7	96	12.4
	Proficient	2,011	80	93.6	109	4.8

Table S1.4: Summative Raw Score Summary - Grade 3

Domain	Level	N	Min	Mean	Max	SD
	1	428	0	7.6	13	2.7
	2	301	10	13.6	17	1.5
Listening	3	1,584	12	19.4	24	2.0
	4	2,371	19	23.0	26	1.2
	5	1,860	22	24.8	26	0.9
	1	1,830	0	15.4	27	3.8
	2	1,040	15	22.5	30	2.4
Reading	3	2,200	20	27.5	33	2.1
	4	837	26	30.8	34	1.3
	5	517	29	32.6	34	1.1
	1	921	0	8.2	17	4.9
	2	772	11	16.2	20	1.3
Speaking	3	1,308	13	18.6	23	1.2
	4	1,750	16	20.7	24	1.2
	5	1,696	19	23.0	25	1.2
	1	1,716	0	6.8	16	4.0
	2	1,104	6	14.2	19	1.6
Writing	3	2,179	10	17.8	22	1.6
	4	925	14	20.3	23	1.0
	5	509	18	21.9	24	1.0
	Emerging	615	0	36.1	72	13.2
Overall	Progressing	4,709	23	80.2	100	12.4
	Proficient	1,061	89	98.9	109	3.1

Table S1.5: Summative Raw Score Summary - Grade 4

Domain	Level	N	Min	Mean	Max	SD
	1	428	0	8.8	14	2.8
	2	333	10	13.9	18	1.5
Listening	3	1,076	12	18.6	25	2.1
	4	2,028	18	23.8	29	2.0
	5	1,434	23	27.5	30	1.4
	1	1,106	0	6.4	13	2.0
	2	863	6	9.8	14	1.6
Reading	3	1,701	9	14.2	20	2.1
	4	915	14	18.8	24	1.6
	5	609	18	22.6	27	1.7
	1	742	0	7.7	17	4.9
	2	568	13	16.8	20	1.5
Speaking	3	884	15	20.1	24	1.3
	4	1,381	17	22.7	26	1.2
	5	1,646	21	25.5	30	1.4
	1	958	0	5.4	14	3.1
	2	674	8	13.6	19	2.1
Writing	3	2,518	11	20.0	27	2.4
	4	628	20	23.5	27	1.3
	5	421	22	25.5	30	1.4
	Emerging	627	0	31.2	58	11.4
Overall	Progressing	3,619	30	74.9	99	12.7
	Proficient	927	83	96.8	112	4.8

Table S1.6: Summative Raw Score Summary - Grade 5

Domain	Level	N	Min	Mean	Max	SD
	1	510	0	10.0	16	3.2
	2	393	11	15.9	20	1.8
Listening	3	620	13	19.7	25	1.9
	4	1,938	18	24.4	29	2.0
	5	1,177	24	27.9	30	1.3
	1	1,033	0	7.1	15	2.2
	2	774	6	11.6	16	1.7
Reading	3	1,708	11	16.9	24	2.3
	4	655	18	21.5	26	1.4
	5	343	20	23.8	27	1.3
	1	796	0	8.7	19	5.4
	2	531	14	18.5	23	1.4
Speaking	3	1,171	16	21.7	25	1.3
	4	1,001	19	24.0	27	1.0
	5	1,053	23	26.2	30	1.2
	1	725	0	5.2	14	3.1
	2	498	6	14.0	19	2.2
Writing	3	2,608	12	21.4	28	2.5
	4	431	22	25.1	29	1.2
	5	253	23	26.6	29	1.3
	Emerging	702	0	35.7	64	13.2
Overall	Progressing	3,223	39	81.6	103	11.9
	Proficient	561	90	101.0	111	3.4

Table S1.7: Summative Raw Score Summary - Grade 6

Domain	Level	N	Min	Mean	Max	SD
	1	366	0	10.9	17	3.5
	2	254	13	17.7	23	2.0
Listening	3	812	18	24.2	31	2.5
	4	1,399	25	30.7	35	1.9
	5	864	30	34.3	36	1.2
	1	779	0	7.8	15	2.2
	2	731	6	11.0	18	1.7
Reading	3	1,367	9	15.8	23	2.5
	4	438	17	21.2	26	1.6
	5	304	21	25.6	31	1.9
	1	517	0	4.8	12	3.8
	2	465	8	13.0	17	1.4
Speaking	3	1,163	12	16.8	20	1.4
	4	805	16	19.5	23	1.0
	5	685	17	22.3	27	1.4
	1	506	0	3.1	11	2.7
	2	418	6	11.5	17	1.9
Writing	3	1,972	12	17.9	24	2.2
	4	452	18	21.4	24	1.2
	5	273	19	23.4	27	1.3
	Emerging	490	0	32.7	60	11.9
Overall	Progressing	2,626	31	77.6	104	12.4
	Proficient	462	89	100.5	114	4.8

Table S1.8: Summative Raw Score Summary - Grade 7

Domain	Level	N	Min	Mean	Max	SD
	1	537	0	12.6	21	4.1
	2	433	15	21.6	27	2.2
Listening	3	1,225	22	29.0	36	2.5
	4	829	30	33.3	36	1.1
	5	559	32	35.0	36	0.9
	1	1,030	0	8.9	16	2.4
	2	871	8	14.0	20	2.0
Reading	3	1,190	13	19.9	27	2.5
	4	254	21	24.6	29	1.5
	5	149	24	27.5	31	1.4
	1	610	0	5.7	13	3.9
	2	470	9	14.0	18	1.6
Speaking	3	1,204	13	18.0	22	1.4
	4	668	18	20.7	23	0.9
	5	564	17	23.2	27	1.4
	1	823	0	6.6	17	4.9
	2	677	10	16.2	22	1.5
Writing	3	1,573	14	20.2	25	1.7
	4	267	20	23.0	26	1.0
	5	160	22	24.7	28	1.2
	Emerging	723	6	40.1	71	14.4
Overall	Progressing	2,500	44	85.3	109	11.5
	Proficient	238	97	106.1	119	3.7

Table S1.9: Summative Raw Score Summary - Grade 8

Domain	Level	N	Min	Mean	Max	SD
	1	588	0	12.9	22	3.9
	2	327	16	22.1	27	2.3
Listening	3	1,082	23	30.1	35	2.5
	4	841	30	33.9	36	1.1
	5	624	32	35.3	36	0.7
	1	1,012	0	9.3	19	2.7
	2	771	9	15.2	21	2.0
Reading	3	1,253	15	21.8	28	2.6
	4	211	23	26.7	30	1.3
	5	135	25	28.5	31	1.4
	1	615	0	5.2	14	4.0
	2	396	9	14.0	17	1.5
Speaking	3	1,062	13	18.3	22	1.5
	4	622	17	21.1	24	0.9
	5	705	20	23.7	27	1.4
	1	868	0	7.0	18	5.3
	2	613	12	17.2	23	1.7
Writing	3	1,477	16	21.1	26	1.6
	4	253	21	23.9	27	1.0
	5	172	23	25.4	28	1.2
	Emerging	743	0	39.2	75	15.5
Overall	Progressing	2,359	51	89.8	112	11.9
	Proficient	238	102	110.0	118	3.0

Table S1.10: Summative Raw Score Summary - Grade 9

Domain	Level	N	Min	Mean	Max	SD
Listening	1	1,287	0	7.5	15	2.5
	2	527	7	12.8	18	1.9
	3	1,618	12	18.9	26	2.6
	4	799	19	23.5	27	1.4
	5	484	21	25.3	27	1.1
	1	1,790	0	9.6	17	2.6
	2	1,115	8	14.7	22	2.2
Reading	3	1,515	12	20.8	30	3.0
	4	155	24	27.2	32	1.7
	5	96	27	30.2	35	1.7
	1	1,239	0	4.3	13	3.4
	2	762	9	13.6	18	1.8
Speaking	3	1,634	14	18.9	23	1.6
-	4	582	20	22.0	25	1.0
	5	449	20	24.2	27	1.2
Writing	1	1,648	0	5.2	15	4.1
	2	907	9	14.7	19	1.6
	3	1,803	13	19.0	24	1.9
	4	218	18	22.5	25	1.2
	5	91	22	24.2	27	1.1
Overall	Emerging	1,567	0	30.8	63	12.1
	Progressing	2,885	38	75.2	100	12.0
	Proficient	137	93	99.8	109	3.5

Table S1.11: Summative Raw Score Summary - Grade 10

Domain	Level	N	Min	Mean	Max	SD
	1	608	0	7.8	13	2.5
Listening	2	414	9	13.0	19	1.9
	3	1,184	12	19.1	26	2.6
	4	708	19	23.4	27	1.3
	5	599	22	25.3	27	1.1
	1	1,002	0	9.9	18	2.7
	2	753	8	14.6	23	2.2
Reading	3	1,349	14	21.1	29	3.0
	4	231	23	27.4	31	1.5
	5	145	27	30.4	34	1.8
	1	533	0	5.1	12	3.5
	2	559	9	13.6	18	1.8
Speaking	3	1,246	15	18.9	23	1.6
	4	549	20	22.0	24	0.9
	5	576	21	24.1	27	1.2
	1	871	0	6.2	15	4.2
Writing	2	640	10	14.7	19	1.6
	3	1,556	14	19.1	24	1.9
	4	238	19	22.3	25	1.1
	5	163	21	24.2	28	1.3
Overall	Emerging	815	0	34.9	62	12.2
	Progressing	2,385	39	77.3	102	12.2
	Proficient	214	92	100.3	112	4.1

Table S1.12: Summative Raw Score Summary - Grade 11

Domain	Level	N	Min	Mean	Max	SD
	1	425	0	8.0	14	2.5
	2	382	7	13.0	19	1.9
Listening	3	954	12	19.0	25	2.5
	4	628	18	23.4	27	1.4
	5	692	21	25.4	27	1.2
	1	774	0	9.9	17	2.5
	2	655	9	14.7	24	2.1
Reading	3	1,186	13	21.3	30	3.0
	4	255	23	27.4	32	1.6
	5	172	25	30.3	34	1.8
	1	333	0	5.4	11	3.6
	2	485	9	13.7	18	1.9
Speaking	3	1,065	14	18.9	24	1.6
	4	525	19	21.9	24	0.9
	5	627	21	24.2	27	1.3
	1	659	0	7.3	16	4.1
	2	577	10	14.8	19	1.7
Writing	3	1,302	14	19.1	24	1.9
	4	300	19	22.3	25	1.2
	5	188	21	24.1	27	1.2
	Emerging	626	0	38.1	66	11.6
Overall	Progressing	2,106	30	78.3	104	12.5
	Proficient	263	93	100.6	111	3.7

Table S1.13: Summative Raw Score Summary - Grade 12

Domain	Level	N	Min	Mean	Max	SD
	1	257	0	8.0	14	2.5
	2	277	8	12.8	17	1.9
Listening	3	814	12	19.1	26	2.5
	4	553	18	23.4	27	1.3
	5	586	22	25.5	27	1.1
	1	497	0	10.0	15	2.4
	2	546	8	14.7	22	2.2
Reading	3	1,023	12	21.5	31	3.1
	4	230	22	27.2	32	1.6
	5	153	26	30.3	35	1.9
	1	203	0	5.0	12	3.7
	2	343	8	13.6	18	1.9
Speaking	3	869	13	19.0	24	1.6
	4	474	19	22.0	25	1.0
	5	547	21	24.3	27	1.3
	1	390	0	7.5	15	4.2
	2	522	10	14.7	20	1.7
Writing	3	1,110	13	19.2	24	1.9
	4	242	20	22.2	25	1.1
	5	174	21	24.0	28	1.3
	Emerging	371	3	39.0	59	11.9
Overall	Progressing	1,793	27	78.6	103	12.8
	Proficient	242	92	100.4	111	3.8

**Section 2: Summative Assessment - Raw Score Distributions** 

Figure S2.1: Summative Raw Score Summary - Kindergarten Listening

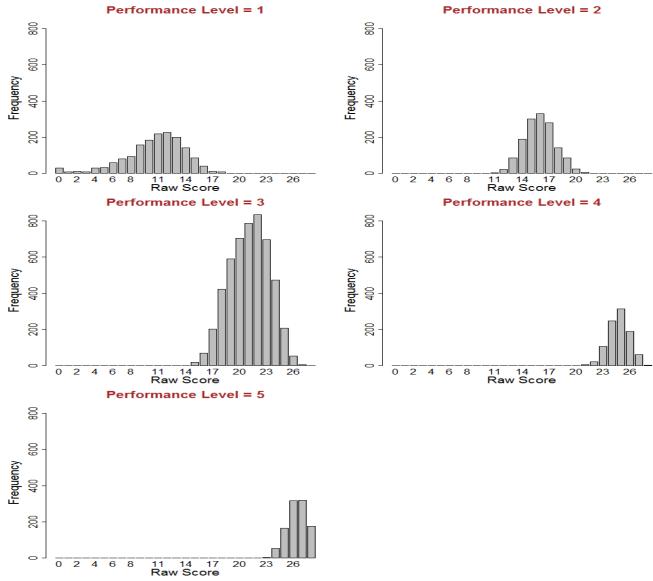


Figure S2.2: Summative Raw Score Summary - Kindergarten Reading

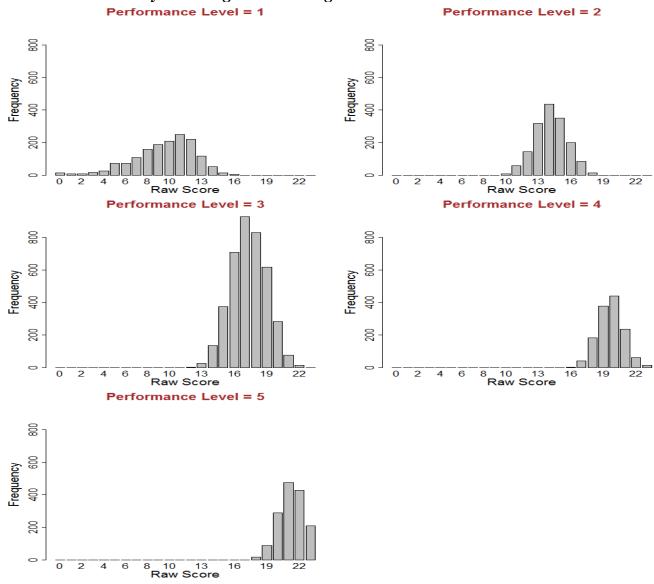


Figure S2.3: Summative Raw Score Summary - Kindergarten Speaking

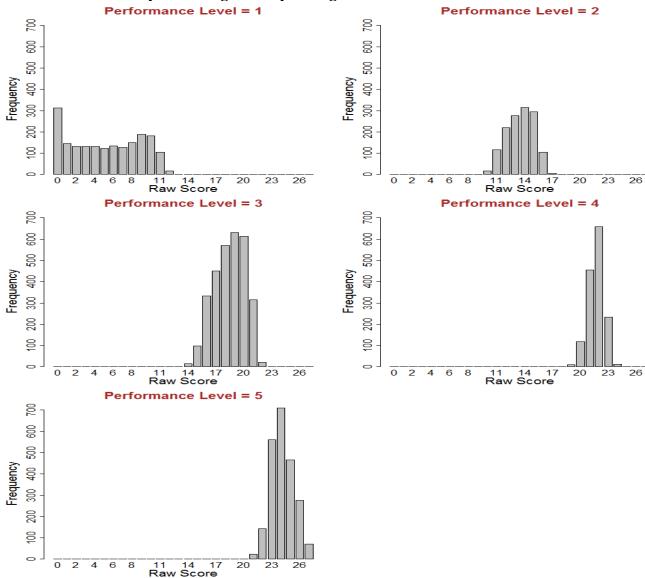
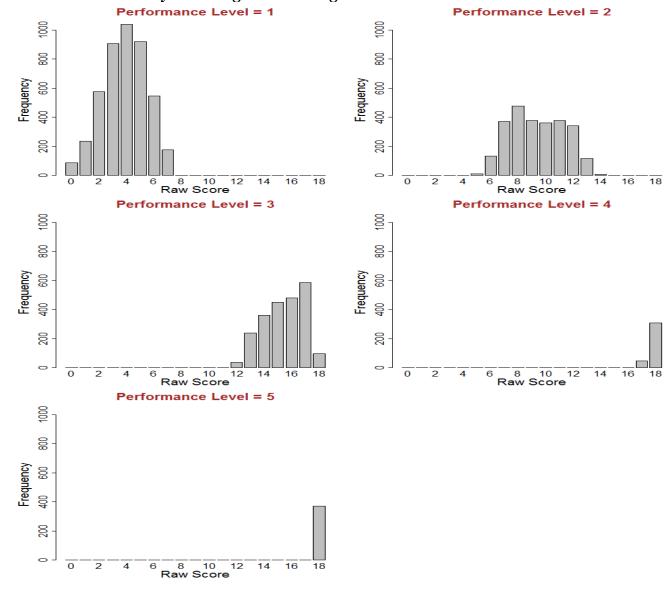


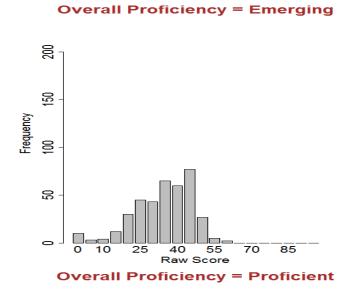
Figure S2.4: Summative Raw Score Summary - Kindergarten Writing

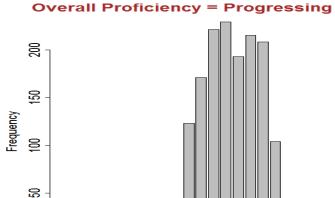


85

70

Figure S2.5: Summative Raw Score Summary - Kindergarten Overall<sup>1</sup>





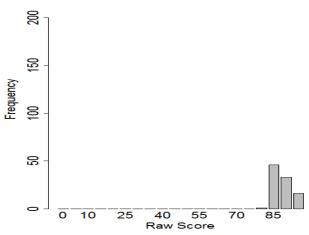
40

Raw Score

55

0 10

25



Note 1. On the horizontal axis, the numbers indicate the minimum raw score in each bin.

Figure S2.6: Summative Raw Score Summary - Grade 1 Listening

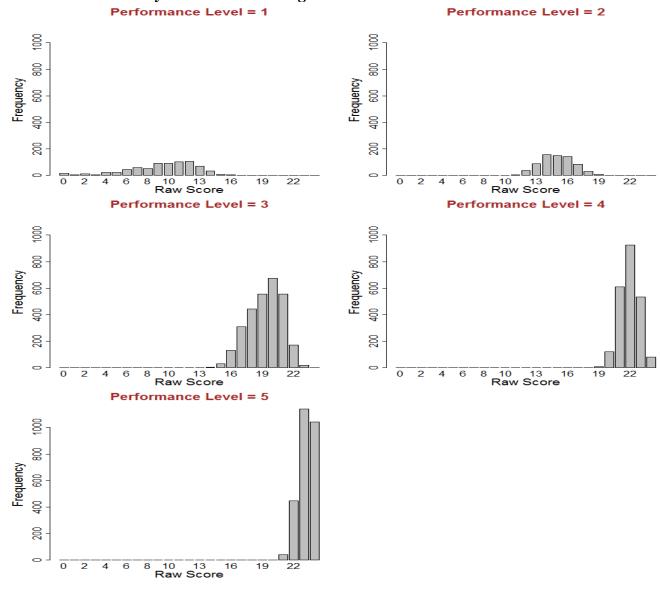


Figure S2.7: Summative Raw Score Summary - Grade 1 Reading

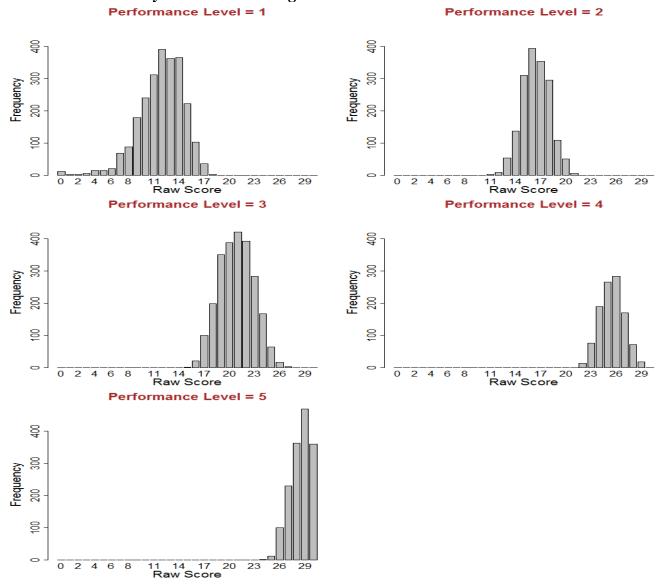


Figure S2.8: Summative Raw Score Summary - Grade 1 Speaking

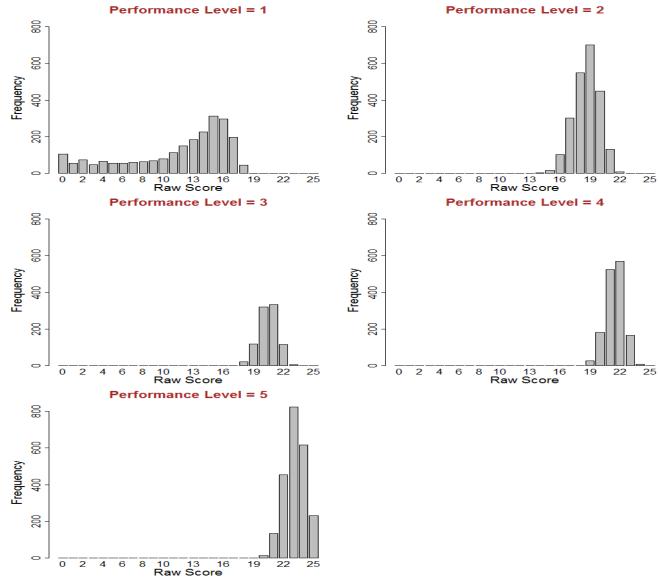


Figure S2.9: Summative Raw Score Summary - Grade 1 Writing

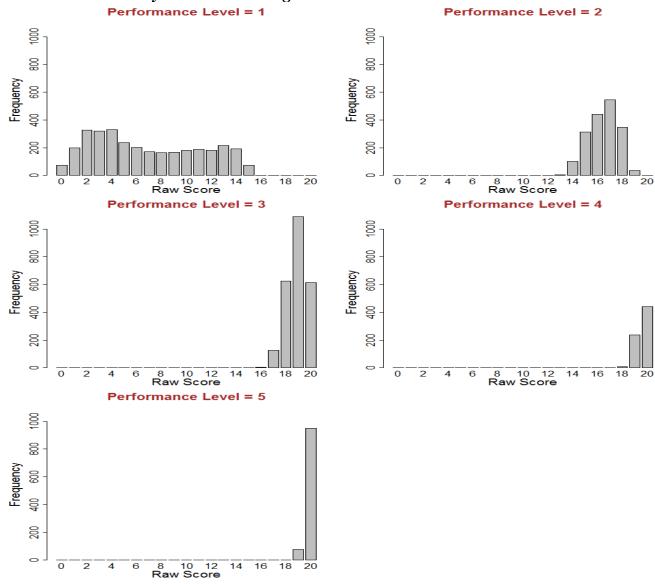
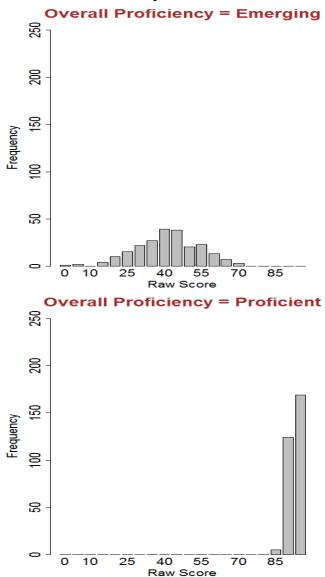


Figure S2.10: Summative Raw Score Summary - Grade 1 Overall



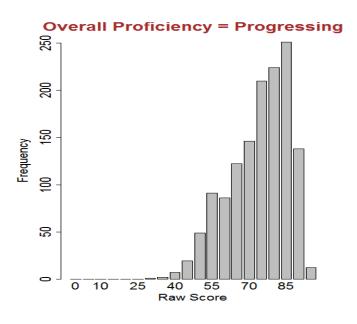


Figure S2.11: Summative Raw Score Summary - Grade 2 Listening

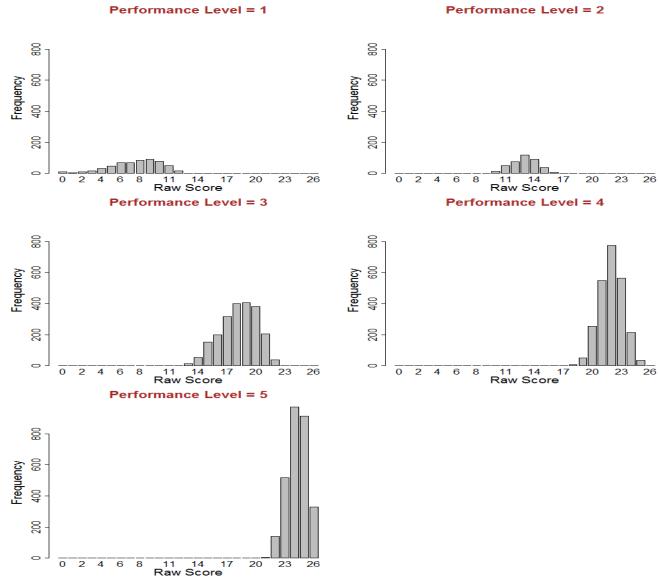


Figure S2.12: Summative Raw Score Summary - Grade 2 Reading

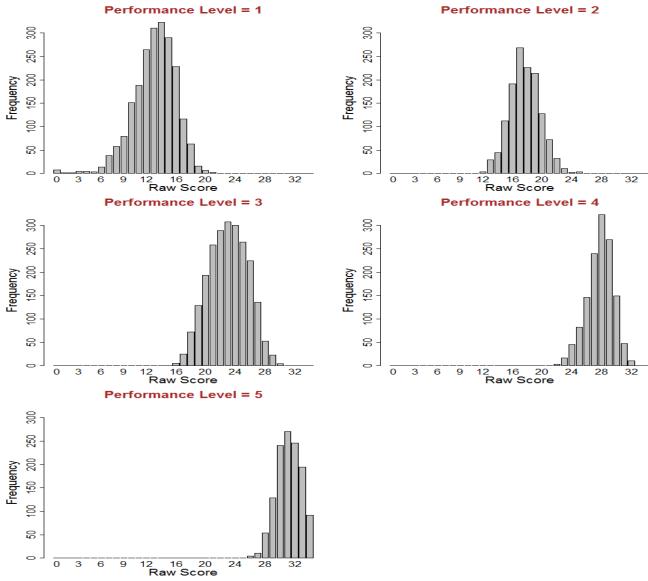


Figure S2.13: Summative Raw Score Summary - Grade 2 Speaking

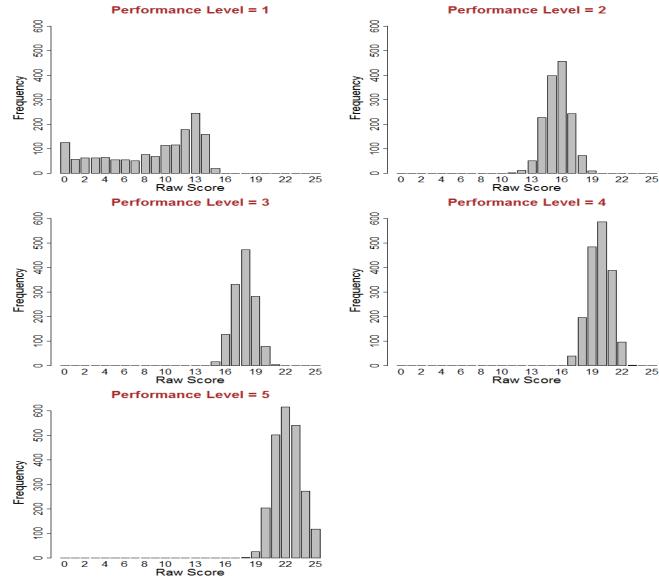


Figure S2.14: Summative Raw Score Summary - Grade 2 Writing

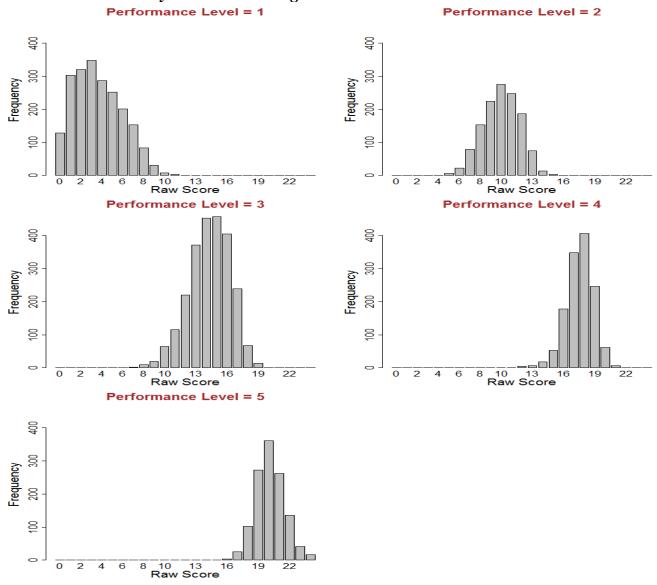
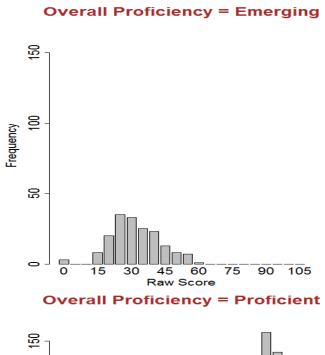
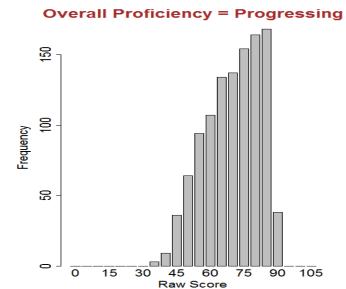


Figure S2.15: Summative Raw Score Summary - Grade 2 Overall





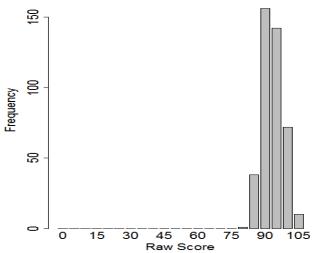


Figure S2.16: Summative Raw Score Summary - Grade 3 Listening

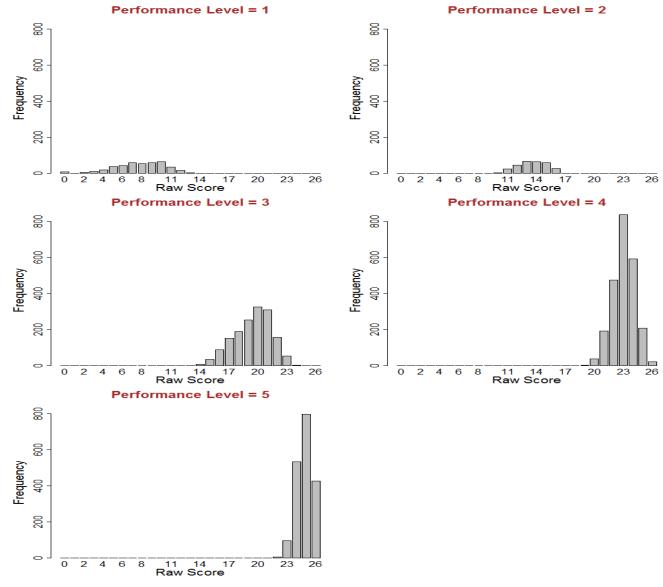


Figure S2.17: Summative Raw Score Summary - Grade 3 Reading

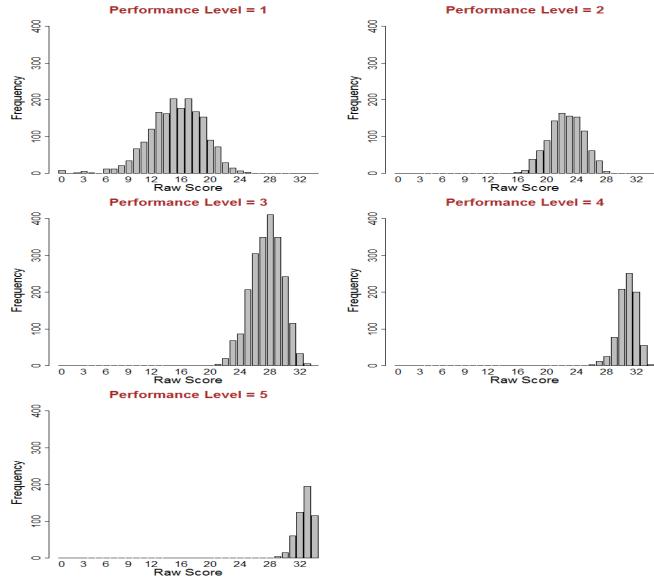


Figure S2.18: Summative Raw Score Summary - Grade 3 Speaking

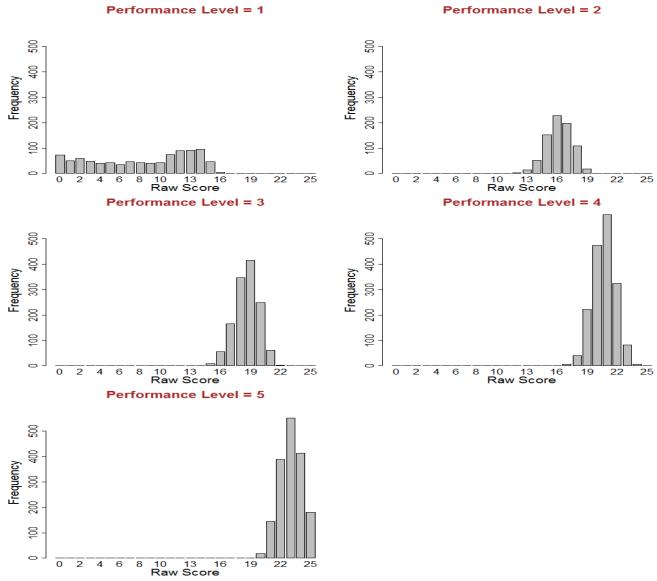


Figure S2.19: Summative Raw Score Summary - Grade 3 Writing

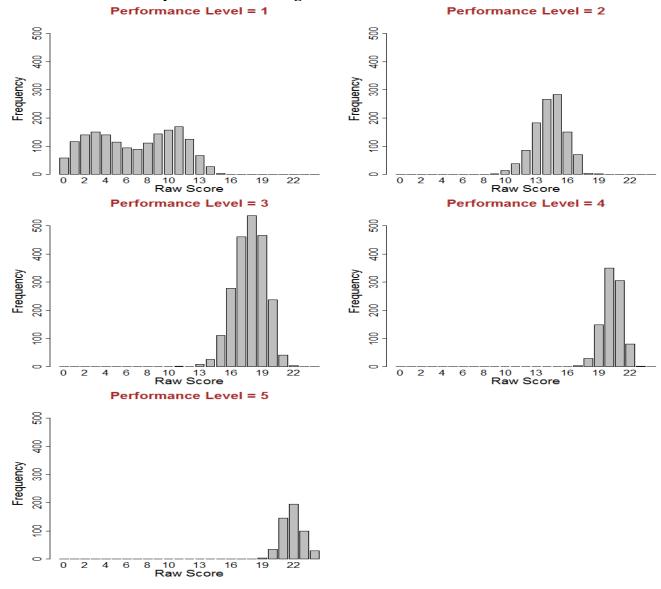
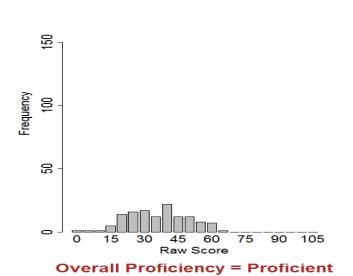
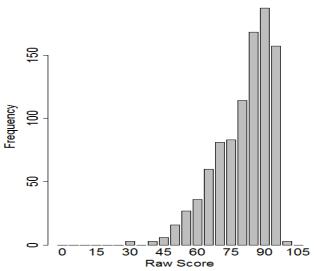


Figure S2.20: Summative Raw Score Summary - Grade 3 Overall

Overall Proficiency = Emerging







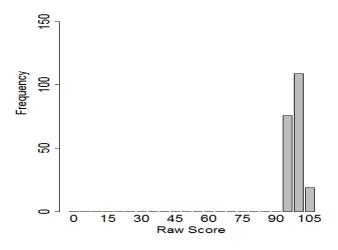


Figure S2.21: Summative Raw Score Summary - Grade 4 Listening

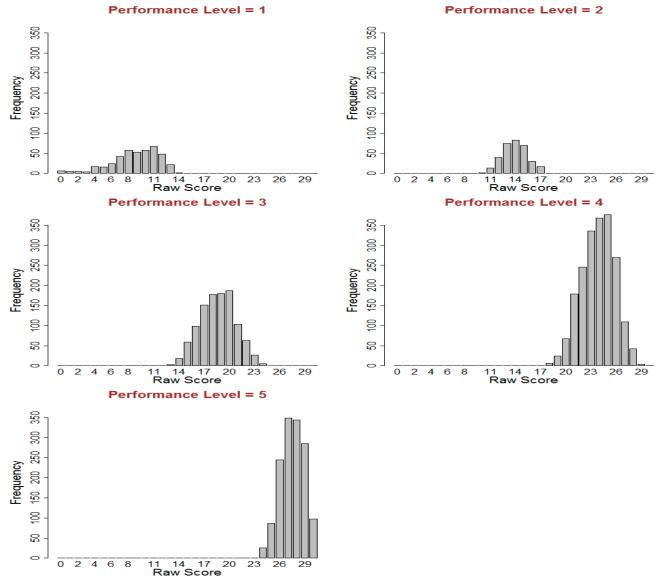


Figure S2.22: Summative Raw Score Summary - Grade 4 Reading

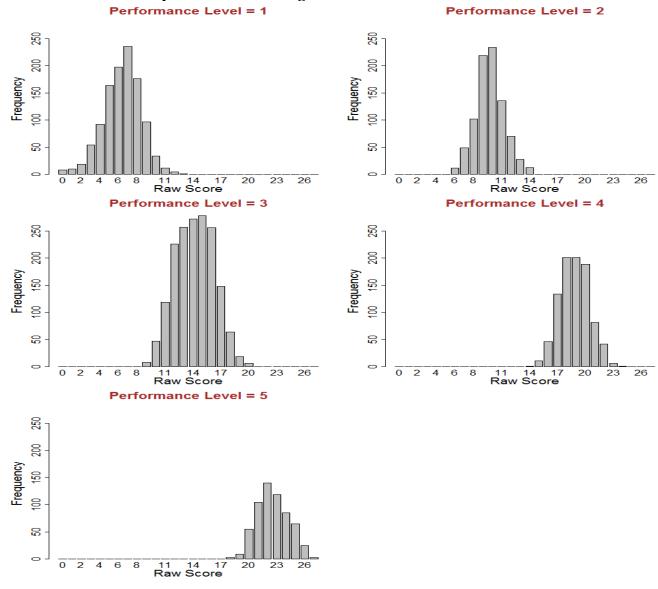


Figure S2.23: Summative Raw Score Summary - Grade 4 Speaking

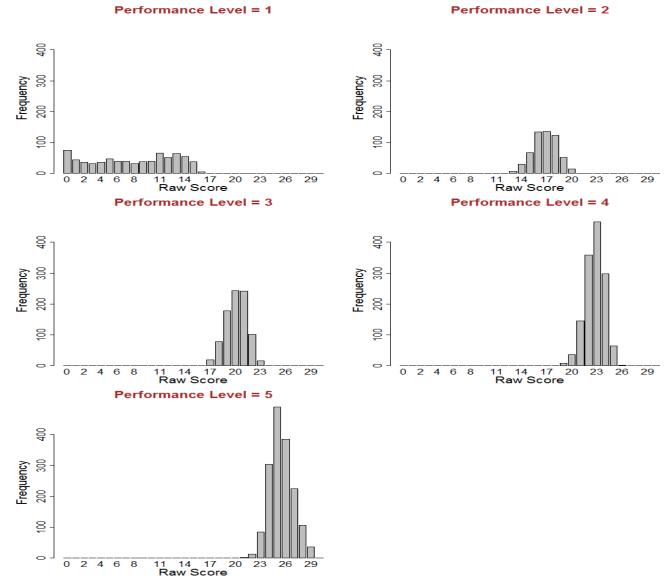


Figure S2.24: Summative Raw Score Summary - Grade 4 Writing

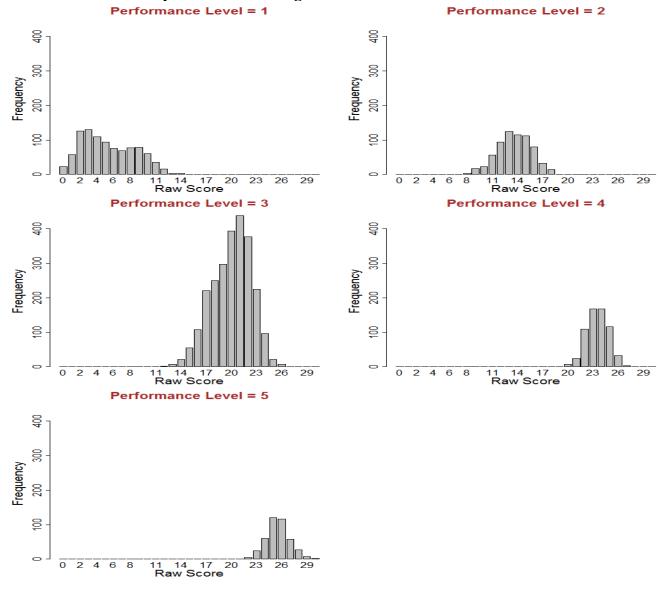
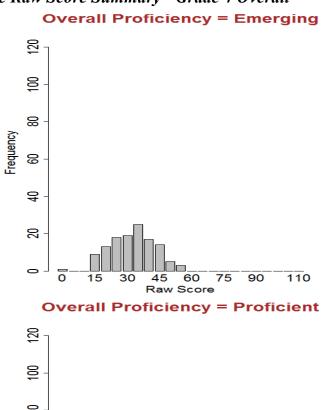
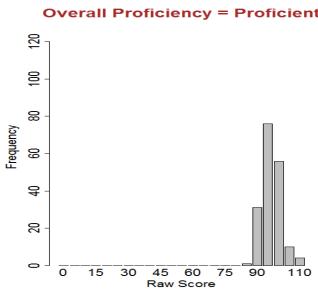
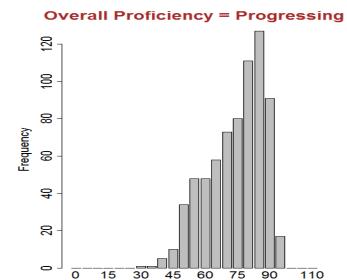


Figure S2.25: Summative Raw Score Summary - Grade 4 Overall







Raw Score

Figure S2.26: Summative Raw Score Summary - Grade 5 Listening

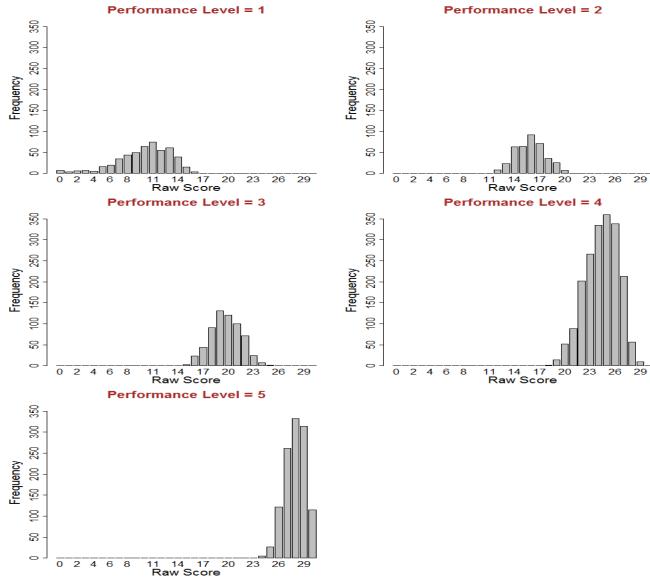


Figure S2.27: Summative Raw Score Summary - Grade 5 Reading

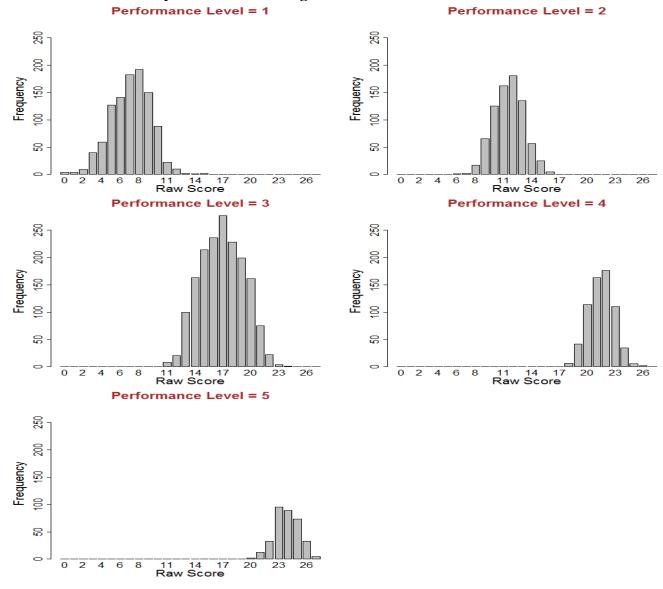


Figure S2.28: Summative Raw Score Summary - Grade 5 Speaking

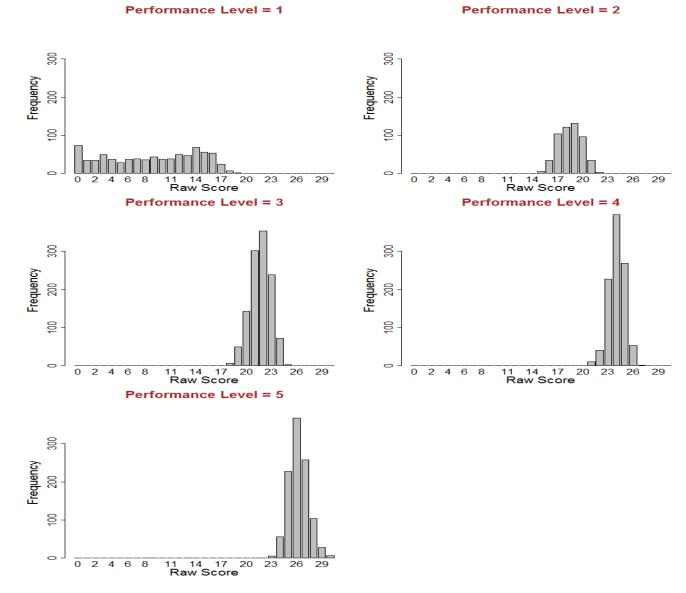


Figure S2.29: Summative Raw Score Summary - Grade 5 Writing

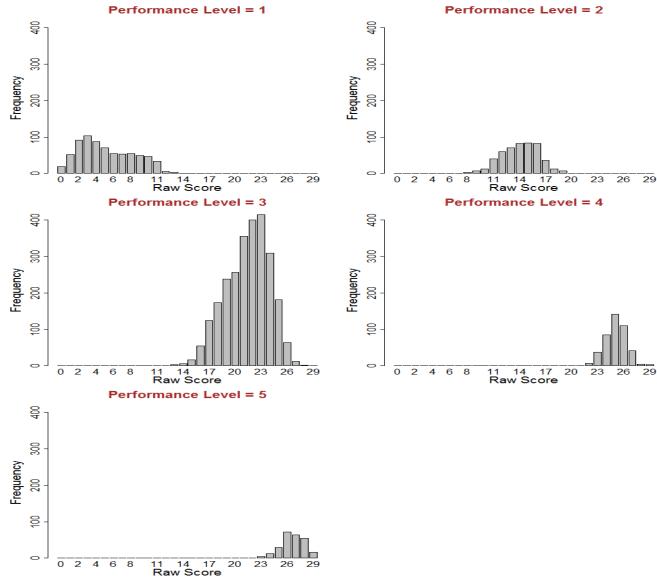
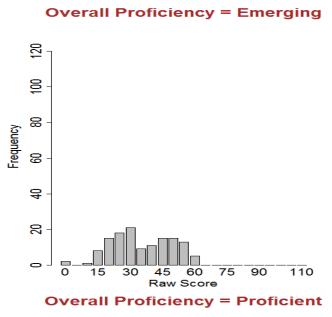
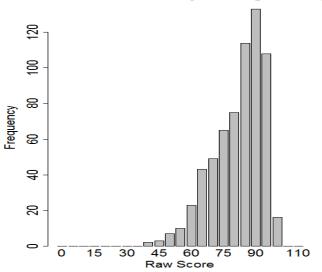


Figure S2.30: Summative Raw Score Summary - Grade 5 Overall



## Overall Proficiency = Progressing



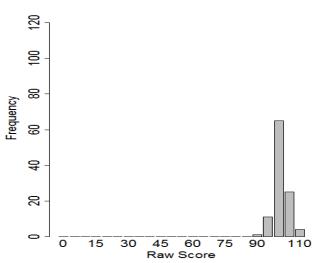


Figure S2.31: Summative Raw Score Summary - Grade 6 Listening

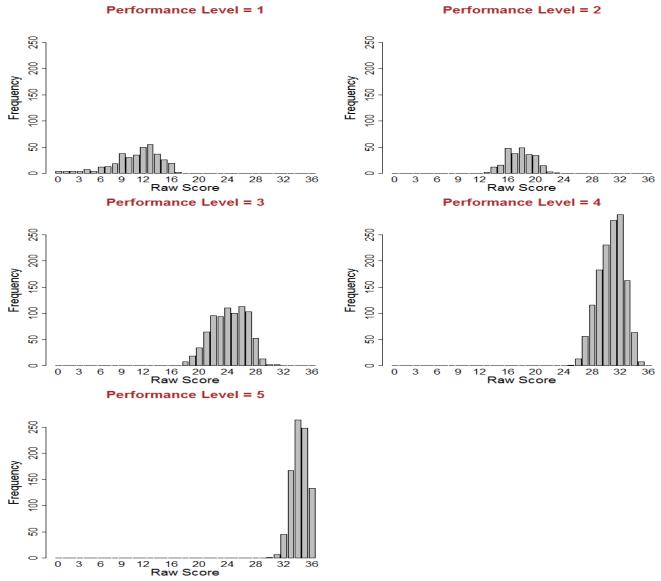


Figure S2.32: Summative Raw Score Summary - Grade 6 Reading

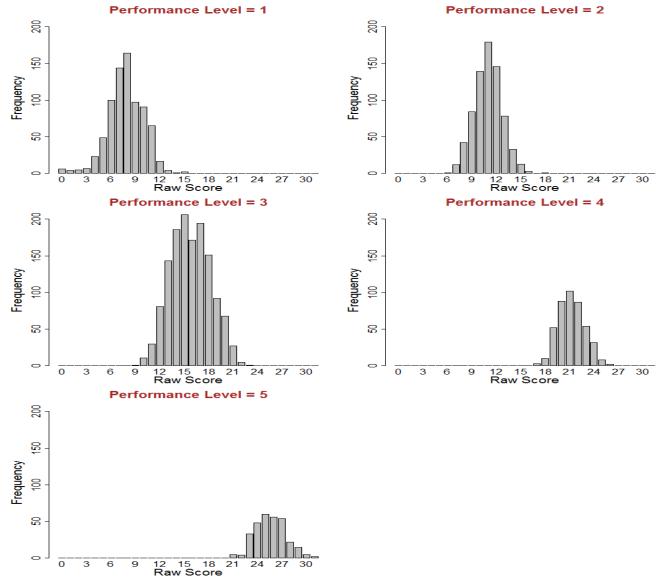


Figure S2.33: Summative Raw Score Summary - Grade 6 Speaking

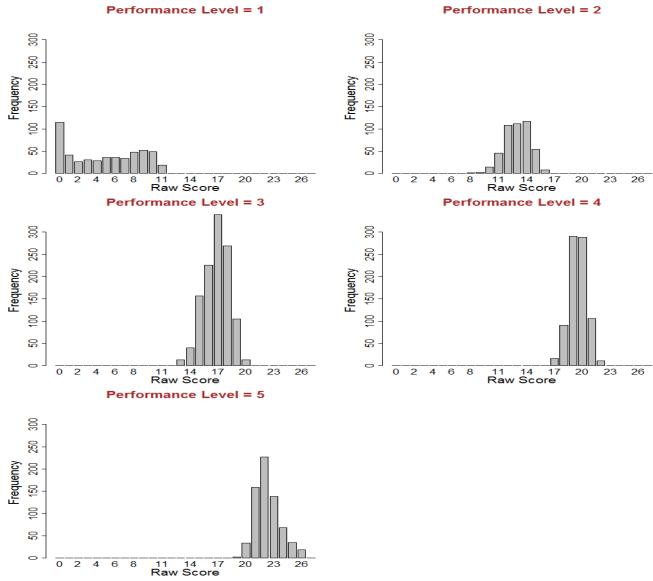


Figure S2.34: Summative Raw Score Summary - Grade 6 Writing

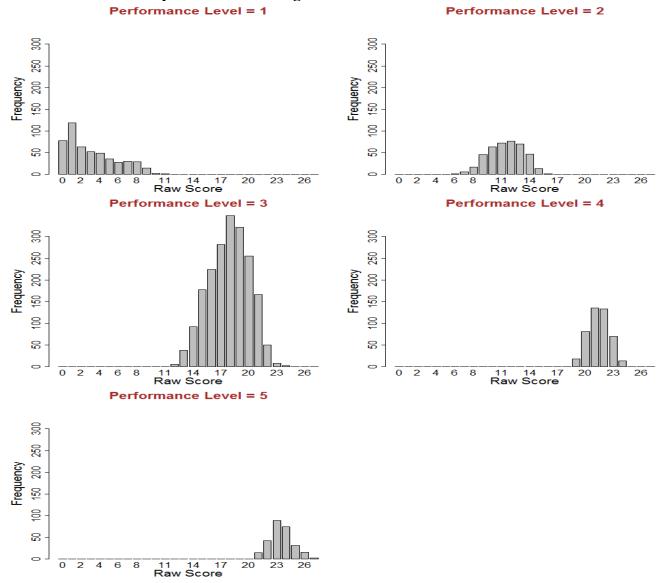
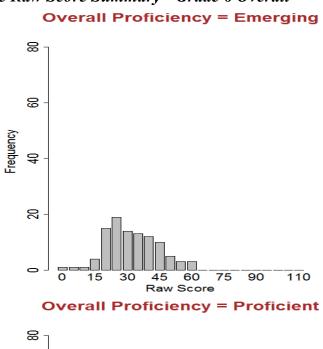
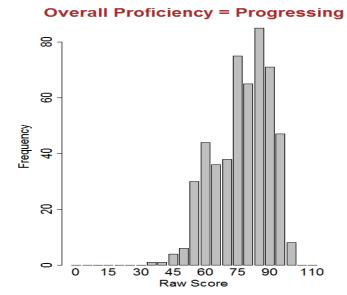


Figure S2.35: Summative Raw Score Summary - Grade 6 Overall





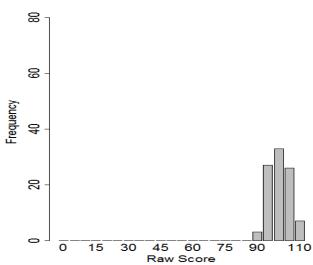


Figure S2.36: Summative Raw Score Summary - Grade 7 Listening

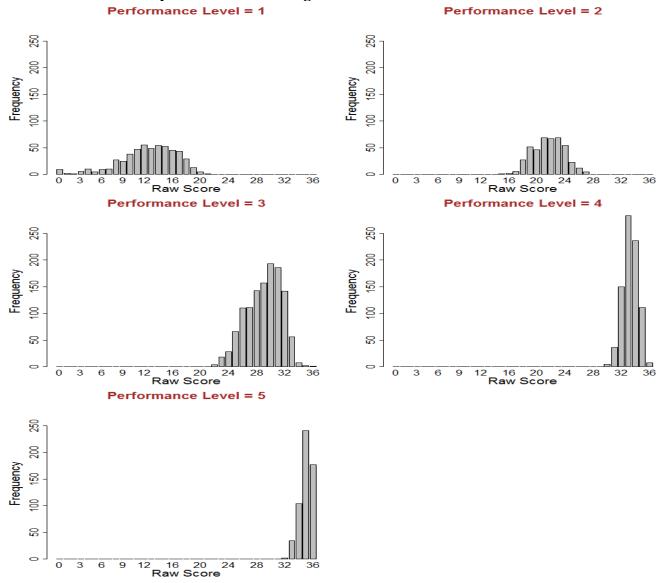


Figure S2.37: Summative Raw Score Summary - Grade 7 Reading

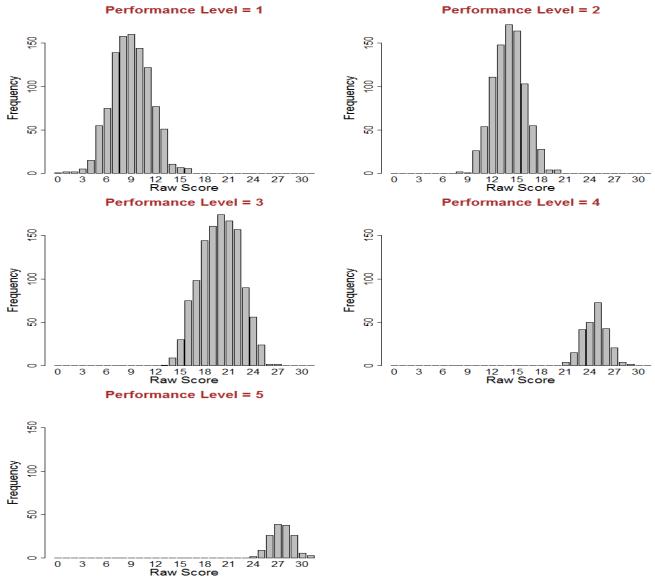


Figure S2.38: Summative Raw Score Summary - Grade 7 Speaking

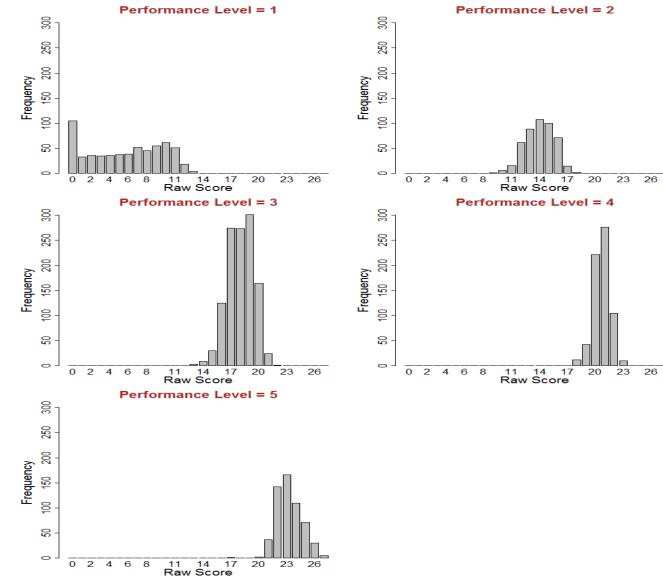


Figure S2.39: Summative Raw Score Summary - Grade 7 Writing

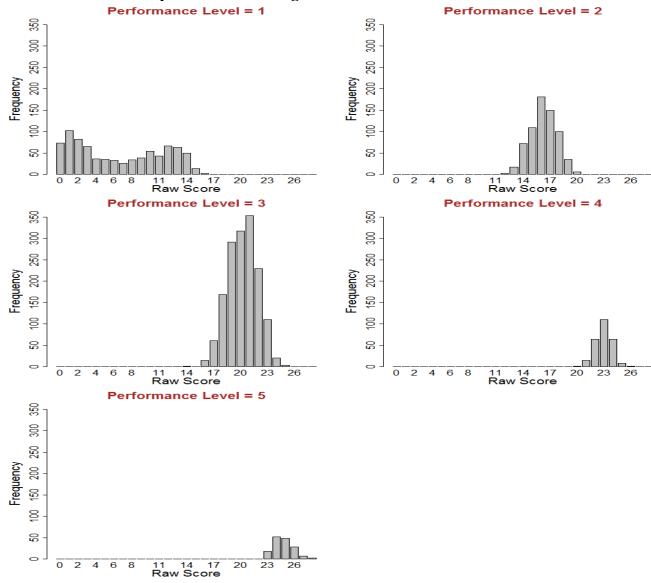
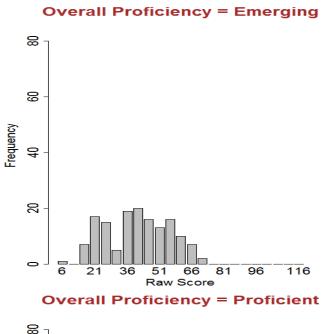
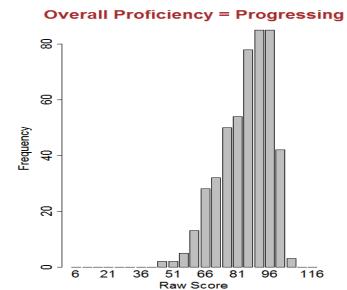


Figure S2.40: Summative Raw Score Summary - Grade 7 Overall





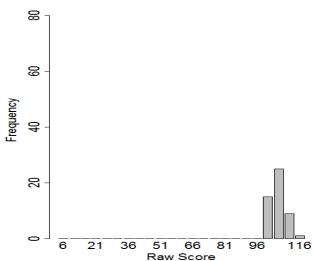


Figure S2.41: Summative Raw Score Summary - Grade 8 Listening

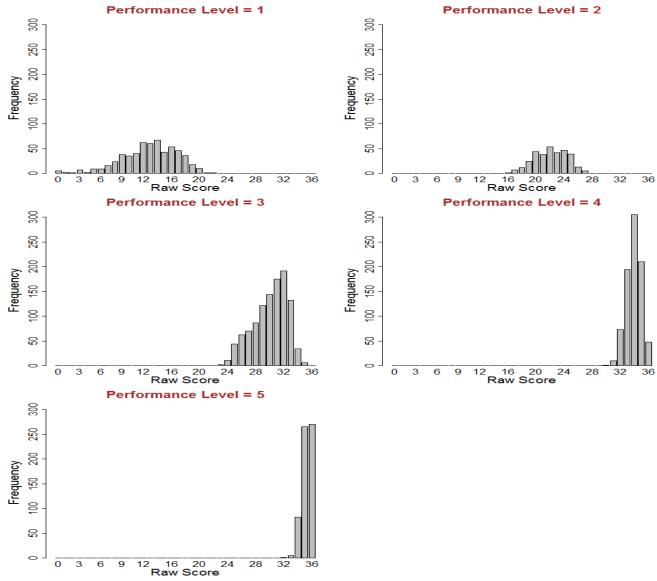


Figure S2.42: Summative Raw Score Summary - Grade 8 Reading

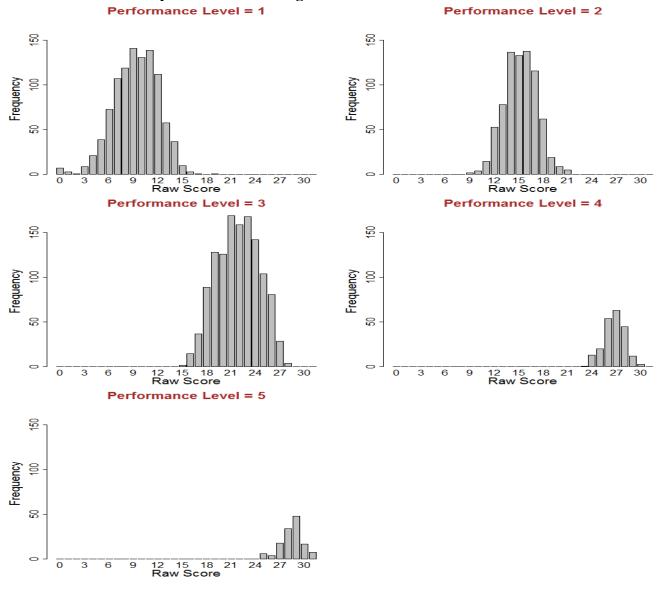


Figure S2.43: Summative Raw Score Summary - Grade 8 Speaking

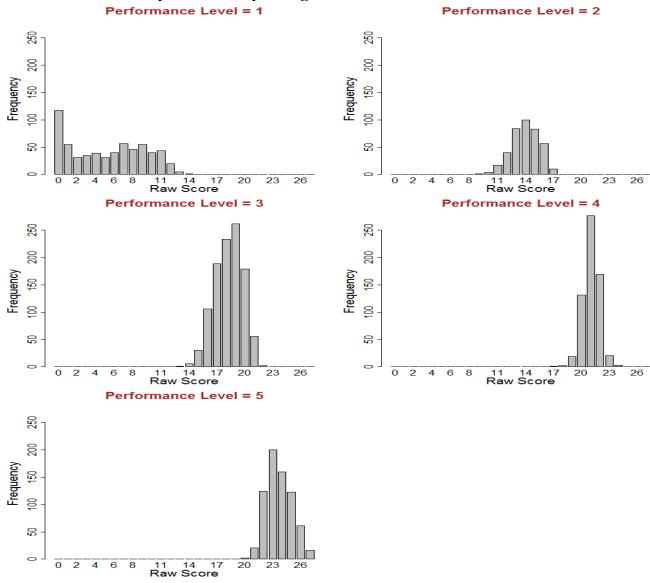


Figure S2.44: Summative Raw Score Summary - Grade 8 Writing

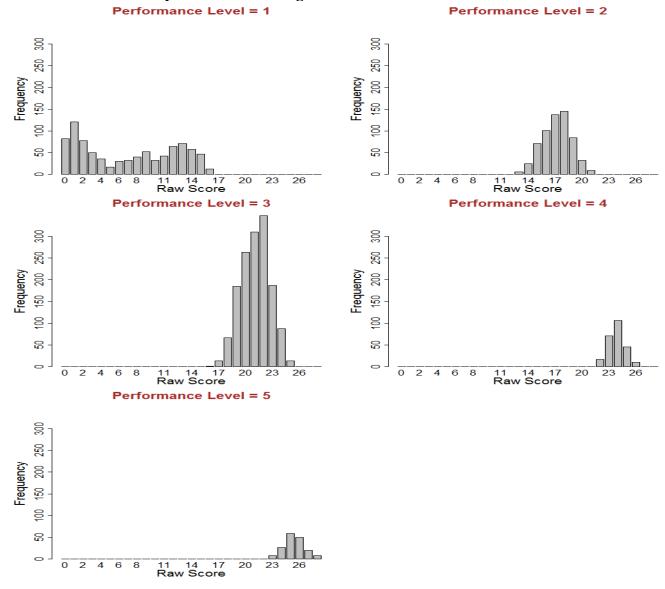
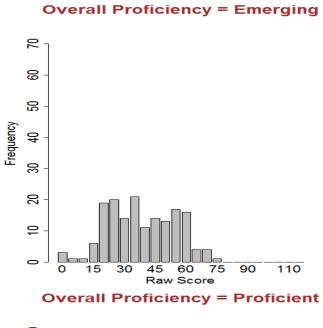
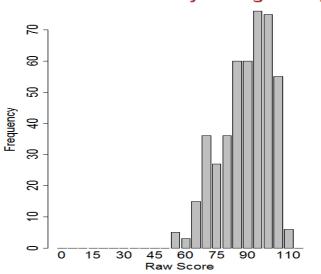


Figure S2.45: Summative Raw Score Summary - Grade 8 Overall



## Overall Proficiency = Progressing



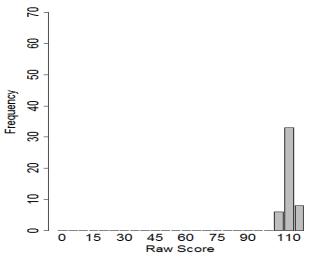


Figure S2.46: Summative Raw Score Summary - Grade 9 Listening

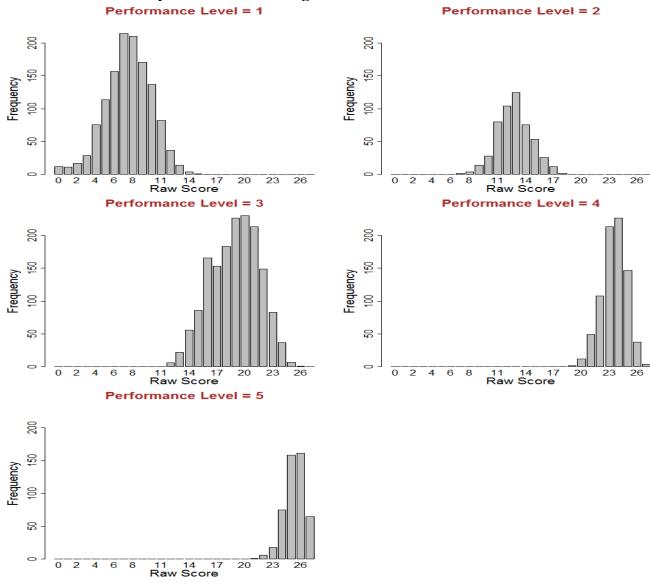


Figure S2.47: Summative Raw Score Summary - Grade 9 Reading

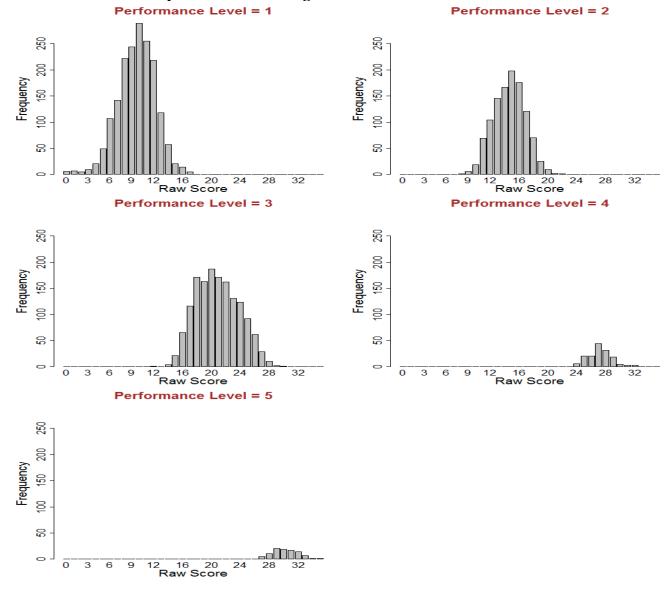


Figure S2.48: Summative Raw Score Summary - Grade 9 Speaking

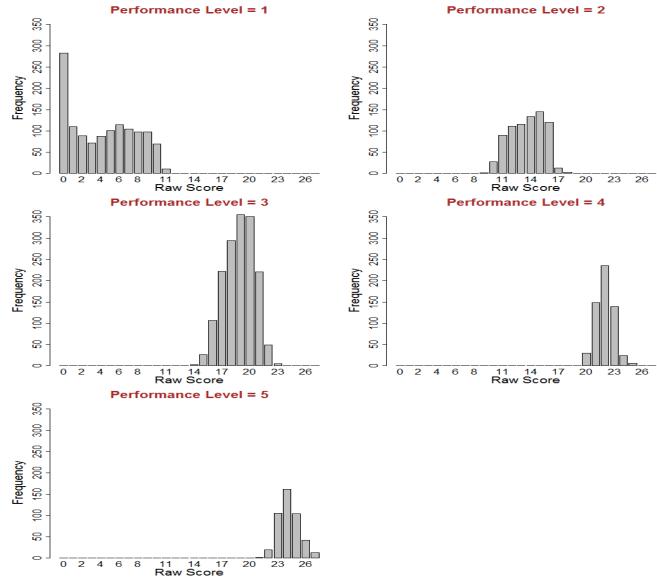


Figure S2.49: Summative Raw Score Summary - Grade 9 Writing

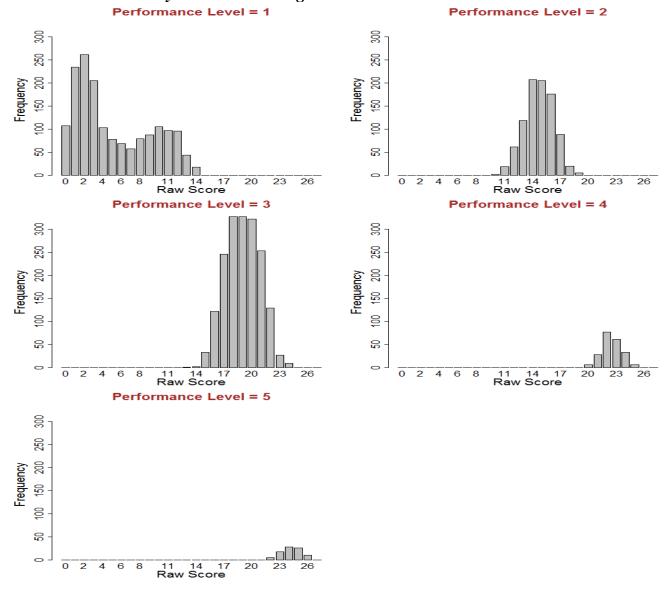
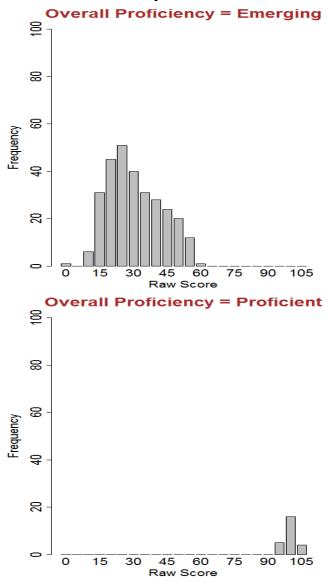


Figure S2.50: Summative Raw Score Summary - Grade 9 Overall



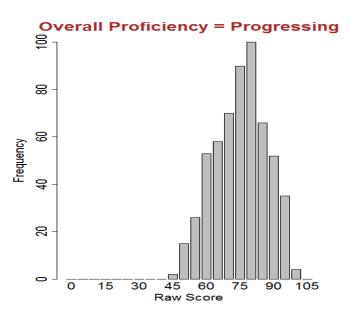


Figure S2.51: Summative Raw Score Summary - Grade 10 Listening

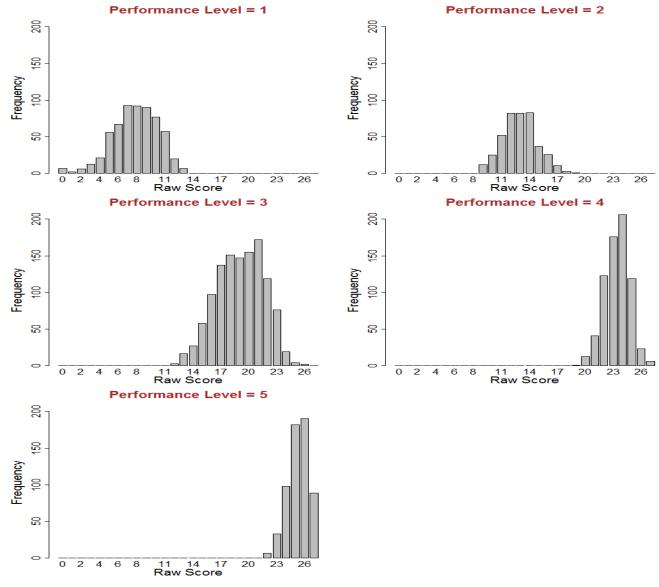


Figure S2.52: Summative Raw Score Summary - Grade 10 Reading

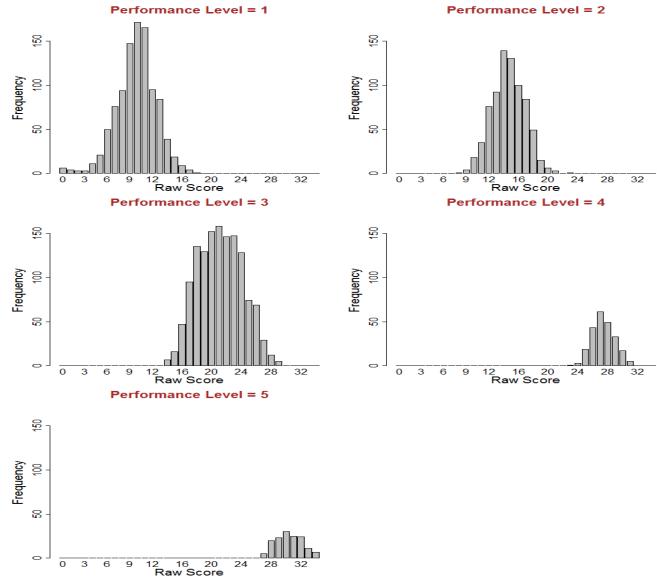


Figure S2.53: Summative Raw Score Summary - Grade 10 Speaking

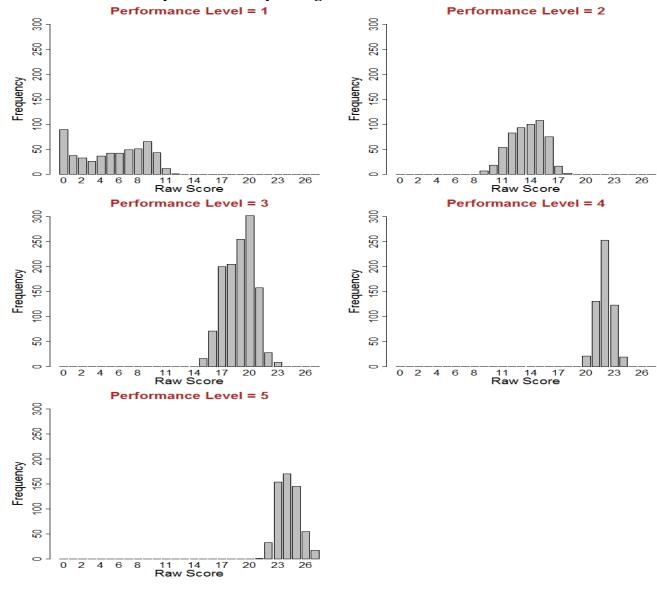


Figure S2.54: Summative Raw Score Summary - Grade 10 Writing

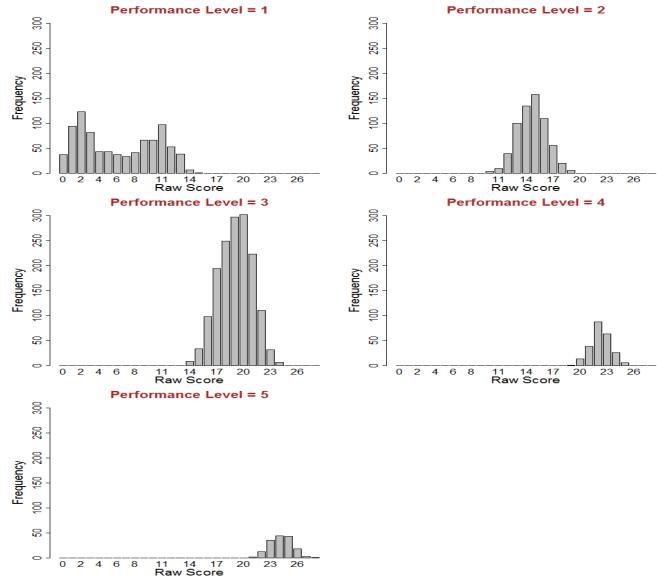
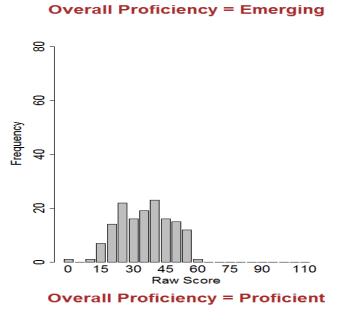
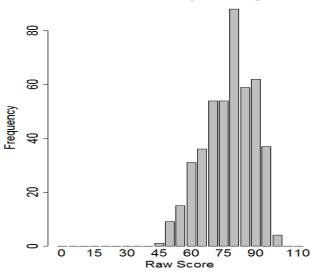


Figure S2.55: Summative Raw Score Summary - Grade 10 Overall



## Overall Proficiency = Progressing



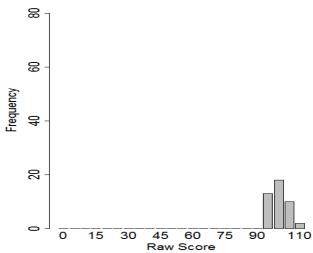


Figure S2.56: Summative Raw Score Summary - Grade 11 Listening

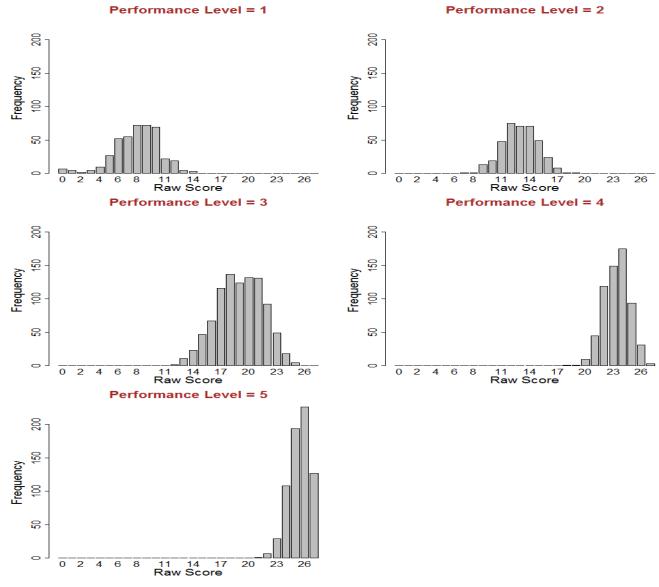


Figure S2.57: Summative Raw Score Summary - Grade 11 Reading

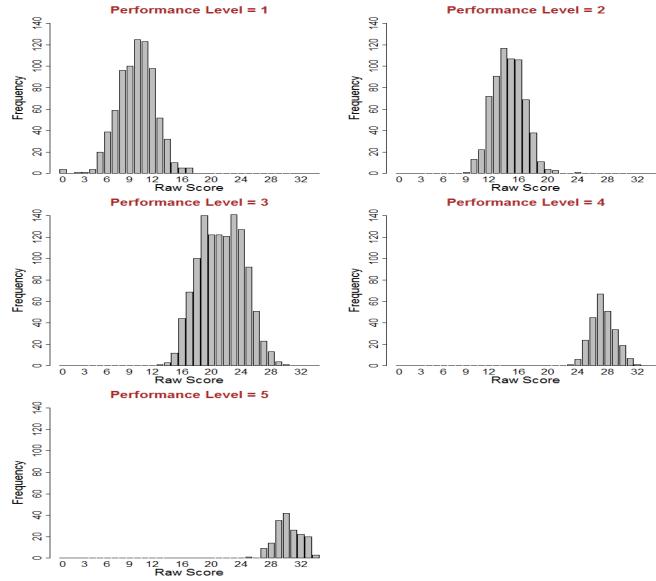


Figure S2.58: Summative Raw Score Summary - Grade 11 Speaking

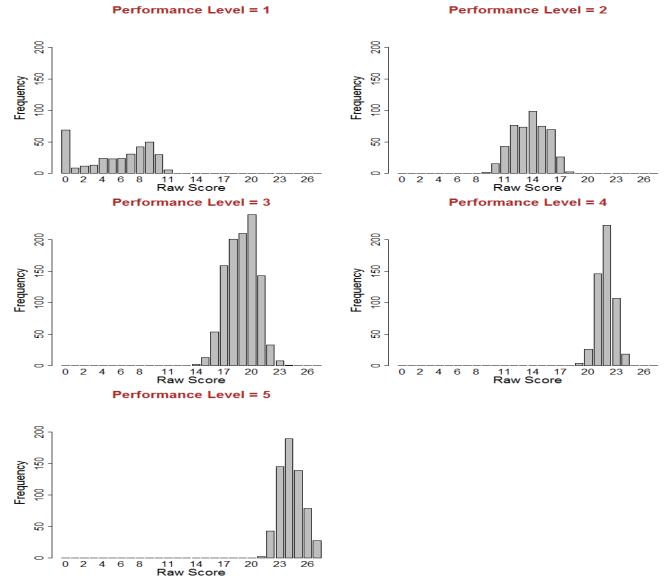


Figure S2.59: Summative Raw Score Summary - Grade 11 Writing

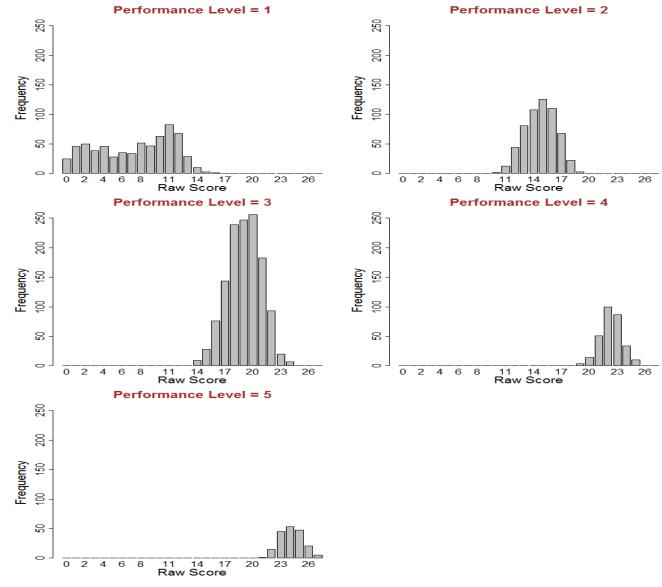
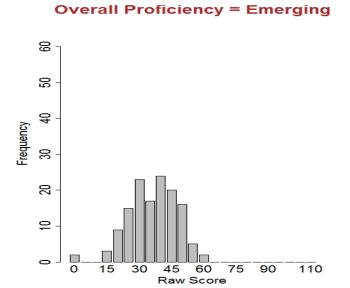
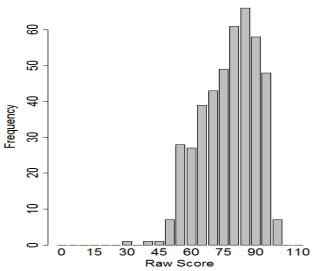


Figure S2.60: Summative Raw Score Summary - Grade 11 Overall



## Overall Proficiency = Progressing





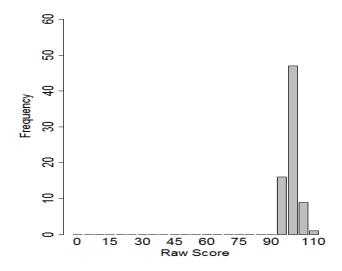


Figure S2.61: Summative Raw Score Summary - Grade 12 Listening

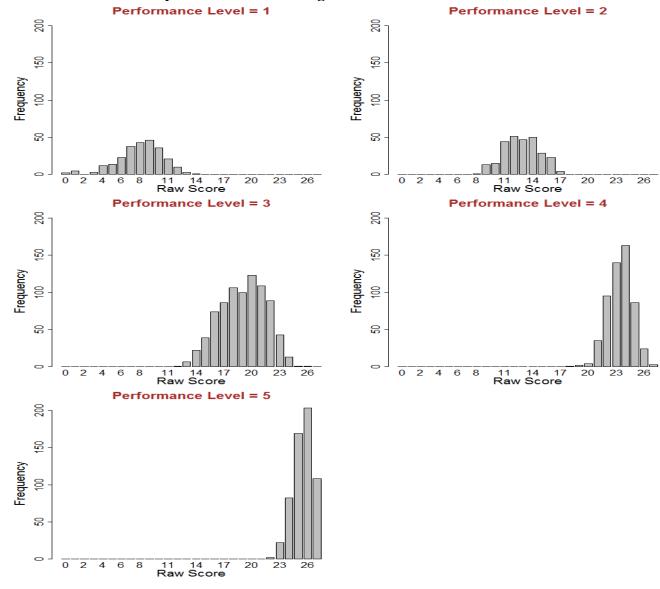


Figure S2.62: Summative Raw Score Summary - Grade 12 Reading

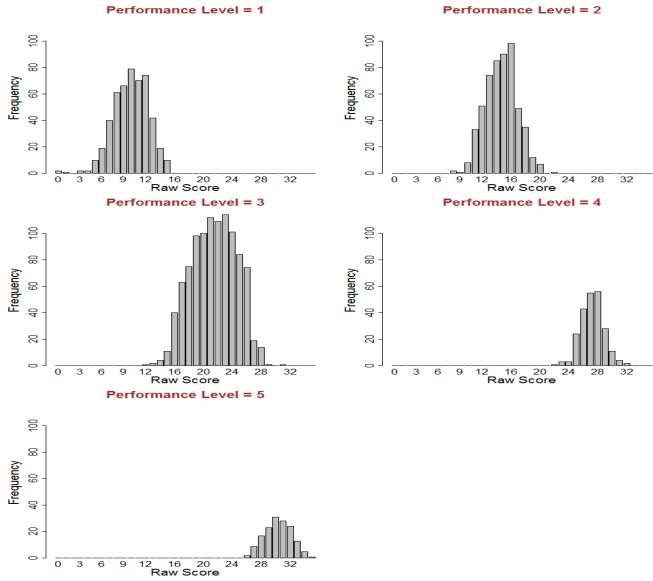


Figure S2.63: Summative Raw Score Summary - Grade 12 Speaking

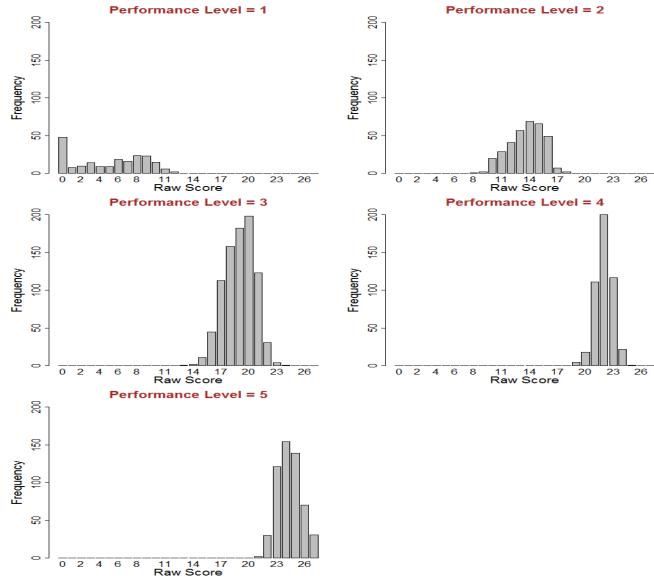


Figure S2.64: Summative Raw Score Summary - Grade 12 Writing

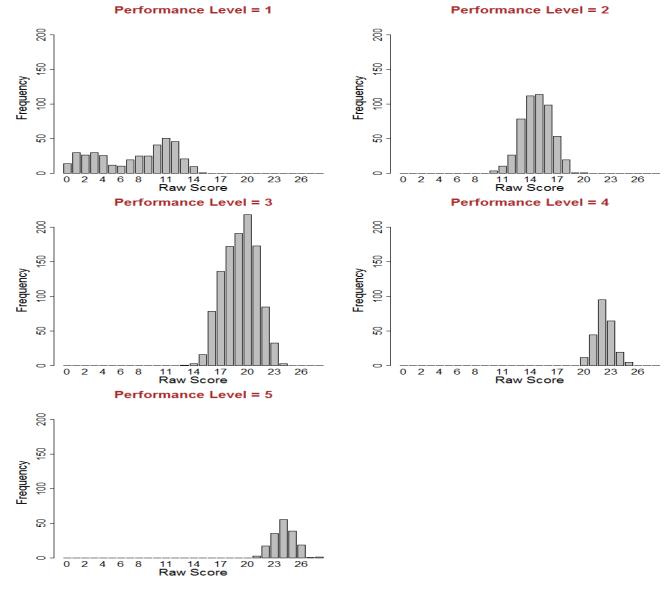
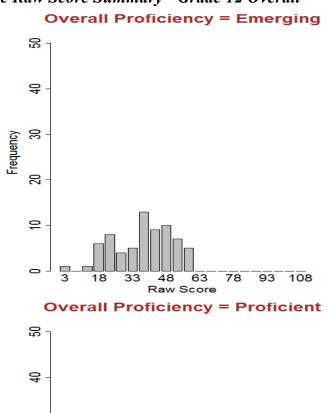
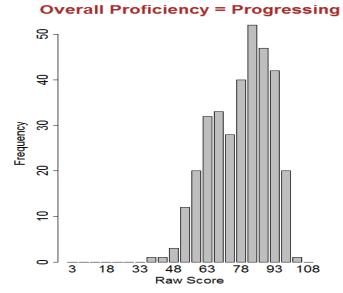
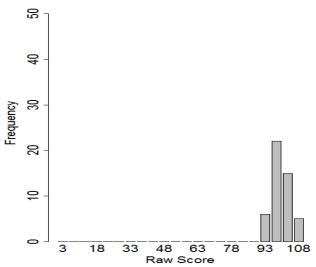


Figure S2.65: Summative Raw Score Summary - Grade 12 Overall







## **Section 3: Summative Assessment - Scale Score Summary**

- \* Domain tests with Exemption or Not Attempted are excluded.
- \* The statistics are suppressed when the N count is fewer than 10.

