National Center and State Collaborative

Response to NCSC Steering Committee Concerns

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Introduction

After the initial core item selection for the 2015 operational administration, the NCSC steering committee reviewed the *NCSC Initial Core Item List Report* and expressed some concerns especially about the statistical equivalence of the four forms within some grades for the reading tests. The purpose of this document is to report how Measured Progress addressed the concerns raised by the steering committee.

For the initial core item selection, all core item selections were made based entirely on ensuring the best possible content characteristics for each form because of the inherent limitations of the statistical evidence from the stand-alone field-tests. However, the steering committee was concerned that the forms for grades 7, 8, and 11 Reading were statistically less parallel in terms of their item response theory (IRT) characteristics (i.e., test characteristic curve [TCC], test information function [TIF], and standard error of measurement [SEM]) relative to other grade/content areas. To address this concern, Measured Progress updated the core item lists, without any content considerations, so that the forms would reflect more statistical similarity. The main differences from the initial selection were:

> Core item selections were made based on individual item-level statistics instead of the passage-level. All of the common items were selected to serve as core items.

We next present results describing the revised forms for grades 7, 8, and 11 reading. Table 1 below lays out the test length for each of the revised forms. Note that test length is defined as the maximum possible number of operationally scored points on each form. Moreover, Table 2 provides the breakdown of points depending on whether the items are

"common" to *all* four forms within a particular grade or "unique" to a specific form. Additionally, in Table 3, the number of possible points at each tier is given for each form.

TABLE 1. TEST LENGTH: READING

Grade	Form 1	Form 2	Form 3	Form 4
7	21	21	21	19
8	21	21	25	21
11	27	23	24	24

** Test length was defined as the maximum raw score points examinees can obtain.*

TABLE 2. NUMBER OF POINTS FOR COMMON AND UNIQUE ITEMS: READING

Grade	Form 1		Form 2		Form 3	
	Common	Unique	Common	Unique	Common	Unique
7	15	6	15	6	15	6
8	15	6	15	6	15	10

11	19	8	19	4	19	5

TABLE 3. NUMBER OF POINTS AT EACH TIER

Grade	Form	Reading			
		Tier 1	Tier 2	Tier 3	Tier 4
7	1	4	6	11	0
	2	4	12	5	0
	3	4	6	11	0
	4	4	10	5	0
8	1	4	6	11	0
	2	4	6	11	0
	3	8	6	11	0
	4	4	12	5	0
	1	8	5	14	0

11					
	2	8	5	11	0
	3	8	5	11	0
	4	8	10	6	0

Classical Statistics Summary

In constructing the revised reading forms for grades 7, 8, and 11, Measured Progress ran analyses (i.e., classical statistics and item response theory [IRT] statistics) to examine the degree of equivalence of the forms. All analyses were run on the basis of pilot test item-level data from the fall of 2014 provided by CTB.

Presented below in Table 4, for grades 7, 8, and 11 reading are the means and standard deviations (in parentheses) for the p-values and item-total correlations over the final items selected for each revised form.

TABLE 4. CLASSICAL STATISTICS FOR READING: MEANS AND STANDARD DEVIATIONS

Grade	Statistic	Form 1	Form 2	Form 3	Form 4

7	p-value	.61 (.13)	.64 (.14)	.62 (.14)	.63 (.13)
	Item-total correlation	.30 (.14)	.34 (.15)	.31 (.12)	.28 (.08)
8	p-value	.61 (.13)	.62 (.13)	.63 (.16)	.64 (.12)
	Item-total correlation	.23 (.09)	.25 (.11)	.26 (.10)	.28 (.15)
11	p-value	.66 (.15)	.67 (.16)	.66 (.16)	.67 (.16)
	Item-total correlation	.31 (.11)	.31 (.13)	.32 (.13)	.32 (.13)

** Numbers in parenthesis indicate the standard deviation of the statistic.*

In terms of classical statistics, the similarity of the four revised forms within each grade/content with respect to difficulty and discrimination was notably improved as compared to the statistics reported for the initial content-driven forms (see Table 7 in *NCSC Initial Core Item List Report*). The differences presented in Table 4 are judged as small and quite acceptable, although it should be kept in mind that these values are based on data from a limited stand-alone field test and, thus, could turn out substantially different in a full-scale operational setting.

Item Response Theory Results Summary

Using the Rasch IRT item parameters calibrated by CTB, the test characteristic curve (TCC), test information function (TIF), and standard error of measurement (SEM) curves were built for each revised form.

Figures 1 through 6 present the TCCs, TIFs, and SEM curves for all the revised forms. Because the four forms for a given grade level had more than one maximum possible score, such differences make it difficult to use the TCC's and TIF's to compare the tests in regard to difficulty level and measurement precision. To make for a more fair comparison of the TCC's and TIF's, each TCC and TIF was multiplied, if needed, by a proportionality constant to show what the TCC would look like if it had the same maximum score as the form with the largest maximum score.

