2001 Oregon Extended Assessment

Reading Results
Writing Results
Math Results

Reliability Summary

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Oregon Extended Assessment in Reading, Writing, and Math

Description

The Alternate Assessment with basic academic skills is comprised of reading, writing, and mathematics tasks that provide sensitive administration and scoring systems that extend below the current statewide tests that rely on multiple-choice or performance task formats. They are designed to tap whether or not students with significant disabilities are learning to write, read, or manipulate numbers. The critical attributes of writing were considered as (a) encoding symbols, (b) using alphabetic generalizations, and (c) that conveyed meaning. Reading had three critical attributes: (a) decoding symbols (b) using alphabetic generalizations, and (c) with interpretations made from text. In math, the critical attributes were (a) use of a number system, (b) following rules and algorithms, (c) that can be manipulated into expressions and solutions.

This framework of attributes allowed the development of test specifications with a variety of tasks that eventually were placed into a single construct using a developmental scale of proficiency. Earlier tasks were considered more basic though a stringent task analysis was not necessarily assumed. An important caveat in this sequence was the distinction between operant responses and rule-governed responses. In the former, behavior was considered stipulated to specific contexts and instances. In the latter, transfer was possible to novel contexts and instances. In the range of tasks, however, the focus was on content specifications. As Dunbar, Koretz, and Hoover (1991)[1] have noted, "if an inference to a domain is intended, the sampling of tasks cannot be ignored in considerations of validity" (p. 298).

The definition of proficiency, therefore, can be interpreted at several levels. At the task level, flexibility exists in the method of administration but not in content of the tasks. Teachers can use any of several presentations or responses to ascertain the student's skill in the basic academic area. Also, scoring of individual tasks is made at the time of testing with allowance made for partially correct answers to be scored, Finally, the performance on individual tasks is evaluated qualitatively to determine how advanced the skills are developmentally. In this last judgment, both the number of correct items in a task and the level of the task in the sequence. Eventually, students' scores are expressed on a 0-6 scale with the end points reflecting the near inappropriateness of the measures for the student at that time:

- For students scoring .5-1, the focus of statewide assessment should be on life and career related skills.
- For students scoring 5.5-6, the challenge process should be invoked with possible accommodations considered.

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[1] Dunbar, S.B., Koretz, D., & Hoover, H.D. (1991). Quality control in the development and use of performance assessments. *Applied Measurement in Education, 4,* 289-304.

Brief Summary of Findings from Extended Reading Assessment

Reading Task 1: Naming/Pointing to Pictures (8 items)
- Scores for Naming/Pointing to Pictures are available for approximately 2370 students. The task was administered to approximately 1750 students, while 611 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 51 students.
- Given 2 points for a commonly accepted name and 1 point for a description or less accepted name, students' mean score on each item ranged from 1.10 to 1.98. Most students were at least able to describe different pictures and frequently could provide the picture's commonly accepted name.
- The standard deviation on each item ranged from 0.19 to 0.94
- Average student scores on this task were approximately 14 out of 16 possible points.

Reading Task 2: Naming/Pointing to Letters (8 Items)
- Scores for Naming/Pointing to Letters are available for approximately 2370 students. The task was administered to approximately 1780 students, while 580 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 57 students.
- Given 2 points for correct identification on the letter and 1 point for a partially correct identification (e.g., provides the sound of letter), mean student performance on each item ranged from 1.90 to 1.94. Data suggest that there was little variation in item difficulty and students generally correctly identified letters.
- Average student scores on this task were greater than 15 out of 16 possible points.

Reading Task 3: Reading/Pointing to Words (8 Items)
- Scores for Reading/Pointing to Words are available for approximately 2300 students. The task was administered to approximately 2130 students, while 172 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 113 students.
- Given 2 points for a correct word and 1 point for identifying any correct sound in the word, student mean performance on each task ranged from 1.09 to 1.81.
- The standard deviation for each item ranged from 0.57 to 0.90.
- Data suggest that most students correctly read all of the words presented.
- Average student scores on this task were approximately 13 out of 16 possible points.

Reading Task 4: Phonemic Segmentation (8 Items)
- Scores for Phonemic Segmentation are available for approximately 2160 students. The task was administered to approximately 2010 students, while 147 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 241 students.
- Average student scores on this task were approximately 19 out of 22 possible points.

Reading Task 5: Blending Sounds (7 Items)
- Scores for Blending Sounds are available for approximately 2140 students. The task was administered to approximately 2000 students, while 138 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 268 students.
- Average student scores on this task were approximately 19 out of 22 possible points.

Reading Task 6-Reading Names (4 Items)
- Scores for Reading Namers are available for approximately 2080 students. The task was administered to approximately 2010 students, while 71 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 330 students.

- Mean syllables read correctly in each name ranged from 0.71 to 1.54, with students reading more syllables correctly on names that were the most phonetically regular.
- Average student scores on this task were approximately 4.5 out of 9 possible points.

Reading Task 7: Reading Sentences (4 Items)

- Scores for Reading Sentences are available for approximately 2160 students. The task was administered to approximately 2090 students, while 70 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 245 students.
- The mean number of words read correctly on each sentence ranged from 1.37 on the two-word sentence to 4.59 on the five-word sentence.
- Data suggest that most students correctly read all words in the sentences presented.
- Average student scores on this task were approximately 12 out of 14 possible points.

Reading Task 8: Oral Reading Fluency

- Easy, moderately difficult, and more difficult reading passages were read by approximately 1570, 690, and 360 students respectively.
- Mean words read correct increased as passage difficulty increased, indicating that the most skilled readers read the more difficult passages.
- Median performance was below the mean for each passage. Mode words read correctly was below the mean on the easy and difficult passages, and was nearly equal to the mean on the moderately difficult passage.

Reading Task 9: Retelling Stories as Reading Comprehension

- Retell for the easy, moderately difficult, and more difficult reading passages was administered to approximately 1360, 630, and 310 students respectively.
- Mean number of words retold was approximately 13, 18, and 15 on the easy, moderately difficult, and more difficult passages respectively. Both median and mode performance was within two numbers of the mean for all passages except for mode on the moderately difficult passage.
- The standard deviations for the easy, moderately difficult, and difficult passages were 6.87, 10.24, and 8.16, which are approximately one-half of the respective means.

Reading Task 10: Retelling Story as Listening Comprehension

- Retelling stories as listening comprehension was administered to approximately 770, 310, and 250 students respectively. Many fewer students were administered the listening comprehension measure than were administered the reading comprehension measure.
- Students retold means of approximately 12, 19, and 14 key words on the easy, moderately difficult and more difficult passages.
- Both median and mode performance was within two numbers of the mean for all passages except for mode on the moderately difficult passage.
- The standard deviations for the easy, moderately difficult, and difficult passages were 7.50, 10.75, and 7.39, which are approximately one-half of the respective means.