Table S3.1: Summative Scale Score Summary by Subgroup - Kindergarten

O., b.,	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		10,224	237	545.7	775	77.4	10,122	247	549.1	770	73.9
	Female	4,810	237	556.1	775	75.8	4,791	247	558.1	770	73.1
Gender	Male	5,260	237	536.0	775	77.7	5,178	247	540.6	770	73.7
	Missing	154	371	549.8	722	76.0	153	383	554.5	715	75.8
	American Indian or Alaskan Native	35	395	548.6	668	72.5	35	430	555.5	679	63.3
	Asian	2,243	237	561.5	775	77.1	2,209	247	565.5	770	73.0
	Black or African American	1,854	237	547.0	760	73.3	1,833	247	551.1	755	70.3
	Hispanic or Latino	3,548	237	528.0	768	74.0	3,516	247	532.0	760	70.5
Ethnicity	Native Hawaiian or Other Pacific Islander	53	423	554.7	673	54.1	53	419	560.8	675	50.8
	Two or More Races	930	346	532.0	775	78.8	922	345	534.9	770	75.4
	White	1,515	292	569.7	775	79.0	1,508	331	570.2	770	76.5
	Other/Unknown	46	432	561.3	732	75.2	46	437	562.0	725	73.5
Other	Gifted	8					8				
Other	IEP	593	237	493.0	734	88.0	507	247	513.1	737	80.4

C. have	Status —			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	13	415	525.5	695	99.4	13	417	524.1	692	93.6
	Autism	195	237	449.0	734	84.0	138	247	477.4	737	79.7
	Developmental delay	7					6				
	Emotional disturbance	4					4				
	Hearing Impaired	6					7				
	Intellectual Disability	19	366	448.5	551	58.4	17	339	452.1	552	64.6
Primary Disability	Multiple disabilities	32	237	366.7	468	69.7	11	247	356.8	457	75.6
	Orthopedic impairment	5					5				
	Other health impairment	55	394	520.9	702	64.0	53	387	519.7	708	70.9
	Specific learning disability	31	471	551.4	652	48.0	30	447	553.4	650	51.1
	Speech or language impairment	233	381	533.1	719	68.0	232	397	538.1	709	67.2
	Traumatic brain injury	3					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.1: Summative Scale Score Summary by Subgroup - Kindergarten (cont.)

Outh mineron	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		10,076	291	558.6	756	85.1	10,101	309	523.6	727	75.3
	Female	4,768	291	568.9	756	82.8	4,785	309	526.3	723	74.6
Gender	Male	5,158	291	549.0	756	86.1	5,163	309	520.8	727	75.6
	Missing	150	331	559.2	726	88.7	153	354	533.1	700	81.1
	American Indian or Alaskan Native	35	342	571.2	726	83.0	35	400	523.4	685	71.2
	Asian	2,195	291	574.5	756	79.6	2,204	309	552.4	723	78.0
	Black or African American	1,827	291	569.8	745	74.8	1,826	309	523.0	715	72.6
<b>-</b> 0	Hispanic or Latino	3,509	291	538.1	753	87.4	3,513	309	499.7	719	63.6
Ethnicity	Native Hawaiian or Other Pacific Islander	53	479	580.8	680	50.4	53	429	536.6	683	71.1
	Two or More Races	908	328	536.6	756	95.6	919	351	506.3	723	70.8
	White	1,503	322	581.0	756	80.4	1,505	343	547.7	727	80.3
	Other/Unknown	46	354	582.8	670	73.7	46	433	536.8	703	75.7
Other	Gifted	8					8				
Other	IEP	494	291	504.3	720	95.0	499	309	495.2	707	78.6

Oukana	Otatua		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	13	346	492.0	655	113.0	13	428	505.9	689	81.0
	Autism	129	291	442.8	711	93.1	132	309	495.4	707	93.1
	Developmental delay	7					5				
	Emotional disturbance	4					4				
	Hearing Impaired	6					7				
	Intellectual Disability	13	328	438.2	535	61.6	15	350	442.1	528	56.1
Primary Disability	Multiple disabilities	10	291	334.8	431	41.8	12	309	379.1	526	69.1
	Orthopedic impairment	5					5				
	Other health impairment	54	345	514.0	666	79.5	53	366	497.0	693	63.8
	Specific learning disability	31	406	560.0	680	65.1	30	419	488.2	613	47.6
	Speech or language impairment	232	337	537.9	720	78.8	232	361	503.1	697	71.6
	Traumatic brain injury	2				roop grade k	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.1: Summative Scale Score Summary by Subgroup - Kindergarten (cont.)

Oukamana	Otatua		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		10,229	3377	5481.8	6865	553.3	10,239	3185	5441.5	7178	575.6
	Female	4,811	3377	5557.4	6865	544.5	4,816	3185	5510.5	7178	562.4
Gender	Male	5,264	3377	5412.0	6865	552.7	5,269	3185	5377.2	7178	579.3
	Missing	154	4296	5509.4	6728	539.7	154	3862	5483.3	6717	605.4
	American Indian or Alaskan Native	35	4591	5510.4	6357	478.2	35	4335	5496.9	6691	544.8
	Asian	2,245	3377	5579.0	6865	545.1	2,247	3185	5595.9	7178	570.3
	Black or African American	1,855	3377	5488.7	6865	528.8	1,859	3185	5467.7	6999	532.9
	Hispanic or Latino	3,549	3377	5371.5	6865	540.4	3,552	3185	5280.6	7130	541.9
Ethnicity	Native Hawaiian or Other Pacific Islander	53	4515	5548.0	6354	376.6	53	4789	5565.7	6374	386.7
	Two or More Races	930	4092	5392.6	6865	563.9	931	3768	5304.6	7178	595.0
	White	1,516	3689	5636.8	6865	561.5	1,516	3658	5631.7	7178	580.2
	Other/Unknown	46	4646	5573.6	6756	540.9	46	4528	5580.6	6741	549.0
Other	Gifted	8					8				
Other	IEP	595	3377	5123.8	6865	632.6	598	3185	5043.0	6895	629.8

Oukana	Otatua		Con	nprehensi	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	13	4542	5364.2	6685	753.9	13	4315	5171.2	6455	722.4
	Autism	196	3377	4810.5	6674	584.2	199	3185	4769.9	6895	611.0
	Developmental delay	7					7				
	Emotional disturbance	4					4				
	Hearing Impaired	7					7				
	Intellectual Disability	19	4132	4789.1	5648	450.9	19	3802	4655.6	5183	433.6
Primary Disability	Multiple disabilities	32	3377	4238.6	4848	468.4	32	3185	4256.9	4930	511.5
	Orthopedic impairment	5					5				
	Other health impairment	55	4409	5305.9	6648	503.8	55	4173	5182.4	6530	502.3
	Specific learning disability	31	4855	5564.9	6458	384.8	31	4742	5401.9	5969	363.6
	Speech or language impairment	233	4388	5414.5	6796	500.0	233	3998	5313.7	6562	522.5
	Traumatic brain injury	3				vroce grade k	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.2: Summative Scale Score Summary by Subgroup - Grade 1

O., b.,	04-4			Listening			Reading				
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		9,376	239	547.1	712	75.4	9,268	241	538.6	744	80.4
	Female	4,488	275	553.4	712	73.3	4,449	267	542.0	744	80.8
Gender	Male	4,763	239	541.2	712	76.8	4,693	241	535.6	744	79.9
	Missing	125	326	548.4	712	74.8	126	265	532.4	744	84.5
	American Indian or Alaskan Native	36	381	564.2	665	65.4	36	408	544.4	714	80.5
	Asian	2,154	260	567.2	712	77.2	2,128	282	574.2	744	82.0
	Black or African American	1,804	242	546.6	712	73.4	1,774	249	543.2	744	77.1
	Hispanic or Latino	3,079	275	530.2	712	71.5	3,054	271	509.7	744	70.6
Ethnicity	Native Hawaiian or Other Pacific Islander	47	362	549.0	705	77.2	47	418	545.9	734	88.8
	Two or More Races	877	275	530.4	712	75.2	865	377	511.5	744	74.5
	White	1,349	239	564.4	712	72.1	1,334	241	558.7	744	76.5
	Other/Unknown	30	387	566.8	712	72.7	30	402	562.6	744	85.5
Othor	Gifted	6					6				
Other	IEP	627	239	486.5	690	83.1	528	241	503.2	708	77.9

O. Ib arras arra	Otatus			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	23	407	555.0	690	73.0	23	419	546.8	704	83.0
	Autism	184	242	451.6	661	90.5	121	249	515.3	708	91.0
	Developmental delay	8					4				
	Emotional disturbance	3					3				
	Hearing Impaired	8					10	435	489.6	588	55.5
	Intellectual Disability	24	341	420.9	552	58.5	19	381	454.2	568	44.5
	Multiple disabilities	33	239	403.6	577	71.0	13	241	439.7	545	82.3
Primary Disability	Orthopedic impairment	8					7				
	Other health impairment	86	323	509.8	687	74.0	82	271	506.7	704	82.0
	Specific learning disability	60	370	502.4	646	62.2	57	400	480.8	672	52.8
	Speech or language impairment	211	377	524.9	690	63.8	210	393	513.5	707	70.1
	Traumatic brain injury	3					2				
	Visual impairment	1					1				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.2: Summative Scale Score Summary by Subgroup - Grade 1 (cont.)

0.1	24-1			Speaking			Writing				
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		9,261	265	566.5	736	77.2	9,263	245	530.2	733	88.8
	Female	4,448	276	572.6	736	76.5	4,446	272	535.2	733	88.1
Gender	Male	4,687	265	560.9	736	77.1	4,691	245	525.7	733	89.1
	Missing	126	275	557.3	736	91.3	126	271	520.1	733	92.0
	American Indian or Alaskan Native	36	346	552.6	670	72.9	36	367	527.4	699	92.7
	Asian	2,119	284	587.5	736	74.0	2,126	291	569.4	733	84.1
	Black or African American	1,776	291	574.0	736	67.0	1,773	253	535.1	733	83.8
<b>-</b>	Hispanic or Latino	3,056	279	546.9	736	79.1	3,053	276	497.7	733	83.3
Ethnicity	Native Hawaiian or Other Pacific Islander	47	354	565.7	720	80.7	47	371	537.5	721	99.8
	Two or More Races	861	300	546.2	736	84.3	865	338	498.4	733	87.0
	White	1,336	265	581.3	736	71.9	1,333	245	555.5	733	80.4
	Other/Unknown	30	355	582.5	736	81.6	30	371	548.3	733	87.8
	Gifted	6					6				
Other	IEP	529	265	512.4	700	85.7	525	245	487.2	697	91.3
	Migrant	22	382	573.6	679	78.7	23	350	537.5	697	91.4

Out many	Otatus			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	122	276	484.2	700	102.1	121	253	507.0	691	99.3
	Developmental delay	6					3				
	Emotional disturbance	3					3				
	Hearing Impaired	8					10	384	464.8	609	84.3
	Intellectual Disability	19	340	455.2	599	78.9	19	350	413.0	581	67.8
	Multiple disabilities	16	265	409.3	592	95.9	12	245	384.0	515	68.0
Primary Disability	Orthopedic impairment	7					7				
	Other health impairment	79	305	528.0	681	81.7	82	276	491.8	693	97.1
	Specific learning disability	58	311	519.2	673	73.6	57	366	455.4	616	70.0
	Speech or language impairment	209	331	537.3	664	62.8	209	365	500.4	697	80.6
	Traumatic brain injury	2					2				
	Visual impairment	1					1				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.2: Summative Scale Score Summary by Subgroup - Grade 1 (cont.)

0.1	01-1		Cor	nprehensi	on				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		9,385	3428	5449.8	6633	527.9	9,387	3021	5460.6	6998	615.1
	Female	4,491	3675	5482.7	6633	520.2	4,491	3367	5507.0	6998	608.2
Gender	Male	4,768	3428	5418.8	6633	532.8	4,770	3021	5418.1	6998	617.4
	Missing	126	3793	5449.1	6633	545.7	126	3314	5418.6	6998	655.8
	American Indian or Alaskan Native	36	4425	5561.6	6459	508.5	36	4051	5476.8	6597	596.7
	Asian	2,155	3659	5639.0	6633	546.5	2,155	3334	5697.8	6998	611.1
	Black or African American	1,807	3428	5461.7	6633	515.7	1,808	3128	5489.4	6998	576.3
<b>-</b>	Hispanic or Latino	3,080	3675	5292.8	6633	473.9	3,081	3370	5260.7	6998	575.1
Ethnicity	Native Hawaiian or Other Pacific Islander	47	4379	5474.1	6633	559.5	47	4170	5496.6	6849	674.9
	Two or More Races	878	3836	5300.0	6633	503.2	878	3811	5261.9	6998	612.8
	White	1,352	3428	5579.3	6633	508.4	1,352	3021	5623.3	6998	568.5
	Other/Unknown	30	4441	5625.8	6633	542.1	30	4083	5628.7	6998	629.6
	Gifted	6					6				
Other	IEP	631	3428	5081.5	6633	539.7	631	3021	5008.8	6615	628.7
	Migrant	23	4562	5507.5	6509	519.2	23	4130	5515.2	6662	634.7

Outh manner	Subgroup Status		Comprehension					Overall				
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Autism	185	3428	4932.6	6458	610.3	185	3128	4873.1	6497	695.5	
	Developmental delay	8					8					
	Emotional disturbance	3					3					
	Hearing Impaired	10	4727	5187.4	5854	375.4	10	4337	5047.3	5840	555.5	
	Intellectual Disability	24	4226	4681.1	5532	323.2	24	3982	4515.8	5724	416.5	
	Multiple disabilities	33	3428	4598.3	5657	452.8	33	3021	4417.0	5493	494.4	
Primary Disability	Orthopedic impairment	8					8					
	Other health impairment	86	3765	5199.7	6493	502.6	86	3370	5152.6	6610	624.2	
	Specific learning disability	60	4439	5118.5	6509	397.5	60	4101	5017.6	6336	476.2	
	Speech or language impairment	212	4354	5291.3	6633	450.6	212	4210	5242.2	6615	511.8	
	Traumatic brain injury	3					3					
	Visual impairment	1				roop grade ha	1					

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.3: Summative Scale Score Summary by Subgroup - Grade 2

0.1	01-1-1-			Listening			Reading				
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		8,522	229	528.2	742	72.2	8,427	228	513.3	766	72.4
	Female	4,052	229	532.2	742	70.6	4,023	228	517.7	766	72.2
Gender	Male	4,364	229	524.4	731	73.4	4,299	228	509.1	751	72.4
	Missing	106	312	532.2	678	74.4	105	334	519.2	680	73.6
	American Indian or Alaskan Native	17	383	522.6	660	63.6	17	407	509.3	684	73.7
	Asian	1,797	229	544.4	731	73.2	1,777	228	539.6	751	73.2
	Black or African American	1,651	252	531.9	712	67.9	1,630	277	516.4	720	67.9
F0. 1.14	Hispanic or Latino	2,952	229	515.1	703	69.7	2,923	228	494.2	710	67.5
Ethnicity	Native Hawaiian or Other Pacific Islander	39	397	537.3	644	53.8	39	397	533.2	660	60.0
	Two or More Races	877	272	513.2	742	75.9	869	331	495.2	766	73.5
	White	1,169	272	541.8	717	72.4	1,152	334	530.2	728	72.1
	Other/Unknown	20	459	544.1	642	47.3	20	395	513.6	643	63.2
	Gifted	36	488	610.8	678	50.8	36	478	622.1	687	54.4
Other	IEP	689	252	478.2	685	75.6	604	241	470.4	685	63.8
	Migrant	21	332	511.1	667	109.0	21	344	504.6	660	99.5

Outhouse	Odađana			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	157	252	433.0	655	75.5	112	241	458.3	663	69.6
	Developmental delay	9					6				
	Emotional disturbance	8					8				
	Hearing Impaired	6					4				
	Intellectual Disability	36	315	430.7	547	57.8	24	286	425.8	535	49.3
	Multiple disabilities	27	272	382.0	549	61.4	14	362	401.9	470	29.0
Primary Disability	Orthopedic impairment	6					5				
	Other health impairment	88	342	491.6	640	60.2	80	375	466.2	636	59.1
	Specific learning disability	132	337	488.6	654	55.6	131	364	452.7	650	46.0
	Speech or language impairment	213	364	520.9	663	61.4	213	389	498.1	685	61.0
	Traumatic brain injury	1					1				
	Visual impairment	4				ooo grada ba	4				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.3: Summative Scale Score Summary by Subgroup - Grade 2 (cont.)

0	Otatua			Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		8,424	252	542.6	747	73.3	8,413	235	508.3	765	76.6
	Female	4,020	252	548.3	747	72.3	4,018	235	514.4	765	75.2
Gender	Male	4,299	252	537.1	733	73.7	4,290	235	502.5	751	77.5
	Missing	105	293	545.2	675	78.6	105	352	511.1	641	75.4
	American Indian or Alaskan Native	17	403	539.6	644	70.8	17	360	494.5	661	79.8
	Asian	1,774	252	558.3	705	71.1	1,775	235	535.0	751	74.4
	Black or African American	1,630	292	548.9	725	63.5	1,622	321	512.5	726	71.7
_, , , ,	Hispanic or Latino	2,923	252	528.8	708	73.3	2,921	235	487.7	702	73.4
Ethnicity	Native Hawaiian or Other Pacific Islander	39	481	562.5	686	47.4	39	379	538.2	630	52.1
	Two or More Races	866	295	522.3	747	84.3	869	312	488.4	765	79.6
	White	1,155	293	558.5	715	72.1	1,150	334	527.7	726	74.2
	Other/Unknown	20	504	563.3	623	36.0	20	377	518.9	625	60.9
	Gifted	36	541	620.8	705	46.2	36	514	614.5	694	47.1
Other	IEP	605	259	500.4	666	72.8	595	248	461.2	688	69.4
	Migrant	21	303	488.8	667	124.6	21	358	492.2	629	103.5

Outh masses	Otatus			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	105	259	456.6	626	83.0	104	248	449.2	659	75.1
	Developmental delay	9					6				
	Emotional disturbance	8					8				
	Hearing Impaired	5					4				
	Intellectual Disability	28	304	449.7	574	54.7	24	307	417.8	525	50.6
	Multiple disabilities	14	296	390.1	500	63.4	15	324	383.6	481	38.6
Primary Disability	Orthopedic impairment	5					5				
	Other health impairment	81	327	500.8	628	68.7	78	368	457.3	622	62.9
	Specific learning disability	132	331	511.7	641	57.4	131	334	444.6	671	57.3
	Speech or language impairment	211	307	530.9	666	58.1	213	363	488.4	688	65.1
	Traumatic brain injury	1					1				
	Visual impairment	4				oss grade han	4				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.3: Summative Scale Score Summary by Subgroup - Grade 2 (cont.)

Subgroup	Status	Comprehension					Overall				
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		8,524	3300	5290.9	6729	526.0	8,537	2968	5272.7	7156	570.3
Gender	Female	4,052	3300	5316.9	6729	517.3	4,054	2968	5316.0	7156	560.8
	Male	4,366	3300	5265.5	6729	531.9	4,377	2968	5231.7	6977	575.8
	Missing	106	4007	5341.3	6729	562.4	106	3735	5307.2	6491	581.8
Ethnicity	American Indian or Alaskan Native	17	4487	5276.0	6524	496.3	17	4222	5226.1	6406	556.0
	Asian	1,797	3300	5449.7	6729	541.8	1,800	2968	5446.0	6977	569.7
	Black or African American	1,651	3369	5312.2	6729	497.3	1,654	3332	5304.4	6870	523.4
	Hispanic or Latino	2,953	3300	5174.8	6729	492.6	2,958	2968	5138.0	6724	545.4
	Native Hawaiian or Other Pacific Islander	39	4359	5375.7	6285	420.1	39	4359	5442.0	6209	392.1
	Two or More Races	877	3659	5171.2	6729	534.4	878	3610	5124.9	7156	608.5
	White	1,170	3659	5396.3	6729	532.2	1,171	3648	5405.6	6798	562.9
	Other/Unknown	20	4658	5330.6	6306	395.5	20	4635	5378.5	6181	381.1
Other	Gifted	36	5023	6017.8	6594	434.8	36	5191	6047.5	6509	348.6
	IEP	690	3369	4936.2	6622	498.5	699	3101	4863.9	6455	536.5
	Migrant	21	4077	5223.7	6592	771.1	21	3872	5083.8	6376	876.5

0.1	212122		Cor	nprehensi	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	158	3369	4708.8	6330	508.0	162	3101	4618.8	6319	545.7
Subgroup  Primary Disability	Developmental delay	9					10	4041	4626.3	5431	525.4
	Emotional disturbance	8					9				
	Hearing Impaired	6					6				
	Intellectual Disability	36	3737	4615.7	5342	347.5	37	3520	4546.4	5414	366.8
	Multiple disabilities	27	3659	4342.8	5223	336.7	29	3648	4227.3	5123	337.9
Primary Disability	Orthopedic impairment	6					6				
	Other health impairment	88	4121	4992.1	6224	420.2	88	4098	4909.5	6174	453.7
	Specific learning disability	132	4159	4920.0	6109	342.7	132	3880	4881.6	6356	411.7
	Speech or language impairment	213	4219	5224.9	6622	449.6	213	3958	5168.0	6398	466.9
	Traumatic brain injury	1					1				
	Visual impairment	4				oss grade han	4				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.4: Summative Scale Score Summary by Subgroup - Grade 3

Outh mine was	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		6,571	229	550.0	742	75.4	6,451	228	543.8	766	75.6
	Female	3,012	229	553.2	742	75.6	2,980	228	549.4	766	76.4
Gender	Male	3,522	249	547.3	723	75.1	3,434	266	539.2	740	74.5
	Missing	37	297	535.6	656	80.8	37	262	526.8	654	82.3
	American Indian or Alaskan Native	24	340	551.5	676	98.6	22	367	562.2	687	92.2
	Asian	1,146	229	559.9	742	75.3	1,127	228	563.2	766	73.3
	Black or African American	1,250	240	554.9	729	69.3	1,222	249	548.6	742	73.0
<b>-</b> 04	Hispanic or Latino	2,517	272	542.7	715	74.4	2,475	282	531.3	724	74.2
Ethnicity	Native Hawaiian or Other Pacific Islander	30	412	554.9	659	66.7	29	415	546.8	662	67.5
	Two or More Races	754	317	540.5	724	81.4	744	359	531.5	741	77.9
	White	837	303	559.2	717	78.8	819	305	558.6	727	75.6
	Other/Unknown	13	400	542.9	608	59.9	13	429	541.1	618	60.9
Other	Gifted	33	525	613.3	729	51.5	33	491	614.9	742	63.6
Other	IEP	829	240	512.7	686	77.7	719	249	500.1	688	71.2

Oukana	Otatua		ı	Listening			Reading					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	24	332	529.9	660	85.0	25	395	518.7	636	76.6	
	Autism	135	240	469.1	667	92.6	103	249	492.2	682	85.2	
	Developmental delay	2					1					
	Emotional disturbance	9					8					
	Hearing Impaired	10	439	539.1	627	62.1	11	370	515.1	658	92.7	
	Intellectual Disability	52	272	448.1	596	70.0	38	363	426.3	517	35.0	
Primary Disability	Multiple disabilities	41	303	399.5	618	60.0	10	359	400.2	461	33.4	
	Orthopedic impairment	8					7					
	Other health impairment	115	303	522.8	684	66.6	105	359	500.5	688	66.6	
	Specific learning disability	315	347	532.9	663	59.2	293	337	495.2	669	61.5	
	Speech or language impairment	143	410	552.4	686	58.8	141	405	541.4	685	61.8	
	Traumatic brain injury	2				roce grade h	2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.4: Summative Scale Score Summary by Subgroup - Grade 3 (cont.)

Outh mine was	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		6,474	252	564.8	747	75.7	6,460	235	541.4	765	77.4
	Female	2,984	252	569.8	747	76.3	2,984	235	548.0	765	77.6
Gender	Male	3,454	278	560.7	729	74.8	3,439	290	535.8	741	76.7
	Missing	36	299	549.4	637	81.6	37	269	522.8	636	81.8
	American Indian or Alaskan Native	22	339	570.1	691	98.5	22	359	557.9	690	95.0
	Asian	1,127	252	574.8	747	73.7	1,130	235	559.5	765	74.0
	Black or African American	1,224	295	572.4	737	65.4	1,221	256	546.7	748	74.3
<b>-</b> 04	Hispanic or Latino	2,493	277	556.3	727	75.3	2,478	303	529.0	723	76.1
Ethnicity	Native Hawaiian or Other Pacific Islander	30	472	575.0	701	53.7	29	390	556.2	666	61.6
	Two or More Races	745	295	551.8	727	85.3	747	330	528.8	742	82.6
	White	820	301	576.9	729	79.4	820	312	556.5	724	77.4
	Other/Unknown	13	351	560.9	682	91.9	13	399	537.0	618	66.7
Other	Gifted	33	501	606.6	737	52.0	33	501	605.2	748	59.6
Other	IEP	749	277	533.6	704	71.5	732	256	495.0	675	75.6

Outh many	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	25	381	539.4	681	81.5	25	373	513.4	631	75.4
	Autism	100	277	490.8	678	94.3	102	256	490.7	675	89.0
	Developmental delay	1					1				
	Emotional disturbance	8					8				
	Hearing Impaired	10	479	553.6	642	48.6	12	333	498.6	652	103.5
	Intellectual Disability	46	292	459.5	577	65.8	37	349	410.3	524	43.4
Primary Disability	Multiple disabilities	13	303	440.3	638	95.4	10	353	383.5	426	30.5
	Orthopedic impairment	7					7				
	Other health impairment	109	318	534.9	667	62.6	107	352	492.1	657	75.1
	Specific learning disability	314	302	547.8	704	59.8	304	357	492.4	669	66.9
	Speech or language impairment	139	330	559.1	661	52.4	142	379	534.3	670	60.0
	Traumatic brain injury	2			-	roop grade l	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.4: Summative Scale Score Summary by Subgroup - Grade 3 (cont.)

O. harmana	04-4		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		6,580	3300	5473.4	6729	551.2	6,584	2968	5491.2	7156	592.3
	Female	3,014	3300	5502.6	6729	550.5	3,016	2968	5537.6	7156	594.7
Gender	Male	3,529	3300	5449.4	6729	550.1	3,531	3290	5452.8	6900	587.1
	Missing	37	3613	5380.9	6549	609.6	37	3348	5369.3	6188	632.4
	American Indian or Alaskan Native	24	4076	5508.5	6448	696.2	24	3869	5525.0	6580	783.0
	Asian	1,148	3300	5582.4	6729	548.1	1,148	2968	5607.2	7156	582.6
	Black or African American	1,253	3300	5503.8	6729	522.4	1,254	3129	5532.3	7031	548.5
<b>-</b>	Hispanic or Latino	2,521	3659	5404.0	6729	541.0	2,524	3457	5410.9	6900	580.6
Ethnicity	Native Hawaiian or Other Pacific Islander	30	4580	5480.2	6334	488.2	30	4632	5569.4	6509	468.5
	Two or More Races	754	4006	5397.5	6729	573.5	754	3711	5400.4	6900	637.1
	White	837	3837	5555.1	6729	568.9	837	3639	5590.6	6916	613.3
	Other/Unknown	13	4550	5430.9	5899	385.8	13	4232	5467.5	6088	539.0
Other	Gifted	33	5110	6019.4	6729	435.3	33	5233	5991.0	7031	422.5
Other	IEP	832	3300	5171.4	6729	541.7	834	3129	5135.2	6559	574.6

0.1	012122		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	25	4324	5322.4	6259	583.7	25	4187	5292.2	6208	604.4
	Autism	137	3300	4948.4	6397	641.7	137	3129	4890.4	6460	680.4
	Developmental delay	2					2				
	Emotional disturbance	9					9				
	Hearing Impaired	11	4339	5289.6	6181	587.4	12	4021	5175.2	6168	700.4
	Intellectual Disability	52	3659	4703.9	5835	407.9	52	3648	4572.9	5705	426.1
Primary Disability	Multiple disabilities	41	3865	4472.1	5893	369.3	42	3810	4435.5	6128	424.9
	Orthopedic impairment	8					8				
	Other health impairment	115	3865	5237.1	6729	474.5	115	3839	5193.6	6527	513.7
	Specific learning disability	315	3956	5248.4	6401	430.6	315	3825	5236.6	6559	467.9
	Speech or language impairment	143	4561	5506.2	6598	456.1	143	4403	5474.4	6505	431.9
	Traumatic brain injury	2				ross grade h	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.5: Summative Scale Score Summary by Subgroup - Grade 4

Outh mineron	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		5,315	213	513.5	715	74.3	5,207	228	510.4	712	67.6
	Female	2,380	258	513.8	715	73.9	2,343	266	512.2	712	66.6
Gender	Male	2,897	230	513.3	698	74.4	2,827	261	509.0	711	68.2
	Missing	38	213	507.5	649	88.0	37	228	503.5	696	82.5
	American Indian or Alaskan Native	13	404	504.6	633	79.8	13	411	499.2	670	76.6
	Asian	843	230	528.1	715	75.7	825	261	527.3	712	69.6
	Black or African American	1,057	213	518.6	696	67.4	1,036	228	512.9	692	62.6
<b>-</b>	Hispanic or Latino	2,060	258	505.2	690	72.9	2,022	286	501.8	700	66.1
Ethnicity	Native Hawaiian or Other Pacific Islander	21	344	500.9	629	73.5	21	389	514.5	627	58.7
	Two or More Races	617	283	503.2	670	78.6	603	266	500.5	676	70.5
	White	694	258	522.1	698	77.5	677	342	520.2	711	68.4
	Other/Unknown	10	363	511.1	640	111.6	10	390	517.0	616	87.2
Other	Gifted	34	381	572.3	688	65.2	34	367	571.4	688	62.4
Other	IEP	877	258	480.9	690	70.7	775	357	479.2	694	56.9

Out many	Otatus			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	16	367	531.1	665	80.8	16	387	517.1	654	78.7
	Autism	102	213	433.0	633	76.1	75	228	461.8	633	58.7
	Developmental delay	5					4				
	Emotional disturbance	9					9				
	Hearing Impaired	11	351	475.1	571	71.1	11	368	474.3	534	52.6
	Intellectual Disability	50	274	418.3	503	46.1	34	374	421.5	491	28.6
Primary Disability	Multiple disabilities	37	258	373.8	554	62.7	9				
	Orthopedic impairment	4					2				
	Other health impairment	105	363	484.7	655	59.8	100	371	475.2	647	53.0
	Specific learning disability	468	343	497.9	690	56.3	447	365	480.3	694	53.2
	Speech or language impairment	65	363	532.6	660	57.5	65	373	530.6	650	51.3
	Visual impairment	3				vroce grade l	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.5: Summative Scale Score Summary by Subgroup - Grade 4 (cont.)

Oukamana	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		5,235	237	540.4	736	79.8	5,213	221	506.7	719	75.0
	Female	2,355	255	544.1	736	79.8	2,345	259	510.7	711	74.3
Gender	Male	2,841	265	537.6	731	79.3	2,831	245	503.4	719	75.2
	Missing	39	237	523.6	696	104.1	37	221	504.6	712	90.9
	American Indian or Alaskan Native	13	432	552.9	654	70.3	13	379	492.9	649	85.5
	Asian	829	256	552.8	736	77.6	827	245	525.7	711	72.5
	Black or African American	1,037	237	547.6	706	66.7	1,036	221	511.6	706	67.3
<b>F</b> 0	Hispanic or Latino	2,039	265	531.6	716	83.4	2,025	279	496.2	719	75.1
Ethnicity	Native Hawaiian or Other Pacific Islander	21	352	553.2	671	69.5	21	359	509.4	623	68.0
	Two or More Races	605	255	525.8	713	88.9	602	259	493.2	679	82.4
	White	681	275	553.3	731	75.9	679	301	519.4	701	74.2
	Other/Unknown	10	287	530.7	646	119.0	10	339	512.7	621	102.4
Other	Gifted	34	287	589.3	667	66.5	34	345	558.8	687	61.9
Other	IEP	800	277	518.0	688	72.1	783	301	472.7	673	66.9

C b arra	Ctatus -		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	16	337	560.2	670	86.7	16	374	515.5	655	80.8
	Autism	74	237	476.1	655	85.7	75	221	449.6	655	77.5
	Developmental delay	4					4				
	Emotional disturbance	9					9				
	Hearing Impaired	11	284	495.4	605	100.2	12	333	471.3	573	70.1
	Intellectual Disability	41	327	451.1	601	57.7	34	336	397.5	491	43.8
Primary Disability	Multiple disabilities	10	292	419.0	550	92.4	9				
	Orthopedic impairment	3					2				
	Other health impairment	103	329	514.2	673	72.9	100	328	465.6	635	64.1
	Specific learning disability	462	280	529.7	688	62.1	454	320	478.0	673	60.2
	Speech or language impairment	64	433	552.2	638	48.1	65	345	520.7	625	56.5
	Visual impairment	3					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.5: Summative Scale Score Summary by Subgroup - Grade 4 (cont.)

Outh mineron	04-4		Con	nprehensi	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		5,319	3298	5216.4	6776	515.0	5,322	2892	5232.1	6861	575.3
	Female	2,383	3482	5215.9	6776	505.4	2,384	3202	5253.7	6861	570.8
Gender	Male	2,898	3419	5217.4	6755	522.0	2,899	3130	5215.1	6796	576.4
	Missing	38	3298	5163.9	6346	584.2	39	2892	5180.6	6603	724.1
	American Indian or Alaskan Native	13	4494	5146.5	6317	570.3	13	4451	5194.3	6158	601.1
	Asian	843	3419	5328.9	6776	539.5	843	3130	5358.8	6861	579.8
	Black or African American	1,058	3298	5238.8	6553	478.2	1,059	2892	5268.3	6586	512.9
	Hispanic or Latino	2,061	3482	5160.4	6741	498.2	2,063	3407	5163.3	6634	573.8
Ethnicity	Native Hawaiian or Other Pacific Islander	21	4183	5175.6	6073	485.1	21	3967	5255.5	6119	523.2
	Two or More Races	619	3663	5147.5	6755	531.5	619	3202	5130.7	6567	623.4
	White	694	3482	5275.3	6693	539.2	694	3505	5318.1	6796	574.5
	Other/Unknown	10	4337	5243.2	6180	732.4	10	3833	5243.8	6070	822.7
Other	Gifted	34	4313	5702.0	6490	487.7	34	3847	5690.5	6531	474.8
Other	IEP	879	3482	4971.3	6741	475.6	879	3505	4954.2	6494	523.2

0.1	01-1		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	16	4529	5310.3	6271	580.6	16	4143	5350.1	6385	638.0
	Autism	103	3298	4692.0	6074	479.1	103	2892	4641.2	6213	570.2
	Developmental delay	5					5				
	Emotional disturbance	9					9				
	Hearing Impaired	12	4244	4948.6	5626	410.3	12	3769	4918.6	5640	538.3
	Intellectual Disability	50	3597	4556.2	5061	268.9	50	3612	4455.2	5111	306.3
Primary Disability	Multiple disabilities	37	3482	4298.0	5357	416.7	37	3505	4239.7	5202	401.9
,	Orthopedic impairment	4					4				
	Other health impairment	105	4338	4999.6	6330	400.0	105	4021	4972.2	6230	464.8
	Specific learning disability	468	4185	5061.9	6741	398.5	468	3689	5069.8	6494	428.8
	Speech or language impairment	65	4199	5388.7	6487	416.5	65	4094	5374.4	6207	393.9
	Visual impairment	3				ross arade h	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.6: Summative Scale Score Summary by Subgroup - Grade 5

0.1	01-1			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		4,644	213	523.8	725	78.8	4,519	228	526.8	736	71.7
	Female	2,021	258	526.3	711	77.7	1,976	298	531.2	713	70.4
Gender	Male	2,584	213	521.5	725	79.7	2,504	228	523.2	736	72.6
	Missing	39	359	541.8	687	71.9	39	407	538.4	693	72.2
	American Indian or Alaskan Native	9					9				
	Asian	679	213	534.7	707	82.9	662	228	541.1	713	74.3
	Black or African American	985	258	527.7	693	74.1	964	344	529.4	691	67.6
<b>-</b>	Hispanic or Latino	1,832	213	518.9	725	77.1	1,777	228	521.0	736	71.4
Ethnicity	Native Hawaiian or Other Pacific Islander	27	397	526.7	651	63.8	27	424	523.7	666	58.5
	Two or More Races	573	285	512.3	716	82.8	555	298	517.2	716	75.2
	White	531	246	531.3	712	81.4	517	266	534.0	712	70.4
	Other/Unknown	8					8				
	Gifted	13	516	575.7	662	46.3	13	460	573.8	656	57.3
Other	IEP	945	213	494.0	673	75.3	827	228	496.4	690	64.1
	Migrant	20	397	538.9	644	61.0	20	422	543.8	613	53.1

Subanana	Status -			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	83	213	439.0	660	101.5	51	228	492.5	683	84.9
	Developmental delay	9					6				
	Emotional disturbance	16	380	494.3	609	62.2	16	425	492.0	611	55.1
	Hearing Impaired	9					10	367	490.3	600	66.0
	Intellectual Disability	56	315	431.7	572	47.5	40	325	435.5	512	38.1
	Multiple disabilities	35	246	382.3	653	78.0	12	266	419.6	590	85.3
Primary Disability	Orthopedic impairment	3					3				
	Other health impairment	125	302	499.8	638	66.2	110	354	498.4	643	63.3
	Specific learning disability	563	357	512.5	673	59.4	535	379	500.8	690	58.4
	Speech or language impairment	33	366	546.0	665	70.5	33	377	539.8	661	67.3
	Traumatic brain injury	5					3				
	Visual impairment	2				oog grade ha	1				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.6: Summative Scale Score Summary by Subgroup - Grade 5 (cont.)

O. da anno con	04-4			Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		4,557	237	547.0	758	83.6	4,521	221	522.6	730	79.2
	Female	1,995	270	551.6	758	83.7	1,979	308	527.5	706	78.5
Gender	Male	2,523	237	543.4	747	83.3	2,503	221	518.6	730	79.6
	Missing	39	305	542.5	674	86.7	39	339	533.2	692	82.5
	American Indian or Alaskan Native	9					9				
	Asian	666	237	557.9	722	82.4	662	221	537.7	706	78.8
	Black or African American	972	281	552.4	747	76.5	962	305	526.7	693	72.9
_,, , ,,	Hispanic or Latino	1,794	237	541.9	712	84.7	1,784	221	515.4	730	80.7
Ethnicity	Native Hawaiian or Other Pacific Islander	27	381	558.6	634	64.7	27	375	533.7	657	61.9
	Two or More Races	564	270	528.4	758	92.8	552	308	509.6	712	84.7
	White	517	283	560.6	718	78.3	517	325	533.8	717	75.9
	Other/Unknown	8					8				
	Gifted	13	496	586.4	654	50.0	13	511	581.8	636	38.3
Other	IEP	870	237	528.4	718	76.9	832	221	492.4	677	72.4
	Migrant	20	466	576.5	668	51.4	20	384	543.3	613	57.1

Subgroup	Status -	Speaking					Writing					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Primary Disability	Autism	52	237	489.7	640	106.7	48	221	487.6	651	98.0	
	Developmental delay	6					6					
	Emotional disturbance	16	314	502.5	649	96.6	16	370	486.5	603	72.8	
	Hearing Impaired	9					10	344	476.4	609	88.0	
	Intellectual Disability	49	301	455.7	565	58.3	41	316	414.9	527	51.6	
	Multiple disabilities	14	277	405.4	652	109.9	12	312	404.7	639	98.1	
	Orthopedic impairment	3					3					
	Other health impairment	121	282	521.3	646	77.3	114	315	492.4	672	70.8	
	Specific learning disability	557	292	543.2	718	63.5	539	340	499.3	677	63.9	
	Speech or language impairment	31	284	562.2	684	77.8	33	323	539.9	665	74.6	
	Traumatic brain injury	4					3					
	Visual impairment	1				ana arada hay	1					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.6: Summative Scale Score Summary by Subgroup - Grade 5 (cont.)

Subgroup	Status	Comprehension					Overall					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		4,650	3298	5313.1	6878	552.7	4,654	2892	5329.9	6881	609.8	
Gender	Female	2,022	3482	5334.4	6776	539.8	2,025	3480	5366.6	6881	601.0	
	Male	2,589	3298	5294.5	6878	562.4	2,590	2892	5299.8	6805	615.5	
	Missing	39	4469	5440.8	6779	522.4	39	3986	5415.1	6482	590.1	
Ethnicity	American Indian or Alaskan Native	9					9					
	Asian	680	3298	5401.8	6776	589.9	681	2892	5428.6	6680	630.9	
	Black or African American	987	3482	5333.9	6669	526.9	989	3505	5364.4	6612	565.7	
	Hispanic or Latino	1,833	3298	5278.3	6878	537.0	1,834	2892	5285.7	6740	603.9	
	Native Hawaiian or Other Pacific Islander	27	4591	5290.7	6332	463.5	27	4253	5389.8	6320	471.0	
	Two or More Races	575	3677	5243.4	6693	575.8	575	3480	5222.5	6881	652.9	
	White	531	3298	5355.7	6741	564.5	531	3245	5403.4	6619	608.8	
	Other/Unknown	8					8					
Other	Gifted	13	5111	5664.5	6350	413.6	13	5135	5747.7	6282	356.3	
	IEP	949	3298	5075.4	6667	514.1	951	2892	5077.4	6482	566.3	
	Migrant	20	4507	5420.1	5950	427.7	20	4416	5511.9	6077	434.0	

Outh many	Otatus		Cor	nprehensi	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	85	3298	4758.4	6667	701.8	86	2892	4717.3	6253	730.0
	Developmental delay	9					9				
	Emotional disturbance	16	4477	5090.6	5991	399.0	16	4168	5049.0	5989	514.2
	Hearing Impaired	10	4195	5002.9	5677	514.9	10	3849	4956.6	5869	657.0
	Intellectual Disability	56	3884	4675.7	5662	303.1	56	3893	4572.1	5555	365.6
	Multiple disabilities	35	3298	4357.8	5863	514.3	36	3245	4273.8	6204	554.9
Primary Disability	Orthopedic impairment	3					3				
	Other health impairment	125	3964	5135.0	6361	470.7	125	3647	5114.8	6228	516.3
	Specific learning disability	563	4324	5180.5	6496	424.7	563	3934	5213.2	6482	455.0
	Speech or language impairment	33	4321	5446.1	6413	494.2	33	3773	5483.2	6351	549.4
	Traumatic brain injury	5					5				
	Visual impairment	2				oog grade ha	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.7: Summative Scale Score Summary by Subgroup - Grade 6

0.1	24-1			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,698	232	510.7	680	69.6	3,622	247	512.2	716	62.5
	Female	1,616	232	510.9	679	69.2	1,593	247	513.9	716	61.5
Gender	Male	2,050	255	510.5	680	70.0	1,997	298	510.8	700	63.5
	Missing	32	351	511.5	609	62.2	32	424	518.2	629	49.1
	American Indian or Alaskan Native	10	362	463.3	611	86.3	10	313	473.7	616	82.8
	Asian	485	300	529.6	680	73.3	472	358	536.1	716	68.5
	Black or African American	780	232	520.9	677	64.9	767	247	518.8	700	61.2
<b>-</b> 10	Hispanic or Latino	1,485	305	501.2	669	67.8	1,454	291	503.1	680	58.5
Ethnicity	Native Hawaiian or Other Pacific Islander	12	387	505.6	581	64.9	12	384	498.8	583	60.0
	Two or More Races	474	268	497.0	666	69.1	463	282	500.6	676	59.2
	White	449	255	519.2	658	71.3	441	298	518.2	674	64.9
	Other/Unknown	3					3				
	Gifted	10	452	579.1	649	60.0	10	479	576.7	676	71.2
Other	IEP	811	255	493.3	656	61.0	732	298	492.7	688	51.4
	Migrant	14	394	484.6	570	49.5	14	424	498.0	542	43.0

Outhannana	Odađana			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	77	293	442.5	641	84.4	55	308	475.3	674	70.1
	Developmental delay	5					3				
	Emotional disturbance	11	382	489.8	559	58.6	10	414	485.3	531	45.0
	Hearing Impaired	6					9				
	Intellectual Disability	54	348	442.7	547	46.0	33	373	447.3	562	34.8
	Multiple disabilities	21	255	399.4	536	66.0	7				
Primary Disability	Orthopedic impairment	6					5				
	Other health impairment	101	385	497.4	615	47.3	97	402	489.9	600	45.7
	Specific learning disability	494	362	507.6	656	48.5	478	388	496.2	688	46.6
	Speech or language impairment	32	400	536.0	623	56.7	32	420	534.9	651	56.4
	Traumatic brain injury	3					2				
	Visual impairment	3				ooo grada ba	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.7: Summative Scale Score Summary by Subgroup - Grade 6 (cont.)

O. hamana	Otatua			Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,638	268	535.6	728	73.1	3,624	243	505.7	686	72.2
	Female	1,595	268	538.8	728	73.8	1,589	243	511.9	686	71.4
Gender	Male	2,011	292	532.9	691	72.9	2,003	271	500.7	679	72.8
	Missing	32	442	545.0	634	44.9	32	390	509.7	597	51.0
	American Indian or Alaskan Native	10	307	469.6	616	106.5	10	309	452.3	614	108.7
	Asian	470	311	556.3	691	72.5	474	316	525.9	679	73.4
	Black or African American	770	268	545.1	728	64.4	764	243	516.3	686	66.8
	Hispanic or Latino	1,461	309	525.8	692	72.7	1,455	288	496.0	655	70.8
Ethnicity	Native Hawaiian or Other Pacific Islander	12	422	543.2	629	64.7	12	351	498.2	566	68.8
	Two or More Races	467	289	518.8	678	79.2	463	284	491.8	680	74.5
	White	445	303	548.1	687	72.6	443	271	513.0	667	73.1
	Other/Unknown	3					3				
	Gifted	10	496	590.0	648	44.5	10	461	556.6	640	53.1
Other	IEP	758	292	525.7	652	60.1	737	271	489.1	649	61.6
	Migrant	14	367	523.9	617	76.8	14	340	484.6	588	68.3

0.1	01.15			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	52	292	485.2	645	90.5	52	284	453.3	597	90.8
	Developmental delay	4					3				
	Emotional disturbance	11	333	490.2	588	79.7	10	356	480.4	554	66.9
	Hearing Impaired	9					9				
	Intellectual Disability	42	334	473.3	556	49.8	37	328	417.8	507	52.7
	Multiple disabilities	9					5				
Primary Disability	Orthopedic impairment	6					5				
	Other health impairment	100	320	521.2	648	62.1	98	331	483.5	611	58.5
	Specific learning disability	491	345	536.5	652	50.4	483	345	497.6	649	52.0
	Speech or language impairment	31	360	541.4	625	54.1	32	373	525.2	639	54.3
	Traumatic brain injury	2					2				
	Visual impairment	3				ana grada bar	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.7: Summative Scale Score Summary by Subgroup - Grade 6 (cont.)

0.1	24-1	Comprehension							Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,711	3361	5216.6	6825	483.7	3,722	3052	5219.9	6608	535.0
	Female	1,622	3361	5213.9	6791	474.4	1,626	3052	5244.5	6608	531.7
Gender	Male	2,057	3594	5218.3	6825	492.2	2,064	3353	5199.7	6517	539.0
	Missing	32	4556	5243.6	6136	402.8	32	4633	5270.6	5980	379.2
	American Indian or Alaskan Native	10	4105	4924.0	5950	555.8	10	3617	4806.6	6019	775.4
	Asian	486	3783	5373.4	6791	541.6	486	3753	5381.3	6517	566.0
	Black or African American	784	3361	5274.1	6802	461.1	788	3052	5293.8	6608	493.0
	Hispanic or Latino	1,490	3743	5149.8	6724	460.6	1,495	3512	5144.8	6423	517.2
Ethnicity	Native Hawaiian or Other Pacific Islander	12	4342	5140.2	5661	419.0	12	4166	5193.3	5762	499.4
	Two or More Races	475	3553	5125.1	6825	458.6	477	3346	5105.9	6372	542.3
	White	451	3594	5270.1	6499	495.5	451	3353	5292.7	6367	546.0
	Other/Unknown	3					3				
	Gifted	10	4870	5782.9	6745	570.7	10	4865	5715.8	6218	431.1
Other	IEP	816	3553	5066.6	6825	413.8	822	3353	5066.1	6312	453.3
	Migrant	14	4559	5060.7	5388	282.3	14	4130	5080.2	5722	465.8

0.1	Status		Cor	mprehensi	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	78	3797	4775.4	6825	576.6	80	3387	4693.9	6180	621.5
	Developmental delay	5					6				
	Emotional disturbance	11	4359	5032.9	5454	382.5	11	4225	4957.9	5489	491.9
	Hearing Impaired	9					10	4475	5172.9	5738	353.0
	Intellectual Disability	54	4187	4761.0	5659	308.8	54	3837	4666.2	5412	327.3
	Multiple disabilities	21	3553	4482.0	5440	441.8	21	3353	4416.6	5500	459.7
Primary Disability	Orthopedic impairment	6					6				
	Other health impairment	101	4372	5091.7	5986	323.3	102	3944	5079.6	5875	378.0
	Specific learning disability	495	4339	5145.6	6586	339.0	496	4125	5175.7	6312	357.7
	Speech or language impairment	32	4602	5421.5	6428	441.3	32	4454	5385.0	6078	413.6
	Traumatic brain injury	3					3				
	Visual impairment	3				ana grada bar	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.8: Summative Scale Score Summary by Subgroup - Grade 7

0.1	01-1			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,595	253	518.9	734	76.4	3,504	272	525.4	744	67.9
	Female	1,610	253	519.9	714	76.8	1,575	338	527.5	716	67.8
Gender	Male	1,951	253	518.1	734	75.6	1,897	272	523.6	744	67.5
	Missing	34	319	512.8	680	97.2	32	391	525.2	695	90.8
	American Indian or Alaskan Native	11	393	474.5	592	72.9	11	397	478.3	578	59.9
	Asian	491	268	529.8	714	75.5	475	338	538.7	716	67.2
	Black or African American	736	253	525.0	685	75.0	715	272	530.4	711	70.3
<b>-</b> ,	Hispanic or Latino	1,482	268	508.8	734	76.0	1,447	303	516.3	744	65.2
Ethnicity	Native Hawaiian or Other Pacific Islander	27	394	502.0	595	48.5	26	432	512.8	595	37.8
	Two or More Races	444	339	520.0	693	78.0	436	359	523.6	701	70.1
	White	399	268	532.3	690	76.1	389	378	537.9	706	68.0
	Other/Unknown	5					5				
	Gifted	8					8				
Other	IEP	796	253	505.2	734	69.4	709	272	509.9	744	56.4
	Migrant	13	394	536.8	662	88.5	13	432	540.1	663	82.8

0.1	01.01.00			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	60	253	446.6	615	76.3	39	272	497.3	629	74.9
	Developmental delay	11	374	443.5	519	42.0	7				
	Emotional disturbance	12	459	522.3	620	53.9	12	453	516.2	635	55.3
	Hearing Impaired	3					7				
	Intellectual Disability	63	328	455.9	598	52.7	44	380	461.8	626	47.9
	Multiple disabilities	31	253	369.3	510	68.4	7				
Primary Disability	Orthopedic impairment	6					5				
	Other health impairment	106	378	507.5	657	60.0	99	375	505.1	692	52.6
	Specific learning disability	483	377	526.4	734	54.5	471	401	517.4	744	52.8
	Speech or language impairment	20	448	548.8	626	43.0	20	458	542.9	649	41.2
	Traumatic brain injury	7					4				
	Visual impairment	2				ana arada han	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.8: Summative Scale Score Summary by Subgroup - Grade 7 (cont.)

0.1	24-1			Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,527	283	543.4	731	78.4	3,512	285	516.9	733	78.1
	Female	1,580	283	549.5	731	78.3	1,576	295	523.3	717	78.0
Gender	Male	1,917	292	538.3	724	77.9	1,905	285	511.6	733	77.4
	Missing	30	344	551.0	700	92.4	31	333	516.5	660	99.2
	American Indian or Alaskan Native	11	321	499.6	594	77.5	11	331	463.5	631	93.8
	Asian	478	299	559.9	714	75.0	476	295	529.7	717	71.6
	Black or African American	724	283	549.7	705	70.8	716	300	523.4	707	76.9
<b>-</b>	Hispanic or Latino	1,452	292	533.5	724	80.3	1,449	285	507.5	733	79.4
Ethnicity	Native Hawaiian or Other Pacific Islander	27	328	536.2	585	55.6	26	406	520.1	589	42.0
	Two or More Races	437	310	536.0	676	87.0	436	314	513.1	688	81.5
	White	393	315	558.2	731	73.6	393	322	529.7	692	75.6
	Other/Unknown	5					5				
	Gifted	8					8				
Other	IEP	736	283	538.3	724	64.7	718	300	508.7	733	63.8
	Migrant	13	399	560.4	661	88.5	13	378	535.9	688	91.8

Outh manner	Otatus			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	41	311	506.7	645	91.5	39	329	480.6	624	78.3
Subgroup  Primary Disability	Developmental delay	8					7				
	Emotional disturbance	12	477	533.6	580	34.4	12	393	498.8	609	55.8
	Hearing Impaired	3					7				
	Intellectual Disability	55	302	482.6	601	67.3	48	300	444.5	554	61.2
	Multiple disabilities	12	283	398.0	548	87.4	7				
Primary Disability	Orthopedic impairment	5					5				
	Other health impairment	101	391	535.3	652	56.1	99	347	502.1	678	62.9
	Specific learning disability	480	322	551.7	724	54.7	476	342	521.3	733	54.9
	Speech or language impairment	20	365	559.1	630	51.5	20	479	546.2	636	36.5
	Traumatic brain injury	5					4				
	Visual impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.8: Summative Scale Score Summary by Subgroup - Grade 7 (cont.)

0.1	01-11-1		Cor	nprehensi	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,607	3361	5292.8	6938	532.9	3,612	3314	5298.7	6952	586.9
	Female	1,617	3553	5293.0	6938	527.7	1,620	3334	5330.6	6763	587.2
Gender	Male	1,956	3361	5293.1	6781	533.7	1,958	3314	5273.2	6952	582.5
	Missing	34	3915	5261.1	6554	718.0	34	3888	5251.1	6528	754.2
	American Indian or Alaskan Native	11	4464	4964.3	5631	447.7	11	3954	4923.6	5899	594.2
	Asian	492	3553	5374.9	6627	546.4	492	3531	5398.3	6763	574.1
	Status	6678	573.5								
<b>-</b>	Hispanic or Latino	1,486	3553	5221.9	6781	512.6	1,488	3393	5223.2	6952	585.1
Ethnicity	Other Pacific	27	4470	5150.8	5925	308.5	27	4075	5226.6	5702	367.0
	Two or More Races	448	4059	5301.2	6698	543.2	449	3745	5276.7	6565	614.5
	White	399	3553	5391.1	6733	540.2	399	3560	5409.0	6719	573.9
	Other/Unknown	5					5				
	Gifted	8					8				
Other	IEP	802	3361	5157.2	6781	477.3	803	3314	5173.3	6952	516.4
	Migrant	13	4538	5411.1	6611	639.0	13	4314	5454.2	6322	695.0

0.1	010100		Cor	nprehensi	on				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	60	3361	4821.3	6027	556.4	60	3314	4795.5	6004	626.2
Subgroup  Primary Disability	Developmental delay	11	4288	4733.4	5167	245.2	11	4191	4672.6	5157	288.5
	Emotional disturbance	12	4818	5322.8	6163	458.9	12	4873	5243.8	5981	353.5
	Hearing Impaired	7					7				
	Intellectual Disability	63	4076	4847.1	6091	374.2	63	3553	4777.3	5756	423.8
	Multiple disabilities	31	3553	4265.9	5128	447.6	32	3334	4186.9	5152	480.2
Primary Disability	Orthopedic impairment	6					6				
	Other health impairment	107	4278	5179.1	6450	420.4	107	4058	5187.0	6292	443.5
	Specific learning disability	484	4438	5287.2	6781	390.5	484	3996	5335.3	6952	400.2
	Speech or language impairment	20	4736	5470.9	6122	333.1	20	5003	5502.1	6188	280.2
	Traumatic brain injury	7					7				
	Visual impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.9: Summative Scale Score Summary by Subgroup - Grade 8

O., b.,	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,473	232	532.1	717	85.5	3,392	247	539.3	732	77.8
	Female	1,533	232	533.7	712	85.0	1,505	247	542.9	721	77.1
Gender	Male	1,914	232	530.8	717	85.7	1,863	247	536.4	732	78.0
	Missing	26	375	527.5	688	101.2	24	392	540.7	683	92.4
	American Indian or Alaskan Native	9					9				
	Asian	467	268	551.5	711	85.9	449	386	563.9	726	77.0
	Black or African American	705	232	549.1	711	74.4	696	247	554.2	729	73.3
	Hispanic or Latino	1,415	232	514.8	712	89.3	1,379	247	522.5	715	77.5
Ethnicity	Native Hawaiian or Other Pacific Islander	24	425	550.8	642	54.7	23	463	549.4	651	55.9
	Two or More Races	431	345	525.7	717	85.6	424	350	532.8	732	76.3
	White	415	350	544.2	702	79.1	405	368	548.8	721	76.3
	Other/Unknown	7					7				
Other	Gifted	5					5				
Other	IEP	726	232	519.9	696	76.5	653	247	521.2	706	65.6

Cubanana	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	15	366	504.8	645	101.0	15	394	522.5	648	88.4
	Autism	51	315	454.9	673	91.6	33	373	493.0	680	79.8
	Developmental delay	8					4				
	Emotional disturbance	21	268	512.2	615	82.6	18	426	525.4	647	66.5
	Hearing Impaired	10	390	529.4	688	85.7	12	423	541.3	706	73.1
	Intellectual Disability	62	349	470.2	616	61.8	47	396	470.1	599	52.9
Primary Disability	Multiple disabilities	25	232	374.4	543	67.7	11	247	413.6	487	85.6
	Other health impairment	95	371	515.2	661	69.2	90	387	514.2	656	60.7
	Specific learning disability	443	372	541.6	696	60.4	425	395	531.1	706	58.8
	Speech or language impairment	8					8				
	Traumatic brain injury	5					4				
	Visual impairment	3					3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.9: Summative Scale Score Summary by Subgroup - Grade 8 (cont.)

Out man	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,410	268	551.1	740	87.5	3,393	243	528.0	733	87.8
	Female	1,509	268	556.3	736	87.1	1,507	243	534.6	733	86.8
Gender	Male	1,878	268	547.2	740	87.0	1,863	243	522.8	729	87.9
	Missing	23	320	529.7	665	125.3	23	331	519.0	699	109.4
	American Indian or Alaskan Native	9					9				
	Asian	446	314	576.0	740	81.3	448	320	549.3	729	82.6
	Black or African American	698	268	568.2	725	68.6	696	243	547.0	732	73.3
<b>F</b> 0	Hispanic or Latino	1,392	268	531.2	731	93.5	1,383	243	508.8	733	93.7
Ethnicity	Native Hawaiian or Other Pacific Islander	24	399	564.7	664	63.0	24	452	548.1	654	49.8
	Two or More Races	426	307	542.6	715	93.3	420	310	520.7	721	90.9
	White	408	319	569.4	706	78.8	406	320	542.8	699	78.5
	Other/Unknown	7					7				
Other	Gifted	5					5				
Other	IEP	680	268	545.5	731	74.4	662	243	518.3	699	75.5

Subgroup	Status	Speaking					Writing					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	15	331	514.7	638	120.1	15	344	493.5	637	106.9	
Primary Disability	Autism	37	316	488.0	634	88.3	34	327	451.5	658	101.1	
	Developmental delay	4					4					
	Emotional disturbance	20	424	535.2	632	70.0	19	361	518.5	608	61.7	
	Hearing Impaired	8					11	341	531.2	658	81.3	
	Intellectual Disability	51	314	495.0	661	81.7	47	320	459.0	604	74.3	
	Multiple disabilities	11	268	416.5	517	96.7	9					
	Other health impairment	92	322	534.7	670	73.5	91	334	511.2	681	73.2	
	Specific learning disability	443	324	561.3	731	63.5	433	344	532.1	699	64.3	
	Speech or language impairment	8					8					
	Traumatic brain injury	5					5					
	Visual impairment	3				roop grade k	3					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.9: Summative Scale Score Summary by Subgroup - Grade 8 (cont.)

Subgroup	Status	Comprehension				Overall					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,483	3361	5398.8	6835	601.5	3,490	3052	5394.7	6838	661.0
Gender	Female	1,534	3361	5410.2	6824	593.5	1,537	3052	5432.4	6763	653.8
	Male	1,923	3361	5390.3	6835	606.5	1,927	3052	5365.8	6838	662.7
	Missing	26	4306	5363.6	6417	695.6	26	3951	5309.1	6471	852.4
Ethnicity	American Indian or Alaskan Native	9					9				
	Asian	468	3553	5552.3	6801	622.2	468	3560	5556.7	6838	658.2
	Black or African American	709	3361	5514.2	6835	562.2	711	3052	5532.2	6627	561.1
	Hispanic or Latino	1,418	3361	5279.3	6709	603.3	1,421	3052	5251.3	6724	691.3
	Native Hawaiian or Other Pacific Islander	24	4717	5500.8	6196	407.1	24	4834	5533.2	6264	409.4
	Two or More Races	433	4122	5351.4	6807	586.3	435	3675	5342.6	6711	671.0
	White	415	4169	5471.3	6825	578.4	415	3913	5504.7	6647	607.6
	Other/Unknown	7					7				
Other	Gifted	5					5				
	IEP	731	3361	5266.0	6758	525.5	732	3052	5277.8	6651	573.5

	21.1		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	15	4326	5260.3	6358	687.1	15	3965	5171.3	6157	828.6
	Autism	51	3892	4903.5	6540	646.1	51	3855	4818.3	6378	698.1
	Developmental delay	8					8				
	Emotional disturbance	21	3553	5243.5	6150	593.8	21	3560	5234.8	6116	616.7
	Hearing Impaired	12	4515	5401.5	6758	593.3	12	4226	5389.2	6637	578.9
	Intellectual Disability	62	4183	4921.5	6082	394.1	62	3825	4873.1	5942	488.6
Primary Disability	Multiple disabilities	26	3361	4340.2	5263	432.5	26	3052	4276.3	5179	490.3
	Other health impairment	95	4340	5241.2	6375	472.6	95	3985	5244.6	6346	519.9
	Specific learning disability	445	4379	5395.9	6501	432.1	446	4043	5436.3	6651	459.7
	Speech or language impairment	8					8				
	Traumatic brain injury	5					5				
	Visual impairment	3				aroog grade h	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.10: Summative Scale Score Summary by Subgroup - Grade 9

0.1	01-1-1-			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		4,716	253	512.2	721	79.8	4,672	258	513.9	740	71.4
	Female	1,985	253	517.3	721	79.4	1,970	258	519.2	740	71.2
Gender	Male	2,690	289	508.4	703	79.8	2,663	282	509.9	707	71.3
	Missing	41	364	514.4	656	81.7	39	376	514.2	683	77.0
	American Indian or Alaskan Native	13	481	585.9	689	70.0	13	500	585.4	699	72.4
	Asian	529	310	547.6	711	71.6	522	388	547.1	719	66.5
	Black or African American	1,057	310	530.4	693	71.6	1,048	345	528.3	716	66.4
<b>F</b> 40	Hispanic or Latino	2,058	253	497.1	703	78.5	2,044	258	500.4	726	68.4
Ethnicity	Native Hawaiian or Other Pacific Islander	26	373	511.7	619	65.3	25	391	518.4	638	65.2
	Two or More Races	592	269	482.5	697	83.1	583	285	488.9	720	73.1
	White	437	293	534.0	721	77.8	433	287	533.6	740	72.9
	Other/Unknown	4					4				
	Gifted	7					7				
Other	IEP	711	292	516.2	689	63.3	673	322	510.8	680	54.1
	Migrant	13	312	502.7	654	105.0	13	321	506.0	666	91.2

Outh mineron	Otatus			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	29	310	458.9	581	63.3	21	332	480.6	579	58.8
	Developmental delay	19	310	463.0	571	68.1	16	401	467.9	586	54.1
	Emotional disturbance	12	398	519.2	578	56.8	12	397	500.2	571	50.9
	Hearing Impaired	2					6				
	Intellectual Disability	50	372	465.1	582	50.4	42	367	472.8	568	42.5
	Multiple disabilities	24	306	412.5	530	58.8	11	344	433.5	541	54.4
Primary Disability	Orthopedic impairment	5					5				
	Other health impairment	95	327	520.5	644	59.2	89	322	515.2	631	54.2
	Specific learning disability	452	362	532.6	689	53.0	450	365	518.9	680	50.8
	Speech or language impairment	10	456	522.6	621	50.3	10	427	517.2	600	48.8
	Traumatic brain injury	11	292	495.8	588	80.7	10	428	505.0	579	47.4
	Visual impairment	3				ross arada har	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.10: Summative Scale Score Summary by Subgroup - Grade 9 (cont.)

0.1	01-1			Speaking			Writing					
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		4,667	297	528.7	701	81.5	4,668	263	503.6	713	86.2	
	Female	1,965	297	537.1	701	80.8	1,963	263	512.0	713	85.1	
Gender	Male	2,663	310	522.5	699	81.5	2,663	285	497.5	704	86.5	
	Missing	39	351	532.1	657	75.9	42	342	500.4	662	87.1	
	American Indian or Alaskan Native	13	525	590.8	680	46.3	13	481	567.2	665	61.8	
	Asian	520	336	565.0	699	65.5	520	335	539.1	704	70.2	
	Black or African American	1,058	339	549.1	697	66.2	1,044	338	525.3	679	72.7	
<b>-</b>	Hispanic or Latino	2,039	297	511.4	694	85.6	2,046	263	486.9	704	88.0	
Ethnicity	Native Hawaiian or Other Pacific Islander	25	341	533.5	639	61.2	25	337	512.6	606	64.4	
	Two or More Races	579	305	499.5	662	85.2	583	277	471.4	692	93.5	
	White	429	313	553.8	701	73.3	433	298	528.0	713	81.2	
	Other/Unknown	4					4					
	Gifted	7					7					
Other	IEP	681	317	540.1	694	66.9	677	326	513.0	692	66.4	
	Migrant	12	359	527.0	653	85.0	13	308	496.5	652	104.3	

Oubanana	Otatus			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	25	336	477.0	621	81.5	22	337	461.3	576	79.6
	Developmental delay	16	354	487.4	579	67.3	16	343	446.1	533	71.1
	Emotional disturbance	12	347	531.9	621	73.4	12	352	512.9	584	67.6
	Hearing Impaired	3					6				
	Intellectual Disability	45	347	482.9	623	65.9	43	344	457.0	603	61.0
	Multiple disabilities	13	324	438.5	577	69.4	11	326	396.7	520	64.9
Primary Disability	Orthopedic impairment	5					5				
	Other health impairment	91	354	547.2	666	59.7	90	361	522.3	635	61.5
	Specific learning disability	450	337	553.4	694	57.6	451	336	525.3	692	59.0
	Speech or language impairment	10	497	573.1	689	51.2	10	476	523.6	601	46.6
	Traumatic brain injury	10	317	528.3	617	90.4	10	442	517.7	604	48.7
	Visual impairment	3				oss grada har	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.10: Summative Scale Score Summary by Subgroup - Grade 9 (cont.)

0.1	01-1		Cor	nprehensi	on				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		4,747	3505	5243.7	7012	543.3	4,782	3235	5216.8	6676	618.8
	Female	1,999	3505	5273.4	7012	541.9	2,011	3235	5269.7	6676	614.6
Gender	Male	2,707	3660	5221.9	6955	542.4	2,728	3401	5178.3	6638	619.0
	Missing	41	3794	5235.9	6813	611.3	43	4042	5188.3	6261	638.6
	American Indian or Alaskan Native	13	5054	5816.1	6824	580.9	13	5098	5768.2	6534	490.0
	Asian	530	3794	5488.9	7012	523.3	531	3896	5494.9	6641	534.3
	Black or African American	1,063	3794	5351.0	6889	516.3	1,079	3900	5365.7	6552	534.0
<b>-</b>	Hispanic or Latino	2,075	3505	5145.4	6813	514.2	2,092	3235	5093.4	6638	620.8
Ethnicity	Native Hawaiian or Other Pacific Islander	26	4414	5239.2	6106	485.7	26	3957	5234.2	6126	503.6
	Two or More Races	596	3660	5051.9	6815	545.4	597	3360	4980.8	6501	650.6
	White	440	3721	5392.9	6962	556.5	440	3462	5402.8	6676	592.5
	Other/Unknown	4					4				
	Gifted	7					7				
Other	IEP	721	3660	5218.7	6707	433.9	726	3645	5239.9	6612	486.8
	Migrant	13	3812	5185.9	6347	715.6	13	3873	5155.7	6243	744.6

Out house	Otatus		Cor	nprehensi	on				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	29	3794	4896.9	5833	440.2	30	3795	4812.1	5670	514.2
	Developmental delay	19	3794	4887.0	5799	466.4	19	3900	4803.3	5638	503.1
	Emotional disturbance	12	4516	5200.0	5644	356.3	12	4064	5233.1	5748	483.2
	Hearing Impaired	6					6				
	Intellectual Disability	50	4246	4903.6	5609	323.3	51	3994	4832.2	5762	390.4
	Multiple disabilities	24	3794	4550.1	5408	405.0	24	3692	4471.7	5439	416.7
Primary Disability	Orthopedic impairment	5					5				
	Other health impairment	95	3660	5248.4	6202	421.0	97	3841	5301.9	6198	450.2
	Specific learning disability	458	4278	5319.0	6707	380.3	459	3880	5363.3	6612	409.8
	Speech or language impairment	10	4635	5253.8	5905	360.5	10	4907	5378.4	6128	368.0
	Traumatic brain injury	11	3794	5065.3	5630	534.6	11	3645	5121.3	5855	601.5
	Visual impairment	3				roop grade ha	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.11: Summative Scale Score Summary by Subgroup - Grade 10

Out and	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,515	253	535.8	735	77.2	3,482	258	536.2	749	73.3
	Female	1,539	333	541.5	734	74.8	1,522	315	541.0	746	71.1
Gender	Male	1,956	253	531.5	735	78.9	1,941	258	532.7	749	74.8
	Missing	20	396	528.4	632	74.2	19	400	521.1	639	71.6
	American Indian or Alaskan Native	12	366	543.8	666	95.4	12	382	551.9	686	89.7
	Asian	497	324	568.9	734	65.4	493	319	566.4	740	67.1
	Black or African American	793	269	546.2	721	69.6	786	269	544.3	733	67.9
<b>-</b> 0	Hispanic or Latino	1,436	253	519.3	731	79.9	1,419	258	521.0	742	73.6
Ethnicity	Native Hawaiian or Other Pacific Islander	21	405	528.6	611	62.2	22	426	528.2	620	56.4
	Two or More Races	373	342	515.5	706	83.0	374	362	519.6	721	77.0
	White	380	383	553.2	735	68.9	373	369	553.6	749	68.6
	Other/Unknown	3					3				
Other	Gifted	9					9				
Other	IEP	551	253	524.7	664	66.3	515	258	519.8	709	62.2

Oukana	Status		ı	Listening			Reading					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	21	408	536.4	629	74.4	21	401	534.8	661	73.4	
	Autism	35	369	500.5	628	71.5	32	369	507.0	652	70.8	
	Developmental delay	7					6					
	Emotional disturbance	10	428	506.3	613	66.6	10	415	482.8	604	62.4	
	Hearing Impaired	6					9					
	Intellectual Disability	40	362	462.0	566	42.2	36	382	462.7	554	39.1	
Primary Disability	Multiple disabilities	22	253	408.6	495	57.9	6					
	Orthopedic impairment	3					4					
	Other health impairment	78	393	531.0	652	57.5	74	413	525.3	654	57.6	
	Specific learning disability	348	363	543.6	664	56.3	341	414	532.0	709	55.9	
	Speech or language impairment	9					8					
	Visual impairment	2				roce grade k	2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.11: Summative Scale Score Summary by Subgroup - Grade 10 (cont.)

Subgroup	04-4		;	Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		3,465	297	554.6	729	71.4	3,470	263	528.9	733	80.0	
	Female	1,516	333	562.1	719	69.8	1,519	324	536.1	733	77.3	
Gender	Male	1,931	297	548.8	729	72.0	1,933	263	523.4	712	81.6	
	Missing	18	350	545.9	638	87.4	18	360	514.1	647	88.7	
	American Indian or Alaskan Native	12	372	552.9	638	75.0	12	343	533.9	671	103.6	
	Asian	493	351	583.8	714	58.4	491	318	556.8	699	62.7	
	Black or African American	785	303	566.9	713	58.0	783	273	542.0	729	68.3	
<b>-</b>	Hispanic or Latino	1,414	297	538.6	729	77.4	1,419	263	511.3	718	85.5	
Ethnicity	Native Hawaiian or Other Pacific Islander	21	473	551.4	607	44.1	22	377	527.8	629	68.7	
	Two or More Races	369	335	532.9	719	75.9	367	340	508.0	733	91.2	
	White	368	362	572.4	697	63.3	373	342	551.6	712	67.8	
	Other/Unknown	3					3					
Other	Gifted	8					8					
Other	IEP	535	297	551.0	701	60.2	521	263	523.7	662	67.7	

O. Ib anno ma	Status		;	Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	21	350	540.4	664	76.2	21	364	514.5	598	68.8	
	Autism	32	366	518.5	647	69.0	32	352	499.6	626	79.1	
	Developmental delay	7					6					
	Emotional disturbance	10	442	528.9	603	52.2	10	370	469.7	594	87.9	
	Hearing Impaired	8					9					
	Intellectual Disability	39	339	489.6	559	51.1	37	342	450.6	554	53.3	
Primary Disability	Multiple disabilities	7					6					
	Orthopedic impairment	4					4					
	Other health impairment	78	353	546.5	634	51.1	75	372	529.9	653	60.0	
	Specific learning disability	351	356	565.8	701	52.2	345	361	539.5	662	57.7	
	Speech or language impairment	9					8					
	Visual impairment	2				roop grada k	2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.11: Summative Scale Score Summary by Subgroup - Grade 10 (cont.)

Subgroup	04-4		Con	nprehens	ion		Overall					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		3,538	3505	5406.5	7148	558.3	3,551	3235	5410.3	6907	583.9	
	Female	1,545	3904	5437.8	7065	540.0	1,549	3731	5462.1	6885	566.1	
Gender	Male	1,973	3505	5382.6	7148	571.8	1,982	3235	5370.5	6907	594.4	
	Missing	20	4511	5336.3	6050	507.5	20	4119	5338.5	6178	611.0	
	American Indian or Alaskan Native	12	4317	5514.5	6607	675.8	12	4011	5467.1	6319	716.7	
	Asian	498	3898	5645.4	6933	511.3	500	3801	5654.7	6885	487.7	
	Black or African American	799	3607	5464.0	7148	526.4	802	3312	5494.6	6780	507.5	
<b>-</b>	Hispanic or Latino	1,446	3505	5294.8	7065	557.2	1,453	3235	5281.5	6907	614.1	
Ethnicity	Native Hawaiian or Other Pacific Islander	22	4555	5332.2	5971	421.5	22	4471	5377.9	6020	447.0	
	Two or More Races	376	4232	5279.2	6897	584.1	377	3893	5254.7	6732	628.7	
	White	382	4353	5520.2	7058	525.7	382	4058	5552.9	6877	518.1	
	Other/Unknown	3					3					
Other	Gifted	9					9					
Other	IEP	557	3505	5276.7	6557	474.1	564	3235	5320.1	6445	492.4	

Oukana	Status		Con	nprehens	ion		Overall					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	21	4447	5447.4	6286	568.4	21	4155	5359.9	6233	568.5	
	Autism	35	4426	5159.7	6302	533.5	35	4058	5121.2	6048	552.0	
	Developmental delay	7					8					
	Emotional disturbance	10	4673	5130.0	5921	448.6	10	4417	5074.1	5873	509.9	
	Hearing Impaired	11	4827	5310.3	6177	447.5	11	4669	5312.3	6065	453.8	
	Intellectual Disability	40	4322	4869.5	5461	272.5	40	3934	4832.9	5493	338.2	
Primary Disability	Multiple disabilities	22	3505	4505.4	5099	397.2	22	3235	4483.9	5125	463.7	
	Orthopedic impairment	4					4					
	Other health impairment	78	4390	5327.5	6328	435.4	79	4203	5351.5	6235	436.5	
	Specific learning disability	348	4411	5401.7	6557	416.4	353	4273	5468.5	6445	408.8	
	Speech or language impairment	9					9					
	Visual impairment	2					2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.12: Summative Scale Score Summary by Subgroup - Grade 11

Outh mine un	04-4			Listening			Reading					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		3,082	253	545.9	746	76.8	3,043	258	545.1	760	73.3	
	Female	1,357	253	549.0	746	76.0	1,336	258	548.4	750	71.2	
Gender	Male	1,682	253	543.1	744	77.3	1,665	258	542.4	760	74.8	
	Missing	43	380	554.5	666	78.7	42	341	552.7	668	77.2	
	American Indian or Alaskan Native	5					5					
	Asian	452	253	566.4	746	66.4	440	258	563.1	750	66.9	
	Black or African American	789	333	552.2	711	71.6	781	378	549.3	718	69.7	
<b>-</b> 0	Hispanic or Latino	1,132	309	532.2	709	81.1	1,122	357	533.1	718	73.8	
Ethnicity	Native Hawaiian or Other Pacific Islander	23	406	565.6	665	69.9	23	384	549.6	680	71.9	
	Two or More Races	311	347	527.8	701	79.7	308	381	530.2	717	75.1	
	White	361	253	561.6	721	72.7	355	258	562.5	733	75.8	
	Other/Unknown	9					9					
Other	Gifted	2					2					
Other	IEP	445	253	526.4	695	73.4	415	258	523.2	702	65.4	

Oukana	04-4			Listening			Reading					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	10	394	586.0	656	80.1	10	440	583.8	670	74.5	
	Autism	29	253	487.1	634	90.3	20	258	491.3	658	88.8	
	Developmental delay	5					4					
	Emotional disturbance	6					6					
	Hearing Impaired	2					8					
	Intellectual Disability	40	370	473.8	569	45.3	33	402	462.8	524	32.3	
	Multiple disabilities	24	310	415.5	606	84.0	7					
Primary Disability	Orthopedic impairment	1					1					
	Other health impairment	56	382	538.0	669	63.4	55	383	535.2	674	63.7	
	Specific learning disability	269	376	545.6	695	60.2	269	368	533.2	702	59.7	
	Speech or language impairment	7					8					
	Traumatic brain injury	5					5					
	Visual impairment	3					2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.12: Summative Scale Score Summary by Subgroup - Grade 11 (cont.)

Oukanana	04-4		;	Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		3,036	297	565.1	722	67.1	3,027	263	540.2	749	75.7	
	Female	1,333	297	571.3	722	64.6	1,336	263	546.5	749	73.6	
Gender	Male	1,660	297	560.0	720	68.3	1,650	263	534.9	734	77.1	
	Missing	43	348	570.6	681	79.8	41	348	549.5	661	74.1	
	American Indian or Alaskan Native	5					5					
	Asian	445	297	584.5	714	56.2	441	263	556.5	749	60.6	
	Black or African American	778	340	570.5	720	57.5	772	336	547.1	715	68.7	
	Hispanic or Latino	1,116	325	551.5	722	75.6	1,119	319	526.5	718	81.9	
Ethnicity	Native Hawaiian or Other Pacific Islander	25	356	578.7	665	61.6	23	359	550.9	637	71.8	
	Two or More Races	301	342	552.9	718	68.5	305	345	523.5	698	82.1	
	White	357	297	579.8	711	59.7	353	263	559.8	703	71.1	
	Other/Unknown	9					9					
Other -	Gifted	2					2					
	IEP	416	297	554.8	718	64.1	409	263	528.4	686	69.0	

Subgroup	04-4		;	Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	10	353	571.6	632	84.4	10	406	567.7	636	69.0	
	Autism	20	297	504.6	615	93.2	18	263	485.6	612	100.8	
	Developmental delay	4					3					
	Emotional disturbance	6					6					
	Hearing Impaired	3					6					
	Intellectual Disability	37	372	505.4	566	52.0	35	365	465.6	559	52.8	
	Multiple disabilities	9					6					
Primary Disability	Orthopedic impairment	1					1					
	Other health impairment	55	342	565.0	685	64.4	55	347	535.7	646	63.9	
	Specific learning disability	266	340	568.4	718	52.1	267	344	541.1	686	61.7	
	Speech or language impairment	7					7					
	Traumatic brain injury	6					5					
	Visual impairment	3					2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.12: Summative Scale Score Summary by Subgroup - Grade 11 (cont.)

Subgroup	Status	Comprehension					Overall				
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,094	3505	5472.2	7148	566.9	3,108	3235	5490.5	6873	566.7
Gender	Female	1,359	3505	5484.4	7029	555.0	1,364	3235	5527.0	6873	554.9
	Male	1,692	3505	5460.8	7148	576.1	1,701	3235	5459.5	6835	573.5
	Missing	43	4194	5537.9	6471	575.0	43	4014	5556.1	6406	604.4
Ethnicity	American Indian or Alaskan Native	5					5				
	Asian	452	3505	5616.1	6947	519.6	453	3235	5638.8	6873	487.1
	Black or African American	795	3956	5508.6	7004	543.1	800	3960	5532.8	6750	515.3
	Hispanic or Latino	1,135	3794	5379.4	7032	575.4	1,139	3705	5385.9	6783	607.2
	Native Hawaiian or Other Pacific Islander	23	4435	5577.0	6695	560.2	25	4332	5597.1	6345	508.0
	Two or More Races	312	4068	5351.1	7056	578.4	313	3986	5367.0	6704	588.8
	White	363	3505	5586.6	7029	567.9	364	3235	5623.6	6698	537.9
	Other/Unknown	9					9				
Other	Gifted	2					2				
	IEP	454	3505	5291.7	6702	525.3	460	3235	5328.1	6704	534.0
	Migrant	10	4578	5815.7	6441	589.2	10	4279	5730.5	6274	608.0

	21.1		Cor	nprehensi	on						
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Autism	29	3505	5069.1	6287	639.9	29	3235	5001.6	6061	665.8
	Developmental delay	5					5				
	Emotional disturbance	6					6				
	Hearing Impaired	8					8				
	Intellectual Disability	40	4220	4914.5	5462	269.7	41	4319	4923.5	5509	308.7
	Multiple disabilities	24	3794	4553.7	5876	575.4	25	3900	4544.8	5872	566.4
Primary Disability	Orthopedic impairment	1					1				
	Other health impairment	57	4395	5394.0	6503	464.3	58	3986	5443.2	6366	470.0
	Specific learning disability	271	4337	5414.4	6702	448.5	273	3929	5477.6	6704	442.0
	Speech or language impairment	8					8				
	Traumatic brain injury	5					6				
	Visual impairment	3				roos grado ha	3				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.13: Summative Scale Score Summary by Subgroup - Grade 12

Oukana	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		2,489	294	553.6	758	73.7	2,450	296	553.6	762	71.1
	Female	1,127	310	556.8	758	73.5	1,106	375	556.3	762	70.3
Gender	Male	1,324	294	550.8	716	74.1	1,306	296	551.4	737	71.8
	Missing	38	405	555.0	660	66.0	38	400	549.7	661	69.6
	American Indian or Alaskan Native	10	393	532.7	631	75.4	10	424	537.9	619	64.5
	Asian	398	353	567.6	693	66.0	388	336	567.9	704	64.7
	Black or African American	631	332	556.8	758	70.1	622	380	554.9	762	68.8
<b>-</b>	Hispanic or Latino	903	294	546.2	725	78.0	892	296	546.4	737	73.2
Ethnicity	Native Hawaiian or Other Pacific Islander	17	454	537.6	618	46.8	17	451	538.4	650	58.1
	Two or More Races	232	332	539.6	691	75.8	228	379	542.9	698	73.3
	White	295	372	562.4	721	73.3	290	400	562.6	729	73.2
	Other/Unknown	3					3				
Othor	Gifted	1					1				
Other	IEP	358	332	528.1	691	70.3	320	379	531.0	706	60.2

Outh many	04-4			_istening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	13	419	578.0	667	63.5	13	420	572.6	688	68.8
	Autism	25	332	468.3	628	80.1	16	401	491.3	586	61.4
	Developmental delay	3					3				
	Emotional disturbance	5					5				
	Hearing Impaired	2					2				
	Intellectual Disability	32	375	481.7	583	55.6	24	388	485.9	592	51.1
Primary Disability	Multiple disabilities	20	333	428.7	546	52.3	6				
	Other health impairment	42	380	537.1	632	59.4	39	436	534.7	638	52.1
	Specific learning disability	221	379	546.0	691	60.8	219	379	537.8	706	59.1
	Speech or language impairment	1					1				
	Traumatic brain injury	3					3				
	Visual impairment	2				roce grade k	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.13: Summative Scale Score Summary by Subgroup - Grade 12 (cont.)

Outh mineron	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		2,437	329	572.2	718	64.6	2,441	292	548.4	767	70.8
	Female	1,105	334	575.3	713	63.2	1,110	324	552.8	767	69.7
Gender	Male	1,298	329	569.3	718	65.4	1,296	292	544.7	719	71.7
	Missing	34	349	581.6	673	71.3	35	365	546.5	668	68.1
	American Indian or Alaskan Native	10	437	547.6	621	51.1	10	359	519.3	625	71.7
	Asian	385	344	589.9	705	54.0	389	332	560.0	697	59.5
	Black or African American	622	342	575.7	718	58.2	621	346	553.6	767	65.2
	Hispanic or Latino	881	329	564.1	708	70.8	884	292	539.9	714	77.4
Ethnicity	Native Hawaiian or Other Pacific Islander	17	385	552.0	605	54.4	17	449	541.7	612	47.4
	Two or More Races	229	341	554.1	713	68.4	227	337	536.9	669	74.0
	White	290	345	581.7	707	60.8	290	348	557.2	744	69.9
	Other/Unknown	3					3				
Othor	Gifted	1					1				
Other	IEP	334	341	553.1	682	67.1	320	324	531.6	667	72.2

Out man	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	13	452	576.3	641	47.9	13	364	555.1	634	76.4
	Autism	15	373	501.3	622	75.9	15	368	475.5	619	91.8
	Developmental delay	4					3				
	Emotional disturbance	5					5				
	Hearing Impaired	3					2				
	Intellectual Disability	30	345	502.3	603	69.8	26	353	477.2	584	66.8
Primary Disability	Multiple disabilities	7					7				
	Other health impairment	42	398	550.5	633	53.4	39	371	537.7	640	62.7
	Specific learning disability	221	341	566.0	682	61.8	216	337	542.2	667	66.6
_	Speech or language impairment	1					1				
	Traumatic brain injury	3					3				
	Visual impairment	2				ross grade h	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption or Not Attempted are excluded.