FIGURE 1. TEST CHARACTERISTIC CURVE FOR GRADE 7 READING

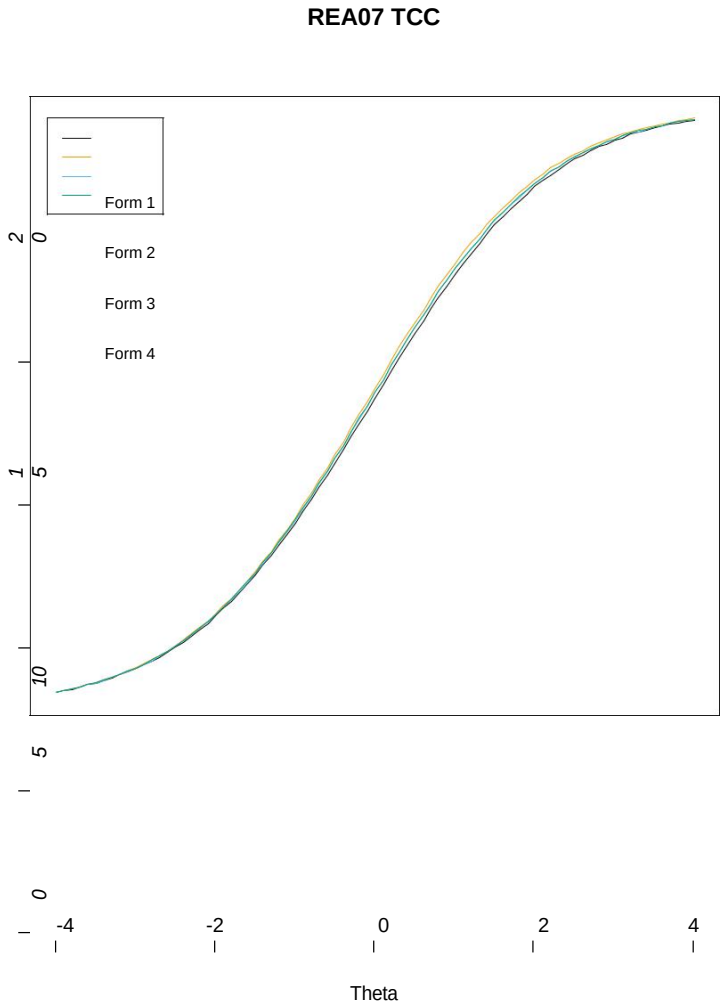
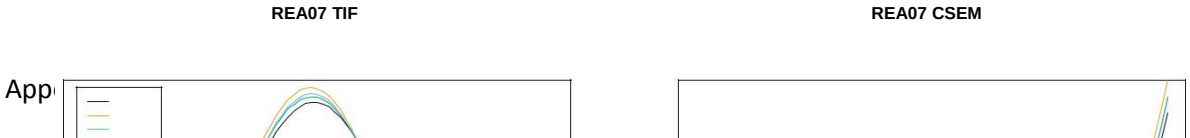
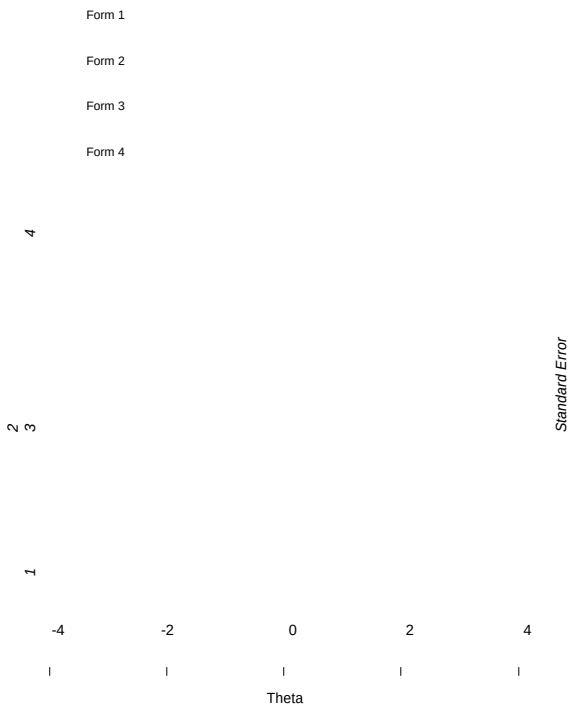


