

APPENDIX L
2021 MCAS EQUATING REPORT



Massachusetts Comprehensive Assessment System

2020–2021: EQUATING REPORT

cognia™



2020–2021 Massachusetts Comprehensive Assessment System

Equating Report

The purpose of this document is to summarize the psychometric calibration and linking results obtained from Cognia for Next-Gen MCAS. Presented in this report are various program summary statistics and specific results related to the study.

The results of this report are organized as follows:

1. Aggregate Results
 1. Percentage of Students by Achievement Levels Categories
 2. Raw Scores Associated with Cutpoints
 3. Calibration Report
 4. Equating Item Summary Statistics
2. Grade Subject Results
 1. A/A, B/B, Test Characteristic Curve, Test Information Function, and Cumulative Scale Score Distribution Plots
 2. Lookup Tables
 3. Rescore Analysis
 4. Tabled B/B Analysis Results
 5. Final Item Parameters

The final results of this equating will be included as part of the 2020–2021 Next-Gen MCAS Technical Manual. If requested, Cognia will distribute and/or present this report at the next MCAS TAC.

Section 1.1

Percentage of Students by Achievement Levels Categories

Table 1.1.1
Percentage of Students by Achievement Levels Categories
English Language Arts

Grade	Year	Session ¹	N	NM	PM	ME	EE	MEEE	Ave. Scale Score
3	2021	1	31,316	11	38	43	9	51	498.4
	2021	2	31,385	7	42	41	11	52	500.7
	1819		66,911	6	37	47	10	57	504.1
	1718		68,293	6	42	43	9	52	502.2
4	2021	1	32,095	12	39	43	6	49	496.9
	2021	2	32,123	12	37	44	7	51	499.1
	1819		68,812	7	40	43	9	53	501.9
	1718		70,591	8	39	44	10	54	501.8
5	2021	1	32,412	12	37	42	8	51	497.4
	2021	2	32,192	11	46	37	7	44	496.0
	1819		71,023	7	40	46	7	53	501.3
	1718		71,009	6	39	48	6	55	501.9
6	2021	1	32,809	23	28	36	12	49	496.2
	2021	2	32,801	19	34	34	12	46	496.9
	1819		71,289	12	34	41	13	54	501.5
	1718		69,760	10	38	41	11	52	501.0
7	2021	1	33,423	21	36	36	7	43	494.2
	2021	2	33,305	17	39	38	5	44	494.1
	1819		70,148	12	39	41	9	49	499.2
	1718		69,502	14	40	39	8	46	497.0
8	2021	1	33,567	20	40	34	6	40	493.6
	2021	2	33,191	15	43	35	7	43	495.5
	1819		69,822	12	35	41	12	53	500.0
	1718		70,786	14	34	42	10	52	499.1
10	2021	1	63,485	8	27	46	19	65	507.3
	1819		69,902	7	31	48	14	62	506.2

¹Note. In 2021 the sessions were randomly spiraled. The population in 2021 is likely to be different from the 2019 and 2018 populations due to the pandemic effect.

Table 1.1.2
 Percentage of Students by Achievement Levels Categories
 Mathematics

Grade	Year	Session	N	NM	PM	ME	EE	MEEE	Ave.ScaleScore
3	2021	1	31,459	26	41	27	6	33	488.5
	2021	2	31,241	24	41	29	5	34	487.7
	1819		66,997	11	39	41	9	50	499.4
	1718		68,412	11	39	41	10	50	499.9
4	2021	1	32,189	23	44	29	5	33	488.2
	2021	2	32,026	22	44	31	3	34	487.9
	1819		68,798	11	39	42	8	50	499.2
	1718		70,624	11	40	41	7	48	497.9
5	2021	1	32,411	19	49	28	4	32	489.3
	2021	2	32,116	18	46	31	4	36	491.0
	1819		71,022	9	42	43	6	49	498.5
	1718		71,040	9	45	42	5	46	497.5
6	2021	1	32,843	19	46	29	6	35	491.5
	2021	2	32,678	24	43	30	3	33	488.8
	1819		71,265	9	39	42	10	52	500.8
	1718		69,771	10	42	41	7	48	498.6
7	2021	1	33,404	17	48	28	7	35	492.5
	2021	2	33,232	17	47	30	5	35	491.6
	1819		70,128	12	40	38	11	48	498.3
	1718		69,494	12	41	39	8	47	497.5
8	2021	1	33,473	20	45	31	4	35	490.0
	2021	2	33,287	21	49	26	4	30	488.7
	1819		69,800	11	42	37	10	47	499.1
	1718		70,790	11	39	42	8	50	498.8
10	2021	1	63,198	11	36	41	11	53	500.6
	1819		69,478	8	33	46	13	59	505.2