Table S3.13: Summative Scale Score Summary by Subgroup - Grade 12 (cont.)

Outh mineron	04-4		Con	nprehens	ion			3560 5549.8 6956 542 3848 5575.8 6956 536 3560 5527.5 6735 545 4122 5559.9 6365 532				
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		2,501	3747	5529.4	7148	555.0	2,514	3560	5549.8	6956	542.2	
	Female	1,130	3794	5545.7	7031	550.3	1,137	3848	5575.8	6956	538.4	
Gender	Male	1,333	3747	5515.7	7148	560.4	1,339	3560	5527.5	6735	545.1	
	Missing	38	4539	5528.0	6515	506.0	38	4122	5559.9	6365	532.0	
	American Indian or Alaskan Native	10	4553	5429.6	6086	533.6	10	4324	5384.1	6107	509.2	
	Asian	398	3886	5628.9	6788	512.9	398	3974	5661.6	6557	478.3	
	Black or African American	636	3956	5538.2	7075	538.1	639	3985	5572.8	6956	508.5	
	Hispanic or Latino	909	3747	5482.5	7148	571.1	916	3560	5490.7	6802	578.5	
Ethnicity	Native Hawaiian or Other Pacific Islander	17	4713	5410.2	6389	420.6	17	4796	5446.8	5992	352.3	
	Two or More Races	232	3959	5442.2	6749	573.3	234	3941	5440.9	6607	564.5	
	White	296	4346	5595.3	7031	565.7	297	4071	5625.0	6724	532.5	
	Other/Unknown	3					3					
Othor	Gifted	1					1					
Other	IEP	361	3956	5317.0	6911	490.4	365	3941	5344.4	6564	535.6	

0.1	01-1-1-		Con	nprehensi	ion						
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	13	4628	5746.0	6807	535.2	13	4402	5670.1	6178	489.4
	Autism	26	3959	4928.4	6010	502.0	26	4045	4906.7	6009	548.1
	Developmental delay	3					4				
	Emotional disturbance	5					5				
	Hearing Impaired	2					3				
	Intellectual Disability	32	4382	5010.4	5870	370.3	32	4090	4978.9	5720	422.7
Primary Disability	Multiple disabilities	20	3956	4650.9	5513	361.8	21	4000	4594.5	5321	355.7
	Other health impairment	42	4311	5386.0	6160	422.5	42	4285	5417.7	6145	445.7
	Specific learning disability	223	4396	5433.6	6911	438.9	224	3941	5489.4	6564	468.5
	Speech or language impairment	1					1				
	Traumatic brain injury	3					3				
	Visual impairment	2				ross grade h	2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

## Section 4: Summative Assessment - Percentage of Students by Domain Performance Level

<sup>\*</sup> Domain tests with Exemption are excluded from counts, which only include tests assigned to domain performance levels 1-5.

Table S4.1: Summative Performance Level by Domain - Kindergarten

0.1	01-1			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		10,224	16.1	14.4	49.9	9.4	10.3	10,122	15.5	16.1	39.7	13.5	15.2
	Female	4,810	12.9	12.2	51.5	11.1	12.2	4,791	12.8	13.9	40.1	15.2	17.9
Gender	Male	5,260	19.0	16.3	48.4	7.9	8.4	5,178	17.9	18.2	39.5	11.9	12.5
	Missing	154	14.3	15.6	49.4	7.8	13.0	153	17.0	13.7	34.0	17.6	17.6
	American Indian or Alaskan Native	35	14.3	14.3	51.4	11.4	8.6	35	11.4	17.1	40.0	17.1	14.3
	Asian	2,243	10.8	11.3	52.4	11.0	14.4	2,209	9.7	13.1	41.2	14.9	21.1
	Black or African American	1,854	12.5	13.8	56.3	9.5	7.9	1,833	12.8	15.2	44.1	15.1	12.9
<b>-</b>	Hispanic or Latino	3,548	22.2	17.3	46.8	8.0	5.7	3,516	20.8	19.8	38.1	12.1	9.2
Ethnicity	Native Hawaiian or Other Pacific Islander	53	3.8	17.0	64.2	11.3	3.8	53	1.9	17.0	52.8	18.9	9.4
	Two or More Races	930	22.5	17.8	44.0	6.7	9.0	922	22.6	19.0	35.6	10.1	12.8
	White	1,515	10.6	10.8	48.6	11.4	18.6	1,508	11.3	11.0	38.3	15.0	24.5
	Other/Unknown	46	13.0	13.0	43.5	15.2	15.2	46	6.5	23.9	34.8	13.0	21.7
	Gifted	8	0.0	0.0	50.0	0.0	50.0	8	0.0	0.0	37.5	0.0	62.5
Other	IEP	593	35.1	20.6	36.1	4.2	4.0	507	28.0	20.5	37.7	5.5	8.3
	Migrant	13	30.8	23.1	23.1	0.0	23.1	13	46.2	7.7	23.1	0.0	23.1

Oukawa	Otatua			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	195	56.4	21.5	19.0	2.1	1.0	138	44.2	21.0	29.7	1.4	3.6
	Developmental delay	7	14.3	28.6	42.9	14.3	0.0	6	16.7	16.7	16.7	50.0	0.0
	Emotional disturbance	4	0.0	50.0	50.0	0.0	0.0	4	25.0	50.0	25.0	0.0	0.0
	Hearing Impaired	6	16.7	33.3	50.0	0.0	0.0	7	28.6	14.3	42.9	0.0	14.3
	Intellectual Disability	19	52.6	31.6	15.8	0.0	0.0	17	64.7	5.9	29.4	0.0	0.0
	Multiple disabilities	32	96.9	3.1	0.0	0.0	0.0	11	100.0	0.0	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	5	20.0	40.0	40.0	0.0	0.0	5	20.0	40.0	40.0	0.0	0.0
	Other health impairment	55	21.8	18.2	50.9	7.3	1.8	53	22.6	24.5	43.4	1.9	7.5
	Specific learning disability	31	0.0	22.6	67.7	3.2	6.5	30	6.7	13.3	60.0	10.0	10.0
	Speech or language impairment	233	16.7	20.2	49.4	6.4	7.3	232	16.4	20.7	42.7	9.1	11.2
	Traumatic brain injury	3	33.3	33.3	0.0	0.0	33.3	2	0.0	50.0	0.0	0.0	50.0
	Visual impairment	1	100.0	0.0	0.0	0.0	0.0	0					_

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.1: Summative Performance Level by Domain - Kindergarten (cont.)

Out man	04-4			Speak	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		10,076	18.7	13.5	30.5	14.8	22.5	10,101	44.5	25.6	22.5	3.6	3.8
	Female	4,768	15.8	11.7	29.4	16.0	27.1	4,785	42.8	26.2	23.2	3.6	4.1
Gender	Male	5,158	21.3	15.3	31.5	13.8	18.1	5,163	46.1	25.1	21.7	3.6	3.4
	Missing	150	22.0	11.3	28.0	12.0	26.7	153	41.8	22.9	24.2	3.9	7.2
	American Indian or Alaskan Native	35	11.4	17.1	22.9	20.0	28.6	35	31.4	42.9	20.0	0.0	5.7
	Asian	2,195	13.9	12.0	29.1	16.0	28.9	2,204	29.0	25.3	32.8	6.9	5.9
	Black or African American	1,827	12.4	13.2	34.1	17.5	22.8	1,826	43.3	27.0	23.3	3.3	3.1
<b>-</b>	Hispanic or Latino	3,509	25.9	15.6	31.0	11.8	15.7	3,513	57.7	25.5	14.0	1.5	1.3
Ethnicity	Native Hawaiian or Other Pacific Islander	53	5.7	18.9	28.3	32.1	15.1	53	35.8	30.2	24.5	3.8	5.7
	Two or More Races	908	28.7	13.3	27.5	13.0	17.4	919	54.6	23.9	17.3	1.3	2.8
	White	1,503	11.4	11.2	28.9	17.0	31.5	1,505	32.4	25.0	29.2	5.4	8.0
	Other/Unknown	46	10.9	8.7	32.6	17.4	30.4	46	39.1	28.3	19.6	8.7	4.3
	Gifted	8	0.0	0.0	25.0	25.0	50.0	8	0.0	25.0	37.5	0.0	37.5
Other	IEP	494	40.3	17.0	26.3	7.5	8.9	499	57.5	22.2	16.4	2.0	1.8
	Migrant	13	38.5	23.1	15.4	7.7	15.4	13	69.2	7.7	15.4	0.0	7.7

Cubanana	Status -			Speak	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	129	67.4	13.2	13.2	3.9	2.3	132	53.0	20.5	22.0	3.8	0.8
	Developmental delay	7	42.9	0.0	28.6	14.3	14.3	5	40.0	20.0	40.0	0.0	0.0
	Emotional disturbance	4	50.0	50.0	0.0	0.0	0.0	4	25.0	50.0	0.0	25.0	0.0
	Hearing Impaired	6	16.7	33.3	16.7	0.0	33.3	7	57.1	14.3	28.6	0.0	0.0
	Intellectual Disability	13	92.3	0.0	7.7	0.0	0.0	15	80.0	20.0	0.0	0.0	0.0
	Multiple disabilities	10	100.0	0.0	0.0	0.0	0.0	12	91.7	8.3	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	5	20.0	20.0	60.0	0.0	0.0	5	40.0	40.0	20.0	0.0	0.0
	Other health impairment	54	33.3	24.1	31.5	7.4	3.7	53	60.4	24.5	13.2	0.0	1.9
	Specific learning disability	31	16.1	12.9	41.9	19.4	9.7	30	60.0	30.0	10.0	0.0	0.0
	Speech or language impairment	232	25.0	18.1	34.5	8.6	13.8	232	56.0	22.8	17.2	1.7	2.2
	Traumatic brain injury	2	50.0	0.0	0.0	0.0	50.0	2	50.0	0.0	0.0	0.0	50.0
	Visual impairment	0					ntod are av	0					

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.2: Summative Performance Level by Domain - Grade 1

Out man	04-4			Lister	ing					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		9,376	8.1	7.6	30.9	24.5	28.9	9,268	26.5	18.6	26.1	12.0	16.8
	Female	4,488	6.8	6.5	30.1	25.1	31.5	4,449	24.5	19.3	27.0	11.3	17.9
Gender	Male	4,763	9.2	8.7	31.8	23.7	26.5	4,693	28.3	18.0	25.3	12.6	15.8
	Missing	125	11.2	4.0	26.4	32.0	26.4	126	29.4	19.0	24.6	11.9	15.1
	American Indian or Alaskan Native	36	2.8	5.6	33.3	19.4	38.9	36	25.0	16.7	27.8	11.1	19.4
	Asian	2,154	5.7	6.2	23.7	23.4	40.9	2,128	13.9	13.3	27.5	15.7	29.6
	Black or African American	1,804	6.7	7.8	31.2	26.6	27.7	1,774	22.1	19.3	28.4	13.7	16.5
<b>-</b>	Hispanic or Latino	3,079	10.4	9.1	37.5	24.2	18.8	3,054	38.7	22.6	23.1	7.6	7.9
Ethnicity	Native Hawaiian or Other Pacific Islander	47	6.4	8.5	40.4	12.8	31.9	47	27.7	19.1	19.1	17.0	17.0
	Two or More Races	877	11.9	10.3	34.1	22.6	21.2	865	39.9	21.2	20.9	7.5	10.5
	White	1,349	6.2	4.4	24.9	25.5	38.9	1,334	16.0	15.7	31.3	16.1	20.8
	Other/Unknown	30	6.7	3.3	23.3	40.0	26.7	30	16.7	16.7	23.3	20.0	23.3
	Gifted	6	0.0	0.0	0.0	0.0	100.0	6	0.0	0.0	16.7	0.0	83.3
Other	IEP	627	25.4	17.2	33.8	13.1	10.5	528	43.6	18.4	22.0	8.7	7.4
	Migrant	23	4.3	8.7	34.8	17.4	34.8	23	17.4	21.7	26.1	8.7	26.1

Out amount	04-4			Liste	ning					Reac	ling		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	184	44.0	21.2	17.9	7.1	9.8	121	33.1	19.8	24.0	10.7	12.4
	Developmental delay	8	50.0	37.5	12.5	0.0	0.0	4	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	3	0.0	0.0	66.7	33.3	0.0	3	33.3	0.0	66.7	0.0	0.0
	Hearing Impaired	8	12.5	12.5	25.0	37.5	12.5	10	60.0	10.0	20.0	10.0	0.0
	Intellectual Disability	24	62.5	20.8	12.5	4.2	0.0	19	68.4	26.3	5.3	0.0	0.0
	Multiple disabilities	33	63.6	18.2	15.2	3.0	0.0	13	61.5	23.1	15.4	0.0	0.0
Primary Disability	Orthopedic impairment	8	37.5	12.5	50.0	0.0	0.0	7	71.4	0.0	14.3	0.0	14.3
	Other health impairment	86	14.0	15.1	39.5	16.3	15.1	82	47.6	13.4	20.7	9.8	8.5
	Specific learning disability	60	13.3	20.0	45.0	13.3	8.3	57	56.1	22.8	17.5	1.8	1.8
	Speech or language impairment	211	7.1	12.3	46.9	19.9	13.7	210	38.1	20.0	23.8	11.0	7.1
	Traumatic brain injury	3	0.0	66.7	33.3	0.0	0.0	2	100.0	0.0	0.0	0.0	0.0
	Visual impairment	1	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.2: Summative Performance Level by Domain - Grade 1 (cont.)

O. th. mars . m	04-4			Speak	ing					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		9,261	24.9	24.5	10.0	16.0	24.6	9,263	35.0	19.4	26.8	7.5	11.2
	Female	4,448	21.9	24.2	10.1	15.8	28.1	4,446	32.8	19.8	27.6	7.4	12.4
Gender	Male	4,687	27.7	24.9	9.9	16.2	21.3	4,691	37.0	19.1	26.1	7.7	10.1
	Missing	126	25.4	25.4	8.7	16.7	23.8	126	38.9	19.0	27.0	6.3	8.7
	American Indian or Alaskan Native	36	33.3	25.0	11.1	8.3	22.2	36	36.1	22.2	22.2	11.1	8.3
	Asian	2,119	17.7	18.2	10.5	18.0	35.6	2,126	18.5	16.9	31.7	12.2	20.7
	Black or African American	1,776	19.4	28.1	10.4	17.7	24.4	1,773	31.0	21.4	29.3	8.2	10.2
<b>-</b>	Hispanic or Latino	3,056	32.7	28.4	10.1	12.6	16.2	3,053	50.1	20.7	20.2	3.7	5.2
Ethnicity	Native Hawaiian or Other Pacific Islander	47	34.0	12.8	10.6	19.1	23.4	47	38.3	10.6	27.7	6.4	17.0
	Two or More Races	861	34.8	23.8	8.8	14.5	18.0	865	50.5	18.5	20.5	4.4	6.1
	White	1,336	18.8	21.9	9.0	19.3	31.0	1,333	22.1	18.2	35.5	9.9	14.3
	Other/Unknown	30	13.3	26.7	16.7	16.7	26.7	30	20.0	33.3	23.3	10.0	13.3
	Gifted	6	0.0	16.7	0.0	0.0	83.3	6	0.0	0.0	16.7	0.0	83.3
Other	IEP	529	50.1	27.2	6.6	9.1	7.0	525	53.3	15.6	22.9	3.6	4.6
	Migrant	22	22.7	9.1	22.7	13.6	31.8	23	21.7	30.4	21.7	13.0	13.0

Outh mineron	Otatura			Speak	king					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	122	63.1	18.0	3.3	5.7	9.8	121	42.1	15.7	29.8	4.1	8.3
	Developmental delay	6	83.3	16.7	0.0	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	3	0.0	100.0	0.0	0.0	0.0	3	33.3	33.3	33.3	0.0	0.0
	Hearing Impaired	8	37.5	12.5	25.0	12.5	12.5	10	60.0	10.0	30.0	0.0	0.0
	Intellectual Disability	19	78.9	15.8	0.0	5.3	0.0	19	84.2	10.5	5.3	0.0	0.0
	Multiple disabilities	16	87.5	6.3	6.3	0.0	0.0	12	91.7	8.3	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	7	71.4	14.3	0.0	0.0	14.3	7	71.4	14.3	0.0	14.3	0.0
	Other health impairment	79	41.8	29.1	5.1	13.9	10.1	82	50.0	13.4	26.8	2.4	7.3
	Specific learning disability	58	43.1	37.9	6.9	6.9	5.2	57	73.7	12.3	12.3	1.8	0.0
	Speech or language impairment	209	40.2	31.1	10.0	12.9	5.7	209	49.8	18.2	23.9	4.3	3.8
	Traumatic brain injury	2	100.0	0.0	0.0	0.0	0.0	2	100.0	0.0	0.0	0.0	0.0
	Visual impairment	1	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.3: Summative Performance Level by Domain - Grade 2

0.1	Status	Listening					Reading						
Subgroup		N	1	2	3	4	5	N	1	2	3	4	5
Total		8,522	6.9	4.7	25.5	28.8	34.1	8,427	25.9	15.9	27.2	16.0	15.0
Gender	Female	4,052	5.9	4.1	25.0	29.0	36.0	4,023	24.1	15.8	27.4	16.3	16.5
	Male	4,364	7.8	5.2	26.2	28.6	32.2	4,299	27.7	16.1	27.0	15.7	13.4
	Missing	106	7.5	4.7	20.8	30.2	36.8	105	21.9	14.3	29.5	17.1	17.1
	American Indian or Alaskan Native	17	5.9	5.9	17.6	52.9	17.6	17	23.5	17.6	35.3	11.8	11.8
	Asian	1,797	5.5	3.2	19.8	26.2	45.4	1,777	14.5	12.0	28.3	21.1	24.1
	Black or African American	1,651	4.9	4.7	25.6	30.3	34.5	1,630	21.8	16.3	32.4	15.7	13.7
<b>-</b>	Hispanic or Latino	2,952	8.5	5.1	30.7	30.1	25.7	2,923	34.8	19.0	24.9	12.0	9.3
Ethnicity	Native Hawaiian or Other Pacific Islander	39	5.1	0.0	20.5	46.2	28.2	39	7.7	17.9	33.3	25.6	15.4
	Two or More Races	877	10.0	7.9	28.4	26.5	27.3	869	38.8	16.1	20.5	12.8	11.9
	White	1,169	5.9	3.5	19.5	28.1	42.9	1,152	17.7	13.5	28.4	20.9	19.4
	Other/Unknown	20	0.0	0.0	35.0	35.0	30.0	20	20.0	15.0	45.0	10.0	10.0
Other	Gifted	36	0.0	0.0	8.3	5.6	86.1	36	0.0	2.8	11.1	16.7	69.4
	IEP	689	17.4	14.2	33.2	23.1	12.0	604	49.5	18.7	20.5	6.8	4.5
	Migrant	21	28.6	0.0	23.8	0.0	47.6	21	42.9	4.8	14.3	9.5	28.6

Outh mineron	Status	Listening					Reading						
Subgroup		N	1	2	3	4	5	N	1	2	3	4	5
	Autism	157	35.7	22.3	25.5	11.5	5.1	112	53.6	21.4	15.2	6.3	3.6
	Developmental delay	9	44.4	22.2	11.1	11.1	11.1	6	66.7	0.0	33.3	0.0	0.0
	Emotional disturbance	8	0.0	0.0	37.5	37.5	25.0	8	50.0	0.0	37.5	12.5	0.0
	Hearing Impaired	6	16.7	50.0	16.7	0.0	16.7	4	50.0	25.0	25.0	0.0	0.0
Primary Disability	Intellectual Disability	36	41.7	13.9	36.1	8.3	0.0	24	79.2	12.5	8.3	0.0	0.0
	Multiple disabilities	27	63.0	25.9	7.4	3.7	0.0	14	92.9	7.1	0.0	0.0	0.0
	Orthopedic impairment	6	16.7	16.7	33.3	16.7	16.7	5	40.0	20.0	20.0	0.0	20.0
	Other health impairment	88	9.1	12.5	37.5	30.7	10.2	80	55.0	17.5	15.0	7.5	5.0
	Specific learning disability	132	7.6	11.4	44.7	28.8	7.6	131	64.1	18.3	13.0	3.8	0.8
	Speech or language impairment	213	3.3	8.5	33.8	29.6	24.9	213	30.5	19.2	31.9	10.8	7.5
	Traumatic brain injury	1	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0
	Visual impairment	4	0.0	0.0	0.0	75.0	25.0	4	0.0	0.0	75.0	0.0	25.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.3: Summative Performance Level by Domain - Grade 2 (cont.)

Out was	04-4			Speak	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		8,424	18.1	17.5	15.7	21.4	27.3	8,413	25.2	15.3	29.0	15.9	14.6
	Female	4,020	16.0	16.4	15.2	22.0	30.3	4,018	22.0	15.6	29.5	16.4	16.5
Gender	Male	4,299	20.1	18.7	16.1	20.7	24.4	4,290	28.3	15.0	28.6	15.3	12.9
	Missing	105	17.1	12.4	14.3	22.9	33.3	105	22.9	17.1	25.7	20.0	14.3
	American Indian or Alaskan Native	17	17.6	17.6	17.6	17.6	29.4	17	23.5	29.4	29.4	5.9	11.8
	Asian	1,774	12.5	14.7	14.5	22.4	35.9	1,775	14.6	11.2	30.1	21.1	23.0
	Black or African American	1,630	13.7	19.8	16.1	21.5	28.8	1,622	21.4	15.7	32.6	16.2	14.1
<b>-</b> 0	Hispanic or Latino	2,923	22.6	20.0	17.6	20.8	19.0	2,921	33.4	18.9	27.3	11.6	8.8
Ethnicity	Native Hawaiian or Other Pacific Islander	39	5.1	15.4	28.2	20.5	30.8	39	2.6	17.9	41.0	23.1	15.4
	Two or More Races	866	29.8	17.0	13.4	17.7	22.2	869	37.5	15.0	23.9	12.1	11.5
	White	1,155	13.5	12.6	13.3	23.8	36.7	1,150	17.6	11.9	29.6	21.0	20.0
	Other/Unknown	20	0.0	25.0	10.0	35.0	30.0	20	20.0	5.0	45.0	25.0	5.0
	Gifted	36	0.0	0.0	13.9	11.1	75.0	36	0.0	0.0	11.1	25.0	63.9
Other	IEP	605	41.0	21.3	13.7	15.0	8.9	595	50.3	18.7	20.3	7.6	3.2
	Migrant	21	42.9	14.3	0.0	14.3	28.6	21	42.9	4.8	19.0	4.8	28.6

Outhannana	Otatua			Speak	king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	105	63.8	15.2	8.6	8.6	3.8	104	55.8	15.4	21.2	4.8	2.9
	Developmental delay	9	66.7	22.2	11.1	0.0	0.0	6	66.7	0.0	33.3	0.0	0.0
	Emotional disturbance	8	25.0	12.5	37.5	12.5	12.5	8	50.0	0.0	12.5	37.5	0.0
	Hearing Impaired	5	40.0	40.0	0.0	20.0	0.0	4	50.0	25.0	25.0	0.0	0.0
	Intellectual Disability	28	78.6	10.7	7.1	3.6	0.0	24	79.2	12.5	8.3	0.0	0.0
	Multiple disabilities	14	92.9	7.1	0.0	0.0	0.0	15	93.3	6.7	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	5	20.0	20.0	40.0	0.0	20.0	5	60.0	0.0	20.0	0.0	20.0
	Other health impairment	81	42.0	19.8	9.9	22.2	6.2	78	53.8	23.1	14.1	6.4	2.6
	Specific learning disability	132	36.4	24.2	13.6	16.7	9.1	131	62.6	19.8	13.0	3.8	0.8
	Speech or language impairment	211	22.7	25.1	19.0	18.0	15.2	213	31.5	21.1	29.6	12.7	5.2
	Traumatic brain injury	1	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0
	Visual impairment	4	25.0	0.0	25.0	0.0	50.0	4	0.0	0.0	50.0	25.0	25.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.4: Summative Performance Level by Domain - Grade 3

Cubanana	Ctatus			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		6,571	6.5	4.6	24.2	36.1	28.6	6,451	28.4	16.2	34.2	13.1	8.1
	Female	3,012	6.4	4.1	22.4	37.2	29.9	2,980	26.4	15.5	34.6	13.5	10.0
Gender	Male	3,522	6.5	5.0	25.6	35.2	27.7	3,434	30.1	16.6	34.0	12.7	6.5
	Missing	37	10.8	5.4	24.3	45.9	13.5	37	29.7	27.0	27.0	13.5	2.7
	American Indian or Alaskan Native	24	12.5	4.2	12.5	37.5	33.3	22	27.3	9.1	18.2	22.7	22.7
	Asian	1,146	5.1	3.5	22.9	34.3	34.1	1,127	18.9	15.5	37.3	16.0	12.3
	Black or African American	1,250	3.8	4.2	25.0	39.2	27.8	1,222	25.5	15.6	37.8	12.4	8.6
<b>-</b>	Hispanic or Latino	2,517	7.4	5.1	26.1	37.1	24.2	2,475	34.3	17.8	31.2	11.3	5.3
Ethnicity	Native Hawaiian or Other Pacific Islander	30	0.0	6.7	36.7	23.3	33.3	29	31.0	6.9	44.8	13.8	3.4
	Two or More Races	754	9.2	6.0	24.4	33.4	27.1	744	35.9	15.5	31.9	9.5	7.3
	White	837	7.3	3.8	18.5	33.8	36.6	819	21.1	14.0	35.9	18.6	10.4
	Other/Unknown	13	7.7	0.0	15.4	61.5	15.4	13	23.1	23.1	46.2	7.7	0.0
Other	Gifted	33	0.0	0.0	3.0	39.4	57.6	33	6.1	6.1	36.4	18.2	33.3
Oulei	IEP	829	11.6	10.7	34.5	30.6	12.5	719	52.7	18.8	20.6	5.4	2.5

Cubanana	Ctatus			Liste	ning					Read	ling		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Migrant	24	12.5	4.2	25.0	33.3	25.0	25	44.0	12.0	28.0	16.0	0.0
	Autism	135	24.4	24.4	27.4	11.1	12.6	103	56.3	15.5	16.5	9.7	1.9
	Developmental delay	2	0.0	0.0	100.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	9	11.1	0.0	55.6	33.3	0.0	8	62.5	12.5	25.0	0.0	0.0
	Hearing Impaired	10	0.0	10.0	30.0	40.0	20.0	11	54.5	9.1	18.2	9.1	9.1
	Intellectual Disability	52	32.7	23.1	32.7	11.5	0.0	38	94.7	5.3	0.0	0.0	0.0
Primary Disability	Multiple disabilities	41	73.2	7.3	17.1	0.0	2.4	10	100.0	0.0	0.0	0.0	0.0
	Orthopedic impairment	8	12.5	12.5	25.0	25.0	25.0	7	42.9	14.3	14.3	14.3	14.3
	Other health impairment	115	7.8	5.2	43.5	30.4	13.0	105	53.3	18.1	21.0	5.7	1.9
	Specific learning disability	315	2.9	7.3	37.1	41.9	10.8	293	54.3	24.9	16.4	2.4	2.0
	Speech or language impairment	143	0.0	6.3	30.8	39.2	23.8	141	28.4	17.0	41.1	9.2	4.3
	Traumatic brain injury	2	0.0	0.0	100.0	0.0	0.0	2	100.0	0.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.4: Summative Performance Level by Domain - Grade 3 (cont.)

Cubanana	Ctatus			Speal	king					Writi	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		6,474	14.2	12.0	20.3	27.1	26.4	6,460	26.6	17.2	33.9	14.4	8.0
	Female	2,984	12.9	11.4	18.7	27.1	29.9	2,984	23.9	17.0	33.8	14.9	10.3
Gender	Male	3,454	15.3	12.6	21.6	27.1	23.4	3,439	28.9	17.2	34.0	13.9	6.0
	Missing	36	22.2	2.8	25.0	30.6	19.4	37	29.7	27.0	24.3	16.2	2.7
	American Indian or Alaskan Native	22	13.6	9.1	22.7	22.7	31.8	22	18.2	18.2	22.7	27.3	13.6
	Asian	1,127	11.8	10.7	18.2	26.7	32.6	1,130	18.6	14.2	39.1	16.1	11.9
	Black or African American	1,224	10.8	11.4	22.7	28.3	26.8	1,221	24.0	16.6	36.5	15.0	7.9
<b>-</b>	Hispanic or Latino	2,493	16.4	13.7	21.4	27.4	21.1	2,478	32.4	19.7	30.1	12.2	5.6
Ethnicity	Native Hawaiian or Other Pacific Islander	30	10.0	20.0	10.0	36.7	23.3	29	13.8	24.1	34.5	20.7	6.9
	Two or More Races	745	19.7	13.0	18.5	25.6	23.1	747	32.7	16.9	32.4	11.4	6.7
	White	820	11.3	8.2	18.3	26.1	36.1	820	19.1	14.3	35.6	19.9	11.1
	Other/Unknown	13	15.4	15.4	15.4	23.1	30.8	13	23.1	23.1	38.5	15.4	0.0
Other	Gifted	33	0.0	9.1	15.2	30.3	45.5	33	0.0	15.2	36.4	21.2	27.3
Other	IEP	749	25.4	19.6	24.7	19.8	10.5	732	50.5	21.3	20.1	5.6	2.5

Cubana	Status			Spea	king					Writi	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Migrant	25	24.0	8.0	40.0	8.0	20.0	25	40.0	24.0	24.0	12.0	0.0
	Autism	100	52.0	15.0	11.0	12.0	10.0	102	52.0	14.7	21.6	7.8	3.9
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	8	0.0	37.5	37.5	12.5	12.5	8	50.0	25.0	12.5	12.5	0.0
	Hearing Impaired	10	10.0	20.0	40.0	10.0	20.0	12	41.7	16.7	25.0	8.3	8.3
	Intellectual Disability	46	69.6	23.9	2.2	4.3	0.0	37	94.6	5.4	0.0	0.0	0.0
Primary Disability	Multiple disabilities	13	61.5	30.8	0.0	0.0	7.7	10	100.0	0.0	0.0	0.0	0.0
	Orthopedic impairment	7	14.3	14.3	28.6	28.6	14.3	7	28.6	28.6	14.3	28.6	0.0
	Other health impairment	109	25.7	20.2	25.7	22.0	6.4	107	53.3	20.6	17.8	6.5	1.9
	Specific learning disability	314	17.5	19.1	29.0	23.6	10.8	304	52.0	24.7	18.4	3.0	2.0
	Speech or language impairment	139	10.8	20.9	28.8	22.3	17.3	142	28.9	27.5	32.4	7.0	4.2
	Traumatic brain injury	2	0.0	0.0	100.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.5: Summative Performance Level by Domain - Grade 4

Out and	Otatus			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		5,315	8.1	6.3	20.3	38.2	27.1	5,207	21.3	16.6	32.7	17.6	11.8
	Female	2,380	7.9	6.1	20.3	39.4	26.4	2,343	20.0	16.3	34.1	17.6	12.0
Gender	Male	2,897	8.2	6.5	20.3	37.3	27.7	2,827	22.4	16.6	31.8	17.5	11.6
	Missing	38	13.2	2.6	21.1	34.2	28.9	37	16.2	29.7	21.6	24.3	8.1
	American Indian or Alaskan Native	13	0.0	23.1	23.1	23.1	30.8	13	38.5	7.7	30.8	15.4	7.7
	Asian	843	6.4	4.7	15.3	37.7	35.8	825	14.7	12.8	34.2	20.5	17.8
	Black or African American	1,057	4.4	6.3	20.3	42.5	26.4	1,036	17.6	17.1	35.9	19.2	10.2
	Hispanic or Latino	2,060	9.5	6.8	23.5	37.3	23.0	2,022	25.0	18.7	31.4	15.2	9.7
Ethnicity	Native Hawaiian or Other Pacific Islander	21	9.5	9.5	23.8	38.1	19.0	21	14.3	14.3	47.6	14.3	9.5
	Two or More Races	617	12.8	7.1	18.3	36.8	25.0	603	28.7	15.3	30.3	16.4	9.3
	White	694	7.5	5.2	18.4	37.0	31.8	677	17.3	15.5	32.2	20.2	14.8
	Other/Unknown	10	20.0	10.0	20.0	10.0	40.0	10	30.0	10.0	10.0	20.0	30.0
	Gifted	34	2.9	0.0	2.9	32.4	61.8	34	2.9	0.0	32.4	29.4	35.3
Other	IEP	877	12.1	9.7	32.7	33.6	11.9	775	35.7	26.5	24.8	9.0	4.0
	Migrant	16	6.3	0.0	25.0	37.5	31.3	16	18.8	25.0	25.0	6.3	25.0

	21.1			Lister	ning					Read	ling		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	102	32.4	10.8	35.3	17.6	3.9	75	44.0	29.3	21.3	2.7	2.7
	Developmental delay	5	60.0	40.0	0.0	0.0	0.0	4	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	9	0.0	22.2	33.3	22.2	22.2	9	44.4	11.1	22.2	0.0	22.2
	Hearing Impaired	11	18.2	0.0	45.5	27.3	9.1	11	18.2	36.4	45.5	0.0	0.0
	Intellectual Disability	50	32.0	24.0	42.0	2.0	0.0	34	88.2	8.8	2.9	0.0	0.0
	Multiple disabilities	37	67.6	18.9	8.1	5.4	0.0	9	66.7	22.2	11.1	0.0	0.0
Primary Disability	Orthopedic impairment	4	25.0	0.0	25.0	50.0	0.0	2	0.0	0.0	100.0	0.0	0.0
	Other health impairment	105	6.7	11.4	39.0	32.4	10.5	100	38.0	25.0	28.0	6.0	3.0
	Specific learning disability	468	3.2	7.7	35.7	40.2	13.2	447	33.6	30.2	23.9	8.9	3.4
	Speech or language impairment	65	1.5	4.6	12.3	49.2	32.3	65	6.2	12.3	40.0	32.3	9.2
	Traumatic brain injury	2	50.0	0.0	50.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Visual impairment	3	0.0	0.0	0.0	66.7	33.3	2	50.0	0.0	0.0	50.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.5: Summative Performance Level by Domain - Grade 4 (cont.)

O. da anno ann	Otatua			Speal	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		5,235	14.2	10.9	16.9	26.5	31.6	5,213	18.4	12.9	48.4	12.1	8.1
	Female	2,355	12.7	9.9	16.6	26.9	33.9	2,345	17.1	12.1	49.1	13.1	8.6
Gender	Male	2,841	15.5	11.5	17.1	26.1	29.8	2,831	19.6	13.5	47.8	11.3	7.7
	Missing	39	15.4	15.4	17.9	23.1	28.2	37	13.5	21.6	45.9	8.1	10.8
	American Indian or Alaskan Native	13	15.4	7.7	15.4	15.4	46.2	13	38.5	0.0	38.5	15.4	7.7
	Asian	829	10.7	8.6	15.0	28.5	37.3	827	11.7	9.9	50.5	14.8	13.1
	Black or African American	1,037	9.7	12.4	19.8	26.7	31.3	1,036	15.5	12.5	52.7	12.3	7.0
	Hispanic or Latino	2,039	17.3	11.3	16.4	26.4	28.5	2,025	21.9	14.4	47.7	10.1	5.8
Ethnicity	Native Hawaiian or Other Pacific Islander	21	9.5	9.5	19.0	19.0	42.9	21	9.5	19.0	52.4	14.3	4.8
	Two or More Races	605	20.3	11.9	16.5	26.0	25.3	602	25.9	14.0	42.0	10.5	7.6
	White	681	10.4	9.0	16.6	25.0	39.1	679	13.8	12.2	47.1	15.6	11.2
	Other/Unknown	10	20.0	10.0	10.0	0.0	60.0	10	20.0	10.0	30.0	30.0	10.0
	Gifted	34	2.9	2.9	5.9	26.5	61.8	34	2.9	5.9	44.1	26.5	20.6
Other	IEP	800	20.9	16.4	23.0	22.6	17.1	783	31.3	20.8	41.4	4.3	2.2
	Migrant	16	12.5	6.3	12.5	25.0	43.8	16	18.8	12.5	43.8	6.3	18.8

Cubanana	Ctatus			Speal	king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	74	43.2	23.0	13.5	6.8	13.5	75	49.3	12.0	33.3	4.0	1.3
	Developmental delay	4	75.0	25.0	0.0	0.0	0.0	4	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	9	33.3	22.2	0.0	11.1	33.3	9	55.6	11.1	11.1	11.1	11.1
	Hearing Impaired	11	27.3	9.1	18.2	36.4	9.1	12	25.0	25.0	41.7	8.3	0.0
	Intellectual Disability	41	58.5	26.8	7.3	4.9	2.4	34	79.4	11.8	8.8	0.0	0.0
	Multiple disabilities	10	60.0	10.0	20.0	10.0	0.0	9	66.7	33.3	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	3	33.3	0.0	0.0	33.3	33.3	2	0.0	0.0	100.0	0.0	0.0
	Other health impairment	103	23.3	16.5	22.3	22.3	15.5	100	32.0	28.0	37.0	2.0	1.0
	Specific learning disability	462	14.3	15.8	26.8	24.5	18.6	454	26.7	22.9	44.3	4.4	1.8
	Speech or language impairment	64	6.3	9.4	21.9	40.6	21.9	65	9.2	10.8	64.6	9.2	6.2
	Traumatic brain injury	0						1	100.0	0.0	0.0	0.0	0.0
	Visual impairment	3	0.0	0.0	66.7	0.0	33.3	2	0.0	50.0	50.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.6: Summative Performance Level by Domain - Grade 5

Oukana	04-4			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		4,644	11.0	8.5	13.4	41.8	25.4	4,519	22.9	17.1	37.8	14.5	7.6
	Female	2,021	10.4	8.3	12.7	42.9	25.7	1,976	20.5	16.4	39.7	15.1	8.2
Gender	Male	2,584	11.6	8.5	13.9	40.8	25.2	2,504	24.9	17.7	36.3	14.1	7.1
	Missing	39	2.6	12.8	10.3	48.7	25.6	39	15.4	17.9	41.0	15.4	10.3
	American Indian or Alaskan Native	9	11.1	22.2	11.1	22.2	33.3	9	33.3	11.1	22.2	11.1	22.2
	Asian	679	10.0	6.8	11.2	39.6	32.4	662	18.3	14.8	38.1	15.7	13.1
	Black or African American	985	8.6	7.6	13.9	44.2	25.7	964	19.5	18.8	39.3	15.7	6.7
<b>-</b>	Hispanic or Latino	1,832	11.2	9.9	14.6	41.9	22.4	1,777	25.9	17.9	36.5	13.3	6.4
Ethnicity	Native Hawaiian or Other Pacific Islander	27	3.7	11.1	11.1	51.9	22.2	27	18.5	25.9	40.7	11.1	3.7
	Two or More Races	573	16.9	7.9	13.1	40.0	22.2	555	28.6	15.3	36.9	12.8	6.3
	White	531	9.8	7.7	11.3	41.1	30.1	517	19.0	16.1	40.0	17.0	7.9
	Other/Unknown	8	12.5	0.0	0.0	75.0	12.5	8	12.5	12.5	50.0	25.0	0.0
	Gifted	13	0.0	0.0	0.0	61.5	38.5	13	7.7	0.0	46.2	23.1	23.1
Other	IEP	945	13.7	14.9	21.7	38.1	11.6	827	36.0	24.3	30.8	6.0	2.8
	Migrant	20	5.0	5.0	15.0	40.0	35.0	20	10.0	20.0	55.0	15.0	0.0

Out amount	04-4			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	83	44.6	12.0	10.8	24.1	8.4	51	45.1	15.7	23.5	9.8	5.9
	Developmental delay	9	33.3	55.6	11.1	0.0	0.0	6	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	16	6.3	18.8	31.3	31.3	12.5	16	37.5	25.0	31.3	6.3	0.0
	Hearing Impaired	9	33.3	11.1	0.0	55.6	0.0	10	50.0	0.0	40.0	10.0	0.0
	Intellectual Disability	56	35.7	35.7	21.4	7.1	0.0	40	80.0	17.5	2.5	0.0	0.0
	Multiple disabilities	35	68.6	17.1	11.4	0.0	2.9	12	75.0	8.3	8.3	8.3	0.0
Primary Disability	Orthopedic impairment	3	33.3	33.3	33.3	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
	Other health impairment	125	8.8	18.4	24.8	36.8	11.2	110	35.5	21.8	33.6	6.4	2.7
	Specific learning disability	563	4.3	12.6	24.2	45.5	13.5	535	32.1	27.1	32.7	5.2	2.8
	Speech or language impairment	33	6.1	3.0	15.2	45.5	30.3	33	15.2	12.1	54.5	6.1	12.1
	Traumatic brain injury	5	60.0	0.0	0.0	40.0	0.0	3	33.3	33.3	33.3	0.0	0.0
	Visual impairment	2	0.0	0.0	50.0	50.0	0.0	1	0.0	100.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.6: Summative Performance Level by Domain - Grade 5 (cont.)

Outh many	04-4			Speak	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		4,557	17.5	11.7	25.7	22.0	23.2	4,521	16.1	11.0	57.7	9.6	5.6
	Female	1,995	16.2	9.9	26.0	22.4	25.6	1,979	14.5	10.4	59.3	9.1	6.7
Gender	Male	2,523	18.5	13.0	25.6	21.7	21.2	2,503	17.3	11.6	56.6	9.7	4.8
	Missing	39	17.9	12.8	25.6	20.5	23.1	39	15.4	5.1	51.3	20.5	7.7
	American Indian or Alaskan Native	9	44.4	0.0	11.1	22.2	22.2	9	22.2	11.1	44.4	0.0	22.2
	Asian	666	15.5	7.8	24.5	23.4	28.8	662	10.6	11.3	56.9	11.8	9.4
	Black or African American	972	15.2	14.2	24.2	21.9	24.5	962	13.5	11.0	61.0	9.0	5.4
<b>-</b>	Hispanic or Latino	1,794	18.7	12.0	26.3	23.0	20.1	1,784	18.7	12.1	55.7	9.2	4.4
Ethnicity	Native Hawaiian or Other Pacific Islander	27	14.8	3.7	33.3	25.9	22.2	27	11.1	3.7	74.1	3.7	7.4
	Two or More Races	564	23.6	12.4	27.7	19.0	17.4	552	21.9	10.3	57.2	5.4	5.1
	White	517	13.2	10.6	25.7	20.1	30.4	517	12.8	8.3	59.2	13.9	5.8
	Other/Unknown	8	12.5	0.0	50.0	12.5	25.0	8	12.5	0.0	75.0	12.5	0.0
	Gifted	13	0.0	7.7	30.8	30.8	30.8	13	0.0	0.0	69.2	7.7	23.1
Other	IEP	870	22.9	17.1	30.0	17.9	12.1	832	23.1	18.8	52.6	3.4	2.2
	Migrant	20	5.0	15.0	20.0	40.0	20.0	20	5.0	10.0	70.0	15.0	0.0

Oukanana	Otatua			Speal	king					Writ	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	52	42.3	11.5	21.2	13.5	11.5	48	25.0	16.7	47.9	6.3	4.2
	Developmental delay	6	66.7	0.0	33.3	0.0	0.0	6	66.7	16.7	16.7	0.0	0.0
	Emotional disturbance	16	31.3	12.5	31.3	18.8	6.3	16	31.3	6.3	50.0	12.5	0.0
	Hearing Impaired	9	44.4	11.1	11.1	33.3	0.0	10	30.0	20.0	40.0	10.0	0.0
	Intellectual Disability	49	65.3	22.4	12.2	0.0	0.0	41	75.6	7.3	17.1	0.0	0.0
	Multiple disabilities	14	78.6	14.3	0.0	0.0	7.1	12	75.0	0.0	16.7	0.0	8.3
Primary Disability	Orthopedic impairment	3	66.7	33.3	0.0	0.0	0.0	3	33.3	33.3	33.3	0.0	0.0
	Other health impairment	121	26.4	14.9	34.7	13.2	10.7	114	23.7	16.7	57.0	1.8	0.9
	Specific learning disability	557	14.7	18.5	32.7	20.5	13.6	539	17.8	21.3	55.8	3.2	1.9
	Speech or language impairment	31	9.7	12.9	25.8	22.6	29.0	33	9.1	9.1	60.6	12.1	9.1
	Traumatic brain injury	4	50.0	0.0	25.0	25.0	0.0	3	33.3	0.0	66.7	0.0	0.0
	Visual impairment	1	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.7: Summative Performance Level by Domain - Grade 6

Oukana	04-4			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,698	9.9	6.9	22.0	37.9	23.4	3,622	21.5	20.2	37.8	12.1	8.4
	Female	1,616	9.2	7.4	22.3	38.7	22.5	1,593	19.8	20.2	39.6	12.0	8.5
Gender	Male	2,050	10.5	6.5	21.6	37.4	24.0	1,997	23.1	20.2	36.3	12.1	8.4
	Missing	32	6.3	6.3	28.1	31.3	28.1	32	9.4	25.0	40.6	18.8	6.3
	American Indian or Alaskan Native	10	40.0	0.0	20.0	30.0	10.0	10	40.0	10.0	40.0	0.0	10.0
	Asian	485	7.4	6.4	17.5	33.2	35.5	472	14.2	13.3	38.3	15.5	18.6
	Black or African American	780	6.2	5.0	20.1	43.2	25.5	767	16.6	19.2	41.6	13.8	8.9
<b>-</b>	Hispanic or Latino	1,485	11.2	8.3	25.2	36.8	18.5	1,454	25.4	22.7	36.6	10.2	5.2
Ethnicity	Native Hawaiian or Other Pacific Islander	12	8.3	16.7	8.3	41.7	25.0	12	25.0	16.7	50.0	8.3	0.0
	Two or More Races	474	13.7	8.4	22.6	38.6	16.7	463	27.2	22.2	36.5	8.9	5.2
	White	449	10.2	4.2	19.2	36.5	29.8	441	18.8	19.5	35.4	15.4	10.9
	Other/Unknown	3	0.0	0.0	0.0	33.3	66.7	3	0.0	0.0	33.3	33.3	33.3
	Gifted	10	0.0	0.0	10.0	20.0	70.0	10	0.0	20.0	30.0	10.0	40.0
Other	IEP	811	9.2	8.8	31.2	39.5	11.3	732	28.3	28.1	34.2	7.0	2.5
	Migrant	14	14.3	7.1	28.6	42.9	7.1	14	28.6	7.1	64.3	0.0	0.0

Outh manner	Otatus			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	77	44.2	9.1	14.3	26.0	6.5	55	41.8	23.6	23.6	5.5	5.5
	Developmental delay	5	20.0	0.0	80.0	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	11	9.1	9.1	27.3	54.5	0.0	10	40.0	0.0	60.0	0.0	0.0
	Hearing Impaired	6	0.0	0.0	33.3	50.0	16.7	9	22.2	22.2	44.4	0.0	11.1
	Intellectual Disability	54	22.2	27.8	40.7	9.3	0.0	33	66.7	27.3	6.1	0.0	0.0
	Multiple disabilities	21	61.9	19.0	14.3	4.8	0.0	7	71.4	14.3	14.3	0.0	0.0
Primary Disability	Orthopedic impairment	6	0.0	0.0	16.7	66.7	16.7	5	0.0	20.0	60.0	20.0	0.0
	Other health impairment	101	3.0	6.9	41.6	40.6	7.9	97	28.9	33.0	29.9	8.2	0.0
	Specific learning disability	494	2.0	6.5	32.0	46.2	13.4	478	24.5	29.5	37.4	6.7	1.9
	Speech or language impairment	32	3.1	6.3	15.6	43.8	31.3	32	9.4	12.5	46.9	21.9	9.4
	Traumatic brain injury	3	0.0	66.7	0.0	33.3	0.0	2	50.0	0.0	0.0	50.0	0.0
	Visual impairment	3	0.0	0.0	0.0	33.3	66.7	3	0.0	0.0	33.3	0.0	66.7

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.7: Summative Performance Level by Domain - Grade 6 (cont.)

Subgroup	Status	Speaking					Writing						
		N	1	2	3	4	5	N	1	2	3	4	5
Total		3,638	14.2	12.8	32.0	22.1	18.9	3,624	14.0	11.5	54.4	12.5	7.6
	Female	1,595	13.6	11.8	31.3	22.6	20.8	1,589	11.8	10.9	55.1	12.6	9.6
Gender	Male	2,011	14.9	13.4	32.6	21.6	17.5	2,003	15.8	11.9	53.9	12.3	6.0
	Missing	32	3.1	21.9	31.3	31.3	12.5	32	3.1	18.8	59.4	15.6	3.1
	American Indian or Alaskan Native	10	40.0	0.0	40.0	10.0	10.0	10	40.0	10.0	30.0	0.0	20.0
	Asian	470	10.9	7.0	25.7	24.0	32.3	474	10.3	8.9	48.7	17.1	15.0
	Black or African American	770	9.7	14.4	29.2	25.8	20.8	764	10.1	9.4	58.6	13.2	8.6
	Hispanic or Latino	1,461	16.7	14.2	35.6	19.9	13.6	1,455	16.2	13.4	55.5	9.8	5.1
Ethnicity	Native Hawaiian or Other Pacific Islander	12	8.3	25.0	16.7	25.0	25.0	12	16.7	8.3	58.3	16.7	0.0
	Two or More Races	467	19.7	14.6	33.2	20.1	12.4	463	18.4	12.7	54.6	10.2	4.1
	White	445	11.2	9.7	30.8	23.1	25.2	443	12.0	10.8	50.3	17.4	9.5
	Other/Unknown	3	0.0	0.0	0.0	33.3	66.7	3	0.0	0.0	33.3	66.7	0.0
	Gifted	10	0.0	10.0	10.0	30.0	50.0	10	0.0	10.0	50.0	10.0	30.0
Other	IEP	758	13.5	18.9	39.2	18.9	9.6	737	13.7	18.3	59.4	6.4	2.2
	Migrant	14	21.4	7.1	35.7	21.4	14.3	14	21.4	7.1	64.3	7.1	0.0

Outhannana	Status	Speaking					Writing						
Subgroup		N	1	2	3	4	5	N	1	2	3	4	5
	Autism	52	36.5	15.4	28.8	11.5	7.7	52	40.4	5.8	44.2	7.7	1.9
	Developmental delay	4	25.0	50.0	25.0	0.0	0.0	3	33.3	66.7	0.0	0.0	0.0
	Emotional disturbance	11	36.4	27.3	9.1	27.3	0.0	10	20.0	10.0	70.0	0.0	0.0
	Hearing Impaired	9	11.1	22.2	33.3	33.3	0.0	9	11.1	11.1	66.7	11.1	0.0
	Intellectual Disability	42	38.1	33.3	28.6	0.0	0.0	37	48.6	29.7	21.6	0.0	0.0
	Multiple disabilities	9	66.7	22.2	11.1	0.0	0.0	5	60.0	20.0	20.0	0.0	0.0
Primary Disability	Orthopedic impairment	6	0.0	0.0	50.0	33.3	16.7	5	0.0	0.0	100.0	0.0	0.0
	Other health impairment	100	14.0	21.0	38.0	20.0	7.0	98	15.3	18.4	61.2	4.1	1.0
	Specific learning disability	491	7.9	17.5	42.6	20.6	11.4	483	8.1	19.9	63.4	6.4	2.3
	Speech or language impairment	31	6.5	12.9	41.9	25.8	12.9	32	6.3	3.1	62.5	25.0	3.1
	Traumatic brain injury	2	50.0	0.0	50.0	0.0	0.0	2	50.0	0.0	50.0	0.0	0.0
	Visual impairment	3	0.0	0.0	0.0	66.7	33.3	3	0.0	0.0	33.3	0.0	66.7

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.8: Summative Performance Level by Domain - Grade 7

O. Ib anno ma	04-4			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,595	15.0	12.1	34.1	23.2	15.6	3,504	29.4	24.9	34.1	7.3	4.3
	Female	1,610	14.6	12.0	33.5	24.9	15.0	1,575	27.5	25.8	34.8	7.4	4.5
Gender	Male	1,951	15.2	11.9	35.0	21.9	16.0	1,897	30.8	24.1	33.9	7.3	3.8
	Missing	34	20.6	23.5	14.7	17.6	23.5	32	40.6	21.9	12.5	3.1	21.9
	American Indian or Alaskan Native	11	36.4	18.2	27.3	18.2	0.0	11	63.6	9.1	27.3	0.0	0.0
	Asian	491	9.4	12.2	32.6	25.3	20.6	475	23.8	22.1	38.1	9.3	6.7
	Black or African American	736	11.5	13.9	33.8	21.7	19.0	715	27.8	23.5	33.3	9.4	6.0
<b>-</b>	Hispanic or Latino	1,482	18.7	12.5	35.4	22.2	11.3	1,447	33.4	26.9	31.9	5.2	2.6
Ethnicity	Native Hawaiian or Other Pacific Islander	27	3.7	29.6	48.1	18.5	0.0	26	19.2	65.4	15.4	0.0	0.0
	Two or More Races	444	16.9	9.5	34.0	22.1	17.6	436	29.6	23.4	36.2	6.7	4.1
	White	399	12.5	8.5	31.3	28.6	19.0	389	23.9	22.4	38.0	10.8	4.9
	Other/Unknown	5	0.0	20.0	40.0	40.0	0.0	5	20.0	40.0	40.0	0.0	0.0
	Gifted	8	0.0	0.0	12.5	50.0	37.5	8	0.0	0.0	62.5	37.5	0.0
Other	IEP	796	12.9	17.2	43.2	18.7	7.9	709	35.8	31.7	27.6	3.5	1.3
	Migrant	13	7.7	23.1	15.4	23.1	30.8	13	30.8	15.4	30.8	7.7	15.4

O. Ib arras va	Otatura			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	60	40.0	23.3	28.3	6.7	1.7	39	43.6	23.1	25.6	7.7	0.0
	Developmental delay	11	36.4	45.5	18.2	0.0	0.0	7	85.7	14.3	0.0	0.0	0.0
	Emotional disturbance	12	0.0	25.0	50.0	8.3	16.7	12	41.7	16.7	33.3	8.3	0.0
	Hearing Impaired	3	0.0	33.3	33.3	33.3	0.0	7	71.4	0.0	28.6	0.0	0.0
	Intellectual Disability	63	27.0	36.5	33.3	1.6	1.6	44	77.3	15.9	4.5	2.3	0.0
	Multiple disabilities	31	80.6	12.9	6.5	0.0	0.0	7	100.0	0.0	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	6	16.7	16.7	16.7	16.7	33.3	5	20.0	20.0	40.0	20.0	0.0
	Other health impairment	106	11.3	16.0	47.2	20.8	4.7	99	38.4	31.3	26.3	3.0	1.0
	Specific learning disability	483	3.9	13.7	49.1	23.0	10.4	471	29.3	36.1	29.7	3.2	1.7
	Speech or language impairment	20	0.0	5.0	40.0	45.0	10.0	20	10.0	25.0	60.0	0.0	5.0
	Traumatic brain injury	7	14.3	28.6	42.9	14.3	0.0	4	50.0	25.0	25.0	0.0	0.0
	Visual impairment	2	0.0	50.0	0.0	50.0	0.0	2	50.0	0.0	50.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.8: Summative Performance Level by Domain - Grade 7 (cont.)

O. Ib arras arra	04-4			Speak	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,527	17.3	13.3	34.2	19.0	16.2	3,512	23.5	19.3	44.9	7.6	4.6
	Female	1,580	15.4	13.2	31.6	20.5	19.2	1,576	21.3	18.3	45.4	9.0	6.0
Gender	Male	1,917	18.9	13.5	36.4	17.8	13.5	1,905	25.2	20.3	44.8	6.5	3.3
	Missing	30	16.7	10.0	33.3	13.3	26.7	31	35.5	12.9	29.0	6.5	16.1
	American Indian or Alaskan Native	11	36.4	9.1	45.5	9.1	0.0	11	54.5	9.1	27.3	0.0	9.1
	Asian	478	12.8	9.4	33.1	22.8	22.0	476	18.3	17.9	49.8	8.0	6.1
	Black or African American	724	14.1	15.9	33.3	18.9	17.8	716	22.6	17.7	44.4	9.1	6.1
<b>-</b>	Hispanic or Latino	1,452	20.7	14.3	35.0	17.3	12.7	1,449	26.7	21.5	42.6	5.8	3.5
Ethnicity	Native Hawaiian or Other Pacific Islander	27	7.4	14.8	70.4	7.4	0.0	26	11.5	34.6	53.8	0.0	0.0
	Two or More Races	437	21.1	10.3	33.0	22.0	13.7	436	25.2	17.2	45.0	9.4	3.2
	White	393	12.5	13.2	33.1	18.6	22.6	393	17.8	17.8	48.3	9.9	6.1
	Other/Unknown	5	20.0	0.0	40.0	0.0	40.0	5	20.0	20.0	60.0	0.0	0.0
	Gifted	8	0.0	0.0	25.0	25.0	50.0	8	0.0	0.0	62.5	37.5	0.0
Other	IEP	736	14.7	19.2	41.3	16.6	8.3	718	24.4	27.6	41.9	4.0	2.1
	Migrant	13	15.4	7.7	30.8	0.0	46.2	13	23.1	23.1	30.8	7.7	15.4

Out amount	Otatus			Speak	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	41	36.6	12.2	26.8	17.1	7.3	39	41.0	25.6	28.2	5.1	0.0
	Developmental delay	8	50.0	37.5	12.5	0.0	0.0	7	85.7	14.3	0.0	0.0	0.0
	Emotional disturbance	12	0.0	33.3	66.7	0.0	0.0	12	16.7	50.0	25.0	8.3	0.0
	Hearing Impaired	3	0.0	33.3	33.3	33.3	0.0	7	57.1	14.3	28.6	0.0	0.0
	Intellectual Disability	55	40.0	36.4	18.2	5.5	0.0	48	68.8	22.9	8.3	0.0	0.0
	Multiple disabilities	12	75.0	16.7	8.3	0.0	0.0	7	71.4	28.6	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	5	20.0	0.0	40.0	20.0	20.0	5	20.0	0.0	60.0	0.0	20.0
	Other health impairment	101	16.8	19.8	40.6	16.8	5.9	99	30.3	27.3	37.4	4.0	1.0
	Specific learning disability	480	7.7	17.9	45.2	19.0	10.2	476	16.4	28.6	47.9	4.6	2.5
	Speech or language impairment	20	5.0	5.0	65.0	20.0	5.0	20	0.0	25.0	70.0	0.0	5.0
	Traumatic brain injury	5	40.0	40.0	20.0	0.0	0.0	4	25.0	25.0	50.0	0.0	0.0
	Visual impairment	2	0.0	50.0	0.0	0.0	50.0	2	0.0	50.0	50.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.9: Summative Performance Level by Domain - Grade 8

Cubanana	Ctatus			Liste	ning					Read	ling		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,473	17.0	9.4	31.3	24.3	18.0	3,392	29.9	22.8	37.1	6.2	4.0
	Female	1,533	16.3	8.7	32.8	23.1	19.1	1,505	28.2	23.1	37.8	6.7	4.1
Gender	Male	1,914	17.2	10.1	30.5	25.2	17.0	1,863	31.1	22.8	36.4	5.9	3.8
	Missing	26	34.6	3.8	7.7	34.6	19.2	24	33.3	8.3	45.8	4.2	8.3
	American Indian or Alaskan Native	9	11.1	11.1	22.2	11.1	44.4	9	22.2	11.1	44.4	11.1	11.1
	Asian	467	12.0	7.3	29.1	24.8	26.8	449	20.3	18.9	43.2	10.0	7.6
	Black or African American	705	8.2	8.7	36.6	25.8	20.7	696	21.6	25.6	38.9	8.8	5.2
	Hispanic or Latino	1,415	23.3	11.2	28.8	22.5	14.2	1,379	37.8	22.0	34.2	4.3	1.7
Ethnicity	Native Hawaiian or Other Pacific Islander	24	4.2	4.2	45.8	33.3	12.5	23	17.4	39.1	39.1	4.3	0.0
	Two or More Races	431	21.1	8.1	33.4	21.3	16.0	424	33.5	24.1	35.4	2.4	4.7
	White	415	12.5	8.9	30.4	30.1	18.1	405	25.2	23.2	38.5	8.1	4.9
	Other/Unknown	7	0.0	0.0	42.9	42.9	14.3	7	14.3	42.9	28.6	14.3	0.0
Other	Gifted	5	0.0	0.0	20.0	60.0	20.0	5	0.0	0.0	80.0	0.0	20.0
Other	IEP	726	14.0	13.8	41.0	21.6	9.5	653	35.5	31.5	28.8	3.1	1.1

C. hamana	Status			Lister	ning					Read	ling		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Migrant	15	40.0	6.7	13.3	26.7	13.3	15	46.7	6.7	33.3	13.3	0.0
	Autism	51	52.9	11.8	21.6	3.9	9.8	33	63.6	9.1	18.2	6.1	3.0
	Developmental delay	8	50.0	25.0	12.5	12.5	0.0	4	75.0	25.0	0.0	0.0	0.0
	Emotional disturbance	21	19.0	4.8	38.1	33.3	4.8	18	33.3	27.8	33.3	5.6	0.0
	Hearing Impaired	10	10.0	30.0	30.0	10.0	20.0	12	25.0	41.7	25.0	0.0	8.3
	Intellectual Disability	62	30.6	27.4	35.5	3.2	3.2	47	74.5	14.9	10.6	0.0	0.0
Primary Disability	Multiple disabilities	25	80.0	12.0	8.0	0.0	0.0	11	100.0	0.0	0.0	0.0	0.0
	Other health impairment	95	13.7	16.8	47.4	14.7	7.4	90	34.4	37.8	24.4	3.3	0.0
	Specific learning disability	443	4.3	11.1	45.4	28.7	10.6	425	28.7	34.4	33.2	2.6	1.2
	Speech or language impairment	8	0.0	12.5	37.5	12.5	37.5	8	12.5	25.0	50.0	12.5	0.0
	Traumatic brain injury	5	0.0	40.0	20.0	20.0	20.0	4	50.0	25.0	25.0	0.0	0.0
	Visual impairment	3	0.0	0.0	0.0	100.0	0.0	3	0.0	33.3	33.3	33.3	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.9: Summative Performance Level by Domain - Grade 8 (cont.)

Cubanana	Ctatus			Speal	king					Writi	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,410	18.0	11.6	31.1	18.3	20.9	3,393	25.6	18.1	43.8	7.5	5.1
	Female	1,509	17.1	11.1	30.3	18.0	23.6	1,507	23.6	16.8	45.0	8.8	5.8
Gender	Male	1,878	18.6	12.1	32.1	18.5	18.7	1,863	27.1	19.4	42.7	6.4	4.5
	Missing	23	30.4	4.3	13.0	26.1	26.1	23	34.8	4.3	52.2	4.3	4.3
	American Indian or Alaskan Native	9	22.2	0.0	33.3	0.0	44.4	9	22.2	11.1	33.3	33.3	0.0
	Asian	446	10.5	9.6	26.9	20.0	33.0	448	19.2	13.6	48.0	10.3	8.9
	Black or African American	698	10.0	12.5	35.7	19.3	22.5	696	15.8	22.8	45.8	9.8	5.7
<b>-</b>	Hispanic or Latino	1,392	25.1	12.6	30.7	17.6	14.0	1,383	34.0	16.2	41.4	5.4	3.0
Ethnicity	Native Hawaiian or Other Pacific Islander	24	8.3	16.7	37.5	16.7	20.8	24	8.3	33.3	45.8	8.3	4.2
	Two or More Races	426	21.6	11.3	29.6	18.3	19.2	420	28.6	18.6	41.4	6.2	5.2
	White	408	12.7	9.6	31.1	17.2	29.4	406	19.2	20.4	45.6	8.4	6.4
	Other/Unknown	7	14.3	0.0	0.0	42.9	42.9	7	0.0	14.3	71.4	0.0	14.3
Other	Gifted	5	0.0	0.0	60.0	0.0	40.0	5	20.0	0.0	60.0	0.0	20.0
Other	IEP	680	15.4	16.6	38.2	16.8	12.9	662	26.9	24.6	42.4	3.8	2.3

Cubanana	Status			Speal	king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Migrant	15	40.0	6.7	6.7	6.7	40.0	15	53.3	0.0	40.0	6.7	0.0
	Autism	37	40.5	21.6	24.3	2.7	10.8	34	61.8	11.8	17.6	5.9	2.9
	Developmental delay	4	50.0	50.0	0.0	0.0	0.0	4	75.0	0.0	25.0	0.0	0.0
	Emotional disturbance	20	25.0	15.0	30.0	20.0	10.0	19	26.3	26.3	47.4	0.0	0.0
	Hearing Impaired	8	12.5	0.0	62.5	12.5	12.5	11	18.2	27.3	45.5	0.0	9.1
	Intellectual Disability	51	35.3	27.5	21.6	9.8	5.9	47	59.6	21.3	19.1	0.0	0.0
Primary Disability	Multiple disabilities	11	54.5	45.5	0.0	0.0	0.0	9	88.9	11.1	0.0	0.0	0.0
	Other health impairment	92	19.6	17.4	38.0	18.5	6.5	91	28.6	26.4	40.7	3.3	1.1
	Specific learning disability	443	8.8	14.7	42.9	18.1	15.6	433	19.4	26.1	48.0	4.2	2.3
	Speech or language impairment	8	25.0	0.0	12.5	37.5	25.0	8	12.5	25.0	37.5	0.0	25.0
	Traumatic brain injury	5	20.0	20.0	20.0	40.0	0.0	5	60.0	0.0	20.0	20.0	0.0
	Visual impairment	3	0.0	0.0	33.3	33.3	33.3	3	0.0	0.0	100.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.10: Summative Performance Level by Domain - Grade 9

O. da anno ann	04-4			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		4,716	27.3	11.2	34.3	16.9	10.3	4,672	38.3	23.9	32.4	3.3	2.1
	Female	1,985	24.4	11.8	35.1	17.4	11.3	1,970	34.7	25.6	33.7	3.4	2.7
Gender	Male	2,690	29.4	10.8	33.9	16.5	9.5	2,663	41.0	22.8	31.4	3.3	1.5
	Missing	41	29.3	7.3	24.4	26.8	12.2	39	41.0	12.8	41.0	0.0	5.1
	American Indian or Alaskan Native	13	0.0	7.7	23.1	23.1	46.2	13	0.0	38.5	15.4	30.8	15.4
	Asian	529	11.5	9.8	37.8	21.9	18.9	522	20.5	22.8	45.6	6.3	4.8
	Black or African American	1,057	15.6	13.3	38.6	19.8	12.7	1,048	29.5	26.7	37.5	4.1	2.2
<b>-</b> 4	Hispanic or Latino	2,058	34.5	11.4	33.3	14.0	6.7	2,044	45.3	24.1	27.7	1.8	1.1
Ethnicity	Native Hawaiian or Other Pacific Islander	26	23.1	3.8	53.8	15.4	3.8	25	32.0	40.0	20.0	8.0	0.0
	Two or More Races	592	46.1	9.0	24.0	14.9	6.1	583	54.2	18.5	24.4	1.9	1.0
	White	437	16.5	10.1	37.8	20.1	15.6	433	28.6	23.3	38.1	5.8	4.2
	Other/Unknown	4	0.0	25.0	0.0	50.0	25.0	4	25.0	0.0	75.0	0.0	0.0
	Gifted	7	0.0	0.0	14.3	85.7	0.0	7	0.0	28.6	71.4	0.0	0.0
Other	IEP	711	14.8	17.4	47.5	15.6	4.6	673	34.3	35.5	28.8	1.0	0.3
	Migrant	13	30.8	7.7	38.5	7.7	15.4	13	38.5	23.1	30.8	0.0	7.7

Outh manage	Otatua			Lister	ning					Read	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	29	44.8	24.1	27.6	3.4	0.0	21	61.9	19.0	19.0	0.0	0.0
	Developmental delay	19	42.1	15.8	36.8	5.3	0.0	16	56.3	37.5	6.3	0.0	0.0
	Emotional disturbance	12	16.7	8.3	58.3	16.7	0.0	12	33.3	50.0	16.7	0.0	0.0
	Hearing Impaired	2	0.0	50.0	0.0	0.0	50.0	6	66.7	16.7	16.7	0.0	0.0
	Intellectual Disability	50	42.0	26.0	30.0	2.0	0.0	42	66.7	26.2	7.1	0.0	0.0
	Multiple disabilities	24	70.8	16.7	12.5	0.0	0.0	11	81.8	9.1	9.1	0.0	0.0
Primary Disability	Orthopedic impairment	5	0.0	20.0	60.0	0.0	20.0	5	20.0	40.0	20.0	20.0	0.0
	Other health impairment	95	8.4	24.2	44.2	20.0	3.2	89	33.7	30.3	34.8	1.1	0.0
	Specific learning disability	452	7.3	13.9	54.6	18.4	5.8	450	27.6	38.9	32.0	1.1	0.4
	Speech or language impairment	10	0.0	30.0	50.0	10.0	10.0	10	20.0	50.0	30.0	0.0	0.0
	Traumatic brain injury	11	9.1	27.3	45.5	18.2	0.0	10	40.0	40.0	20.0	0.0	0.0
	Visual impairment	3	33.3	33.3	0.0	33.3	0.0	3	66.7	0.0	33.3	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.10: Summative Performance Level by Domain - Grade 9 (cont.)

Out man	04-4			Speal	king					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		4,667	26.6	16.3	35.0	12.5	9.6	4,668	35.3	19.4	38.6	4.7	1.9
	Female	1,965	23.4	15.0	35.7	13.5	12.5	1,963	31.8	19.2	41.4	5.0	2.6
Gender	Male	2,663	29.0	17.2	34.6	11.7	7.5	2,663	37.9	19.6	36.6	4.4	1.5
	Missing	39	20.5	25.6	30.8	10.3	12.8	42	40.5	16.7	38.1	2.4	2.4
	American Indian or Alaskan Native	13	0.0	7.7	46.2	23.1	23.1	13	15.4	15.4	53.8	0.0	15.4
	Asian	520	12.3	11.3	39.2	19.4	17.7	520	18.5	19.8	50.4	7.7	3.7
	Black or African American	1,058	15.5	19.7	38.5	14.6	11.8	1,044	25.2	23.5	43.0	6.0	2.3
<b>-</b>	Hispanic or Latino	2,039	33.4	16.9	33.9	9.9	5.9	2,046	42.8	18.4	34.8	3.1	0.9
Ethnicity	Native Hawaiian or Other Pacific Islander	25	16.0	24.0	48.0	8.0	4.0	25	20.0	36.0	44.0	0.0	0.0
	Two or More Races	579	44.6	14.2	26.1	9.5	5.7	583	52.3	14.1	29.2	3.4	1.0
	White	429	16.1	14.2	37.1	15.4	17.2	433	23.6	20.8	43.9	7.2	4.6
	Other/Unknown	4	0.0	25.0	75.0	0.0	0.0	4	25.0	0.0	50.0	0.0	25.0
	Gifted	7	0.0	0.0	28.6	14.3	57.1	7	0.0	14.3	85.7	0.0	0.0
Other	IEP	681	14.8	22.2	44.6	11.6	6.8	677	26.3	27.9	43.7	1.8	0.3
	Migrant	12	25.0	33.3	16.7	16.7	8.3	13	30.8	30.8	23.1	7.7	7.7

Cubanana	Ctatus			Speak	king					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	25	44.0	36.0	16.0	0.0	4.0	22	54.5	13.6	31.8	0.0	0.0
	Developmental delay	16	50.0	12.5	37.5	0.0	0.0	16	62.5	25.0	12.5	0.0	0.0
	Emotional disturbance	12	16.7	25.0	50.0	0.0	8.3	12	33.3	8.3	58.3	0.0	0.0
	Hearing Impaired	3	0.0	33.3	66.7	0.0	0.0	6	33.3	50.0	16.7	0.0	0.0
	Intellectual Disability	45	37.8	40.0	20.0	0.0	2.2	43	62.8	27.9	9.3	0.0	0.0
	Multiple disabilities	13	76.9	15.4	7.7	0.0	0.0	11	81.8	18.2	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	5	0.0	20.0	60.0	20.0	0.0	5	0.0	80.0	20.0	0.0	0.0
	Other health impairment	91	12.1	22.0	45.1	14.3	6.6	90	18.9	33.3	45.6	2.2	0.0
	Specific learning disability	450	8.0	20.2	50.2	13.6	8.0	451	19.5	27.5	50.3	2.2	0.4
	Speech or language impairment	10	0.0	20.0	60.0	10.0	10.0	10	30.0	30.0	40.0	0.0	0.0
	Traumatic brain injury	10	20.0	10.0	50.0	20.0	0.0	10	30.0	40.0	30.0	0.0	0.0
	Visual impairment	3	66.7	0.0	33.3	0.0	0.0	3	66.7	0.0	33.3	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.11: Summative Performance Level by Domain - Grade 10

Oukana	04-4			Lister	ing					Read	ling		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,515	17.3	11.8	33.7	20.2	17.0	3,482	28.8	21.6	38.7	6.7	4.2
	Female	1,539	14.6	11.8	34.6	21.1	17.9	1,522	26.1	21.7	41.1	6.4	4.7
Gender	Male	1,956	19.3	11.9	33.0	19.4	16.4	1,941	30.9	21.5	36.9	6.9	3.8
	Missing	20	25.0	5.0	35.0	20.0	15.0	19	31.6	26.3	36.8	5.3	0.0
	American Indian or Alaskan Native	12	16.7	16.7	25.0	8.3	33.3	12	25.0	16.7	41.7	8.3	8.3
	Asian	497	5.4	7.8	33.4	26.4	27.0	493	15.0	17.0	50.7	11.4	5.9
	Black or African American	793	9.0	14.2	38.0	20.9	17.9	786	22.0	26.2	39.7	7.5	4.6
<b>-</b>	Hispanic or Latino	1,436	25.5	12.1	31.3	18.0	13.1	1,419	37.1	21.1	34.2	4.7	3.0
Ethnicity	Native Hawaiian or Other Pacific Islander	21	14.3	14.3	47.6	23.8	0.0	22	22.7	36.4	40.9	0.0	0.0
	Two or More Races	373	28.7	11.0	31.4	14.7	14.2	374	40.9	18.7	30.7	6.1	3.5
	White	380	8.4	11.3	36.1	23.9	20.3	373	18.5	22.3	45.6	7.2	6.4
	Other/Unknown	3	0.0	0.0	0.0	66.7	33.3	3	0.0	0.0	100.0	0.0	0.0
	Gifted	9	0.0	0.0	22.2	44.4	33.3	9	0.0	22.2	33.3	22.2	22.2
Other	IEP	551	13.8	17.4	43.0	17.8	8.0	515	33.0	27.2	35.9	3.1	0.8
	Migrant	21	23.8	4.8	33.3	23.8	14.3	21	23.8	23.8	47.6	4.8	0.0

Outhanna	Otatus			Lister	ning					Read	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	35	31.4	17.1	31.4	14.3	5.7	32	50.0	18.8	28.1	3.1	0.0
	Developmental delay	7	42.9	57.1	0.0	0.0	0.0	6	83.3	16.7	0.0	0.0	0.0
	Emotional disturbance	10	30.0	10.0	40.0	10.0	10.0	10	60.0	20.0	20.0	0.0	0.0
	Hearing Impaired	6	0.0	16.7	50.0	33.3	0.0	9	44.4	33.3	11.1	11.1	0.0
	Intellectual Disability	40	37.5	47.5	15.0	0.0	0.0	36	77.8	19.4	2.8	0.0	0.0
	Multiple disabilities	22	81.8	13.6	4.5	0.0	0.0	6	100.0	0.0	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	3	0.0	0.0	100.0	0.0	0.0	4	50.0	50.0	0.0	0.0	0.0
	Other health impairment	78	7.7	19.2	47.4	17.9	7.7	74	28.4	28.4	36.5	6.8	0.0
	Specific learning disability	348	5.5	13.2	48.6	21.8	10.9	341	24.6	28.4	42.8	2.9	1.2
	Speech or language impairment	9	0.0	22.2	33.3	33.3	11.1	8	25.0	25.0	50.0	0.0	0.0
	Traumatic brain injury	4	75.0	0.0	25.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0
	Visual impairment	2	0.0	50.0	0.0	50.0	0.0	2	50.0	0.0	0.0	50.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.11: Summative Performance Level by Domain - Grade 10 (cont.)

O. Ib arrassa	04-4			Speak	king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,465	15.4	16.1	36.0	15.9	16.6	3,470	25.1	18.5	44.9	6.9	4.7
	Female	1,516	13.4	14.8	34.4	17.2	20.2	1,519	22.4	17.1	47.7	7.4	5.3
Gender	Male	1,931	16.8	17.2	37.3	14.8	13.8	1,933	27.2	19.6	42.6	6.5	4.2
	Missing	18	27.8	5.6	27.8	22.2	16.7	18	27.8	16.7	50.0	0.0	5.6
	American Indian or Alaskan Native	12	16.7	8.3	50.0	16.7	8.3	12	25.0	25.0	25.0	16.7	8.3
	Asian	493	4.9	12.8	34.7	17.2	30.4	491	12.0	17.7	53.4	9.6	7.3
	Black or African American	785	7.3	18.3	38.5	18.2	17.7	783	18.1	20.8	48.4	7.3	5.4
<b>-</b> 4	Hispanic or Latino	1,414	22.6	16.5	35.2	13.7	11.9	1,419	33.6	17.8	40.0	5.6	3.1
Ethnicity	Native Hawaiian or Other Pacific Islander	21	9.5	28.6	42.9	19.0	0.0	22	18.2	22.7	50.0	9.1	0.0
	Two or More Races	369	26.3	18.2	32.2	13.3	10.0	367	36.0	18.5	36.0	4.6	4.9
	White	368	8.4	12.0	38.3	19.6	21.7	373	14.5	16.9	53.6	9.1	5.9
	Other/Unknown	3	0.0	0.0	33.3	33.3	33.3	3	0.0	0.0	100.0	0.0	0.0
	Gifted	8	0.0	25.0	25.0	0.0	50.0	8	0.0	12.5	62.5	12.5	12.5
Other	IEP	535	9.2	24.1	42.8	14.2	9.7	521	23.6	26.3	44.3	4.6	1.2
	Migrant	21	19.0	14.3	47.6	14.3	4.8	21	33.3	9.5	57.1	0.0	0.0

Oukawa	Otatus			Speak	king					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	32	25.0	25.0	40.6	3.1	6.3	32	37.5	25.0	34.4	3.1	0.0
	Developmental delay	7	42.9	42.9	14.3	0.0	0.0	6	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	10	20.0	40.0	30.0	10.0	0.0	10	60.0	10.0	30.0	0.0	0.0
	Hearing Impaired	8	0.0	12.5	37.5	50.0	0.0	9	33.3	55.6	11.1	0.0	0.0
	Intellectual Disability	39	30.8	53.8	15.4	0.0	0.0	37	75.7	18.9	5.4	0.0	0.0
	Multiple disabilities	7	85.7	14.3	0.0	0.0	0.0	6	100.0	0.0	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	4	25.0	25.0	25.0	25.0	0.0	4	25.0	50.0	25.0	0.0	0.0
	Other health impairment	78	7.7	28.2	51.3	7.7	5.1	75	18.7	29.3	45.3	5.3	1.3
	Specific learning disability	351	3.4	19.7	46.2	17.7	13.1	345	14.8	26.1	51.9	5.8	1.4
	Speech or language impairment	9	0.0	22.2	66.7	11.1	0.0	8	0.0	25.0	75.0	0.0	0.0
	Traumatic brain injury	1	100.0	0.0	0.0	0.0	0.0	0					
	Visual impairment	2	0.0	0.0	50.0	50.0	0.0	2	0.0	50.0	50.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.12: Summative Performance Level by Domain - Grade 11

0	Status	Listening					Reading						
Subgroup		N	1	2	3	4	5	N	1	2	3	4	5
Total		3,082	13.8	12.4	31.0	20.4	22.5	3,043	25.5	21.5	39.0	8.4	5.7
	Female	1,357	12.2	12.5	31.8	21.0	22.5	1,336	22.7	22.3	41.4	7.6	6.1
Gender	Male	1,682	15.1	12.7	30.2	19.7	22.3	1,665	27.8	21.1	36.8	8.9	5.4
	Missing	43	14.0	0.0	32.6	27.9	25.6	42	21.4	14.3	47.6	14.3	2.4
	American Indian or Alaskan Native	5	0.0	0.0	40.0	60.0	0.0	5	0.0	20.0	80.0	0.0	0.0
	Asian	452	4.6	8.4	35.8	24.6	26.5	440	13.9	22.3	45.7	11.1	7.0
	Black or African American	789	9.1	13.6	33.0	21.3	23.1	781	22.8	21.5	41.6	8.3	5.8
	Hispanic or Latino	1,132	20.9	12.6	28.7	18.0	19.7	1,122	31.6	22.5	35.3	6.4	4.2
Ethnicity	Native Hawaiian or Other Pacific Islander	23	8.7	8.7	17.4	43.5	21.7	23	17.4	21.7	52.2	4.3	4.3
	Two or More Races	311	21.2	17.4	27.0	16.4	18.0	308	34.4	21.8	31.8	7.1	4.9
	White	361	7.5	10.8	31.9	21.6	28.3	355	20.3	17.5	40.8	12.7	8.7
	Other/Unknown	9	0.0	0.0	22.2	33.3	44.4	9	0.0	11.1	55.6	11.1	22.2
	Gifted	2	0.0	0.0	50.0	50.0	0.0	2	50.0	0.0	50.0	0.0	0.0
Other	IEP	445	15.7	14.4	40.0	17.5	12.4	415	30.4	31.8	31.1	5.1	1.7
	Migrant	10	10.0	0.0	10.0	40.0	40.0	10	20.0	0.0	60.0	0.0	20.0

Out amount	Status	Listening					Reading						
Subgroup		N	1	2	3	4	5	N	1	2	3	4	5
	Autism	29	41.4	6.9	31.0	10.3	10.3	20	50.0	25.0	15.0	10.0	0.0
	Developmental delay	5	40.0	40.0	20.0	0.0	0.0	4	75.0	0.0	25.0	0.0	0.0
	Emotional disturbance	6	16.7	33.3	16.7	33.3	0.0	6	50.0	16.7	33.3	0.0	0.0
	Hearing Impaired	2	0.0	0.0	50.0	0.0	50.0	8	62.5	12.5	12.5	12.5	0.0
	Intellectual Disability	40	30.0	32.5	37.5	0.0	0.0	33	75.8	24.2	0.0	0.0	0.0
	Multiple disabilities	24	70.8	12.5	12.5	4.2	0.0	7	57.1	28.6	14.3	0.0	0.0
Primary Disability	Orthopedic impairment	1	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	100.0	0.0
	Other health impairment	56	8.9	12.5	48.2	16.1	14.3	55	18.2	40.0	30.9	9.1	1.8
	Specific learning disability	269	6.7	12.6	43.5	22.7	14.5	269	22.3	34.2	37.5	4.1	1.9
	Speech or language impairment	7	14.3	14.3	14.3	28.6	28.6	8	12.5	12.5	62.5	12.5	0.0
	Traumatic brain injury	5	40.0	0.0	40.0	20.0	0.0	5	80.0	0.0	20.0	0.0	0.0
	Visual impairment	3	0.0	33.3	33.3	0.0	33.3	2	50.0	50.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.12: Summative Performance Level by Domain - Grade 11 (cont.)

Out man	bgroup Status			Speal	king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,036	11.0	16.0	35.1	17.3	20.7	3,027	21.8	19.1	43.0	9.9	6.2
	Female	1,333	9.2	14.6	35.4	17.3	23.6	1,336	18.9	19.2	44.2	10.3	7.3
Gender	Male	1,660	12.5	17.3	34.8	17.2	18.2	1,650	24.4	19.0	41.7	9.7	5.3
	Missing	43	11.6	7.0	37.2	20.9	23.3	41	12.2	19.5	56.1	4.9	7.3
	American Indian or Alaskan Native	5	0.0	0.0	60.0	40.0	0.0	5	0.0	20.0	80.0	0.0	0.0
	Asian	445	4.9	12.1	33.9	21.8	27.2	441	8.8	23.4	50.3	10.9	6.6
	Black or African American	778	6.8	15.9	39.7	17.6	19.9	772	18.0	19.7	44.9	11.0	6.3
	Hispanic or Latino	1,116	16.9	17.7	32.6	15.3	17.5	1,119	28.9	18.5	39.3	8.3	5.0
Ethnicity	Native Hawaiian or Other Pacific Islander	25	4.0	8.0	48.0	24.0	16.0	23	13.0	17.4	60.9	8.7	0.0
	Two or More Races	301	15.3	19.3	34.6	14.3	16.6	305	32.8	17.4	37.4	7.9	4.6
	White	357	6.4	14.0	33.6	18.8	27.2	353	15.9	15.9	43.9	13.3	11.0
	Other/Unknown	9	0.0	0.0	22.2	22.2	55.6	9	0.0	11.1	66.7	11.1	11.1
Othor	Gifted	2	0.0	0.0	50.0	50.0	0.0	2	0.0	50.0	50.0	0.0	0.0
Other —	IEP	416	11.1	18.8	41.8	17.8	10.6	409	23.0	25.4	43.0	5.4	3.2

Cubanana	Ctatus			Speal	king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Migrant	10	10.0	10.0	10.0	40.0	30.0	10	10.0	10.0	50.0	30.0	0.0
	Autism	20	35.0	10.0	45.0	10.0	0.0	18	50.0	0.0	50.0	0.0	0.0
	Developmental delay	4	25.0	50.0	25.0	0.0	0.0	3	66.7	0.0	33.3	0.0	0.0
	Emotional disturbance	6	16.7	16.7	50.0	16.7	0.0	6	33.3	33.3	16.7	16.7	0.0
	Hearing Impaired	3	0.0	0.0	33.3	33.3	33.3	6	33.3	16.7	50.0	0.0	0.0
	Intellectual Disability	37	29.7	40.5	29.7	0.0	0.0	35	62.9	28.6	8.6	0.0	0.0
	Multiple disabilities	9	66.7	0.0	22.2	11.1	0.0	6	50.0	16.7	33.3	0.0	0.0
Primary Disability	Orthopedic impairment	1	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	100.0	0.0
	Other health impairment	55	7.3	20.0	36.4	16.4	20.0	55	16.4	29.1	45.5	3.6	5.5
	Specific learning disability	266	4.5	15.8	46.6	21.4	11.7	267	15.4	26.2	47.9	7.1	3.4
	Speech or language impairment	7	0.0	28.6	14.3	28.6	28.6	7	14.3	14.3	71.4	0.0	0.0
	Traumatic brain injury	6	50.0	33.3	16.7	0.0	0.0	5	40.0	40.0	20.0	0.0	0.0
	Visual impairment	3	33.3	0.0	33.3	33.3	0.0	2	50.0	50.0	0.0	0.0	0.0

\* Domain tests with Exemption or Not Attempted are excluded.

Table S4.13: Summative Performance Level by Domain - Grade 12

O. th marrow	Subgroup Status			Lister	ning					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		2,489	10.4	11.1	32.7	22.2	23.5	2,450	20.3	22.3	41.8	9.4	6.2
	Female	1,127	9.6	11.3	31.5	21.7	25.9	1,106	19.3	22.4	41.6	9.7	7.1
Gender	Male	1,324	11.1	11.0	33.8	22.5	21.6	1,306	21.1	22.3	41.9	9.0	5.7
	Missing	38	7.9	10.5	34.2	26.3	21.1	38	21.1	18.4	44.7	15.8	0.0
	American Indian or Alaskan Native	10	10.0	10.0	40.0	20.0	20.0	10	30.0	20.0	50.0	0.0	0.0
	Asian	398	6.3	7.3	31.4	27.6	27.4	388	13.4	18.8	50.5	11.6	5.7
	Black or African American	631	8.4	9.7	35.5	24.6	21.9	622	19.0	22.5	43.7	8.5	6.3
<b>-</b> 4	Hispanic or Latino	903	13.7	12.2	32.1	19.6	22.4	892	23.1	24.0	38.2	9.3	5.4
Ethnicity	Native Hawaiian or Other Pacific Islander	17	0.0	23.5	52.9	17.6	5.9	17	23.5	29.4	35.3	11.8	0.0
	Two or More Races	232	15.5	12.5	34.9	16.8	20.3	228	25.9	25.0	32.9	9.6	6.6
	White	295	6.4	14.6	27.8	22.4	28.8	290	19.0	19.0	44.1	7.9	10.0
	Other/Unknown	3	0.0	0.0	0.0	33.3	66.7	3	0.0	0.0	33.3	66.7	0.0
	Gifted	1	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	100.0	0.0	0.0
Other	IEP	358	15.9	12.8	40.8	19.3	11.2	320	25.0	28.4	41.9	3.4	1.3
	Migrant	13	7.7	0.0	30.8	30.8	30.8	13	7.7	23.1	46.2	15.4	7.7

Oukanana	Subgroup Status			Liste	ning					Reac	ling		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	25	64.0	0.0	20.0	8.0	8.0	16	43.8	25.0	31.3	0.0	0.0
	Developmental delay	3	0.0	0.0	66.7	33.3	0.0	3	66.7	0.0	33.3	0.0	0.0
	Emotional disturbance	5	20.0	0.0	20.0	20.0	40.0	5	20.0	0.0	40.0	20.0	20.0
	Hearing Impaired	2	0.0	0.0	100.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0
	Intellectual Disability	32	28.1	28.1	40.6	3.1	0.0	24	54.2	33.3	12.5	0.0	0.0
	Multiple disabilities	20	70.0	20.0	10.0	0.0	0.0	6	66.7	33.3	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	1	100.0	0.0	0.0	0.0	0.0	0					
	Other health impairment	42	4.8	19.0	42.9	23.8	9.5	39	23.1	23.1	51.3	2.6	0.0
	Specific learning disability	221	6.8	12.2	43.0	23.5	14.5	219	20.1	29.7	44.7	4.1	1.4
	Speech or language impairment	1	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	100.0	0.0
	Traumatic brain injury	3	0.0	33.3	66.7	0.0	0.0	3	66.7	33.3	0.0	0.0	0.0
	Visual impairment	2	0.0	0.0	50.0	50.0	0.0	2	0.0	0.0	100.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Table S4.13: Summative Performance Level by Domain - Grade 12 (cont.)