FIGURE 2. TEST INFORMATION FUNCTION AND STANDARD ERROR FOR GRADE 7 READING




Form 1
Form 2
Form 3
Form 4
4
3
2
1
Standard Error
-4
-2
0
2
4
Theta

Form 1
Form 2
Form 3
Form 4
-4
-2
0
2
4
Theta

FIGURE 3. TEST CHARACTERISTIC CURVE FOR GRADE 8 READING

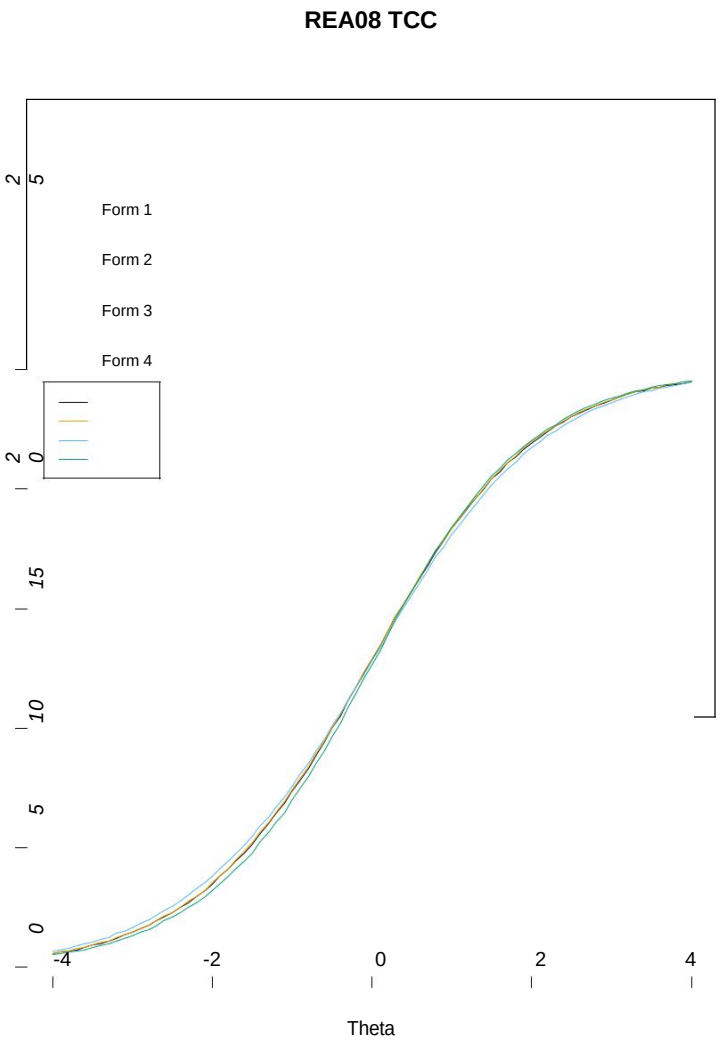
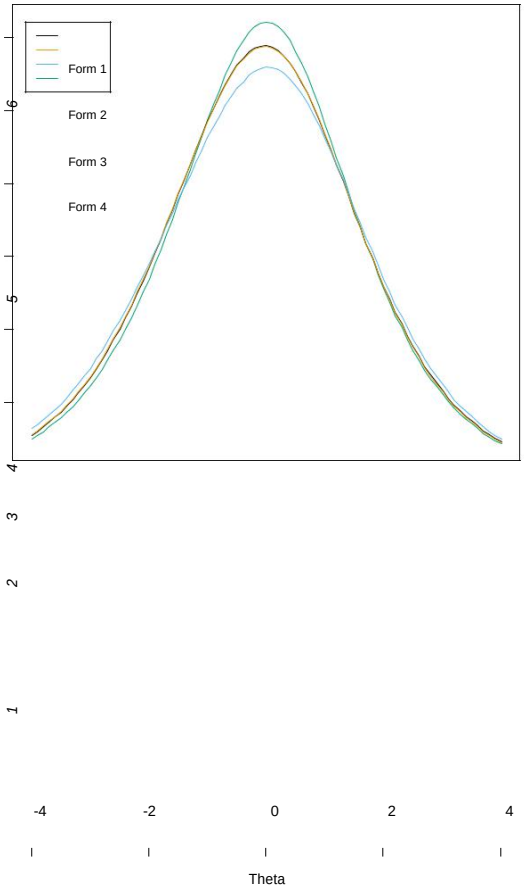