Summary Tables

Reading Task 1: Naming/Pointing to Pictures (8 items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	1.97	0.22	2	1754	611	2365	1.98	51	38	89
Item 2	1.92	0.35	2	1751	611	2362	1.94	51	41	92
Item 3	1.33	0.86	2	1756	611	2367	1.51	51	36	87
Item 4	1.11	0.97	2	1752	611	2363	1.34	51	40	91
Item 5	1.72	0.61	2	1755	611	2366	1.79	51	37	88
Item 6	1.10	0.94	2	1754	611	2365	1.33	51	38	89
Item 7	1.95	0.29	2	1754	611	2365	1.96	51	38	89
Item 8	1.98	0.19	2	1755	611	2366	1.98	51	37	88
Average	1.63	0.55	2	1754	611	2365	1.73	51	38	89

Item Avg. (only administered items)	1.63
Item Avg. (admin + NA-P)	1.73
Total Avg. (only administered items)	13.07
Total Avg. (Admin + NA-P)	13.83

Reading Task 2: Naming/Pointing to Letters (8 items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	BLANK NO NA-P/I	Total Missing Data (NA-I + Blank)
e	1.94	0.35	2	1784	584	2368	1.95	57	29	86
m	1.94	0.33	2	1784	584	2368	1.96	57	29	86
r	1.93	0.36	2	1785	584	2369	1.95	57	28	85
t	1.92	0.38	2	1783	584	2367	1.94	57	30	87
H	1.90	0.42	2	1784	584	2368	1.93	57	29	86
S	1.94	0.33	2	1783	584	2367	1.95	57	30	87
W	1.91	0.42	2	1783	584	2367	1.93	57	30	87
C	1.92	0.38	2	1786	584	2370	1.94	57	27	84
Average	1.93	0.37	2	1784	584	2368	1.94	57	29	86

Item Avg. (only administered items)	1.93
Item Avg. (admin + NA-P)	1.94
Total Avg. (only administered items)	15.41
Total Avg. (Admin + NA-P)	15.55

Reading Task 3: Reading/Pointing to Words (8 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	BLANK NO NA-P/I	Total Missing Data (NA-I+ Blank)
two	1.81	0.55	2	2138	172	2310	1.82	113	31	144
are	1.78	0.60	2	2138	172	2308	1.80	113	31	144
how	1.49	0.80	2	2136	172	2309	1.53	113	33	146
some	1.65	0.68	2	2137	172	2300	1.68	113	32	145
were	1.09	0.90	2	2128	172	2302	1.16	113	41	154
each	1.36	0.87	2	2130	172	2304	1.41	113	39	152
out	1.62	0.74	2	2132	172	2301	1.64	113	37	150
will	1.79	0.57	2	2129	172	2306	1.80	113	40	153
Average	1.57	0.71	2	2134	172	2305	1.60	113	36	149

Item Avg. (only administered items)	1.57
Item Avg. (admin + NA-P)	1.60
Total Avg. (only administered items)	12.58
Total Avg. (Admin + NA-P)	12.84

Reading Task 4: Phonemic Segmentation (8 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I+ Blank)
/d/ /o/ /g/	2.68	0.77	3	2020	147	2167	2.70	241	46	287
/u/ /p/	1.82	0.58	2	2016	147	2163	1.83	241	50	291
/ch/ /i/ /p/	2.51	0.94	3	2016	147	2163	2.55	241	50	291
/p/ /e/ /g/	2.50	0.88	3	2016	147	2163	2.53	241	50	291
/c/ /a/ /t/	2.73	0.75	3	2013	147	2160	2.75	241	53	294
/sh/ /ow/	1.62	0.71	2	2011	147	2158	1.65	241	55	296
/d/ /o/ /g/	2.47	0.95	3	2007	147	2154	2.51	241	59	300
/l/ /ea/ /f/	2.47	0.95	3	2005	147	2152	2.51	241	61	302
Average	2.35	0.81	3	2013	147	2160	2.38	241	53	294

Item Avg. (only administered items)	2.35
Item Avg. (admin + NA-P)	2.38
Total Avg. (only administered items)	18.81
Total Avg. (Admin + NA-P)	19.02

Reading Task 5: Blending Sounds (7 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
/t/ /u/ /g/	2.65	0.75	3	2001	138	2139	2.67	268	47	315
/h/ /a/ /m/	2.68	0.72	3	2004	138	2142	2.70	268	44	312
/a/ /n/ /t/	2.72	0.70	3	2005	138	2143	2.74	268	43	311
/p/ /i/ /n/	2.62	0.74	3	2002	138	2140	2.65	268	46	314
/s/ /e/ /t/	2.38	0.73	3	2003	138	2141	2.42	268	45	313
/r/ /o/ /t/	2.45	0.82	3	2001	138	2139	2.48	268	47	315
/m/ /u/ /s/ /t/	3.49	0.99	4	1997	138	2135	3.53	268	51	319
Average	2.71	0.78	3	2002	138	2140	2.74	268	46	314
Item Avg. (only administered items)					2.71					
Item Avg. (admin + NA-P)					2.74					
Total Avg. (only administered items)					19.00					
Total Avg. (Admin + NA-P)					19.19					

Reading Task 6-Reading Names (4 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
Vic tor Cross	1.54	1.22	3	2010	71	2081	1.59	330	43	373
Sue Peck	0.71	0.81	2	2010	71	2081	0.75	330	43	373
Dan Mart	1.32	0.74	2	2007	71	2078	1.34	330	46	376
Joel Chan	0.86	0.81	2	2004	71	2075	0.90	330	49	379
Average	1.11	0.89	2	2008	71	2079	1.15	330	45	375
Item Avg. (only administered items)					1.11					
Item Avg. (admin + NA-P)					1.15					
Total Avg. (only administered items)					4.43					
Total Avg. (Admin + NA-P)					4.58					

Reading Task 7: Reading Sentences (4 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
Tom camps.	1.37	0.72	2	2088	70	2158	1.39	245	51	296
His dog runs.	2.63	0.74	3	2089	70	2159	2.64	245	50	295
The pan is hot.	3.61	0.81	4	2088	70	2158	3.62	245	51	296
A car can go fast.	4.59	0.96	5	2087	70	2157	4.60	245	52	297
Average	3.05	0.81	4	2088	70	2158	3.06	245	51	296

Item Avg. (only administered items)	3.05
Item Avg. (admin + NA-P)	3.06
Total Avg. (only administered items)	12.19
Total Avg. (Admin + NA-P)	12.25

Reading Task 8: Oral Reading Fluency

	Mean	SD	Median	Mode	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
WRC/Min: Easy Passage	46.50	33.89	40	20	1566	194	1760	537	140	677
Errors/Min: Easy Passage	5.41	6.83	4	2	1562	194	1756	537	161	698
WRC/Min: Medium Passage	67.37	35.83	61	67	682	81	763	1272	413	1685
Errors/Min: Medium Passage	3.78	4.58	3	1	686	81	767	1272	415	1687
WRC/Min: Difficult Passage	75.61	65.70	60	33	360	22	382	1591	480	2071
Errors/Min: Difficult Passage	5.45	7.41	4	4	359	22	381	1591	482	2073