O. Ib arras arra	Subgroup Status			Speak	king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		2,437	8.3	14.1	35.7	19.5	22.5	2,441	16.1	21.4	45.5	9.9	7.1
Gender	Female	1,105	7.9	14.8	32.3	20.3	24.7	1,110	15.4	20.3	44.9	11.4	8.0
	Male	1,298	8.7	13.5	38.6	18.7	20.5	1,296	16.7	22.4	45.8	8.7	6.4
	Missing	34	8.8	11.8	32.4	20.6	26.5	35	14.3	20.0	54.3	5.7	5.7
	American Indian or Alaskan Native	10	10.0	20.0	50.0	10.0	10.0	10	10.0	60.0	20.0	10.0	0.0
	Asian	385	3.9	9.4	34.0	20.3	32.5	389	10.0	21.1	52.2	9.5	7.2
	Black or African American	622	5.6	14.5	37.6	21.1	21.2	621	13.0	22.4	47.8	9.8	6.9
<b>-</b>	Hispanic or Latino	881	12.0	15.2	34.5	17.8	20.4	884	20.8	21.2	41.0	10.1	7.0
Ethnicity	Native Hawaiian or Other Pacific Islander	17	11.8	5.9	58.8	23.5	0.0	17	11.8	23.5	64.7	0.0	0.0
	Two or More Races	229	12.7	18.3	38.4	16.6	14.0	227	20.3	22.5	41.4	10.6	5.3
	White	290	5.2	13.1	33.1	22.4	26.2	290	13.4	18.3	48.6	10.0	9.7
	Other/Unknown	3	0.0	0.0	33.3	0.0	66.7	3	0.0	0.0	33.3	33.3	33.3
	Gifted	1	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	100.0	0.0	0.0
Other	IEP	334	13.5	15.9	42.8	15.0	12.9	320	18.8	25.3	45.3	9.4	1.3
	Migrant	13	7.7	0.0	46.2	30.8	15.4	13	15.4	15.4	46.2	23.1	0.0

Subanana	Status	Status			king					Writ	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Autism	15	53.3	0.0	40.0	0.0	6.7	15	46.7	20.0	26.7	6.7	0.0
	Developmental delay	4	25.0	25.0	25.0	25.0	0.0	3	0.0	66.7	33.3	0.0	0.0
	Emotional disturbance	5	0.0	20.0	40.0	20.0	20.0	5	20.0	20.0	20.0	20.0	20.0
	Hearing Impaired	3	0.0	66.7	33.3	0.0	0.0	2	50.0	0.0	50.0	0.0	0.0
	Intellectual Disability	30	30.0	30.0	36.7	3.3	0.0	26	42.3	38.5	19.2	0.0	0.0
	Multiple disabilities	7	28.6	71.4	0.0	0.0	0.0	7	85.7	14.3	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	0						0					
	Other health impairment	42	14.3	19.0	47.6	11.9	7.1	39	10.3	28.2	53.8	7.7	0.0
	Specific learning disability	221	8.1	13.1	44.8	17.6	16.3	216	14.8	23.6	48.6	11.6	1.4
	Speech or language impairment	1	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	100.0	0.0	0.0
	Traumatic brain injury	3	33.3	0.0	66.7	0.0	0.0	3	0.0	100.0	0.0	0.0	0.0
	Visual impairment	2	0.0	0.0	0.0	50.0	50.0	2	0.0	0.0	100.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Section 5: Summative Assessment - Percentage of Students by Overall Proficiency Level

Table S5.1: Summative Overall Proficiency Categories - Kindergarten

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		10,239	20.9	74.3	4.8
	Female	4,816	16.8	77.9	5.3
Gender	Male	5,269	24.5	71.2	4.3
	Missing	154	24.7	67.5	7.8
	American Indian or Alaskan Native	35	17.1	77.1	5.7
	Asian	2,247	14.2	78.0	7.8
	Black or African American	1,859	15.5	80.6	3.9
Ethnicity	Hispanic or Latino	3,552	29.0	69.4	1.7
Etimicity	Native Hawaiian or Other Pacific Islander	53	13.2	81.1	5.7
	Two or More Races	931	30.9	66.0	3.1
	White	1,516	12.7	77.6	9.7
	Other/Unknown	46	17.4	73.9	8.7
	Gifted	8	0.0	62.5	37.5
Other	IEP	598	46.5	52.0	1.5
	Migrant	13	53.8	38.5	7.7
	Autism	199	67.8	31.7	0.5
Primary Disability	Developmental delay	7	42.9	57.1	0.0
Filliary Disability	Emotional disturbance	4	50.0	50.0	0.0
	Hearing Impaired	7	42.9	57.1	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	19	68.4	31.6	0.0
	Multiple disabilities	32	100.0	0.0	0.0
	Orthopedic impairment	5	20.0	80.0	0.0
	Other health impairment	55	32.7	65.5	1.8
	Specific learning disability	31	12.9	87.1	0.0
	Speech or language impairment	233	26.2	71.7	2.1
	Traumatic brain injury	3	66.7	0.0	33.3
	Visual impairment	1	100.0	0.0	0.0

Table S5.2: Summative Overall Proficiency Categories - Grade 1

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		9,387	13.2	71.5	15.3
	Female	4,491	11.1	72.6	16.4
Gender	Male	4,770	15.1	70.4	14.4
	Missing	126	15.1	72.2	12.7
	American Indian or Alaskan Native	36	8.3	80.6	11.1
	Asian	2,155	8.5	64.2	27.3
	Black or African American	1,808	12.1	73.7	14.3
Ethnicity	Hispanic or Latino	3,081	17.4	75.0	7.6
Etimicity	Native Hawaiian or Other Pacific Islander	47	12.8	70.2	17.0
	Two or More Races	878	19.7	71.6	8.7
	White	1,352	8.4	71.9	19.7
	Other/Unknown	30	10.0	70.0	20.0
	Gifted	6	0.0	16.7	83.3
Other	IEP	631	39.5	55.6	4.9
	Migrant	23	8.7	73.9	17.4
	Autism	185	59.5	35.1	5.4
D	Developmental delay	8	87.5	12.5	0.0
Primary Disability	Emotional disturbance	3	0.0	100.0	0.0
	Hearing Impaired	10	40.0	60.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	24	83.3	16.7	0.0
	Multiple disabilities	33	81.8	18.2	0.0
	Orthopedic impairment	8	50.0	50.0	0.0
	Other health impairment	86	24.4	66.3	9.3
	Specific learning disability	60	30.0	66.7	3.3
	Speech or language impairment	212	17.5	77.4	5.2
	Traumatic brain injury	3	66.7	33.3	0.0
	Visual impairment	1	0.0	100.0	0.0

Table S5.3: Summative Overall Proficiency Categories - Grade 2

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		8,537	10.9	65.3	23.8
	Female	4,054	9.4	64.8	25.8
Gender	Male	4,377	12.4	65.8	21.8
	Missing	106	9.4	61.3	29.2
	American Indian or Alaskan Native	17	11.8	76.5	11.8
	Asian	1,800	7.8	57.1	35.1
	Black or African American	1,654	8.8	68.7	22.6
Ethnicity	Hispanic or Latino	2,958	13.2	71.2	15.7
Etimicity	Native Hawaiian or Other Pacific Islander	39	2.6	59.0	38.5
	Two or More Races	878	17.2	63.3	19.5
	White	1,171	8.8	59.2	32.0
	Other/Unknown	20	0.0	85.0	15.0
	Gifted	36	0.0	27.8	72.2
Other	IEP	699	31.2	61.1	7.7
	Migrant	21	28.6	38.1	33.3
	Autism	162	57.4	37.7	4.9
Primary Disability	Developmental delay	10	60.0	40.0	0.0
Filliary Disability	Emotional disturbance	9	11.1	77.8	11.1
	Hearing Impaired	6	66.7	33.3	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	37	56.8	43.2	0.0
	Multiple disabilities	29	89.7	10.3	0.0
	Orthopedic impairment	6	33.3	50.0	16.7
	Other health impairment	88	20.5	69.3	10.2
	Specific learning disability	132	18.2	78.0	3.8
	Speech or language impairment	213	9.9	76.1	14.1
	Traumatic brain injury	1	0.0	100.0	0.0
	Visual impairment	4	0.0	75.0	25.0

Table S5.4: Summative Overall Proficiency Categories - Grade 3

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		6,584	10.7	72.9	16.4
	Female	3,016	10.0	71.3	18.7
Gender	Male	3,531	11.2	74.4	14.4
	Missing	37	16.2	70.3	13.5
	American Indian or Alaskan Native	24	16.7	50.0	33.3
	Asian	1,148	8.3	69.6	22.1
	Black or African American	1,254	7.7	76.3	16.0
Ethnicity	Hispanic or Latino	2,524	12.2	75.6	12.2
	Native Hawaiian or Other Pacific Islander	30	6.7	76.7	16.7
	Two or More Races	754	14.5	72.3	13.3
	White	837	10.8	65.5	23.8
	Other/Unknown	13	7.7	84.6	7.7
	Gifted	33	0.0	54.5	45.5
Other	IEP	834	22.2	72.5	5.3
	Migrant	25	16.0	76.0	8.0
	Autism	137	47.4	44.5	8.0
Primary Disability	Developmental delay	2	0.0	100.0	0.0
	Emotional disturbance	9	11.1	88.9	0.0
	Hearing Impaired	12	25.0	66.7	8.3

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	52	55.8	44.2	0.0
	Multiple disabilities	42	81.0	19.0	0.0
	Orthopedic impairment	8	25.0	50.0	25.0
	Other health impairment	115	13.0	81.7	5.2
	Specific learning disability	315	9.8	86.3	3.8
	Speech or language impairment	143	5.6	87.4	7.0
	Traumatic brain injury	2	0.0	100.0	0.0

Table S5.5: Summative Overall Proficiency Categories - Grade 4

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		5,322	13.4	69.0	17.6
	Female	2,384	12.9	68.1	19.0
Gender	Male	2,899	13.7	69.8	16.5
	Missing	39	15.4	66.7	17.9
	American Indian or Alaskan Native	13	15.4	61.5	23.1
	Asian	843	10.1	64.7	25.3
	Black or African American	1,059	9.8	74.0	16.1
Ethnicity	Hispanic or Latino	2,063	15.4	70.6	14.1
Etimicity	Native Hawaiian or Other Pacific Islander	21	19.0	61.9	19.0
	Two or More Races	619	19.2	65.6	15.2
	White	694	11.1	66.0	22.9
	Other/Unknown	10	30.0	30.0	40.0
	Gifted	34	2.9	55.9	41.2
Other	IEP	879	20.7	73.6	5.7
	Migrant	16	6.3	68.8	25.0
	Autism	103	42.7	54.4	2.9
D	Developmental delay	5	100.0	0.0	0.0
Primary Disability	Emotional disturbance	9	22.2	55.6	22.2
	Hearing Impaired	12	25.0	75.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	50	56.0	44.0	0.0
	Multiple disabilities	37	86.5	13.5	0.0
	Orthopedic impairment	4	25.0	75.0	0.0
	Other health impairment	105	16.2	80.0	3.8
	Specific learning disability	468	9.8	84.2	6.0
	Speech or language impairment	65	3.1	81.5	15.4
	Traumatic brain injury	2	50.0	50.0	0.0
	Visual impairment	3	0.0	100.0	0.0

Table S5.6: Summative Overall Proficiency Categories - Grade 5

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		4,654	17.2	70.5	12.3
Gender	Female	2,025	16.0	71.0	13.0
	Male	2,590	18.3	70.2	11.5
	Missing	39	12.8	64.1	23.1
Ethnicity	American Indian or Alaskan Native	9	33.3	44.4	22.2
	Asian	681	14.2	68.0	17.8
	Black or African American	989	14.2	74.2	11.6
	Hispanic or Latino	1,834	18.6	70.4	10.9
	Native Hawaiian or Other Pacific Islander	27	11.1	77.8	11.1
	Two or More Races	575	23.5	67.7	8.9
	White	531	15.1	70.2	14.7
	Other/Unknown	8	12.5	75.0	12.5
Other	Gifted	13	0.0	76.9	23.1
	IEP	951	25.7	69.5	4.8
	Migrant	20	5.0	85.0	10.0
Primary Disability	Autism	86	54.7	39.5	5.8
	Developmental delay	9	66.7	33.3	0.0
	Emotional disturbance	16	25.0	68.8	6.3
	Hearing Impaired	10	50.0	40.0	10.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	56	69.6	30.4	0.0
	Multiple disabilities	36	86.1	11.1	2.8
	Orthopedic impairment	3	33.3	66.7	0.0
	Other health impairment	125	23.2	73.6	3.2
	Specific learning disability	563	13.3	81.7	5.0
	Speech or language impairment	33	9.1	72.7	18.2
	Traumatic brain injury	5	60.0	40.0	0.0
	Visual impairment	2	0.0	100.0	0.0

Table S5.7: Summative Overall Proficiency Categories - Grade 6

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		3,722	15.2	72.3	12.5
	Female	1,626	14.8	72.0	13.2
Gender	Male	2,064	15.7	72.4	11.9
	Missing	32	6.3	81.3	12.5
	American Indian or Alaskan Native	10	40.0	50.0	10.0
	Asian	486	12.8	63.2	24.1
	Black or African American	788	10.8	75.8	13.5
Ethnicity	Hispanic or Latino	1,495	17.1	74.8	8.0
Etimicity	Native Hawaiian or Other Pacific Islander	12	25.0	66.7	8.3
	Two or More Races	477	20.5	71.5	8.0
	White	451	13.1	69.0	18.0
	Other/Unknown	3	0.0	66.7	33.3
	Gifted	10	0.0	60.0	40.0
Other	IEP	822	17.2	78.3	4.5
	Migrant	14	21.4	78.6	0.0
	Autism	80	55.0	41.3	3.8
Drimony Dioshility	Developmental delay	6	33.3	66.7	0.0
Primary Disability	Emotional disturbance	11	18.2	81.8	0.0
	Hearing Impaired	10	20.0	70.0	10.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	54	50.0	50.0	0.0
	Multiple disabilities	21	81.0	19.0	0.0
	Orthopedic impairment	6	0.0	100.0	0.0
	Other health impairment	102	7.8	88.2	3.9
	Specific learning disability	496	7.1	88.9	4.0
	Speech or language impairment	32	6.3	68.8	25.0
	Traumatic brain injury	3	66.7	33.3	0.0
	Visual impairment	3	0.0	33.3	66.7

Table S5.8: Summative Overall Proficiency Categories - Grade 7

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		3,612	22.7	70.7	6.7
	Female	1,620	21.9	70.2	8.0
Gender	Male	1,958	23.2	71.4	5.4
	Missing	34	32.4	50.0	17.6
	American Indian or Alaskan Native	11	36.4	63.6	0.0
	Asian	492	16.9	73.8	9.3
	Black or African American	741	20.8	70.3	8.9
Ethnicity	Hispanic or Latino	1,488	26.3	69.2	4.5
Etimicity	Native Hawaiian or Other Pacific Islander	27	14.8	85.2	0.0
	Two or More Races	449	24.1	70.4	5.6
	White	399	18.3	72.4	9.3
	Other/Unknown	5	20.0	80.0	0.0
	Gifted	8	0.0	75.0	25.0
Other	IEP	803	25.8	71.7	2.5
	Migrant	13	23.1	61.5	15.4
	Autism	60	60.0	38.3	1.7
Brimany Dioability	Developmental delay	11	81.8	18.2	0.0
Primary Disability	Emotional disturbance	12	16.7	83.3	0.0
	Hearing Impaired	7	71.4	28.6	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	63	60.3	39.7	0.0
	Multiple disabilities	32	93.8	6.3	0.0
	Orthopedic impairment	6	33.3	50.0	16.7
	Other health impairment	107	22.4	74.8	2.8
	Specific learning disability	484	12.0	85.1	2.9
	Speech or language impairment	20	0.0	95.0	5.0
	Traumatic brain injury	7	42.9	57.1	0.0
	Visual impairment	2	50.0	50.0	0.0

Table S5.9: Summative Overall Proficiency Categories - Grade 8

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		3,490	23.3	69.8	6.9
	Female	1,537	21.9	71.1	7.0
Gender	Male	1,927	24.2	68.9	6.9
	Missing	26	38.5	57.7	3.8
	American Indian or Alaskan Native	9	22.2	55.6	22.2
	Asian	468	17.5	70.1	12.4
	Black or African American	711	14.1	77.2	8.7
Ethnicity	Hispanic or Latino	1,421	31.5	64.7	3.8
Etimicity	Native Hawaiian or Other Pacific Islander	24	8.3	87.5	4.2
	Two or More Races	435	25.1	69.9	5.1
	White	415	16.9	73.3	9.9
	Other/Unknown	7	0.0	85.7	14.3
	Gifted	5	0.0	80.0	20.0
Other	IEP	732	24.0	73.5	2.5
	Migrant	15	46.7	46.7	6.7
	Autism	51	62.7	33.3	3.9
Primary Disability	Developmental delay	8	75.0	12.5	12.5
Filliary Disability	Emotional disturbance	21	19.0	81.0	0.0
	Hearing Impaired	12	25.0	66.7	8.3

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	62	53.2	46.8	0.0
	Multiple disabilities	26	92.3	7.7	0.0
	Other health impairment	95	25.3	73.7	1.1
	Specific learning disability	446	11.9	85.4	2.7
	Speech or language impairment	8	12.5	75.0	12.5
	Traumatic brain injury	5	40.0	60.0	0.0
	Visual impairment	3	0.0	100.0	0.0

Table S5.10: Summative Overall Proficiency Categories - Grade 9

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		4,782	35.0	62.1	2.9
	Female	2,011	32.1	64.1	3.8
Gender	Male	2,728	37.0	60.7	2.2
	Missing	43	39.5	58.1	2.3
	American Indian or Alaskan Native	13	0.0	84.6	15.4
	Asian	531	19.2	75.0	5.8
	Black or African American	1,079	25.0	71.2	3.8
Ethnicity	Hispanic or Latino	2,092	42.1	56.6	1.3
Etimicity	Native Hawaiian or Other Pacific Islander	26	23.1	76.9	0.0
	Two or More Races	597	52.1	46.1	1.8
	White	440	23.2	70.7	6.1
	Other/Unknown	4	25.0	75.0	0.0
	Gifted	7	0.0	100.0	0.0
Other	IEP	726	27.7	71.9	0.4
	Migrant	13	38.5	53.8	7.7
	Autism	30	60.0	40.0	0.0
Primary Disability	Developmental delay	19	52.6	47.4	0.0
Filliary Disability	Emotional disturbance	12	25.0	75.0	0.0
	Hearing Impaired	6	66.7	33.3	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	51	68.6	31.4	0.0
	Multiple disabilities	24	87.5	12.5	0.0
	Orthopedic impairment	5	0.0	100.0	0.0
	Other health impairment	97	24.7	74.2	1.0
	Specific learning disability	459	16.8	82.8	0.4
	Speech or language impairment	10	10.0	90.0	0.0
	Traumatic brain injury	11	27.3	72.7	0.0
	Visual impairment	3	66.7	33.3	0.0

Table S5.11: Summative Overall Proficiency Categories - Grade 10

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		3,551	25.0	68.9	6.1
	Female	1,549	21.9	71.7	6.4
Gender	Male	1,982	27.4	66.6	5.9
	Missing	20	30.0	65.0	5.0
	American Indian or Alaskan Native	12	25.0	58.3	16.7
	Asian	500	11.4	78.4	10.2
	Black or African American	802	17.8	75.4	6.7
Ethnicity	Hispanic or Latino	1,453	32.9	63.0	4.1
Lumony	Native Hawaiian or Other Pacific Islander	22	27.3	72.7	0.0
	Two or More Races	377	36.9	58.1	5.0
	White	382	16.5	75.4	8.1
	Other/Unknown	3	0.0	100.0	0.0
	Gifted	9	0.0	88.9	11.1
Other	IEP	564	26.8	71.3	2.0
	Migrant	21	28.6	71.4	0.0
	Autism	35	45.7	54.3	0.0
Primary Disability	Developmental delay	8	87.5	12.5	0.0
Filliary Disability	Emotional disturbance	10	40.0	60.0	0.0
	Hearing Impaired	11	27.3	54.5	18.2

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	40	77.5	22.5	0.0
	Multiple disabilities	22	95.5	4.5	0.0
	Orthopedic impairment	4	25.0	75.0	0.0
	Other health impairment	79	22.8	74.7	2.5
	Specific learning disability	353	14.2	83.9	2.0
	Speech or language impairment	9	11.1	88.9	0.0
	Traumatic brain injury	4	75.0	25.0	0.0
	Visual impairment	2	0.0	100.0	0.0

Table S5.12: Summative Overall Proficiency Categories - Grade 11

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		3,108	22.2	69.2	8.5
	Female	1,364	19.8	70.6	9.6
Gender	Male	1,701	24.4	67.9	7.7
	Missing	43	14.0	79.1	7.0
	American Indian or Alaskan Native	5	0.0	100.0	0.0
	Asian	453	10.6	77.5	11.9
	Black or African American	800	19.0	73.3	7.8
Ethnicity	Hispanic or Latino	1,139	29.6	63.7	6.7
Ethnicity	Native Hawaiian or Other Pacific Islander	25	12.0	88.0	0.0
	Two or More Races	313	30.7	62.3	7.0
	White	364	15.1	71.4	13.5
	Other/Unknown	9	0.0	77.8	22.2
	Gifted	2	0.0	100.0	0.0
Other	IEP	460	27.4	69.3	3.3
	Migrant	10	10.0	70.0	20.0
	Autism	29	48.3	48.3	3.4
Primary Disability	Developmental delay	5	80.0	20.0	0.0
	Emotional disturbance	6	33.3	66.7	0.0
	Hearing Impaired	8	62.5	37.5	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	41	56.1	43.9	0.0
	Multiple disabilities	25	84.0	16.0	0.0
	Orthopedic impairment	1	0.0	0.0	100.0
	Other health impairment	58	20.7	74.1	5.2
	Specific learning disability	273	14.7	82.1	3.3
	Speech or language impairment	8	25.0	75.0	0.0
	Traumatic brain injury	6	50.0	50.0	0.0
	Visual impairment	3	33.3	66.7	0.0

Table S5.13: Summative Overall Proficiency Categories - Grade 12

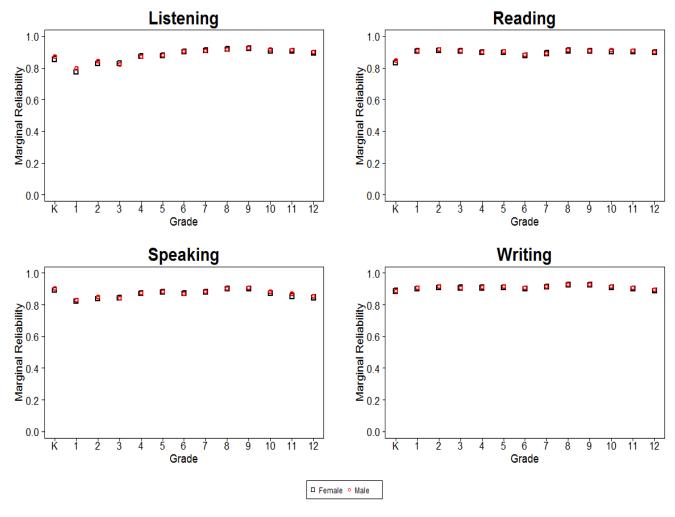
Subgroup	Status	N	Emerging	Progressing	Proficient
Total		2,514	17.1	73.3	9.6
	Female	1,137	17.2	71.8	11.0
Gender	Male	1,339	17.0	74.5	8.5
	Missing	38	15.8	76.3	7.9
	American Indian or Alaskan Native	10	10.0	90.0	0.0
	Asian	398	10.1	79.6	10.3
	Black or African American	639	14.1	76.8	9.1
Ethnicity	Hispanic or Latino	916	21.3	69.1	9.6
Etimicity	Native Hawaiian or Other Pacific Islander	17	11.8	88.2	0.0
	Two or More Races	234	24.8	66.2	9.0
	White	297	14.5	74.1	11.4
	Other/Unknown	3	0.0	100.0	0.0
	Gifted	1	0.0	100.0	0.0
Other	IEP	365	25.2	71.8	3.0
	Migrant	13	7.7	84.6	7.7
	Autism	26	65.4	34.6	0.0
D	Developmental delay	4	25.0	75.0	0.0
Primary Disability	Emotional disturbance	5	20.0	40.0	40.0
	Hearing Impaired	3	0.0	100.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
	Intellectual Disability	32	53.1	46.9	0.0
	Multiple disabilities	21	90.5	9.5	0.0
	Orthopedic impairment	1	100.0	0.0	0.0
	Other health impairment	42	21.4	76.2	2.4
	Specific learning disability	224	12.9	83.5	3.6
	Speech or language impairment	1	0.0	100.0	0.0
	Traumatic brain injury	3	33.3	66.7	0.0
	Visual impairment	2	0.0	100.0	0.0

## **Section 6: Summative Assessment - Marginal Reliability**

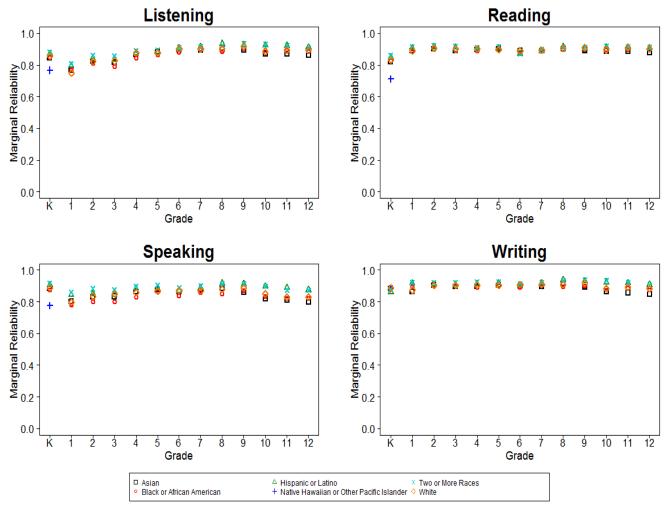
\* Domain tests with Exemption or Not Attempted are excluded.

Figure S6.1: Summative Marginal Reliability by Gender



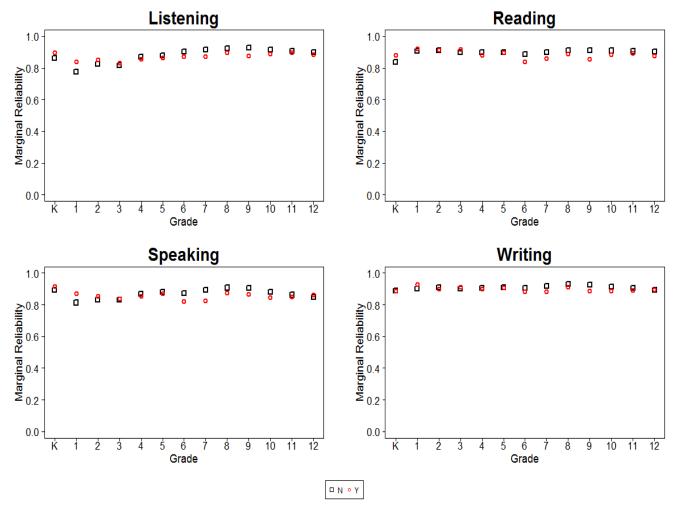
<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Figure S6.2: Summative Marginal Reliability by Ethnicity



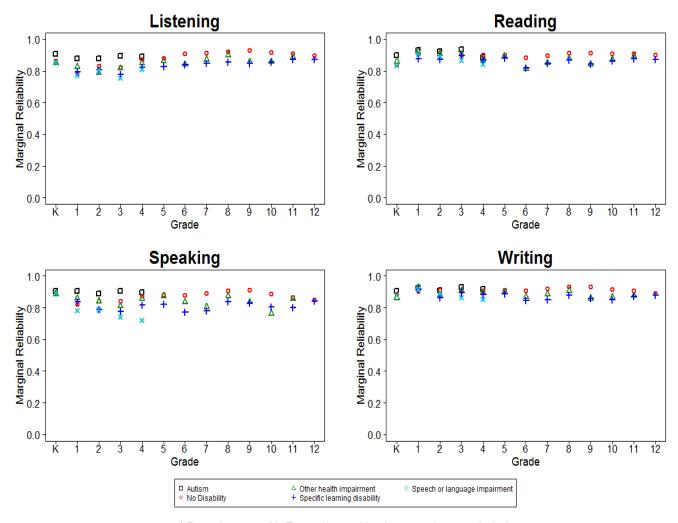
<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Figure S6.3: Summative Marginal Reliability by IEP



<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

Figure S6.4: Summative Marginal Reliability by Primary Disability



<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded.

## Section 7: Summative Assessment - Conditional Standard Error of Measurement (CSEM)

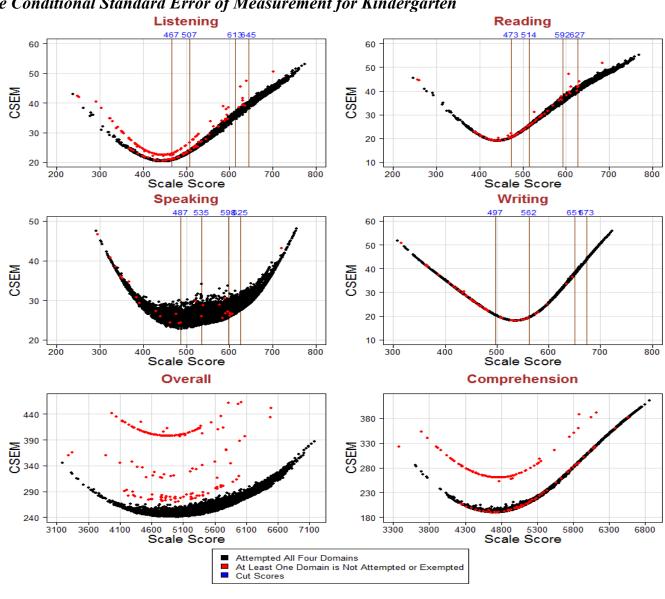


Figure S7.1: Summative Conditional Standard Error of Measurement for Kindergarten

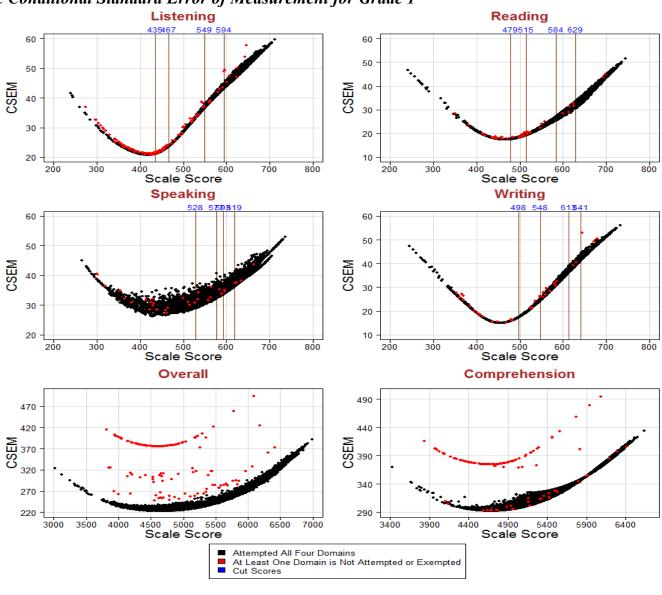


Figure S7.2: Summative Conditional Standard Error of Measurement for Grade 1

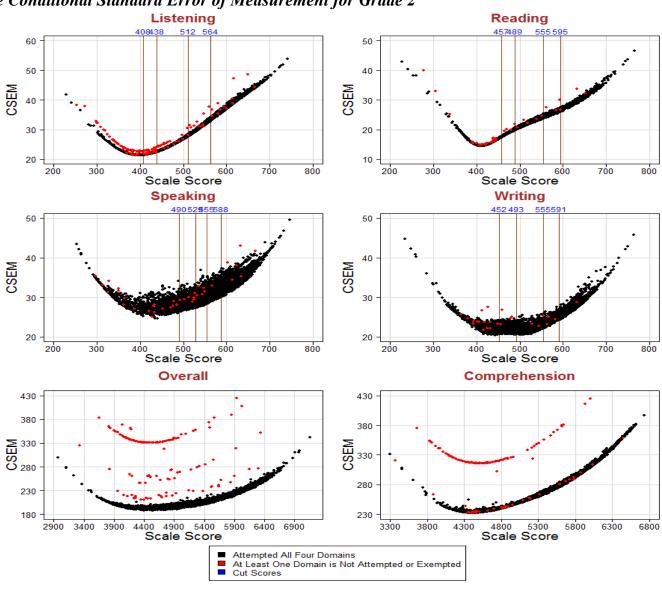


Figure S7.3: Summative Conditional Standard Error of Measurement for Grade 2

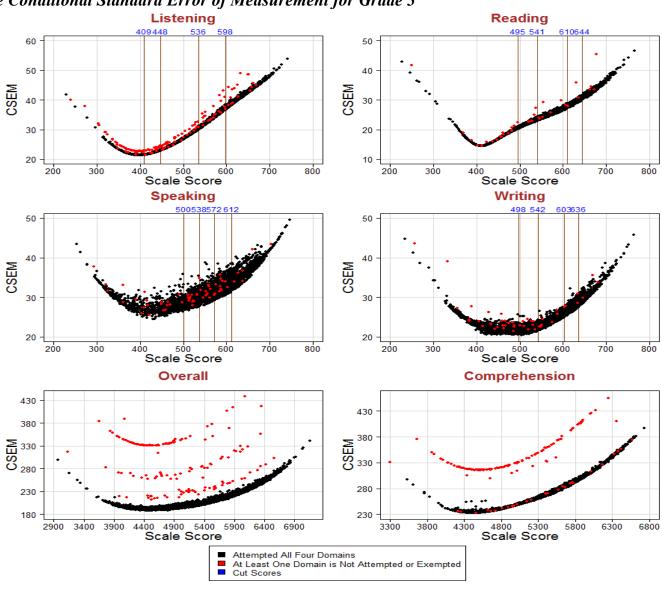


Figure S7.4: Summative Conditional Standard Error of Measurement for Grade 3

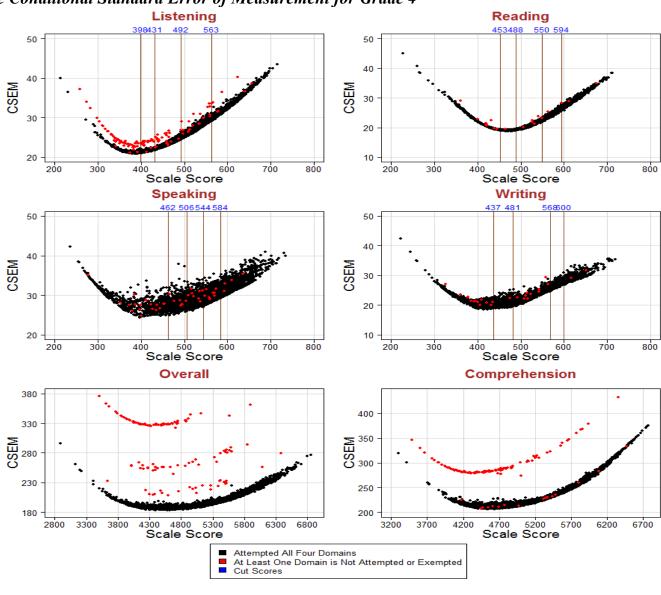


Figure S7.5: Summative Conditional Standard Error of Measurement for Grade 4

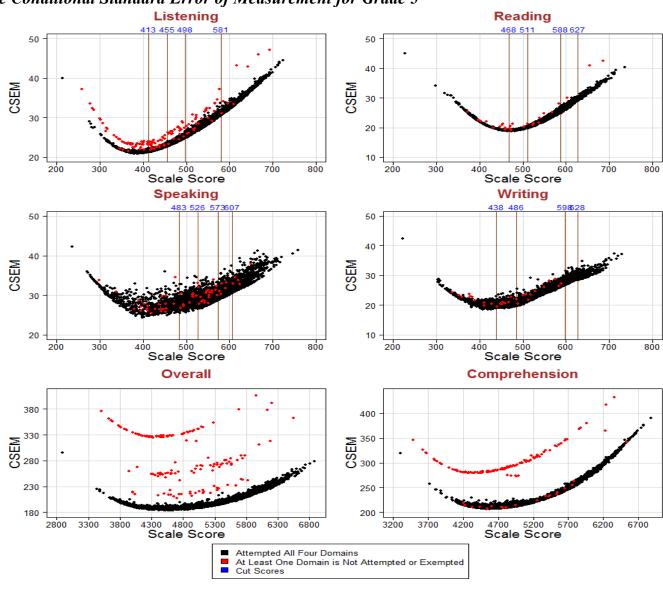


Figure S7.6: Summative Conditional Standard Error of Measurement for Grade 5

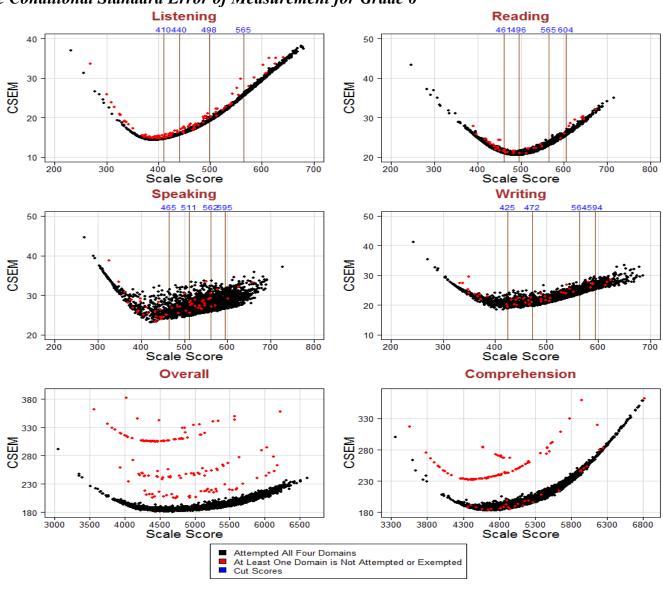


Figure S7.7: Summative Conditional Standard Error of Measurement for Grade 6

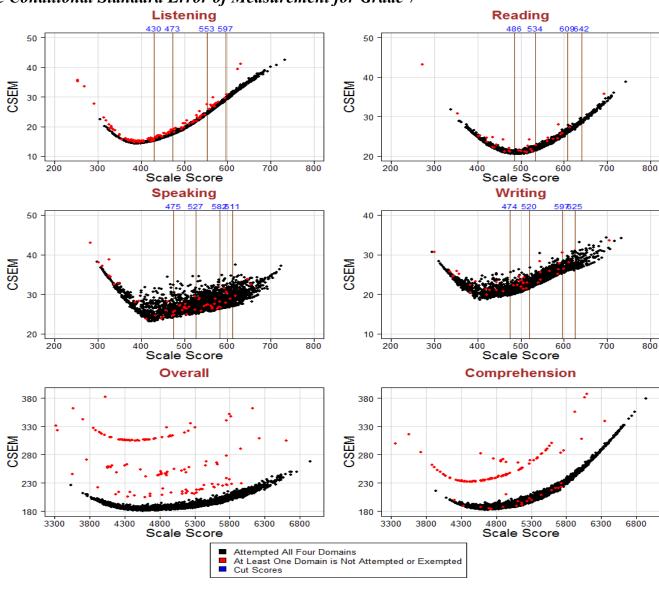


Figure S7.8: Summative Conditional Standard Error of Measurement for Grade 7

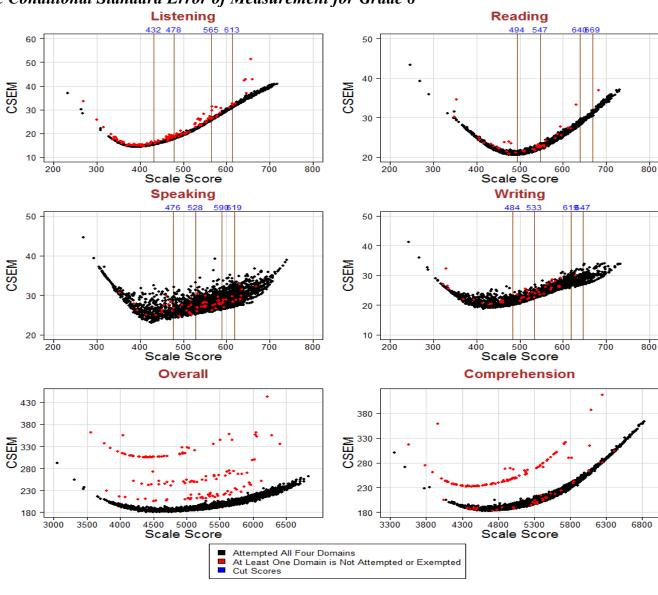


Figure S7.9: Summative Conditional Standard Error of Measurement for Grade 8

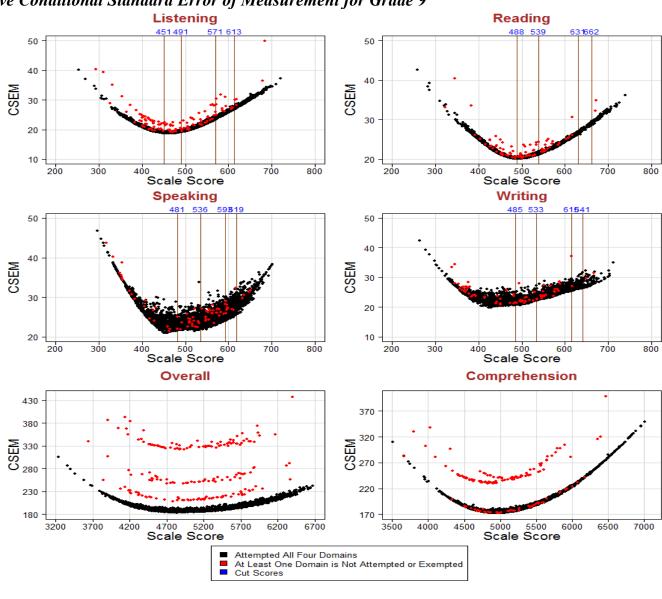


Figure S7.10: Summative Conditional Standard Error of Measurement for Grade 9

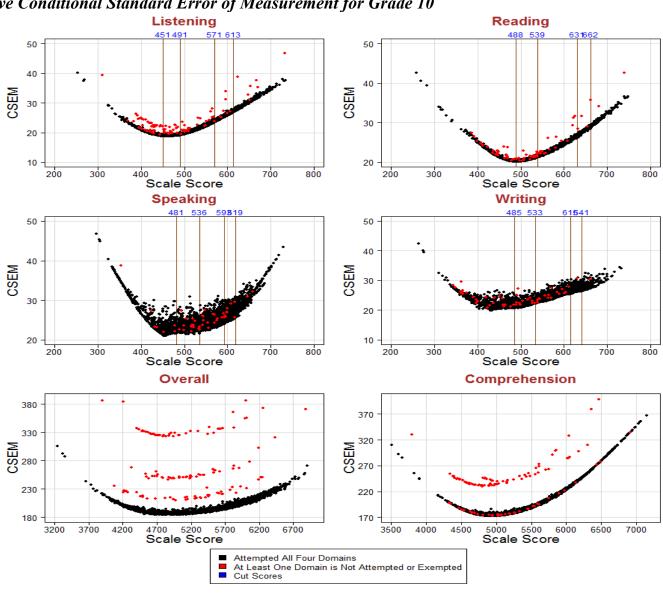


Figure S7.11: Summative Conditional Standard Error of Measurement for Grade 10

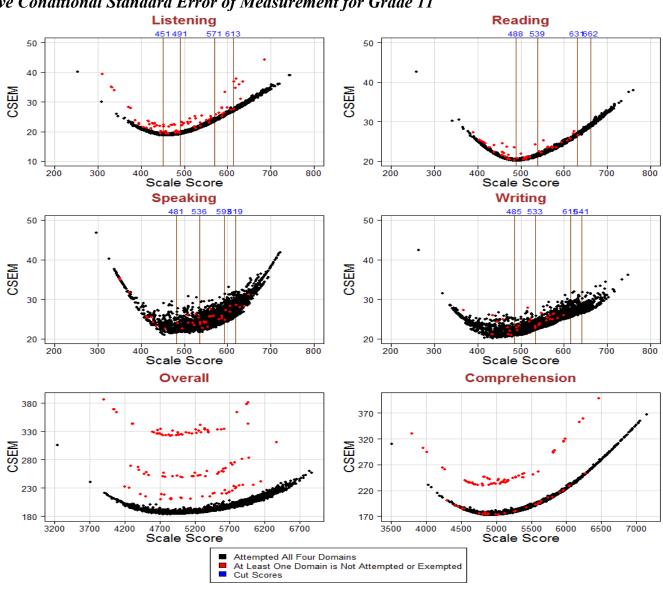


Figure S7.12: Summative Conditional Standard Error of Measurement for Grade 11

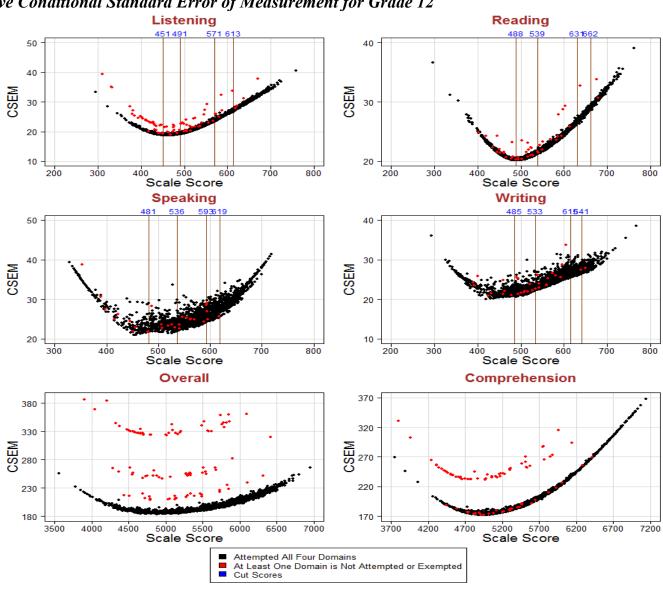


Figure S7.13: Summative Conditional Standard Error of Measurement for Grade 12

Section 8: Summative Assessment - Inter-Rater Analysis

Table S8.1: Summative Inter-Rater Result - Kindergarten

					V			N			Percent	
Domain	Item ID	Score Points	Number FR	Number SR	Percent SR	Weighte d Kappa	Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	4192	2	9,973	1,956	19.6	.781	1,788	1,913	43	91.4	97.8	2.2
	4194	2	9,933	1,951	19.6	.818	1,750	1,931	20	89.7	99.0	1.0
	4196	2	9,913	1,947	19.6	.825	1,785	1,911	36	91.7	98.2	1.8
	4198	2	9,840	1,914	19.5	.743	1,401	1,892	22	73.2	98.9	1.1
	4200	2	9,897	1,942	19.6	.706	1,653	1,871	71	85.1	96.3	3.7
Speaking	4202	2	9,770	1,886	19.3	.760	1,435	1,827	59	76.1	96.9	3.1
	6585	3	9,829	1,933	19.7	.794	1,290	1,905	28	66.7	98.6	1.4
	6590	3	9,861	1,948	19.8	.819	1,319	1,916	32	67.7	98.4	1.6
	6591	3	9,928	1,968	19.8	.837	1,339	1,948	20	68.0	99.0	1.0
	6592	3	9,912	1,963	19.8	.831	1,374	1,939	24	70.0	98.8	1.2
	6597	3	9,858	1,918	19.5	.815	1,455	1,905	13	75.9	99.3	0.7

<sup>\*</sup> FR: First rater; SR: Second rater.

Table S8.2: Summative Inter-Rater Result - Grade 1

					Percent SR	Weighte d Kappa	N			Percent		
Domain	Item ID	Score Points	Number FR	Number SR			Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	598	2	9,170	1,814	19.8	.826	1,645	1,795	19	90.7	99.0	1.0
	600	2	9,156	1,811	19.8	.705	1,521	1,807	4	84.0	99.8	0.2
	602	2	9,167	1,815	19.8	.840	1,720	1,809	6	94.8	99.7	0.3
	604	2	9,136	1,807	19.8	.861	1,650	1,797	10	91.3	99.4	0.6
Speaking	606	2	9,123	1,802	19.8	.680	1,460	1,767	35	81.0	98.1	1.9
	700	3	9,151	1,815	19.8	.880	1,504	1,796	19	82.9	99.0	1.0
	6567	3	9,157	1,821	19.9	.703	1,243	1,784	37	68.3	98.0	2.0
	6581	4	9,148	1,818	19.9	.766	1,180	1,760	58	64.9	96.8	3.2
	660	5	9,098	1,792	19.7	.854	1,022	1,733	59	57.0	96.7	3.3

<sup>\*</sup> FR: First rater; SR: Second rater.

Table S8.3: Summative Inter-Rater Result - Grade Band 2-3

				Number SR	Percent SR	Weighte d Kappa	N			Percent		
Domain	Item ID	Score Points	Number FR				Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	1348	2	14,770	2,931	19.8	.724	2,540	2,910	21	86.7	99.3	0.7
	1350	2	14,727	2,923	19.8	.773	2,481	2,898	25	84.9	99.1	0.9
	1352	2	14,754	2,932	19.9	.720	2,464	2,923	9	84.0	99.7	0.3
	1354	2	14,758	2,935	19.9	.684	2,495	2,929	6	85.0	99.8	0.2
Speaking	1356	2	14,726	2,924	19.9	.760	2,684	2,892	32	91.8	98.9	1.1
	1394	3	14,727	2,926	19.9	.784	1,959	2,883	43	67.0	98.5	1.5
	6554	3	14,730	2,935	19.9	.828	2,269	2,900	35	77.3	98.8	1.2
	1448	4	14,737	2,928	19.9	.861	2,145	2,783	145	73.3	95.0	5.0
	1440	5	14,703	2,916	19.8	.824	1,729	2,814	102	59.3	96.5	3.5
	1496	3	14,619	2,490	17.0	.880	1,939	2,457	33	77.9	98.7	1.3
Writing	1512	3	14,629	2,370	16.2	.886	1,912	2,335	35	80.7	98.5	1.5
	1464	4	14,495	2,829	19.5	.872	2,048	2,753	76	72.4	97.3	2.7
	1586	4	14,540	2,836	19.5	.867	2,002	2,819	17	70.6	99.4	0.6

<sup>\*</sup> FR: First rater; SR: Second rater.

Table S8.4: Summative Inter-Rater Result - Grade Band 4-5

								N			Percent	
Domain	Item ID	Score Points	Number FR	Number SR	Percent SR	Weighte d Kappa	Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	2116	3	9,694	1,921	19.8	.776	1,409	1,896	25	73.3	98.7	1.3
	2184	3	9,689	1,923	19.8	.930	1,783	1,913	10	92.7	99.5	0.5
	2186	3	9,670	1,917	19.8	.807	1,406	1,877	40	73.3	97.9	2.1
Speaking -	2188	3	9,672	1,918	19.8	.766	1,367	1,905	13	71.3	99.3	0.7
эреакту	6563	3	9,749	1,942	19.9	.688	1,261	1,920	22	64.9	98.9	1.1
	2098	5	9,659	1,914	19.8	.857	1,355	1,811	103	70.8	94.6	5.4
	2100	5	9,678	1,921	19.8	.779	1,127	1,837	84	58.7	95.6	4.4
	2206	5	9,664	1,912	19.8	.796	1,082	1,834	78	56.6	95.9	4.1
	2350	3	9,594	1,833	19.1	.856	1,389	1,800	33	75.8	98.2	1.8
	2352	3	9,578	1,807	18.9	.859	1,361	1,780	27	75.3	98.5	1.5
Writing	2354	3	9,587	1,828	19.1	.856	1,365	1,800	28	74.7	98.5	1.5
	2344	4	9,598	1,899	19.8	.788	1,121	1,825	74	59.0	96.1	3.9
	2306	5	9,577	1,870	19.5	.844	1,205	1,814	56	64.4	97.0	3.0

<sup>\*</sup> FR: First rater; SR: Second rater.

Table S8.5: Summative Inter-Rater Result - Grade Band 6-8

				Number SR	Percent SR	Weighte d Kappa	N			Percent			
Domain	Item ID	Score Points	Number FR				Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement	
	2672	3	10,431	2,052	19.7	.778	1,502	2,037	15	73.2	99.3	0.7	
	2676	3	10,392	2,050	19.7	.817	1,634	1,988	62	79.7	97.0	3.0	
	2678	3	10,354	2,038	19.7	.803	1,605	2,019	19	78.8	99.1	0.9	
Speaking	2680	3	10,364	2,044	19.7	.827	1,655	2,007	37	81.0	98.2	1.8	
	2654	5	10,310	2,009	19.5	.876	1,327	1,946	63	66.1	96.9	3.1	
	2656	5	10,311	2,022	19.6	.872	1,485	1,987	35	73.4	98.3	1.7	
	2706	5	10,384	2,042	19.7	.877	1,319	1,988	54	64.6	97.4	2.6	
	2778	3	10,365	2,026	19.5	.741	1,267	2,000	26	62.5	98.7	1.3	
	2806	3	10,380	1,935	18.6	.893	1,576	1,929	6	81.4	99.7	0.3	
Writing	2808	3	10,360	1,927	18.6	.870	1,533	1,914	13	79.6	99.3	0.7	
Writing -	2810	3	10,370	1,949	18.8	.871	1,538	1,938	11	78.9	99.4	0.6	
	2752	5	10,359	2,019	19.5	.826	1,202	1,970	49	59.5	97.6	2.4	
	2796	5	10,387	2,023	19.5	.861	1,413	1,993	30	69.8	98.5	1.5	

<sup>\*</sup> FR: First rater; SR: Second rater.

Table S8.6: Summative Inter-Rater Result - Grade Band 9-12

				Number SR	Percent SR	Weighte d Kappa	N			Percent		
Domain	Item ID	Score Points	Number FR				Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	3374	3	13,476	2,633	19.5	.809	1,922	2,614	19	73.0	99.3	0.7
	3382	3	13,423	2,638	19.7	.766	1,834	2,580	58	69.5	97.8	2.2
	3384	3	13,381	2,623	19.6	.824	1,992	2,567	56	75.9	97.9	2.1
Speaking	3386	3	13,367	2,622	19.6	.808	1,861	2,607	15	71.0	99.4	0.6
	3352	5	13,416	2,638	19.7	.878	1,930	2,531	107	73.2	95.9	4.1
	3354	5	13,342	2,607	19.5	.900	1,801	2,524	83	69.1	96.8	3.2
	3406	5	13,387	2,614	19.5	.836	1,449	2,479	135	55.4	94.8	5.2
	3490	3	13,310	2,569	19.3	.782	1,682	2,529	40	65.5	98.4	1.6
	3516	3	13,360	2,457	18.4	.869	1,960	2,428	29	79.8	98.8	1.2
Writing	3518	3	13,332	2,459	18.4	.864	1,911	2,428	31	77.7	98.7	1.3
Writing	3520	3	13,357	2,478	18.6	.863	1,936	2,456	22	78.1	99.1	0.9
	3456	5	13,288	2,550	19.2	.840	1,590	2,497	53	62.4	97.9	2.1
	3494	5	13,287	2,548	19.2	.887	1,664	2,519	29	65.3	98.9	1.1

<sup>\*</sup> FR: First rater; SR: Second rater.

**Section 9: Summative Assessment - Dimensionality** 

Figure S9.1: Summative Validity - Dimensionality for Kindergarten

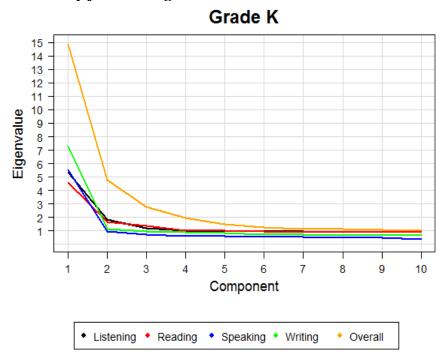


Figure S9.2: Summative Validity - Dimensionality for Grade 1

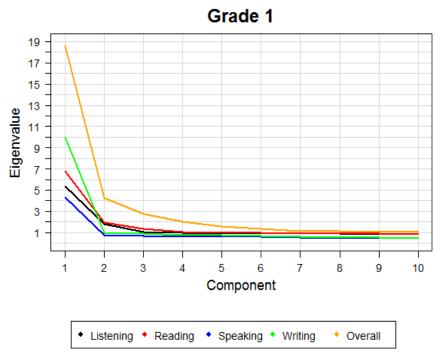


Figure S9.3: Summative Validity - Dimensionality for Grade Band 2-3

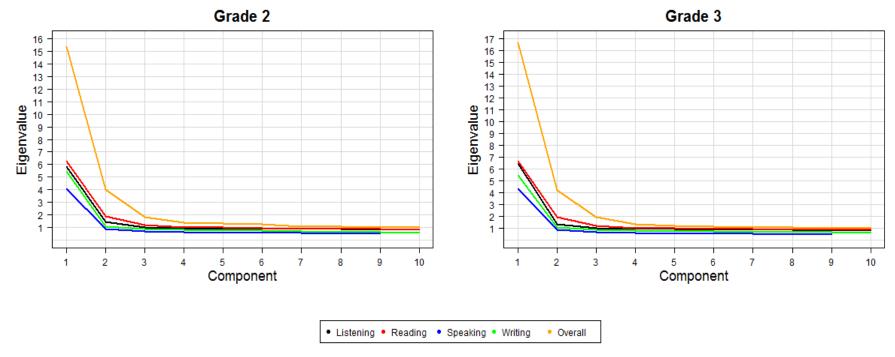


Figure S9.4: Summative Validity - Dimensionality for Grade Band 4-5

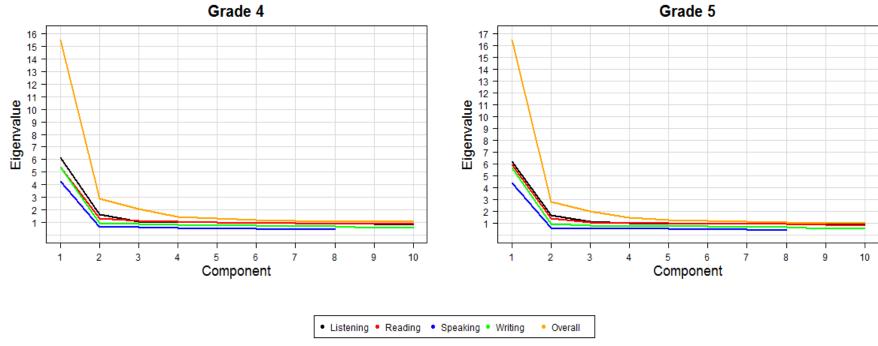


Figure S9.5: Summative Validity - Dimensionality for Grade Band 6-8

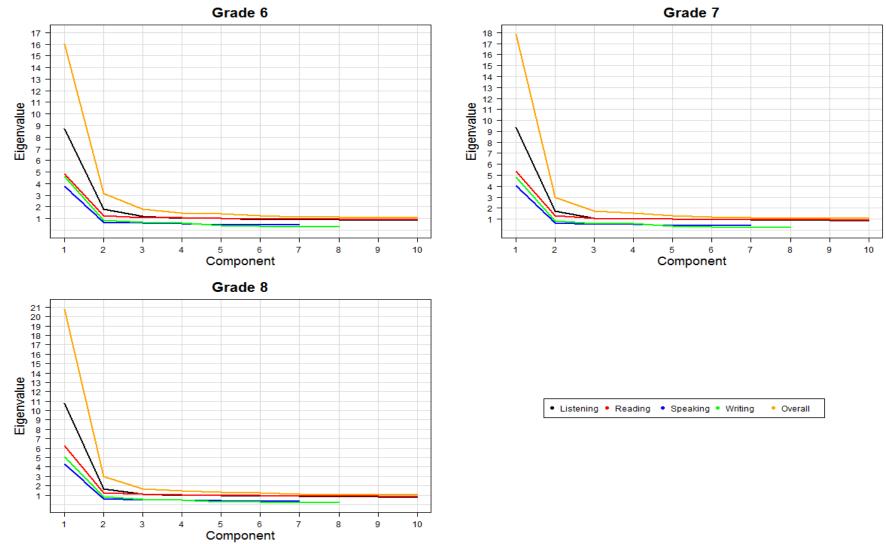
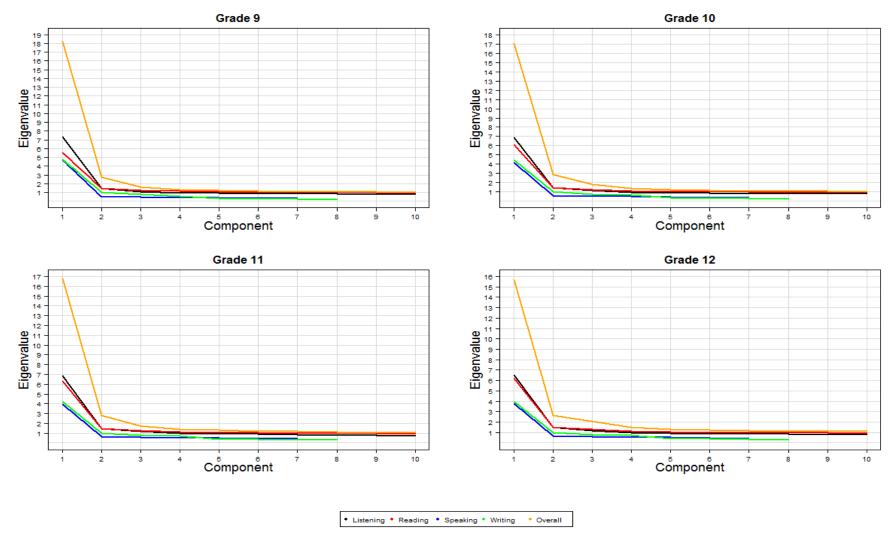
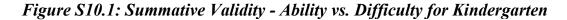
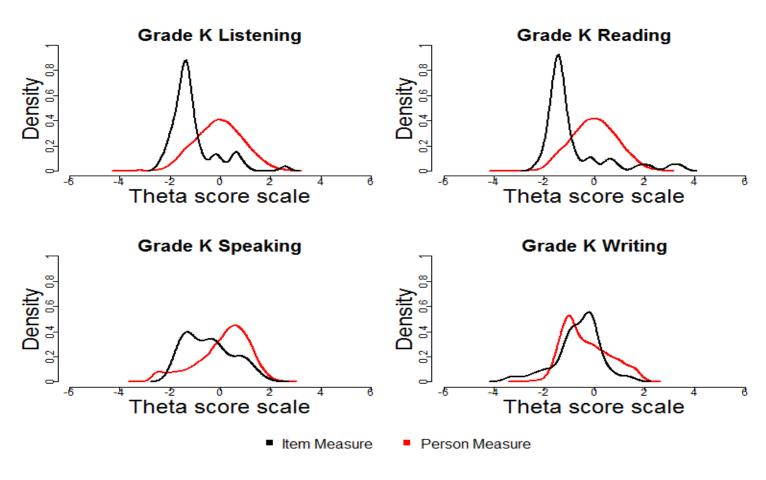


Figure S9.6: Summative Validity - Dimensionality for Grade Band 9-12



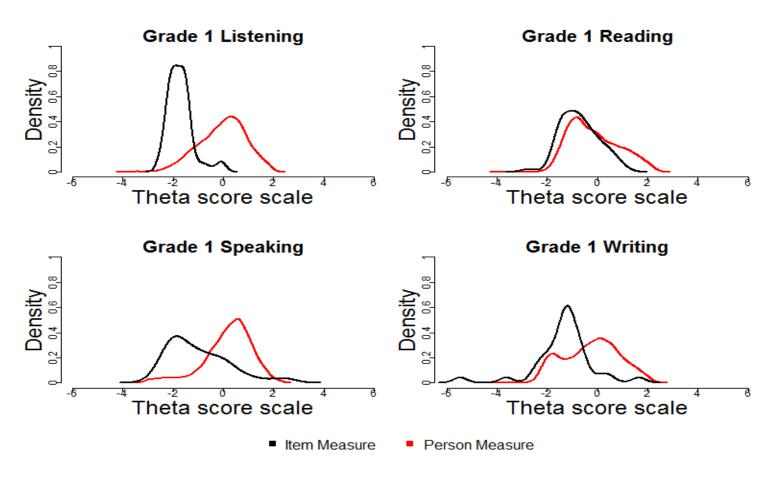
Section 10: Summative Assessment - Ability vs. Difficulty





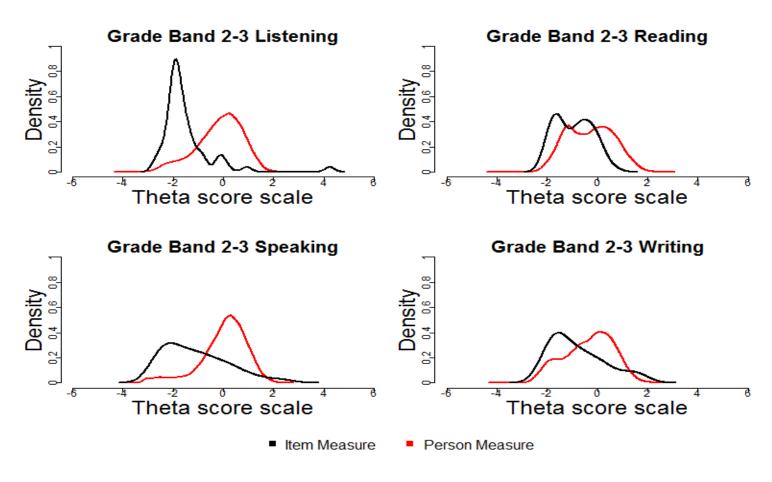
<sup>\*</sup> The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75, are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S10.2: Summative Validity - Ability vs. Difficulty for Grade 1



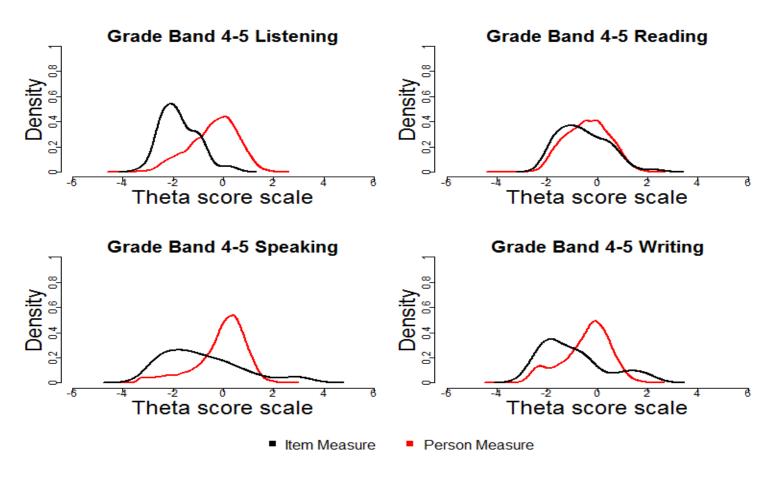
<sup>\*</sup> The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75, are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S10.3: Summative Validity - Ability vs. Difficulty for Grade Band 2-3



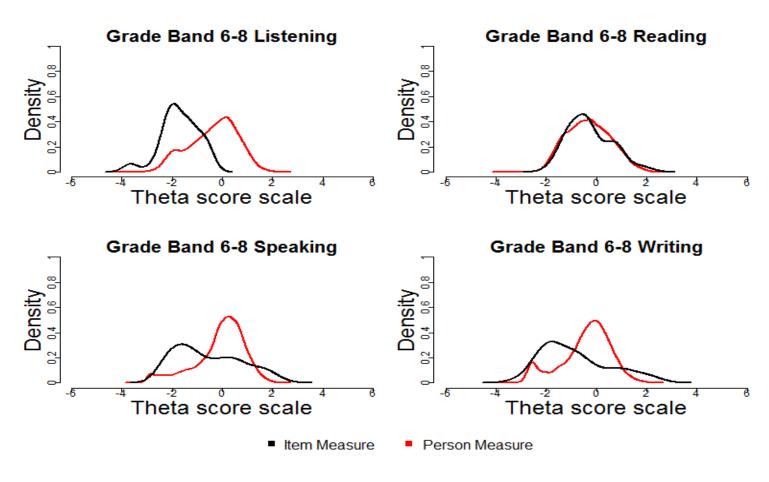
<sup>\*</sup> The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75, are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S10.4: Summative Validity - Ability vs. Difficulty for Grade Band 4-5



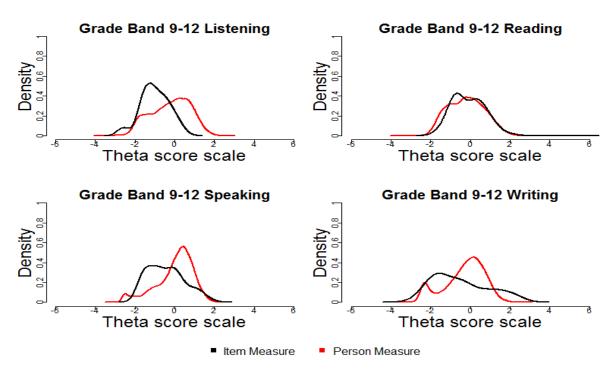
<sup>\*</sup> The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75, are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S10.5: Summative Validity - Ability vs. Difficulty for Grade Band 6-8



<sup>\*</sup> The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75, are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.





<sup>\*</sup> The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75, are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one

# **TECHNICAL REPORT**

# PART II – SCREENER ASSESSMENT

# Ohio English Language Proficiency Screener – Listening, Reading, Speaking, and Writing

Grades K-12

2021-2022 Administration

Submitted to:

Ohio Department of Education

Submitted by:

Cambium Assessment, Inc. 1000 Thomas Jefferson Street, NW Washington, DC 20007

November 2022

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## **Chapter 1. Introduction**

The English Language Proficiency Assessment for the 21st Century (ELPA21) is a testing program in which multiple states participate to support educators, member states, and members of the public as they adopt and implement the English Language Proficiency (ELP) standards and college-and career-ready standards. The assessment includes tests on listening, reading, speaking, and writing for students in kindergarten, grade 1, grades 2–3, grades 4–5, grades 6–8, and grades 9–12.

In 2017, the program developed the ELPA21 screener. The purpose of the screener is to identify students who require English language development instruction. The ELPA21 screener is an assessment of a student's language proficiency in the required domains of listening, reading, speaking, and writing. The test questions were based on the same ELP standards adopted by the ELPA21 member states. Ohio is a member of the ELPA21 consortium, and Ohio's screener assessment is called the Ohio English Language Proficiency Screener (OELPS).

Part II of this technical report focuses on the 2021–2022 test administration of the OELPS assessments. The screener adopted the same achievement standards, used the same scoring method (but different additional rules as listed in Section 2.5, Scoring Rules for Screener Tests, of this technical report), and followed the same quality control procedures as the summative assessment. The screener scores were reported online.

Part II includes the following chapters on the screener tests:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. 2021–2022 Summary
- Chapter 4. Reliability
- Chapter 5. Validity
- Chapter 6. Reporting

The results of the 2021–2022 OELPS are included in this report and in Appendix Part II.

# **Chapter 2. Test Administration**

The screener tests were administered to students in kindergarten, grade 1, grades 2–3, grades 4–5, grades 6–8, and grades 9–12. Like the summative assessment, each form of the screener assessment involved four domain tests. Students could be exempted from as many as three domain tests. The tests did not have a time limit.

#### 2.1 TESTING WINDOW

Due to the ongoing impacts of the COVID-19 pandemic during the 2021–2022 school year, the Ohio Department of Education (ODE) emphasized that districts and schools should be concerned first and foremost about the safety of students and staff. Assessments occurred only if they could be safely administered. Safety was determined locally at the student, teacher, building, district, or county level depending on the circumstances. Parental judgments relative to safety were also considered and respected.

To support schools in meeting their obligation to annually assess all ELs' English language proficiency with OELPA, ODE announced some changes for the 2021–2022 test administration:

For the OELPS screener assessment, the 2021–2022 testing window was scheduled from August 23, 2021, to June 30, 2022. ODE allowed districts to administer the 2021 OELPS speaking test to groups of students instead of requiring one-to-one administration.

When scheduling test administrations, districts should have considered that students taking the speaking test would say their responses aloud. To maintain test validity and security, the speaking test should have been administered so that students could not hear one another and so that recordings did not pick up others' voices. Thus, districts should have tested students in large quiet spaces and/or in groups as small as the testing window and scheduling allowed. ODE recommended that schools continue to administer the speaking test, if possible, one-to-one, with one student and one test administrator (TA).

The *Test Coordinator Manual* and *Test Administration Manual* (TAM) were updated to include the testing window extension and group administration of the speaking test. Additional information about state testing this year is on ODE's Rest and Restart Education page.

#### 2.2 TEST DESIGN

Each 2021–2022 OELPS assessment had one online form, one paper-pencil form, and one braille form.

The online form has three steps. Step 1 consists of practice items, while Steps 2 and 3 include operational items. To allow for domain exemptions and because TA input is required (at the end of Step 1 and for the scoring of speaking items in Step 2), the three steps are administered as nine segments with various possible routes through a subset of those segments, as shown in Figure 2.1. The content of the segments includes the following:

• Segment 1 includes nonscored practice items. At the end of Segment 1, the TA indicates whether the student should proceed to the operational items. If the TA determines that the test should not proceed, the student is directed to Segment 9, which contains one

nonscored survey item, and then the test ends. In this case, the student is assigned an overall classification of "Proficiency Not Demonstrated" and the domain performance level is assigned as "Performance Not Determined" for all domains. If the TA indicates the test should proceed, then the student is routed to Segment 2 (Step 2A) unless the student is exempted from the speaking domain, in which case the student is routed to Segment 7 (modified version of Step 2).

- Segment 2 (Step 2A) consists of scored, on-the-fly speaking items. After the student responds to these items, the TA assigns a score to each item. From Segment 2 (Step 2A), most students are routed to Segment 3 (Step 2B). However, students who are exempted from the listening, reading, and/or writing domains proceed to Segment 5.
- Segment 3 (Step 2B) consists of machine-scored operational items from the listening, reading, and writing domains. After the student completes Segment 3, a summed score is computed from all the item scores in Step 2 (Segments 2 and 3). If this summed score is below a threshold score, the test ends. If the raw score meets or exceeds the threshold score, the test is routed to Segment 4 (see Table 2.1 for threshold information).
- Segment 4 (Step 3) includes operationally scored items from all domains.
- Segment 5 (Step 2B for students who are exempted from the listening, reading, and/or writing domains) consists of operational machine-scored items from all non-exempted domains. Upon completion of Segment 5, students proceed to Segment 6, regardless of score.
- Segment 6 (Step 3 for students who are exempted from the listening, reading, and/or writing domains) consists of items from all non-exempted domains.
- Segment 7 (Step 2 for students who are exempted from the speaking domain) consists of machine-scored operational items from the listening, reading, and writing domains. Students are administered the form where their exempted domains are suppressed. Upon completion of Segment 7, students proceed to Segment 8 regardless of score.
- Segment 8 (Step 3 for students who are exempted from the speaking domain) consists of items from all non-exempted domains in addition to the speaking domain.
- Segment 9 (Step 1) contains a survey item that allows TAs to describe why the student did not engage with the screener assessment.

The online test routing design is displayed in Figure 2.1.

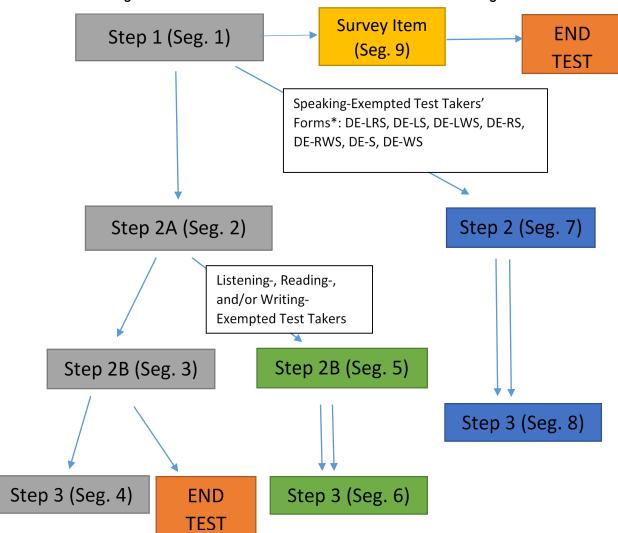


Figure 2.1 2021–2022 ELPA21 Screener Online Test Design

<sup>\*</sup> DE-LRS (listening, reading, and speaking exempted), DE-LS (listening and speaking exempted), DE-LWS (listening, writing, and speaking exempted), DE-RS (reading and speaking exempted), DE-RS (reading, writing, and speaking exempted), DE-WS (writing and speaking exempted).

Table 2.1 Threshold Step 2 Summed Scores for Proceeding to Step 3

Grade Band	Threshold Score	Step 2 Max Score
Beginning of Kindergarten (BK) <sup>1</sup>	20	26
K	23	26
1	24	27
2–3	25	28
4–5	26	31
6–8	28	33
9–12	27	30

Note 1. BK is the same test as K with a different proficiency definition. Starting 2021–22, BK students are considered overall proficient with all 3 or above in each domain rather than all 4 or above. In Ohio, students took BK if they were kindergarteners screened by Dec. 31. They were not in Pre-K when they were screened.

5

The paper-pencil form has five segments:

- Segment 1 (Step 1) includes nonscored, practice items. At the end of Segment 1, the TA indicates whether the student should proceed to the operational items. If the TA determines that the test should not proceed, the test ends.
- Segment 2 (Step 2) includes operational items from all four domains. After data entry is completed for Segment 2, a summed score is computed from all the item scores in this segment. If this summed score is below the threshold score, the test ends. If the raw score meets or exceeds the threshold score, the test is routed to Segment 3 (see Table 2.1 for threshold information).
- Segment 3 (Step 3) includes operational items from all four domains.
- Segment 4 (Step 2 for students with any domain exemption) and Segment 5 (Step 3 for students with any domain exemption) include operational items from all non-exempted domains. Tests proceed from Segment 4 to Segment 5 regardless of score.

Figure 2.2 displays the test design for the paper-pencil screener test. After test administration of the paper-pencil form, student responses were entered into Cambium Assessment, Inc.'s Data Entry Interface (DEI) on the state testing portal for all English Language Proficiency Assessment for the 21st Century (ELPA21) domain tests. Practice test items were not entered into the DEI and were not scored.

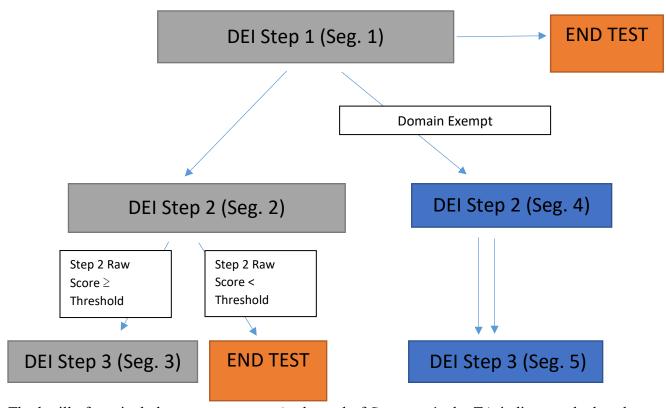


Figure 2.2 2021–2022 ELPA21 Screener Paper-Pencil Test Design

The braille form includes two segments. At the end of Segment 1, the TA indicates whether the student should proceed to the operational items. If so, the student is routed to Segment 2, which contains operational items for all domains. If the TA indicates that the student should not proceed, then the test ends.

The non-domain-exempted form summary of the screener tests is listed in Tables 2.2–2.4. Specifically, Table 2.2 includes Segments 2–4 items, Table 2.3 includes Segments 2–3 items, and Table 2.4 includes Segment 2 items.

Table 2.2 Number of Operational Items and Score Points by Domain and Grade Band—Online Screener

					(	Grade/Grade Band									
	В	K/K		1	2	2–3		4–5		6–8		<b>-12</b>			
Domain	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points			
Listening	13	13	11	11	11	11	10	10	17	18	15	18			
Reading	9	9	13	13	11	13	21	23	13	13	16	17			
Speaking	6	14	6	15	6	14	7	21	9	27	9	27			
Writing	10	10	11	11	14	17	9	21	7	23	6	20			
Total	38	46	41	50	42	55	47	75	46	81	46	82			

Table 2.3 Number of Operational Items and Score Points by Domain and Grade Band—Paper Screener

	Grade/Grade Band														
<del>-</del>	BK/K		1		2–3		4–5		6–8		9–12				
Domain	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points			
Listening	13	13	11	11	11	11	10	10	17	18	15	18			
Reading	9	9	13	13	11	13	21	23	13	13	16	17			
Speaking	6	14	6	15	6	14	7	21	9	27	9	27			
Writing	10	10	11	11	14	17	9	21	7	23	6	20			
Total	38	46	41	50	42	55	47	75	46	81	46	82			

Table 2.4 Number of Operational Items and Score Points by Domain and Grade Band—Braille Screener

		Grade/Grade Band														
	Bł	K/K	1		2–3		4–5		6–8		9–12					
Domain	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points				
Listening	9	9	9	9	10	10	11	11	11	12	10	13				
Reading	11	11	9	9	8	10	13	15	11	11	12	13				
Speaking	6	14	6	16	6	16	8	29	8	25	8	25				
Writing	8	8	8	8	10	13	8	16	7	23	8	26				
Total	34	42	32	42	34	49	40	71	37	71	38	77				

## 2.3 TEST ADMINISTRATION MANUAL

## 2.3.1 Directions for Test Administration

For the 2021–2022 test administration, a TAM was developed for each state, including Ohio. The TAM guides TAs in test administration.

The TAM for the screener tests usually discusses the following key topics:

- Overview of the ELPA21 screener
- TA qualifications
- Preliminary planning
- Materials required
- Administrative considerations
- Student preparation/guidance for Step 1
- Administrative guidance for Step 2 and Step 3
- Test security instructions for each of the three steps

• Contact information for user support

## 2.3.2 Training/Practice Tests

To help TAs and students familiarize themselves with the online registration and Test Delivery System, training/practice tests (Step 1 in screener tests) were provided before and during the testing windows. Training/practice tests can be accessed through a nonsecure browser or a secure browser. For screener assessments, the tests become secure automatically when students proceed to Step 2.

The training/practice tests have two components: the first for TAs to create and manage the training/practice test sessions, and the second for students to take an actual training/practice test.

The *Practice Test Administration* site introduces TAs to

- logging in;
- starting a test session;
- providing the session ID to the students signing in to the TA session;
- monitoring students' progress throughout their tests; and
- stopping the test.

The Practice Tests site introduces students to

- signing in;
- verifying student information;
- selecting a test;
- waiting for the TA to check the test settings and approve participation;
- starting and preparing for the test (adjusting the audio sound, checking the microphone for recording speaking responses, and reviewing test instructions);
- taking the test; and
- submitting the test.

#### 2.4 TEST SECURITY

The test security procedures are consistent across all assessments in each state. Details about student-level testing confidentiality, system security, testing environment security, and documentation of test security violations can be found in Part I, Chapter 9, Quality Control, of this technical report.

#### 2.5 SCORING RULES FOR SCREENER TESTS

The scoring rules applied to the 2021–2022 OELPS include the following:

- All pending and expired test records in Step 2 should be scored.
- If a single item in Step 2 is attempted, all domains without domain exemptions are considered attempted, and all non-attempted items in Step 2 should be given a score of zero.
- If the student's test is stopped by the automatic stopping rule after Step 2, items in Step 3

should be treated as not presented. If the student's test continues to Step 3, all items in Step 3 that the student does not respond to should be scored as zero.

- If a student has a domain exemption for a domain, the domain is reported as exempt if it is not attempted.
  - o For online tests, any domain exemptions must be entered into the Test Information Distribution Engine (TIDE) prior to the student starting the test. Students taking the online screener will be presented with items only in non-exempt domains.
  - o For paper-pencil tests, TAs are told which items not to administer if the student has any domain exemptions. However, if a student is exempt from a domain but responses to any items in the domain are entered into the DEI, the domain will be scored as though the student was not exempt.
- For OELPS, handscored items are scored by local TAs.
- Tests in which the TA indicates that the student will not continue after the Step 1 practice items will be scored as follows:
  - Each domain will be scored as 0 points. The score of 0 will receive a label of "Performance Not Determined."
  - o Proficiency status will be scored as "D" and reported as "Proficiency Not Demonstrated."

#### 2.6 HANDSCORING

- 2.6.1 For OELPS, all handscoring is done locally.
- 2.6.2 Rules for Handscoring

For OELPS, the district scores speaking and writing in THSS [now TASC].

The condition code categories and the rules for evaluating a potential nonscorable response in the speaking domain are summarized in Section 3.5.1 in Part I of this technical report.

## **Chapter 3. 2021–2022 Summary**

The 2021–2022 OELPS results are presented in this chapter and in Sections 1–5 of Appendix Part II of this technical report. The multidimensional item response theory (MIRT) model precludes one-to-one correspondence between domain raw and scale scores and allows the same domain raw score to fall into different performance levels depending on performance on the off-domain items. Additionally, we have to consider whether a student is advanced from Step 2 to Step 3 when interpreting raw scores.

The results in each section are briefly explained here:

- Section 1. Screener Assessment—Raw Score Statistics
  - Tables S1.1–S1.13 present the number of students and the minimum, mean, maximum, and standard deviation of domain raw scores by each performance level in each grade for each domain. Tables S1.1–S1.13 also present the number of students and the minimum, maximum, average, and standard deviation of the overall raw scores by each proficiency level in each grade.
- Section 2. Screener Assessment—Raw Score Distributions
  - Figures S2.1–S2.65 present the frequency of raw score distributions by performance level for each domain in each grade, and the frequency of overall raw score distributions by proficiency level in each grade.
- Section 3. Screener Assessment—Scale Score Summary
  - Tables S3.1–S3.13 present the number of students, minimum, mean, maximum, and standard deviation of the domain, overall, and comprehension scores by subgroups in each grade (K–12).
- Section 4. Screener Assessment—Percentage of Students by Domain Performance Level
  - Tables S4.1–S4.13 present the total number of students taking each domain test and the percentage of students in each performance level by domain test and by subgroups.
- Section 5. Screener Assessment—Percentage of Students by Overall Proficiency Level
  - o Tables S5.1–S5.13 present the total number of students who are categorized in each of the overall proficiency levels (Emerging, Progressing, and Proficient) by subgroups.

#### 3.1 2021–2022 STUDENT PARTICIPATION

Table 3.1 summarizes student participation in each mode of testing. Most students took the assessment online (99.98%), followed by paper-pencil (0.02%). No student received the braille forms (0.00%) in the 2021–2022 OELPS assessment.

Table 3.2 and Table 3.3 present the frequencies of students who took summative and screener tests, and participation by grade, respectively. The tables show that the highest percentage of students taking the screener tests were in kindergarten, followed by students in grade band 2–3.

Table 3.3 shows the participation in OELPS by subgroup. There were more male students than female students. Most students were in the Hispanic or Latino group (26.6%–33.6%), followed by African American students (17.4%–19.9%) and Asian students (16.2%–25.4%). About 0.1%–0.6% of the students had migrated to the United States from other countries. The percentage of students who had Individualized Education Programs (IEPs) ranged from 1.6%–3.7%. About 1.3%–3.4% of the students had disabilities. Most students identified as having a speech or language impairment were in kindergarten (0.7%), grade 1 (0.5%), and grade band 2–3 (0.3%), while most students identified as having a specific learning disability were in upper grades: 0.3% in grade band 4–5, 0.4% in middle school, and 0.9% in high school.

Tables S1.1–S1.13 in Section 1 of Appendix Part II of this technical report show the number of students, minimum, maximum, average, and standard deviation of domain raw scores and overall raw scores by each performance level in each grade for each domain. Figures S2.1–S2.65 in Section 2 of Appendix Part II of this technical report present the frequency of raw score distributions by performance level for each domain in each grade, and the frequency of overall raw score distributions by proficiency level in each grade.

Table 3.2 Student Participation by Test Mode

Crada	Total —	Braille	)	Onlin	ie	Paper		
Grade	Total <del>-</del>	N	%	N	%	N	%	
вк	10,789	0	0.0	10,789	100.00	0	0.00	
K¹	785	0	0.0	784	99.87	1	0.13	
1	1,982	0	0.0	1,982	100.00	0	0.00	
2	1,355	0	0.0	1,355	100.00	0	0.00	
3	1,221	0	0.0	1,221	100.00	0	0.00	
4	993	0	0.0	993	100.00	0	0.00	
5	968	0	0.0	968	100.00	0	0.00	
6	890	0	0.0	889	99.89	1	0.11	
7	919	0	0.0	918	99.89	1	0.11	
8	969	0	0.0	968	99.90	1	0.10	
9	1,743	0	0.0	1,743	100.00	0	0.00	
10	853	0	0.0	853	100.00	0	0.00	
11	583	0	0.0	583	100.00	0	0.00	
12	306	0	0.0	305	99.67	1	0.33	
Total	24,356	0	0.0	24,351	99.98	5	0.02	

Note 1. Kindergarteners take BK through Dec. 31 and K after Dec. 31.

Table 3.3 Number of Students for 2021–2022 OELPA and OELPS

Grade/Grade Band	N Summative	N Screener	N Both
K	10,239	11,574 <sup>1</sup>	9,345
1	9,387	1,982	1,552
2–3	15,121	2,576	1,786
4–5	9,976	1,961	1,234
6–8	10,824	2,778	1,802
9–12	13,955	3,485	2,497

Note 1. This total includes both BK and K students, about 93% of kindergarten screeners took the test before Dec. 31.