FIGURE 4. TEST INFORMATION FUNCTION AND STANDARD ERROR FOR GRADE 8 READING

REA08 TIF



REA08 CSEM

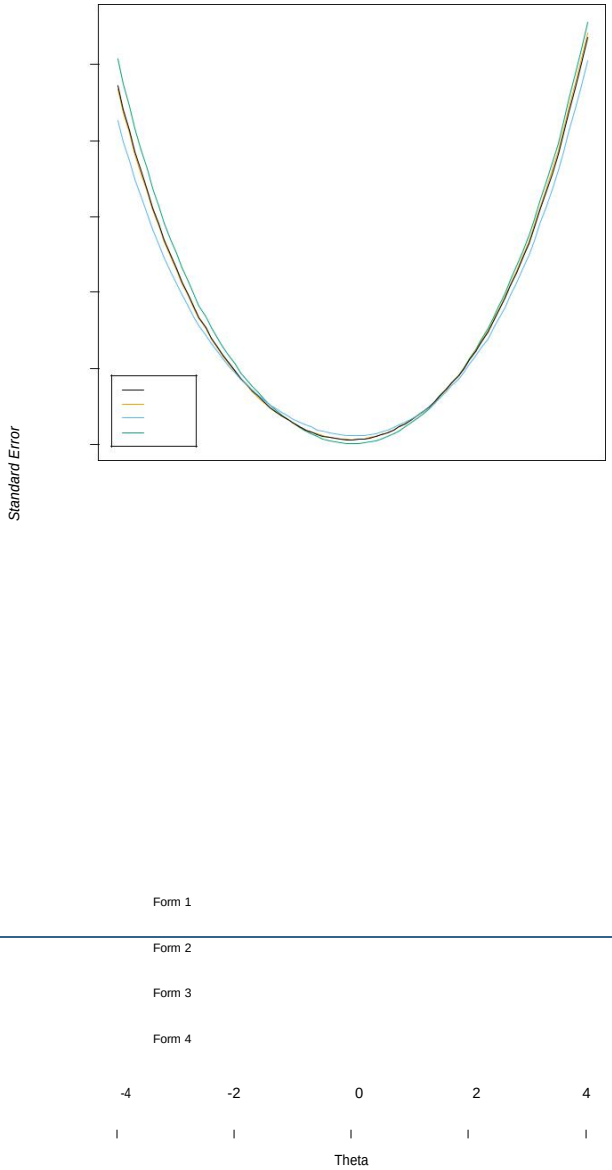


FIGURE 5. TEST CHARACTERISTIC CURVE FOR GRADE 11 READING

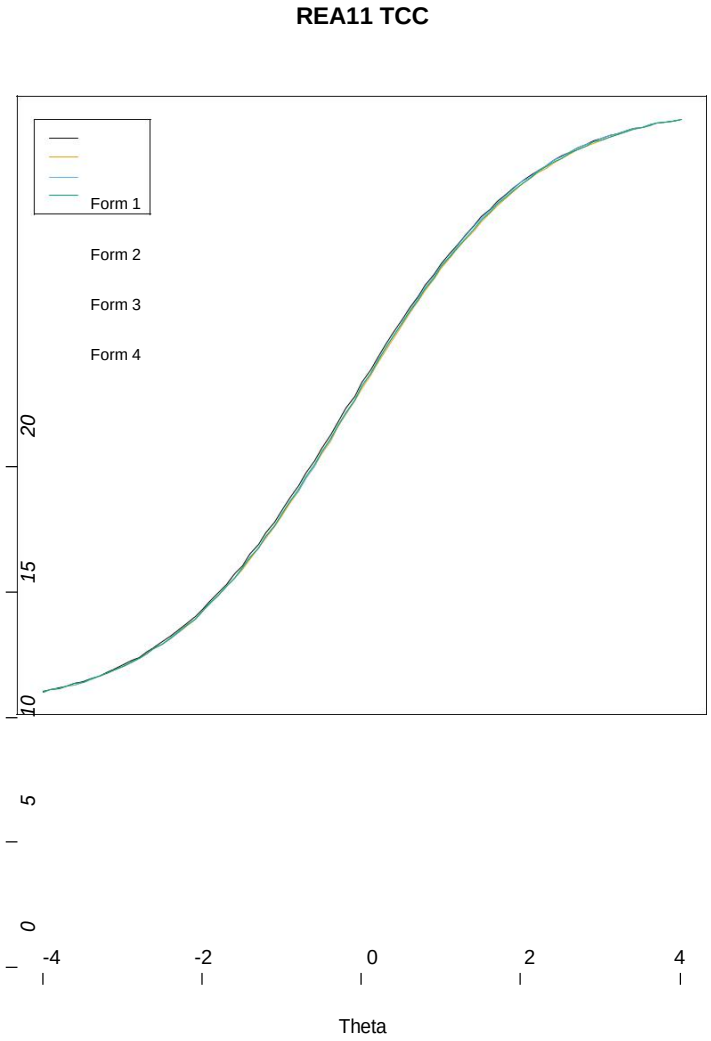
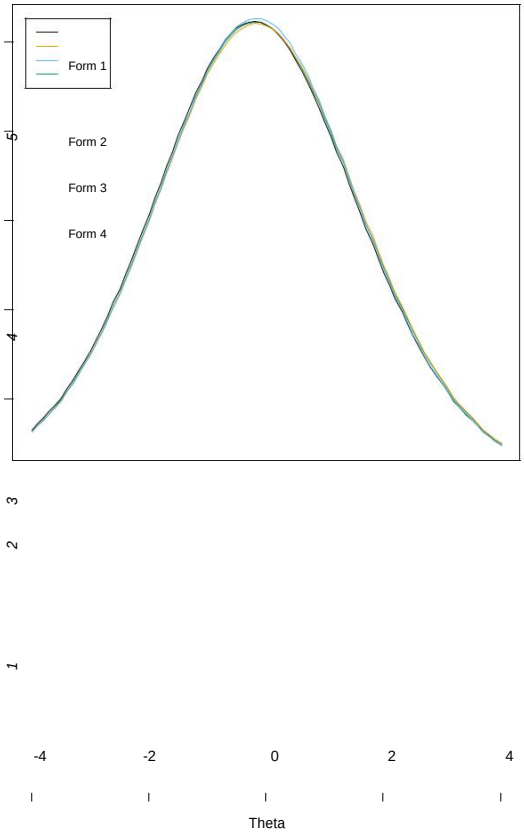
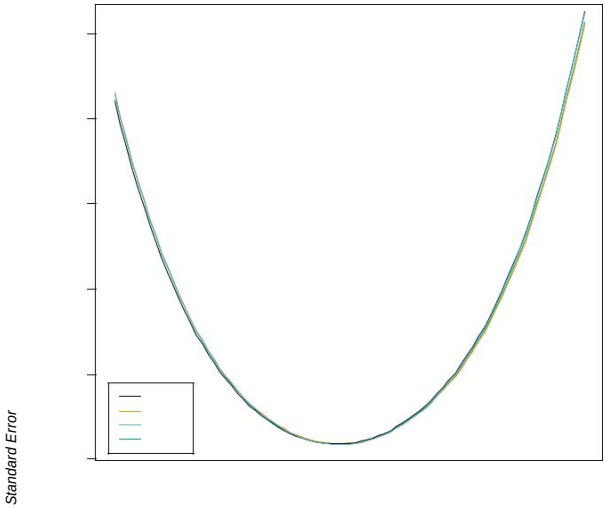


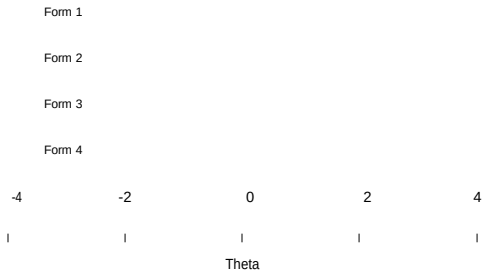
FIGURE 6. TEST INFORMATION FUNCTION AND STANDARD ERROR FOR GRADE 11 READING

REA11 TIF



REA11 CSEM





The IRT results clearly indicate an improved (i.e., higher) degree of similarity between the four reading forms at each grade level in terms of both their TCC and TIF, as compared to the curves calculated for the initial versions of these forms (see Figures 23 to 28 in *NCSC Initial Core Item List Report*). The largest differences occur for the four TIF curves for reading grade 8; however, the differences in TIF are relevant only to the degree that they cause differences in the conditional standard error of mesurement (CSEM). As seen in Figure 4, the differences in CSEM are clearly small and not of concern. Because TIF is proportional to the square of the CSEM, small differences in CSEM can sometimes appear exggerated when looked at in terms of TIF, which is why we provide both curves for our analyses.

Concluding Remarks

After the initial core item selection for the 2015 operational administration, the NCSC steering committee reviewed the *NCSC Initial Core Item List Report* and expressed some concerns about the statistical equivalence of the four forms corresponding to the reading tests in grades 7, 8, and 11. Consequently, the steering committee recommended that Measured Progress construct revised forms for these reading tests where statistical comparability would be emphasized without regard to content considerations. The construction of the revised forms was completed in this manner, and the results were presented in this document. The results indicated that, as desired, the revised reading forms within grades 7, 8, and 11 now exhibit a notably improved degree of statistical similarity with each other. As discussed in regard to the initial form selection (see the *NCSC Initial Core Item List Report*) and emphasized again here, the item statistics used for the classical and IRT analyses came from pilot data, not operational. Moreover, because standards have not yet been set and scales have not yet been established, the typical statistical evaluation of the TCC and TIF at the cuts and the raw-score-to-scale-score conversion tables could not be conducted. Thus, we continue to emphasize that quality of the content characteristics of the forms is the primary criterion for properly evaluating these initial forms. The operational administration will result in more reliable, stable, and accurate statistics, which will enable a high quality statistical evaluation process to augment the content evaluation.