Reading Task 9: Retelling Stories as Reading Comprehension

	Mean	SD	Median	Mode	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
Easy Passage (32 possible words)	12.52	6.87	12	11	1363	193	1556	716	182	898
Medium Difficulty Passage (61 possible words)	18.33	10.24	17	13	628	80	708	1311	435	1746
Difficult Passage (42 possible words)	15.44	8.16	15	14	311	21	332	1575	547	2122

Task 10: Retelling Story as Listening Comprehension

	Mean	SD	Median	Mode	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
Easy Passage (32 possible words)	12.12	7.50	11	12	772	607	1379	612	463	1075
Medium Difficulty Passage (61 possible words)	19.30	10.75	18.5	25	312	403	705	1102	637	1739
Difficult Passage (42 possible words)	14.43	7.39	14	14	253	290	543	1266	645	1911

Brief Summary of Findings from Extended Writing Assessment

Writing Task 1: Copying Letters (10 Items)
- Scores for Copying Letters are available for approximately 1800 students. The task was administered to approximately 1320 students, while 490 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 74 students.
- Given 2 points for a correctly copied letter and 1 point for a partially correct letter, students' mean score on each item ranged from 1.80 to 1.92. Data suggest that there was little variation in item difficulty and students generally correctly identified letters. Most students were at least able to correctly copy the letters presented.
- The standard deviation on each item ranged from 0.35 to 0.56.
- Average student scores on this task were approximately 19 out of a possible 20.

Writing Task 2: Copying Words (8 Items)
- Scores for Copying Words are available for approximately 1750 students. The task was administered to approximately 1370 students, while 390 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 97 students.
- Given 4 points for a correctly copied word and 2 points for a partially correct word, students' mean score on each item ranged from 3.64 to 3.82. Data suggest that there was little variation in item difficulty and students generally correctly identified letters. Most students were able to correctly copy the words presented.
- The standard deviation on each item ranged from 0.66 to 0.86.
- Average student scores on this task were approximately 30 out of a possible 32.

Writing Task 3: Dictating Words (8 Items)
- Scores for Dictating Words are available for approximately 1650 students. The task was administered to approximately 1600 students, while 50 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 213 students.
- Each written word was scored for correct letter sequences. Mean CLS per word ranged from 2.27 (if) to 3.34 (and).
- The standard deviation ranged on each item from 0.98 to 1.57.
- Average student scores on this task were approximately 22 out of a possible 29.

Writing Task 4: Dictating Sentences (2 Items)
- Scores for Dictating Sentences are available for approximately 1540 students. The task was administered to approximately 1520 students, while 20 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 313 students.
- Each written sentence was scored for correct letter sequences. Mean CLS per sentence was 14.14 for the 4-word sentence and 19.19 for the 5-word sentence.
- The standard deviations for each sentence were 6.86 and 10.85 respectively, which are approximately one-half of the mean for each sentence.
- Average student scores on this task were approximately 33 out of a possible 42.

Writing Task 5: Writing Sentences (3 Items)
- Scores for Writing Sentences are available for approximately 1390 students. The task was administered to an average of nearly 1380 students, while 14 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 408 students.

- Each written sentence was scored for total words written and correct letter sequences. Mean TWW per sentence was 5.61. Mean CLS per sentence was 16.08.
- Median and mode scores for TWW were 5. Median and mode scores for CLS were 15 and 12 respectively.
- The standard deviations for TWW and CLS were 3.80 and 9.08 respectively, which are approximately one-half of the mean for each sentence.

Writing Task 6: Story Writing
- Scores for Story Writing are available for approximately 1220 students. The task was administered to approximately 1200 students, while 12 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 579 students.
- Each story was scored for total words written, correct word sequences. Stories also were rated on a scale from 1-3 for their overall organization and quality. Mean TWW per sentence was 21.38. Mean CWS per sentence was 14.39. Mean ideas and organization rating was 1.44.
- Median and mode performance was below the mean for each scoring method. Median and mode were 19 and 14 respectively for TWW, 10 and 4 for CWS, and 1 and 2 for overall story quality.

Summary Tables

Writing Task 1-Copying Letters (10 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
e	1.91	0.37	2	1321	490	1811	1.93	74	45	119
m	1.88	0.39	2	1321	490	1811	1.91	74	45	119
d	1.89	0.39	2	1322	490	1812	1.92	74	44	118
a	1.89	0.40	2	1322	490	1812	1.92	74	44	118
s	1.92	0.35	2	1320	490	1810	1.94	74	45	119
L	1.92	0.35	2	1319	490	1809	1.94	74	47	121
R	1.86	0.46	2	1320	490	1810	1.90	74	46	120
B	1.89	0.42	2	1319	490	1809	1.92	74	47	121
F	1.90	0.39	2	1319	490	1809	1.93	74	47	121
N	1.80	0.53	2	1315	490	1805	1.85	74	51	125
Average	1.89	0.41	2	1320	490	1810	1.92	74	46	120

Item Avg. (only administered items)	1.89
Item Avg. (admin + NA-P)	1.92
Total Avg. (only administered items)	18.86
Total Avg. (Admin + NA-P)	19.17

Writing Task 2-Copying Words (8 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
sat	3.77	0.71	4	1371	388	1759	3.82	97	74	171
cup	3.72	0.75	4	1364	388	1752	3.78	97	81	178
ram	3.76	0.73	4	1368	388	1756	3.82	97	77	174
bow	3.82	0.66	4	1373	388	1761	3.86	97	72	169
dig	3.77	0.72	4	1372	388	1760	3.82	97	73	170
red	3.80	0.69	4	1369	388	1757	3.84	97	76	173
fun	3.73	0.77	4	1371	388	1759	3.79	97	74	171
key	3.64	0.86	4	1348	388	1736	3.72	97	97	194
Average	3.75	0.74	4	1367	388	1755	3.81	97	78	175

Item Avg. (only administered items)	3.75
Item Avg. (admin + NA-P)	3.81
Total Avg. (only administered items)	30.02
Total Avg. (Admin + NA-P)	30.45

Writing Task 3-Dictating Words (8 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
if	2.27	1.15	3	1608	51	1659	2.29	213	58	271
leg	2.33	1.32	2	1607	51	1658	2.38	213	59	272
job	2.43	1.57	2	1606	51	1657	2.47	213	60	273
sat	3.34	1.22	4	1586	51	1637	3.36	213	80	293
up	2.56	0.98	3	1581	51	1632	2.57	213	85	298
dip	2.73	1.47	4	1581	51	1632	2.77	213	85	298
on	2.56	1.00	3	1580	51	1631	2.58	213	86	299
run	3.28	1.26	4	1580	51	1631	3.30	213	86	299
Average	2.69	1.25	3.13	1591	51	1642	2.72	213	75	288