Table 3.3 2021-2022 Student Participation in OELPS Tests

Subaroup	Status	Ві	<b>&lt;</b> 1	K	K			2-	3	4-	5	6-	8	9-1	2
Subgroup	Status	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total		10,789	100.0	785	100.0	1,982	100.0	2,576	100.0	1,961	100.0	2,778	100.0	3,485	100.0
	вк	10,789	100.0												
	К			785	100.0										
	1					1,982	100.0								
	2							1,355	52.6						
	3							1,221	47.4						
	4									993	50.6				
Grade	5									968	49.4				
Grade	6											890	32.0		
	7											919	33.1		
	8											969	34.9		
	9													1,743	50.0
	10													853	24.5
	11													583	16.7
	12													306	8.8
Gender	Female	4,960	46.0	349	44.5	945	47.7	1,188	46.1	934	47.6	1,302	46.9	1,438	41.3

Subgroup	Status	ВК	(1	K		1		2-	3	4-{	5	6-8	3	9-1	2
Subgroup	Status	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	Male	5,244	48.6	409	52.1	939	47.4	1,260	48.9	946	48.2	1,333	48.0	1,852	53.1
	Missing	585	5.4	27	3.4	98	4.9	128	5.0	81	4.1	143	5.1	195	5.6
	American Indian or Alaskan Native	39	0.4	2	0.3	5	0.3	8	0.3	5	0.3	9	0.3	6	0.2
	Asian	2,737	25.4	170	21.7	496	25.0	638	24.8	386	19.7	451	16.2	370	10.6
	Black or African American	1,879	17.4	156	19.9	371	18.7	482	18.7	389	19.8	487	17.5	610	17.5
Ethnicity	Hispanic or Latino	3,147	29.2	224	28.5	535	27.0	684	26.6	569	29.0	934	33.6	1,416	40.6
	Native Hawaiian or Other Pacific Islander	48	0.4	6	0.8	11	0.6	9	0.3	10	0.5	16	0.6	24	0.7
	Two or More Races	1,163	10.8	110	14.0	232	11.7	338	13.1	298	15.2	422	15.2	635	18.2
	White	1,632	15.1	111	14.1	300	15.1	396	15.4	280	14.3	420	15.1	408	11.7
	Other/Unknown	144	1.3	6	0.8	32	1.6	21	0.8	24	1.2	39	1.4	16	0.5
	Gifted	6	0.1	1	0.1	4	0.2	9	0.3	3	0.2	1	0.0	1	0.0
Other	IEP	216	2.0	29	3.7	32	1.6	46	1.8	32	1.6	66	2.4	80	2.3
	Migrant	16	0.1	2	0.3	6	0.3	16	0.6	6	0.3	14	0.5	20	0.6

Cubaraua	Status	вк	<u></u>	K		1		2-3	3	4-5	5	6-8	3	9-1	2
Subgroup	Status	N	%	N	%	N	%	N	%	N	%	N	%	N	%
	Autism	60	0.6	16	2.0	9	0.5	11	0.4	7	0.4	7	0.3	3	0.1
	Developmenta I delay	3	0.0	1	0.1			1	0.0	1	0.1	2	0.1	6	0.2
	Emotional disturbance	1	0.0					1	0.0	2	0.1			4	0.1
	Hearing Impaired	4	0.0	2	0.3	2	0.1	1	0.0	1	0.1	4	0.1		
	Intellectual Disability	5	0.0			1	0.1	3	0.1	3	0.2	5	0.2	3	0.1
	Multiple disabilities	15	0.1	2	0.3	4	0.2	4	0.2	2	0.1	2	0.1	6	0.2
Primary Disability	Orthopedic impairment	4	0.0							1	0.1				
	Other health impairment	10	0.1			3	0.2	3	0.1	3	0.2	13	0.5	4	0.1
	Specific learning disability	7	0.1	1	0.1	1	0.1	9	0.3	7	0.4	26	0.9	20	0.6
	Speech or language impairment	72	0.7	4	0.5	5	0.3	5	0.2	1	0.1	4	0.1		
	Traumatic brain injury			1	0.1										
	Visual impairment	1	0.0											1	0.0

Note 1. BK and K are the same test, but proficiency definition is different.

#### 3.2 2021–2022 STUDENT SCALE SCORE AND PERFORMANCE SUMMARY

Table 3.4 shows the number and percentages of students who had a domain exemption. Tables 3.5–3.7 show the number of students, minimum, mean, maximum, and standard deviation of the domain, and overall scale scores in each grade. The OELPS tests are not vertically linked across all grades. Scale scores can be compared only for tests or students within a grade band (BK, K, 1, 2–3, 4–5, 6–8, and 9–12). Scale score summary by subgroup for each grade is also presented in Section 3 of Appendix Part II of this technical report.

Table 3.8, Table 3.9, and Figure 3.1 show the percentage of students by grade in each domain test. The results indicate that most students have achieved performance level 1 in reading, speaking, and writing in grades 1–11. Most students scored at Level 1 in listening in grades 3–11, but in grades BK–2, most students scored at Level 3. Students who scored at Level 4 had overall lower percentages in reading, speaking, and writing. The percentage of students by performance level by subgroup for each grade is also presented in Section 4 of Appendix Part II of this technical report.

Table 3.10 and Figure 3.2 present the percentage of students by overall proficiency level. The results show that the majority of students achieved the Emerging or Progressing category. The percentage of students who are proficient increases from kindergarten to grade 2 and from grade 3 to grade 5, then consistently decreases until grade 9, and slightly increases until grade 12. The percentage of students in the Emerging category is relatively stable until grade 4, increases until grade 8, and then consistently drops afterward. Section 5 of Appendix Part II of this technical report displays the overall proficiency level by subgroup for each grade. Please note that BK students are considered overall proficient with all 3 or above in each domain rather than all 4 or above. This is the only difference between BK and K starting 2021–22.

Table 3.4 Summary of Domain Exemptions

Grade	Total	Listening	Reading	Speaking	Writing
ВК	10,789	0 (0.0%)	4 (0.4%)	4 (0.7%)	4 (0.3%)
К	785	0 (0.0%)	0 (0.0%)	1 (0.3%)	0 (0.0%)
1	1,982	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
2	1,355	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
3	1,221	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
4	993	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
5	968	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
6	890	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
7	919	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
8	969	0 (0.0%)	0 (0.0%)	1 (0.0%)	0 (0.0%)
9	1,743	1 (0.1%)	2 (0.2%)	1 (0.1%)	1 (0.1%)
10	853	0 (0.0%)	1 (0.1%)	1 (0.1%)	1 (0.1%)
11	583	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
12	306	0 (0.0%)	1 (0.1%)	1 (0.1%)	1 (0.1%)

Table 3.5 Scale Score Summary by Grade—Listening and Reading\*

One de		L	istening					Reading		
Grade	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
ВК	10,419	314	523.1	714	67.7	10,415	318	519.9	708	67.1
K	656	314	523.2	714	88.9	656	318	519.6	708	88.7
1	1,882	288	501.7	678	90.1	1,882	286	481.9	704	95.4
2	1,250	286	480.6	710	90.8	1,250	278	464.6	734	100.4
3	1,143	286	500.3	710	101.3	1,143	278	494.5	734	110.8
4	909	270	488.6	768	115.1	909	270	490.9	781	114.8
5	885	270	487.7	778	124.9	885	270	493.1	795	122.1
6	779	279	490.6	738	109.7	779	296	495.3	733	106.7
7	791	279	482.8	738	115.5	791	296	491.2	733	112.8
8	819	279	483.5	738	118.3	819	296	492.3	733	114.5
9	1,349	297	464.2	731	107.9	1,348	309	470.2	733	103.6
10	754	297	498.0	731	108.3	753	309	501.2	733	104.6
11	531	297	525.1	731	109.4	531	309	528.1	733	105.5
12	274	297	545.7	731	108.4	273	309	548.9	733	104.2

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. Scale scores cannot be compared across grade bands.

Table 3.6 Scale Score Summary by Grade—Speaking and Writing\*

Od-		S	peaking					Writing		
Grade	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
вк	10,415	339	516.1	711	88.1	10,415	347	484.0	684	61.7
K	655	339	506.7	711	104.7	656	347	503.8	684	83.9
1	1,882	310	485.1	669	100.3	1,882	283	478.0	698	95.3
2	1,250	292	462.6	703	110.7	1,250	276	460.5	737	102.6
3	1,143	292	481.1	703	121.6	1,143	276	492.7	737	112.9
4	909	270	499.8	780	147.7	909	268	490.1	787	122.0
5	885	270	492.4	786	154.5	885	268	491.6	797	130.5
6	779	296	500.6	732	129.5	779	281	491.6	741	113.4
7	791	296	491.9	732	133.3	791	281	485.7	741	119.8
8	818	296	482.9	732	135.9	819	281	486.4	741	122.4
9	1,349	332	476.8	722	114.9	1,349	315	471.7	732	102.7
10	753	332	510.0	722	117.4	753	315	502.3	732	103.1
11	531	332	542.3	722	114.8	531	315	528.5	732	105.7
12	273	332	562.3	722	110.6	273	315	548.4	732	104.6

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. Scale scores cannot be compared across grade bands.

Table 3.7 Scale Score Summary by Grade—Comprehension and Overall\*

Oura da		Com	nprehens	ion					Overall		
Grade	N	Min	Mean	Max	SD		N	Min	Mean	Max	SD
ВК	10,419	3978	5383.2	6375	489.4	=	10,419	3646	5156.9	6763	538.9
К	656	3978	5352.5	6375	603.7		656	3646	5174.5	6763	729.7
1	1,882	3785	5138.4	6387	630.9		1,882	3364	4975.2	6629	757.3
2	1,250	3756	4987.6	6439	660.3		1,250	3326	4815.1	6880	809.2
3	1,143	3756	5145.6	6439	725.2		1,143	3326	5019.8	6880	897.6
4	909	3649	5027.7	6700	714.6		909	3237	5029.1	7323	1000.5
5	885	3649	5028.0	6700	763.1		885	3237	5019.2	7401	1064.6
6	779	3803	5067.9	6476	695.8		779	3388	5052.0	6974	915.6
7	791	3803	5027.8	6476	730.6		791	3388	4996.9	6974	961.1
8	819	3803	5032.9	6476	742.4		819	3388	4982.4	6974	979.3
9	1,350	3787	4893.8	6524	721.8		1,350	3605	4862.2	6923	854.9
10	754	3787	5117.1	6524	726.1		754	3605	5122.6	6923	864.3
11	531	3787	5292.0	6524	723.8		531	3605	5351.4	6923	865.1
12	274	3787	5441.0	6524	724.1		274	3605	5512.8	6923	848.0

<sup>\*</sup> Scale scores cannot be compared across grade bands. Ohio does not use these scores for any purpose.

Table 3.8 Percentage of Students in Each Performance Level by Grade—Listening and Reading\*

Cuada			Li	istening						F	Reading			
Grade	N	0	1	2	3	4	5	N	0	1	2	3	4	5
вк	10,782	3.4	18.6	16.8	52.0	4.7	4.4	10,778	3.4	22.2	20.3	41.8	6.0	6.4
К	774	15.2	23.3	11.1	37.5	4.4	8.5	774	15.2	26.5	11.6	30.6	5.7	10.3
1	1,976	4.8	25.7	7.8	32.0	12.4	17.4	1,976	4.8	52.0	11.7	14.7	6.9	9.9
2	1,349	7.3	23.2	10.2	25.9	15.3	18.1	1,349	7.3	50.6	7.5	15.3	6.5	12.8
3	1,214	5.8	23.1	12.0	21.2	18.7	19.2	1,214	5.8	47.4	12.3	17.7	6.8	10.0
4	990	8.2	26.1	7.1	15.1	16.9	26.8	990	8.2	39.7	9.1	14.2	10.0	18.8
5	964	8.2	33.7	8.5	8.2	15.9	25.5	964	8.2	45.6	9.2	13.2	7.0	16.8
6	882	11.7	27.3	9.3	11.0	14.9	25.9	882	11.7	40.6	6.9	15.5	8.7	16.6
7	894	11.5	36.9	9.1	15.7	8.7	18.1	894	11.5	45.2	11.2	14.8	6.8	10.5
8	917	10.7	41.4	9.1	13.2	8.9	16.7	917	10.7	49.7	10.5	16.1	5.0	8.0
9	1,738	22.4	43.7	6.3	12.5	4.7	10.5	1,737	22.4	48.8	7.5	13.3	3.3	4.6
10	848	11.1	35.6	9.0	18.9	9.1	16.4	847	11.1	44.0	13.1	18.8	5.5	7.4
11	580	8.4	28.6	10.3	19.8	9.1	23.6	580	8.4	36.2	15.0	19.7	7.6	13.1
12	299	8.4	20.1	11.7	17.4	12.4	30.1	298	8.4	28.9	12.4	25.2	10.1	15.1
Total	24,207	7.3	25.2	12.5	34.2	8.6	12.2	24,200	7.3	34.9	14.7	27.8	6.3	9.0

<sup>\*</sup> Level 0: Performance Not Determined. Scores for domain tests marked as Exemption or Not Attempted are excluded.

Table 3.9 Percentage of Students in Each Performance Level by Grade—Speaking and Writing\*

Crada			S	peaking				Writing							
Grade	N	0	1	2	3	4	5	N	0	1	2	3	4	5	
вк	10,778	3.4	36.4	21.3	20.2	5.9	12.8	10,778	3.4	63.3	23.5	7.2	1.5	1.1	
К	773	15.3	37.0	12.3	15.9	7.5	12.0	774	15.2	44.1	19.3	14.9	3.5	3.1	
1	1,976	4.8	59.0	16.6	3.4	5.4	10.8	1,976	4.8	59.9	11.1	12.4	5.4	6.4	
2	1,349	7.3	52.3	13.0	7.0	4.8	15.6	1,349	7.3	50.4	10.7	11.9	6.2	13.6	
3	1,214	5.8	49.4	8.1	8.8	10.4	17.5	1,214	5.8	48.8	10.8	15.3	7.2	12.0	
4	990	8.2	38.4	7.1	10.1	5.4	30.9	990	8.2	36.4	8.8	18.6	7.7	20.4	
5	964	8.2	47.0	6.6	5.8	3.6	28.7	964	8.2	39.8	9.2	18.4	5.3	19.1	
6	882	11.7	36.8	7.1	13.4	5.1	25.9	882	11.7	33.0	9.1	19.3	7.3	19.7	
7	894	11.5	41.6	9.4	10.2	5.4	21.9	894	11.5	44.1	11.4	13.6	4.0	15.3	
8	916	10.7	45.9	8.3	10.6	4.7	19.9	917	10.7	49.0	10.1	12.8	4.6	12.9	
9	1,738	22.4	43.4	9.9	9.0	2.4	12.9	1,738	22.4	49.0	8.1	10.3	2.7	7.5	
10	847	11.1	39.7	10.5	12.6	5.2	20.9	847	11.1	43.1	13.5	16.3	4.8	11.2	
11	580	8.4	31.9	11.9	13.4	3.4	30.9	580	8.4	35.9	12.8	19.7	5.7	17.6	
12	298	8.4	24.2	13.4	12.1	5.4	36.6	298	8.4	29.5	10.4	23.2	6.7	21.8	
Total	24,199	7.3	41.2	15.4	14.1	5.5	16.5	24,201	7.3	53.8	16.5	11.4	3.6	7.5	

<sup>\*</sup> Level 0: Performance Not Determined. Scores for domain tests marked as Exemption or Not Attempted are excluded.

Table 3.5 Percentage of Students in Each Overall Proficiency Category by Grade

Grade	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
BK¹	10,782	3.4	30.4	58.0	8.3
K <sup>2</sup>	774	15.2	31.4	47.0	6.3
1	1,976	4.8	33.0	52.8	9.5
2	1,349	7.3	33.1	43.4	16.2
3	1,214	5.8	34.9	44.1	15.2
4	990	8.2	33.0	32.9	25.9
5	964	8.2	42.1	27.5	22.2
6	882	11.7	34.8	31.6	21.9
7	894	11.5	44.6	28.1	15.8
8	917	10.7	48.7	27.8	12.8
9	1,739	22.4	48.3	22.0	7.4
10	848	11.1	42.8	34.6	11.6
11	580	8.4	36.9	35.0	19.7
12	299	8.4	29.8	39.1	22.7
Total	24,208	7.3	34.8	46.1	11.8

Note 1. Definition of proficiency is all 3s or above in BK; 2. Definition of proficiency is all 4s or above in K and all other grades.

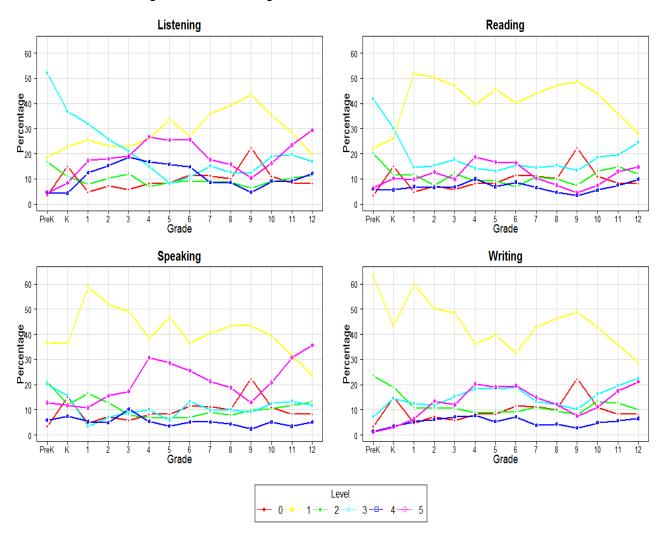


Figure 3.3 Percentage of Students in Performance Levels\*

<sup>\*</sup> Level 0: Performance Not Determined. Scores for domain tests marked as Exemption or Not Attempted are excluded.

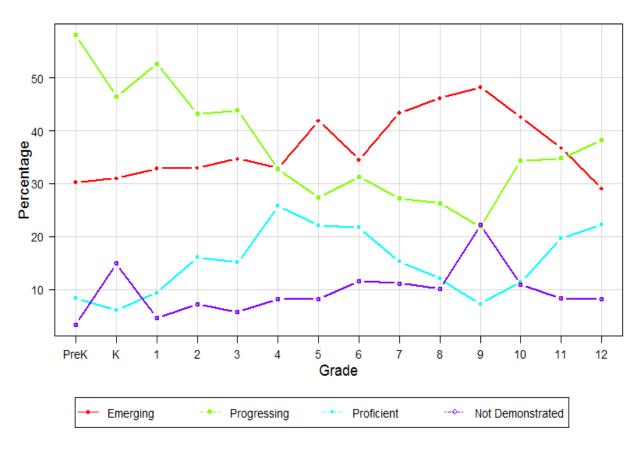


Figure 3.4 Percentage of Students in Proficiency Levels\*

<sup>\*</sup> The percentage of students marked Proficiency Not Attempted is excluded.

## 3.3 2021–2022 TESTING TIME FOR ONLINE SCREENER TESTS

In the 2021–2022 OELPS tests, students who did not have any domain exemptions proceeded to Segments 2 and 3 (Step 2) and proceeded to Segment 4 (Step 3) if their raw scores met or exceeded the threshold score for Step 2 (refer to Table 2.1). Therefore, students who exited at Step 3 took more items than those who stopped at Step 2. Table 3.11 summarizes testing time by end step in each grade/grade band for the OELPS tests. Testing time was computed based on the total page time a student spent on each item in Step 2 and time spent on Step 3 if the student proceeded to Step 3. Therefore, page time for test administrators' (TAs) responses, such as the time TAs spent on scoring the Step 2A items, was not included in the testing time summary. In addition, students who had any non-attempted or exempted domains or had proficiency not demonstrated were excluded. As expected, students who ended the test at Step 3 had longer testing times than those who ended at Step 2. In addition, upper-grade tests had longer testing times than the lower-grade tests due to the tests being longer and the items being more complex.

Table 3.11 Testing Time for the 2021–2022 Online Screener Tests

Grade/Grade	Fred Oters	N.	N of				Testing	Time (M	e (Minutes)					
Band	End Step	N	Items	Min	P10	P25	P50	P75	P90	Max	Mean	SD		
вк	Step 2	6,978	18	0.6	4.7	5.3	6.1	7.4	9.3	51.6	6.7	2.5		
<b>B</b> K	Step 3	3,406	34	9.8	13.0	14.3	16.2	18.9	22.5	54.3	17.2	4.4		
К	Step 2	506	18	2.2	4.6	5.2	6.2	7.9	10.2	26.9	7.0	3.0		
	Step 3	145	34	10.3	12.9	14.4	17.0	20.7	22.9	43.0	17.8	4.7		
1	Step 2	1,225	19	1.4	6.4	7.3	8.4	10.1	13.0	47.0	9.2	3.2		
	Step 3	645	37	13.0	16.9	19.0	22.7	28.2	33.4	60.9	24.4	7.4		
2-3	Step 2	1,462	20	0.9	5.9	7.0	8.7	10.8	13.8	37.2	9.4	3.6		
2-5	Step 3	874	38	13.9	25.1	28.7	34.8	42.6	51.6	107.1	37.4	12.7		
4-5	Step 2	1,042	21	0.9	7.3	9.1	11.8	15.5	20.6	76.7	13.2	6.8		
4-5	Step 3	734	43	16.4	25.5	29.8	36.3	45.5	57.6	128.3	39.2	13.6		
6-R	Step 2	1,396	19	1.0	5.9	7.9	11.3	15.0	19.3	54.9	12.2	6.1		
6-8 -	Step 3	942	42	13.4	25.4	29.9	36.2	44.5	55.8	146.3	39.2	14.4		
9-12 -	Step 2	1,941	20	0.0	7.7	10.5	14.3	19.0	25.1	62.7	15.6	7.7		
	Step 3	950	42	14.0	28.1	33.3	42.0	53.1	65.8	143.3	45.0	16.6		

# **Chapter 4. Reliability**

In the same procedure as described in Part I, Chapter 4, of this technical report, the test reliability for screener tests is assessed using:

- marginal standard error of measurement (MSEM);
- marginal reliability;
- conditional standard error of measurement (CSEM); and
- classification accuracy (CA) and classification consistency (CC).

In addition, since the OELPS used local test administrators (TAs) for handscoring in the 2021–2022 test administration, inter-rater analysis was not conducted. The results for the 2021–2022 OELPS assessment are illustrated in this chapter and in Section 6 of Appendix Part II of this technical report:

- Section 6. Screener Assessment—Conditional Standard Error of Measurement (CSEM)
  - o Figures S6.1–S6.13 show the CSEM plots for the domain, overall, and comprehension scores. If an OELPS test applies to multiple grades, the CSEM plots are broken down by grade. Scores can be computed from tests that end at Step 2 or Step 3. Because students stopping after Step 2 completed a shorter test, it was expected that these students' scores would have a greater error. The CSEM plots use different colors to differentiate the students who ended the test after Step 2 from those who completed Step 3.

#### 4.1 MARGINAL STANDARD ERROR OF MEASUREMENT

As described in Part I, the MSEM is a way to examine score reliability. The ratio of MSEM and the standard deviation of scale scores can also indicate the measure errors, and the analysis for the ratio is displayed in Figure 4.1.

1.0 8.0 MSEM/SD Ratio 90 90  $X \square \Delta$ **X** 0.2 0.0 2 5 3 7 9 K 4 6 8 10 11 12 PreK Grade Listening Speaking × Comprehension

Figure 4.5 Ratio of Marginal Standard Error of Measurement to Standard Deviation of Estimated Scale Scores by Grade and Domain\*

Overall

+ Writing

## 4.2 MARGINAL RELIABILITY

Reading

Table 4.1 and Figure 4.2 show the marginal reliability by grade. The marginal reliabilities by domain were obtained using the domain scores based on the multidimensional item response theory (MIRT) models, and the overall and comprehension marginal reliabilities were obtained using the overall and comprehension scores based on the bi-factor models. BK had lower marginal reliability than the other grades. This is possibly due to less overall variation, see SDs in tables (Tables 3.5–3.7) in Chapter 3. Writing had lower marginal reliability in kindergarten, grade 1, and high school but had slightly higher reliability in grades 2–8. Listening had relatively lower reliability than the other domains in grades 1–5. In addition, Section 6 of Appendix Part II of this

<sup>\*</sup> Scores for domain tests marked as Exemption are excluded.

technical report displays CSEM plots by grade. Groups with fewer than 50 students were excluded from the plots of marginal reliability by groups.

Table 4.6 Marginal Reliability by Score and Grade\*

Grade	N	Listening	Reading	Speaking	Writing	Comprehension	Overall
ВК	10,415	.77	.74	.82	.71	.69	.76
K	655	.83	.82	.85	.79	.76	.84
1	1,882	.81	.88	.85	.87	.74	.87
2	1,250	.85	.92	.89	.92	.81	.91
3	1,143	.87	.92	.90	.93	.82	.93
4	909	.91	.93	.93	.93	.86	.94
5	885	.92	.93	.93	.94	.87	.94
6	779	.93	.91	.93	.92	.87	.94
7	791	.93	.92	.93	.93	.88	.94
8	818	.94	.92	.93	.93	.89	.94
9	1,347	.93	.92	.91	.88	.90	.92
10	753	.93	.92	.92	.89	.90	.93
11	531	.93	.92	.92	.89	.89	.93
12	273	.92	.91	.91	.89	.88	.92

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. We also break out Step 2 and Step 3, based on our calculation, step 3 has lower reliability than step 2, this may be due to the lower N counts in step 3, so we combine step 2 and step 3 for the reliability analysis.

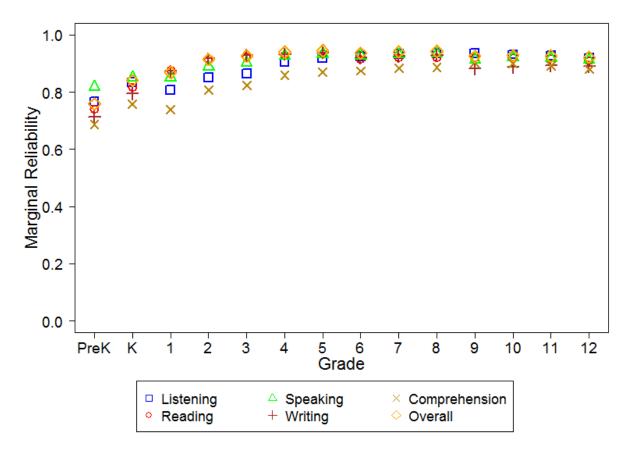


Figure 4.6 Marginal Reliability\*

#### 4.3 CLASSIFICATION ACCURACY AND CONSISTENCY

As described in Section 6.4 in Part I, CA analysis investigates how precisely students are classified into each performance level. CC analysis investigates how consistently students are classified into each performance level across two independent test administrations of equivalent forms. Since obtaining test scores from two independent test administrations is not feasible due to issues such as logistics and cost constraints, the CC index is computed with the assumption that the same test is independently administered twice to the same group of students. Table 4.2 presents the overall CA and CC by domain. CC rates can be lower than CA because CC is based on two tests with measurement errors, while CA is based on one test with a measurement error and the true score. The CA and CC rates for each performance level are higher for the levels with a smaller standard error. Also, the CA and CC indices for the overall proficiency categories are lower than that of each performance level due to multiple cuts.

Table 4.3 and Figure 4.3 show the CA, and Table 4.4 and Figure 4.4 display the CC for each cut score. Across the four performance cut scores, the CA indices are all above 0.8, denoting that the degree to which we can reliably differentiate students between adjacent performance levels is

<sup>\*</sup> Scores for domain tests marked as Exemption are excluded.

typically above 0.8. The accuracy indices in grade 2 and higher are above 0.9 for all domains. In terms of CC, the indices are above 0.75 in all cuts and all grades.

Table 4.5 and Figure 4.5 display the CA and CC for overall proficiency levels. The plot shows that all the accuracy and consistency indices are above 0.79. The accuracy and consistency indices for cut score 1 are lower than those for cut score 2 in BK and are comparable to those for cut score 2 in the other grades.

Table 4.7 OELPS Overall Classification Accuracy and Consistency for Domain Performance Levels by Domain and Grade\*

Grade		Accu	racy			Consistency						
Grade	Listening	Reading	Speaking	Writing	Listening	Reading	Speaking	Writing				
вк	.67	.60	.64	.74	.57	.49	.56	.65				
К	.71	.65	.69	.70	.61	.55	.62	.62				
1	.63	.75	.73	.78	.53	.68	.68	.72				
2	.65	.79	.74	.79	.55	.72	.69	.73				
3	.66	.77	.73	.79	.56	.71	.68	.73				
4	.73	.77	.79	.78	.64	.71	.74	.72				
5	.76	.80	.83	.80	.68	.74	.79	.73				
6	.77	.78	.79	.76	.68	.71	.74	.68				
7	.79	.79	.81	.81	.72	.73	.75	.75				
8	.80	.82	.83	.83	.74	.77	.77	.78				
9	.84	.84	.82	.81	.78	.79	.76	.75				
10	.78	.80	.78	.75	.71	.73	.72	.68				
11	.77	.76	.78	.74	.69	.68	.70	.66				
12	.74	.71	.76	.71	.66	.64	.68	.63				

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. We also break out Step 2 and Step 3, based on our calculation, step 3 has lower values than step 2, this may be due to the lower N counts in step 3, so we combine step 2 and step 3 for all the Classification Accuracy and Consistency analysis.

Table 4.8 Classification Accuracy for Each Cut by Domain and Grade\*

		Liste	ning			Read	ding			Spea	ıking			Wri	ting	
Grade	Cut 1	Cut 2	Cut 3	Cut 4												
ВК	.91	.84	.93	.96	.88	.82	.90	.94	.87	.87	.91	.93	.82	.94	.98	.98
К	.93	.89	.91	.93	.91	.87	.88	.92	.91	.89	.91	.93	.86	.91	.94	.95
1	.91	.90	.87	.89	.91	.92	.94	.94	.88	.90	.91	.92	.93	.94	.94	.95
2	.91	.91	.89	.91	.93	.94	.95	.95	.90	.91	.92	.93	.92	.94	.96	.96
3	.91	.93	.90	.89	.94	.93	.93	.94	.93	.92	.91	.91	.94	.94	.94	.95
4	.93	.94	.92	.92	.94	.94	.94	.94	.94	.93	.93	.94	.94	.94	.94	.94
5	.93	.95	.94	.93	.94	.95	.95	.94	.95	.95	.96	.95	.94	.95	.95	.94
6	.94	.95	.94	.93	.95	.95	.93	.93	.95	.94	.94	.94	.91	.94	.95	.94
7	.95	.95	.94	.93	.95	.94	.94	.94	.95	.94	.95	.95	.95	.94	.95	.95
8	.95	.96	.94	.94	.96	.95	.94	.95	.96	.95	.95	.95	.95	.96	.95	.95
9	.95	.96	.96	.96	.96	.95	.96	.97	.94	.95	.95	.96	.93	.94	.96	.96
10	.95	.94	.94	.94	.94	.94	.95	.95	.94	.94	.94	.94	.91	.92	.95	.95
11	.94	.95	.94	.93	.94	.93	.93	.93	.93	.94	.94	.94	.92	.92	.93	.93
12	.94	.95	.93	.91	.94	.92	.91	.91	.93	.94	.94	.92	.92	.92	.92	.92

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. Cut scores 1–4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

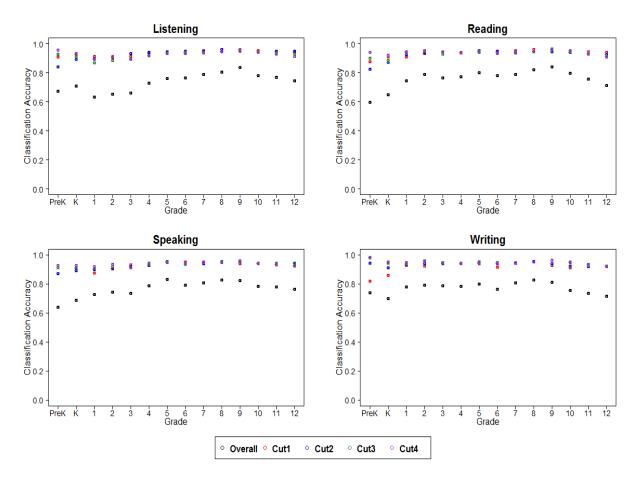


Figure 4.7 Classification Accuracy\*

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. Cut scores 1–4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

Table 4.9 Classification Consistency for Each Cut by Domain and Grade\*

	Listening					Read	ding			Spea	ıking			Writing			
Grade	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	
ВК	.86	.78	.90	.94	.82	.76	.85	.91	.82	.82	.87	.90	.75	.91	.97	.98	
К	.89	.84	.87	.90	.87	.82	.84	.88	.86	.85	.88	.89	.80	.87	.92	.94	
1	.87	.85	.82	.85	.87	.89	.92	.92	.83	.86	.87	.89	.90	.91	.91	.93	
2	.87	.87	.84	.88	.90	.91	.93	.93	.87	.87	.89	.90	.89	.91	.94	.94	
3	.88	.90	.86	.85	.92	.90	.90	.92	.90	.89	.87	.87	.92	.91	.92	.93	
4	.90	.91	.89	.89	.91	.92	.91	.92	.92	.90	.91	.91	.92	.92	.92	.92	
5	.90	.92	.91	.90	.92	.93	.92	.92	.92	.93	.93	.92	.91	.93	.93	.92	
6	.91	.92	.92	.90	.92	.93	.91	.91	.93	.91	.91	.92	.88	.91	.92	.92	
7	.93	.93	.92	.91	.93	.91	.92	.92	.93	.92	.92	.92	.92	.92	.92	.93	
8	.92	.94	.92	.92	.94	.93	.92	.93	.94	.93	.93	.93	.93	.94	.93	.93	
9	.93	.94	.94	.94	.94	.93	.95	.95	.91	.93	.94	.94	.89	.92	.95	.95	
10	.93	.91	.92	.91	.91	.92	.92	.94	.91	.92	.92	.91	.87	.89	.93	.93	
11	.92	.93	.91	.90	.92	.90	.90	.90	.90	.92	.92	.90	.88	.89	.91	.90	
12	.92	.92	.90	.88	.92	.90	.88	.88	.90	.92	.91	.89	.88	.89	.88	.88	

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. Cut scores 1–4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

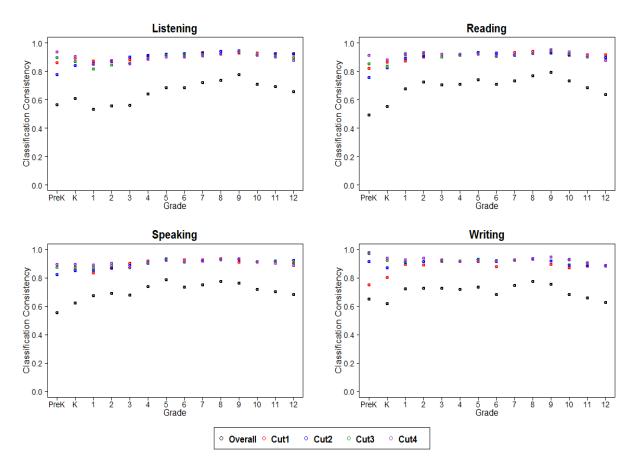


Figure 4.8 Classification Consistency\*

<sup>\*</sup> Scores for domain tests marked as Exemption or Not Attempted are excluded. Cut scores 1–4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

Table 4.10 Screener Classification for Overall Proficiency Classifications by Grade\*

		Accuracy			Consistency	
Grade	Overall	Between Emerging and Progressing	Between Progressing and Proficient	Overall	Between Emerging and Progressing	Between Progressing and Proficient
вк	.82	.87	.95	.79	.83	.96
K	.87	.91	.96	.83	.88	.95
1	.85	.90	.95	.80	.86	.94
2	.87	.92	.95	.82	.88	.94
3	.88	.94	.94	.83	.91	.92
4	.89	.95	.94	.85	.93	.92
5	.89	.95	.94	.86	.93	.93
6	.89	.95	.94	.85	.93	.92
7	.89	.95	.95	.86	.93	.93
8	.90	.95	.95	.87	.94	.93
9	.92	.96	.97	.89	.94	.95
10	.90	.94	.95	.86	.92	.94
11	.87	.94	.93	.84	.92	.91
12	.86	.94	.92	.81	.92	.89

<sup>\*</sup> Cut 1 falls between Emerging and Progressing; Cut 2 falls between Progressing and Proficient.

**Classification Accuracy Classification Consistency** 1.0 000 Classification Accuracy
7.0 9.0 88.0 0.0 0.0 10 11 12 PreK PreK Grade Grade Overall O Between Emerging and Progressing O Between Progressing and Proficient

Figure 4.9 Proficiency Classification\*

<sup>\*</sup> Cut 1 falls between Emerging and Progressing; Cut 2 falls between Progressing and Proficient.

# Chapter 5. Validity

Discussions on test development, form construction, scaling, equating, and standard setting can be found in the related documents from the English Language Proficiency Assessment for the 21st Century (ELPA21).

Since the items and item parameters in the screener tests are drawn from the item pool for summative tests, and the purpose of the screener is to predict students' overall English proficiency categories, we evaluate the relationship between the screener and summative tests instead of evaluating the validity aspects as we do for the summative tests and summarize student progress from the time they took the screener tests to the time they took the summative tests. The statistical methods and the results are presented in this chapter and Sections 7–8 of Appendix Part II of this technical report:

- Section 7. Student Progress from Screener to Summative—Scatter Plots of Scale Score Change
  - o Figures S7.14–S7.19 display scatter plots of scale scores for the screener and summative assessment.
- Section 8. Student Progress from Screener to Summative—Comparison of Scale Scores
  - Tables S8.1–S8.6 summarize the comparisons of scale score summary statistics for domain, overall, and comprehension scores.

#### 5.1 CORRELATIONS BETWEEN SUMMATIVE AND SCREENER TESTS

Students who took the ELPA21 screener and were classified as an English learner (Proficiency Not Demonstrated, Emerging, or Progressing) would in general be expected to also take the ELPA21 summative assessment. The test questions on the screener and summative assessments are drawn from the same item pools and assess the same English Language Proficiency (ELP) standards adopted by the state of Ohio. We identified the students who completed both the screener and summative assessments and compared their performance across the two occasions.

The correlation between the scale scores from the summative and screener tests is assessed using Pearson correlations. The correlation between the performance levels from both tests is assessed using Goodman and Kruskal's gamma correlation (Goodman & Kruskal, 1954). The gamma correlation, or gamma statistics, is for ordinal level data with a small number of response categories. It is designed to determine how effectively a researcher can use the information about an individual measured on one variable to predict the measure of the individual on another variable. The correlation results are presented in Table 5.1 and Table 5.2.

Table 5.1 shows the Pearson correlation between the screener and the summative tests in domain and composite scores. Correlations of all types of scores are the lowest in the kindergarten test; the correlations are above 0.70 in each domain and composite scale scores in grade 2 and above. The speaking tests have relatively higher correlations than the other three domains in kindergarten and grade 1 but have lower correlations in middle and high school.

Table 5.2 shows the gamma correlations between domain performance levels and test proficiency categories. Gamma correlation measures the strength of association of the cross-tabulated data when both variables are measured at the ordinal level. As with the correlations between scale scores presented in Table 5.1, kindergarten has the lowest correlations in all domain performance levels and overall proficiency categories. For grade 2 and above, the correlations are about 0.74. In addition, the correlations between proficiency categories are generally higher than those between domain performance levels. This is because there are three levels in overall proficiency while there are five levels in domain performance. These correlations show predictive validity between the screener and summative tests because they were given to the same students at different times.

Table 5.11 Pearson Correlations Between Scale Scores for the Screener and Summative Assessments\*

Grade/Grade	Listening		Reading		Spea	Speaking		Writing		Comprehension		rall
Band	N	Corr	N	Corr	N	Corr	N	Corr	N	Corr	N	Corr
K¹	8,944	.63	8,907	.59	8,883	.66	8,892	.43	8,948	.57	8,956	.69
1	1,469	.78	1,462	.77	1,456	.77	1,462	.76	1,471	.77	1,471	.83
2-3	1,645	.74	1,642	.75	1,641	.79	1,640	.77	1,648	.73	1,649	.80
4-5	1,117	.79	1,108	.76	1,108	.79	1,107	.82	1,119	.75	1,120	.83
6-8	1,552	.81	1,544	.77	1,543	.76	1,539	.82	1,556	.79	1,561	.83
9-12	2,024	.87	2,018	.84	2,008	.77	2,017	.85	2,032	.85	2,044	.87

<sup>\*</sup> Results are based on the subset of students with results for both the screener and summative assessments. Note 1. Kindergarten screener included both BK and K students in Tables 5.1 and 5.2.

Table 5.12 Gamma Correlations Between Domain/Proficiency Classifications for the Screener and Summative Assessments\*

Grade/Grade	Listening		Read	Reading		Speaking		Writing		rall iency
Band	N	Corr	N	Corr	N	Corr	N	Corr	N	Corr
K	9,319	.73	9,224	.65	9,189	.64	9,205	.54	8,956	.87
1	1,543	.80	1,531	.84	1,525	.67	1,530	.84	1,471	.92
2-3	1,770	.81	1,761	.85	1,759	.78	1,758	.87	1,649	.92
4-5	1,226	.85	1,213	.88	1,214	.79	1,213	.91	1,120	.96
6-8	1,764	.87	1,754	.86	1,751	.77	1,749	.89	1,561	.95
9-12	2,462	.92	2,455	.93	2,444	.83	2,454	.93	2,044	.97

<sup>\*</sup> Results are based on the subset of students with results for both the screener and summative assessments.

## 5.2 STUDENT PROGRESS FROM SCREENER TO SUMMATIVE

Students' progress from the time they took the screener tests to the time they took the summative tests was evaluated by the changes in scale scores and performance levels. The major confounding factor in this result is the measurement error in both assessments. Given the acceptable marginal reliability indices described in Part I, Chapter 6, and Part II, Chapter 4, Reliability, of this technical report, we can see the trend of student progress.

Figure 5.1 and Figure 5.2 show the growth of the average domain scores and composite scores, respectively. The average scale scores in the summative assessment are, in general, higher than those in the screener assessment. Since screener and summative are on the same scale, scores within the same band can be compared. In addition, Section 7 of Appendix Part II of this technical report presents a scatter plot of scale score changes from screener to summative assessments for each grade or grade band, while Section 8 summarizes a comparison of scale scores between screener and summative assessments.

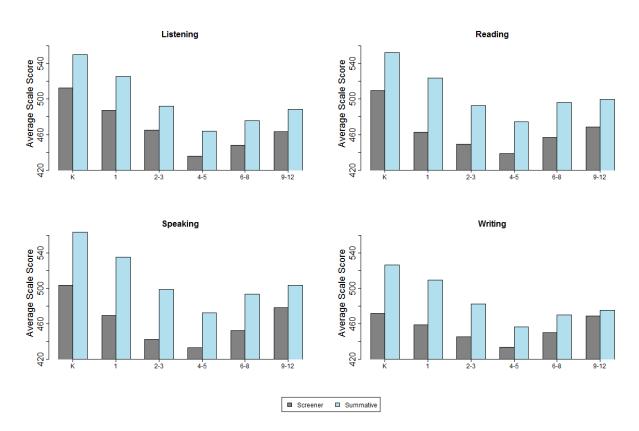


Figure 5.10 Average Domain Scale Score Progress<sup>1</sup>

Note 1. Kindergarten screener figures included both BK and K students.

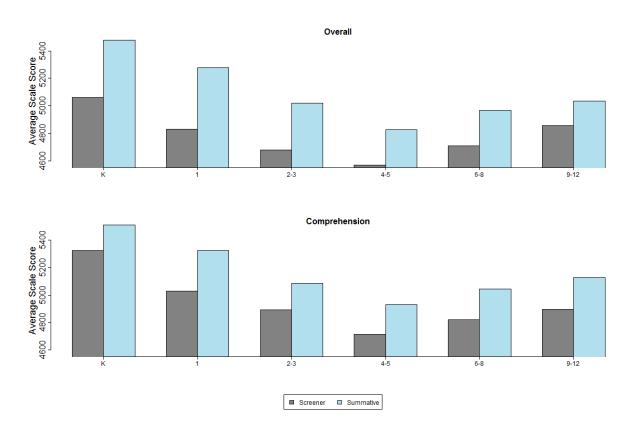


Figure 5.11 Average Overall and Comprehension Scale Score Progress<sup>1</sup>

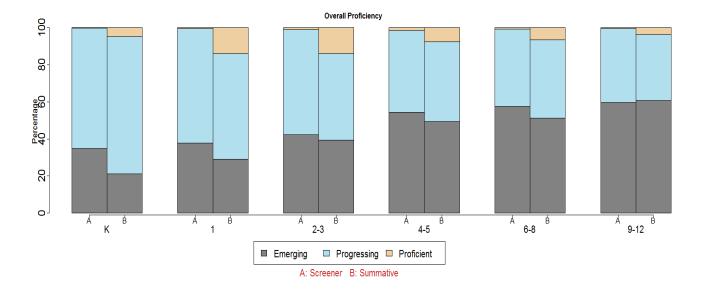
Note 1. Kindergarten screener figures included both BK and K students.

Figure 5.3 and Figure 5.4 display the percentage of students in each domain performance level and overall proficiency category, respectively. In each pair of bars, the left bar represents the screener test results and the right bar represents the corresponding summative test results. The graphs indicate that more students are in higher domain performance levels (i.e., 4 or 5) of overall proficiency categories in the summative tests when compared to the screener tests at each grade/grade band. Students who are proficient on the screener are not identified as EL and do not take the OELPA. Students who are identified have room to improve.

Listening Reading 80 8 Percentage 40 60 Percentage 20 А В 1 А В 1 А В 2-3 А В 6-8 A B А В 4-5 Speaking 80 8 Percentage 40 60 Percentage А в 2-3 А В 4-5 А В 6-8 А В 9-12  $\blacksquare$  Level 1  $\blacksquare$  Level 2  $\blacksquare$  Level 3  $\blacksquare$  Level 4  $\blacksquare$  Level 5 A: Screener B: Summative

Figure 5.12 Percentages of Domain Performance Level from Screener to Summative





# **Chapter 6. Reporting**

As with the summative tests, the screener test results are available in the Centralized Reporting System (CRS). The detailed introduction to the CRS can be found in Part I, Chapter 8, of this technical report. Figure 6.1 and Figure 6.2 show a sample page of an online score report and the individual student report for the 2021–2022 OELPS, respectively.

User: demo.user@demo.com | Role: VIEWONLY @ State: Ohio Department of Education hio Department Reporting ♣ Inbox (6) 
⑦ Help 
♣ Sign Out <u>Dashboard Selector</u> > <u>Dashboard Generator</u> > State Dashboard 4 Average Score and Performance Distribution, by Assessment: Ohio Department of Education, 2021-2022 Features & Tools Filters Filtered By School: All Schools | Test Reasons: All Test Reasons | Date Last Student Average Score Test Performance Distribution **Assessment Name** Taken Reason Count 2021-2022 10179 06/30/2022 Beginning of Kindergarten OELPS n/a (OELPS) Count 3.2K 6.1K 829 Reasons 0 2021-2022 Grade 4 OELPS 892 n/a 06/29/2022 Percent 36% 28% (OELPS) Count 2021-2022 Grade 9 OELPS 06/28/2022 1319 n/a (OELPS) Count 823 374 122 2021-2022 06/27/2022 Grade 8 OELPS 804 n/a 31% 15% Percent (OELPS) 0 2021-2022 Grade 10 OELPS 741 n/a 06/27/2022 39% 290 13% 98 (OELPS) Count 2021-2022 Grade 1 OELPS 1841 n/a 06/27/2022 Percent (OELPS) Count 642 1K 176 0 2021-2022 510 06/27/2022 Grade 11 OELPS Percent 41% 38% 22% (OELPS) 192 110 Count 2021-2022 Grade 2 OELPS 1223 06/23/2022 n/a Percent (OELPS) 17% Count 576 205 2021-2022 Grade 5 OELPS 865 n/a 06/23/2022 Percent 46% 29% 24% (OELPS) 2021-2022 760 06/23/2022 Grade 7 OELPS n/a (OELPS) Count 239 137 Copyright © 2022 Cambium Assessment, Inc. All rights reserved.

Figure 6.1 CRS Sample Page Showing State's Overall Performance by Grade

## Figure 6.14 Sample Page of an Individual Student Report



Individual Student Report

**Demo Student** 

Student ID: 999999999 | Student DOB: 9/17/2005 | Enrolled Grade: 11

Grade 10 OELPS 2021-2022

Demo District Demo School

Date Taken: 8/30/2021

Proficiency Status: Progressing

#### Proficiency Determination

Proficient - Students are Proficient when they demonstrate a level of English language skill necessary to independently produce, interpret, collaborate on, and succeed in grade-level academic tasks in English. This is indicated on the OELPS by scoring Level 4 or Level 5 in all domains. Proficient students are not identified as English Learners and do not receive English language development services.

Progressing - Students are Progressing when, with support, they are approaching a level of English language skill necessary to produce, interpret, and collaborate on grade-level academic tasks in English. This is indicated on the OELPS by scoring at least one domain score above Level 2 and at least one domain score below Level 4. These students are eligible for English language development services.

Emerging - Students are Emerging when they have not yet reached a level of English language skill necessary to produce, interpret, and collaborate on grade-level content-related academic tasks in English. This is indicated on the OELPS by scoring a Level 1 or Level 2 in listening, reading, writing, and speaking. These students are eligible for English language development services.

Proficiency Not Demonstrated - Students receive a status of Proficiency Not Demonstrated when testing is stopped due to the student not participating. State policy determines whether or not a non-participant is eligible for English language development services at school.

How Did Your Child Perform on Different Areas of the Test?







Domain	Performance	Domain Description
Listening	3	When listening, the student at Level 3 is working on: determining the meaning of general academic and content-specific words, phrases and frequently occurring expressions; demonstrating comprehension of oral presentations and exchanges of information about literary and informational texts by determining the certical idea or theme and supporting reasons, restating key ideas and information, and explaining how the theme is developed by specific details; adding information and evidence to oral exchanges.
Reading	2	When reading grade-appropriate text, the student at Level 2 is working on: identifying the meanings of key vocabulary, frequently occurring words, phrases, and expressions in literary and informational text; recognizing the main idea/argument of a text and reteiling a few key details; gathering information from provided sources and summarizing data and information.
Speaking	3	When speaking, the student at Level 3 is working on: speaking about informational and complex literary lext or delivering short oral presentations using standard language forms; recounting a sequence of events with a beginning, middle, and end, introducing and developing an informational topic with facts and details and a conclusion; participating in discussions, building on the ideas of others and expressing own ideas, asking and answering relevant questions, and restating some key ideas.
Writing	2	When writing, the student at Level 2 is working on: writing clear and coherent simple and compound sentences using common linking words; constructing written claims with some organization, supported by a reason or evidence and a concluding statement; recounting a short sequence of events in order; providing one or two facts about a topic; writing one relevant question about a prompt.

# References

Goodman, L., & Kruskal, W. (1954). Measures of association for cross classifications. *Journal of the American Statistical Association*, 49(268), 732–764.

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**Section 1: Screener Assessment - Raw Score Statistics** 

Table S1.1: Screener Raw Score Summary - Beginning of Kindergarten

Domain	Level	Step <sup>1</sup>	N	Min	Mean	Max	SD
	1	Step 2	1,989	0	2.7	5	1.3
	1	Step 3	2	6	6.5	7	0.7
	2	Step 2	1,690	3	4.8	6	0.6
Lintonino	2	Step 3	116	5	7.3	10	1.1
Listening	3	Step 2	3,299	4	5.8	6	0.4
	3	Step 3	2,301	6	10.3	13	1.4
	4	Step 3	509	10	12.2	13	0.8
	5	Step 3	478	11	12.7	13	0.5
	1	Step 2	2,365	0	2.2	5	1.1
	1	Step 3	6	4	5.0	6	0.6
	2	Step 2	2,020	2	3.6	6	0.8
<b>D</b>	2	Step 3	163	3	5.4	7	0.9
Reading	3	Step 2	2,593	3	4.6	6	0.8
	3	Step 3	1,908	3	7.0	9	1.0
	4	Step 3	642	6	8.0	9	0.8
	5	Step 3	687	7	8.5	9	0.6
	1	Step 2	3,884	0	1.7	6	1.6
	1	Step 3	32	3	4.8	6	0.8
	2	Step 2	1,964	3	5.3	7	0.8
	2	Step 3	319	5	7.3	9	0.8
Speaking	3	Step 2	1,056	6	7.1	8	0.6
	3	Step 3	1,117	7	10.0	12	1.0
	4	Step 2	74	8	8.0	8	0.0
	4	Step 3	562	10	12.0	13	0.6
	5	Step 3	1,376	11	13.6	14	0.6
	1	Step 2	5,725	0	1.5	4	1.0
	1	Step 3	1,075	0	3.6	5	1.0
	2	Step 2	1,171	3	3.6	6	0.7
Writing	2	Step 3	1,357	4	6.2	8	0.9
	3	Step 2	82	5	5.6	6	0.5
	3	Step 3	695	7	8.9	10	0.8

Domain	Level	Step <sup>1</sup>	N	Min	Mean	Max	SD
	4	Step 3	158	10	10.0	10	0.0
	5	Step 3	121	10	10.0	10	0.0
	Emerging	Step 2	3,241	0	10.0	19	3.9
	Emerging	Step 3	13	22	25.8	28	1.6
Overall	Progressing	Step 2	3,737	10	16.8	21	1.9
	Progressing	Step 3	2,502	23	34.0	43	3.8
	Proficient	Step 3	891	32	41.4	46	3.1

Note 1. The online form has three steps. Step 1 consists of practice items, while Steps 2 and 3 include operational items. A summed score is computed from all the item scores in Step 2, If this summed score is below a threshold score, the test ends. If the raw score meets or exceeds the threshold score, the test is routed to step 3, see details on p.2-5 in the screener report.

Table S1.2: Screener Raw Score Summary – Kindergarten

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	179	0	2.3	5	1.2
	2	Step 2	85	3	4.8	6	0.7
	2	Step 3	1	5	5.0	5	NA
Listening	3	Step 2	242	4	5.9	6	0.4
	3	Step 3	45	8	10.3	13	1.2
	4	Step 3	34	10	11.7	13	1.0
	5	Step 3	65	11	12.6	13	0.6
	1	Step 2	204	0	1.9	5	1.1
	2	Step 2	90	2	3.7	6	0.9
	3	Step 2	206	3	4.7	6	0.8
Reading	3	Step 3	28	5	7.1	9	1.0
	4	Step 2	6	5	5.7	6	0.5
	4	Step 3	38	6	8.0	9	0.8
	5	Step 3	79	7	8.6	9	0.6
	1	Step 2	286	0	1.1	5	1.5
	2	Step 2	89	3	5.0	7	0.8
	2	Step 3	4	6	7.0	8	0.8
	3	Step 2	99	5	6.8	8	0.7
Speaking	3	Step 3	24	8	9.5	11	0.9
	4	Step 2	32	8	8.0	8	0.0
	4	Step 3	25	10	11.4	12	0.6
	5	Step 3	92	12	13.6	14	0.6
	1	Step 2	335	0	1.4	4	1.0
	1	Step 3	4	4	4.0	4	0.0
	2	Step 2	124	3	3.7	5	0.7
	2	Step 3	23	5	6.6	8	0.8
Writing	3	Step 2	47	5	5.5	6	0.5
	3	Step 3	68	8	9.0	10	0.7
	4	Step 3	27	10	10.0	10	0.0
	5	Step 3	23	10	10.0	10	0.0
Overall	Emerging	Step 2	242	0	7.8	18	4.1

Domain	Level	Step	N	Min	Mean	Max	SD
	Progressing	Step 2	264	12	18.6	22	2.5
	Progressing	Step 3	97	32	39.3	45	3.1
	Proficient	Step 3	48	41	44.3	46	1.4

Table S1.3: Screener Raw Score Summary - Grade 1

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	505	0	3.0	6	1.4
	2	Step 2	154	4	5.5	7	0.7
	3	Step 2	511	5	7.1	8	0.8
Listening	3	Step 3	117	7	8.7	10	0.8
Listering	4	Step 2	54	7	8.0	8	0.2
	4	Step 3	190	8	10.2	11	0.7
	5	Step 2	1	8	8.0	8	NA
	5	Step 3	338	9	10.8	11	0.4
	1	Step 2	1,005	0	2.3	6	1.3
	1	Step 3	18	3	4.9	7	1.0
	2	Step 2	153	3	4.7	6	0.7
	2	Step 3	78	4	6.6	10	1.2
Reading	3	Step 2	65	4	5.8	6	0.5
	3	Step 3	222	5	8.8	12	1.3
	4	Step 2	2	6	6.0	6	0.0
	4	Step 3	133	9	10.9	13	1.1
	5	Step 3	194	10	12.1	13	0.8
	1	Step 2	1,065	0	3.4	8	3.0
	1	Step 3	95	8	11.6	13	1.2
	2	Step 2	158	8	8.0	8	0.0
	2	Step 3	168	10	13.6	15	0.8
Speaking	3	Step 2	1	8	8.0	8	NA
	3	Step 3	66	13	14.5	15	0.6
	4	Step 2	1	8	8.0	8	NA
	4	Step 3	104	14	14.9	15	0.3
	5	Step 3	212	15	15.0	15	0.0
	1	Step 2	1,116	0	2.2	5	1.2
	1	Step 3	62	3	6.2	8	1.0
Writing	2	Step 2	89	3	4.6	5	0.5
	2	Step 3	128	7	8.4	10	0.8
	3	Step 2	19	5	5.0	5	0.0

Domain	Level	Step	N	Min	Mean	Max	SD
	3	Step 3	224	8	9.8	11	0.6
	4	Step 2	1	5	5.0	5	NA
	4	Step 3	105	9	10.3	11	0.5
	5	Step 3	126	10	10.6	11	0.5
	Emerging	Step 2	649	0	9.7	23	4.8
	Progressing	Step 2	575	10	19.7	26	2.8
Overall	Progressing	Step 3	460	30	41.9	48	3.5
	Proficient	Step 2	1	27	27.0	27	NA
	Proficient	Step 3	185	44	47.9	50	1.4

Table S1.4: Screener Raw Score Summary - Grade 2

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	293	0	2.7	6	1.2
	2	Step 2	135	3	4.4	6	0.8
	3	Step 2	320	4	6.4	8	1.0
Lietonina	3	Step 3	26	6	7.6	9	0.8
Listening	4	Step 2	81	6	7.6	8	0.6
	4	Step 3	123	7	9.4	11	0.9
	5	Step 2	2	7	7.5	8	0.7
	5	Step 3	240	8	10.4	11	0.7
	1	Step 2	657	0	1.9	5	1.2
	2	Step 2	84	3	4.1	5	0.4
	2	Step 3	16	4	5.9	9	1.5
	3	Step 2	88	4	4.9	5	0.3
Reading	3	Step 3	116	5	8.3	11	1.2
	4	Step 2	1	5	5.0	5	NA
	4	Step 3	87	8	10.1	12	1.1
	5	Step 2	1	5	5.0	5	NA
	5	Step 3	170	9	11.7	13	1.1
	1	Step 2	669	0	2.4	8	2.7
	1	Step 3	10	7	8.7	10	1.1
	2	Step 2	130	6	7.6	8	0.6
	2	Step 3	43	8	10.4	12	0.8
0	3	Step 2	30	8	8.0	8	0.0
Speaking	3	Step 3	64	10	11.8	13	0.7
	4	Step 2	1	8	8.0	8	NA
	4	Step 3	64	11	12.7	14	0.7
	5	Step 2	1	8	8.0	8	NA
	5	Step 3	208	12	13.7	14	0.5
	1	Step 2	654	0	2.1	6	1.3
10/-:4:-	1	Step 3	1	5	5.0	5	NA
Writing	2	Step 2	114	3	4.6	7	0.9
	2	Step 3	29	5	6.7	8	0.7

Domain	Level	Step	N	Min	Mean	Max	SD
	3	Step 2	60	4	6.1	7	0.8
	3	Step 3	97	7	9.4	12	1.3
	4	Step 2	2	7	7.0	7	0.0
	4	Step 3	81	9	12.1	15	1.0
	5	Step 2	1	7	7.0	7	NA
	5	Step 3	181	11	14.7	17	1.3
	Emerging	Step 2	424	0	7.9	20	4.1
	Progressing	Step 2	406	8	19.4	27	3.8
Overall	Progressing	Step 3	173	28	39.7	47	3.7
	Proficient	Step 2	1	27	27.0	27	NA
	Proficient	Step 3	216	43	49.0	55	2.9

Table S1.5: Screener Raw Score Summary - Grade 3

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	263	0	2.6	5	1.2
	2	Step 2	146	3	4.6	7	0.8
	3	Step 2	199	4	6.6	8	1.0
Listening	3	Step 3	55	7	8.5	10	0.9
	4	Step 2	23	6	7.7	8	0.6
	4	Step 3	201	7	9.8	11	0.8
	5	Step 3	229	9	10.5	11	0.6
	1	Step 2	542	0	2.2	5	1.4
	1	Step 3	14	6	6.8	8	0.8
	2	Step 2	80	4	4.9	5	0.2
	2	Step 3	68	5	8.2	10	1.2
Reading	3	Step 2	9	5	5.0	5	0.0
	3	Step 3	202	7	10.2	13	1.2
	4	Step 3	81	9	11.3	13	1.0
	5	Step 3	120	11	12.4	13	0.6
	1	Step 2	561	0	2.0	8	2.5
	1	Step 3	19	8	9.4	11	0.9
	2	Step 2	56	6	7.6	8	0.7
	2	Step 3	42	9	10.9	12	0.8
Speaking	3	Step 2	13	8	8.0	8	0.0
	3	Step 3	92	11	12.0	13	0.7
	4	Step 2	1	8	8.0	8	NA
	4	Step 3	124	11	13.0	14	0.6
	5	Step 3	208	12	13.9	14	0.3
	1	Step 2	554	0	2.8	7	1.6
	1	Step 3	19	5	6.8	9	1.0
	2	Step 2	64	4	6.2	7	0.7
Writing	2	Step 3	66	7	9.1	11	1.2
	3	Step 2	13	6	6.9	7	0.3
	3	Step 3	169	9	12.0	15	1.2
	4	Step 3	86	12	14.1	16	0.8

Domain	Level	Step	N	Min	Mean	Max	SD
	5	Step 3	145	13	15.9	17	0.9
	Emerging	Step 2	407	0	8.8	23	4.2
Overell	Progressing	Step 2	224	9	20.6	27	3.3
Overall	Progressing	Step 3	303	31	43.4	51	3.8
	Proficient	Step 3	182	47	51.3	55	2.0

Table S1.6: Screener Raw Score Summary - Grade 4

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	257	0	1.8	4	1.1
	2	Step 2	69	3	4.2	6	0.7
	3	Step 2	136	4	5.5	7	0.8
Listening	3	Step 3	12	6	6.8	7	0.5
	4	Step 2	62	5	6.7	7	0.5
	4	Step 3	103	6	7.7	10	0.8
	5	Step 3	265	7	9.0	10	0.8
	1	Step 2	390	0	3.1	7	1.6
	2	Step 2	79	4	5.6	7	0.8
	2	Step 3	11	9	10.9	13	1.4
Reading	3	Step 2	55	5	7.1	9	0.9
	3	Step 3	84	11	14.6	18	1.4
	4	Step 3	99	13	16.5	20	1.4
	5	Step 3	186	15	19.5	23	1.7
	1	Step 2	375	0	1.6	7	2.1
	1	Step 3	3	7	7.0	7	0.0
	2	Step 2	57	4	6.6	8	0.9
	2	Step 3	13	8	11.4	14	1.7
Speaking	3	Step 2	79	7	7.7	8	0.4
	3	Step 3	20	11	14.4	16	1.3
	4	Step 2	13	8	8.0	8	0.0
	4	Step 3	39	15	16.6	18	1.0
	5	Step 3	305	16	20.0	21	1.2
	1	Step 2	357	0	1.2	4	1.0
	2	Step 2	84	1	3.2	6	1.0
	2	Step 3	3	7	7.3	8	0.6
Writing	3	Step 2	83	2	4.7	7	1.0
	3	Step 3	99	8	12.7	16	1.7
	4	Step 3	76	12	15.3	19	1.3
	5	Step 3	202	15	18.1	21	1.5
Overall	Emerging	Step 2	325	0	7.8	20	4.2

Domain	Level	Step	N	Min	Mean	Max	SD
	Progressing	Step 2	199	12	21.0	26	3.4
	Progressing	Step 3	124	39	53.2	61	4.9
	Proficient	Step 3	256	56	64.7	74	4.5

Table S1.7: Screener Raw Score Summary - Grade 5

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	314	0	2.1	5	1.3
	2	Step 2	81	3	4.6	6	0.7
	3	Step 2	72	4	5.8	7	0.7
Lietonina	3	Step 3	6	5	6.3	7	0.8
Listening	4	Step 2	50	6	6.8	7	0.4
	4	Step 3	103	6	7.9	10	1.0
	5	Step 2	1	7	7.0	7	NA
	5	Step 3	245	7	9.2	10	0.8
	1	Step 2	428	0	3.5	7	1.7
	2	Step 2	70	5	6.5	9	1.0
	2	Step 3	18	10	12.1	15	1.4
D. a.din.n.	3	Step 2	19	6	7.2	8	0.8
Reading	3	Step 3	108	12	15.8	20	1.5
	4	Step 3	67	15	18.0	22	1.3
	5	Step 2	1	9	9.0	9	NA
	5	Step 3	161	16	20.1	23	1.4
	1	Step 2	437	0	1.8	7	2.2
	1	Step 3	3	10	11.3	12	1.2
	2	Step 2	49	5	7.1	8	0.8
	2	Step 3	15	8	12.6	14	1.5
Speaking	3	Step 2	31	7	8.0	8	0.2
	3	Step 3	25	13	15.7	17	1.0
	4	Step 3	35	16	17.5	19	0.9
	5	Step 2	1	8	8.0	8	NA
	5	Step 3	276	15	20.2	21	1.1
	1	Step 2	373	0	1.3	5	1.2
	2	Step 2	86	1	3.6	6	1.1
Maria in a	2	Step 3	1	8	8.0	8	NA
Writing	3	Step 2	58	3	5.2	7	1.0
	3	Step 3	119	8	13.8	18	2.2
	4	Step 3	51	13	16.4	19	1.4

Domain	Level	Step	N	Min	Mean	Max	SD
	5	Step 2	1	7	7.0	7	NA
	5	Step 3	183	14	18.8	21	1.4
	Emerging	Step 2	394	0	9.2	22	4.8
	Progressing	Step 2	123	14	22.3	25	2.5
Overall	Progressing	Step 3	141	38	56.1	65	5.0
	Proficient	Step 2	1	31	31.0	31	NA
	Proficient	Step 3	213	60	67.0	75	3.5

Table S1.8: Screener Raw Score Summary - Grade 6

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	236	0	3.2	6	1.6
	2	Step 2	82	5	6.3	8	0.8
	3	Step 2	91	6	8.1	10	0.8
Lintonino	3	Step 3	5	10	11.6	14	1.5
Listening	4	Step 2	41	8	9.4	10	0.6
	4	Step 3	90	11	14.0	18	1.3
	5	Step 2	1	10	10.0	10	NA
	5	Step 3	226	12	16.1	18	1.1
	1	Step 2	353	0	1.2	4	1.0
	2	Step 2	55	2	3.7	5	0.7
	2	Step 3	6	5	5.8	7	1.0
Donding	3	Step 2	42	4	5.2	6	0.8
Reading	3	Step 3	94	6	9.0	12	1.4
	4	Step 2	1	6	6.0	6	NA
	4	Step 3	75	8	10.7	13	1.0
	5	Step 3	146	10	12.4	13	0.8
	1	Step 2	317	0	1.5	6	1.9
	1	Step 3	3	11	11.0	11	0.0
	2	Step 2	54	5	6.6	8	0.7
	2	Step 3	8	12	14.9	16	1.8
Speaking	3	Step 2	79	7	7.9	8	0.3
	3	Step 3	39	16	19.1	23	1.7
	4	Step 3	45	19	21.7	24	1.1
	5	Step 2	1	8	8.0	8	NA
	5	Step 3	226	22	26.0	27	1.2
	1	Step 2	286	0	1.9	5	1.4
	2	Step 2	77	1	3.9	6	1.1
Writin a	2	Step 3	3	12	12.3	13	0.6
Writing	3	Step 2	87	3	5.8	8	1.3
	3	Step 3	81	13	17.0	20	1.7
	4	Step 2	1	7	7.0	7	NA

Domain	Level	Step	N	Min	Mean	Max	SD
	4	Step 3	63	17	20.0	22	1.0
	5	Step 3	174	18	21.9	23	1.1
	Emerging	Step 2	302	0	8.9	21	4.6
	Progressing	Step 2	148	11	22.6	27	3.6
Overall	Progressing	Step 3	129	48	63.9	73	5.3
	Proficient	Step 2	1	31	31.0	31	NA
	Proficient	Step 3	192	66	75.1	81	3.3

Table S1.9: Screener Raw Score Summary - Grade 7

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	310	0	3.6	7	1.7
	2	Step 2	68	5	7.4	10	1.0
	2	Step 3	4	9	10.5	12	1.7
Listening	3	Step 2	67	7	8.8	10	0.9
	3	Step 3	69	10	13.7	17	1.5
	4	Step 3	77	12	15.3	18	1.2
	5	Step 3	161	14	16.3	18	1.1
	1	Step 2	371	0	1.3	5	1.1
	1	Step 3	3	5	5.7	6	0.6
	2	Step 2	62	3	4.7	6	0.7
D. a. dina n	2	Step 3	35	5	7.9	10	1.3
Reading	3	Step 2	12	6	6.0	6	0.0
	3	Step 3	119	7	10.3	13	1.3
	4	Step 3	61	10	12.0	13	0.8
	5	Step 3	93	11	12.7	13	0.5
	1	Step 2	348	0	1.6	7	2.1
	1	Step 3	4	8	11.0	13	2.2
	2	Step 2	61	5	7.0	8	0.7
Speaking	2	Step 3	13	12	15.5	19	1.9
Speaking	3	Step 2	36	7	8.0	8	0.2
	3	Step 3	52	17	20.4	23	1.5
	4	Step 3	47	21	23.0	25	0.9
	5	Step 3	195	22	26.2	27	1.1
	1	Step 2	359	0	2.2	6	1.6
	1	Step 3	5	8	10.8	14	2.3
	2	Step 2	75	3	5.8	9	1.3
M/vitin a	2	Step 3	25	12	15.2	18	1.7
Writing	3	Step 2	11	6	7.9	9	1.0
	3	Step 3	110	14	19.3	22	1.3
	4	Step 3	35	20	20.9	22	0.6
	5	Step 3	136	20	22.3	23	0.8

Domain	Level	Step	N	Min	Mean	Max	SD
	Emerging	Step 2	367	0	10.0	26	5.8
	Emerging	Step 3	3	44	45.3	48	2.3
Overall	Progressing	Step 2	78	18	25.1	27	2.0
	Progressing	Step 3	168	43	66.4	77	5.9
	Proficient	Step 3	140	70	76.8	81	2.4

Table S1.10: Screener Raw Score Summary - Grade 8

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	373	0	3.9	7	1.7
	2	Step 2	79	5	7.3	9	0.8
	2	Step 3	3	10	12.0	13	1.7
Listening	3	Step 2	48	8	8.8	10	0.7
	3	Step 3	72	10	14.4	17	1.4
	4	Step 3	82	12	15.6	18	1.1
	5	Step 3	153	13	16.7	18	1.0
	1	Step 2	446	0	1.5	5	1.2
	1	Step 3	2	5	6.0	7	1.4
	2	Step 2	53	4	5.1	6	0.6
Donalis s	2	Step 3	42	5	8.5	11	1.2
Reading	3	Step 2	1	6	6.0	6	NA
	3	Step 3	147	8	11.2	13	1.1
	4	Step 3	46	11	12.4	13	0.6
	5	Step 3	73	12	12.9	13	0.3
	1	Step 2	408	0	1.3	7	1.9
	1	Step 3	5	7	9.4	12	2.4
	2	Step 2	58	5	7.1	8	0.8
Speaking	2	Step 3	17	13	15.7	18	1.8
Speaking	3	Step 2	34	8	8.0	8	0.0
	3	Step 3	63	17	20.6	24	1.6
	4	Step 3	43	20	23.6	25	1.0
	5	Step 3	182	22	26.2	27	1.0
	1	Step 2	437	0	2.3	7	1.6
	1	Step 3	4	7	10.0	13	2.9
	2	Step 2	60	4	6.5	9	1.2
M/vitin a	2	Step 3	33	13	16.0	18	1.5
Writing	3	Step 2	3	8	8.3	9	0.6
	3	Step 3	113	16	19.8	22	1.4
	4	Step 3	42	21	21.6	23	0.7
	5	Step 3	118	21	22.6	23	0.6

Domain	Level	Step	N	Min	Mean	Max	SD
	Emerging	Step 2	436	0	10.1	26	5.6
	Emerging	Step 3	3	34	47.7	57	12.1
Overall	Progressing	Step 2	64	20	25.1	27	1.8
	Progressing	Step 3	190	46	68.1	78	6.0
	Proficient	Step 3	117	73	78.2	81	2.0

Table S1.11: Screener Raw Score Summary - Grade 9

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	755	0	3.3	9	2.0
	2	Step 2	109	5	8.1	10	1.0
	3	Step 2	153	7	10.3	12	1.0
Listening	3	Step 3	64	13	15.5	18	1.2
	4	Step 2	3	12	12.0	12	0.0
	4	Step 3	75	15	16.8	18	0.8
	5	Step 3	182	16	17.6	18	0.6
	1	Step 2	843	0	1.9	6	1.5
	2	Step 2	107	3	5.6	7	0.8
	2	Step 3	24	7	9.8	12	1.2
Reading	3	Step 2	70	5	6.7	7	0.5
	3	Step 3	159	9	13.0	17	1.7
	4	Step 3	58	13	15.1	17	0.9
	5	Step 3	80	14	16.0	17	0.7
	1	Step 2	751	0	0.9	5	1.5
	2	Step 2	161	4	5.7	7	0.8
	2	Step 3	10	11	14.9	17	1.9
Speaking	3	Step 2	108	6	7.7	8	0.6
	3	Step 3	49	17	20.9	23	1.6
	4	Step 3	41	22	23.7	25	0.8
	5	Step 3	221	24	26.2	27	0.9
	1	Step 2	841	0	0.6	3	0.7
	1	Step 3	5	6	8.8	10	1.6
	2	Step 2	113	0	1.7	3	0.7
<b>NA</b> 242	2	Step 3	28	10	12.6	15	1.4
Writing	3	Step 2	66	0	2.4	3	0.7
	3	Step 3	111	13	16.3	19	1.4
	4	Step 3	46	14	18.2	19	0.9
	5	Step 3	131	17	19.4	20	0.7
	Emerging	Step 2	834	0	7.9	24	5.2
Overall	Progressing	Step 2	186	12	23.5	26	2.9

Domain	Level	Step	N	Min	Mean	Max	SD
	Progressing	Step 3	193	49	69.3	78	6.0
	Proficient	Step 3	128	75	78.8	82	1.8

Table S1.12: Screener Raw Score Summary - Grade 10

Domain	Level	Step	N	Min	Mean	Max	SD
Listening	1	Step 2	301	0	3.6	9	2.0
	2	Step 2	75	5	8.4	11	1.0
	2	Step 3	1	12	12.0	12	NA
	3	Step 2	115	8	10.2	12	0.9
	3	Step 3	45	14	15.7	18	1.0
	4	Step 2	3	12	12.0	12	0.0
	4	Step 3	74	15	16.9	18	0.8
	5	Step 3	139	16	17.7	18	0.5
	1	Step 2	372	0	2.1	6	1.5
	1	Step 3	1	7	7.0	7	NA
	2	Step 2	93	4	5.5	7	0.8
<b>D</b>	2	Step 3	18	7	9.2	11	1.2
Reading	3	Step 2	29	5	6.5	7	0.6
	3	Step 3	130	9	13.2	17	1.5
	4	Step 3	47	14	15.3	17	1.0
	5	Step 3	63	14	16.2	17	0.7
	1	Step 2	334	0	1.2	5	1.7
	1	Step 3	2	8	8.5	9	0.7
	2	Step 2	85	4	5.7	7	0.9
011	2	Step 3	4	14	15.0	16	0.8
Speaking	3	Step 2	75	6	7.6	8	0.6
	3	Step 3	32	18	20.9	23	1.7
	4	Step 3	44	21	23.6	25	0.9
	5	Step 3	177	24	26.3	27	0.8
Writing	1	Step 2	362	0	0.7	3	0.7
	1	Step 3	3	2	6.7	11	4.5
	2	Step 2	99	0	1.7	3	0.7
	2	Step 3	15	10	12.6	15	1.4
	3	Step 2	33	1	2.2	3	0.7
	3	Step 3	105	13	16.1	19	1.2
	4	Step 3	41	16	18.1	20	0.7

Domain	Level	Step	N	Min	Mean	Max	SD
	5	Step 3	95	18	19.5	20	0.6
Overall	Emerging	Step 2	361	0	9.1	22	5.5
	Emerging	Step 3	1	29	29.0	29	NA
	Progressing	Step 2	133	14	23.1	26	2.4
	Progressing	Step 3	160	44	70.2	78	5.8
	Proficient	Step 3	98	74	79.0	82	2.0

Table S1.13: Screener Raw Score Summary - Grade 11

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	162	0	4.1	8	1.9
	2	Step 2	60	6	8.0	11	1.1
	3	Step 2	72	8	10.3	12	1.0
Listening	3	Step 3	43	12	15.5	17	1.1
	4	Step 2	1	12	12.0	12	NA
	4	Step 3	52	15	16.8	18	0.9
	5	Step 3	137	16	17.7	18	0.5
	1	Step 2	206	0	2.4	6	1.5
	2	Step 2	69	4	5.7	7	0.8
	2	Step 3	18	7	9.4	12	1.3
Reading	3	Step 2	20	6	6.6	7	0.5
	3	Step 3	94	10	13.2	16	1.5
	4	Step 3	44	13	15.2	17	1.0
	5	Step 3	76	15	16.2	17	0.7
	1	Step 2	180	0	1.6	5	1.7
	1	Step 3	3	7	7.3	8	0.6
	2	Step 2	68	4	5.7	7	0.9
Consisten	2	Step 3	1	15	15.0	15	NA
Speaking	3	Step 2	47	6	7.6	8	0.6
	3	Step 3	29	17	21.0	24	1.7
	4	Step 3	20	22	23.7	25	1.0
	5	Step 3	179	22	26.4	27	0.9
	1	Step 2	203	0	0.6	3	0.7
	1	Step 3	1	6	6.0	6	NA
	2	Step 2	64	0	1.8	3	0.7
\ <b>\</b> \_'\!\	2	Step 3	10	12	13.3	15	0.9
Writing	3	Step 2	28	1	2.3	3	0.6
	3	Step 3	86	11	16.0	20	1.7
	4	Step 3	33	16	18.0	19	1.0
	5	Step 3	102	15	19.4	20	0.8
Overall	Emerging	Step 2	212	0	11.0	23	5.6

Domain	Level	Step	N	Min	Mean	Max	SD
	Progressing	Step 2	83	16	23.4	26	2.5
	Progressing	Step 3	118	51	69.6	79	5.7
	Proficient	Step 3	114	73	78.9	82	2.0

Table S1.14: Screener Raw Score Summary - Grade 12

Domain	Level	Step	N	Min	Mean	Max	SD
	1	Step 2	56	0	4.1	8	2.2
	2	Step 2	35	7	8.1	10	0.9
	3	Step 2	39	8	10.2	12	1.0
Listening	3	Step 3	13	13	15.1	17	1.1
	4	Step 2	2	12	12.0	12	0.0
	4	Step 3	35	14	16.9	18	1.1
	5	Step 3	90	16	17.7	18	0.6
	1	Step 2	83	0	2.7	6	1.7
	2	Step 2	35	4	5.8	7	0.7
	2	Step 3	2	9	10.0	11	1.4
Reading	3	Step 2	14	6	6.9	7	0.4
	3	Step 3	61	9	13.1	17	1.7
	4	Step 3	30	13	15.2	17	0.9
	5	Step 3	45	14	16.1	17	0.7
	1	Step 2	69	0	1.9	5	1.7
	2	Step 2	38	4	5.6	7	0.9
	2	Step 3	2	16	16.5	17	0.7
Speaking	3	Step 2	25	6	7.6	8	0.6
	3	Step 3	11	16	20.4	22	2.0
	4	Step 3	16	22	23.6	25	0.9
	5	Step 3	109	22	26.4	27	0.9
	1	Step 2	85	0	0.7	3	0.8
	2	Step 2	27	0	1.7	3	0.8
	2	Step 3	4	11	12.5	14	1.3
Writing	3	Step 2	20	1	2.4	3	0.7
	3	Step 3	49	13	16.3	19	1.2
	4	Step 3	20	16	18.2	19	0.9
	5	Step 3	65	17	19.3	20	0.8
	Emerging	Step 2	85	0	12.0	22	6.0
Overall	Progressing	Step 2	47	18	23.7	26	2.2
	Progressing	Step 3	70	56	71.3	78	4.4

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Domain	Level	Step	N	Min	Mean	Max	SD
	Proficient	Step 3	68	74	78.9	82	1.9

**Section 2: Screener Assessment - Raw Score Distributions** 

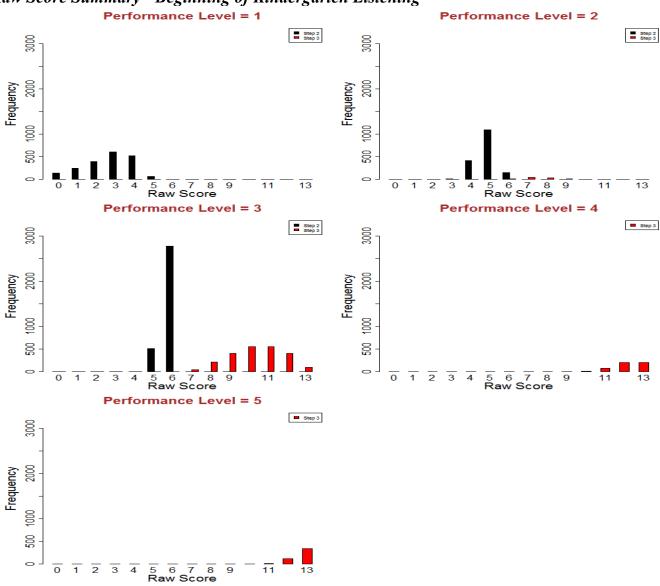


Figure S2.1: Screener Raw Score Summary - Beginning of Kindergarten Listening

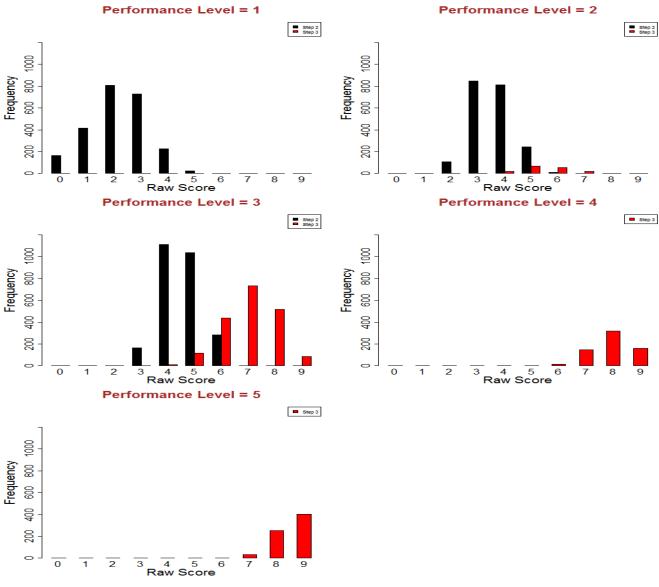


Figure S2.2: Screener Raw Score Summary - Beginning of Kindergarten Reading

Performance Level = 1 Performance Level = 2 Step 2
Step 3 Step 2
Step 3 1500 1500 Frequency Frequency 1000 5 6 7 8 9 Raw Score 13 0 1 2 3 5 6 7 8 9 Raw Score 13 Performance Level = 3 Performance Level = 4 Step 2
Step 3 Step 2
Step 3 1500 1500 Frequency 1000 Frequency 200 0 1 2 3 5 6 7 8 9 Raw Score 5 6 7 8 9 Raw Score 4 13 2 3 4 11 Performance Level = 5 Step 3 1500 Frequency 1000 200 5 6 7 8 9 Raw Score  $\overline{\mathbf{o}}$ 2 3 4 5 6 11

Figure S2.3: Screener Raw Score Summary - Beginning of Kindergarten Speaking

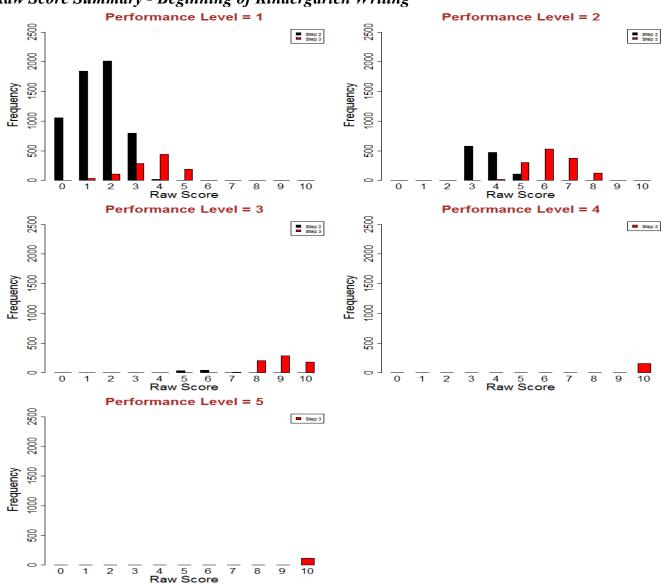


Figure S2.4: Screener Raw Score Summary - Beginning of Kindergarten Writing

Figure S2.5: Screener Raw Score Summary - Beginning of Kindergarten Overall

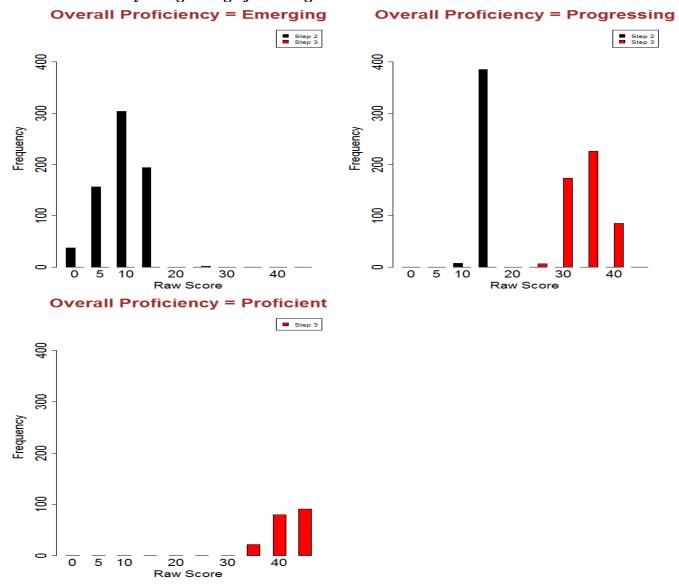


Figure S2.6: Screener Raw Score Summary - Kindergarten Listening

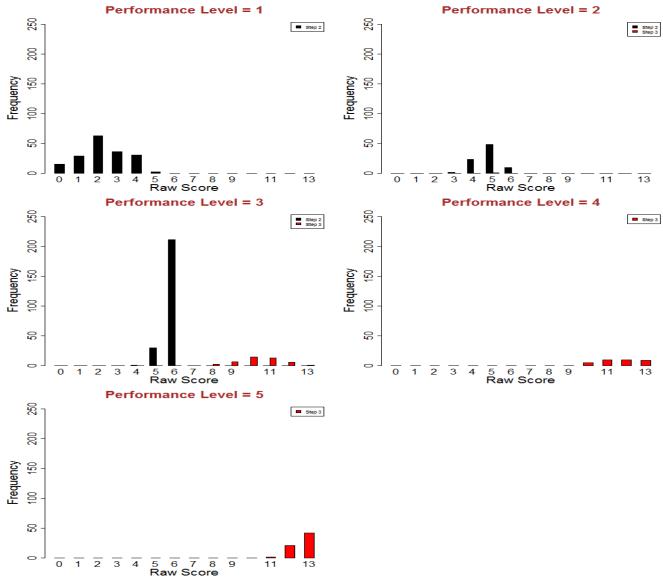


Figure S2.7: Screener Raw Score Summary - Kindergarten Reading

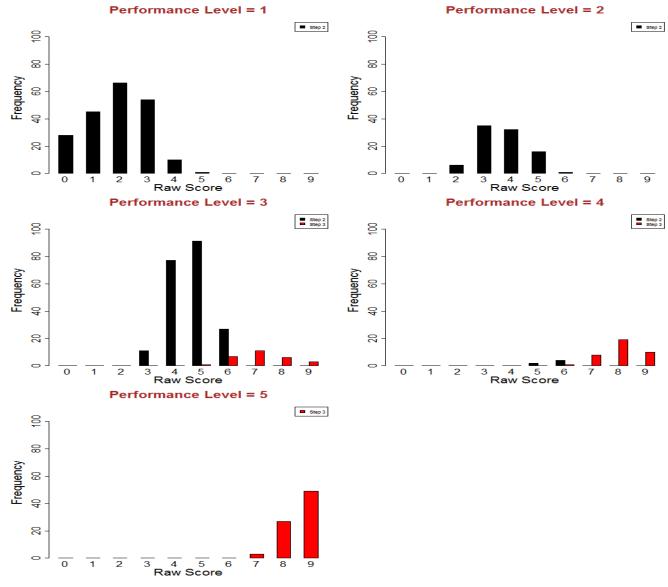


Figure S2.8: Screener Raw Score Summary - Kindergarten Speaking

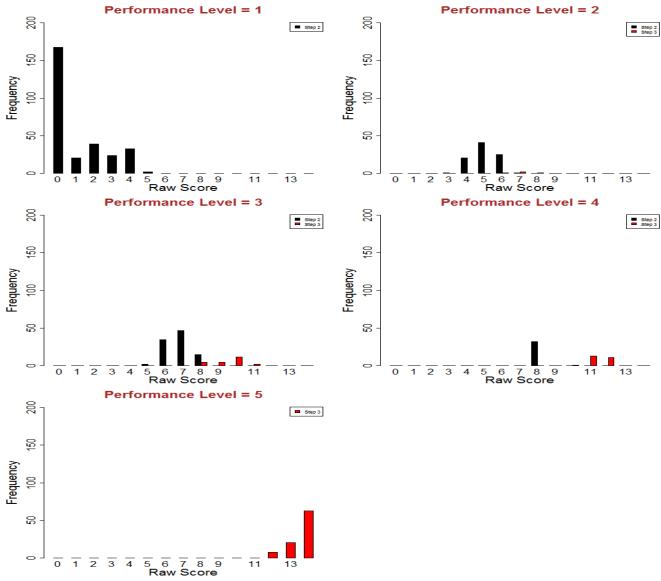


Figure S2.9: Screener Raw Score Summary - Kindergarten Writing

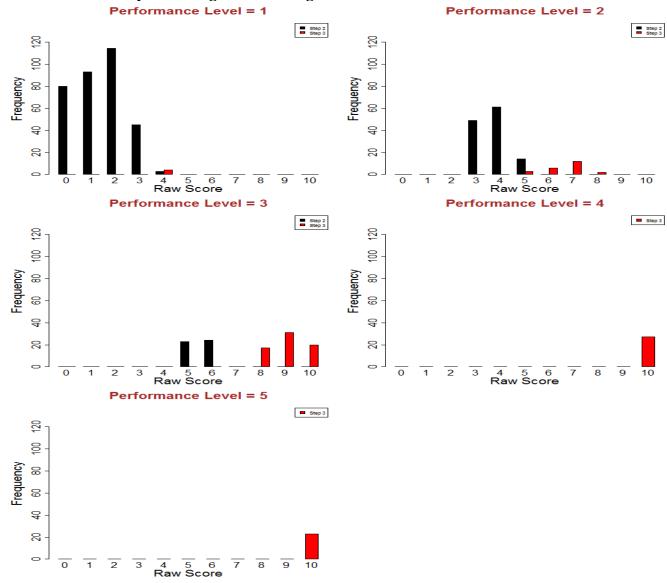
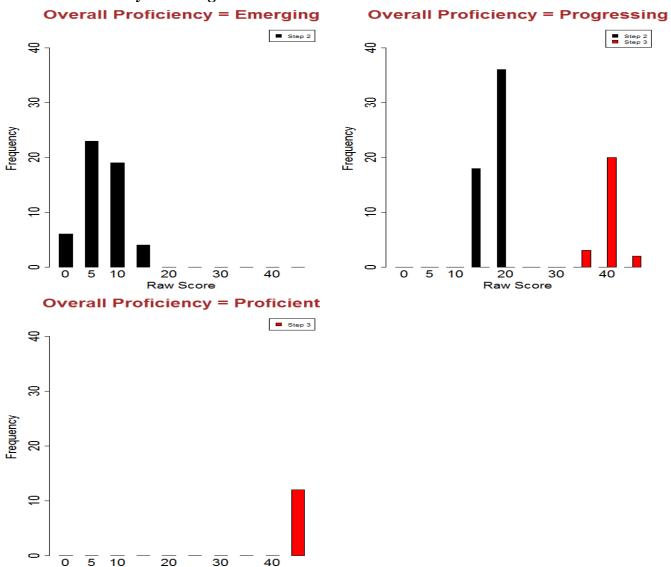