Table 1.1.3
 Percentage of Students by Achievement Levels Categories
 Science

Grade	Year	Session	N	NM	PM	ME	EE	MEEE	Ave.SS
5	2021	1	31,849	19	35	38	8	46	495.3
	2021	2	31,876	16	45	34	5	40	493.3
	2021	Mini	666	14	36	43	7	50	498.0
	1819		70,996	11	40	41	9	50	499.0
8	2021	1	25,652	16	44	31	8	39	494.4
	2021	2	25,614	13	42	36	8	44	496.5
	2021	Mini	824	12	42	37	8	46	498.1
	1819		69,605	11	42	39	8	47	498.1

Section 1.2

Raw Scores Associated with Cutpoints

Table 1.2.1—Raw Scores Associated with Cutpoints

Subject	Grade	Cut Point	Session1	Session2	Mini Form
English Language Arts	3	NM-PM	5	6	
		PM-ME	11	14	
		ME-EE	16	20	
	4	NM-PM	6	7	
		PM-ME	12	15	
		ME-EE	18	22	
	5	NM-PM	7	8	
		PM-ME	13	17	
		ME-EE	18	23	
	6	NM-PM	8	9	
		PM-ME	12	17	
		ME-EE	17	24	
	7	NM-PM	7	10	
		PM-ME	13	18	
		ME-EE	19	25	
8	NM-PM	7	11		
	PM-ME	14	20		
	ME-EE	19	26		
10	NM-PM	19			
	PM-ME	35			
	ME-EE	45			
Mathematics	3	NM-PM	7	7	
		PM-ME	15	15	
		ME-EE	21	22	
	4	NM-PM	8	7	
		PM-ME	18	17	
		ME-EE	25	25	
	5	NM-PM	7	6	
		PM-ME	17	15	
		ME-EE	25	24	
	6	NM-PM	6	7	
		PM-ME	15	15	
		ME-EE	24	24	
	7	NM-PM	5	5	
		PM-ME	15	12	
		ME-EE	24	22	
8	NM-PM	6	7		
	PM-ME	14	17		
	ME-EE	25	25		
10	NM-PM	13			
	PM-ME	30			
	ME-EE	53			
Science	5	NM-PM	9	9	14
		PM-ME	16	17	26
		ME-EE	23	23	36
	8	NM-PM	9	7	13
		PM-ME	17	14	25
		ME-EE	22	21	35

Note. Session 1 and Session 2 do not have the same total score points for English Language Arts tests. Due to the total score point and session content differences, it is not recommended to compare the cut scores between sessions.

Section 1.3

Calibration Report

Calibration Report—Executive Summary

FlexMIRT 3.03 was used for the IRT calibration at Cognia. All command files were set up in a way following general settings. The calibration convergence criterion was set to 0.001.

A 3PLM was used for standard four-option multiple choice (MC) items, a 2PLM was used for dichotomously-scored short response items, multi-select items, and technology-enhanced items, and a Graded Response Model (GRM) was specified for the polytomously-scored multi-part items and open response items. The logistic version of the IRT models was used. The prior distribution for the guessing parameter was set to be $\text{beta}(5,17)$, and $\text{logNormal}(0, 0.25)$ was used as the prior for the item discrimination parameter. No prior was supplied for the item difficulty parameter. The calibration only included students taking the online test forms and did not include any remote test takers.

The calibration went smoothly and got converged in all subjects/grades. In particular, the largest change in parameter values (from one iteration to the next) was decreasing and tended to flatten out towards the end of the calibration process. The number of cycles to convergence in each grade/content for the initial calibrations are listed in the following table.

The IRT model fit was evaluated for each of the items. The resulting parameters demonstrated good model fit for the majority of the items.