Item Avg. (only administered items)	2.69
Item Avg. (admin + NA-P)	2.72
Total Avg. (only administered items)	21.49
Total Avg. (Admin + NA-P)	21.73

Writing Task 4-Dictating Sentences (2 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean With NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
The hat is red.	14.14	6.86	15	1528	21	1549	14.15	313	68	381
She has to help Jill's mom.	19.19	10.85	27	1507	21	1528	19.30	313	89	402
Average	16.67	8.85		1518	21	1539	16.73	313	79	392

Item Avg. (only administered items)	16.67
Item Avg. (admin + NA-P)	16.73
Total Avg. (only administered items)	33.33
Total Avg. (Admin + NA-P)	33.45

Writing Task 5- Writing Sentences

	Mean	SD	Median	Mode	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
Total Words Written	5.61	3.80	5	5	1405	14	1419	408	103	511
Correct Letter Sequences (CLS)	16.08	9.08	15	12	1366	14	1380	408	142	550
Total CLS Possible	22.04	9.83	21	15	1361	14	1375	408	147	555
Average					1377	14	1391	408	131	539

Writing Task 6-Story Writing

	Mean	SD	Median	Mode	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Total NA-I	Blank No NA-P/I	Total Missing Data (NA-I + Blank)
Total Words Written	21.38	12.90	19	14	1224	12	1236	579	115	694
Correct Letter Sequences (CLS)	14.39	14.34	10	4	1198	12	1210	579	141	720
Total CLS Possible	26.30	16.37	23	21	1190	12	1202	579	149	728
Ideas and Organization Rating	1.44	0.84	1	2	1157	12	1216	579	182	714
Average					1192	12	1216	579	146	714

Writing Task 6-Story Writing

Letter	Means for Story Writing	SD	Median	Mode	Min	Max	Total Cases	Total Missing Cases
Total Words Written	21.38	12.90	19	14	0	99	1224	706
Correct Word Sequences (CLS)	14.39	14.34	10	4	0	99	1198	732
Total CWS Possible	26.30	16.37	23	21	0	99	1190	740
Ideas and Organization Rating	1.44	0.84	1	2	0	3	1157	773

Brief Summary of Findings from Extended Math Assessment

Math Task 1: Copying Numbers (8 items)
- Scores for Copying Numbers are available for approximately 1900 students. The task was administered to approximately 1380 students, while 517 students were given an automatic pass (NA-P). This task was considered inappropriate (NA-I) for 76 students.
- Given 2 points for each correctly copied digit and 1 point for partially correct digit, the maximum score for each item ranged from 2 to 6 points. The mean score on each item ranged from 1.92 to 5.45. Median and mode performance was higher than the mean on all items.
- The standard deviation on each item ranged from 0.25 to 1.42.
- Average student scores on this task were approximately 23 out of 24 possible points.

Math Task 2a: Naming/Pointing to Numbers (8 Items)
- Scores for Naming/Pointing to Numbers are available for approximately 1925 students. The task was administered to approximately 1399 students, while 526 students were given an automatic pass. This task was considered inappropriate for 44 students.
- Given 1 point for the correct identification of a single-digit number, the mean score on each item ranged from 0.96 to 0.99. Median and mode performance both were higher than the mean. Data suggests that there was little variation in item difficulty and students generally correctly identified numbers.
- The standard deviation on each item ranged from 0.11 to 0.20.
- Average student scores on this task were approximately 8 out of 8 possible points.

Math Task 2b: Ordering Numbers (1 Items)
- Scores for Ordering Numbers are available for 1885 students. The task was administered to 1600 students, while 285 students were given an automatic pass. The task was considered inappropriate for 98 students.
- Given 1 point for putting the 4 single-digit numbers in correct order, the mean score was 0.77. Median and mode performance was 1. The standard deviation on the item was 0.42.

Math Task 3: Naming/Pointing to Shapes (8 Items)
- Scores for Naming/Pointing to Shapes are available for approximately 1910 students. The task was administered to approximately 1847 students, while 66 students were given an automatic pass. This task was considered inappropriate for 43 students.
- Given 1 point for each shape named correctly, the mean score on each item ranged from 0.25 to 0.96.
- The standard deviation on each item ranged from 0.19 to 0.47.
- Average student scores on this task were approximately 5 out of 8 possible points.

Math Task 4: Writing Numerals (10 Items)
- Scores for Writing Numerals are available for approximately 1850 students. The task was administered to approximately 1669 students, while 176 students were given an automatic pass. This task was considered inappropriate for 115 students.
- The maximum score for each item ranged from 2 to 4 points. Given 2 points for each correctly written digit and 1 point for partially correct digit, the mean performance on each item ranged from 1.92 to 3.69. The median and mode scores were higher than mean scores for each item.
- The standard deviation on each item ranged from 0.30 to 1.22.
- Average student scores on this task were approximately 31 out of 34 possible points.

Math Task 5: Counting On Dictation (2 Items)
- Scores for Counting on Dictation are available for approximately 1860 students. The task was administered to approximately 1721 students, while 141 students were given an automatic pass. This task was considered inappropriate for 85 students.
- Response was scored using correct number sequence. Given 1 point for each correct number sequence, the maximum score for each item was 9 points. Mean correct number sequence ranged from 4.70 to 8.50. Both median and mode correct number sequence was above the mean indicating that most students responded correctly.
- The standard deviations for the 2 items were 1.77 and 3.30.
- Average student scores on this task were approximately 14 out of 18 possible points.

Math Task 6a: Naming/Pointing to Money (9 Items)
- Scores for Naming/Pointing to Money are available for approximately 1900 students. The task was administered to approximately 1820 students, while 75 students were given an automatic pass. This task was considered inappropriate for 60 students.
- Given 1 point for each bill/coin identified correctly, the mean score for each item ranged from 0.43 to 0.94.
- The standard deviation ranged from 0.28 to 0.50.
- Average student scores on this task were approximately 7 out of 9 possible points.

Math Task 6b: Counting Money (5 Items)
- Scores for Counting Money are available for approximately 1710 students. The task was administered to approximately 1664 students, while 50 students were given an automatic pass. This task was considered inappropriate for 247 students.
- The maximum point for each item ranged from 1 to 2 points. Mean score for each item ranged from 0.70 to 1.34. Median and mode for each item was higher than the mean on all items except for one item.
- The standard deviation ranged from 0.46 to 0.94.
- Average student scores on this task were approximately 5 out of 9 possible points.

Math Task 7: Telling Time (4 Items)
- Scores for Telling Time are available for approximately 1830 students. The task was administered to approximately 1783 students, while 45 students were given an automatic pass. This task was considered inappropriate for 136 students.
- Given 2 points for minutes correctly identified and 1 point for hours correctly identified, the maximum point for each item was 3. Mean score for each item ranged from 1.13 to 2.61.
- Standard deviation ranged from 0.92 to 1.34.
- Average student scores on this task were approximately 8 out of 12 possible points.