Figure S2.10: Screener Raw Score Summary - Kindergarten Overall



Raw Score

Figure S2.11: Screener Raw Score Summary - Grade 1 Listening

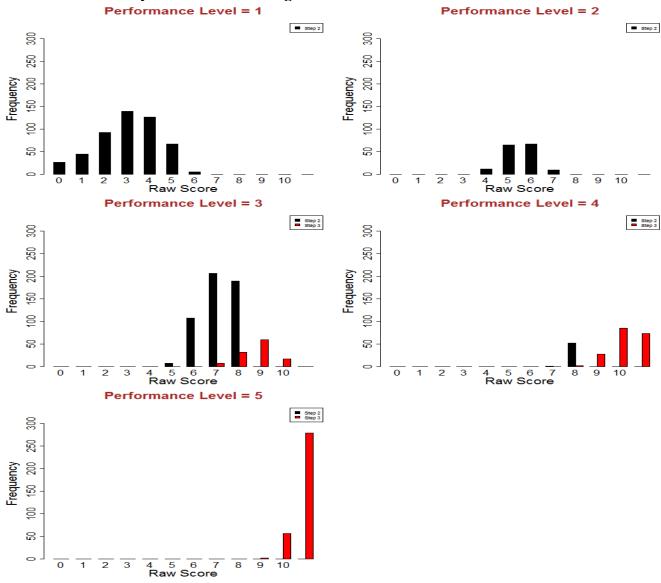


Figure S2.12: Screener Raw Score Summary - Grade 1 Reading

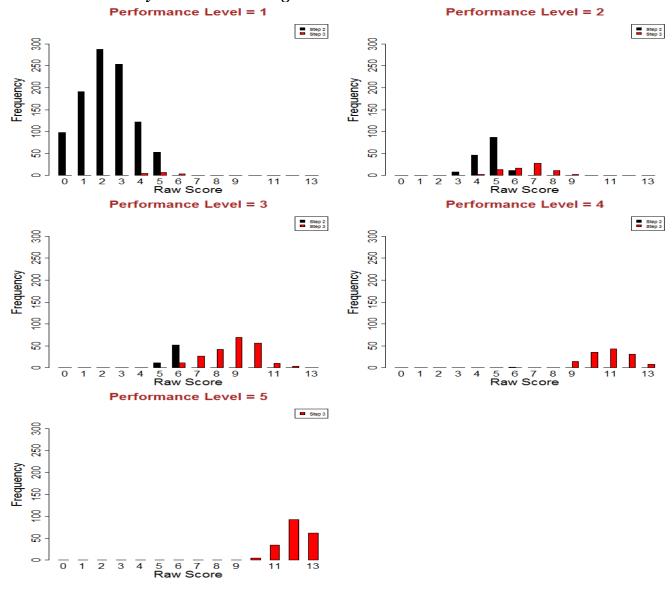


Figure S2.13: Screener Raw Score Summary - Grade 1 Speaking

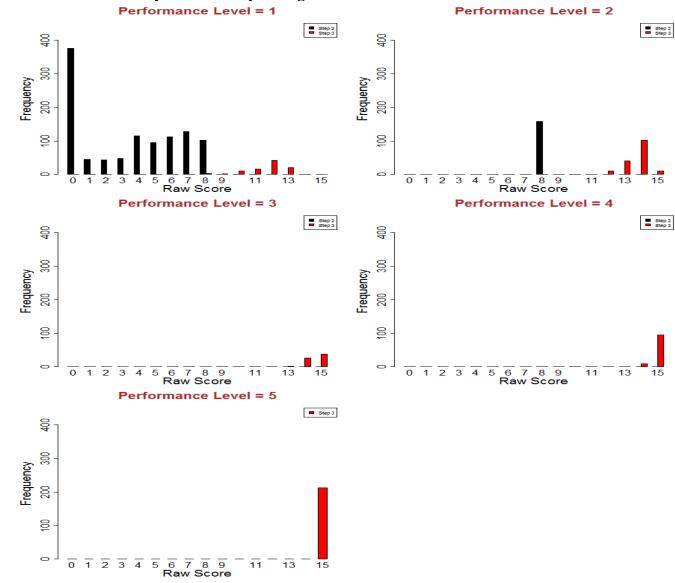


Figure S2.14: Screener Raw Score Summary - Grade 1 Writing

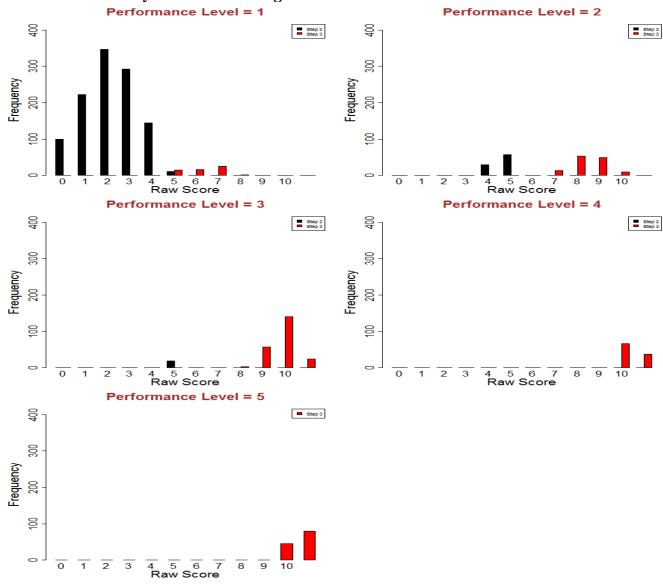


Figure S2.15: Screener Raw Score Summary - Grade 1 Overall

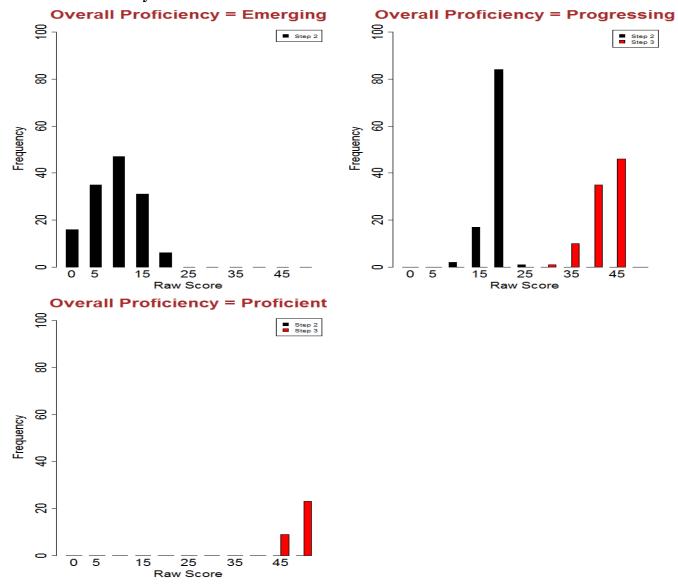


Figure S2.16: Screener Raw Score Summary - Grade 2 Listening

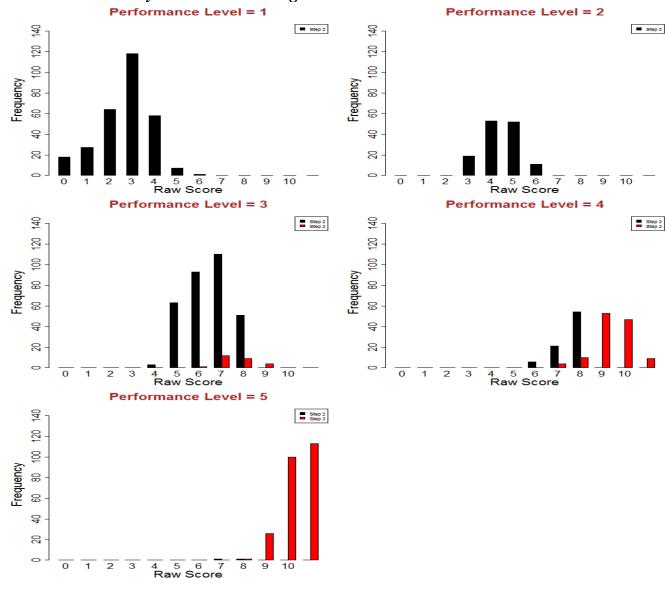


Figure S2.17: Screener Raw Score Summary - Grade 2 Reading

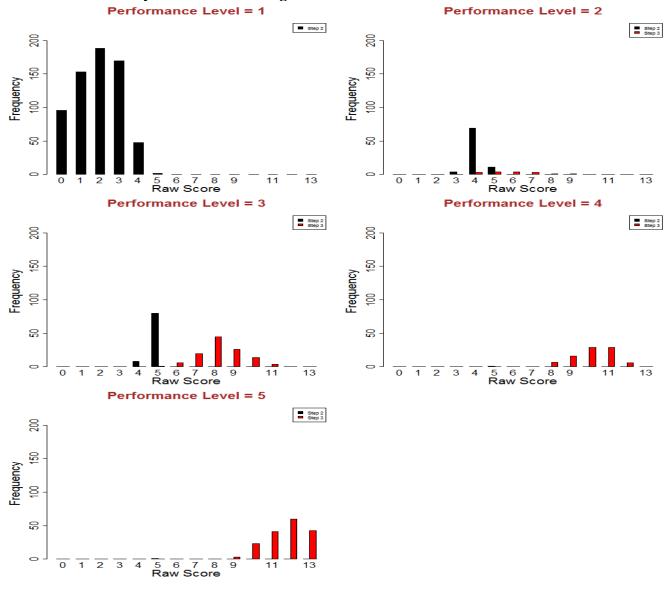


Figure S2.18: Screener Raw Score Summary - Grade 2 Speaking

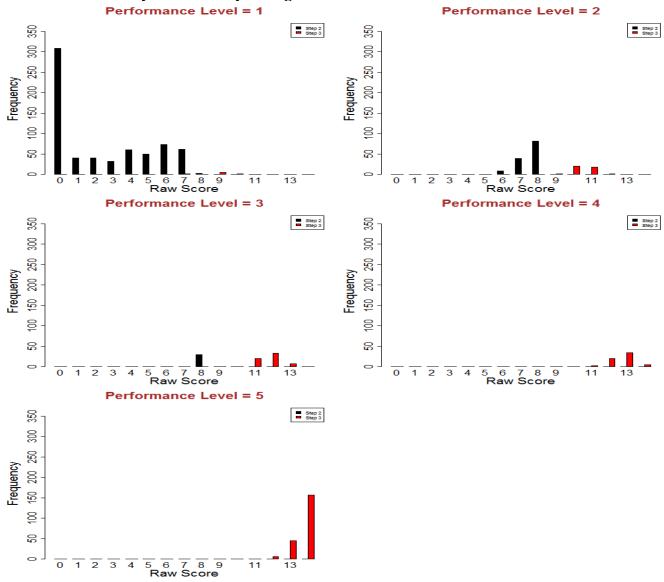


Figure S2.19: Screener Raw Score Summary - Grade 2 Writing

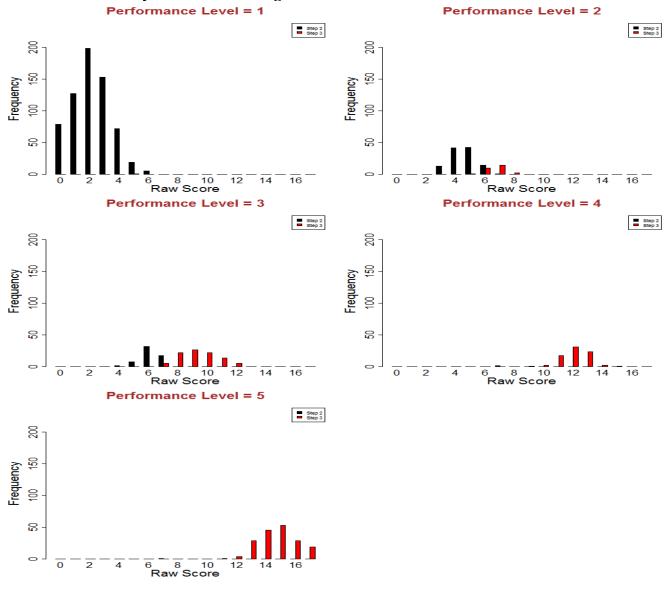


Figure S2.20: Screener Raw Score Summary - Grade 2 Overall

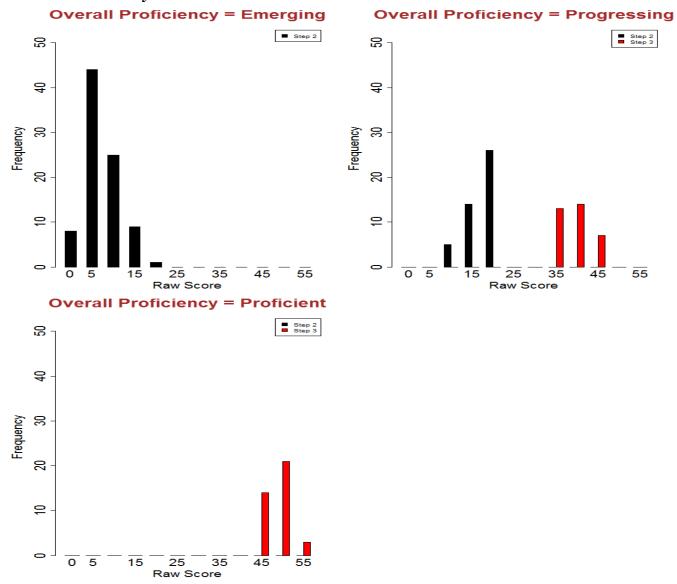


Figure S2.21: Screener Raw Score Summary - Grade 3 Listening

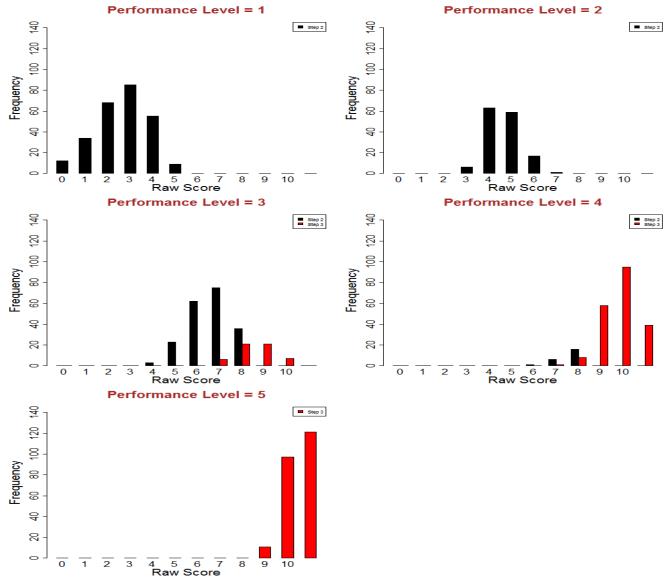


Figure S2.22: Screener Raw Score Summary - Grade 3 Reading

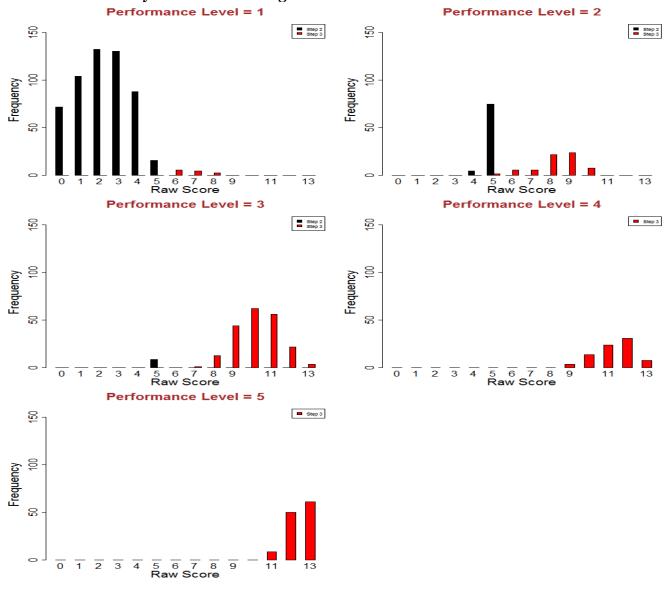


Figure S2.23: Screener Raw Score Summary - Grade 3 Speaking

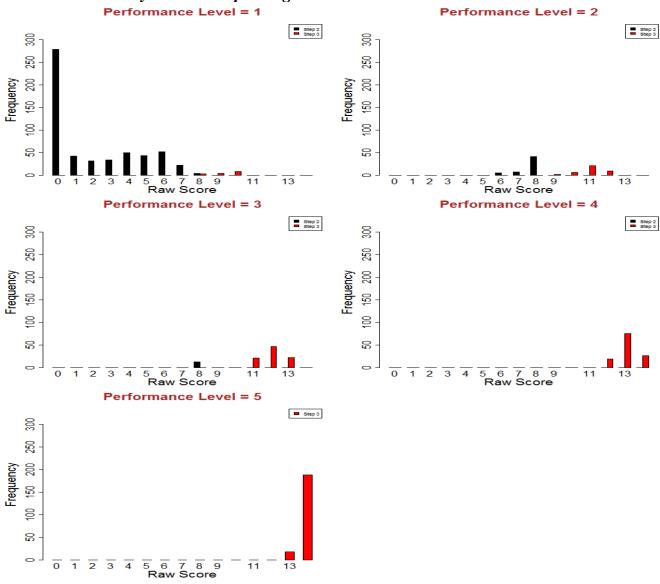


Figure S2.24: Screener Raw Score Summary - Grade 3 Writing

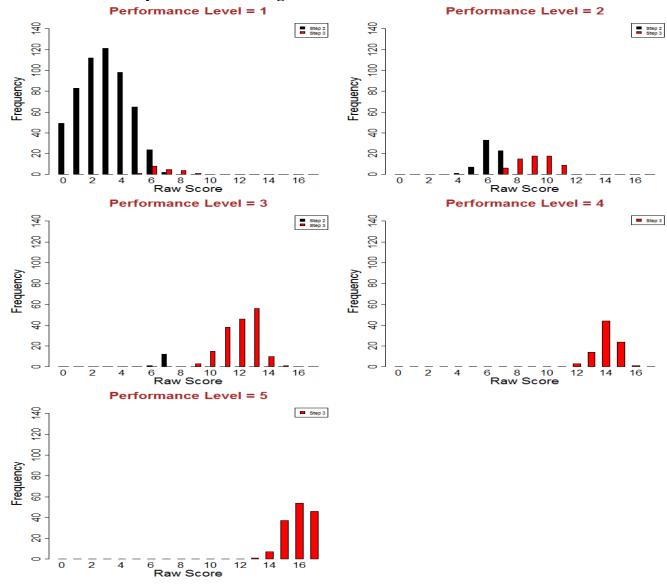


Figure S2.25: Screener Raw Score Summary - Grade 3 Overall

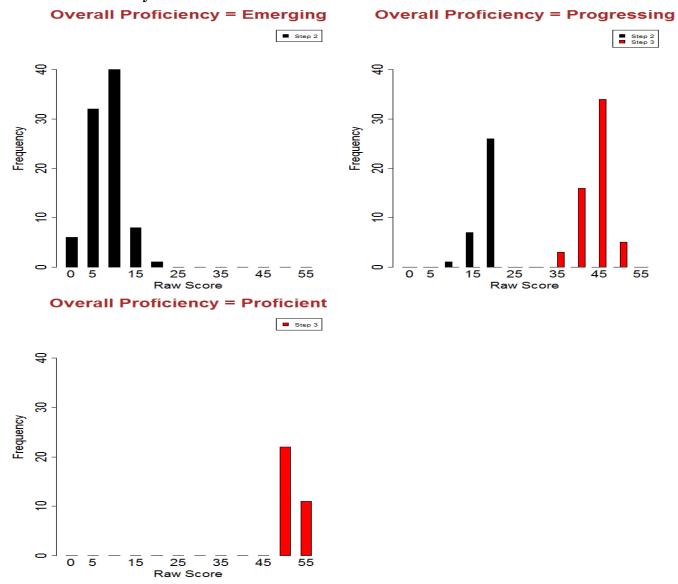


Figure S2.26: Screener Raw Score Summary - Grade 4 Listening

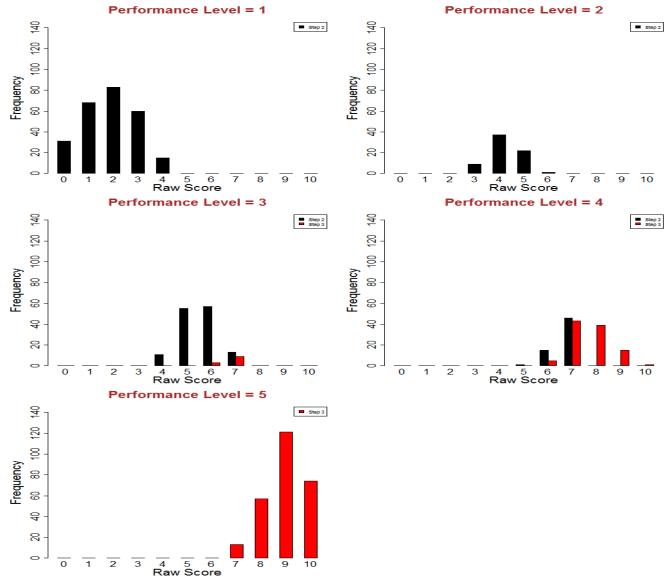


Figure S2.27: Screener Raw Score Summary - Grade 4 Reading

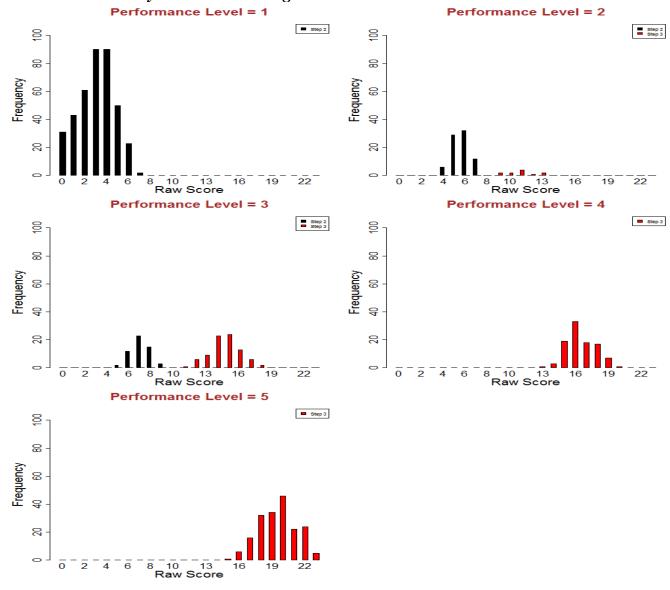


Figure S2.28: Screener Raw Score Summary - Grade 4 Speaking

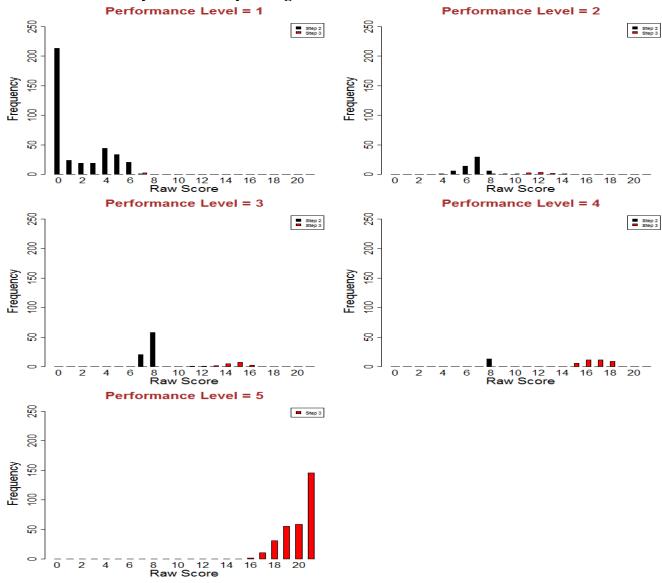


Figure S2.29: Screener Raw Score Summary - Grade 4 Writing

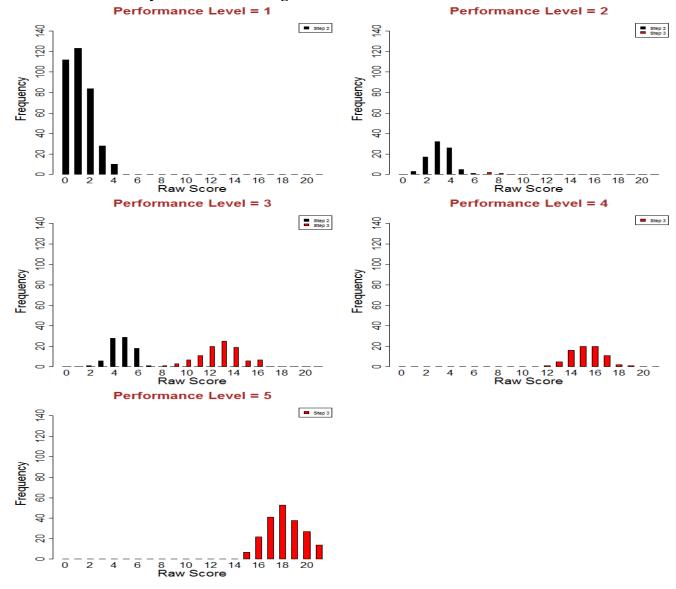


Figure S2.30: Screener Raw Score Summary - Grade 4 Overall

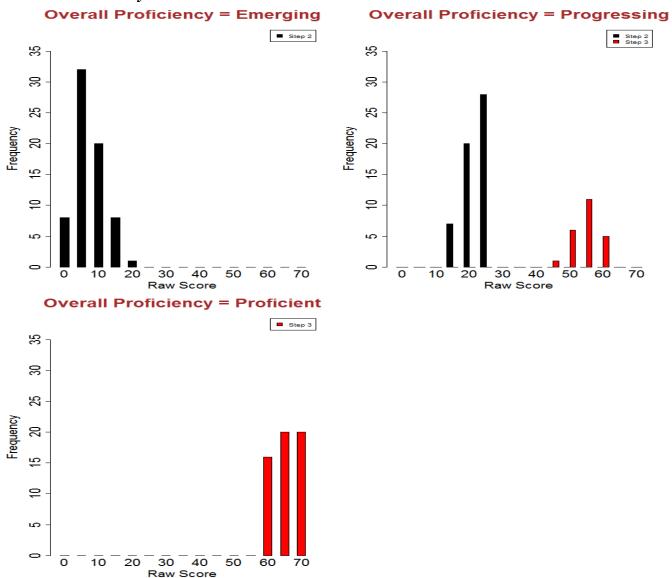


Figure S2.31: Screener Raw Score Summary - Grade 5 Listening

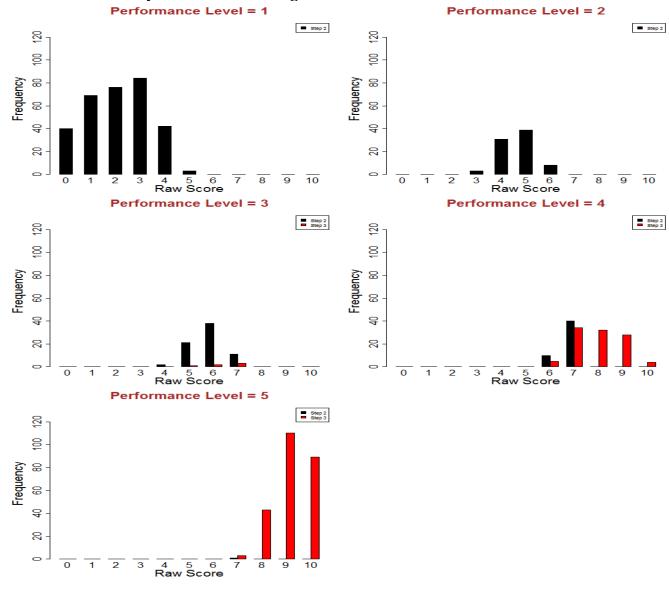


Figure S2.32: Screener Raw Score Summary - Grade 5 Reading

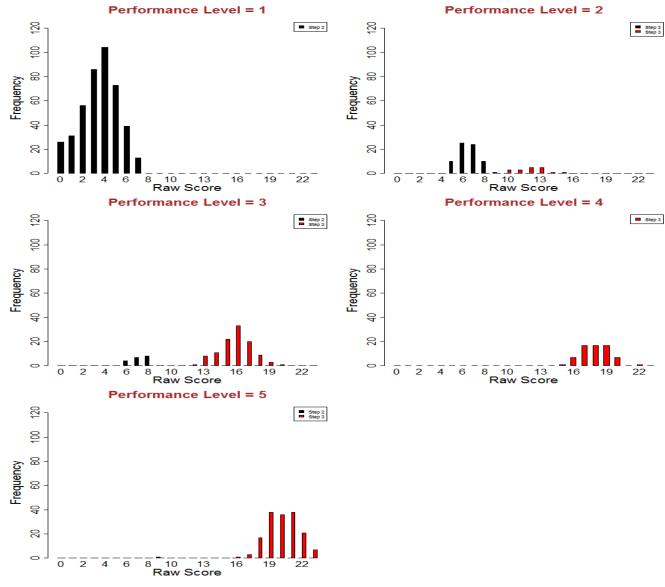


Figure S2.33: Screener Raw Score Summary - Grade 5 Speaking

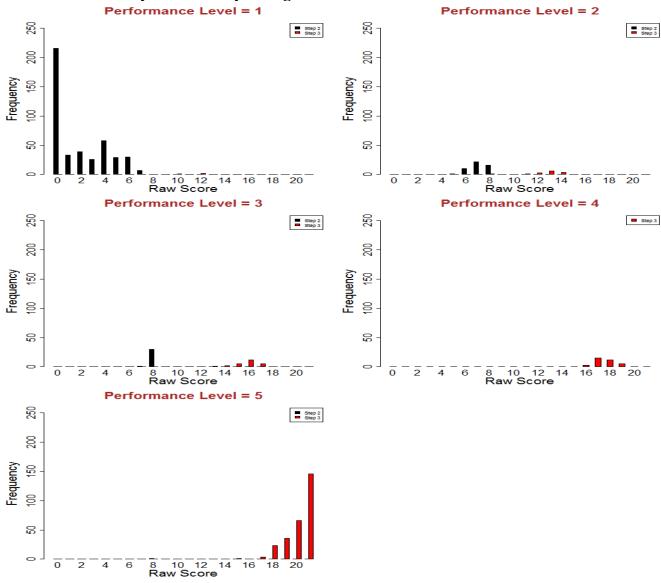


Figure S2.34: Screener Raw Score Summary - Grade 5 Writing

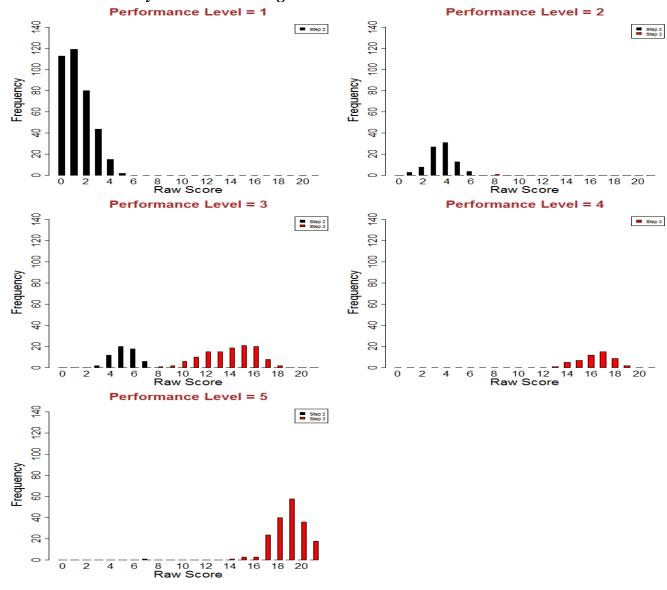


Figure S2.35: Screener Raw Score Summary - Grade 5 Overall

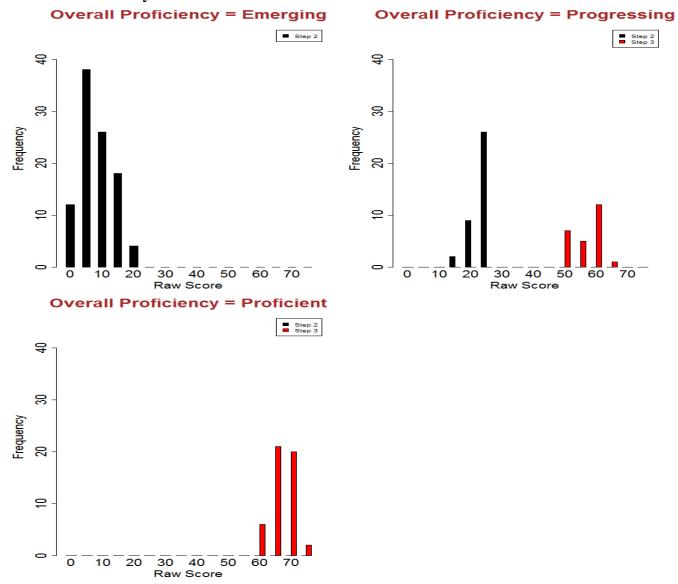


Figure S2.36: Screener Raw Score Summary - Grade 6 Listening

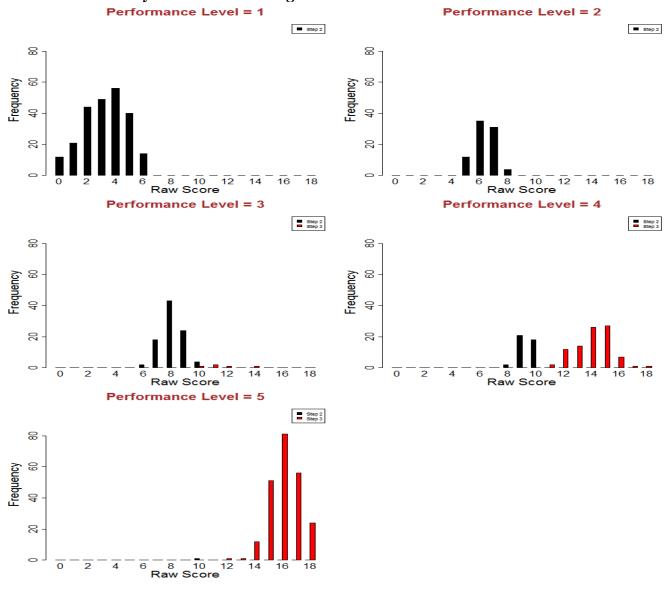


Figure S2.37: Screener Raw Score Summary - Grade 6 Reading

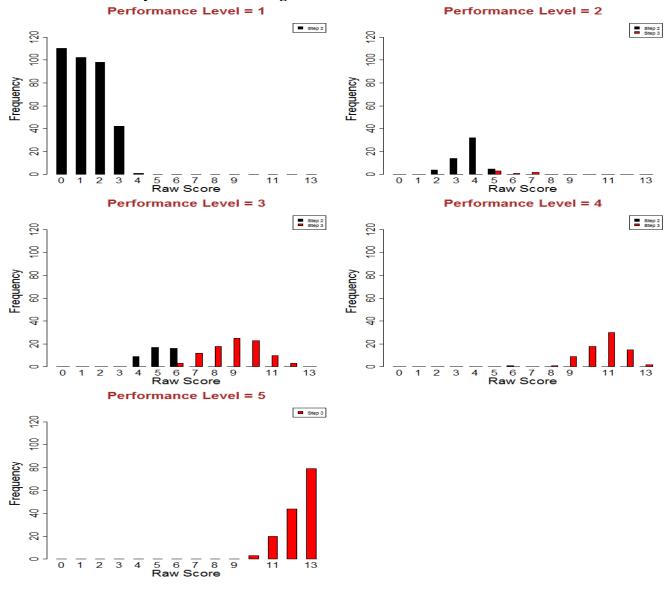


Figure S2.38: Screener Raw Score Summary - Grade 6 Speaking

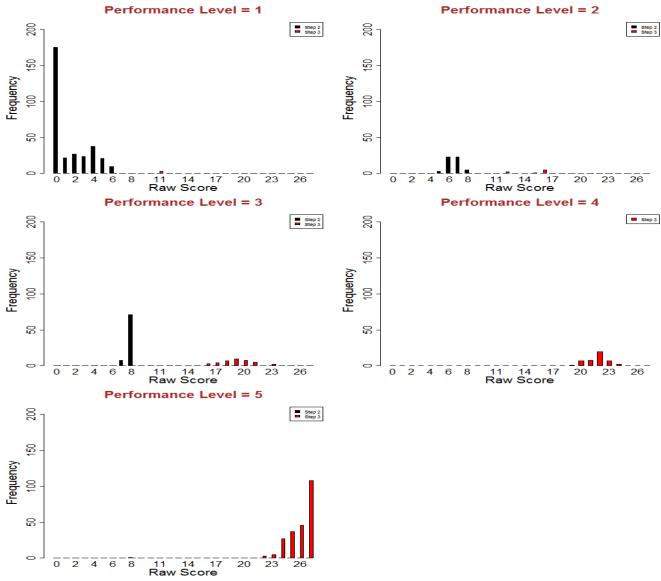


Figure S2.39: Screener Raw Score Summary - Grade 6 Writing

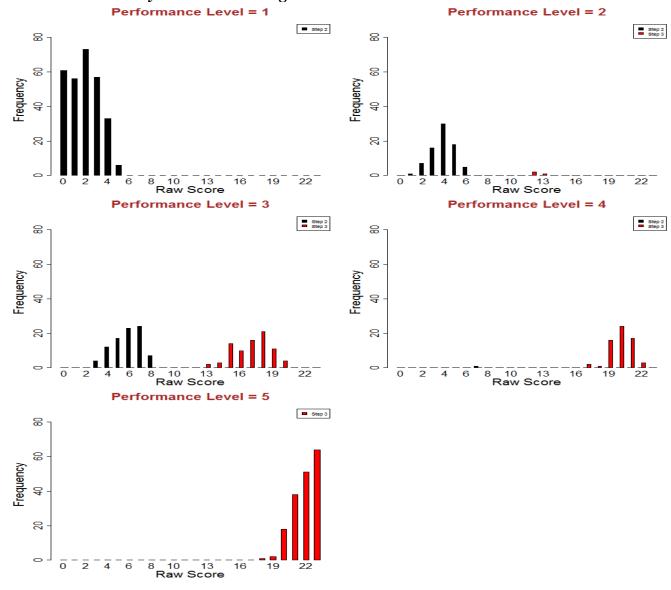


Figure S2.40: Screener Raw Score Summary - Grade 6 Overall

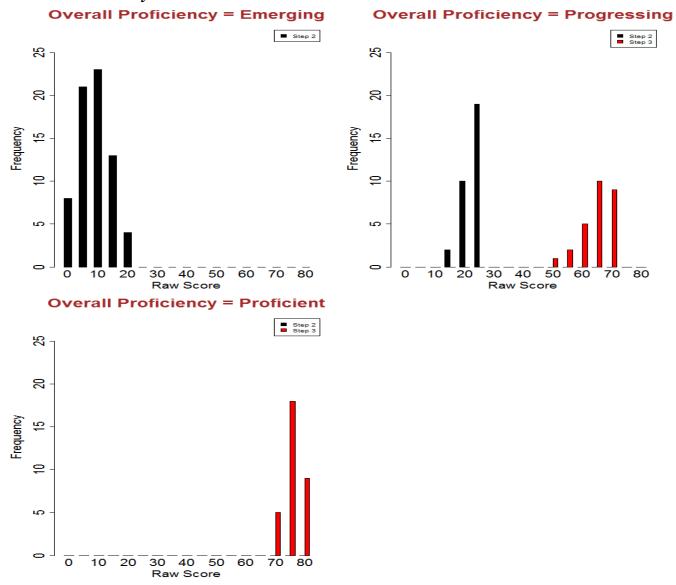


Figure S2.41: Screener Raw Score Summary - Grade 7 Listening

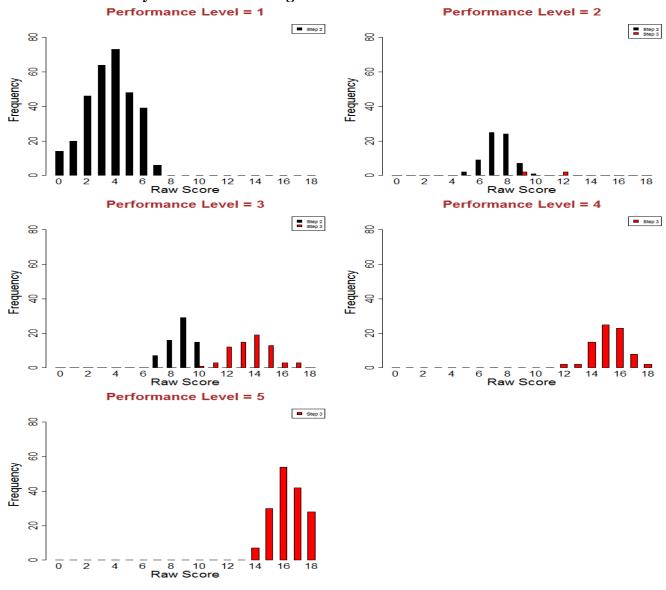


Figure S2.42: Screener Raw Score Summary - Grade 7 Reading

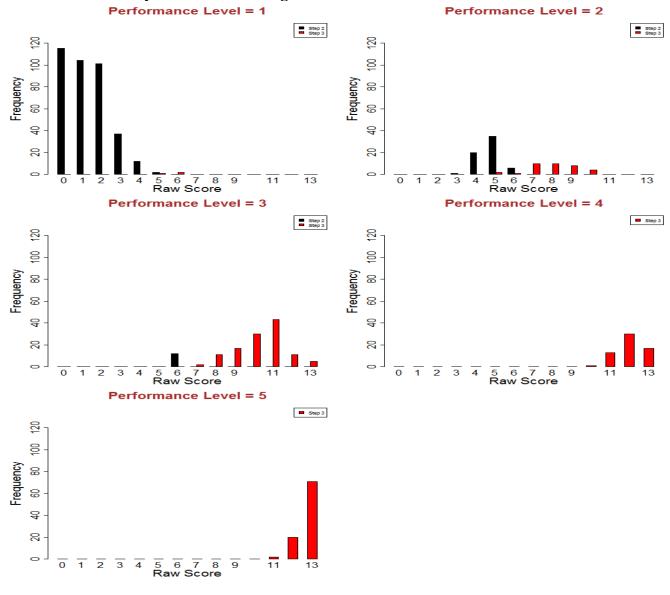


Figure S2.43: Screener Raw Score Summary - Grade 7 Speaking

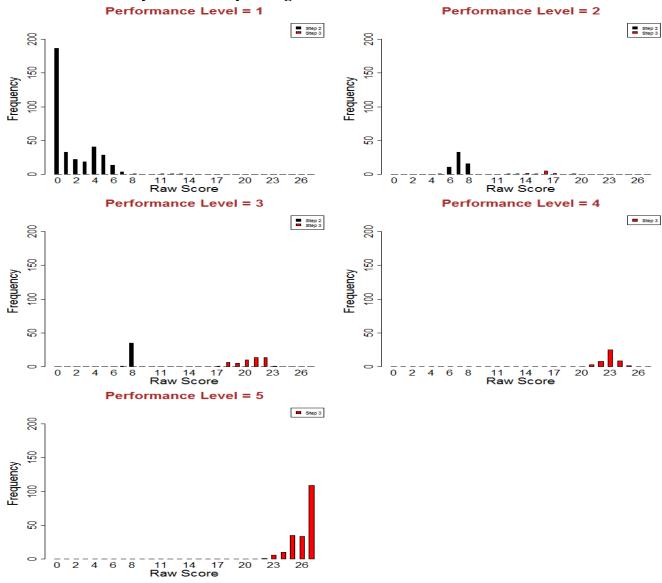


Figure S2.44: Screener Raw Score Summary - Grade 7 Writing

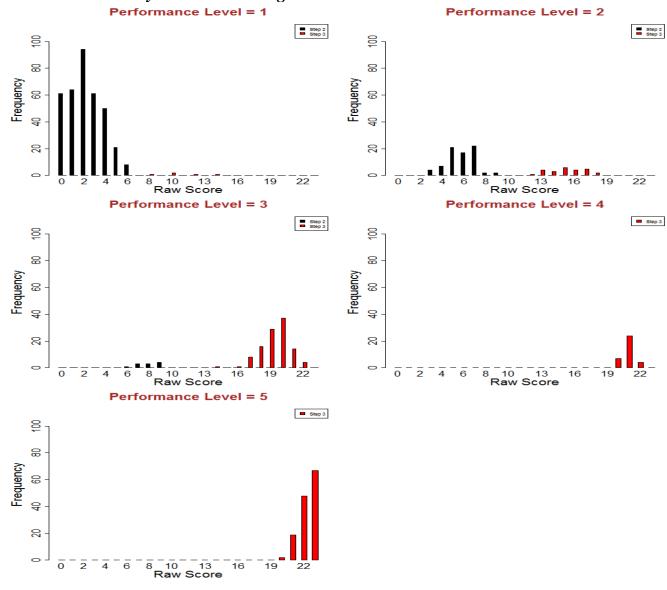


Figure S2.45: Screener Raw Score Summary - Grade 7 Overall

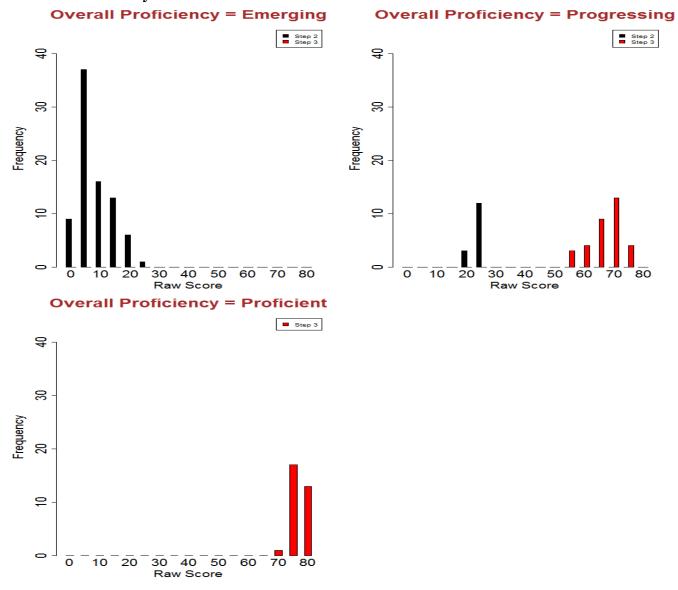


Figure S2.46: Screener Raw Score Summary - Grade 8 Listening

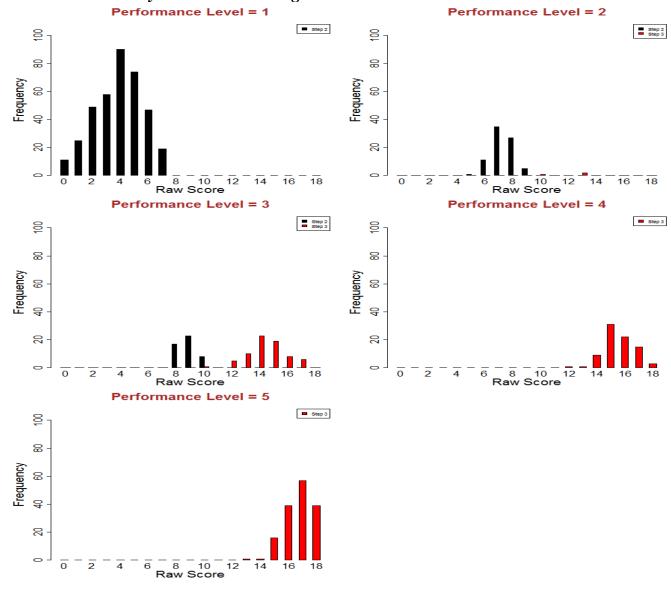


Figure S2.47: Screener Raw Score Summary - Grade 8 Reading

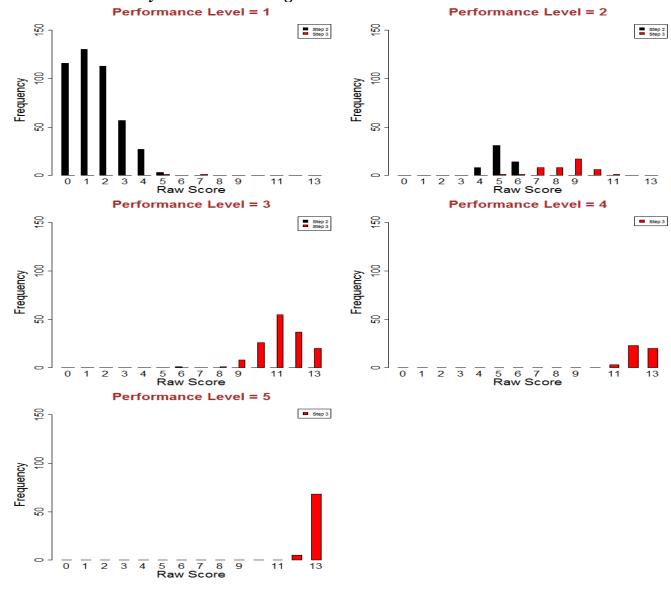


Figure S2.48: Screener Raw Score Summary - Grade 8 Speaking

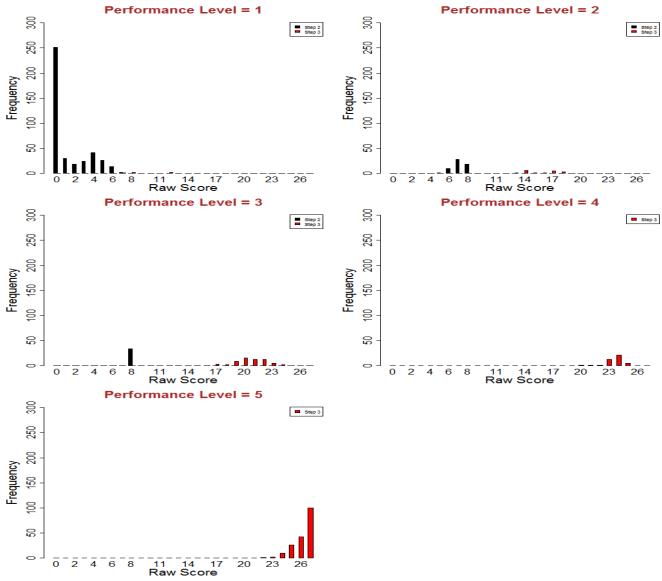


Figure S2.49: Screener Raw Score Summary - Grade 8 Writing

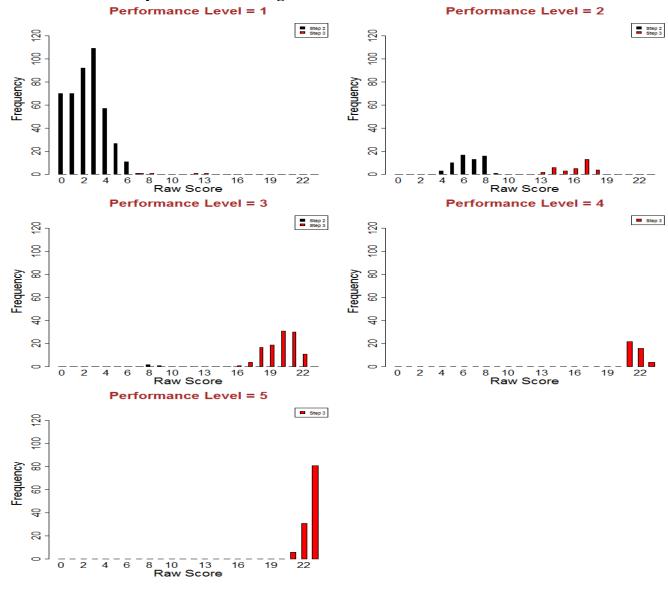
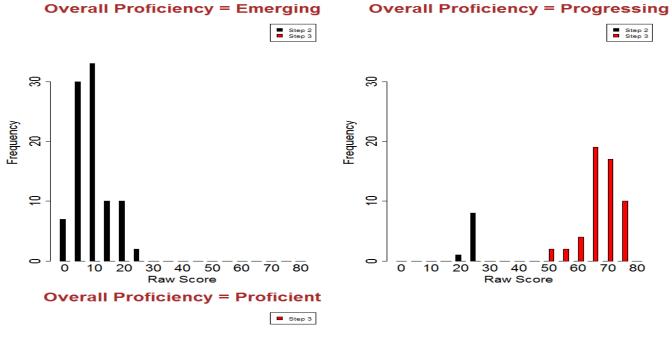


Figure S2.50: Screener Raw Score Summary - Grade 8 Overall



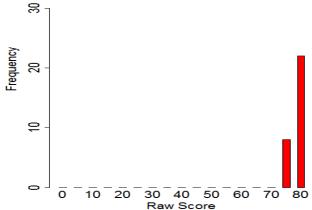


Figure S2.51: Screener Raw Score Summary - Grade 9 Listening

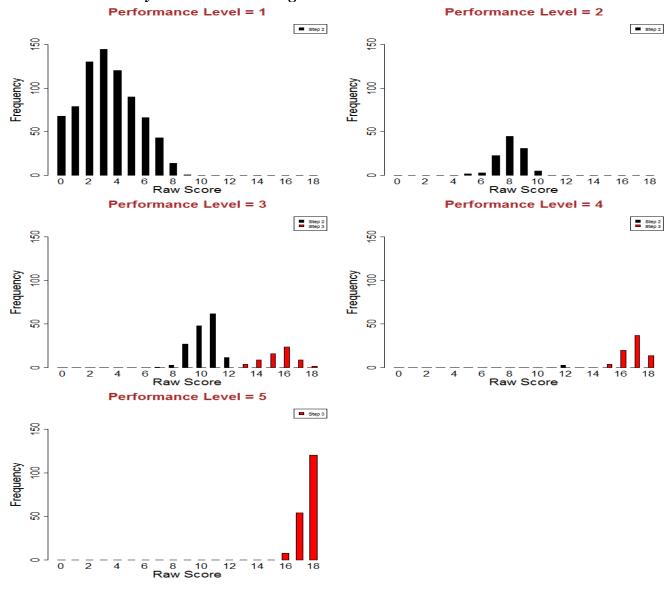


Figure S2.52: Screener Raw Score Summary - Grade 9 Reading

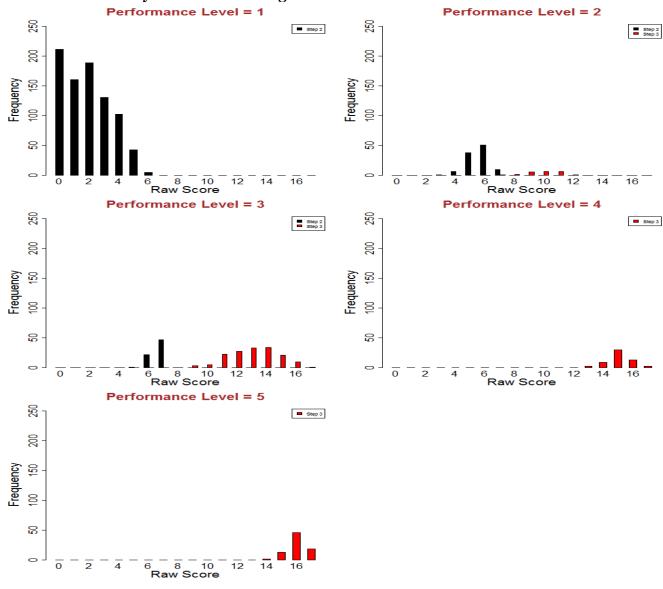


Figure S2.53: Screener Raw Score Summary - Grade 9 Speaking

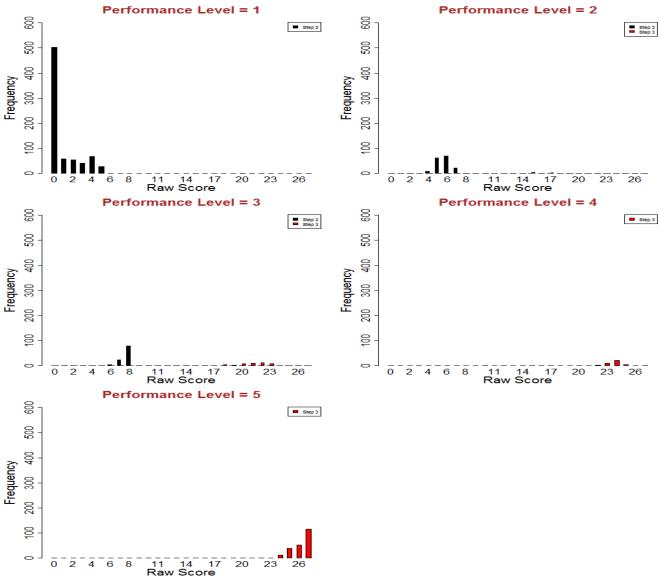


Figure S2.54: Screener Raw Score Summary - Grade 9 Writing

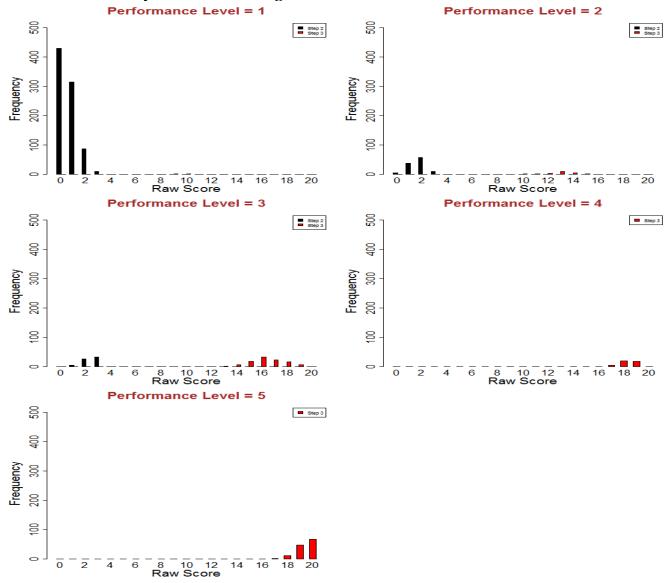


Figure S2.55: Screener Raw Score Summary - Grade 9 Overall

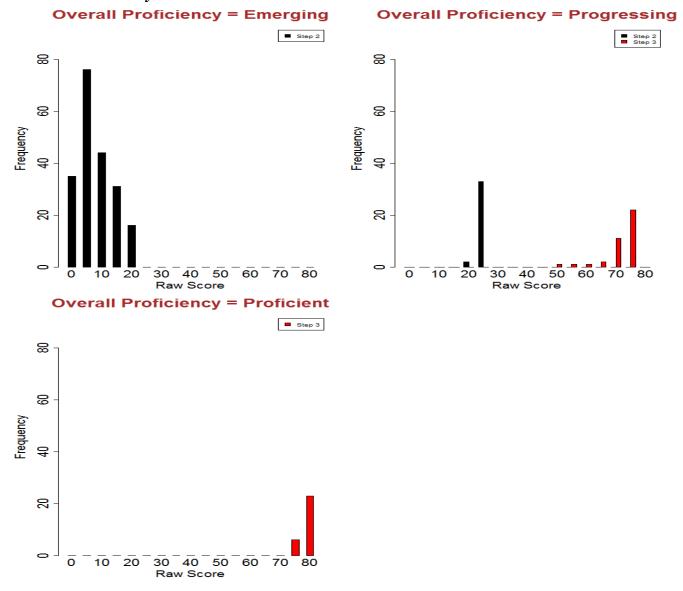


Figure S2.56: Screener Raw Score Summary - Grade 10 Listening

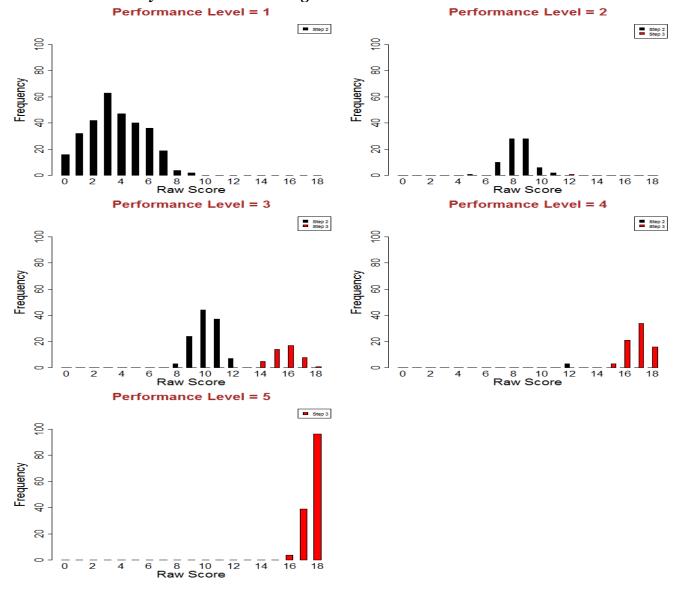


Figure S2.57: Screener Raw Score Summary - Grade 10 Reading

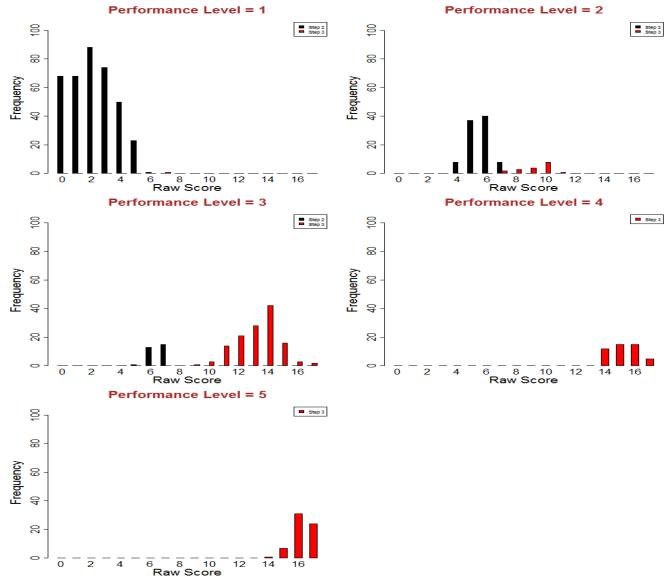


Figure S2.58: Screener Raw Score Summary - Grade 10 Speaking

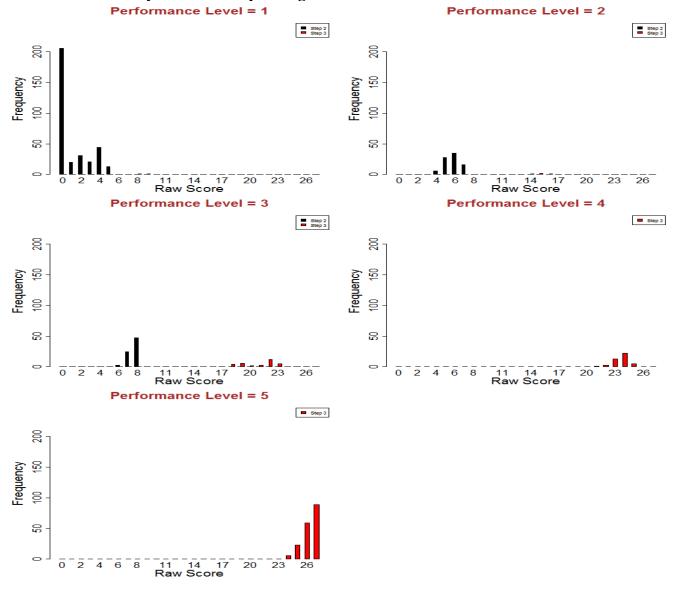


Figure S2.59: Screener Raw Score Summary - Grade 10 Writing

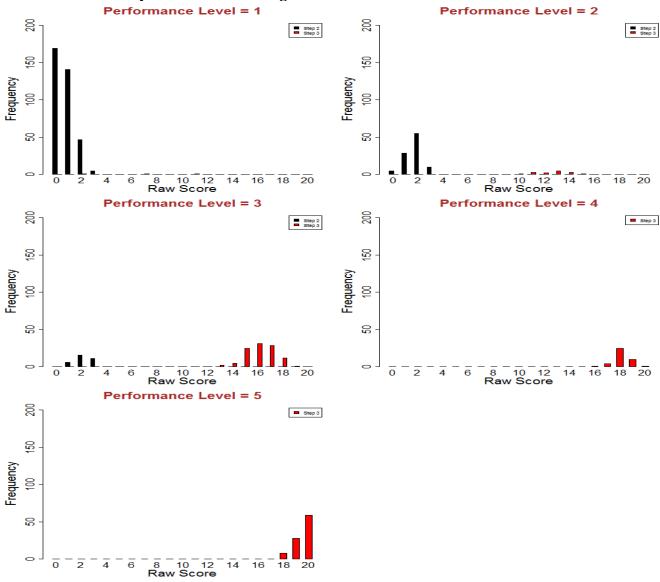


Figure S2.60: Screener Raw Score Summary - Grade 10 Overall

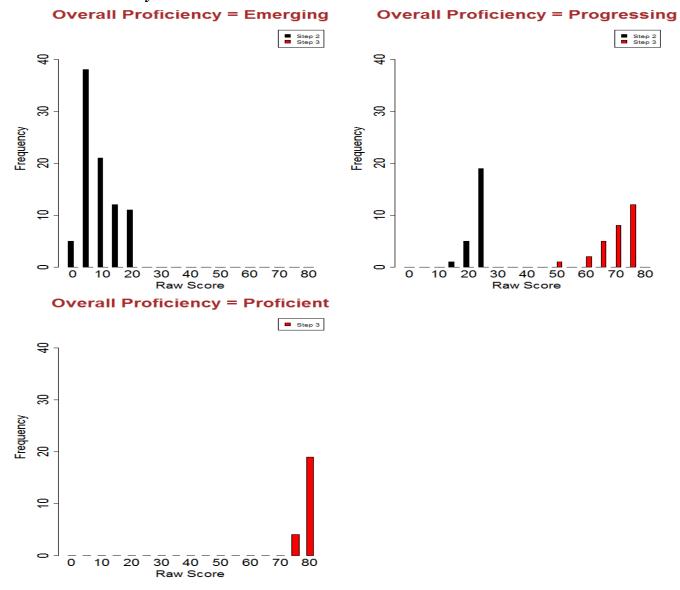


Figure S2.61: Screener Raw Score Summary - Grade 11 Listening

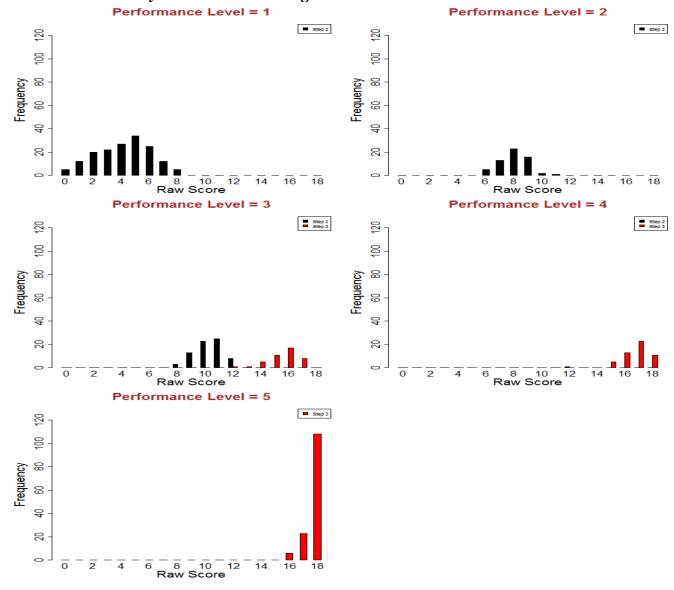


Figure S2.62: Screener Raw Score Summary - Grade 11 Reading

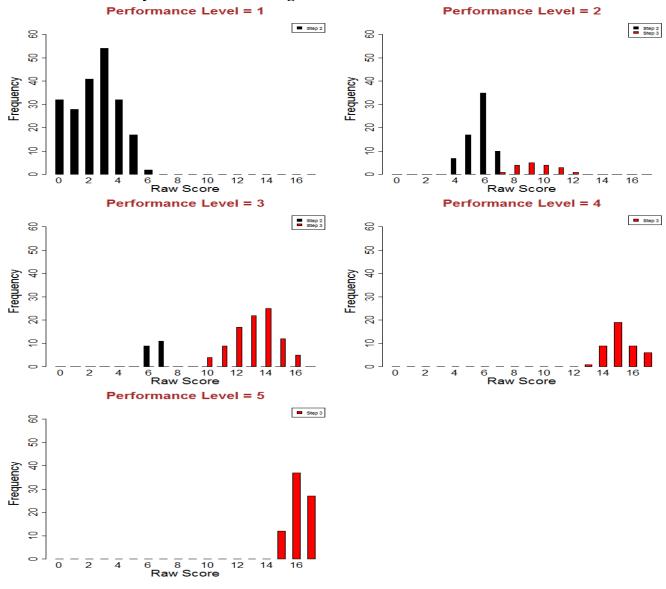


Figure S2.63: Screener Raw Score Summary - Grade 11 Speaking

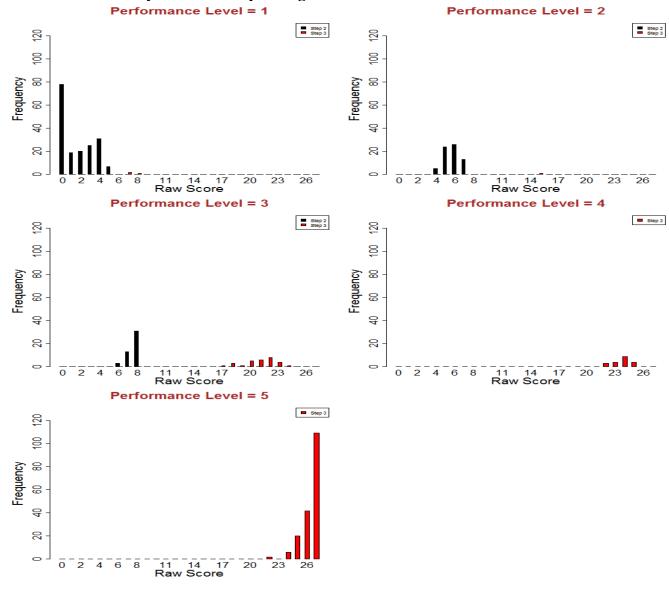


Figure S2.64: Screener Raw Score Summary - Grade 11 Writing

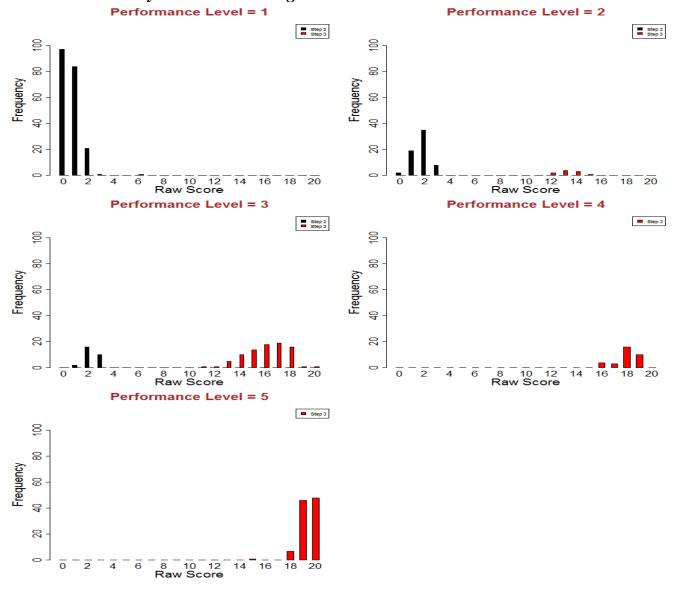


Figure S2.65: Screener Raw Score Summary - Grade 11 Overall

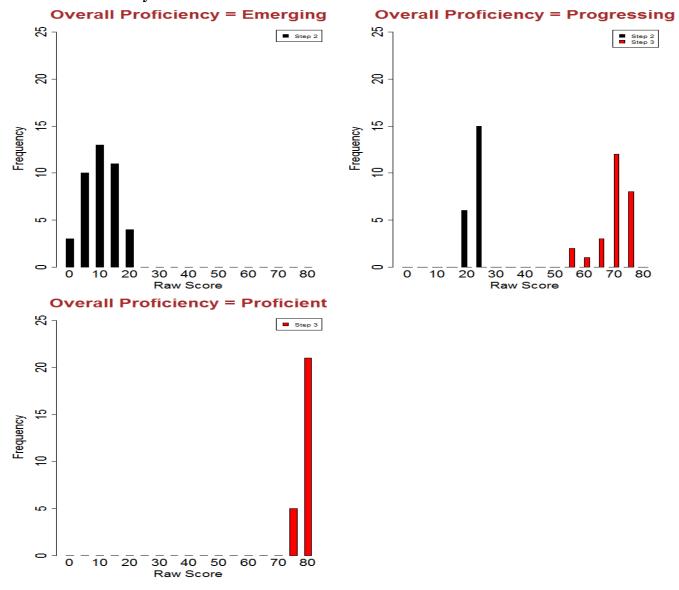


Figure S2.66: Screener Raw Score Summary - Grade 12 Listening

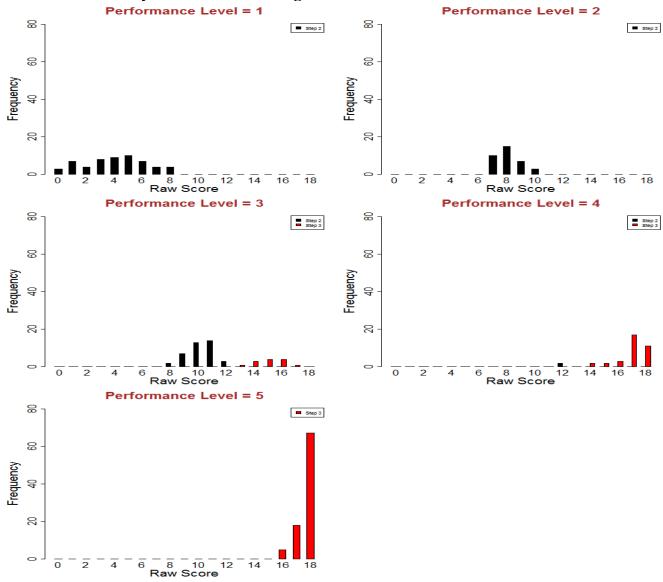


Figure S2.67: Screener Raw Score Summary - Grade 12 Reading

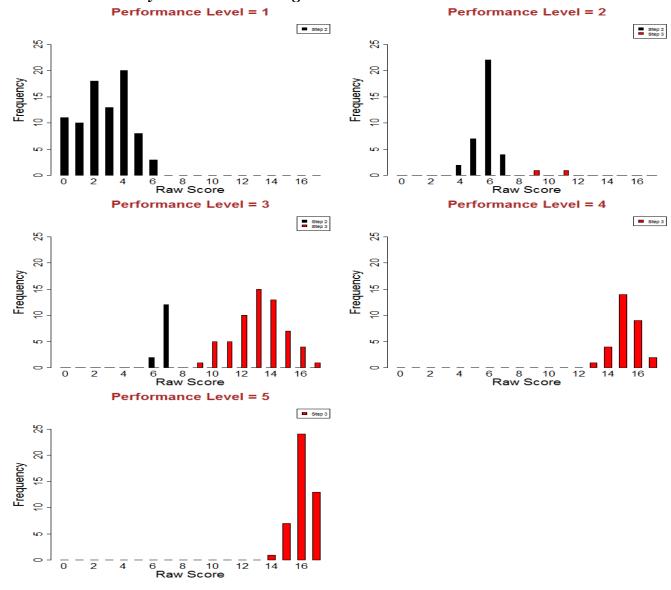


Figure S2.68: Screener Raw Score Summary - Grade 12 Speaking

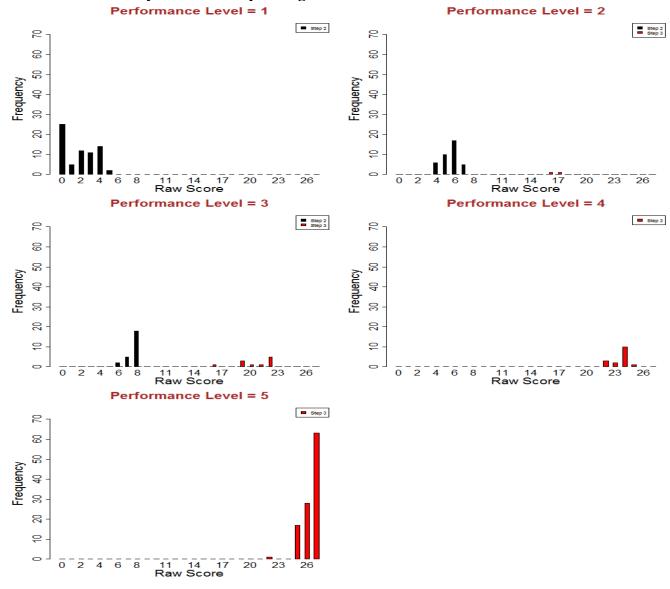


Figure S2.69: Screener Raw Score Summary - Grade 12 Writing

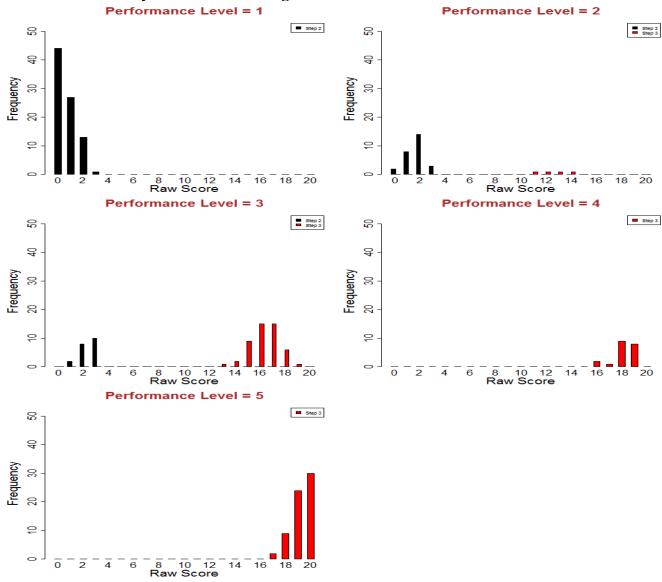
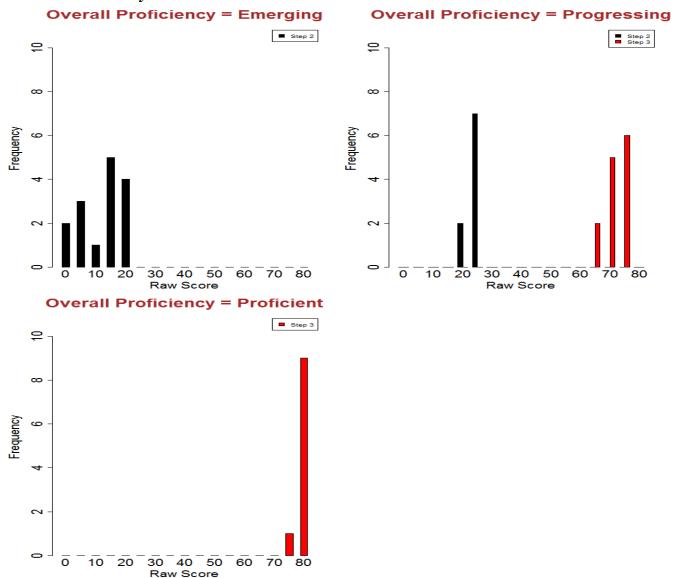


Figure S2.70: Screener Raw Score Summary - Grade 12 Overall



## **Section 3: Screener Assessment - Scale Score Summary**

\* Domain tests with Exemption are excluded.

<sup>\*</sup> The statistics are suppressed when the N count is fewer than 10.

Table S3.1: Screener Scale Score Summary by Subgroup – Beginning Kindergarten

0.1	01-1			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		10,419	314	523.1	714	67.7	10,415	318	519.9	708	67.1
	Female	4,832	314	528.2	714	68.2	4,832	318	525.5	708	66.7
Gender	Male	5,017	314	518.6	714	66.7	5,014	318	514.8	708	66.8
	Missing	570	314	520.0	714	69.9	569	318	517.5	708	70.0
	American Indian or Alaskan Native	37	387	532.8	688	74.9	37	363	530.1	676	74.3
	Asian	2,666	314	540.7	714	72.6	2,664	318	536.3	708	72.1
	Black or African American	1,835	314	526.9	714	62.0	1,833	318	523.4	708	62.1
	Hispanic or Latino	3,016	314	502.6	714	61.4	3,016	318	501.2	708	60.4
Ethnicity	Native Hawaiian or Other Pacific Islander	48	435	528.2	666	43.1	48	425	525.5	666	45.0
	Two or More Races	1,085	314	511.7	714	67.8	1,085	318	508.5	708	67.1
	White	1,591	314	534.5	714	65.4	1,591	318	530.1	708	65.7
	Other/Unknown	141	314	535.8	714	73.2	141	318	531.2	708	75.0
Other	Gifted	6					6				
Other	IEP	171	314	491.0	636	61.2	169	318	487.7	632	62.0

Outh man	Otatus			_istening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	16	353	485.2	591	68.2	16	350	480.5	569	69.0
	Autism	32	314	454.7	563	75.2	32	318	450.5	584	73.2
	Developmental delay	3					3				
	Emotional disturbance	1					1				
	Hearing Impaired	4					4				
	Intellectual Disability	4					4				
Primary Disability	Multiple disabilities	5					5				
	Orthopedic impairment	4					4				
	Other health impairment	10	389	523.2	634	76.0	10	406	521.4	632	75.2
	Specific learning disability	7					7				
	Speech or language impairment	71	419	508.0	628	49.0	71	391	504.5	610	51.5

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.1: Screener Scale Score Summary by Subgroup - Beginning Kindergarten (cont.)

O. h	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		10,415	339	516.1	711	88.1	10,415	347	484.0	684	61.7
	Female	4,832	339	524.4	711	89.1	4,832	347	485.4	684	61.3
Gender	Male	5,014	339	508.2	711	86.3	5,014	347	482.2	684	62.0
	Missing	569	339	514.7	711	90.2	569	347	487.1	684	62.0
	American Indian or Alaskan Native	37	361	531.2	700	91.1	37	369	496.9	671	67.6
	Asian	2,664	339	541.7	711	87.7	2,664	347	505.6	684	72.9
	Black or African American	1,833	339	524.5	711	80.3	1,833	347	487.0	684	58.8
	Hispanic or Latino	3,016	339	485.6	711	82.4	3,016	347	465.5	684	46.7
Ethnicity	Native Hawaiian or Other Pacific Islander	48	378	510.6	692	67.2	48	386	473.8	621	47.3
	Two or More Races	1,085	339	496.2	711	89.9	1,085	347	470.7	684	56.0
	White	1,591	339	533.2	711	86.9	1,591	347	487.0	684	59.5
	Other/Unknown	141	339	532.2	711	91.9	141	347	496.9	684	70.3
Other	Gifted	6					6				
Other	IEP	169	339	468.0	677	80.2	169	347	461.3	631	54.4

0.1	Otatas		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	16	353	471.3	640	81.1	16	361	451.1	517	43.3
	Autism	32	339	421.3	628	77.8	32	347	451.0	631	80.4
	Developmental delay	3					3				
	Emotional disturbance	1					1				
	Hearing Impaired	4					4				
	Intellectual Disability	4					4				
Primary Disability	Multiple disabilities	5					5				
	Orthopedic impairment	4					4				
	Other health impairment	10	378	516.9	625	84.2	10	386	469.1	547	47.8
	Specific learning disability	7					7				
	Speech or language impairment	71	375	497.1	672	71.9	71	383	471.5	615	43.9

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.1: Screener Scale Score Summary by Subgroup - Beginning Kindergarten (cont.)

0.1	01-1		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		10,419	3978	5383.2	6375	489.4	10,419	3646	5156.9	6763	538.9
	Female	4,832	3978	5423.0	6375	488.0	4,832	3646	5199.1	6763	537.9
Gender	Male	5,017	3978	5348.9	6375	486.8	5,017	3646	5117.1	6763	535.1
	Missing	570	3978	5348.6	6375	500.0	570	3646	5149.5	6763	554.4
	American Indian or Alaskan Native	37	4203	5434.5	6375	540.0	37	3915	5255.6	6592	579.1
	Asian	2,666	3978	5469.1	6375	500.0	2,666	3646	5327.4	6763	581.6
	Black or African American	1,835	3978	5408.6	6375	459.2	1,835	3646	5198.2	6763	485.9
<b>-</b>	Hispanic or Latino	3,016	3978	5267.5	6375	474.5	3,016	3646	4972.8	6763	470.7
Ethnicity	Native Hawaiian or Other Pacific Islander	48	4739	5475.0	6254	328.8	48	4240	5150.9	6325	380.1
	Two or More Races	1,085	3978	5323.7	6375	504.5	1,085	3646	5037.5	6763	534.1
	White	1,591	3978	5460.3	6375	476.4	1,591	3646	5242.2	6763	521.3
	Other/Unknown	141	3978	5447.9	6375	504.8	141	3646	5266.9	6763	602.1
Other	Gifted	6					6				
Other	IEP	171	3978	5172.1	6375	478.0	171	3646	4872.1	6020	485.5

0.1	01-1		Con	nprehensi	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	16	3978	5130.4	5744	553.6	16	3823	4833.4	5716	488.9
	Autism	32	3978	4898.0	5876	520.3	32	3646	4597.0	5960	602.0
	Developmental delay	3					3				
	Emotional disturbance	1					1				
	Hearing Impaired	4					4				
	Intellectual Disability	4					4				
Primary Disability	Multiple disabilities	5					5				
	Orthopedic impairment	4					4				
	Other health impairment	10	4402	5434.6	6375	615.1	10	4240	5124.1	5929	550.8
	Specific learning disability	7					7				
	Speech or language impairment	71	4582	5290.0	6073	416.7	71	4129	5030.3	6020	384.2

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.2: Screener Scale Score Summary by Subgroup - Kindergarten

Oub was	04-4			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		656	314	523.2	714	88.9	656	318	519.6	708	88.7
	Female	288	328	530.5	714	89.4	288	341	527.2	708	88.0
Gender	Male	342	314	516.9	714	87.1	342	318	512.9	708	87.9
	Missing	26	331	525.2	714	104.2	26	338	524.0	708	102.7
	American Indian or Alaskan Native	2					2				
	Asian	137	314	552.5	714	96.8	137	318	546.5	708	98.1
	Black or African American	137	314	535.1	714	74.0	137	318	530.5	708	76.1
	Hispanic or Latino	202	314	502.9	696	85.8	202	318	500.8	694	84.5
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	88	314	508.0	714	94.7	88	318	505.2	708	93.6
	White	78	370	521.4	714	89.9	78	374	519.6	708	89.2
	Other/Unknown	6					6				
Other	Gifted	1					1				
Otilei	IEP	18	364	469.1	606	67.5	18	352	461.2	588	68.0

O . h	Otatua			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	1		-			1				
	Autism	6					6				
	Developmental delay	1					1				
Hearing Impa	Hearing Impaired	2					2				
Primary Disability	Multiple disabilities	1					1				
	Specific learning disability	1					1				
	Speech or language impairment	4					4				
	Traumatic brain injury	1					1				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.2: Screener Scale Score Summary by Subgroup - Kindergarten (cont.)