We are very grateful for the time and efforts of the steering committee, who, we are certain, have spent a great deal of time overseeing the NCSC assessment program, including the transfer of the psychometric responsibilities for form development to Measured Progress. We are especially grateful for your careful consideration and discussion of the initial forms and your valuable feedback in regard to the recommended revisions we have implemented as described in this follow-up report. We look forward to continued discussions in regard to the NCSC assessment program.

APPENDIX A—REVISED TEST MAP FOR CORE ITEMS

Revised Test Map for Core Items on Grade 7 Reading Form 1

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113801A	RD_07_1	TIER 1	MC	1	0.81	0.34	Reading Informational Text
122038A	RD_07_1	TIER 1	MC	2	0.80	0.36	Reading Informational Text
122037A	RD_07_1	TIER 1	MC	3	0.81	0.32	Reading Informational Text
113802B	RD_07_1	TIER 1	MC	4	0.84	0.34	Reading at Word Level
114594A	RD_07_1	TIER 2	MC	5	0.64	0.24	Reading Literature
700001P	RD_07_1	TIER 2	CR - 2pts	6	0.64	0.31	Reading Literature
700002P	RD_07_1	TIER 2	CR - 2pts	7	0.47	0.19	Reading Literature
114596A	RD_07_1	TIER 2	MC	8	0.64	0.31	Reading at Word Level
700003P	RD_07_1	TIER 3	CR - 2pts	9	0.52	0.13	Reading Informational Text
121347A	RD_07_1	TIER 3	MC	10	0.52	0.17	Reading Informational Text
121343A	RD_07_1	TIER 3	MC	11	0.47	0.08	Reading Informational Text
115373A	RD_07_1	TIER 3	MC	12	0.53	0.16	Reading at Word Level
115431A	RD_07_1	TIER 3	MC	21	0.57	0.62	Reading Literature
700004P	RD_07_1	TIER 3	CR - 2pts	22	0.56	0.45	Reading Literature
700005P	RD_07_1	TIER 3	CR - 2pts	23	0.58	0.48	Reading Literature
115432A	RD_07_1	TIER 3	MC	24	0.43	0.31	Reading at Word Level

Revised Test Map for Core Items on Grade 7 Reading Form 2

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113801A	RD_07_2	TIER 1	MC	1	0.81	0.38	Reading Informational Text
122038A	RD_07_2	TIER 1	MC	2	0.80	0.33	Reading Informational Text
122037A	RD_07_2	TIER 1	MC	3	0.81	0.30	Reading Informational Text
113802B	RD_07_2	TIER 1	MC	4	0.84	0.33	Reading at Word Level
114594A	RD_07_2	TIER 2	MC	5	0.64	0.30	Reading Literature
700001P	RD_07_2	TIER 2	CR - 2pts	6	0.64	0.33	Reading Literature
700002P	RD_07_2	TIER 2	CR - 2pts	7	0.47	0.20	Reading Literature
114596A	RD_07_2	TIER 2	MC	8	0.64	0.37	Reading at Word Level
700003P	RD_07_2	TIER 3	CR - 2pts	9	0.52	0.12	Reading Informational Text
121347A	RD_07_2	TIER 3	MC	10	0.52	0.25	Reading Informational Text
121343A	RD_07_2	TIER 3	MC	11	0.47	0.14	Reading Informational Text
115373A	RD_07_2	TIER 3	MC	12	0.53	0.19	Reading at Word Level
114646A	RD_07_2	TIER 2	MC	13	0.79	0.50	Reading Literature
700006P	RD_07_2	TIER 2	CR - 2pts	14	0.70	0.62	Reading Literature
700007P	RD_07_2	TIER 2	CR - 2pts	15	0.56	0.56	Reading Literature
114645A	RD_07_2	TIER 2	MC	16	0.50	0.53	Reading at Word Level

Revised Test Map for Core Items on Grade 7 Reading Form 3

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113801A	RD_07_3	TIER 1	MC	1	0.81	0.33	Reading Informational Text
122038A	RD_07_3	TIER 1	MC	2	0.80	0.35	Reading Informational Text
122037A	RD_07_3	TIER 1	MC	3	0.81	0.27	Reading Informational Text
113802B	RD_07_3	TIER 1	MC	4	0.84	0.34	Reading at Word Level
114594A	RD_07_3	TIER 2	MC	5	0.64	0.29	Reading Literature
700001P	RD_07_3	TIER 2	CR - 2pts	6	0.64	0.36	Reading Literature
700002P	RD_07_3	TIER 2	CR - 2pts	7	0.47	0.17	Reading Literature
114596A	RD_07_3	TIER 2	MC	8	0.64	0.37	Reading at Word Level
700003P	RD_07_3	TIER 3	CR - 2pts	9	0.52	0.15	Reading Informational Text
121347A	RD_07_3	TIER 3	MC	10	0.52	0.20	Reading Informational Text
121343A	RD_07_3	TIER 3	MC	11	0.47	0.11	Reading Informational Text
115373A	RD_07_3	TIER 3	MC	12	0.53	0.20	Reading at Word Level
114633A	RD_07_3	TIER 3	MC	21	0.74	0.45	Reading Literature
700010P	RD_07_3	TIER 3	CR - 2pts	22	0.47	0.41	Reading Literature
700011P	RD_07_3	TIER 3	CR - 2pts	23	0.63	0.52	Reading Literature
114632A	RD_07_3	TIER 3	MC	24	0.45	0.41	Reading at Word Level