Math Task 8ab: Manipulating with Math Concepts (6 Items)
- Scores for this subtask of Manipulating with Math Concepts are available for approximately 1890 students. The task was administered to approximately 1668 students, while 220 students were given an automatic pass. This task was considered inappropriate for 71 students.
- Given 1 point for each correct response, the mean score ranged from 0.92 to 0.97. Median and mode performance was higher than the mean for each item. Data suggests that there was little variation in item difficulty and students generally responded correctly.
- The standard deviations ranged from 0.17 to 0.27.

- Average student scores on this task were approximately 6 out of 6 possible points.

Math Task 8cd: Manipulating with Math Concepts (6 Items)
- Scores for this subtask of Manipulating with Math Concepts are available for approximately 1840 students. The task was administered to approximately 1754 students, while 86 students were given an automatic pass. This task was considered inappropriate for 98 students.
- Given 1 point for each correct response, the mean score for each item ranged from 0.13 to 0.99. Median and mode performance was higher than the mean for the first 4 items.
- The standard deviations ranged from 0.11 to 0.47.
- Average student scores on this task were approximately 4 out of 6 possible points.

Math Task 8ef: Manipulating with Math Concepts (6 Items)
- Scores for this subtask of Manipulating with Math Concepts are available for approximately 1820 students. The task was administered to approximately 1684 students, while 139 students were given an automatic pass. This task was considered inappropriate for 117 students.
- Given 1 point for correct response for each item, the mean score ranged from 0.74 to 0.94. Median and mode performance was higher than the mean for each item.
- The standard deviations ranged from 0.23 to 0.44.
- Average student scores on this task were approximately 5 out of 6 possible points.

Math Task 8g: Place Value (2 Items)
- Scores for Place Value are available for approximately 1720 students. The task was administered to approximately 1690 students, while 32 students were given an automatic pass. This task was considered inappropriate for 231 students.
- Given 1 point for a correctly identified place value, mean scores for the 2 items were 0.36 and 0.62.
- The standard deviations were 0.48 and 0.49.
- Average student scores on this task were approximately 1 out of 2 possible points.

Math Task 9a: Timed Computation – Addition Facts
- Scores for Timed Computation are available for approximately 1640 students. The task was administered to approximately 1599 students, while 43 students were given an automatic pass. This task was considered inappropriate for 197 students.
- Given 1 point for each correct digit in correct place, the maximum point for each item ranged from 1 to 2 points. The mean score for each item ranged from 0.02 to 1.55.
- The standard deviation ranged from 0.13 to 0.76.
- Average student scores on this task were approximately 5 out of 31 possible points.

Math Task 9b: Timed Computation – Subtraction Facts
- Scores for Timed Computation are available for approximately 1480 students. The task was administered to approximately 1438 students, while 43 students were given an automatic pass. This task was considered inappropriate for 255 students.
- Given 1 point for each correct digit in correct place, the mean score for each item ranged from 0.01 to 0.97.
- The standard deviation ranged from 0.09 to 0.45.
- Average student scores on this task were approximately 4 out of 20 possible points.

Math Task 9c: Timed Computation – Multiplication Facts
- Scores for Timed Computation are available for approximately 766 students. The task was administered to approximately 739 students, while 27 students were given an automatic pass. This task was considered inappropriate for 1025 students.
- Given 1 point for each correct digit in correct place, the maximum point for each item ranged from 1 to 2 points. The mean score for each item ranged from 0.02 to 0.92.
- The standard deviation ranged from 0.18 to 0.95.
- Average student scores on this task were approximately 5 out of 34 possible points.

Math Task 10ab: Mixed Computation
- Scores for Mixed Computation are available for approximately 1290 students. The task was administered to approximately 1266 students, while 25 students were given an automatic pass. This task was considered inappropriate for 556 students.
- Given 1 point for each correct digit in correct place, the maximum point for each item ranged from 1 to 3 points. The mean score for each item ranged from 0 to 0.98.
- The standard deviation ranged from 0.04 to 0.51.
- Average student scores on this task were approximately 3 out of 22 possible points.

Math Task 10cd: Mixed Computation
- Scores for Mixed Computation are available for approximately 435 students. The task was administered to approximately 405 students, while 30 students were given an automatic pass. This task was considered inappropriate for 1327 students.
- Given 1 point for each correct digit in correct place, the maximum point for each item ranged from 1 to 4 points. The mean score for each item ranged from 0.01 to 0.95
- The standard deviation ranged from 0.15 to 1.00
- Average student scores on this task were approximately 5 out of 23 possible points.

Summary Tables

Math Task 1: Copying Numbers (8 items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	1.94	0.32	2	1383	517	1900	1.96	76	55	131
Item 2	1.95	0.25	2	1383	517	1900	1.97	76	55	131
Item 3	1.93	0.33	2	1385	517	1902	1.95	76	53	129
Item 4	5.45	1.42	6	1380	517	1897	5.60	76	58	134
Item 5	1.92	0.35	2	1378	517	1895	1.95	76	60	136
Item 6	3.70	0.83	4	1378	517	1895	3.79	76	60	136
Item 7	3.74	0.81	4	1379	517	1896	3.81	76	59	135
Item 8	1.94	0.35	2	1377	517	1894	1.95	76	61	137
Average	2.82	0.58	3	1380	517	1897	2.87	76	58	134
Item Avg. (only administered items)					2.82					
Item Avg. (admin + NA-P)					2.87					
Total Avg. (only administered items)					22.58					
Total Avg. (admin + NA-P)					22.97					

Math Task 2a: Naming/Pointing to Numbers (8 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.98	0.14	1	1401	526	1927	0.98	44	60	104
Item 2	0.96	0.19	1	1400	526	1926	0.97	44	61	105
Item 3	0.98	0.14	1	1399	526	1925	0.99	44	62	106
Item 4	0.97	0.17	1	1399	526	1925	0.98	44	62	106
Item 5	0.96	0.20	1	1398	526	1924	0.97	44	63	107
Item 6	0.99	0.11	1	1399	526	1925	0.99	44	62	106
Item 7	0.97	0.16	1	1399	526	1925	0.98	44	62	106
Item 8	0.96	0.20	1	1399	526	1925	0.97	44	62	106
Average	0.97	0.16	1	1399	526	1925	0.98	44	62	106
Item Avg. (only administered items)					0.97					
Item Avg. (admin + NA-P)					0.98					
Total Avg. (only administered items)					7.77					
Total Avg. (admin + NA-P)					7.83					

Math Task 2b: Ordering Numbers (1 Item)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.77	0.42	1	1600	285	1885	0.80	98	48	146
Item Avg. (only administered items)					0.77					
Item Avg. (admin + NA-P)					0.80					
Total Avg. (only administered items)					0.77					
Total Avg. (admin + NA-P)					0.80					