Out was	04-4		Speaking				Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		655	339	506.7	711	104.7	656	347	503.8	684	83.9	
	Female	288	345	513.2	711	106.7	288	353	506.9	684	79.9	
Gender	Male	341	339	501.3	711	102.8	342	347	500.2	684	86.0	
	Missing	26	347	504.7	711	106.5	26	358	518.9	684	100.1	
	American Indian or Alaskan Native	2					2					
	Asian	136	339	535.3	711	114.0	137	347	538.0	684	97.7	
	Black or African American	137	339	521.5	711	86.4	137	347	504.3	684	78.2	
	Hispanic or Latino	202	339	486.2	705	104.6	202	347	489.6	677	74.1	
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6					
	Two or More Races	88	339	493.9	711	106.1	88	347	487.7	684	83.1	
	White	78	362	499.2	711	109.1	78	380	500.7	684	79.3	
	Other/Unknown	6					6					
Other	Gifted	1					1					
Other	IEP	17	356	454.3	669	88.0	18	354	449.3	583	73.5	

Cubana	Ctatus -			Speaking				Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Migrant	1		-		_	1		-		-		
	Autism	6					6						
	Developmental delay	1					1						
	Hearing Impaired	2					2						
Primary Disability	Multiple disabilities	1					1						
	Specific learning disability	1					1						
	Speech or language impairment	4					4						
	Traumatic brain injury	1					1						

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.2: Screener Scale Score Summary by Subgroup - Kindergarten (cont.)

	21.1		Con	nprehens	ion		Overall					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Total		656	3978	5352.5	6375	603.7	656	3646	5174.5	6763	729.7	
	Female	288	4104	5411.5	6375	606.2	288	3752	5225.1	6763	724.4	
Gender	Male	342	3978	5301.7	6375	591.9	342	3646	5128.8	6763	725.3	
	Missing	26	4040	5367.1	6375	689.7	26	3775	5215.8	6763	830.4	
	American Indian or Alaskan Native	2					2					
	Asian	137	3978	5501.2	6375	612.5	137	3646	5421.9	6763	824.2	
	Black or African American	137	3978	5459.7	6375	525.2	137	3646	5256.4	6763	611.6	
	Hispanic or Latino	202	3978	5216.3	6375	593.8	202	3646	5020.9	6680	693.1	
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6					
	Two or More Races	88	3978	5260.3	6375	653.5	88	3646	5049.6	6763	751.8	
	White	78	4331	5362.5	6375	630.2	78	4045	5146.3	6763	735.0	
	Other/Unknown	6					6					
Other	Gifted	1					1					
Other	IEP	18	4257	4964.4	5652	479.4	18	3833	4704.0	5990	588.5	

Cubana	Ctatus -		Co	mprehens	ion			Overall					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Migrant	1		<u>-</u>			1		<u>-</u>				
	Autism	6					6						
	Developmental delay	1					1						
	Hearing Impaired	2					2						
Primary Disability	Multiple disabilities	1					1						
,	Specific learning disability	1					1						
	Speech or language impairment	4					4						
	Traumatic brain injury	1					1						

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.3: Screener Scale Score Summary by Subgroup - Grade 1

	21.1		ı	Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,882	288	501.7	678	90.1	1,882	286	481.9	704	95.4
	Female	896	288	509.1	678	88.5	896	286	486.3	704	96.6
Gender	Male	892	288	496.6	678	91.2	892	286	479.0	704	94.7
	Missing	94	312	479.8	662	89.1	94	295	466.8	682	88.3
	American Indian or Alaskan Native	5					5				
	Asian	479	288	539.1	678	94.6	479	286	527.6	704	105.2
	Black or African American	355	288	503.5	668	75.7	355	286	478.5	684	83.7
<b>-</b>	Hispanic or Latino	511	288	468.7	678	81.2	511	286	445.9	704	76.7
Ethnicity	Native Hawaiian or Other Pacific Islander	11	367	435.4	522	46.4	11	354	395.7	425	20.8
	Two or More Races	202	288	479.5	678	90.1	202	286	459.8	704	90.3
	White	291	288	511.8	678	89.6	291	286	490.9	704	94.5
	Other/Unknown	28	369	519.1	626	77.6	28	324	492.4	635	80.6
Other	Gifted	4					4				
Other	IEP	26	288	489.4	678	90.7	26	286	486.4	704	92.3

Subgroup	Ctatus			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	5		_		-	5		-		
	Autism	6					6				
	Hearing Impaired	2					2				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
,	Other health impairment	3					3				
	Specific learning disability	1					1				
	Speech or language impairment	5					5				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.3: Screener Scale Score Summary by Subgroup - Grade 1 (cont.)

O. h	04-4		;	Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,882	310	485.1	669	100.3	1,882	283	478.0	698	95.3
	Female	896	310	489.9	669	101.2	896	283	483.3	698	96.5
Gender	Male	892	310	482.8	669	98.8	892	283	474.5	698	94.6
	Missing	94	313	460.5	655	101.8	94	292	461.1	670	87.6
	American Indian or Alaskan Native	5					5				
	Asian	479	310	524.7	669	102.0	479	283	523.5	698	104.4
	Black or African American	355	310	492.1	660	83.6	355	283	471.9	683	83.1
	Hispanic or Latino	511	310	445.9	669	91.1	511	283	440.7	698	77.3
Ethnicity	Native Hawaiian or Other Pacific Islander	11	336	410.2	524	69.1	11	348	387.8	423	18.6
	Two or More Races	202	310	457.3	669	104.7	202	283	458.6	698	91.0
	White	291	310	499.5	669	98.8	291	283	490.8	698	93.5
	Other/Unknown	28	326	504.5	625	92.6	28	337	489.2	621	82.2
Other	Gifted	4					4				
Other	IEP	26	310	474.4	669	87.2	26	283	488.7	698	95.9

Subgroup	Ctatus -			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	5		_		-	5		-	-	
	Autism	6					6				
	Hearing Impaired	2					2				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	3					3				
	Specific learning disability	1					1				
	Speech or language impairment	5					5				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.3: Screener Scale Score Summary by Subgroup - Grade 1 (cont.)

O. h	04-4		Con	nprehensi	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,882	3785	5138.4	6387	630.9	1,882	3364	4975.2	6629	757.3
	Female	896	3785	5176.5	6387	625.5	896	3364	5020.4	6629	761.6
Gender	Male	892	3785	5112.5	6387	636.0	892	3364	4947.0	6629	753.5
	Missing	94	3923	5020.5	6387	613.1	94	3483	4812.6	6456	724.4
	American Indian or Alaskan Native	5					5				
	Asian	479	3785	5417.2	6387	672.5	479	3364	5324.9	6629	814.9
	Black or African American	355	3785	5149.6	6387	555.2	355	3364	4975.1	6526	631.9
	Hispanic or Latino	511	3785	4908.9	6387	547.8	511	3364	4670.6	6629	636.2
Ethnicity	Native Hawaiian or Other Pacific Islander	11	4059	4613.5	5013	255.0	11	3967	4315.1	4869	261.0
	Two or More Races	202	3785	4973.4	6387	602.0	202	3364	4785.0	6629	752.3
	White	291	3785	5189.0	6387	623.2	291	3364	5073.1	6629	746.6
	Other/Unknown	28	4122	5244.7	6267	545.0	28	3761	5105.7	6074	663.3
Other	Gifted	4					4				
Other	IEP	26	3785	5076.9	6387	583.3	26	3364	4958.5	6629	716.1

Cubanana	Ctatus		Co	mprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	5		-		_	5		-		
	Autism	6					6				
	Hearing Impaired	2					2				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	3					3				
	Specific learning disability	1					1				
	Speech or language impairment	5					5				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.4: Screener Scale Score Summary by Subgroup - Grade 2

0.1	01-1			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,250	286	480.6	710	90.8	1,250	278	464.6	734	100.4
	Female	584	286	486.2	710	90.5	584	278	470.0	734	100.1
Gender	Male	594	286	476.3	710	91.6	594	278	460.2	734	101.8
	Missing	72	286	470.2	675	85.3	72	278	457.7	706	90.7
	American Indian or Alaskan Native	4					4				
	Asian	341	286	503.9	710	103.1	341	278	498.5	734	113.1
	Black or African American	228	286	493.6	710	81.5	228	278	473.9	734	92.7
<b>-</b>	Hispanic or Latino	328	286	455.0	686	79.4	328	278	433.4	706	84.7
Ethnicity	Native Hawaiian or Other Pacific Islander	4					4				
	Two or More Races	155	286	448.1	676	77.9	155	278	425.6	693	82.5
	White	176	286	490.1	688	87.9	176	278	474.8	701	96.5
	Other/Unknown	14	361	539.3	675	95.8	14	376	519.5	706	119.9
Other	Gifted	7					7				
Other	IEP	13	286	417.3	538	71.5	13	278	398.9	508	73.6

Cubanana	Ctatus			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	9		-		-	9		-		
	Autism	3					3				
	Developmental delay	1					1				
	Hearing Impaired	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	1					1				
	Specific learning disability	2					2				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.4: Screener Scale Score Summary by Subgroup - Grade 2 (cont.)

0.1	01-1		:	Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,250	292	462.6	703	110.7	1,250	276	460.5	737	102.6
	Female	584	292	467.0	703	111.4	584	276	465.7	737	102.2
Gender	Male	594	292	459.0	703	111.2	594	276	456.2	737	104.0
	Missing	72	292	456.2	671	100.3	72	276	452.9	712	92.9
	American Indian or Alaskan Native	4					4				
	Asian	341	292	495.4	703	119.0	341	276	495.9	737	115.7
	Black or African American	228	292	482.2	703	92.8	228	276	469.7	737	94.1
<b>-</b>	Hispanic or Latino	328	292	424.8	684	101.0	328	276	427.8	700	86.1
Ethnicity	Native Hawaiian or Other Pacific Islander	4					4				
	Two or More Races	155	292	418.7	676	98.7	155	276	418.7	683	82.8
	White	176	292	476.6	686	110.2	176	276	473.1	714	99.3
	Other/Unknown	14	326	533.2	663	113.2	14	355	513.3	712	119.0
Other	Gifted	7					7				
Other	IEP	13	292	387.0	539	82.7	13	276	395.3	505	75.3

Cubanana	Ctatus			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	9		-		-	9		-		
	Autism	3					3				
	Developmental delay	1					1				
	Hearing Impaired	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	1					1				
	Specific learning disability	2					2				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.4: Screener Scale Score Summary by Subgroup - Grade 2 (cont.)

O. h	04-4		Con	nprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,250	3756	4987.6	6439	660.3	1,250	3326	4815.1	6880	809.2
	Female	584	3756	5029.2	6439	657.6	584	3326	4857.8	6880	809.4
Gender	Male	594	3756	4953.9	6439	667.3	594	3326	4781.1	6880	817.2
	Missing	72	3756	4927.8	6439	610.1	72	3326	4750.5	6563	729.6
	American Indian or Alaskan Native	4					4				
	Asian	341	3756	5174.4	6439	725.9	341	3326	5072.8	6880	906.1
	Black or African American	228	3756	5078.1	6439	615.9	228	3326	4922.7	6880	716.9
	Hispanic or Latino	328	3756	4794.5	6439	580.8	328	3326	4552.6	6665	698.7
Ethnicity	Native Hawaiian or Other Pacific Islander	4					4				
	Two or More Races	155	3756	4754.1	6439	580.2	155	3326	4492.0	6573	677.4
	White	176	3756	5040.7	6439	632.2	176	3326	4910.6	6692	786.8
	Other/Unknown	14	4269	5379.7	6439	765.3	14	3870	5301.2	6563	907.0
Other	Gifted	7					7				
Other	IEP	13	3756	4576.9	5869	563.5	13	3326	4266.5	5249	600.0

Subgroup	Ctatus		Co	mprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	9					9				
	Autism	3					3				
	Developmental delay	1					1				
	Hearing Impaired	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	1					1				
	Specific learning disability	2					2				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.5: Screener Scale Score Summary by Subgroup - Grade 3

0.1	01-1			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,143	286	500.3	710	101.3	1,143	278	494.5	734	110.8
	Female	519	286	504.1	710	103.9	519	278	497.2	734	113.6
Gender	Male	568	286	497.6	710	100.1	568	278	492.3	734	109.4
	Missing	56	296	493.0	660	88.1	56	296	491.1	666	98.6
	American Indian or Alaskan Native	4					4				
	Asian	255	286	541.5	710	104.6	255	278	544.8	734	112.7
	Black or African American	234	286	512.2	710	90.7	234	278	505.9	734	99.4
	Hispanic or Latino	318	286	460.0	710	86.2	318	278	445.7	734	93.3
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	145	286	486.5	710	97.2	145	278	478.3	734	104.6
	White	175	286	507.4	710	111.2	175	278	506.3	734	119.8
	Other/Unknown	7					7				
Other	Gifted	2					2				
Other	IEP	23	286	464.1	657	94.3	23	278	438.3	670	100.8

O. hama	Otatus			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	7				_	7				
	Autism	5					5				
	Emotional disturbance	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	2					2				
	Specific learning disability	6					6				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.5: Screener Scale Score Summary by Subgroup - Grade 3 (cont.)

0.1	01-1		:	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,143	292	481.1	703	121.6	1,143	276	492.7	737	112.9
	Female	519	292	485.2	703	124.0	519	276	496.1	737	115.8
Gender	Male	568	292	477.7	703	120.2	568	276	490.0	737	111.3
	Missing	56	308	476.3	664	112.9	56	292	487.0	683	102.4
	American Indian or Alaskan Native	4					4				
	Asian	255	292	533.6	703	121.9	255	276	544.0	737	115.6
	Black or African American	234	292	502.4	703	103.8	234	276	503.0	737	101.3
	Hispanic or Latino	318	292	428.0	703	107.7	318	276	442.7	737	94.5
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	145	292	457.1	703	117.1	145	276	476.6	737	107.2
	White	175	292	489.5	703	129.6	175	276	506.8	737	120.9
	Other/Unknown	7					7				
Other	Gifted	2					2				
Other	IEP	23	292	441.9	662	105.8	23	276	429.9	651	98.3

Subgroup	Ctatus			Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	7		_		_	7		-		-
	Autism	5					5				
	Emotional disturbance	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	2					2				
	Specific learning disability	6					6				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.5: Screener Scale Score Summary by Subgroup - Grade 3 (cont.)

	21.1		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,143	3756	5145.6	6439	725.2	1,143	3326	5019.8	6880	897.6
	Female	519	3756	5163.9	6439	738.0	519	3326	5049.0	6880	920.0
Gender	Male	568	3756	5132.2	6439	722.5	568	3326	4997.4	6880	886.2
	Missing	56	3756	5111.7	6329	636.0	56	3536	4975.3	6369	803.9
	American Indian or Alaskan Native	4					4				
	Asian	255	3756	5437.3	6439	714.3	255	3326	5420.8	6880	916.1
	Black or African American	234	3756	5251.0	6439	668.7	234	3326	5133.6	6880	787.5
	Hispanic or Latino	318	3756	4850.1	6439	638.4	318	3326	4625.3	6880	762.4
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	145	3756	5043.5	6439	691.5	145	3326	4876.6	6880	856.1
	White	175	3756	5188.8	6439	786.8	175	3326	5103.7	6880	970.3
	Other/Unknown	7					7				
Other	Gifted	2					2				
Other	IEP	23	3756	4873.2	6439	708.0	23	3326	4627.8	6408	8.008

Subgroup	Status	Comprehension					Overall					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	7		-			7					
Primary Disability	Autism	5					5					
	Emotional disturbance	1					1					
	Intellectual Disability	1					1					
	Multiple disabilities	1					1					
	Other health impairment	2					2					
	Specific learning disability	6					6					
	Speech or language impairment	2					2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.6: Screener Scale Score Summary by Subgroup - Grade 4

Subgroup	Status	Listening				Reading					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		909	270	488.6	768	115.1	909	270	490.9	781	114.8
Gender	Female	446	270	493.6	768	119.3	446	270	493.4	781	120.0
	Male	423	270	483.4	734	110.7	423	270	488.2	768	109.7
	Missing	40	295	487.0	749	115.3	40	283	490.5	762	110.0
Ethnicity	American Indian or Alaskan Native	2					2				
	Asian	187	270	533.7	768	109.6	187	270	535.3	781	113.3
	Black or African American	182	270	513.8	729	98.8	182	270	511.3	751	103.3
	Hispanic or Latino	280	270	445.3	728	103.9	280	270	450.4	768	100.8
	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	123	270	456.1	758	118.7	123	270	462.0	767	115.7
	White	115	270	508.2	749	127.4	115	270	510.2	762	127.0
	Other/Unknown	14	403	553.7	697	92.0	14	414	549.2	720	102.6
Other	Gifted	1					1				
	IEP	14	342	481.1	697	100.4	14	309	474.8	692	105.4

Subgroup	Ctatus			Listening			Reading						
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Migrant	3		-		-	3		_				
Primary Disability  Primary Disability  Multiple disabilities  Specific learning disability	Autism	3					3						
		2					2						
		1					1						
	Specific learning disability	3					3						

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.6: Screener Scale Score Summary by Subgroup - Grade 4 (cont.)

O. Ib arras res	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		909	270	499.8	780	147.7	909	268	490.1	787	122.0
	Female	446	270	503.4	780	151.5	446	268	493.7	787	126.3
Gender	Male	423	270	495.0	769	143.5	423	268	486.1	769	117.1
	Missing	40	277	510.0	768	150.6	40	282	491.8	768	125.3
	American Indian or Alaskan Native	2					2				
	Asian	187	270	554.0	780	137.4	187	268	538.0	787	118.8
	Black or African American	182	270	538.1	761	123.7	182	268	514.2	751	108.7
<b>-</b> 0	Hispanic or Latino	280	270	443.6	769	139.6	280	268	445.2	769	107.9
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	123	270	457.6	774	153.0	123	268	457.2	778	123.5
	White	115	270	521.8	768	156.9	115	268	511.5	766	133.4
	Other/Unknown	14	450	596.6	743	95.5	14	432	561.0	714	97.1
Other	Gifted	1					1				
Other	IEP	14	290	493.0	742	131.5	14	308	479.6	726	113.4

Subgroup	Ctatus			Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Migrant	3		_	-	-	3					
	Autism	3					3					
Primary Disability	Intellectual Disability	2					2					
	Multiple disabilities	1					1					
	Specific learning disability	3					3					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.6: Screener Scale Score Summary by Subgroup - Grade 4 (cont.)

O. da anno con	04-4		Con	nprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		909	3649	5027.7	6700	714.6	909	3237	5029.1	7323	1000.5
	Female	446	3649	5050.0	6700	745.0	446	3237	5058.9	7323	1035.6
Gender	Male	423	3649	5007.9	6700	688.5	423	3237	4995.9	7146	963.2
	Missing	40	3774	4989.1	6588	644.7	40	3346	5048.4	7172	1003.7
	American Indian or Alaskan Native	2					2				
	Asian	187	3649	5305.3	6588	675.2	187	3237	5418.8	7323	955.1
	Black or African American	182	3649	5172.7	6588	634.6	182	3237	5250.9	7066	867.9
	Hispanic or Latino	280	3649	4774.7	6700	653.2	280	3237	4653.3	7146	905.5
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	123	3649	4838.7	6536	740.0	123	3237	4750.5	7248	1024.2
	White	115	3649	5133.6	6700	778.4	115	3237	5195.5	7172	1090.4
	Other/Unknown	14	4468	5366.9	6324	598.8	14	4498	5621.5	6848	768.1
Other	Gifted	1					1				
Other	IEP	14	4025	4919.1	5966	567.9	14	3560	4945.3	6808	898.6

Subgroup	Ctatus		Co	mprehens	ion		Overall						
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Migrant	3		-	-		3		-	-			
	Autism	3					3						
Primary Disability  Primary Disability  Multiple disabilities  Specific learning disability		2					2						
		1					1						
		3					3						

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.7: Screener Scale Score Summary by Subgroup - Grade 5

0.1	24-4			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		885	270	487.7	778	124.9	885	270	493.1	795	122.1
	Female	410	270	498.0	778	128.2	410	270	503.3	795	124.1
Gender	Male	439	270	477.0	778	122.2	439	270	483.1	795	120.6
	Missing	36	270	501.6	714	112.2	36	270	498.1	731	108.9
	American Indian or Alaskan Native	3					3				
	Asian	169	270	522.7	768	137.3	169	270	527.6	781	139.5
	Black or African American	189	270	504.0	778	110.3	189	270	507.3	795	107.4
	Hispanic or Latino	252	270	446.6	772	115.0	252	270	452.0	786	110.2
Ethnicity	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	134	270	466.3	778	122.3	134	270	476.4	795	116.7
	White	125	270	521.1	741	124.6	125	270	524.0	756	122.6
	Other/Unknown	10	327	506.8	714	139.3	10	338	523.2	731	123.6
Other	Gifted	2					2				
Other	IEP	15	335	463.1	649	94.8	15	341	459.8	687	105.3

Cubanana	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	2		-		_	2		-		
	Autism	2					2				
	Developmental delay	1					1				
	Emotional disturbance	2					2				
	Hearing Impaired	1					1				
Primary Disability	Intellectual Disability	1					1				
	Orthopedic impairment	1					1				
	Other health impairment	3					3				
	Specific learning disability	4					4				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.7: Screener Scale Score Summary by Subgroup - Grade 5 (cont.)

Cultura	Ctatus		;	Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		885	270	492.4	786	154.5	885	268	491.6	797	130.5
	Female	410	270	502.1	786	157.7	410	268	503.3	797	133.1
Gender	Male	439	270	482.3	786	151.8	439	268	480.0	797	128.3
	Missing	36	270	506.4	742	144.9	36	268	500.5	720	117.4
	American Indian or Alaskan Native	3					3				
	Asian	169	270	533.9	780	164.7	169	268	529.0	787	146.3
	Black or African American	189	270	515.1	786	135.8	189	268	504.8	797	116.3
	Hispanic or Latino	252	270	440.4	782	142.1	252	268	447.8	791	117.8
Ethnicity	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	134	270	464.0	786	152.1	134	268	471.9	797	126.4
	White	125	270	535.9	763	158.8	125	268	529.4	750	130.0
	Other/Unknown	10	298	513.9	713	168.1	10	334	515.9	717	135.7
Othor	Gifted	2					2				
Other	IEP	15	304	469.5	714	124.7	15	345	466.4	677	111.4

Outh man	Otatus			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	2		_	<u>-</u>		2				
	Autism	2					2				
	Developmental delay	1					1				
	Emotional disturbance	2					2				
	Hearing Impaired	1					1				
Primary Disability	Intellectual Disability	1					1				
	Orthopedic impairment	1					1				
	Other health impairment	3					3				
	Specific learning disability	4					4				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.7: Screener Scale Score Summary by Subgroup - Grade 5 (cont.)

O. Ib	04-4		Con	nprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		885	3649	5028.0	6700	763.1	885	3237	5019.2	7401	1064.6
	Female	410	3649	5087.5	6700	768.9	410	3237	5103.4	7401	1086.6
Gender	Male	439	3649	4966.7	6700	760.2	439	3237	4933.2	7401	1046.4
	Missing	36	3649	5097.0	6700	689.0	36	3237	5107.6	6861	970.2
	American Indian or Alaskan Native	3					3				
	Asian	169	3649	5229.7	6700	838.6	169	3237	5318.2	7323	1176.1
	Black or African American	189	3649	5150.5	6700	687.7	189	3237	5155.2	7401	938.1
	Hispanic or Latino	252	3649	4776.4	6627	712.7	252	3237	4656.8	7352	967.7
Ethnicity	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	134	3649	4911.6	6700	734.9	134	3237	4843.7	7401	1036.8
	White	125	3649	5192.6	6627	746.7	125	3237	5316.5	7134	1074.4
	Other/Unknown	10	4007	5222.3	6700	851.9	10	3673	5213.2	6861	1139.9
Other	Gifted	2					2				
Other	IEP	15	4103	4817.4	6101	602.1	15	3773	4807.5	6474	867.6

Outh many	Otatus		Co	mprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	2					2				
	Autism	2					2				
	Developmental delay	1					1				
	Emotional disturbance	2					2				
	Hearing Impaired	1					1				
Primary Disability	Intellectual Disability	1					1				
	Orthopedic impairment	1					1				
	Other health impairment	3					3				
	Specific learning disability	4					4				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.8: Screener Scale Score Summary by Subgroup - Grade 6

Outh mine was	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		779	279	490.6	738	109.7	779	296	495.3	733	106.7
	Female	378	279	495.0	738	111.9	378	296	499.3	733	108.3
Gender	Male	363	279	486.0	738	108.0	363	296	490.4	733	106.2
	Missing	38	340	490.8	722	104.1	38	372	502.4	723	95.3
	American Indian or Alaskan Native	6					6				
	Asian	157	279	526.9	738	122.0	157	296	530.1	733	118.8
	Black or African American	168	279	510.0	738	103.8	168	296	514.9	733	99.6
	Hispanic or Latino	239	279	461.1	699	96.0	239	296	468.0	709	93.1
Ethnicity	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	104	279	464.5	706	103.9	104	296	468.7	703	100.1
	White	90	302	495.1	738	112.1	90	310	496.8	733	111.5
	Other/Unknown	12	384	536.3	722	109.5	12	388	548.2	723	112.4
Other	IEP	10	316	511.4	693	119.1	10	326	517.5	695	111.3
Other	Migrant	2					2				

Subgroup	Ctatus			Listening			Reading						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
Primary Disability	Autism	1		-		-	1						
	Other health impairment	3					3						
	Specific learning disability	4					4						
	Speech or language impairment	1					1						

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.8: Screener Scale Score Summary by Subgroup - Grade 6 (cont.)

Outh mineron	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		779	296	500.6	732	129.5	779	281	491.6	741	113.4
	Female	378	296	504.3	732	131.3	378	281	497.5	741	115.1
Gender	Male	363	296	496.0	732	128.9	363	281	484.8	741	112.7
	Missing	38	334	507.9	725	120.1	38	365	498.7	731	101.2
	American Indian or Alaskan Native	6					6				
	Asian	157	296	546.8	732	130.0	157	281	531.5	741	126.1
	Black or African American	168	296	531.1	732	117.1	168	281	509.3	741	106.5
	Hispanic or Latino	239	296	462.3	717	124.7	239	281	464.3	718	99.8
Ethnicity	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	104	296	461.5	714	126.0	104	281	460.0	697	105.7
	White	90	304	504.9	732	127.0	90	295	493.1	741	117.6
	Other/Unknown	12	395	566.8	725	102.1	12	377	548.5	731	107.3
Other	IEP	10	365	539.2	709	112.3	10	311	506.7	690	118.3
Other	Migrant	2					2				

Subgroup	Ctatus			Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
Primary Disability	Autism	1		-		-	1						
	Other health impairment	3					3						
	Specific learning disability	4					4						
	Speech or language impairment	1					1						

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.8: Screener Scale Score Summary by Subgroup - Grade 6 (cont.)

Outh mine was	04-4		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		779	3803	5067.9	6476	695.8	779	3388	5052.0	6974	915.6
	Female	378	3803	5091.9	6476	708.1	378	3388	5089.3	6974	930.6
Gender	Male	363	3803	5041.5	6476	687.8	363	3388	5008.2	6974	908.9
	Missing	38	4188	5081.4	6476	654.6	38	3995	5100.2	6889	829.2
	American Indian or Alaskan Native	6					6				
	Asian	157	3803	5266.1	6476	747.5	157	3388	5368.4	6974	990.0
	Black or African American	168	3803	5205.5	6476	663.3	168	3388	5231.5	6974	846.6
<b>-</b> 04	Hispanic or Latino	239	3803	4882.7	6356	610.9	239	3388	4805.1	6776	824.2
Ethnicity	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	104	3803	4933.6	6476	693.2	104	3388	4799.8	6746	874.6
	White	90	3916	5085.4	6476	722.1	90	3487	5073.4	6974	933.2
	Other/Unknown	12	4201	5356.9	6356	737.3	12	4191	5504.3	6889	862.7
Other	IEP	10	3933	5231.8	6356	748.7	10	3739	5248.2	6679	905.5
Other	Migrant	2					2				

Subgroup	Status	Comprehension					Overall					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Primary Disability	Autism	1		-	-		1		-			
	Other health impairment	3					3					
	Specific learning disability	4					4					
	Speech or language impairment	1					1					

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.9: Screener Scale Score Summary by Subgroup - Grade 7

Subgroup	Status	Listening				Reading					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		791	279	482.8	738	115.5	791	296	491.2	733	112.8
Gender	Female	373	279	491.5	738	119.2	373	296	498.3	733	116.6
	Male	353	279	473.5	738	111.9	353	296	483.2	733	109.1
	Missing	65	333	483.2	726	110.6	65	331	493.8	725	108.8
Ethnicity	Asian	127	279	531.9	738	117.3	127	296	540.8	733	116.2
	Black or African American	157	291	512.4	738	101.3	157	310	519.3	733	98.2
	Hispanic or Latino	263	279	447.5	738	107.1	263	296	456.9	733	103.3
	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	96	279	445.5	717	109.8	96	296	454.4	702	106.7
	White	123	279	494.0	738	124.8	123	296	503.8	733	123.4
	Other/Unknown	17	366	511.9	707	112.4	17	356	511.2	709	108.2
Other	IEP	12	332	476.3	565	64.2	12	337	458.1	552	68.4
	Migrant	6					6				
Primary Disability	Developmental delay	1					1				

Subgroup	Ctatus			Listening			Reading					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Intellectual Disability	1				-	1					
	Other health impairment	3					3					
	Specific learning disability	6					6					
	Speech or language impairment	1					1					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.9: Screener Scale Score Summary by Subgroup - Grade 7 (cont.)

Outh sure vie	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		791	296	491.9	732	133.3	791	281	485.7	741	119.8
	Female	373	296	500.7	732	135.3	373	281	494.1	741	123.8
Gender	Male	353	296	483.7	732	131.3	353	281	476.8	741	115.9
	Missing	65	315	485.7	727	131.6	65	316	485.2	734	115.8
	Asian	127	296	551.9	732	125.6	127	281	537.3	741	119.7
	Black or African American	157	309	533.3	732	115.8	157	295	516.9	741	106.2
	Hispanic or Latino	263	296	446.0	732	131.5	263	281	449.7	741	111.5
Ethnicity	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	96	296	441.9	720	126.1	96	281	446.8	722	111.6
	White	123	296	511.1	732	130.8	123	281	496.5	741	131.3
	Other/Unknown	17	329	525.6	717	120.0	17	365	511.3	718	115.5
Other	IEP	12	368	493.6	648	97.8	12	322	456.2	591	68.4
Other	Migrant	6					6				
Primary Disability	Developmental delay	1					1				

Subgroup	Ctatus			Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Intellectual Disability	1					1					
	Other health impairment	3					3					
	Specific learning disability	6					6					
	Speech or language impairment	1					1					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.9: Screener Scale Score Summary by Subgroup - Grade 7 (cont.)

0.1	01-1		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		791	3803	5027.8	6476	730.6	791	3388	4996.9	6974	961.1
	Female	373	3803	5078.0	6476	753.7	373	3388	5063.6	6974	989.0
Gender	Male	353	3803	4969.5	6476	705.5	353	3388	4927.9	6974	933.2
	Missing	65	4101	5055.7	6476	717.7	65	3646	4988.9	6910	934.8
	Asian	127	3803	5333.4	6476	743.7	127	3388	5423.3	6974	955.0
	Black or African American	157	3803	5213.0	6476	645.1	157	3554	5265.1	6974	836.7
	Hispanic or Latino	263	3803	4802.0	6476	665.7	263	3388	4688.8	6974	907.0
Ethnicity	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	96	3803	4800.0	6476	714.3	96	3388	4667.1	6816	905.2
	White	123	3803	5106.9	6476	788.9	123	3388	5103.8	6974	1016.8
	Other/Unknown	17	4196	5176.0	6476	709.8	17	3898	5214.7	6776	905.4
Other	IEP	12	4017	4934.4	5370	438.2	12	3825	4866.1	5765	576.7
Other	Migrant	6					6				
Primary Disability	Developmental delay	1					1				

Cubarraus	Ctatus		Co	mprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Intellectual Disability	1					1				
	Other health impairment	3					3				
	Specific learning disability	6					6				
	Speech or language impairment	1					1				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.10: Screener Scale Score Summary by Subgroup - Grade 8

Outh mine was	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		819	279	483.5	738	118.3	819	296	492.3	733	114.5
	Female	371	279	494.2	738	120.7	371	296	503.4	733	115.7
Gender	Male	412	279	476.6	738	115.8	412	296	485.3	733	112.8
	Missing	36	279	452.8	698	112.3	36	296	459.2	708	110.9
	American Indian or Alaskan Native	3					3				
	Asian	130	336	537.5	738	118.8	130	334	546.8	733	112.4
	Black or African American	132	279	532.7	738	108.5	132	296	539.7	733	107.2
<b>-</b> 04	Hispanic or Latino	313	279	431.0	738	96.5	313	296	442.6	733	94.5
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	126	279	475.9	738	116.8	126	296	482.0	733	110.6
	White	100	279	511.0	738	124.9	100	296	516.9	733	121.6
	Other/Unknown	10	523	612.0	698	62.3	10	542	616.8	708	67.2
Other	Gifted	1					1				
Other	IEP	20	279	477.8	675	100.5	20	296	478.9	665	91.5

Subgroup	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	5		_		-	5				
	Autism	2					2				
	Developmental delay	1					1				
	Hearing Impaired	3					3				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	3					3				
_	Specific learning disability	4					4				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.10: Screener Scale Score Summary by Subgroup - Grade 8 (cont.)

0.1	01-1		:	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		818	296	482.9	732	135.9	819	281	486.4	741	122.4
	Female	371	296	491.9	732	138.5	371	281	497.7	741	123.8
Gender	Male	411	296	477.6	732	133.7	412	281	479.0	741	120.6
	Missing	36	296	450.0	717	128.7	36	281	454.7	717	120.2
	American Indian or Alaskan Native	3					3				
	Asian	130	324	549.4	732	123.8	130	319	544.5	741	120.4
	Black or African American	132	296	542.8	732	114.7	132	281	536.0	741	113.5
	Hispanic or Latino	313	296	420.1	732	117.9	313	281	431.3	741	99.6
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	125	296	464.2	732	138.3	126	281	478.8	741	120.8
	White	100	296	522.6	732	135.2	100	281	515.1	741	129.2
	Other/Unknown	10	555	643.8	717	55.5	10	548	627.2	717	63.5
Other	Gifted	1					1				
Other	IEP	19	296	491.3	702	105.6	20	281	477.7	691	103.7

Subgroup	Status			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	5		_		-	5				
	Autism	2					2				
	Developmental delay	1					1				
	Hearing Impaired	2					3				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	3					3				
	Specific learning disability	4					4				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.10: Screener Scale Score Summary by Subgroup - Grade 8 (cont.)

O. da anno anno	04-4		Con	nprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		819	3803	5032.9	6476	742.4	819	3388	4982.4	6974	979.3
	Female	371	3803	5105.8	6476	757.2	371	3388	5067.7	6974	993.6
Gender	Male	412	3803	4986.6	6476	726.9	412	3388	4928.9	6974	963.9
	Missing	36	3803	4811.4	6290	694.0	36	3388	4715.4	6777	939.2
	American Indian or Alaskan Native	3					3				
	Asian	130	4063	5371.9	6476	729.6	130	3726	5454.9	6974	943.6
	Black or African American	132	3803	5365.4	6476	706.1	132	3388	5400.0	6974	874.4
	Hispanic or Latino	313	3803	4710.7	6476	622.8	313	3388	4535.8	6974	814.1
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	126	3803	4967.1	6476	712.2	126	3388	4893.9	6974	971.0
	White	100	3803	5177.2	6476	765.2	100	3388	5227.0	6974	1021.4
	Other/Unknown	10	5359	5764.4	6239	354.9	10	5584	6107.1	6777	462.9
Other	Gifted	1					1				
Other	IEP	20	3803	4965.9	6107	590.5	20	3388	4948.3	6550	783.3

0.1	Otataa		Co	mprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	5		-		-	5		-		
	Autism	2					2				
	Developmental delay	1					1				
	Hearing Impaired	3					3				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	3					3				
	Specific learning disability	4					4				
	Speech or language impairment	2					2				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.11: Screener Scale Score Summary by Subgroup - Grade 9

0.1	01-1			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,349	297	464.2	731	107.9	1,348	309	470.2	733	103.6
	Female	537	297	476.7	731	109.3	538	309	482.5	733	103.8
Gender	Male	744	297	456.4	731	107.0	742	309	462.7	733	103.5
	Missing	68	321	451.8	696	98.1	68	326	455.6	701	93.2
	American Indian or Alaskan Native	1					1				
	Asian	136	297	546.7	731	120.5	135	309	552.8	733	113.7
	Black or African American	261	297	498.8	718	92.5	261	309	503.6	715	90.6
<b>-</b>	Hispanic or Latino	488	297	436.5	731	97.5	488	309	442.7	733	92.6
Ethnicity	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	337	297	423.5	723	91.2	336	309	432.1	722	87.9
	White	111	321	516.2	731	109.5	112	327	515.1	733	105.7
	Other/Unknown	7					7				
Other	Gifted	1					1				
Other	IEP	22	392	492.1	656	71.4	21	391	490.2	672	79.3

Cubanous	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	3		-		_	3		-		
	Developmental delay	2					2				
	Emotional disturbance	3					3				
Primary Disability	Intellectual Disability	3					2				
	Other health impairment	1					1				
	Specific learning disability	7					7				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.11: Screener Scale Score Summary by Subgroup - Grade 9 (cont.)

O. h	04-4		;	Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,349	332	476.8	722	114.9	1,349	315	471.7	732	102.7
	Female	538	332	489.6	722	116.4	538	315	484.0	732	103.7
Gender	Male	743	332	467.9	722	113.5	743	315	463.7	732	102.0
	Missing	68	342	472.1	706	111.1	68	333	461.5	685	93.9
	American Indian or Alaskan Native	1					1				
	Asian	135	332	567.4	722	116.0	135	315	552.6	732	115.8
	Black or African American	261	332	522.1	716	97.7	261	315	501.5	722	88.6
	Hispanic or Latino	488	332	443.9	722	106.4	488	315	445.5	732	93.5
Ethnicity	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	337	332	431.0	718	97.2	337	315	435.0	726	86.6
	White	112	342	533.2	722	109.8	112	334	517.7	732	104.2
	Other/Unknown	7					7				
Othor	Gifted	1					1				
Other	IEP	21	383	532.6	653	69.4	21	419	497.7	681	74.5

Subgroup	Ctatus			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Migrant	3			-		3		-		
	Developmental delay	2					2				
	Emotional disturbance	3					3				
Primary Disability	Intellectual Disability	2					2				
	Other health impairment	1					1				
	Specific learning disability	7					7				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.11: Screener Scale Score Summary by Subgroup - Grade 9 (cont.)

O. Ib arras res	04-4		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,350	3787	4893.8	6524	721.8	1,350	3605	4862.2	6923	854.9
	Female	538	3787	4975.0	6524	723.9	538	3605	4964.1	6923	862.5
Gender	Male	744	3787	4844.4	6524	720.9	744	3605	4796.0	6923	848.7
	Missing	68	3934	4791.8	6524	660.8	68	3720	4781.2	6678	791.0
	American Indian or Alaskan Native	1					1				
	Asian	136	3787	5436.9	6524	783.3	136	3605	5541.0	6923	924.8
	Black or African American	261	3787	5132.6	6524	636.9	261	3605	5156.5	6839	731.3
	Hispanic or Latino	488	3787	4705.0	6524	642.7	488	3605	4629.1	6923	777.7
Ethnicity	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	337	3787	4623.4	6446	615.6	337	3605	4535.4	6869	718.2
	White	112	3947	5228.4	6524	738.8	112	3727	5263.5	6923	851.8
	Other/Unknown	7					7				
Other	Gifted	1					1				
Other	IEP	22	4363	5026.7	6122	508.0	22	4399	5105.5	6386	563.6

Subgroup	Status		Co	mprehens	ion			Overall					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Migrant	3		_		-	3		-				
Primary Disability	Developmental delay	2					2						
	Emotional disturbance	3					3						
	Intellectual Disability	3					3						
	Other health impairment	1					1						
	Specific learning disability	7					7						

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.12: Screener Scale Score Summary by Subgroup - Grade 10

Subgroup	Status	Listening				Reading					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		754	297	498.0	731	108.3	753	309	501.2	733	104.6
Gender	Female	304	297	506.8	731	108.0	304	309	510.8	733	104.3
	Male	392	297	491.6	731	107.7	391	309	494.2	733	104.4
	Missing	58	320	494.9	731	112.2	58	345	497.4	733	105.8
Ethnicity	American Indian or Alaskan Native	3					3				
	Asian	91	297	560.3	731	98.1	91	309	559.7	733	98.5
	Black or African American	155	297	538.5	731	90.1	154	309	539.6	733	89.8
	Hispanic or Latino	293	297	450.7	731	97.9	293	309	457.3	733	92.6
	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	113	322	468.4	731	107.6	113	326	471.4	733	104.8
	White	92	297	553.4	731	100.9	92	309	553.3	733	99.0
	Other/Unknown	2					2				
Other	IEP	10	352	469.9	583	86.6	9				
	Migrant	6					6				

Subgroup	Ctatus			Listening			Reading					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Autism	2					2		_			
Primary Disability	Developmental delay	1					1					
	Multiple disabilities	2					1					
	Specific learning disability	2					2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.12: Screener Scale Score Summary by Subgroup - Grade 10 (cont.)

0.1	01-1		:	Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		753	332	510.0	722	117.4	753	315	502.3	732	103.1
	Female	304	332	521.5	722	116.9	304	315	510.6	732	102.0
Gender	Male	391	332	501.8	722	116.3	391	315	496.4	732	103.0
	Missing	58	345	505.0	722	123.7	58	340	498.7	732	108.6
	American Indian or Alaskan Native	3					3				
	Asian	91	332	578.9	722	98.4	91	315	562.4	732	95.0
	Black or African American	154	332	562.5	722	95.4	154	315	540.1	732	88.8
	Hispanic or Latino	293	332	456.9	722	108.1	293	315	458.5	732	92.9
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	113	342	475.3	722	116.9	113	334	472.6	732	99.1
	White	92	332	565.2	722	103.7	92	315	554.1	732	97.7
	Other/Unknown	2					2				
Other	IEP	9					9				
Other	Migrant	6					6				

Subgroup	Ctatus			Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Autism	2		-		-	2		-			
Primary Disability	Developmental delay	1					1					
	Multiple disabilities	1					1					
	Specific learning disability	2					2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.12: Screener Scale Score Summary by Subgroup - Grade 10 (cont.)

0.1	01-1		Con	nprehens	ion				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		754	3787	5117.1	6524	726.1	754	3605	5122.6	6923	864.3
	Female	304	3787	5180.6	6524	725.5	304	3605	5201.1	6923	858.6
Gender	Male	392	3787	5071.8	6524	724.6	392	3605	5066.5	6923	860.4
	Missing	58	4024	5090.7	6524	727.2	58	3809	5090.9	6923	903.6
	American Indian or Alaskan Native	3					3				
	Asian	91	3787	5520.8	6524	662.8	91	3605	5631.4	6923	768.5
	Black or African American	155	3787	5387.4	6524	620.9	155	3605	5467.5	6923	719.4
	Hispanic or Latino	293	3787	4803.9	6524	643.7	293	3605	4739.9	6923	779.3
Ethnicity	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	113	3944	4923.1	6524	743.4	113	3727	4869.5	6923	856.1
	White	92	3787	5484.4	6524	670.9	92	3605	5557.2	6923	798.2
	Other/Unknown	2					2				
Other	IEP	10	4170	4973.0	6045	685.0	10	3925	4905.9	5722	689.7
Other	Migrant	6					6				

Subgroup	Ctatus		Co	mprehens	ion		Overall					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Autism	2		-	-	-	2					
Primary Disability	Developmental delay	1					1					
	Multiple disabilities	2					2					
	Specific learning disability	2					2					

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.13: Screener Scale Score Summary by Subgroup - Grade 11

Outh sure vie	04-4			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		531	297	525.1	731	109.4	531	309	528.1	733	105.5
	Female	234	311	548.5	731	107.6	234	322	550.8	733	104.8
Gender	Male	258	297	505.6	731	105.9	258	309	509.2	733	101.5
	Missing	39	336	512.9	709	117.6	39	340	517.3	712	112.1
	Asian	78	311	565.8	731	105.9	78	322	571.0	733	101.4
	Black or African American	94	365	525.4	731	98.4	94	356	528.9	733	96.2
	Hispanic or Latino	199	297	482.7	723	107.7	199	309	485.8	722	103.3
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	47	353	551.7	723	111.6	47	370	555.5	722	104.9
	White	103	340	566.8	731	96.6	103	352	567.0	733	92.6
	Other/Unknown	4					4				
Other	IEP	13	365	524.8	731	112.7	13	356	522.8	733	110.8
Other	Migrant	6					6				
Primary Disability	Developmental delay	1					1				

Subgroup	Ctatus			Listening			Reading						
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Multiple disabilities	1					1						
	Specific learning disability	5					5						

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.13: Screener Scale Score Summary by Subgroup - Grade 11 (cont.)

Outh sure un	04-4		;	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		531	332	542.3	722	114.8	531	315	528.5	732	105.7
	Female	234	342	562.8	722	113.8	234	330	550.2	732	103.7
Gender	Male	258	332	526.1	722	112.1	258	315	510.4	732	103.4
	Missing	39	349	526.6	712	121.4	39	362	518.4	700	110.7
	Asian	78	359	589.9	722	97.3	78	330	567.2	732	101.2
	Black or African American	94	370	553.3	722	93.6	94	366	528.5	732	97.3
	Hispanic or Latino	199	332	490.2	718	118.4	199	315	488.4	726	103.7
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	47	358	564.7	718	116.0	47	384	557.0	726	108.4
	White	103	352	587.8	722	99.0	103	354	566.5	732	93.8
	Other/Unknown	4					4				
Other	IEP	13	391	567.7	722	110.2	13	366	516.8	732	110.7
Other	Migrant	6					6				
Primary Disability	Developmental delay	1					1				

Subgroup	Ctatus			Speaking			Writing						
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Multiple disabilities	1					1						
	Specific learning disability	5					5						

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.13: Screener Scale Score Summary by Subgroup - Grade 11 (cont.)

0.1	01-1		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		531	3787	5292.0	6524	723.8	531	3605	5351.4	6923	865.1
	Female	234	3787	5453.1	6524	716.8	234	3727	5529.9	6923	853.1
Gender	Male	258	3787	5157.1	6524	692.4	258	3605	5204.4	6923	840.7
	Missing	39	3947	5218.1	6524	791.0	39	3881	5251.9	6764	917.7
	Asian	78	3787	5578.7	6524	706.1	78	3827	5697.7	6923	797.9
	Black or African American	94	4167	5290.9	6524	655.6	94	4038	5377.5	6923	756.1
	Hispanic or Latino	199	3787	5008.2	6524	710.9	199	3605	4990.6	6869	865.2
Ethnicity	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	47	4145	5453.5	6524	709.7	47	4030	5564.5	6869	869.5
	White	103	4124	5572.1	6524	640.3	103	3902	5685.1	6923	758.7
	Other/Unknown	4					4				
Other	IEP	13	4167	5282.8	6524	756.2	13	4038	5372.9	6923	886.5
Other	Migrant	6					6				
Primary Disability	Developmental delay	1					1				

Subgroup	Chatria		Co	mprehens	ion		Overall						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Multiple disabilities	1					1						
	Specific learning disability	5					5						

<sup>\*</sup> Scale scores cannot be compared across grade bands.

Table S3.14: Screener Scale Score Summary by Subgroup - Grade 12

	21.1		ı	Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		274	297	545.7	731	108.4	273	309	548.9	733	104.2
	Female	130	297	555.4	731	105.4	129	309	558.0	733	101.5
Gender	Male	124	297	540.5	731	109.8	124	309	543.2	733	106.4
	Missing	20	357	514.8	702	116.5	20	351	524.9	703	106.2
	American Indian or Alaskan Native	1					1				
	Asian	36	297	564.1	723	115.7	36	309	569.3	722	113.9
	Black or African American	51	299	539.4	705	96.7	50	310	546.1	696	89.0
	Hispanic or Latino	102	297	516.3	723	108.6	102	309	519.3	722	102.4
Ethnicity	Native Hawaiian or Other Pacific Islander	4					4				
	Two or More Races	19	360	581.3	731	117.3	19	351	581.1	733	121.2
	White	58	342	577.0	731	99.6	58	347	577.9	733	97.7
	Other/Unknown	3					3				
Other	IEP	9					8				
Other	Migrant	2					2				

Subgroup	Ctatus			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	2					1				
Primary Disability -	Other health impairment	1					1				
	Specific learning disability	3					3				
	Visual impairment	1					1				

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.14: Screener Scale Score Summary by Subgroup - Grade 12 (cont.)

	21.1		:	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		273	332	562.3	722	110.6	273	315	548.4	732	104.6
	Female	129	332	576.6	722	103.7	129	315	559.7	732	100.6
Gender	Male	124	332	553.6	722	115.6	124	315	540.9	732	107.1
	Missing	20	355	524.4	709	112.7	20	361	522.1	695	111.1
	American Indian or Alaskan Native	1					1				
	Asian	36	332	580.7	718	107.8	36	315	569.7	726	109.9
	Black or African American	50	333	571.8	710	93.8	50	316	544.7	711	91.6
	Hispanic or Latino	102	332	524.0	718	115.9	102	315	519.6	726	105.1
Ethnicity	Native Hawaiian or Other Pacific Islander	4					4				
	Two or More Races	19	355	590.5	722	110.5	19	361	580.8	732	118.1
	White	58	373	596.7	722	100.8	58	373	576.7	732	96.9
	Other/Unknown	3					3				
Other	IEP	8					8				
Other	Migrant	2					2				

Subgroup	Status			Speaking			Writing					
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Multiple disabilities	1					1					
Primary Disability -	Other health impairment	1					1					
	Specific learning disability	3					3					
	Visual impairment	1					1					

<sup>\*</sup> Scale scores cannot be compared across grade bands.
\* Domain tests with Exemption are excluded.

Table S3.14: Screener Scale Score Summary by Subgroup - Grade 12 (cont.)

	21.1		Con	nprehens	ion				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		274	3787	5441.0	6524	724.1	274	3605	5512.8	6923	848.0
	Female	130	3787	5488.8	6524	701.3	130	3605	5602.4	6923	809.5
Gender	Male	124	3787	5420.0	6524	741.8	124	3605	5458.3	6923	876.2
	Missing	20	4167	5259.9	6446	761.7	20	3907	5268.5	6720	881.3
	American Indian or Alaskan Native	1					1				
	Asian	36	3787	5563.8	6524	785.5	36	3605	5671.5	6869	884.6
	Black or African American	51	3787	5404.6	6524	656.7	51	3611	5504.4	6747	725.6
	Hispanic or Latino	102	3787	5249.0	6524	714.5	102	3605	5258.9	6869	863.7
Ethnicity	Native Hawaiian or Other Pacific Islander	4					4				
	Two or More Races	19	4167	5660.4	6524	789.2	19	3907	5763.8	6923	927.0
	White	58	3944	5645.2	6524	673.5	58	4015	5763.0	6923	777.8
	Other/Unknown	3					3				
Other	IEP	9					9				
Other	Migrant	2					2				

Subgroup	Status	Comprehension				Overall					
		N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Primary Disability	Multiple disabilities	2					2				
	Other health impairment	1					1				
	Specific learning disability	3					3				
	Visual impairment	1					1				

<sup>\*</sup> Scale scores cannot be compared across grade bands.

## Section 4: Screener Assessment - Percentage of Students by Domain Performance Level

<sup>\*</sup> Domain tests with Exemption or Not Attempted are excluded from counts, which only include tests assigned to domain performance levels 0-5.

Table S4.1: Screener Performance Level by Domain - Beginning Kindergarten

Out many	04-4			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		10,78 2	3.4	18.6	16.8	52.0	4.7	4.4	10,77 8	3.4	22.2	20.3	41.8	6.0	6.4
	Female	4,957	2.5	16.5	15.4	55.2	5.4	5.0	4,957	2.5	19.2	19.3	44.9	6.9	7.2
Gender	Male	5,241	4.3	20.5	18.2	48.9	4.2	3.9	5,238	4.3	24.8	21.1	39.0	5.2	5.7
	Missing	584	2.4	20.4	15.8	53.1	3.8	4.6	583	2.4	23.8	20.8	41.2	5.8	6.0
	American Indian or Alaskan Native	39	5.1	15.4	12.8	53.8	5.1	7.7	39	5.1	20.5	15.4	41.0	7.7	10.3
	Asian	2,736	2.6	14.1	14.5	52.0	7.5	9.2	2,734	2.6	18.0	18.2	40.1	8.8	12.3
	Black or African American	1,878	2.3	16.2	15.3	58.4	4.0	3.8	1,876	2.3	19.6	19.3	47.8	5.4	5.6
	Hispanic or Latino	3,144	4.1	25.3	20.5	47.2	2.0	1.0	3,144	4.1	28.5	23.4	39.2	3.1	1.7
Ethnicity	Native Hawaiian or Other Pacific Islander	48	0.0	4.2	22.9	68.8	2.1	2.1	48	0.0	8.3	31.3	52.1	4.2	4.2
	Two or More Races	1,163	6.7	22.3	18.1	45.9	3.9	3.1	1,163	6.7	26.1	20.5	38.0	4.4	4.3
	White	1,631	2.5	14.2	14.3	57.8	6.6	4.7	1,631	2.5	17.8	18.7	45.2	8.4	7.5
	Other/Unknown	143	1.4	16.1	14.0	54.5	7.7	6.3	143	1.4	19.6	17.5	42.0	9.8	9.8
Other	Gifted	6	0.0	0.0	16.7	66.7	16.7	0.0	6	0.0	16.7	0.0	16.7	50.0	16.7
Other	IEP	216	20.8	26.4	19.0	31.5	2.3	0.0	214	21.0	29.9	19.2	25.7	2.8	1.4

Cubanana	Ctatus			L	istening.						ı	Reading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	16	0.0	31.3	31.3	37.5	0.0	0.0	16	0.0	31.3	25.0	43.8	0.0	0.0
	Autism	60	46.7	26.7	10.0	16.7	0.0	0.0	60	46.7	30.0	15.0	8.3	0.0	0.0
	Developmental delay	3	0.0	33.3	33.3	33.3	0.0	0.0	3	0.0	33.3	33.3	33.3	0.0	0.0
	Emotional disturbance	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Hearing Impaired	4	0.0	50.0	25.0	25.0	0.0	0.0	4	0.0	75.0	0.0	25.0	0.0	0.0
	Intellectual Disability	5	20.0	60.0	20.0	0.0	0.0	0.0	5	20.0	60.0	20.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	15	66.7	33.3	0.0	0.0	0.0	0.0	15	66.7	33.3	0.0	0.0	0.0	0.0
	Orthopedic impairment	4	0.0	0.0	75.0	25.0	0.0	0.0	4	0.0	25.0	0.0	75.0	0.0	0.0
	Other health impairment	10	0.0	20.0	20.0	40.0	20.0	0.0	10	0.0	20.0	30.0	30.0	0.0	20.0
	Specific learning disability	7	0.0	42.9	14.3	42.9	0.0	0.0	7	0.0	42.9	28.6	28.6	0.0	0.0
	Speech or language impairment	72	1.4	23.6	22.2	50.0	2.8	0.0	72	1.4	27.8	22.2	41.7	6.9	0.0
	Visual impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	0						

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.1: Screener Performance Level by Domain - Beginning Kindergarten (cont.)

Out many	04-4			S	peaking						١	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		10,77 8	3.4	36.4	21.3	20.2	5.9	12.8	10,77 8	3.4	63.3	23.5	7.2	1.5	1.1
	Female	4,957	2.5	33.2	21.2	21.6	6.0	15.4	4,957	2.5	63.3	24.1	7.3	1.5	1.3
Gender	Male	5,238	4.3	39.3	21.5	18.8	5.7	10.4	5,238	4.3	63.6	22.8	6.9	1.4	1.0
	Missing	583	2.4	37.4	20.1	20.8	6.9	12.5	583	2.4	61.6	24.7	9.1	1.4	0.9
	American Indian or Alaskan Native	39	5.1	28.2	17.9	28.2	5.1	15.4	39	5.1	59.0	20.5	12.8	2.6	0.0
	Asian	2,734	2.6	26.5	20.7	22.2	8.1	19.9	2,734	2.6	50.7	27.1	13.6	3.9	2.2
	Black or African American	1,876	2.3	32.2	23.0	23.8	6.2	12.4	1,876	2.3	62.3	25.4	8.3	1.0	0.9
<b>-</b> 0	Hispanic or Latino	3,144	4.1	48.4	21.6	16.5	3.6	5.8	3,144	4.1	74.6	18.7	2.3	0.2	0.2
Ethnicity	Native Hawaiian or Other Pacific Islander	48	0.0	31.3	41.7	16.7	4.2	6.3	48	0.0	75.0	20.8	4.2	0.0	0.0
	Two or More Races	1,163	6.7	44.5	18.2	17.5	3.3	9.8	1,163	6.7	68.4	19.5	3.7	0.9	0.8
	White	1,631	2.5	29.7	21.2	21.8	8.4	16.5	1,631	2.5	60.8	27.0	7.3	0.9	1.5
	Other/Unknown	143	1.4	32.2	22.4	16.8	5.6	21.7	143	1.4	54.5	30.8	7.7	1.4	4.2
Other	Gifted	6	0.0	16.7	0.0	33.3	16.7	33.3	6	0.0	33.3	16.7	50.0	0.0	0.0
Other	IEP	214	21.0	48.1	11.7	14.5	1.9	2.8	214	21.0	63.1	13.1	2.8	0.0	0.0

C b arra	Status			S	peaking						,	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	16	0.0	68.8	0.0	25.0	0.0	6.3	16	0.0	81.3	18.8	0.0	0.0	0.0
	Autism	60	46.7	43.3	3.3	5.0	0.0	1.7	60	46.7	41.7	5.0	6.7	0.0	0.0
	Developmental delay	3	0.0	66.7	0.0	33.3	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Emotional disturbance	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	4	0.0	75.0	0.0	25.0	0.0	0.0	4	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Intellectual Disability	5	20.0	80.0	0.0	0.0	0.0	0.0	5	20.0	80.0	0.0	0.0	0.0	0.0
	Multiple disabilities	15	66.7	33.3	0.0	0.0	0.0	0.0	15	66.7	33.3	0.0	0.0	0.0	0.0
.,	Orthopedic impairment	4	0.0	50.0	50.0	0.0	0.0	0.0	4	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	10	0.0	30.0	20.0	40.0	0.0	10.0	10	0.0	80.0	20.0	0.0	0.0	0.0
	Specific learning disability	7	0.0	71.4	14.3	14.3	0.0	0.0	7	0.0	85.7	14.3	0.0	0.0	0.0
	Speech or language impairment	72	1.4	44.4	20.8	26.4	2.8	4.2	72	1.4	75.0	20.8	2.8	0.0	0.0
	Visual impairment	0							0						

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.2: Screener Performance Level by Domain - Kindergarten

0.1	01-1			L	isteninç	9					F	Reading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		774	15.2	23.3	11.1	37.5	4.4	8.5	774	15.2	26.5	11.6	30.6	5.7	10.3
	Female	345	16.5	20.6	11.3	35.9	5.2	10.4	345	16.5	24.6	10.1	30.7	5.2	12.8
Gender	Male	402	14.9	25.1	11.2	38.3	3.7	6.7	402	14.9	28.1	12.9	29.9	6.0	8.2
	Missing	27	3.7	29.6	7.4	44.4	3.7	11.1	27	3.7	25.9	11.1	40.7	7.4	11.1
	American Indian or Alaskan Native	2	0.0	0.0	0.0	100.0	0.0	0.0	2	0.0	0.0	0.0	100.0	0.0	0.0
	Asian	169	18.9	17.8	8.9	31.4	5.3	17.8	169	18.9	20.7	12.4	20.1	8.3	19.5
	Black or African American	153	10.5	13.7	13.1	52.3	3.9	6.5	153	10.5	19.0	13.7	42.5	6.5	7.8
_, , , ,	Hispanic or Latino	223	9.4	30.9	15.7	34.5	3.1	6.3	223	9.4	35.0	13.9	30.0	4.5	7.2
Ethnicity	Native Hawaiian or Other Pacific Islander	6	0.0	16.7	16.7	66.7	0.0	0.0	6	0.0	16.7	16.7	66.7	0.0	0.0
	Two or More Races	110	20.0	27.3	9.1	31.8	7.3	4.5	110	20.0	29.1	11.8	25.5	4.5	9.1
	White	105	25.7	25.7	3.8	34.3	3.8	6.7	105	25.7	26.7	1.9	32.4	4.8	8.6
	Other/Unknown	6	0.0	33.3	16.7	50.0	0.0	0.0	6	0.0	33.3	16.7	50.0	0.0	0.0
Other -	Gifted	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	0.0	100.0	0.0
Other	IEP	29	37.9	31.0	10.3	20.7	0.0	0.0	29	37.9	31.0	13.8	17.2	0.0	0.0

Subgroup	Chatus			L	.isteninç	3					F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	2	50.0	50.0	0.0	0.0	0.0	0.0	 2	50.0	50.0	0.0	0.0	0.0	0.0
	Autism	16	62.5	25.0	6.3	6.3	0.0	0.0	16	62.5	31.3	0.0	6.3	0.0	0.0
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	2	0.0	0.0	0.0	100.0	0.0	0.0	2	0.0	0.0	50.0	50.0	0.0	0.0
Primary Disability	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
.,	Specific learning disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Speech or language impairment	4	0.0	25.0	0.0	75.0	0.0	0.0	4	0.0	25.0	0.0	75.0	0.0	0.0
	Traumatic brain injury	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.2: Screener Performance Level by Domain - Kindergarten (cont.)

0.1	01-1			S	peaking							Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		773	15.3	37.0	12.3	15.9	7.5	12.0	774	15.2	44.1	19.3	14.9	3.5	3.1
	Female	345	16.5	33.6	12.5	15.4	7.8	14.2	345	16.5	43.8	19.1	12.8	4.6	3.2
Gender	Male	401	15.0	39.4	12.5	16.0	7.0	10.2	402	14.9	44.3	19.4	16.2	2.5	2.7
	Missing	27	3.7	44.4	7.4	22.2	11.1	11.1	27	3.7	44.4	18.5	22.2	3.7	7.4
	American Indian or Alaskan Native	2	0.0	0.0	100.0	0.0	0.0	0.0	2	0.0	0.0	100.0	0.0	0.0	0.0
	Asian	168	19.0	30.4	11.3	10.7	5.4	23.2	169	18.9	30.8	16.0	19.5	6.5	8.3
	Black or African American	153	10.5	28.8	16.3	29.4	6.5	8.5	153	10.5	45.8	22.2	16.3	2.6	2.6
_, , , ,	Hispanic or Latino	223	9.4	48.0	11.7	12.6	8.5	9.9	223	9.4	53.8	21.5	11.2	3.6	0.4
Ethnicity	Native Hawaiian or Other Pacific Islander	6	0.0	50.0	16.7	16.7	16.7	0.0	6	0.0	50.0	33.3	16.7	0.0	0.0
	Two or More Races	110	20.0	37.3	13.6	11.8	8.2	9.1	110	20.0	45.5	17.3	13.6	1.8	1.8
	White	105	25.7	35.2	6.7	14.3	9.5	8.6	105	25.7	41.0	15.2	13.3	1.9	2.9
	Other/Unknown	6	0.0	50.0	0.0	50.0	0.0	0.0	6	0.0	50.0	16.7	33.3	0.0	0.0
Other	Gifted	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	100.0	0.0	0.0
Otilei	IEP	28	39.3	42.9	7.1	7.1	0.0	3.6	29	37.9	48.3	6.9	6.9	0.0	0.0

C b arra	Chatus			s	peakinç	J					١	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
	Autism	16	62.5	37.5	0.0	0.0	0.0	0.0	16	62.5	25.0	6.3	6.3	0.0	0.0
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	2	0.0	50.0	50.0	0.0	0.0	0.0	2	0.0	50.0	50.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
,	Specific learning disability	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Speech or language impairment	4	0.0	50.0	0.0	25.0	0.0	25.0	4	0.0	75.0	0.0	25.0	0.0	0.0
	Traumatic brain injury	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.3: Screener Performance Level by Domain - Grade 1

0.1	01-1			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,976	4.8	25.7	7.8	32.0	12.4	17.4	1,976	4.8	52.0	11.7	14.7	6.9	9.9
	Female	941	4.8	23.4	7.3	32.5	14.0	18.0	941	4.8	51.3	10.8	15.4	6.5	11.2
Gender	Male	937	4.8	26.8	8.8	31.3	11.1	17.3	937	4.8	52.2	12.4	14.2	7.6	8.9
	Missing	98	4.1	36.7	4.1	33.7	9.2	12.2	98	4.1	57.1	14.3	12.2	5.1	7.1
	American Indian or Alaskan Native	5	0.0	20.0	0.0	40.0	0.0	40.0	5	0.0	20.0	20.0	20.0	40.0	0.0
	Asian	495	3.2	17.0	5.3	25.9	16.6	32.1	495	3.2	32.5	11.5	20.4	10.7	21.6
	Black or African American	371	4.3	19.9	5.7	43.7	15.1	11.3	371	4.3	51.2	15.1	16.2	7.8	5.4
_, , , ,	Hispanic or Latino	535	4.5	36.8	9.9	33.5	8.2	7.1	535	4.5	71.2	8.2	9.7	2.6	3.7
Ethnicity	Native Hawaiian or Other Pacific Islander	11	0.0	54.5	18.2	27.3	0.0	0.0	11	0.0	100.0	0.0	0.0	0.0	0.0
	Two or More Races	232	12.9	33.2	8.2	24.1	8.6	12.9	232	12.9	56.9	10.3	9.1	4.7	6.0
	White	299	2.7	21.4	10.0	30.8	14.0	21.1	299	2.7	46.8	14.7	17.1	7.7	11.0
	Other/Unknown	28	0.0	14.3	14.3	35.7	3.6	32.1	28	0.0	42.9	21.4	14.3	17.9	3.6
Other	Gifted	4	0.0	0.0	0.0	25.0	0.0	75.0	4	0.0	0.0	0.0	25.0	25.0	50.0
Otilei	IEP	32	18.8	25.0	15.6	18.8	9.4	12.5	32	18.8	37.5	21.9	6.3	9.4	6.3

Cubanana			L	.istening	)						F	Reading				
Subgroup	Status	N	0	1	2	3	4	5		N	0	1	2	3	4	5
	Migrant	5	0.0	60.0	0.0	40.0	0.0	0.0	_	5	0.0	60.0	40.0	0.0	0.0	0.0
	Autism	9	33.3	11.1	11.1	33.3	0.0	11.1		9	33.3	33.3	0.0	22.2	11.1	0.0
	Hearing Impaired	2	0.0	50.0	0.0	0.0	50.0	0.0		2	0.0	50.0	50.0	0.0	0.0	0.0
	Intellectual Disability	1	0.0	0.0	100.0	0.0	0.0	0.0		1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	4	75.0	25.0	0.0	0.0	0.0	0.0		4	75.0	25.0	0.0	0.0	0.0	0.0
,	Other health impairment	3	0.0	66.7	0.0	0.0	0.0	33.3		3	0.0	33.3	33.3	0.0	33.3	0.0
•	Specific learning disability	1	0.0	0.0	0.0	100.0	0.0	0.0		1	0.0	0.0	100.0	0.0	0.0	0.0
	Speech or language impairment	5	0.0	0.0	20.0	40.0	20.0	20.0		5	0.0	40.0	40.0	0.0	0.0	20.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.3: Screener Performance Level by Domain - Grade 1 (cont.)

0.1	01-1			S	peaking						,	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,976	4.8	59.0	16.6	3.4	5.4	10.8	1,976	4.8	59.9	11.1	12.4	5.4	6.4
	Female	941	4.8	57.8	15.9	3.5	5.8	12.1	941	4.8	57.9	11.4	13.0	5.1	7.9
Gender	Male	937	4.8	59.3	17.5	3.4	5.2	9.7	937	4.8	60.8	10.9	12.5	5.9	5.1
	Missing	98	4.1	67.3	14.3	2.0	3.1	9.2	98	4.1	70.4	10.2	7.1	3.1	5.1
	American Indian or Alaskan Native	5	0.0	40.0	0.0	0.0	40.0	20.0	5	0.0	40.0	0.0	40.0	0.0	20.0
	Asian	495	3.2	43.2	18.8	4.2	8.1	22.4	495	3.2	39.4	15.2	17.4	9.3	15.6
	Black or African American	371	4.3	57.7	24.5	4.3	3.5	5.7	371	4.3	63.6	13.5	11.6	4.3	2.7
	Hispanic or Latino	535	4.5	75.9	10.5	2.6	2.6	3.9	535	4.5	77.0	6.9	6.7	2.8	2.1
Ethnicity	Native Hawaiian or Other Pacific Islander	11	0.0	100.0	0.0	0.0	0.0	0.0	11	0.0	100.0	0.0	0.0	0.0	0.0
	Two or More Races	232	12.9	63.8	8.6	1.7	3.4	9.5	232	12.9	62.1	8.2	9.1	3.0	4.7
	White	299	2.7	52.2	20.7	3.7	8.7	12.0	299	2.7	55.9	12.4	16.4	7.0	5.7
	Other/Unknown	28	0.0	53.6	21.4	3.6	14.3	7.1	28	0.0	60.7	3.6	32.1	3.6	0.0
Other —	Gifted	4	0.0	0.0	50.0	0.0	0.0	50.0	4	0.0	0.0	25.0	0.0	50.0	25.0
Otilei	IEP	32	18.8	50.0	25.0	3.1	0.0	3.1	32	18.8	43.8	18.8	9.4	6.3	3.1

Out man	04-4			S	peaking								Writing			
Subgroup	Status	N	0	1	2	3	4	5		N	0	1	2	3	4	5
	Migrant	5	0.0	80.0	20.0	0.0	0.0	0.0	-	5	0.0	60.0	40.0	0.0	0.0	0.0
	Autism	9	33.3	44.4	22.2	0.0	0.0	0.0		9	33.3	44.4	0.0	11.1	11.1	0.0
	Hearing Impaired	2	0.0	50.0	50.0	0.0	0.0	0.0		2	0.0	50.0	50.0	0.0	0.0	0.0
	Intellectual Disability	1	0.0	100.0	0.0	0.0	0.0	0.0		1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	4	75.0	25.0	0.0	0.0	0.0	0.0		4	75.0	25.0	0.0	0.0	0.0	0.0
,	Other health impairment	3	0.0	33.3	33.3	33.3	0.0	0.0		3	0.0	33.3	33.3	33.3	0.0	0.0
5	Specific learning disability	1	0.0	100.0	0.0	0.0	0.0	0.0		1	0.0	0.0	100.0	0.0	0.0	0.0
	Speech or language impairment	5	0.0	60.0	20.0	0.0	0.0	20.0		5	0.0	40.0	40.0	0.0	0.0	20.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.4: Screener Performance Level by Domain - Grade 2

0.1	01-1			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,349	7.3	23.2	10.2	25.9	15.3	18.1	1,349	7.3	50.6	7.5	15.3	6.5	12.8
	Female	627	6.9	22.0	8.5	26.6	16.4	19.6	627	6.9	48.3	8.3	15.6	7.2	13.7
Gender	Male	650	8.6	23.7	11.7	25.1	13.5	17.4	650	8.6	52.5	5.2	15.2	6.3	12.2
	Missing	72	0.0	29.2	12.5	26.4	20.8	11.1	72	0.0	52.8	20.8	13.9	2.8	9.7
	American Indian or Alaskan Native	4	0.0	50.0	0.0	50.0	0.0	0.0	4	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	364	6.3	19.8	6.9	17.9	20.6	28.6	364	6.3	34.9	6.9	19.2	11.0	21.7
	Black or African American	240	5.0	13.3	9.2	36.7	17.1	18.8	240	5.0	46.3	10.0	20.0	5.8	12.9
	Hispanic or Latino	349	6.0	32.7	13.2	28.7	9.7	9.7	349	6.0	67.6	6.9	9.7	2.9	6.9
Ethnicity	Native Hawaiian or Other Pacific Islander	4	0.0	0.0	25.0	25.0	0.0	50.0	4	0.0	50.0	0.0	0.0	0.0	50.0
	Two or More Races	173	10.4	32.9	13.9	23.1	11.6	8.1	173	10.4	64.2	6.9	9.8	5.2	3.5
	White	201	12.4	17.4	9.5	24.4	16.9	19.4	201	12.4	42.3	8.0	17.4	7.5	12.4
	Other/Unknown	14	0.0	7.1	7.1	28.6	14.3	42.9	14	0.0	42.9	0.0	21.4	0.0	35.7
Other	Gifted	7	0.0	14.3	0.0	0.0	42.9	42.9	7	0.0	14.3	14.3	14.3	14.3	42.9
Other	IEP	19	31.6	36.8	10.5	10.5	10.5	0.0	19	31.6	52.6	10.5	5.3	0.0	0.0

Oukana	04-4			L	.istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	9	0.0	33.3	33.3	11.1	0.0	22.2	9	0.0	66.7	0.0	11.1	0.0	22.2
	Autism	6	50.0	16.7	16.7	16.7	0.0	0.0	6	50.0	33.3	16.7	0.0	0.0	0.0
	Developmental delay	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
	Other health impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
8	Specific learning disability	2	0.0	50.0	0.0	0.0	50.0	0.0	2	0.0	50.0	0.0	50.0	0.0	0.0
	Speech or language impairment	2	0.0	50.0	0.0	0.0	50.0	0.0	2	0.0	50.0	50.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.4: Screener Performance Level by Domain - Grade 2 (cont.)

0.1	01-1			S	peaking						,	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,349	7.3	52.3	13.0	7.0	4.8	15.6	1,349	7.3	50.4	10.7	11.9	6.2	13.6
	Female	627	6.9	50.7	12.8	7.5	5.7	16.4	627	6.9	48.5	10.8	12.9	6.4	14.5
Gender	Male	650	8.6	52.5	12.9	6.8	3.8	15.4	650	8.6	51.4	10.0	10.8	6.2	13.1
	Missing	72	0.0	63.9	15.3	5.6	5.6	9.7	72	0.0	58.3	15.3	12.5	4.2	9.7
	American Indian or Alaskan Native	4	0.0	100.0	0.0	0.0	0.0	0.0	4	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	364	6.3	39.8	11.8	7.1	9.1	25.8	364	6.3	35.2	10.2	15.9	9.6	22.8
	Black or African American	240	5.0	47.9	17.9	10.4	5.4	13.3	240	5.0	45.8	15.4	14.6	6.7	12.5
	Hispanic or Latino	349	6.0	67.9	12.0	4.3	1.4	8.3	349	6.0	68.2	9.2	6.0	2.9	7.7
Ethnicity	Native Hawaiian or Other Pacific Islander	4	0.0	25.0	25.0	0.0	25.0	25.0	4	0.0	50.0	0.0	0.0	0.0	50.0
	Two or More Races	173	10.4	65.9	9.2	6.9	2.3	5.2	173	10.4	65.3	8.7	7.5	4.0	4.0
	White	201	12.4	41.8	14.4	8.0	4.0	19.4	201	12.4	39.3	11.4	14.9	7.5	14.4
	Other/Unknown	14	0.0	35.7	7.1	7.1	7.1	42.9	14	0.0	42.9	0.0	21.4	0.0	35.7
Other	Gifted	7	0.0	28.6	14.3	14.3	0.0	42.9	7	0.0	14.3	0.0	28.6	14.3	42.9
Other	IEP	19	31.6	57.9	5.3	5.3	0.0	0.0	19	31.6	42.1	21.1	5.3	0.0	0.0

Oukana	04-4			s	peaking							Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	9	0.0	66.7	0.0	11.1	0.0	22.2	9	0.0	66.7	0.0	11.1	0.0	22.2
	Autism	6	50.0	50.0	0.0	0.0	0.0	0.0	6	50.0	16.7	33.3	0.0	0.0	0.0
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Hearing Impaired	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
	Other health impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
\$	Specific learning disability	2	0.0	50.0	0.0	50.0	0.0	0.0	2	0.0	50.0	50.0	0.0	0.0	0.0
	Speech or language impairment	2	0.0	50.0	50.0	0.0	0.0	0.0	2	0.0	50.0	0.0	50.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.5: Screener Performance Level by Domain - Grade 3

0.1	Status	Listening						Reading							
Subgroup		N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,214	5.8	23.1	12.0	21.2	18.7	19.2	1,214	5.8	47.4	12.3	17.7	6.8	10.0
	Female	554	6.3	22.2	11.6	20.8	18.1	21.1	554	6.3	46.4	11.9	17.9	7.0	10.5
Gender	Male	604	6.0	24.3	12.3	20.2	19.7	17.5	604	6.0	47.7	12.3	18.0	6.1	9.9
	Missing	56	0.0	17.9	14.3	35.7	14.3	17.9	56	0.0	53.6	16.1	12.5	12.5	5.4
	American Indian or Alaskan Native	4	0.0	25.0	0.0	0.0	50.0	25.0	4	0.0	25.0	0.0	50.0	25.0	0.0
	Asian	271	5.9	14.4	7.7	16.6	21.8	33.6	271	5.9	28.8	11.1	22.5	12.2	19.6
	Black or African American	240	2.5	16.3	8.3	28.8	25.0	19.2	240	2.5	40.8	19.2	22.5	7.9	7.1
	Hispanic or Latino	333	4.5	33.0	18.9	23.4	11.7	8.4	333	4.5	67.3	10.8	11.7	4.2	1.5
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	0.0	20.0	20.0	40.0	20.0	5	0.0	40.0	0.0	40.0	0.0	20.0
	Two or More Races	162	10.5	27.2	12.3	21.0	16.7	12.3	162	10.5	50.6	12.3	16.7	3.1	6.8
	White	192	8.9	23.4	10.4	15.1	19.3	22.9	192	8.9	44.8	8.3	15.1	5.7	17.2
	Other/Unknown	7	0.0	28.6	14.3	14.3	14.3	28.6	7	0.0	57.1	14.3	14.3	0.0	14.3
Other	Gifted	2	0.0	0.0	0.0	0.0	50.0	50.0	2	0.0	0.0	0.0	0.0	50.0	50.0
	IEP	26	11.5	19.2	19.2	34.6	7.7	7.7	26	11.5	69.2	7.7	3.8	0.0	7.7

Outh manner	Status	Listening							Reading							
Subgroup		N	0	1	2	3	4	5		N	0	1	2	3	4	5
	Migrant	7	0.0	28.6	42.9	14.3	14.3	0.0	Ī	7	0.0	85.7	0.0	14.3	0.0	0.0
Primary Disability	Autism	5	0.0	0.0	20.0	40.0	0.0	40.0		5	0.0	40.0	20.0	0.0	0.0	40.0
	Emotional disturbance	1	0.0	0.0	0.0	100.0	0.0	0.0		1	0.0	100.0	0.0	0.0	0.0	0.0
	Intellectual Disability	2	50.0	0.0	50.0	0.0	0.0	0.0		2	50.0	50.0	0.0	0.0	0.0	0.0
	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0		2	50.0	50.0	0.0	0.0	0.0	0.0
	Other health impairment	2	0.0	0.0	0.0	100.0	0.0	0.0		2	0.0	50.0	50.0	0.0	0.0	0.0
	Specific learning disability	6	0.0	16.7	33.3	50.0	0.0	0.0		6	0.0	100.0	0.0	0.0	0.0	0.0
	Speech or language impairment	3	33.3	66.7	0.0	0.0	0.0	0.0		3	33.3	66.7	0.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.5: Screener Performance Level by Domain - Grade 3 (cont.)

0.1	01-1			s	peaking						١	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,214	5.8	49.4	8.1	8.8	10.4	17.5	1,214	5.8	48.8	10.8	15.3	7.2	12.0
	Female	554	6.3	48.0	8.1	7.6	10.5	19.5	554	6.3	47.5	10.3	16.2	7.4	12.3
Gender	Male	604	6.0	50.7	7.3	10.3	9.8	16.1	604	6.0	49.3	10.9	15.1	6.5	12.3
	Missing	56	0.0	50.0	16.1	5.4	16.1	12.5	56	0.0	55.4	14.3	8.9	14.3	7.1
	American Indian or Alaskan Native	4	0.0	25.0	25.0	0.0	25.0	25.0	4	0.0	25.0	25.0	25.0	0.0	25.0
	Asian	271	5.9	32.1	5.5	9.6	14.4	32.5	271	5.9	31.4	9.2	19.2	9.2	25.1
	Black or African American	240	2.5	42.9	11.7	12.5	16.3	14.2	240	2.5	44.6	12.5	20.8	12.5	7.1
	Hispanic or Latino	333	4.5	68.8	6.9	8.4	3.9	7.5	333	4.5	67.9	9.9	11.1	4.2	2.4
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	40.0	0.0	0.0	0.0	60.0	5	0.0	40.0	0.0	40.0	0.0	20.0
	Two or More Races	162	10.5	54.9	7.4	6.8	13.0	7.4	162	10.5	50.6	13.0	13.6	3.7	8.6
	White	192	8.9	44.8	8.9	6.3	6.3	25.0	192	8.9	43.8	10.9	10.9	6.8	18.8
	Other/Unknown	7	0.0	42.9	28.6	0.0	14.3	14.3	7	0.0	71.4	0.0	14.3	0.0	14.3
Other	Gifted	2	0.0	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	0.0	0.0	50.0	50.0
Otilei	IEP	26	11.5	53.8	15.4	11.5	3.8	3.8	26	11.5	69.2	7.7	3.8	0.0	7.7

Outh masses	04-4			S	peaking							١	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N		0	1	2	3	4	5
	Migrant	7	0.0	100.0	0.0	0.0	0.0	0.0		7	0.0	85.7	0.0	14.3	0.0	0.0
	Autism	5	0.0	40.0	0.0	20.0	20.0	20.0		5	0.0	40.0	20.0	0.0	0.0	40.0
	Emotional disturbance	1	0.0	0.0	100.0	0.0	0.0	0.0		1	0.0	100.0	0.0	0.0	0.0	0.0
	Intellectual Disability	2	50.0	50.0	0.0	0.0	0.0	0.0		2	50.0	50.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0		2	50.0	50.0	0.0	0.0	0.0	0.0
	Other health impairment	2	0.0	50.0	0.0	50.0	0.0	0.0		2	0.0	50.0	0.0	50.0	0.0	0.0
	Specific learning disability	6	0.0	66.7	33.3	0.0	0.0	0.0		6	0.0	100.0	0.0	0.0	0.0	0.0
	Speech or language impairment	3	33.3	66.7	0.0	0.0	0.0	0.0		3	33.3	66.7	0.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.6: Screener Performance Level by Domain - Grade 4

0.1	01-1			L	istening						F	Reading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		990	8.2	26.1	7.1	15.1	16.9	26.8	990	8.2	39.7	9.1	14.2	10.0	18.8
	Female	486	8.2	25.3	6.6	15.4	15.4	29.0	486	8.2	39.9	9.1	13.2	8.6	21.0
Gender	Male	461	8.2	26.9	7.4	14.5	18.7	24.3	461	8.2	39.7	9.1	15.0	11.3	16.7
	Missing	43	7.0	25.6	9.3	16.3	14.0	27.9	43	7.0	37.2	9.3	18.6	11.6	16.3
	American Indian or Alaskan Native	2	0.0	50.0	50.0	0.0	0.0	0.0	2	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	203	7.9	12.3	4.4	16.7	19.7	38.9	203	7.9	22.7	11.3	16.7	15.3	26.1
	Black or African American	190	4.2	13.7	6.3	18.9	24.2	32.6	190	4.2	28.9	11.1	20.0	11.6	24.2
	Hispanic or Latino	296	5.4	42.6	7.8	15.2	12.2	16.9	296	5.4	57.1	9.1	10.8	7.1	10.5
Ethnicity	Native Hawaiian or Other Pacific Islander	6	0.0	16.7	16.7	0.0	33.3	33.3	6	0.0	33.3	0.0	33.3	0.0	33.3
	Two or More Races	144	14.6	36.8	8.3	10.4	11.1	18.8	144	14.6	49.3	6.3	9.7	6.9	13.2
	White	135	14.8	19.3	8.1	11.1	17.0	29.6	135	14.8	34.1	5.2	13.3	8.9	23.7
	Other/Unknown	14	0.0	0.0	7.1	28.6	28.6	35.7	14	0.0	14.3	21.4	21.4	21.4	21.4
Other	Gifted	1	0.0	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	0.0	0.0	100.0	0.0
Otilei	IEP	16	12.5	18.8	6.3	31.3	12.5	18.8	16	12.5	43.8	12.5	12.5	6.3	12.5

Cubanana	Subgroup Status			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	4	25.0	25.0	0.0	0.0	25.0	25.0	4	25.0	25.0	0.0	0.0	50.0	0.0
	Autism	4	25.0	0.0	0.0	25.0	50.0	0.0	4	25.0	25.0	25.0	25.0	0.0	0.0
Primary Disability	Intellectual Disability	2	0.0	50.0	50.0	0.0	0.0	0.0	2	0.0	100.0	0.0	0.0	0.0	0.0
	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
	Specific learning disability	3	0.0	0.0	33.3	66.7	0.0	0.0	3	0.0	100.0	0.0	0.0	0.0	0.0
	Speech or language impairment	0							0						

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.6: Screener Performance Level by Domain - Grade 4 (cont.)

0.1	01-1			S	peaking						١	Writing			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		990	8.2	38.4	7.1	10.1	5.4	30.9	990	8.2	36.4	8.8	18.6	7.7	20.4
	Female	486	8.2	37.4	7.2	8.8	5.1	33.1	486	8.2	36.2	9.1	16.0	8.0	22.4
Gender	Male	461	8.2	39.3	6.7	11.3	5.9	28.6	461	8.2	36.7	8.5	21.0	7.6	18.0
	Missing	43	7.0	39.5	9.3	11.6	2.3	30.2	43	7.0	34.9	9.3	20.9	4.7	23.3
	American Indian or Alaskan Native	2	0.0	100.0	0.0	0.0	0.0	0.0	2	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	203	7.9	23.6	9.9	11.8	4.9	41.9	203	7.9	18.7	11.3	21.7	10.3	30.0
	Black or African American	190	4.2	24.7	12.6	12.1	6.3	40.0	190	4.2	26.3	8.9	24.7	11.1	24.7
	Hispanic or Latino	296	5.4	55.1	6.8	8.8	3.7	20.3	296	5.4	53.4	8.8	15.9	6.1	10.5
Ethnicity	Native Hawaiian or Other Pacific Islander	6	0.0	33.3	0.0	0.0	16.7	50.0	6	0.0	33.3	0.0	33.3	0.0	33.3
	Two or More Races	144	14.6	48.6	2.1	6.9	4.9	22.9	144	14.6	47.2	6.3	13.2	3.5	15.3
	White	135	14.8	34.8	2.2	9.6	6.7	31.9	135	14.8	30.4	7.4	14.8	6.7	25.9
	Other/Unknown	14	0.0	7.1	0.0	28.6	21.4	42.9	14	0.0	7.1	14.3	35.7	14.3	28.6
Other	Gifted	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	100.0	0.0
Other	IEP	16	12.5	37.5	18.8	12.5	0.0	18.8	16	12.5	37.5	12.5	18.8	6.3	12.5

Cubanana	Ctatus			S	peaking							١	Writing			
Subgroup	Status	N	0	1	2	3	4	5		N	0	1	2	3	4	5
	Migrant	4	25.0	25.0	0.0	25.0	0.0	25.0	_	4	25.0	25.0	0.0	25.0	25.0	0.0
	Autism	4	25.0	25.0	25.0	25.0	0.0	0.0		4	25.0	25.0	25.0	25.0	0.0	0.0
Primary Disability	Intellectual Disability	2	0.0	100.0	0.0	0.0	0.0	0.0		2	0.0	100.0	0.0	0.0	0.0	0.0
	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0		2	50.0	50.0	0.0	0.0	0.0	0.0
	Specific learning disability	3	0.0	66.7	33.3	0.0	0.0	0.0		3	0.0	66.7	33.3	0.0	0.0	0.0
	Speech or language impairment	0								0						

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.7: Screener Performance Level by Domain - Grade 5

0.1	01-1			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		964	8.2	33.7	8.5	8.2	15.9	25.5	964	8.2	45.6	9.2	13.2	7.0	16.8
	Female	444	7.7	30.4	9.0	7.9	16.2	28.8	444	7.7	42.3	8.6	15.1	7.9	18.5
Gender	Male	482	8.9	37.1	8.3	8.1	15.4	22.2	482	8.9	49.0	9.5	11.2	5.8	15.6
	Missing	38	5.3	28.9	5.3	13.2	18.4	28.9	38	5.3	42.1	13.2	15.8	10.5	13.2
	American Indian or Alaskan Native	3	0.0	66.7	33.3	0.0	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Asian	183	7.7	26.2	6.0	9.8	12.6	37.7	183	7.7	36.6	6.6	12.0	10.4	26.8
	Black or African American	199	5.0	24.6	8.0	11.1	25.1	26.1	199	5.0	34.2	18.1	19.1	8.5	15.1
_, , , ,	Hispanic or Latino	268	6.0	47.0	11.2	7.8	13.1	14.9	268	6.0	63.4	7.8	8.2	4.9	9.7
Ethnicity	Native Hawaiian or Other Pacific Islander	4	25.0	0.0	25.0	0.0	25.0	25.0	4	25.0	25.0	0.0	25.0	25.0	0.0
	Two or More Races	153	12.4	39.2	10.5	3.9	14.4	19.6	153	12.4	50.3	5.9	15.0	4.6	11.8
	White	144	13.2	25.7	4.2	8.3	13.9	34.7	144	13.2	35.4	6.9	13.2	5.6	25.7
	Other/Unknown	10	0.0	30.0	10.0	0.0	20.0	40.0	10	0.0	40.0	0.0	20.0	20.0	20.0
Other	Gifted	2	0.0	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	0.0	0.0	0.0	100.0
Otilei	IEP	15	0.0	33.3	13.3	26.7	13.3	13.3	15	0.0	60.0	13.3	13.3	0.0	13.3

Subgroup	04-4			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	2	0.0	50.0	0.0	0.0	0.0	50.0	2	0.0	50.0	0.0	0.0	0.0	50.0
	Autism	2	0.0	0.0	0.0	0.0	50.0	50.0	2	0.0	0.0	0.0	50.0	0.0	50.0
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	2	0.0	0.0	0.0	50.0	0.0	50.0	2	0.0	0.0	50.0	0.0	0.0	50.0
	Hearing Impaired	1	0.0	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
Primary Disability	Intellectual Disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Orthopedic impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
\$	Other health impairment	3	0.0	33.3	33.3	33.3	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Specific learning disability	4	0.0	0.0	0.0	50.0	25.0	25.0	4	0.0	50.0	25.0	0.0	25.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.7: Screener Performance Level by Domain - Grade 5 (cont.)