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113801A	RD_07_4	TIER 1	MC	1	0.81	0.35	Reading Informational Text
122038A	RD_07_4	TIER 1	MC	2	0.80	0.34	Reading Informational Text
122037A	RD_07_4	TIER 1	MC	3	0.81	0.34	Reading Informational Text
113802B	RD_07_4	TIER 1	MC	4	0.84	0.33	Reading at Word Level
114594A	RD_07_4	TIER 2	MC	5	0.64	0.31	Reading Literature
700001P	RD_07_4	TIER 2	CR - 2pts	6	0.64	0.36	Reading Literature
700002P	RD_07_4	TIER 2	CR - 2pts	7	0.47	0.22	Reading Literature
114596A	RD_07_4	TIER 2	MC	8	0.64	0.40	Reading at Word Level
700003P	RD_07_4	TIER 3	CR - 2pts	9	0.52	0.12	Reading Informational Text
121347A	RD_07_4	TIER 3	MC	10	0.52	0.21	Reading Informational Text
121343A	RD_07_4	TIER 3	MC	11	0.47	0.15	Reading Informational Text
115373A	RD_07_4	TIER 3	MC	12	0.53	0.19	Reading at Word Level
114482A	RD_07_4	TIER 2	MC	13	0.69	0.33	Reading Literature
700012P	RD_07_4	TIER 2	CR - 2pts	14	0.63	0.27	Reading Literature
114481A	RD_07_4	TIER 2	MC	16	0.49	0.29	Reading at Word Level

Revised Test Map for Core Items on Grade 8 Reading Form 1

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113423A	RD_08_1	TIER 1	MC	1	0.84	0.25	Reading Informational Text
121729B	RD_08_1	TIER 1	MC	2	0.52	0.02	Reading Informational Text
121761A	RD_08_1	TIER 1	MC	3	0.71	0.13	Reading Informational Text
113425A	RD_08_1	TIER 1	MC	4	0.85	0.28	Reading at Word Level
114688A	RD_08_1	TIER 2	MC	5	0.55	0.15	Reading Literature
800001P	RD_08_1	TIER 2	CR - 2pts	6	0.63	0.27	Reading Literature
800002P	RD_08_1	TIER 2	CR - 2pts	7	0.74	0.26	Reading Literature
114687A	RD_08_1	TIER 2	MC	8	0.64	0.28	Reading at Word Level
114229A	RD_08_1	TIER 3	MC	9	0.47	0.09	Reading Informational Text
114230B	RD_08_1	TIER 3	MC	10	0.60	0.22	Reading Informational Text
800003P	RD_08_1	TIER 3	CR - 2pts	11	0.51	0.25	Reading Informational Text
114228A	RD_08_1	TIER 3	MC	12	0.49	0.20	Reading at Word Level
114876A	RD_08_1	TIER 3	MC	21	0.71	0.33	Reading Literature
800004P	RD_08_1	TIER 3	CR - 2pts	22	0.43	0.30	Reading Literature
800005P	RD_08_1	TIER 3	CR - 2pts	23	0.44	0.31	Reading Literature
114879A	RD_08_1	TIER 3	MC	24	0.68	0.38	Reading at Word Level

Revised Test Map for Core Items on Grade 8 Reading Form 2

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113423A	RD_08_2	TIER 1	MC	1	0.84	0.28	Reading Informational Text
121729B	RD_08_2	TIER 1	MC	2	0.52	0.05	Reading Informational Text
121761A	RD_08_2	TIER 1	MC	3	0.71	0.13	Reading Informational Text
113425A	RD_08_2	TIER 1	MC	4	0.85	0.21	Reading at Word Level
114688A	RD_08_2	TIER 2	MC	5	0.55	0.23	Reading Literature
800001P	RD_08_2	TIER 2	CR - 2pts	6	0.63	0.27	Reading Literature
800002P	RD_08_2	TIER 2	CR - 2pts	7	0.74	0.30	Reading Literature
114687A	RD_08_2	TIER 2	MC	8	0.64	0.30	Reading at Word Level
114229A	RD_08_2	TIER 3	MC	9	0.47	0.16	Reading Informational Text
114230B	RD_08_2	TIER 3	MC	10	0.60	0.18	Reading Informational Text
800003P	RD_08_2	TIER 3	CR - 2pts	11	0.51	0.24	Reading Informational Text
114228A	RD_08_2	TIER 3	MC	12	0.49	0.19	Reading at Word Level
115274A	RD_08_2	TIER 3	MC	21	0.82	0.25	Reading Literature
800008P	RD_08_2	TIER 3	CR - 2pts	22	0.53	0.35	Reading Literature
800009P	RD_08_2	TIER 3	CR - 2pts	23	0.50	0.25	Reading Literature
115272A	RD_08_2	TIER 3	MC	24	0.57	0.53	Reading at Word Level