Math Task 3: Naming/Pointing to Shapes (8 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.33	0.47	1	1843	66	1909	0.36	43	79	122
Item 2	0.96	0.19	1	1850	66	1916	0.96	43	72	115
Item 3	0.82	0.38	1	1850	66	1916	0.83	43	72	115
Item 4	0.85	0.36	1	1851	66	1917	0.85	43	71	114
Item 5	0.72	0.45	1	1848	66	1914	0.73	43	74	117
Item 6	0.70	0.46	1	1843	66	1909	0.71	43	79	122
Item 7	0.25	0.43	1	1845	66	1911	0.27	43	77	120
Item 8	0.26	0.44	1	1843	66	1909	0.29	43	79	122
Average	0.61	0.40	1	1847	66	1913	0.63	43	75	118
Item Avg. (only administered items)					0.61					
Item Avg. (admin + NA-P)					0.63					
Total Avg. (only administered items)					4.90					
Total Avg. (admin + NA-P)					5.00					

Math Task 4: Writing Numerals (10 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	3.55	1.14	4	1673	176	1849	3.59	115	67	182
Item 2	3.41	1.31	4	1673	176	1849	3.47	115	67	182
Item 3	1.92	0.34	2	1672	176	1848	1.93	115	68	183
Item 4	3.59	1.06	4	1667	176	1843	3.63	115	73	188
Item 5	3.51	0.97	4	1668	176	1844	3.56	115	72	187
Item 6	1.94	0.30	2	1668	176	1844	1.95	115	72	187
Item 7	3.46	1.22	4	1668	176	1844	3.51	115	72	187
Item 8	3.47	1.17	4	1666	176	1842	3.52	115	74	189
Item 9	1.92	0.37	2	1665	176	1841	1.92	115	75	190
Item 10	3.69	0.97	4	1666	176	1842	3.72	115	74	189
Average	3.05	0.88	3.4	1669	176	1845	3.08	115	71	186

Item Avg. (only administered items)	3.05
Item Avg. (admin + NA-P)	3.08
Total Avg. (only administered items)	30.46
Total Avg. (admin + NA-P)	30.80

Math Task 5: Counting On Dictation (2 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	8.50	1.77	9	1721	141	1862	8.54	85	84	169
Item 2	4.70	3.30	9	1720	141	1861	5.02	85	85	170
Average	6.60	2.53	9	1721	141	1862	6.78	85	85	170

Item Avg. (only administered items)	6.60
Item Avg. (admin + NA-P)	6.78
Total Avg. (only administered items)	13.20
Total Avg. (admin + NA-P)	13.57

Math Task 6a: Naming/Pointing to Money (9 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.91	0.28	1	1823	75	1898	0.92	60	73	133
Item 2	0.76	0.43	1	1825	75	1900	0.77	60	71	131
Item 3	0.83	0.38	1	1825	75	1900	0.84	60	71	131
Item 4	0.83	0.37	1	1825	75	1900	0.84	60	71	131
Item 5	0.94	0.24	1	1823	75	1898	0.94	60	73	133
Item 6	0.92	0.28	1	1821	75	1896	0.92	60	75	135
Item 7	0.91	0.28	1	1818	75	1893	0.92	60	78	138
Item 8	0.88	0.33	1	1816	75	1891	0.88	60	80	140
Item 9	0.43	0.50	1	1808	75	1883	0.46	60	88	148
Average	0.82	0.34	1	1820	75	1895	0.83	60	76	136

Item Avg. (only administered items)	0.82
Item Avg. (admin + NA-P)	0.83
Total Avg. (only administered items)	7.42
Total Avg. (admin + NA-P)	7.48

Math Task 6b: Counting Money (5 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	1.17	0.94	2	1670	50	1720	1.20	247	64	311
Item 2	1.34	0.91	2	1670	50	1720	1.35	247	64	311
Item 3	1.11	0.94	2	1666	50	1716	1.14	247	68	315
Item 4	0.77	0.88	2	1659	50	1709	0.81	247	75	322
Item 5	0.70	0.46	1	1654	50	1704	0.71	247	80	327
Average	1.02	0.82	1.8	1664	50	1714	1.04	247	70	317

Item Avg. (only administered items)	1.02
Item Avg. (admin + NA-P)	1.04
Total Avg. (only administered items)	5.10
Total Avg. (admin + NA-P)	5.22

Math Task 7: Telling Time (4 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	1.75	1.34	3	1785	45	1830	1.78	136	65	201
Item 2	1.13	1.33	3	1783	45	1828	1.18	136	67	203
Item 3	2.60	0.92	3	1782	45	1827	2.61	136	68	204
Item 4	2.61	0.92	3	1780	45	1825	2.62	136	70	206
Average	2.02	1.13	3	1783	45	1828	2.05	136	68	204

Item Avg. (only administered items)	2.02
Item Avg. (admin + NA-P)	2.05
Total Avg. (only administered items)	8.09
Total Avg. (admin + NA-P)	8.19

Math Task 8ab: Manipulating with Math Concepts (6 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.92	0.27	1	1670	220	1890	0.93	71	70	141
Item 2	0.94	0.24	1	1669	220	1889	0.95	71	71	142
Item 3	0.97	0.17	1	1668	220	1888	0.97	71	72	143
Item 4	0.96	0.19	1	1668	220	1888	0.97	71	72	143
Item 5	0.95	0.21	1	1668	220	1888	0.96	71	72	143
Item 6	0.95	0.23	1	1666	220	1886	0.95	71	74	145
Average	0.95	0.22	1	1668	220	1888	0.95	71	72	143

Item Avg. (only administered items)	0.95
Item Avg. (admin + NA-P)	0.95
Total Avg. (only administered items)	5.69
Total Avg. (admin + NA-P)	5.73

Math Task 8cd: Manipulating with Math Concepts (6 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.98	0.14	1	1759	86	1845	0.98	98	88	186
Item 2	0.99	0.11	1	1759	86	1845	0.99	98	88	186
Item 3	0.74	0.44	1	1758	86	1844	0.76	98	89	187
Item 4	0.66	0.47	1	1753	86	1839	0.68	98	94	192
Item 5	0.31	0.46	1	1750	86	1836	0.34	98	97	195
Item 6	0.13	0.33	1	1747	86	1833	0.17	98	100	198
Average	0.63	0.33	1	1754	86	1840	0.65	98	93	191

Item Avg. (only administered items)	0.63
Item Avg. (admin + NA-P)	0.65
Total Avg. (only administered items)	3.81
Total Avg. (admin + NA-P)	3.91