0.1	01-1			s	peaking						١	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		964	8.2	47.0	6.6	5.8	3.6	28.7	964	8.2	39.8	9.2	18.4	5.3	19.1
	Female	444	7.7	45.0	6.5	5.2	4.1	31.5	444	7.7	36.3	9.2	19.8	5.4	21.6
Gender	Male	482	8.9	49.2	6.8	6.2	2.9	25.9	482	8.9	43.6	9.1	16.2	5.2	17.0
	Missing	38	5.3	42.1	5.3	7.9	7.9	31.6	38	5.3	34.2	10.5	28.9	5.3	15.8
	American Indian or Alaskan Native	3	0.0	66.7	33.3	0.0	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Asian	183	7.7	39.3	4.9	4.9	2.7	40.4	183	7.7	30.6	9.8	14.8	6.0	31.1
	Black or African American	199	5.0	39.7	9.0	10.1	4.5	31.7	199	5.0	32.2	8.5	29.6	7.0	17.6
	Hispanic or Latino	268	6.0	61.2	7.8	4.1	4.5	16.4	268	6.0	54.9	10.8	14.2	4.1	10.1
Ethnicity	Native Hawaiian or Other Pacific Islander	4	25.0	25.0	0.0	0.0	0.0	50.0	4	25.0	25.0	0.0	25.0	0.0	25.0
	Two or More Races	153	12.4	51.0	5.9	4.6	2.6	23.5	153	12.4	45.1	8.5	15.7	5.9	12.4
	White	144	13.2	36.8	4.2	4.9	3.5	37.5	144	13.2	29.2	6.9	17.4	4.2	29.2
	Other/Unknown	10	0.0	40.0	0.0	20.0	0.0	40.0	10	0.0	30.0	10.0	30.0	0.0	30.0
Othor	Gifted	2	0.0	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	0.0	0.0	0.0	100.0
Other	IEP	15	0.0	60.0	13.3	6.7	6.7	13.3	15	0.0	46.7	20.0	20.0	0.0	13.3

Subgroup	04-4			S	peaking						1	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	2	0.0	50.0	0.0	0.0	0.0	50.0	2	0.0	50.0	0.0	0.0	0.0	50.0
	Autism	2	0.0	50.0	0.0	0.0	0.0	50.0	2	0.0	0.0	0.0	50.0	0.0	50.0
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	2	0.0	0.0	50.0	0.0	0.0	50.0	2	0.0	0.0	0.0	50.0	0.0	50.0
	Hearing Impaired	1	0.0	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
Primary Disability	Intellectual Disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Orthopedic impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	3	0.0	100.0	0.0	0.0	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Specific learning disability	4	0.0	0.0	25.0	50.0	0.0	25.0	4	0.0	0.0	50.0	25.0	25.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.8: Screener Performance Level by Domain - Grade 6

0.1	01-1			L	istening						F	Reading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		882	11.7	27.3	9.3	11.0	14.9	25.9	882	11.7	40.6	6.9	15.5	8.7	16.6
	Female	422	10.4	27.3	9.2	9.5	14.5	29.1	422	10.4	38.6	7.8	14.7	10.4	18.0
Gender	Male	421	13.8	27.8	9.0	11.6	14.7	23.0	421	13.8	42.5	5.5	15.9	6.9	15.4
	Missing	39	2.6	23.1	12.8	20.5	20.5	20.5	39	2.6	41.0	12.8	20.5	10.3	12.8
	American Indian or Alaskan Native	6	0.0	50.0	16.7	0.0	16.7	16.7	6	0.0	66.7	0.0	16.7	16.7	0.0
	Asian	167	6.0	19.2	12.6	9.0	12.0	41.3	167	6.0	33.5	7.8	12.0	12.0	28.7
	Black or African American	176	4.5	19.9	6.3	14.8	23.3	31.3	176	4.5	32.4	8.5	26.1	8.0	20.5
	Hispanic or Latino	266	10.2	37.6	9.8	11.3	14.3	16.9	266	10.2	51.1	7.1	15.0	8.3	8.3
Ethnicity	Native Hawaiian or Other Pacific Islander	3	0.0	33.3	0.0	0.0	0.0	66.7	3	0.0	33.3	0.0	0.0	33.3	33.3
	Two or More Races	136	23.5	31.6	6.6	7.4	14.7	16.2	136	23.5	41.9	3.7	14.0	6.6	10.3
	White	116	22.4	21.6	10.3	12.9	9.5	23.3	116	22.4	37.1	6.9	8.6	7.8	17.2
	Other/Unknown	12	0.0	16.7	16.7	8.3	0.0	58.3	12	0.0	33.3	8.3	8.3	8.3	41.7
Othor	IEP	12	16.7	16.7	8.3	8.3	25.0	25.0	12	16.7	16.7	16.7	25.0	8.3	16.7
Other	Migrant	3	33.3	0.0	33.3	33.3	0.0	0.0	3	33.3	33.3	33.3	0.0	0.0	0.0

Cubarana	Status			L	istening						F	Reading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Autism	2	50.0	50.0	0.0	0.0	0.0	0.0		50.0	0.0	50.0	0.0	0.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	,	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Other health impairment	3	0.0	0.0	33.3	33.3	0.0	33.3	3	0.0	33.3	0.0	33.3	0.0	33.3
	Specific learning disability	4	0.0	0.0	0.0	25.0	75.0	0.0	4	0.0	25.0	25.0	50.0	0.0	0.0
	Speech or language impairment	1	0.0	0.0	0.0	0.0	0.0	100.0	,	0.0	0.0	0.0	0.0	100.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.8: Screener Performance Level by Domain - Grade 6 (cont.)

0.1	01-1			S	peaking						١	Writing			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		882	11.7	36.8	7.1	13.4	5.1	25.9	882	11.7	33.0	9.1	19.3	7.3	19.7
	Female	422	10.4	36.5	7.1	12.3	6.9	26.8	422	10.4	32.7	7.8	18.7	9.0	21.3
Gender	Male	421	13.8	37.3	7.1	13.5	3.6	24.7	421	13.8	33.5	10.2	19.0	5.0	18.5
	Missing	39	2.6	35.9	7.7	23.1	2.6	28.2	39	2.6	30.8	10.3	28.2	12.8	15.4
	American Indian or Alaskan Native	6	0.0	66.7	0.0	0.0	16.7	16.7	6	0.0	66.7	0.0	16.7	16.7	0.0
	Asian	167	6.0	28.7	7.2	12.6	6.0	39.5	167	6.0	25.1	9.6	15.0	9.6	34.7
	Black or African American	176	4.5	26.7	10.2	19.9	5.7	33.0	176	4.5	25.0	9.7	30.7	8.0	22.2
_, , , ,	Hispanic or Latino	266	10.2	48.9	5.6	12.4	4.5	18.4	266	10.2	42.9	10.2	17.7	7.1	12.0
Ethnicity	Native Hawaiian or Other Pacific Islander	3	0.0	33.3	0.0	0.0	0.0	66.7	3	0.0	33.3	0.0	0.0	0.0	66.7
	Two or More Races	136	23.5	39.7	5.9	11.8	3.7	15.4	136	23.5	36.8	4.4	19.1	5.1	11.0
	White	116	22.4	33.6	6.9	9.5	5.2	22.4	116	22.4	30.2	9.5	13.8	3.4	20.7
	Other/Unknown	12	0.0	16.7	16.7	16.7	8.3	41.7	12	0.0	8.3	25.0	8.3	25.0	33.3
Other	IEP	12	16.7	25.0	8.3	16.7	0.0	33.3	12	16.7	25.0	0.0	33.3	0.0	25.0
Other	Migrant	3	33.3	33.3	33.3	0.0	0.0	0.0	3	33.3	33.3	0.0	33.3	0.0	0.0

Cubarana	Status			S	peaking						١	<b>Writing</b>			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Autism	2	50.0	0.0	50.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Other health impairment	3	0.0	66.7	0.0	0.0	0.0	33.3	3	0.0	33.3	0.0	33.3	0.0	33.3
	Specific learning disability	4	0.0	0.0	25.0	50.0	0.0	25.0	4	0.0	0.0	25.0	75.0	0.0	0.0
	Speech or language impairment	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.9: Screener Performance Level by Domain - Grade 7

	21.1			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		894	11.5	36.9	9.1	15.7	8.7	18.1	894	11.5	45.2	11.2	14.8	6.8	10.5
	Female	419	11.0	34.4	9.3	14.8	8.4	22.2	419	11.0	43.7	8.6	16.5	8.6	11.7
Gender	Male	409	13.7	38.4	9.0	16.4	8.6	13.9	409	13.7	46.2	14.2	11.5	5.4	9.0
	Missing	66	1.5	43.9	7.6	16.7	12.1	18.2	66	1.5	48.5	9.1	24.2	4.5	12.1
	Asian	138	8.0	24.6	7.2	20.3	6.5	33.3	138	8.0	31.9	13.8	12.3	12.3	21.7
	Black or African American	165	4.8	23.0	12.7	24.2	13.9	21.2	165	4.8	32.1	18.8	23.6	10.9	9.7
	Hispanic or Latino	302	12.9	50.7	6.0	12.6	7.3	10.6	302	12.9	56.6	7.9	12.9	4.3	5.3
Ethnicity	Native Hawaiian or Other Pacific Islander	8	0.0	12.5	25.0	62.5	0.0	0.0	8	0.0	50.0	25.0	25.0	0.0	0.0
	Two or More Races	123	22.0	45.5	8.1	8.1	5.7	10.6	123	22.0	53.7	6.5	8.1	3.3	6.5
	White	141	12.8	29.8	13.5	10.6	10.6	22.7	141	12.8	41.1	9.2	15.6	6.4	14.9
	Other/Unknown	17	0.0	35.3	5.9	23.5	11.8	23.5	17	0.0	47.1	17.6	17.6	0.0	17.6
Other	IEP	15	20.0	13.3	13.3	46.7	6.7	0.0	15	20.0	46.7	20.0	13.3	0.0	0.0
Other	Migrant	6	0.0	16.7	0.0	33.3	16.7	33.3	6	0.0	16.7	16.7	33.3	16.7	16.7
<b>Primary Disability</b>	Autism	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0

Out man	Otatua			L	.istening							Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	0							0						
	Intellectual Disability	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Multiple disabilities	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Other health impairment	4	25.0	0.0	0.0	75.0	0.0	0.0	4	25.0	25.0	25.0	25.0	0.0	0.0
	Specific learning disability	7	14.3	0.0	0.0	57.1	14.3	14.3	7	14.3	42.9	14.3	14.3	0.0	14.3
	Speech or language impairment	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.9: Screener Performance Level by Domain - Grade 7 (cont.)

Oukana	Status	Speaking							Writing						
Subgroup		N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		894	11.5	41.6	9.4	10.2	5.4	21.9	894	11.5	44.1	11.4	13.6	4.0	15.3
	Female	419	11.0	39.1	9.5	9.5	6.0	24.8	419	11.0	43.2	9.1	13.1	4.8	18.9
Gender	Male	409	13.7	43.0	9.5	10.3	4.9	18.6	409	13.7	44.3	13.4	13.4	3.2	12.0
	Missing	66	1.5	48.5	7.6	13.6	4.5	24.2	66	1.5	48.5	13.6	18.2	4.5	13.6
	Asian	138	8.0	26.1	10.9	11.6	7.2	36.2	138	8.0	29.0	15.9	11.6	5.8	29.7
	Black or African American	165	4.8	28.5	15.8	14.5	7.3	29.1	165	4.8	32.1	16.4	23.6	4.8	18.2
	Hispanic or Latino	302	12.9	55.6	5.0	7.6	3.0	15.9	302	12.9	55.6	8.6	11.3	3.0	8.6
Ethnicity	Native Hawaiian or Other Pacific Islander	8	0.0	50.0	37.5	12.5	0.0	0.0	8	0.0	37.5	37.5	25.0	0.0	0.0
	Two or More Races	123	22.0	49.6	7.3	5.7	4.1	11.4	123	22.0	52.8	6.5	8.1	2.4	8.1
	White	141	12.8	35.5	9.2	12.8	7.1	22.7	141	12.8	41.1	9.2	12.8	5.7	18.4
	Other/Unknown	17	0.0	35.3	17.6	11.8	11.8	23.5	17	0.0	41.2	17.6	17.6	0.0	23.5
Other	IEP	15	20.0	33.3	13.3	13.3	6.7	13.3	15	20.0	60.0	6.7	13.3	0.0	0.0
	Migrant	6	0.0	16.7	0.0	33.3	33.3	16.7	6	0.0	16.7	16.7	33.3	0.0	33.3
<b>Primary Disability</b>	Autism	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0

Out man	Status	Speaking						Writing							
Subgroup		N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	0							0						
	Intellectual Disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Multiple disabilities	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Other health impairment	4	25.0	25.0	0.0	0.0	25.0	25.0	4	25.0	50.0	0.0	25.0	0.0	0.0
	Specific learning disability	7	14.3	0.0	28.6	28.6	0.0	28.6	7	14.3	42.9	14.3	14.3	0.0	14.3
	Speech or language impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.10: Screener Performance Level by Domain - Grade 8

0.1	01-1			L	isteninç	]						Reading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		917	10.7	41.4	9.1	13.2	8.9	16.7	917	10.7	49.7	10.5	16.1	5.0	8.0
	Female	423	12.3	38.5	7.6	13.5	9.9	18.2	423	12.3	45.9	12.1	15.1	4.7	9.9
Gender	Male	456	9.6	42.8	10.3	13.6	8.3	15.4	456	9.6	52.0	9.2	17.3	5.7	6.1
	Missing	38	5.3	57.9	10.5	5.3	5.3	15.8	38	5.3	65.8	7.9	13.2	0.0	7.9
	American Indian or Alaskan Native	3	0.0	100.0	0.0	0.0	0.0	0.0	3	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	138	5.8	22.5	13.0	18.8	9.4	30.4	138	5.8	32.6	13.0	25.4	7.2	15.9
	Black or African American	140	5.7	20.7	10.7	20.0	19.3	23.6	140	5.7	30.0	17.1	30.0	7.9	9.3
	Hispanic or Latino	354	11.6	60.2	8.2	9.0	4.0	7.1	354	11.6	68.1	5.9	8.5	2.8	3.1
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	0.0	20.0	40.0	20.0	20.0	5	0.0	20.0	60.0	20.0	0.0	0.0
	Two or More Races	155	18.7	44.5	3.2	11.0	10.3	12.3	155	18.7	48.4	9.0	14.2	3.9	5.8
	White	112	10.7	31.3	13.4	12.5	6.3	25.9	112	10.7	43.8	13.4	11.6	8.0	12.5
	Other/Unknown	10	0.0	0.0	0.0	20.0	40.0	40.0	10	0.0	0.0	10.0	50.0	0.0	40.0
Othor	Gifted	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
Other	IEP	22	9.1	27.3	13.6	36.4	4.5	9.1	22	9.1	54.5	18.2	9.1	9.1	0.0

Oukana	04-4			L	.istening	3					F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	5	0.0	20.0	80.0	0.0	0.0	0.0	5	0.0	100.0	0.0	0.0	0.0	0.0
	Autism	4	50.0	0.0	0.0	25.0	25.0	0.0	4	50.0	25.0	0.0	25.0	0.0	0.0
	Developmental delay	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	3	0.0	0.0	0.0	100.0	0.0	0.0	3	0.0	0.0	66.7	33.3	0.0	0.0
	Intellectual Disability	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	3	0.0	33.3	33.3	33.3	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Specific learning disability	4	0.0	50.0	25.0	0.0	25.0	0.0	4	0.0	75.0	0.0	25.0	0.0	0.0
	Speech or language impairment	2	0.0	0.0	0.0	50.0	0.0	50.0	2	0.0	50.0	0.0	0.0	50.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.10: Screener Performance Level by Domain - Grade 8 (cont.)

0.1	01-1			S	peaking							Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		916	10.7	45.9	8.3	10.6	4.7	19.9	917	10.7	49.0	10.1	12.8	4.6	12.9
	Female	423	12.3	42.3	7.6	11.1	6.1	20.6	423	12.3	44.2	10.9	13.9	4.5	14.2
Gender	Male	455	9.7	47.7	9.2	10.3	3.7	19.3	456	9.6	52.0	9.9	12.3	4.4	11.8
	Missing	38	5.3	63.2	5.3	7.9	0.0	18.4	38	5.3	65.8	5.3	5.3	7.9	10.5
	American Indian or Alaskan Native	3	0.0	100.0	0.0	0.0	0.0	0.0	3	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	138	5.8	27.5	11.6	15.2	8.0	31.9	138	5.8	31.9	16.7	15.2	6.5	23.9
	Black or African American	140	5.7	25.7	12.1	20.7	7.9	27.9	140	5.7	28.6	17.1	23.6	6.4	18.6
	Hispanic or Latino	354	11.6	65.0	5.9	5.9	2.0	9.6	354	11.6	67.8	5.9	7.3	2.3	5.1
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	20.0	20.0	40.0	0.0	20.0	5	0.0	20.0	40.0	20.0	20.0	0.0
	Two or More Races	154	18.8	46.8	6.5	5.2	7.1	15.6	155	18.7	47.7	5.2	14.2	5.2	9.0
	White	112	10.7	35.7	9.8	12.5	2.7	28.6	112	10.7	42.0	13.4	7.1	6.3	20.5
	Other/Unknown	10	0.0	0.0	0.0	20.0	0.0	80.0	10	0.0	0.0	0.0	60.0	0.0	40.0
Othor	Gifted	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
Other	IEP	21	9.5	38.1	23.8	19.0	0.0	9.5	22	9.1	50.0	18.2	13.6	0.0	9.1

Subgroup	04-4			S	peaking	3					\	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	5	0.0	80.0	20.0	0.0	0.0	0.0	5	0.0	100.0	0.0	0.0	0.0	0.0
	Autism	4	50.0	25.0	0.0	0.0	25.0	0.0	4	50.0	0.0	25.0	0.0	25.0	0.0
	Developmental delay	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Hearing Impaired	2	0.0	0.0	50.0	50.0	0.0	0.0	3	0.0	0.0	33.3	66.7	0.0	0.0
	Intellectual Disability	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	3	0.0	66.7	33.3	0.0	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Specific learning disability	4	0.0	50.0	25.0	25.0	0.0	0.0	4	0.0	75.0	0.0	25.0	0.0	0.0
	Speech or language impairment	2	0.0	0.0	0.0	50.0	0.0	50.0	2	0.0	50.0	0.0	0.0	0.0	50.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.11: Screener Performance Level by Domain - Grade 9

0.1	01-1			L	isteninç	]					F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,738	22.4	43.7	6.3	12.5	4.7	10.5	1,737	22.4	48.8	7.5	13.3	3.3	4.6
	Female	681	21.1	40.1	7.3	13.4	5.9	12.2	682	21.1	45.5	8.4	16.4	2.8	5.9
Gender	Male	982	24.2	44.9	5.7	12.0	3.7	9.5	980	24.3	50.0	7.2	10.8	3.7	4.0
	Missing	75	9.3	60.0	5.3	10.7	6.7	8.0	75	9.3	64.0	4.0	17.3	4.0	1.3
	American Indian or Alaskan Native	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
	Asian	161	15.5	21.1	5.0	19.9	6.8	31.7	160	15.6	25.0	10.0	22.5	10.6	16.3
	Black or African American	292	10.6	32.5	11.6	25.7	6.5	13.0	292	10.6	41.1	16.1	23.3	3.4	5.5
	Hispanic or Latino	684	28.7	49.6	3.9	8.9	3.1	5.8	684	28.7	53.4	5.4	8.5	2.0	2.0
Ethnicity	Native Hawaiian or Other Pacific Islander	9	11.1	22.2	0.0	44.4	22.2	0.0	9	11.1	22.2	0.0	66.7	0.0	0.0
	Two or More Races	439	23.2	56.5	6.6	5.2	3.2	5.2	438	23.3	61.0	5.3	6.8	1.4	2.3
	White	145	23.4	26.9	8.3	14.5	9.0	17.9	146	23.3	35.6	5.5	21.2	6.8	7.5
	Other/Unknown	7	0.0	28.6	0.0	0.0	14.3	57.1	7	0.0	28.6	0.0	14.3	14.3	42.9
Other	Gifted	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
Other	IEP	24	8.3	29.2	20.8	29.2	4.2	8.3	23	8.7	52.2	26.1	4.3	0.0	8.7

Cubaraua	Status			Li	isteninç	9					F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	5	40.0	40.0	0.0	0.0	0.0	20.0	5	40.0	40.0	0.0	0.0	20.0	0.0
	Developmental delay	3	33.3	66.7	0.0	0.0	0.0	0.0	3	33.3	66.7	0.0	0.0	0.0	0.0
	Emotional disturbance	3	0.0	0.0	0.0	66.7	33.3	0.0	3	0.0	33.3	33.3	33.3	0.0	0.0
Primary Disability	Intellectual Disability	3	0.0	66.7	0.0	33.3	0.0	0.0	2	0.0	50.0	50.0	0.0	0.0	0.0
<u> </u>	Other health impairment	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Specific learning disability	7	0.0	0.0	42.9	42.9	0.0	14.3	7	0.0	42.9	42.9	0.0	0.0	14.3

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.11: Screener Performance Level by Domain - Grade 9 (cont.)

0.1	01-1			S	peaking	)					,	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,738	22.4	43.4	9.9	9.0	2.4	12.9	1,738	22.4	49.0	8.1	10.3	2.7	7.5
	Female	682	21.1	41.2	10.3	9.1	2.8	15.5	682	21.1	45.7	8.8	12.8	2.9	8.7
Gender	Male	981	24.3	44.5	9.3	8.9	1.9	11.1	981	24.3	50.2	7.7	8.4	2.7	6.8
	Missing	75	9.3	49.3	14.7	10.7	4.0	12.0	75	9.3	62.7	6.7	13.3	1.3	6.7
	American Indian or Alaskan Native	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
	Asian	160	15.6	20.6	10.6	15.6	2.5	35.0	160	15.6	23.8	12.5	18.8	5.0	24.4
	Black or African American	292	10.6	29.5	19.5	18.2	3.8	18.5	292	10.6	43.2	18.5	14.7	4.5	8.6
	Hispanic or Latino	684	28.7	49.6	6.9	6.0	1.5	7.5	684	28.7	52.9	5.1	7.3	1.9	4.1
Ethnicity	Native Hawaiian or Other Pacific Islander	9	11.1	44.4	0.0	22.2	0.0	22.2	9	11.1	22.2	22.2	44.4	0.0	0.0
	Two or More Races	439	23.2	56.9	7.3	4.3	2.1	6.2	439	23.2	61.3	5.0	5.2	1.4	3.9
	White	146	23.3	28.1	12.3	11.0	4.1	21.2	146	23.3	35.6	5.5	18.5	4.8	12.3
	Other/Unknown	7	0.0	28.6	0.0	14.3	14.3	42.9	7	0.0	28.6	0.0	14.3	0.0	57.1
Othor	Gifted	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
Other	IEP	23	8.7	17.4	17.4	47.8	0.0	8.7	23	8.7	52.2	26.1	4.3	0.0	8.7

Subgroup	Ctatus			S	peakinç							Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Migrant	5	40.0	40.0	0.0	0.0	0.0	20.0	5	40.0	40.0	0.0	0.0	20.0	0.0
	Developmental delay	3	33.3	33.3	33.3	0.0	0.0	0.0	3	33.3	66.7	0.0	0.0	0.0	0.0
	Emotional disturbance	3	0.0	0.0	0.0	100.0	0.0	0.0	3	0.0	0.0	66.7	33.3	0.0	0.0
Primary Disability	Intellectual Disability	2	0.0	50.0	0.0	50.0	0.0	0.0	2	0.0	50.0	50.0	0.0	0.0	0.0
	Other health impairment	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Specific learning disability	7	0.0	0.0	0.0	85.7	0.0	14.3	7	0.0	57.1	28.6	0.0	0.0	14.3

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.12: Screener Performance Level by Domain - Grade 10

0.1	01-1			L	istening	ı					F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		848	11.1	35.6	9.0	18.9	9.1	16.4	847	11.1	44.0	13.1	18.8	5.5	7.4
	Female	345	11.9	31.3	9.6	20.9	8.4	18.0	345	11.9	40.6	14.5	18.0	6.1	9.0
Gender	Male	443	11.5	38.1	8.6	17.8	9.5	14.4	442	11.5	45.9	12.2	18.8	5.2	6.3
	Missing	60	3.3	41.7	8.3	15.0	10.0	21.7	60	3.3	50.0	11.7	23.3	5.0	6.7
	American Indian or Alaskan Native	4	25.0	0.0	50.0	0.0	25.0	0.0	4	25.0	50.0	0.0	25.0	0.0	0.0
	Asian	93	2.2	14.0	6.5	34.4	12.9	30.1	93	2.2	21.5	22.6	29.0	4.3	20.4
	Black or African American	161	3.7	16.8	13.0	28.0	16.1	22.4	160	3.8	30.0	15.6	33.8	8.8	8.1
_, , , ,	Hispanic or Latino	361	18.8	50.1	8.9	10.0	5.0	7.2	361	18.8	56.8	9.1	9.7	1.9	3.6
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	20.0	0.0	60.0	20.0	0.0	5	0.0	20.0	40.0	40.0	0.0	0.0
	Two or More Races	127	11.0	48.8	7.9	13.4	5.5	13.4	127	11.0	56.7	8.7	13.4	6.3	3.9
	White	95	3.2	18.9	5.3	26.3	12.6	33.7	95	3.2	26.3	17.9	24.2	14.7	13.7
	Other/Unknown	2	0.0	0.0	0.0	100.0	0.0	0.0	2	0.0	0.0	100.0	0.0	0.0	0.0
Othor	IEP	19	47.4	26.3	5.3	10.5	10.5	0.0	18	50.0	27.8	0.0	22.2	0.0	0.0
Other	Migrant	6	0.0	16.7	33.3	50.0	0.0	0.0	6	0.0	50.0	0.0	50.0	0.0	0.0

Subgroup	Status			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Autism	2	0.0	0.0	50.0	0.0	50.0	0.0	2	0.0	50.0	0.0	50.0	0.0	0.0
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	2	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	0							0						
	Specific learning disability	3	33.3	0.0	0.0	33.3	33.3	0.0	3	33.3	0.0	0.0	66.7	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.12: Screener Performance Level by Domain - Grade 10 (cont.)

0.1	01-1			S	peaking							Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		847	11.1	39.7	10.5	12.6	5.2	20.9	847	11.1	43.1	13.5	16.3	4.8	11.2
	Female	345	11.9	35.7	10.7	14.2	4.6	22.9	345	11.9	38.8	15.1	17.4	4.3	12.5
Gender	Male	442	11.5	42.1	10.6	11.5	5.2	19.0	442	11.5	45.5	12.7	15.4	4.3	10.6
	Missing	60	3.3	45.0	8.3	11.7	8.3	23.3	60	3.3	50.0	10.0	16.7	11.7	8.3
	American Indian or Alaskan Native	4	25.0	50.0	0.0	0.0	0.0	25.0	4	25.0	50.0	0.0	25.0	0.0	0.0
	Asian	93	2.2	16.1	16.1	18.3	9.7	37.6	93	2.2	17.2	21.5	29.0	7.5	22.6
	Black or African American	160	3.8	20.0	15.6	20.0	7.5	33.1	160	3.8	26.3	20.0	28.1	5.6	16.3
_, , , ,	Hispanic or Latino	361	18.8	53.7	8.0	7.2	1.9	10.2	361	18.8	58.2	8.3	6.6	2.2	5.8
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	40.0	0.0	40.0	0.0	20.0	5	0.0	20.0	40.0	40.0	0.0	0.0
	Two or More Races	127	11.0	54.3	3.1	13.4	3.9	14.2	127	11.0	56.7	7.9	14.2	3.9	6.3
	White	95	3.2	21.1	16.8	13.7	11.6	33.7	95	3.2	23.2	18.9	22.1	12.6	20.0
	Other/Unknown	2	0.0	100.0	0.0	0.0	0.0	0.0	2	0.0	0.0	100.0	0.0	0.0	0.0
Other	IEP	18	50.0	16.7	0.0	33.3	0.0	0.0	18	50.0	22.2	5.6	22.2	0.0	0.0
Otilei	Migrant	6	0.0	33.3	33.3	16.7	0.0	16.7	6	0.0	50.0	0.0	50.0	0.0	0.0

Subgroup	Status			s	peaking	]					١	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Autism	2	0.0	0.0	0.0	100.0	0.0	0.0	2	0.0	0.0	50.0	50.0	0.0	0.0
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Emotional disturbance	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	0							0						
	Specific learning disability	3	33.3	0.0	0.0	66.7	0.0	0.0	3	33.3	0.0	0.0	66.7	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.13: Screener Performance Level by Domain - Grade 11

	21.1			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		580	8.4	28.6	10.3	19.8	9.1	23.6	580	8.4	36.2	15.0	19.7	7.6	13.1
	Female	258	9.3	22.5	6.6	22.1	10.5	29.1	258	9.3	27.5	14.3	22.5	9.7	16.7
Gender	Male	283	8.8	32.9	13.4	18.7	8.5	17.7	283	8.8	42.8	15.5	17.7	5.7	9.5
	Missing	39	0.0	38.5	12.8	12.8	5.1	30.8	39	0.0	46.2	15.4	15.4	7.7	15.4
	Asian	79	1.3	16.5	10.1	21.5	13.9	36.7	79	1.3	22.8	19.0	22.8	6.3	27.8
	Black or African American	98	4.1	23.5	17.3	23.5	12.2	19.4	98	4.1	36.7	21.4	20.4	6.1	11.2
	Hispanic or Latino	239	16.7	41.8	6.3	15.9	6.7	12.6	239	16.7	47.3	10.5	13.8	3.8	7.9
Ethnicity	Native Hawaiian or Other Pacific Islander	6	0.0	33.3	66.7	0.0	0.0	0.0	6	0.0	83.3	16.7	0.0	0.0	0.0
	Two or More Races	48	2.1	25.0	8.3	25.0	2.1	37.5	48	2.1	31.3	8.3	25.0	14.6	18.8
	White	106	2.8	14.2	10.4	23.6	11.3	37.7	106	2.8	20.8	18.9	28.3	16.0	13.2
	Other/Unknown	4	0.0	25.0	25.0	0.0	25.0	25.0	4	0.0	25.0	25.0	25.0	0.0	25.0
Othor	IEP	18	27.8	22.2	0.0	33.3	0.0	16.7	18	27.8	22.2	11.1	27.8	5.6	5.6
Other	Migrant	7	14.3	0.0	14.3	0.0	28.6	42.9	7	14.3	14.3	0.0	42.9	14.3	14.3
<b>Primary Disability</b>	Autism	0							0						

Cubavaun	Ctatus			L	istening						F	Reading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Specific learning disability	5	0.0	0.0	0.0	80.0	0.0	20.0	5	0.0	0.0	20.0	60.0	20.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.13: Screener Performance Level by Domain - Grade 11 (cont.)

	21.1			S	peaking						,	Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		580	8.4	31.9	11.9	13.4	3.4	30.9	580	8.4	35.9	12.8	19.7	5.7	17.6
	Female	258	9.3	25.6	10.1	15.1	3.9	36.0	258	9.3	28.7	8.9	26.4	6.6	20.2
Gender	Male	283	8.8	36.4	13.1	13.1	3.5	25.1	283	8.8	41.0	16.3	14.1	5.3	14.5
	Missing	39	0.0	41.0	15.4	5.1	0.0	38.5	39	0.0	46.2	12.8	15.4	2.6	23.1
	Asian	79	1.3	16.5	16.5	15.2	3.8	46.8	79	1.3	22.8	16.5	21.5	6.3	31.6
	Black or African American	98	4.1	25.5	16.3	22.4	4.1	27.6	98	4.1	35.7	18.4	21.4	4.1	16.3
	Hispanic or Latino	239	16.7	46.4	7.5	8.8	2.5	18.0	239	16.7	47.3	8.8	14.2	2.9	10.0
Ethnicity	Native Hawaiian or Other Pacific Islander	6	0.0	33.3	50.0	16.7	0.0	0.0	6	0.0	66.7	33.3	0.0	0.0	0.0
	Two or More Races	48	2.1	29.2	8.3	16.7	6.3	37.5	48	2.1	33.3	6.3	22.9	6.3	29.2
	White	106	2.8	17.9	13.2	13.2	3.8	49.1	106	2.8	19.8	15.1	28.3	13.2	20.8
	Other/Unknown	4	0.0	25.0	25.0	0.0	0.0	50.0	4	0.0	25.0	25.0	25.0	0.0	25.0
Other	IEP	18	27.8	16.7	5.6	16.7	0.0	33.3	18	27.8	27.8	0.0	33.3	5.6	5.6
Other	Migrant	7	14.3	0.0	0.0	14.3	14.3	57.1	7	14.3	14.3	0.0	28.6	28.6	14.3
<b>Primary Disability</b>	Autism	0							0						

Subgroup	Ctatus			S	Speaking							Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Developmental delay	1	0.0	0.0	100.0	0.0	0.0	0.0		1 0	0 100.0	0.0	0.0	0.0	0.0
	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0		1 0	0 100.0	0.0	0.0	0.0	0.0
	Specific learning disability	5	0.0	0.0	0.0	40.0	0.0	60.0		5 0	20.0	0.0	60.0	20.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.14: Screener Performance Level by Domain - Grade 12

0.1	Status	Listening							Reading						
Subgroup		N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		299	8.4	20.1	11.7	17.4	12.4	30.1	298	8.4	28.9	12.4	25.2	10.1	15.1
	Female	142	8.5	14.8	12.7	16.9	16.2	31.0	141	8.5	26.2	10.6	29.1	10.6	14.9
Gender	Male	137	9.5	22.6	10.2	18.2	10.2	29.2	137	9.5	29.2	13.9	22.6	9.5	15.3
	Missing	20	0.0	40.0	15.0	15.0	0.0	30.0	20	0.0	45.0	15.0	15.0	10.0	15.0
	American Indian or Alaskan Native	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	36	0.0	19.4	11.1	13.9	5.6	50.0	36	0.0	30.6	8.3	22.2	16.7	22.2
	Black or African American	52	1.9	19.2	9.6	32.7	15.4	21.2	51	2.0	23.5	19.6	37.3	7.8	9.8
	Hispanic or Latino	126	19.0	25.4	12.7	12.7	11.9	18.3	126	19.0	33.3	11.9	20.6	7.1	7.9
Ethnicity	Native Hawaiian or Other Pacific Islander	4	0.0	0.0	25.0	0.0	0.0	75.0	4	0.0	25.0	0.0	25.0	0.0	50.0
	Two or More Races	19	0.0	15.8	5.3	15.8	21.1	42.1	19	0.0	26.3	5.3	26.3	10.5	31.6
	White	58	0.0	12.1	12.1	17.2	13.8	44.8	58	0.0	22.4	12.1	25.9	15.5	24.1
	Other/Unknown	3	0.0	33.3	0.0	33.3	0.0	33.3	3	0.0	33.3	33.3	33.3	0.0	0.0
Other	IEP	12	25.0	33.3	8.3	0.0	16.7	16.7	11	27.3	36.4	0.0	18.2	0.0	18.2
Other	Migrant	2	0.0	0.0	0.0	0.0	100.0	0.0	2	0.0	0.0	0.0	100.0	0.0	0.0

Subaraun	Status	Listening					Reading								
Subgroup		N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Developmental delay	0		_	-	-	-	_	0		-	-	-	-	
	Multiple disabilities	3	33.3	66.7	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
Primary Disability	Other health impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Specific learning disability	3	0.0	0.0	33.3	0.0	33.3	33.3	3	0.0	33.3	0.0	33.3	0.0	33.3
	Visual impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

Table S4.14: Screener Performance Level by Domain - Grade 12 (cont.)

0.1	01-1	Speaking						Writing							
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		298	8.4	24.2	13.4	12.1	5.4	36.6	298	8.4	29.5	10.4	23.2	6.7	21.8
	Female	141	8.5	17.7	14.2	13.5	8.5	37.6	141	8.5	26.2	7.1	27.7	9.2	21.3
Gender	Male	137	9.5	28.5	12.4	10.2	2.2	37.2	137	9.5	30.7	13.1	20.4	5.1	21.2
	Missing	20	0.0	40.0	15.0	15.0	5.0	25.0	20	0.0	45.0	15.0	10.0	0.0	30.0
	American Indian or Alaskan Native	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Asian	36	0.0	19.4	19.4	5.6	2.8	52.8	36	0.0	33.3	5.6	19.4	5.6	36.1
	Black or African American	51	2.0	21.6	15.7	15.7	7.8	37.3	51	2.0	23.5	17.6	37.3	3.9	15.7
_, , , ,	Hispanic or Latino	126	19.0	31.7	13.5	7.1	7.1	21.4	126	19.0	34.9	8.7	17.5	7.9	11.9
Ethnicity	Native Hawaiian or Other Pacific Islander	4	0.0	0.0	25.0	0.0	0.0	75.0	4	0.0	25.0	0.0	0.0	25.0	50.0
	Two or More Races	19	0.0	15.8	5.3	31.6	5.3	42.1	19	0.0	26.3	5.3	31.6	0.0	36.8
	White	58	0.0	17.2	8.6	17.2	1.7	55.2	58	0.0	22.4	10.3	25.9	6.9	34.5
	Other/Unknown	3	0.0	33.3	0.0	33.3	0.0	33.3	3	0.0	33.3	33.3	0.0	33.3	0.0
Other	IEP	11	27.3	27.3	18.2	0.0	0.0	27.3	11	27.3	36.4	0.0	18.2	0.0	18.2
Otilei	Migrant	2	0.0	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	0.0	50.0	50.0	0.0

Subaraun	Status	Speaking					Writing								
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Developmental delay	0		_	-		_		0		_	-	-	_	
	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
Primary Disability	Other health impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Specific learning disability	3	0.0	0.0	33.3	0.0	0.0	66.7	3	0.0	33.3	0.0	33.3	0.0	33.3
	Visual impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0

<sup>\*</sup> Domain tests with Exemption are excluded.
\* Level 0: Performance Not Determined.

## Section 5: Screener Assessment - Percentage of Students by Overall Proficiency Level

Table S5.1: Screener Overall Proficiency Categories – Beginning of Kindergarten <sup>1</sup>

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		10,782	3.4	30.4	58.0	8.3
	Female	4,957	2.5	27.2	61.5	8.8
Gender	Male	5,241	4.3	33.2	54.9	7.7
	Missing	584	2.4	32.0	56.5	9.1
	American Indian or Alaskan Native	39	5.1	25.6	53.8	15.4
	Asian	2,736	2.6	23.1	57.0	17.3
	Black or African American	1,878	2.3	24.9	64.8	8.0
Ethnicity	Hispanic or Latino	3,144	4.1	41.2	52.9	1.9
Etimicity	Native Hawaiian or Other Pacific Islander	48	0.0	22.9	72.9	4.2
	Two or More Races	1,163	6.7	36.4	52.2	4.7
	White	1,631	2.5	24.2	65.5	7.8
	Other/Unknown	143	1.4	28.0	58.7	11.9
	Gifted	6	0.0	16.7	33.3	50.0
Other	IEP	216	20.8	38.9	39.4	0.9
	Migrant	16	0.0	50.0	50.0	0.0
	Autism	60	46.7	31.7	20.0	1.7
<b>Primary Disability</b>	Developmental delay	3	0.0	33.3	66.7	0.0
	Emotional disturbance	1	0.0	100.0	0.0	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Hearing Impaired	4	0.0	75.0	25.0	0.0
	Intellectual Disability	5	20.0	80.0	0.0	0.0
	Multiple disabilities	15	66.7	33.3	0.0	0.0
	Orthopedic impairment	4	0.0	25.0	75.0	0.0
	Other health impairment	10	0.0	30.0	70.0	0.0
	Specific learning disability	7	0.0	57.1	42.9	0.0
	Speech or language impairment	72	1.4	36.1	61.1	1.4
	Visual impairment	1	0.0	100.0	0.0	0.0

Note 1. For Beginning of Kindergarten (BK), a student is defined as "Proficient" if performance level is Level 3 or above.

Table S5.2: Screener Overall Proficiency Categories - Kindergarten

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		774	15.2	31.4	47.0	6.3
	Female	345	16.5	29.6	46.4	7.5
Gender	Male	402	14.9	33.1	47.0	5.0
	Missing	27	3.7	29.6	55.6	11.1
	American Indian or Alaskan Native	2	0.0	0.0	100.0	0.0
	Asian	169	18.9	24.3	42.0	14.8
	Black or African American	153	10.5	22.9	62.1	4.6
Ethnicity	Hispanic or Latino	223	9.4	44.4	42.6	3.6
Etimicity	Native Hawaiian or Other Pacific Islander	6	0.0	16.7	83.3	0.0
	Two or More Races	110	20.0	32.7	43.6	3.6
	White	105	25.7	27.6	41.9	4.8
	Other/Unknown	6	0.0	33.3	66.7	0.0
	Gifted	1	0.0	0.0	100.0	0.0
Other	IEP	29	37.9	34.5	27.6	0.0
	Migrant	2	50.0	50.0	0.0	0.0
	Autism	16	62.5	25.0	12.5	0.0
<b>Primary Disability</b>	Developmental delay	1	0.0	100.0	0.0	0.0
	Hearing Impaired	2	0.0	0.0	100.0	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Multiple disabilities	2	2 50.0	50.0	0.0	0.0
	Specific learning disability	1	0.0	0.0	100.0	0.0
	Speech or language impairment	2	0.0	25.0	75.0	0.0
	Traumatic brain injury	1	0.0	100.0	0.0	0.0

Table S5.3: Screener Overall Proficiency Categories - Grade 1

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		1,976	4.8	33.0	52.8	9.5
	Female	941	4.8	30.2	54.1	10.9
Gender	Male	937	4.8	35.1	51.9	8.2
	Missing	98	4.1	39.8	49.0	7.1
	American Indian or Alaskan Native	5	0.0	20.0	60.0	20.0
	Asian	495	3.2	21.4	54.7	20.6
	Black or African American	371	4.3	24.5	66.3	4.9
	Hispanic or Latino	535	4.5	46.7	45.2	3.6
Ethnicity	Native Hawaiian or Other Pacific Islander	11	0.0	72.7	27.3	0.0
	Two or More Races	232	12.9	40.9	39.2	6.9
	White	299	2.7	31.1	55.9	10.4
	Other/Unknown	28	0.0	28.6	71.4	0.0
	Gifted	4	0.0	0.0	50.0	50.0
Other	IEP	32	18.8	37.5	40.6	3.1
	Migrant	5	0.0	60.0	40.0	0.0
	Autism	9	33.3	11.1	55.6	0.0
<b>Primary Disability</b>	Hearing Impaired	2	0.0	50.0	50.0	0.0
	Intellectual Disability	1	0.0	100.0	0.0	0.0

Subgroup	Status	N		roficiency Not monstrated	Emerging	Progressing	Proficient
	Multiple disabilities		4	75.0	25.0	0.0	0.0
	Other health impairment		3	0.0	66.7	33.3	0.0
	Specific learning disability		1	0.0	0.0	100.0	0.0
	Speech or language impairment		5	0.0	20.0	60.0	20.0

Table S5.4: Screener Overall Proficiency Categories - Grade 2

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		1,349	7.3	33.1	43.4	16.2
	Female	627	6.9	30.0	45.6	17.5
Gender	Male	650	8.6	35.2	40.6	15.5
	Missing	72	0.0	41.7	48.6	9.7
	American Indian or Alaskan Native	4	0.0	50.0	50.0	0.0
	Asian	364	6.3	26.4	39.0	28.3
	Black or African American	240	5.0	21.7	58.3	15.0
Ethnicity	Hispanic or Latino	349	6.0	45.6	40.4	8.0
Etimicity	Native Hawaiian or Other Pacific Islander	4	0.0	25.0	25.0	50.0
	Two or More Races	173	10.4	46.8	38.2	4.6
	White	201	12.4	26.9	42.8	17.9
	Other/Unknown	14	0.0	14.3	50.0	35.7
	Gifted	7	0.0	14.3	42.9	42.9
Other	IEP	19	31.6	47.4	21.1	0.0
	Migrant	9	0.0	66.7	11.1	22.2
	Autism	6	50.0	33.3	16.7	0.0
Primary Disability	Developmental delay	1	0.0	100.0	0.0	0.0
	Hearing Impaired	1	0.0	100.0	0.0	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Intellectual Disability	1	100.0	0.0	0.0	0.0
	Multiple disabilities	2	50.0	50.0	0.0	0.0
	Other health impairment	1	0.0	100.0	0.0	0.0
	Specific learning disability	2	0.0	50.0	50.0	0.0
	Speech or language impairment	2	0.0	50.0	50.0	0.0

Table S5.5: Screener Overall Proficiency Categories - Grade 3

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		1,214	5.8	34.9	44.1	15.2
	Female	554	6.3	33.8	44.4	15.5
Gender	Male	604	6.0	36.3	43.2	14.6
	Missing	56	0.0	32.1	50.0	17.9
	American Indian or Alaskan Native	4	0.0	25.0	50.0	25.0
	Asian	271	5.9	21.4	43.2	29.5
	Black or African American	240	2.5	24.6	59.6	13.3
<b>-</b> 4	Hispanic or Latino	333	4.5	52.0	39.6	3.9
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	20.0	60.0	20.0
	Two or More Races	162	10.5	39.5	41.4	8.6
	White	192	8.9	33.9	35.4	21.9
	Other/Unknown	7	0.0	42.9	42.9	14.3
	Gifted	2	0.0	0.0	0.0	100.0
Other	IEP	26	11.5	38.5	42.3	7.7
	Migrant	7	0.0	71.4	28.6	0.0
	Autism	5	0.0	20.0	40.0	40.0
<b>Primary Disability</b>	Emotional disturbance	1	0.0	0.0	100.0	0.0
	Intellectual Disability	2	50.0	50.0	0.0	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Multiple disabilities	2	50.0	50.0	0.0	0.0
	Other health impairment	2	0.0	0.0	100.0	0.0
	Specific learning disability	6	0.0	50.0	50.0	0.0
	Speech or language impairment	3	33.3	66.7	0.0	0.0

Table S5.6: Screener Overall Proficiency Categories - Grade 4

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		990	8.2	33.0	32.9	25.9
	Female	486	8.2	31.9	31.9	28.0
Gender	Male	461	8.2	34.1	34.1	23.6
	Missing	43	7.0	34.9	32.6	25.6
	American Indian or Alaskan Native	2	0.0	100.0	0.0	0.0
	Asian	203	7.9	16.7	36.9	38.4
	Black or African American	190	4.2	20.0	43.7	32.1
Ethnicity	Hispanic or Latino	296	5.4	50.3	29.4	14.9
Ethnicity	Native Hawaiian or Other Pacific Islander	6	0.0	33.3	33.3	33.3
	Two or More Races	144	14.6	44.4	22.9	18.1
	White	135	14.8	27.4	28.9	28.9
	Other/Unknown	14	0.0	7.1	50.0	42.9
	Gifted	1	0.0	0.0	0.0	100.0
Other	IEP	16	12.5	25.0	43.8	18.8
	Migrant	4	25.0	25.0	25.0	25.0
	Autism	4	25.0	0.0	75.0	0.0
<b>Primary Disability</b>	Intellectual Disability	2	0.0	100.0	0.0	0.0
	Multiple disabilities	2	50.0	50.0	0.0	0.0

Subgroup	Status	N	Proficienc Not Demonstrat	Emerging	Progressing	Proficient
	Specific learning disability	3	3 0.0	33.3	66.7	0.0

Table S5.7: Screener Overall Proficiency Categories - Grade 5

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		964	8.2	42.1	27.5	22.2
	Female	444	7.7	39.2	28.4	24.8
Gender	Male	482	8.9	45.4	25.5	20.1
	Missing	38	5.3	34.2	42.1	18.4
	American Indian or Alaskan Native	3	0.0	100.0	0.0	0.0
	Asian	183	7.7	32.2	26.8	33.3
	Black or African American	199	5.0	32.7	39.2	23.1
Ethnicity	Hispanic or Latino	268	6.0	58.2	23.1	12.7
Etimicity	Native Hawaiian or Other Pacific Islander	4	25.0	25.0	25.0	25.0
	Two or More Races	153	12.4	49.0	22.2	16.3
	White	144	13.2	29.9	26.4	30.6
	Other/Unknown	10	0.0	40.0	30.0	30.0
	Gifted	2	0.0	0.0	0.0	100.0
Other	IEP	15	0.0	46.7	40.0	13.3
	Migrant	2	0.0	50.0	0.0	50.0
	Autism	2	0.0	0.0	50.0	50.0
<b>Primary Disability</b>	Developmental delay	1	0.0	100.0	0.0	0.0
	Emotional disturbance	2	0.0	0.0	50.0	50.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Hearing Impaired	1	0.0	0.0	100.0	0.0
	Intellectual Disability	1	0.0	100.0	0.0	0.0
	Orthopedic impairment	1	0.0	100.0	0.0	0.0
	Other health impairment	3	0.0	66.7	33.3	0.0
	Specific learning disability	4	0.0	0.0	75.0	25.0

Table S5.8: Screener Overall Proficiency Categories - Grade 6

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		882	11.7	34.8	31.6	21.9
Gender	Female	422	10.4	35.1	30.3	24.2
	Male	421	13.8	34.4	31.8	20.0
	Missing	39	2.6	35.9	43.6	17.9
Ethnicity	American Indian or Alaskan Native	6	0.0	66.7	33.3	0.0
	Asian	167	6.0	28.7	26.9	38.3
	Black or African American	176	4.5	24.4	46.6	24.4
	Hispanic or Latino	266	10.2	44.4	31.6	13.9
	Native Hawaiian or Other Pacific Islander	3	0.0	33.3	0.0	66.7
	Two or More Races	136	23.5	38.2	25.7	12.5
	White	116	22.4	31.9	24.1	21.6
	Other/Unknown	12	0.0	33.3	25.0	41.7
Other -	IEP	12	16.7	25.0	33.3	25.0
	Migrant	3	33.3	33.3	33.3	0.0
Primary Disability	Autism	2	50.0	50.0	0.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0
	Other health impairment	3	0.0	33.3	33.3	33.3
	Specific learning disability	4	0.0	0.0	100.0	0.0

Subgroup	Status	N		roficiency Not monstrated	Emerging	Progressing	Proficient
	Speech or language impairment		1	0.0	0.0	0.0	100.0

Table S5.9: Screener Overall Proficiency Categories - Grade 7

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		894	11.5	44.6	28.1	15.8
	Female	419	11.0	43.2	27.2	18.6
Gender	Male	409	13.7	45.5	27.9	13.0
	Missing	66	1.5	48.5	34.8	15.2
	Asian	138	8.0	29.7	30.4	31.9
	Black or African American	165	4.8	33.3	43.0	18.8
	Hispanic or Latino	302	12.9	56.0	21.9	9.3
Ethnicity	Native Hawaiian or Other Pacific Islander	8	0.0	37.5	62.5	0.0
	Two or More Races	123	22.0	52.0	18.7	7.3
	White	141	12.8	42.6	26.2	18.4
	Other/Unknown	17	0.0	41.2	41.2	17.6
Other	IEP	15	20.0	26.7	53.3	0.0
Other	Migrant	6	0.0	16.7	50.0	33.3
	Autism	1	100.0	0.0	0.0	0.0
	Developmental delay	1	0.0	100.0	0.0	0.0
Primary Disability	Intellectual Disability	1	0.0	100.0	0.0	0.0
	Multiple disabilities	1	100.0	0.0	0.0	0.0
	Other health impairment	4	25.0	0.0	75.0	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Specific learning disability	7	14.3	0.0	71.4	14.3
	Speech or language impairment	1	0.0	100.0	0.0	0.0

Table S5.10: Screener Overall Proficiency Categories - Grade 8

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		917	10.7	48.7	27.8	12.8
	Female	423	12.3	44.2	29.1	14.4
Gender	Male	456	9.6	51.3	27.4	11.6
	Missing	38	5.3	68.4	18.4	7.9
	American Indian or Alaskan Native	3	0.0	100.0	0.0	0.0
	Asian	138	5.8	31.9	39.1	23.2
	Black or African American	140	5.7	29.3	47.9	17.1
Ethnicity	Hispanic or Latino	354	11.6	67.5	15.3	5.6
Etimicity	Native Hawaiian or Other Pacific Islander	5	0.0	0.0	100.0	0.0
	Two or More Races	155	18.7	47.7	23.9	9.7
	White	112	10.7	41.1	28.6	19.6
	Other/Unknown	10	0.0	0.0	60.0	40.0
	Gifted	1	0.0	0.0	100.0	0.0
Other	IEP	22	9.1	40.9	40.9	9.1
	Migrant	5	0.0	100.0	0.0	0.0
	Autism	4	50.0	0.0	50.0	0.0
<b>Primary Disability</b>	Developmental delay	1	0.0	0.0	100.0	0.0
	Hearing Impaired	3	0.0	0.0	100.0	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Intellectual Disability	1	0.0	100.0	0.0	0.0
	Multiple disabilities	1	0.0	100.0	0.0	0.0
	Other health impairment	3	0.0	66.7	33.3	0.0
	Specific learning disability	4	0.0	75.0	25.0	0.0
	Speech or language impairment	2	0.0	0.0	50.0	50.0

Table S5.11: Screener Overall Proficiency Categories - Grade 9

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		1,739	22.4	48.3	22.0	7.4
	Female	682	21.1	45.6	24.9	8.4
Gender	Male	982	24.2	49.3	19.7	6.8
	Missing	75	9.3	60.0	25.3	5.3
	American Indian or Alaskan Native	1	0.0	0.0	100.0	0.0
	Asian	161	15.5	24.8	35.4	24.2
	Black or African American	292	10.6	39.4	41.4	8.6
Ethnicity	Hispanic or Latino	684	28.7	52.8	14.8	3.8
Etimicity	Native Hawaiian or Other Pacific Islander	9	11.1	22.2	66.7	0.0
	Two or More Races	439	23.2	62.2	11.4	3.2
	White	146	23.3	32.2	30.8	13.7
	Other/Unknown	7	0.0	28.6	14.3	57.1
	Gifted	1	0.0	0.0	100.0	0.0
Other	IEP	24	8.3	37.5	45.8	8.3
	Migrant	5	40.0	40.0	0.0	20.0
	Developmental delay	3	33.3	66.7	0.0	0.0
<b>Primary Disability</b>	Emotional disturbance	3	0.0	0.0	100.0	0.0
	Intellectual Disability	3	0.0	66.7	33.3	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
	Other health impairment	1	0.0	0.0	100.0	0.0
	Specific learning disability	7	0.0	0.0	85.7	14.3

Table S5.12: Screener Overall Proficiency Categories - Grade 10

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		848	11.1	42.8	34.6	11.6
	Female	345	11.9	39.4	35.4	13.3
Gender	Male	443	11.5	44.7	33.6	10.2
	Missing	60	3.3	48.3	36.7	11.7
	American Indian or Alaskan Native	4	25.0	50.0	25.0	0.0
	Asian	93	2.2	19.4	53.8	24.7
	Black or African American	161	3.7	26.7	55.9	13.7
Ethnicity	Hispanic or Latino	361	18.8	57.3	18.8	5.0
Ethnicity	Native Hawaiian or Other Pacific Islander	5	0.0	20.0	80.0	0.0
	Two or More Races	127	11.0	55.1	26.0	7.9
	White	95	3.2	23.2	47.4	26.3
	Other/Unknown	2	0.0	0.0	100.0	0.0
Other	IEP	19	47.4	21.1	31.6	0.0
Other	Migrant	6	0.0	50.0	50.0	0.0
	Autism	2	0.0	0.0	100.0	0.0
Drimony Disability	Developmental delay	1	0.0	100.0	0.0	0.0
Primary Disability	Emotional disturbance	1	100.0	0.0	0.0	0.0
	Multiple disabilities	2	0.0	100.0	0.0	0.0

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging d	Progressing	Proficient
	Specific learning disability	;	3 33.3	0.0	66.7	0.0

Table S5.13: Screener Overall Proficiency Categories - Grade 11

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		580	8.4	36.9	35.0	19.7
	Female	258	9.3	29.1	37.6	24.0
Gender	Male	283	8.8	42.0	33.9	15.2
	Missing	39	0.0	51.3	25.6	23.1
	Asian	79	1.3	24.1	41.8	32.9
Ethnicity	Black or African American	98	4.1	36.7	41.8	17.3
	Hispanic or Latino	239	16.7	47.3	24.7	11.3
	Native Hawaiian or Other Pacific Islander	6	0.0	83.3	16.7	0.0
	Two or More Races	48	2.1	29.2	35.4	33.3
	White	106	2.8	23.6	48.1	25.5
	Other/Unknown	4	0.0	50.0	25.0	25.0
Other	IEP	18	27.8	22.2	38.9	11.1
	Migrant	7	14.3	0.0	57.1	28.6
Primary Disability	Developmental delay	1	0.0	100.0	0.0	0.0
	Multiple disabilities	1	0.0	100.0	0.0	0.0
	Specific learning disability	5	0.0	0.0	80.0	20.0

Table S5.14: Screener Overall Proficiency Categories - Grade 12

Subgroup	Status	N	Proficiency Not Demonstrated	Emerging	Progressing	Proficient
Total		299	8.4	29.8	39.1	22.7
	Female	142	8.5	24.6	43.7	23.2
Gender	Male	137	9.5	32.8	35.8	21.9
	Missing	20	0.0	45.0	30.0	25.0
	American Indian or Alaskan Native	1	0.0	100.0	0.0	0.0
	Asian	36	0.0	30.6	33.3	36.1
	Black or African American	52	1.9	25.0	57.7	15.4
Ethnicity	Hispanic or Latino	126	19.0	37.3	28.6	15.1
Ethnicity	Native Hawaiian or Other Pacific Islander	4	0.0	25.0	25.0	50.0
	Two or More Races	19	0.0	15.8	52.6	31.6
	White	58	0.0	20.7	44.8	34.5
	Other/Unknown	3	0.0	33.3	66.7	0.0
Other	IEP	12	25.0	41.7	16.7	16.7
Other	Migrant	2	0.0	0.0	100.0	0.0
Primary Disability	Multiple disabilities	3	33.3	66.7	0.0	0.0
	Other health impairment	1	0.0	100.0	0.0	0.0
	Specific learning disability	3	0.0	33.3	33.3	33.3
	Visual impairment	1	0.0	100.0	0.0	0.0

## Section 6: Screener Assessment - Conditional Standard Error of Measurement (CSEM)

\* Domain tests with Exemption are excluded.

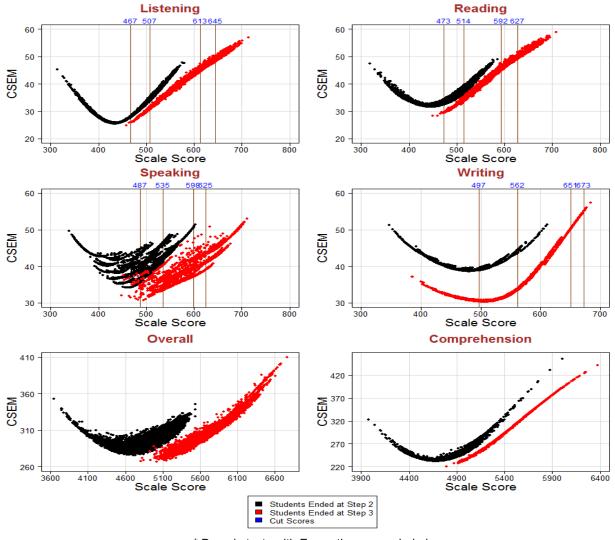


Figure S6.1: Screener Conditional Standard Error of Measurement for Beginning of Kindergarten

<sup>\*</sup> Domain tests with Exemption are excluded.

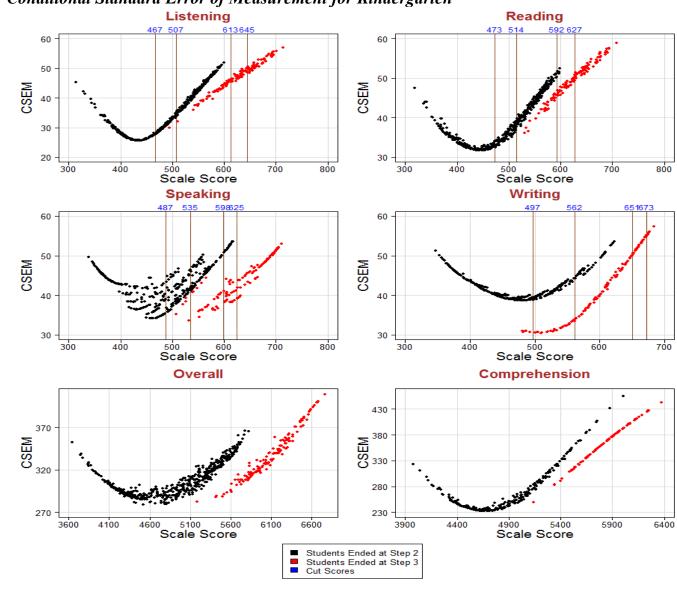
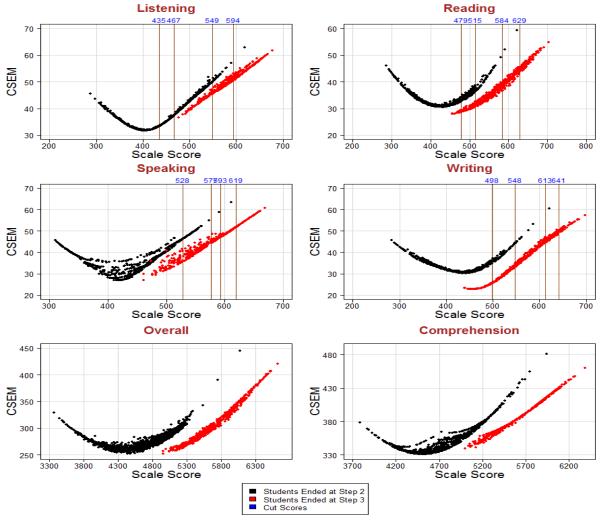


Figure S6.2: Screener Conditional Standard Error of Measurement for Kindergarten

\* Domain tests with Exemption are excluded.

Figure S6.3: Screener Conditional Standard Error of Measurement for Grade 1



<sup>\*</sup> Domain tests with Exemption are excluded.

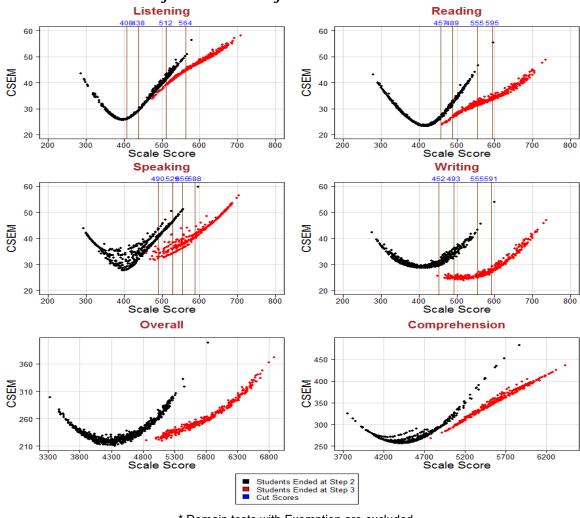


Figure S6.4: Screener Conditional Standard Error of Measurement for Grade 2

<sup>\*</sup> Domain tests with Exemption are excluded.

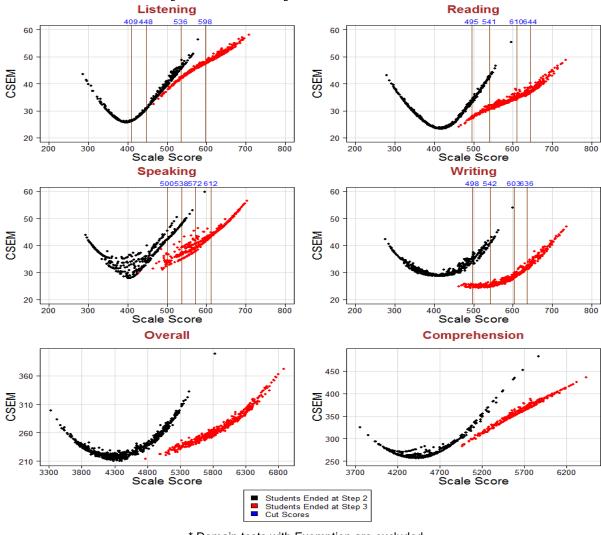


Figure S6.5: Screener Conditional Standard Error of Measurement for Grade 3

<sup>\*</sup> Domain tests with Exemption are excluded.

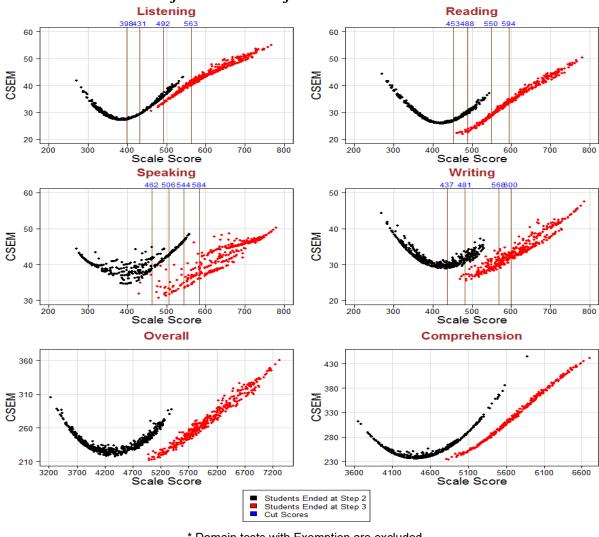


Figure S6.6: Screener Conditional Standard Error of Measurement for Grade 4

<sup>\*</sup> Domain tests with Exemption are excluded.

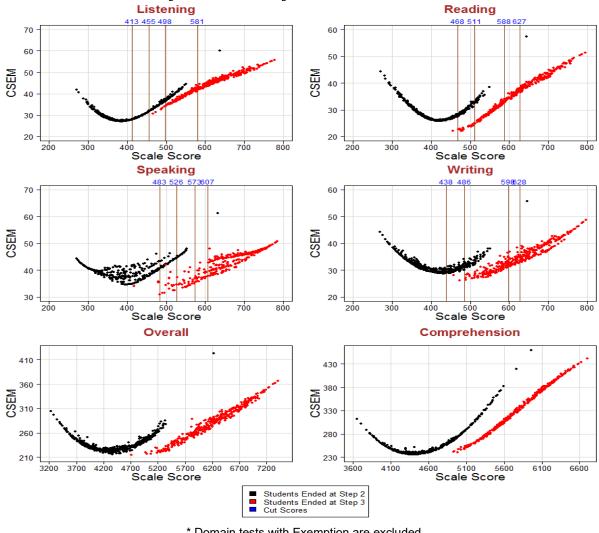


Figure S6.7: Screener Conditional Standard Error of Measurement for Grade 5

<sup>\*</sup> Domain tests with Exemption are excluded.

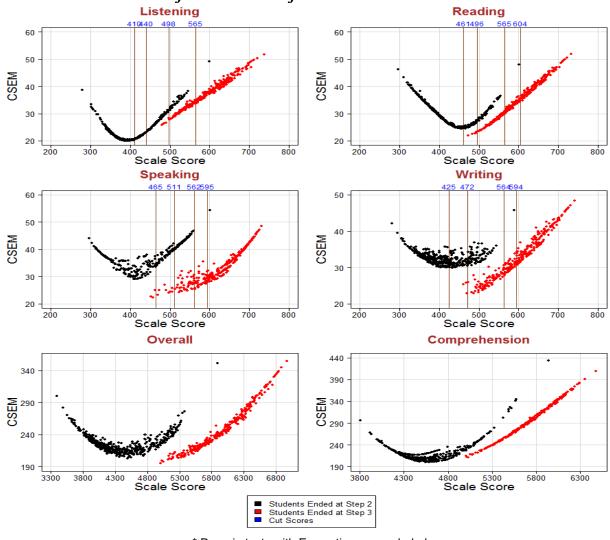


Figure S6.8: Screener Conditional Standard Error of Measurement for Grade 6

<sup>\*</sup> Domain tests with Exemption are excluded.

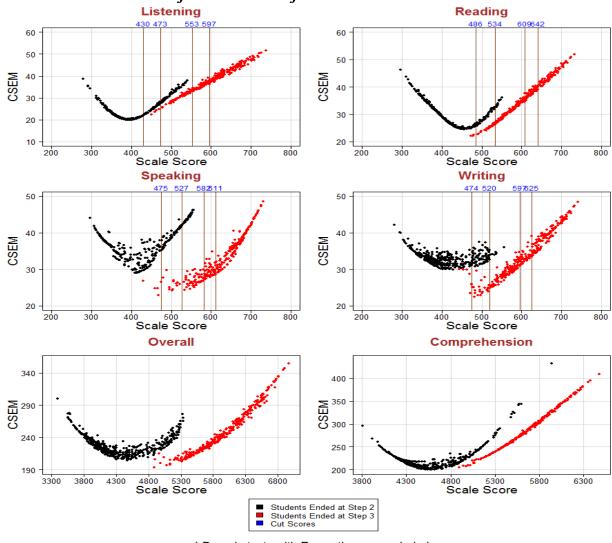


Figure S6.9: Screener Conditional Standard Error of Measurement for Grade 7

<sup>\*</sup> Domain tests with Exemption are excluded.

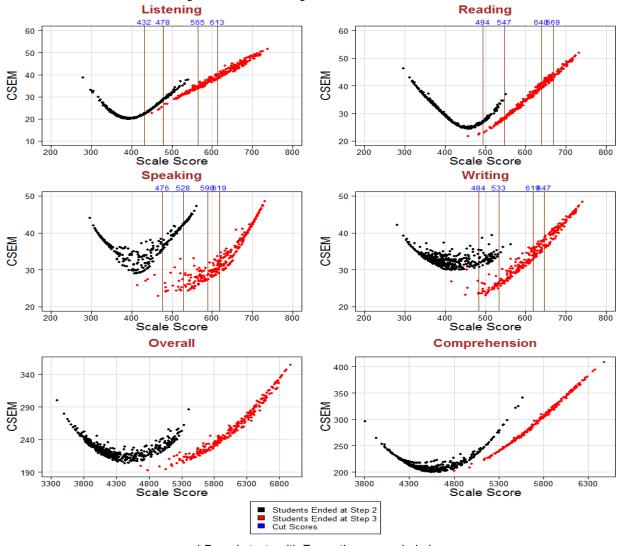


Figure S6.10: Screener Conditional Standard Error of Measurement for Grade 8

<sup>\*</sup> Domain tests with Exemption are excluded.

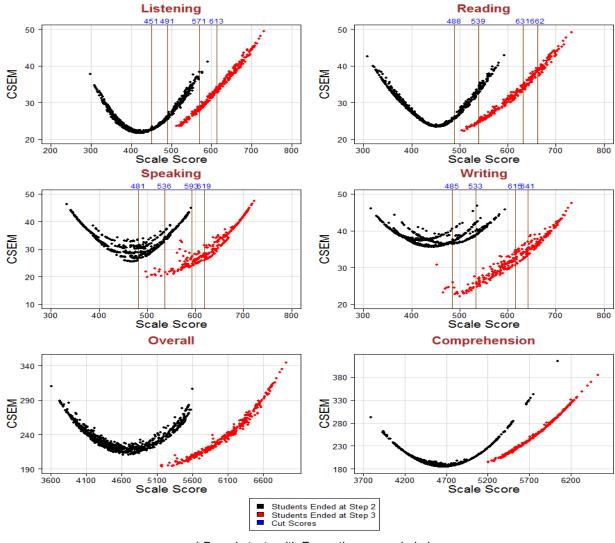


Figure S6.11: Screener Conditional Standard Error of Measurement for Grade 9

<sup>\*</sup> Domain tests with Exemption are excluded.

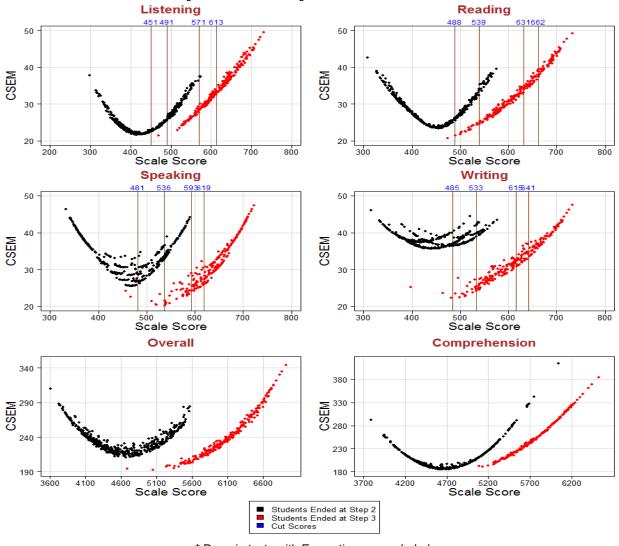


Figure S6.12: Screener Conditional Standard Error of Measurement for Grade 10

<sup>\*</sup> Domain tests with Exemption are excluded.

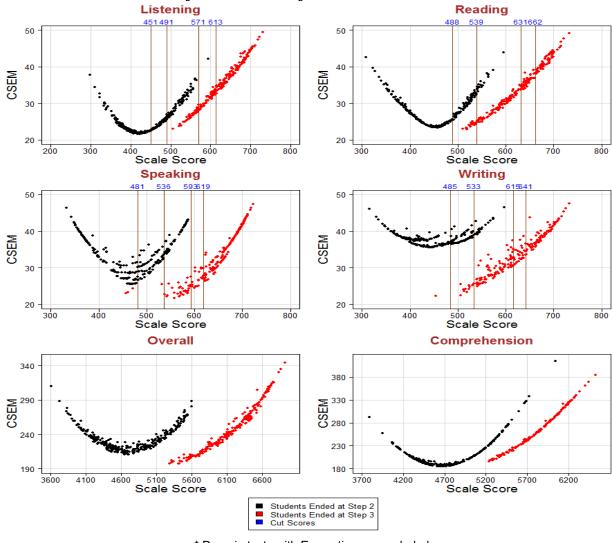


Figure S6.13: Screener Conditional Standard Error of Measurement for Grade 11

<sup>\*</sup> Domain tests with Exemption are excluded.

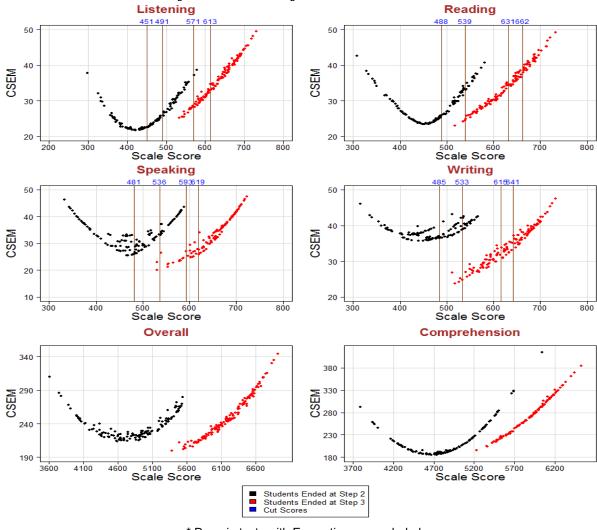


Figure S6.14: Screener Conditional Standard Error of Measurement for Grade 12

<sup>\*</sup> Domain tests with Exemption are excluded.

Section 7: Student Progress from Screener to Summative - Scatter Plots of Scale Score Change

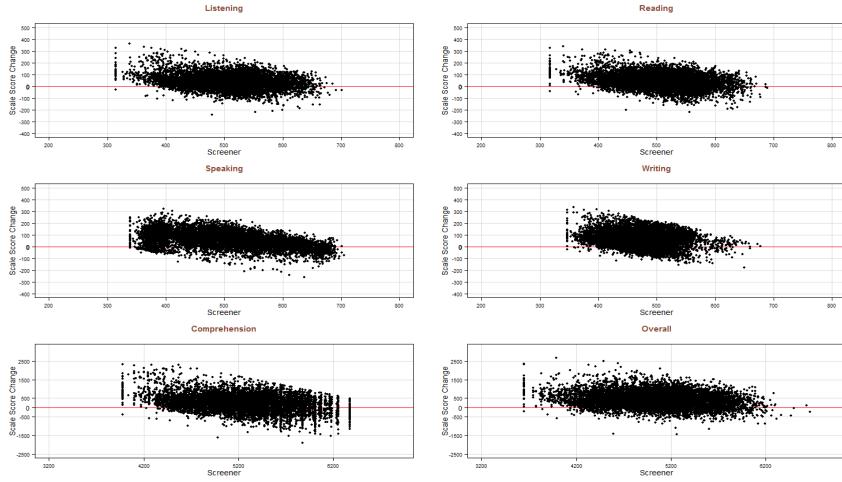


Figure S7.15: Scatter Plot of Scale Score Change from Screener to Summative for Grade K

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment. Students who took both BK and K are included.

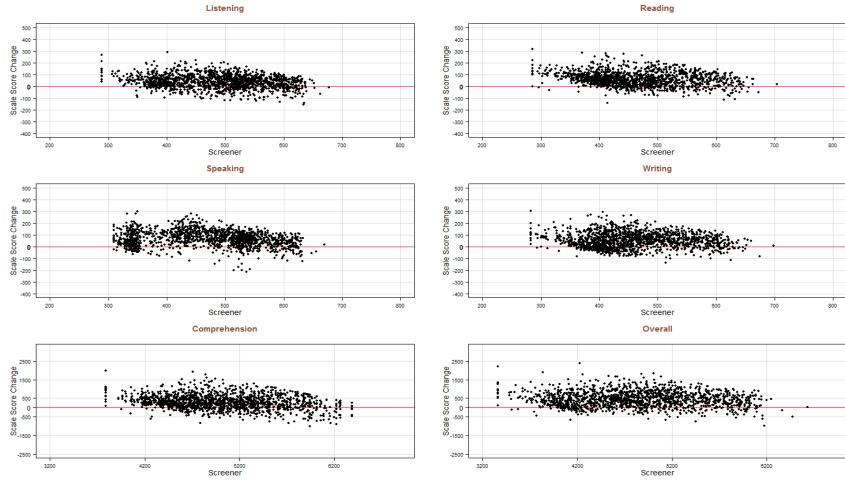


Figure S7.16: Scatter Plot of Scale Score Change from Screener to Summative for Grade 1

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

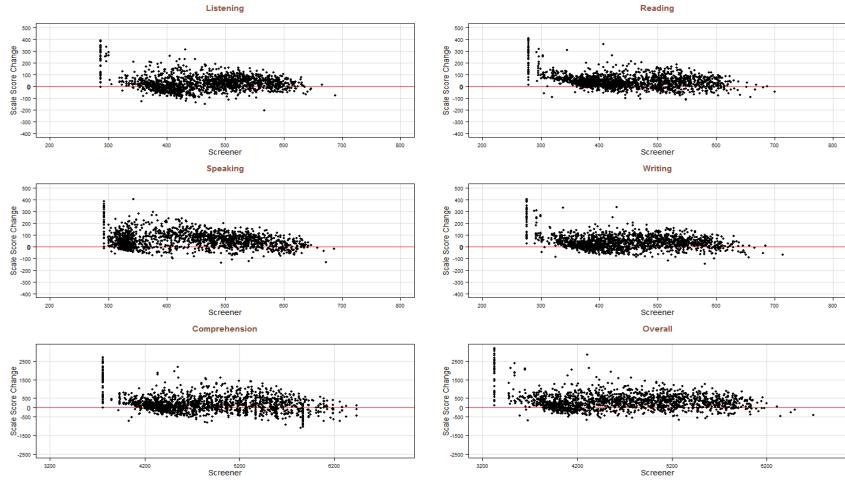


Figure S7.17: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 2-3

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

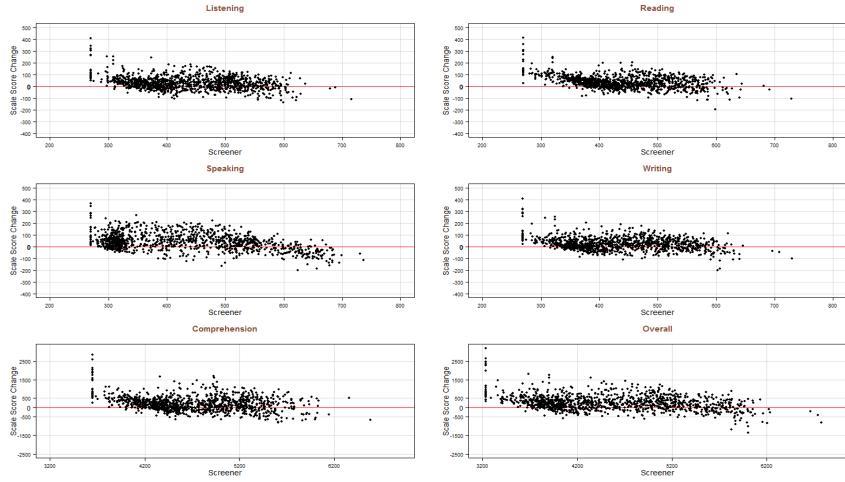


Figure S7.18: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 4-5

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

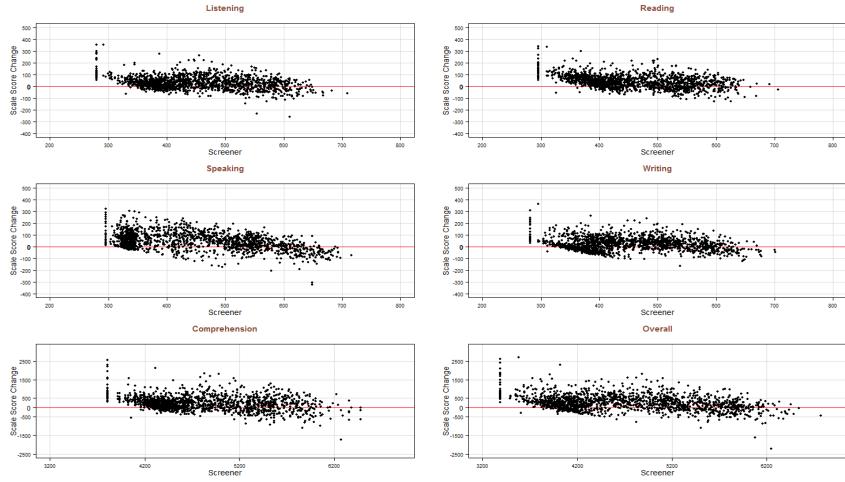


Figure S7.19: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 6-8

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

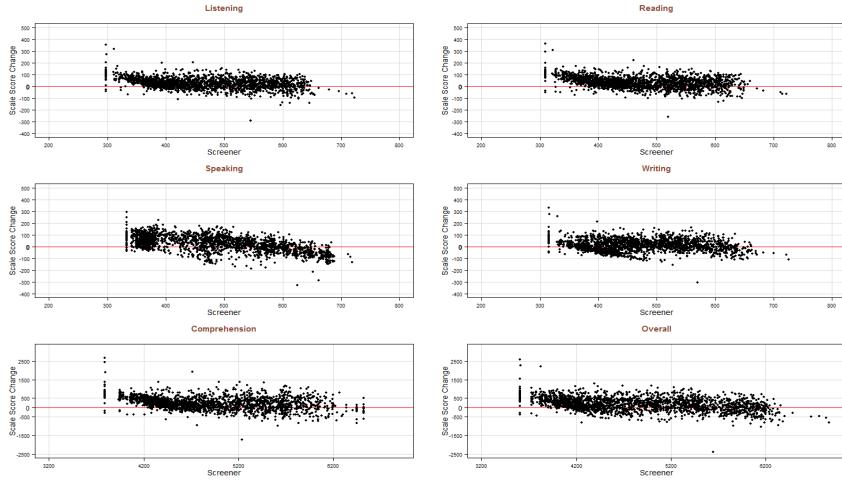


Figure S7.20: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 9-12

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

Section 8: Student Progress from Screener to Summative - Comparison of Scale Scores

Table S8.1: Comparison of Scale Scores Between Screener and Summative - Listening

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
<b>K</b> <sup>1</sup>	Screener	8,944	512	60	314	428	477	521	551	581	701
N.	Summative	8,944	550	74	237	453	498	550	601	647	775
4	Screener	1,469	487	80	288	378	422	497	546	594	678
1	Summative	1,469	526	88	260	404	454	533	595	637	712
2.2	Screener	1,645	465	80	286	370	401	469	525	574	688
2-3	Summative	1,645	492	97	229	361	400	501	572	619	742
4-5	Screener	1,117	436	85	270	332	368	425	505	553	716
4-5	Summative	1,117	464	89	275	356	388	454	536	589	725
6-8	Screener	1,552	448	86	279	354	380	429	517	578	709
<b>6-</b> 8	Summative	1,552	475	89	263	371	397	464	545	603	717
0.42	Screener	2,024	463	91	297	359	388	448	539	597	723
9-12	Summative	2,024	489	88	253	393	414	468	560	618	734

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment. Note 1. Students who took both BK and K are included in S8.1-S8.6.

Table S8.2: Comparison of Scale Scores Between Screener and Summative - Reading

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
	Screener	8,907	510	59	318	427	472	516	549	578	690
K	Summative	8,907	552	72	247	458	503	552	602	647	770
	Screener	1,462	463	79	286	374	404	449	516	576	704
1	Summative	1,462	523	87	273	426	456	503	583	657	744
2.2	Screener	1,642	449	84	278	351	386	436	514	568	701
2-3	Summative	1,642	492	86	228	394	423	471	559	620	766
4-5	Screener	1,108	439	80	270	344	381	431	497	548	729
4-5	Summative	1,108	474	76	286	394	415	455	527	590	736
6-8	Screener	1,544	457	83	296	359	393	436	528	576	706
6-0	Summative	1,544	496	79	270	407	434	479	552	613	732
9-12	Screener	2,018	468	86	309	363	399	454	539	593	722
9-12	Summative	2,018	500	82	258	412	435	479	558	621	746

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

Table S8.3: Comparison of Scale Scores Between Screener and Summative - Speaking

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
V	Screener	8,883	504	82	339	384	446	505	559	614	705
K	Summative	8,883	563	81	291	446	519	577	621	654	756
4	Screener	1,456	470	89	310	341	394	483	538	586	669
1	Summative	1,456	535	101	279	371	474	555	611	649	736
2.2	Screener	1,641	442	98	292	324	337	449	522	575	686
2-3	Summative	1,641	499	108	252	337	403	525	583	629	747
A 5	Screener	1,108	433	115	270	304	319	422	520	601	736
4-5	Summative	1,108	473	109	265	319	375	485	564	610	722
	Screener	1,543	452	109	296	329	341	439	542	607	716
6-8	Summative	1,543	493	101	307	343	408	508	574	621	736
0.40	Screener	2,008	478	103	332	360	372	472	564	629	718
9-12	Summative	2,008	504	86	297	378	440	509	574	611	719

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

Table S8.4: Comparison of Scale Scores Between Screener and Summative - Writing

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
V	Screener	8,892	472	47	347	413	442	472	501	531	677
K	Summative	8,892	526	75	309	441	467	513	581	637	723
	Screener	1,462	459	79	283	371	401	446	515	578	698
1	Summative	1,462	509	99	279	383	416	511	588	644	733
0.0	Screener	1,640	445	86	276	346	381	431	513	569	714
2-3	Summative	1,640	483	94	235	365	399	476	563	613	765
4.5	Screener	1,107	434	87	268	333	362	420	502	558	729
4-5	Summative	1,107	456	92	279	344	370	448	532	583	730
0.0	Screener	1,539	450	89	281	349	380	427	516	582	701
6-8	Summative	1,539	470	99	267	341	367	475	548	598	731
0.40	Screener	2,017	469	84	315	372	403	454	535	592	726
9-12	Summative	2,017	475	95	263	360	379	477	553	606	744

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

Table S8.5: Comparison of Scale Scores Between Screener and Summative - Comprehension

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
К	Screener	8,948	5326	471	3978	4658	5014	5361	5644	5876	6375
, K	Summative	8,948	5513	530	3377	4820	5139	5505	5873	6230	6865
1	Screener	1,471	5030	556	3785	4349	4607	4992	5429	5822	6387
•	Summative	1,471	5326	596	3659	4579	4858	5278	5739	6187	6633
2-3	Screener	1,648	4894	596	3756	4208	4410	4828	5370	5734	6439
2-3	Summative	1,648	5088	654	3300	4275	4514	5035	5575	6021	6729
4-5	Screener	1,119	4713	541	3649	4069	4308	4628	5148	5440	6582
4-5	Summative	1,119	4930	578	3807	4285	4474	4791	5343	5798	6878
6.0	Screener	1,556	4820	573	3803	4197	4374	4655	5299	5653	6476
6-8	Summative	1,556	5046	601	3504	4403	4541	4904	5467	5944	6938
	Screener	2,032	4897	629	3787	4185	4383	4781	5403	5789	6524
9-12	Summative	2,032	5130	617	3505	4498	4642	4923	5570	6064	7056

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.

Table S8.6: Comparison of Scale Scores Between Screener and Summative - Overall

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
	Screener	8,956	5060	459	3646	4419	4772	5115	5347	5638	6670
К	Summative	8,956	5477	551	3185	4751	5105	5485	5864	6184	7178
	Screener	1,471	4831	637	3364	4015	4327	4823	5291	5749	6629
1	Summative	1,471	5278	731	3334	4241	4708	5272	5833	6242	6998
	Screener	1,649	4679	688	3326	3859	4094	4636	5215	5662	6692
2-3	Summative	1,649	5018	762	2968	3994	4312	5025	5636	6035	7156
	Screener	1,120	4568	731	3237	3725	3964	4447	5130	5633	6776
4-5	Summative	1,120	4828	717	3407	3925	4182	4765	5432	5822	6729
	Screener	1,561	4708	732	3388	3890	4101	4571	5279	5787	6768
6-8	Summative	1,561	4965	723	3306	4039	4292	4944	5519	5958	6773
	Screener	2,044	4857	723	3605	3999	4233	4738	5452	5932	6869
9-12	Summative	2,044	5035	684	3235	4226	4431	4959	5591	6017	6862

<sup>\*</sup> Results are based on subset of students with results for both the screener and summative assessment.