Revised Test Map for Core Items on Grade 8 Reading Form 3

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113423A	RD_08_3	TIER 1	MC	1	0.84	0.28	Reading Informational Text
121729B	RD_08_3	TIER 1	MC	2	0.52	0.03	Reading Informational Text
121761A	RD_08_3	TIER 1	MC	3	0.71	0.18	Reading Informational Text
113425A	RD_08_3	TIER 1	MC	4	0.85	0.27	Reading at Word Level
114688A	RD_08_3	TIER 2	MC	5	0.55	0.25	Reading Literature
800001P	RD_08_3	TIER 2	CR - 2pts	6	0.63	0.31	Reading Literature
800002P	RD_08_3	TIER 2	CR - 2pts	7	0.74	0.31	Reading Literature
114687A	RD_08_3	TIER 2	MC	8	0.64	0.30	Reading at Word Level
114229A	RD_08_3	TIER 3	MC	9	0.47	0.18	Reading Informational Text
114230B	RD_08_3	TIER 3	MC	10	0.60	0.24	Reading Informational Text
800003P	RD_08_3	TIER 3	CR - 2pts	11	0.51	0.28	Reading Informational Text
114228A	RD_08_3	TIER 3	MC	12	0.49	0.22	Reading at Word Level
114798A	RD_08_3	TIER 1	MC	13	0.87	0.34	Reading Literature
114799A	RD_08_3	TIER 1	MC	14	0.89	0.31	Reading Literature
114797A	RD_08_3	TIER 1	MC	15	0.89	0.33	Reading Literature
114796A	RD_08_3	TIER 1	MC	16	0.69	0.37	Reading at Word Level
121145A	RD_08_3	TIER 3	MC	20	0.45	0.21	Reading Informational Text
800011P	RD_08_3	TIER 3	CR - 2pts	21	0.51	0.49	Reading Informational Text
121148B	RD_08_3	TIER 3	MC	22	0.43	0.19	Reading Informational Text
121149A	RD_08_3	TIER 3	MC	23	0.52	0.09	Reading Informational Text
121151B	RD_08_3	TIER 3	MC	24	0.43	0.36	Reading at Word Level

Revised Test Map for Core Items on Grade 8 Reading Form 4

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
113423A	RD_08_4	TIER 1	MC	1	0.84	0.25	Reading Informational Text
121729B	RD_08_4	TIER 1	MC	2	0.52	0.05	Reading Informational Text
121761A	RD_08_4	TIER 1	MC	3	0.71	0.15	Reading Informational Text
113425A	RD_08_4	TIER 1	MC	4	0.85	0.24	Reading at Word Level
114688A	RD_08_4	TIER 2	MC	5	0.55	0.20	Reading Literature
800001P	RD_08_4	TIER 2	CR - 2pts	6	0.63	0.32	Reading Literature
800002P	RD_08_4	TIER 2	CR - 2pts	7	0.74	0.32	Reading Literature
114687A	RD_08_4	TIER 2	MC	8	0.64	0.29	Reading at Word Level
114229A	RD_08_4	TIER 3	MC	9	0.47	0.14	Reading Informational Text
114230B	RD_08_4	TIER 3	MC	10	0.60	0.23	Reading Informational Text
800003P	RD_08_4	TIER 3	CR - 2pts	11	0.51	0.24	Reading Informational Text
114228A	RD_08_4	TIER 3	MC	12	0.49	0.17	Reading at Word Level
115286A	RD_08_4	TIER 2	MC	13	0.64	0.28	Reading Literature
800012P	RD_08_4	TIER 2	CR - 2pts	14	0.76	0.63	Reading Literature
800013P	RD_08_4	TIER 2	CR - 2pts	15	0.67	0.55	Reading Literature
115285A	RD_08_4	TIER 2	MC	16	0.58	0.44	Reading at Word Level

Revised Test Map for Core Items on Grade 11 Reading Form 1

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
120151A	RD_11_1	TIER 1	MC	1	0.81	0.25	Reading Informational Text
121227A	RD_11_1	TIER 1	MC	2	0.85	0.31	Reading Informational Text
120149A	RD_11_1	TIER 1	MC	3	0.74	0.34	Reading Informational Text
121230A	RD_11_1	TIER 1	MC	4	0.82	0.32	Reading at Word Level
121228A	RD_11_1	TIER 1	MC	5	0.90	0.24	Reading Informational Text
121229A	RD_11_1	TIER 1	MC	6	0.71	0.28	Reading Informational Text
120148B	RD_11_1	TIER 1	MC	7	0.87	0.27	Reading Informational Text
120150A	RD_11_1	TIER 1	MC	8	0.70	0.23	Reading Informational Text
110001P	RD_11_1	TIER 2	CR - 2pts	9	0.64	0.42	Reading Literature
119081A	RD_11_1	TIER 2	MC	10	0.75	0.34	Reading Literature
119080A	RD_11_1	TIER 2	MC	11	0.71	0.33	Reading Literature
119079A	RD_11_1	TIER 2	MC	12	0.68	0.41	Reading at Word Level
121065A	RD_11_1	TIER 3	MC	13	0.37	0.08	Reading Informational Text
110003P	RD_11_1	TIER 3	CR - 2pts	14	0.34	0.10	Reading Informational Text
121130A	RD_11_1	TIER 3	MC	15	0.49	0.17	Reading Informational Text
117168A	RD_11_1	TIER 3	MC	16	0.63	0.36	Reading Informational Text
117167A	RD_11_1	TIER 3	MC	17	0.61	0.30	Reading at Word Level
110004P	RD_11_1	TIER 3	CR - 2pts	22	0.49	0.45	Reading Informational Text
110005P	RD_11_1	TIER 3	CR - 2pts	23	0.56	0.49	Reading Informational Text

110006P	RD_11_1	TIER 3	CR - 2pts	24	0.49	0.50	Reading Informational Text
114180A	RD_11_1	TIER 3	MC	25	0.64	0.31	Reading Informational Text
114182A	RD_11_1	TIER 3	MC	26	0.62	0.36	Reading at Word Level