Math Task 8ef: Manipulating with Math Concepts (6 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.81	0.39	1	1687	139	1826	0.83	117	88	205
Item 2	0.85	0.35	1	1686	139	1825	0.86	117	89	206
Item 3	0.94	0.23	1	1687	139	1826	0.95	117	88	205
Item 4	0.92	0.28	1	1684	139	1823	0.92	117	91	208
Item 5	0.90	0.30	1	1684	139	1823	0.91	117	91	208
Item 6	0.74	0.44	1	1676	139	1815	0.76	117	99	216
Average	0.86	0.33	1	1684	139	1823	0.87	117	91	208
Item Avg. (only administered items)					0.86					
Item Avg. (admin + NA-P)					0.87					
Total Avg. (only administered items)					5.16					
Total Avg. (admin + NA-P)					5.23					

Math Task 8g: Place Value (2 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.62	0.49	1	1689	32	1721	0.62	231	79	310
Item 2	0.36	0.48	1	1691	32	1723	0.37	231	77	308
Average	0.49	0.48	1	1690	32	1722	0.50	231	78	309
Item Avg. (only administered items)					0.49					
Item Avg. (admin + NA-P)					0.50					
Total Avg. (only administered items)					0.97					
Total Avg. (admin + NA-P)					0.99					

Math Task 9a: Timed Computation – Addition Facts (20 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.98	0.13	1	1700	43	1743	0.98	197	91	288
Item 2	0.87	0.34	1	1662	43	1705	0.87	197	129	326
Item 3	1.55	0.76	2	1636	43	1679	1.56	197	155	352
Item 4	0.06	0.32	2	1619	43	1662	0.11	197	172	369
Item 5	0.05	0.28	2	1602	43	1645	0.10	197	189	386
Item 6	0.06	0.24	1	1653	43	1696	0.08	197	138	335
Item 7	0.09	0.40	2	1642	43	1685	0.14	197	149	346
Item 8	0.08	0.36	2	1627	43	1670	0.13	197	164	361
Item 9	0.06	0.33	2	1601	43	1644	0.11	197	190	387
Item 10	0.03	0.17	1	1593	43	1636	0.05	197	198	395
Item 11	0.05	0.22	1	1632	43	1675	0.08	197	159	356
Item 12	0.06	0.34	2	1607	43	1650	0.11	197	184	381
Item 13	0.03	0.17	1	1593	43	1636	0.06	197	198	395
Item 14	0.03	0.24	2	1562	43	1605	0.08	197	229	426
Item 15	0.02	0.18	2	1546	43	1589	0.07	197	245	442
Item 16	0.05	0.21	1	1596	43	1639	0.07	197	195	392
Item 17	0.04	0.20	1	1581	43	1624	0.07	197	210	407
Item 18	0.03	0.17	1	1559	43	1602	0.06	197	232	429
Item 19	0.03	0.21	2	1518	43	1561	0.08	197	273	470
Item 20	0.02	0.22	2	1442	43	1485	0.08	197	349	546
Average	0.21	0.27	1.55	1599	43	1642	0.24	197	192	389
Item Avg. (only administered items)					0.21					
Item Avg. (admin + NA-P)					0.24					
Total Avg. (only administered items)					4.18					
Total Avg. (admin + NA-P)					4.89					

Math Task 9b: Timed Computation – Subtraction Facts (20 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.97	0.17	1	1588	43	1631	0.97	295	105	400
Item 2	0.73	0.45	1	1538	43	1581	0.73	295	155	450
Item 3	0.78	0.41	1	1523	43	1566	0.79	295	170	465
Item 4	0.04	0.21	1	1501	43	1544	0.07	295	192	487
Item 5	0.04	0.19	1	1483	43	1526	0.07	295	210	505
Item 6	0.08	0.28	1	1524	43	1567	0.11	295	169	464
Item 7	0.05	0.22	1	1508	43	1551	0.08	295	185	480
Item 8	0.04	0.19	1	1487	43	1530	0.07	295	206	501
Item 9	0.03	0.16	1	1465	43	1508	0.05	295	228	523
Item 10	0.02	0.14	1	1416	43	1459	0.05	295	277	572
Item 11	0.04	0.20	1	1455	43	1498	0.07	295	238	533
Item 12	0.04	0.19	1	1447	43	1490	0.06	295	246	541
Item 13	0.02	0.16	1	1417	43	1460	0.05	295	276	571
Item 14	0.02	0.13	1	1392	43	1435	0.05	295	301	596
Item 15	0.01	0.09	1	1359	43	1402	0.04	295	334	629
Item 16	0.04	0.20	1	1401	43	1444	0.07	295	292	587
Item 17	0.04	0.18	1	1384	43	1427	0.06	295	309	604
Item 18	0.02	0.15	1	1352	43	1395	0.05	295	341	636
Item 19	0.01	0.11	1	1316	43	1359	0.04	295	377	672
Item 20	0.01	0.09	1	1210	43	1253	0.04	295	483	778
Average	0.15	0.20	1	1438	43	1481	0.18	295	255	550

Item Avg. (only administered items)	0.15
Item Avg. (admin + NA-P)	0.18
Total Avg. (only administered items)	3.03
Total Avg. (admin + NA-P)	3.53

Math Task 9c: Timed Computation – Multiplication Facts (20 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.92	0.28	1	873	27	900	0.92	1025	106	1131
Item 2	0.89	0.95	2	777	27	804	0.92	1025	202	1227
Item 3	0.78	0.90	2	770	27	797	0.81	1025	209	1234
Item 4	0.08	0.37	2	770	27	797	0.14	1025	209	1234
Item 5	0.06	0.27	2	770	27	797	0.13	1025	209	1234
Item 6	0.06	0.25	1	791	27	818	0.10	1025	188	1213
Item 7	0.07	0.26	1	790	27	817	0.10	1025	189	1214
Item 8	0.04	0.21	2	771	27	798	0.11	1025	208	1233
Item 9	0.06	0.33	2	746	27	773	0.12	1025	233	1258
Item 10	0.05	0.29	2	736	27	763	0.12	1025	243	1268
Item 11	0.09	0.40	2	769	27	796	0.16	1025	210	1235
Item 12	0.04	0.20	1	748	27	775	0.07	1025	231	1256
Item 13	0.05	0.24	2	743	27	770	0.12	1025	236	1261
Item 14	0.02	0.21	2	723	27	750	0.09	1025	256	1281
Item 15	0.02	0.19	2	712	27	739	0.09	1025	267	1292
Item 16	0.05	0.21	1	741	27	768	0.08	1025	238	1263
Item 17	0.07	0.36	2	669	27	696	0.14	1025	310	1335
Item 18	0.03	0.18	1	648	27	675	0.07	1025	331	1356
Item 19	0.02	0.20	2	626	27	653	0.10	1025	353	1378
Item 20	0.05	0.30	2	616	27	643	0.13	1025	363	1388
Average	0.17	0.33	1.7	739	27	766	0.23	1025	240	1265

Item Avg. (only administered items)	0.17
Item Avg. (admin + NA-P)	0.23
Total Avg. (only administered items)	3.43
Total Avg. (admin + NA-P)	4.53