Revised Test Map for Core Items on Grade 11 Reading Form 2

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
120151A	RD_11_2	TIER 1	MC	1	0.81	0.32	Reading Informational Text
121227A	RD_11_2	TIER 1	MC	2	0.85	0.33	Reading Informational Text
120149A	RD_11_2	TIER 1	MC	3	0.74	0.34	Reading Informational Text
121230A	RD_11_2	TIER 1	MC	4	0.82	0.33	Reading at Word Level
121228A	RD_11_2	TIER 1	MC	5	0.90	0.27	Reading Informational Text
121229A	RD_11_2	TIER 1	MC	6	0.71	0.26	Reading Informational Text
120148B	RD_11_2	TIER 1	MC	7	0.87	0.28	Reading Informational Text
120150A	RD_11_2	TIER 1	MC	8	0.70	0.25	Reading Informational Text
110001P	RD_11_2	TIER 2	CR - 2pts	9	0.64	0.44	Reading Literature
119081A	RD_11_2	TIER 2	MC	10	0.75	0.39	Reading Literature
119080A	RD_11_2	TIER 2	MC	11	0.71	0.34	Reading Literature
119079A	RD_11_2	TIER 2	MC	12	0.68	0.40	Reading at Word Level
121065A	RD_11_2	TIER 3	MC	13	0.37	0.06	Reading Informational Text
110003P	RD_11_2	TIER 3	CR - 2pts	14	0.34	0.04	Reading Informational Text
121130A	RD_11_2	TIER 3	MC	15	0.49	0.18	Reading Informational Text
117168A	RD_11_2	TIER 3	MC	16	0.63	0.36	Reading Informational Text
117167A	RD_11_2	TIER 3	MC	17	0.61	0.31	Reading at Word Level

110010P	RD_11_2	TIER 3	CR - 2pts	23	0.49	0.29	Reading Literature
116324A	RD_11_2	TIER 3	MC	24	0.73	0.47	Reading Literature
116323A	RD_11_2	TIER 3	MC	25	0.66	0.61	Reading Literature
116325A	RD_11_2	TIER 3	MC	26	0.48	0.30	Reading at Word Level

Revised Test Map for Core Items on Grade 11 Reading Form 3

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
120151A	RD_11_3	TIER 1	MC	1	0.81	0.30	Reading Informational Text
121227A	RD_11_3	TIER 1	MC	2	0.85	0.30	Reading Informational Text
120149A	RD_11_3	TIER 1	MC	3	0.74	0.36	Reading Informational Text
121230A	RD_11_3	TIER 1	MC	4	0.82	0.36	Reading at Word Level
121228A	RD_11_3	TIER 1	MC	5	0.90	0.30	Reading Informational Text
121229A	RD_11_3	TIER 1	MC	6	0.71	0.30	Reading Informational Text
120148B	RD_11_3	TIER 1	MC	7	0.87	0.28	Reading Informational Text
120150A	RD_11_3	TIER 1	MC	8	0.70	0.22	Reading Informational Text
110001P	RD_11_3	TIER 2	CR - 2pts	9	0.64	0.43	Reading Literature
119081A	RD_11_3	TIER 2	MC	10	0.75	0.41	Reading Literature
119080A	RD_11_3	TIER 2	MC	11	0.71	0.36	Reading Literature

119079A	RD_11_3	TIER 2	MC	12	0.68	0.44	Reading at Word Level
121065A	RD_11_3	TIER 3	MC	13	0.37	0.03	Reading Informational Text
110003P	RD_11_3	TIER 3	CR - 2pts	14	0.34	0.03	Reading Informational Text
121130A	RD_11_3	TIER 3	MC	15	0.49	0.18	Reading Informational Text
117168A	RD_11_3	TIER 3	MC	16	0.63	0.40	Reading Informational Text
117167A	RD_11_3	TIER 3	MC	17	0.61	0.32	Reading at Word Level
110011P	RD_11_3	TIER 3	CR - 2pts	23	0.43	0.37	Reading Literature
113711A	RD_11_3	TIER 3	MC	24	0.53	0.24	Reading Literature
113712A	RD_11_3	TIER 3	MC	25	0.60	0.50	Reading Literature
121743A	RD_11_3	TIER 3	MC	26	0.60	0.54	Reading at Word Level

Revised Test Map for Core Items on Grade 11 Reading Form 4

Item ID	Testlet	Tier	Type	Position	p-value	Item-total correlation	Domain
120151A	RD_11_4	TIER 1	MC	1	0.81	0.32	Reading Informational Text
121227A	RD_11_4	TIER 1	MC	2	0.85	0.34	Reading Informational Text
120149A	RD_11_4	TIER 1	MC	3	0.74	0.32	Reading Informational Text
121230A	RD_11_4	TIER 1	MC	4	0.82	0.35	Reading at Word Level
121228A	RD_11_4	TIER 1	MC	5	0.90	0.26	Reading Informational Text
121229A	RD_11_4	TIER 1	MC	6	0.71	0.31	Reading Informational Text
120148B	RD_11_4	TIER 1	MC	7	0.87	0.29	Reading Informational Text
120150A	RD_11_4	TIER 1	MC	8	0.70	0.25	Reading Informational Text
110001P	RD_11_4	TIER 2	CR - 2pts	9	0.64	0.42	Reading Literature
119081A	RD_11_4	TIER 2	MC	10	0.75	0.41	Reading Literature
119080A	RD_11_4	TIER 2	MC	11	0.71	0.37	Reading Literature
119079A	RD_11_4	TIER 2	MC	12	0.68	0.42	Reading at Word Level
121065A	RD_11_4	TIER 3	MC	13	0.37	0.08	Reading Informational Text
110003P	RD_11_4	TIER 3	CR - 2pts	14	0.34	0.08	Reading Informational Text
121130A	RD_11_4	TIER 3	MC	15	0.49	0.17	Reading Informational Text
117168A	RD_11_4	TIER 3	MC	16	0.63	0.40	Reading Informational Text
117167A	RD_11_4	TIER 3	MC	17	0.61	0.34	Reading at Word Level
110012P	RD_11_4	TIER 2	CR - 2pts	18	0.56	0.53	Reading Literature

113727A	RD_11_4	TIER 2	MC	19	0.47	0.09	Reading Literature
113728A	RD_11_4	TIER 2	MC	20	0.76	0.46	Reading Literature
121746A	RD_11_4	TIER 2	MC	21	0.70	0.47	Reading at Word Level