Math Task 10ab: Mixed Computation (14 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.98	0.13	1	1350	25	1375	0.98	556	100	656
Item 2	0.75	0.43	1	1325	25	1350	0.75	556	125	681
Item 3	0.69	0.46	1	1317	25	1342	0.69	556	133	689
Item 4	0.16	0.51	2	1319	25	1344	0.19	556	131	687
Item 5	0.09	0.37	2	1313	25	1338	0.12	556	137	693
Item 6	0.11	0.48	3	1306	25	1331	0.16	556	144	700
Item 7	0.05	0.33	3	1295	25	1320	0.10	556	155	711
Item 8	0.08	0.28	1	1304	25	1329	0.10	556	146	702
Item 9	0.06	0.24	1	1295	25	1320	0.08	556	155	711
Item 10	0.02	0.14	1	1290	25	1315	0.04	556	160	716
Item 11	0.04	0.25	2	1274	25	1299	0.08	556	176	732
Item 12	0.02	0.19	2	1171	25	1196	0.06	556	279	835
Item 13	0.00	0.05	1	1145	25	1170	0.02	556	305	861
Item 14	0.00	0.04	1	1019	25	1044	0.03	556	431	987
Average	0.22	0.28	1.57	1266	25	1291	0.24	556	184	740

Item Avg. (only administered items)	0.22
Item Avg. (admin + NA-P)	0.24
Total Avg. (only administered items)	3.05
Total Avg. (admin + NA-P)	3.42

Math Task 10cd: Mixed Computation (12 Items)

	Mean	SD	Max	Total Administered	Total NA-P	Total Cases (Administered + NA-P)	Mean with NA-P	Total NA-I	Blank: No NA-P or NA-I	Total Missing Data (NA-I + Blank)
Item 1	0.81	0.39	1	543	30	573	0.82	1327	131	1458
Item 2	0.67	0.47	1	442	30	472	0.69	1327	232	1559
Item 3	0.95	0.87	2	440	30	470	1.02	1327	234	1561
Item 4	0.36	1.00	4	437	30	467	0.60	1327	237	1564
Item 5	0.14	0.58	4	428	30	458	0.39	1327	246	1573
Item 6	0.09	0.43	4	425	30	455	0.35	1327	249	1576
Item 7	0.07	0.25	1	417	30	447	0.13	1327	257	1584
Item 8	0.09	0.29	1	414	30	444	0.15	1327	260	1587
Item 9	0.07	0.25	1	407	30	437	0.13	1327	267	1594
Item 10	0.04	0.20	1	396	30	426	0.11	1327	278	1605
Item 11	0.05	0.22	1	338	30	368	0.13	1327	336	1663
Item 12	0.01	0.15	2	170	30	200	0.31	1327	504	1831
Average	0.28	0.43	1.92	405	30	435	0.40	1327	269	1596

Item Avg. (only administered items)	0.28
Item Avg. (admin + NA-P)	0.40
Total Avg. (only administered items)	3.37
Total Avg. (admin + NA-P)	4.84

Brief Summary of Findings from Extended Assessments

Analysis 1-Test Administrator Comments

- 200 Reading, 200 Writing, and 200 Math assessments were selected to be analyzed for comments written by the test administrator. Respectively 173, 175, and 192 protocols were scorable for the reading, writing and math assessments.
- Comments were coded as relating to format changes, content changes, or "other" comments. Format changes refer to changes that alter the method of in which data are collected, but do not alter the content of the test. Content changes fundamentally change the content of the test, making comparisons across students difficult. "Other" comments are any comment that does not fit under either format or content changes. Common "other" comments include feedback about the test or observations relating to student behavior.
- Format changes accounted for 28% of writing comments, 67% of reading comments, and 75% of math comments.
- Content changes accounted for 4% of math comments, 9% of writing comments, and 25% of reading comments.
- Specific "other" comments were noted for the math and writing tests.16% of math comments included suggestions for testing. 54% of writing comments included feedback on the test (30%), notes regarding student behavior (20%), and teacher prompts (4%).
- Miscellaneous "other" comments accounted for 5% of math comments, 8% of reading comments, and 9% of writing comments

Analysis 2- Interitem and Overall Test Reliability

- 100 Reading, 100 Writing, and 100 Math assessments were selected to be rescored by a second scorer and analyzed for interrater reliability. Respectively 86, 80, and 95 protocols were scorable for the reading, writing and math assessments.
- For reading, the average number of tasks administered was 7.89. Average reliability for each task ranged from 0.91 to 1.00. Overall reliability of all reading tasks was 0.97.
- For writing, the average number of tasks administered was 11.62 out of 17. Average reliability for each task ranged from 0.89 to 0.98. Overall reliability of all writing tasks was 0.93.
- For math, the average number of tasks administered was 4.71 out of 6. Average reliability for each task ranged from 0.89 to 0.99. Overall reliability of all writing tasks was 0.96.

Analysis 3- Inter-rater Reliability for Quantification of Overall Student Performance

- 50 Reading, 50 Writing, and 50 Math assessments were examined by 2 persons to assess the degree to which different persons could reliably quantify student performance on the extended assessments using a scoring rubric. Possible scores ranged from 0 to 6.

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- Results of inter-rater reliability

	Reading		Writing		Math	
Overall range of scoring differences	0.5 to 3		0 to 3		0 to 1	
0	0	(0%)	10	(20%)	22	(44%)
0.5	6	(12%)	13	(26%)	21	(42%)
1.0	19	(38%)	13	(26%)	7	(14%)
1.5	5	(10%)	9	(18%)		
2.0	12	(24%)	4	(8%)		
2.5	3	(6%)	0	(0%)		
3.0	5	(10%)	1	(2%)		
Total	50		50		50	

Analysis 4- Comparison of Primary Rubric Score Ratings to Computer Ratings

- 100 Reading, 100 Writing, and 100 Math assessments were examined to compare human judgment using a rubric with a computer's rating of the performance. Below are the number of Reading, Writing, and Math assessments for which both human and computer scores were available.

Human vs. Computer Difference	Reading		Writing		Math	
0	4	(5%)	2	(3%)	15	(16%)
0.5	13	(15%)	9	(13%)	41	(43%)
1.0	17	(20%)	12	(18%)	20	(21%)
1.5	10	(12%)	14	(21%)	9	(9%)
2.0	19	(22%)	11	(16%)	8	(8%)
2.5	7	(8%)	7	(10%)	0	(0%)
3.0	14	(16%)	7	(10%)	0	(0%)
3.5	0	(0%)	2	(3%)	0	(0%)
4.0	1	(1%)	3	(4%)	0	(0%)
4.5	0	(0%)	0	(0%)	1	(1%)
5.0	1	(1%)	0	(0%)	0	(0%)
5.5	0	(0%)	1	(1%)	1	(1%)
Total	86		68		95	