Table 1.3.1
Number of Cycles to Convergence

Subject	Grade	Initial Cycles	Equating Cycles
English Language Arts	3	18	15
	4	25	18
	5	26	17
	6	29	15
	7	26	11
	8	29	11
	10	57	7
Mathematics	3	37	14
	4	28	12
	5	38	12
	6	42	11
	7	51	32
	8	51	10
Science	5	24	18
	8	27	13

It has been the standard practice to use external post-equating for MCAS. However, considering the potential learning loss during the pandemic, the MCAS technical advisory committee(TAC) had suggested using pre-equating for this year's test to maintain the interpretability of the scale. Initial pre-equating fit analysis suggested the pre-equated parameters of items from the Legacy test had poor fit to the data. The pre-equated parameters for those items were obtained through a linear transformation with a set of items that were administered in both Legacy and NextGen MCAS, and thus did not represent the best estimates. The following table shows the number of items and score points from Legacy and NextGen MCAS.

Table 1.3.2—Score Points Distribution between On-scale and Off-scale items

Subject	Grade	Scale	Items	Points
English Language Arts	3	Next Gen	24	38
		Legacy	6	6
	4	Next Gen	25	38
		Legacy	6	6
	5	Next Gen	24	41
		Legacy	7	7
	6	Next Gen	24	42
		Legacy	8	8
	7	Next Gen	25	43
		Legacy	7	7
	8	Next Gen	24	42
		Legacy	8	8
	10	NextGen	32	51
		Legacy	0	0
Mathematics	3	Next Gen	37	45
		Legacy	3	3
	4	Next Gen	31	42
		Legacy	9	12
	5	Next Gen	30	44
		Legacy	10	10
	6	Next Gen	36	47
		Legacy	4	7
	7	Next Gen	28	42
		Legacy	12	12
	8	Next Gen	35	49
		Legacy	5	5
	10	NextGen	12	18
		Legacy	16	25
		Stand-alone	14	17
	STE	5	Next Gen	26
Legacy			15	18
8		Next Gen	15	20
		Legacy	26	34

To reduce the systematic error in the pre-equated parameters for Legacy items, a post-equating was conducted by fixing the item parameters for all Next-Gen items, including both operational and matrix equating items. The fixed common item parameter (FCIP) method was used to estimate the parameters for the Legacy items.

As it remains unknown as for how the learning loss has impacted item statistics, the drift analysis for equating items was not conducted for deciding which items to be excluded from the anchor set. The methods of evaluating the suitability of the equating items were still conducted for exploratory purpose, including the a/a analysis, the b/b analysis and the rescore analysis. Results from these analyses are included in Section II of this report.

Items flagged by the b/b, or rescore analyses were compiled and placed in our item watch list, which includes the final actions taken on these items. The final watch list is presented in the following table:

Table 1.3.3
Final Items Watch List

Subject	Grade	ItemID	Reason	Action	Source
English Language Arts	3	IA03697	b/b Analysis	retained for equating	
	5	IA00503	b/b Analysis	retained for equating	
	5	IA03738	b/b Analysis	retained for equating	
	6	IA04006	b/b Analysis	retained for equating	
	10	IA03766	b/b Analysis	retained for equating	
Mathematics	4	IA02819	b/b Analysis	retained for equating	
	6	IA01136	b/b Analysis	retained for equating	
	7	IA00883	b/b Analysis	retained for equating	
	7	IA04771	b/b Analysis	retained for equating	
	8	IA01042	b/b Analysis	retained for equating	
Science	10	IA05144	b/b Analysis	retained for equating	
	5	IA05530	b/b Analysis	retained for equating	
	5	IA05768	b/b Analysis	retained for equating	
	8	IA05665	b/b Analysis	retained for equating	

Section 1.4

Equating Item Summary Statistics

Table 1.4.1
Equating Item Summary Statistics*

Subject	Grade	Year	P-Value		Point Biserial		a		b	
			Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
English Language Arts	3	2021	0.54	0.19	0.45	0.09	1.07	0.34	0.18	0.86
		Previous	0.60	0.17	0.45	0.09	0.92	0.32	-0.05	0.71
	4	2021	0.60	0.19	0.42	0.11	0.90	0.24	-0.15	0.89
		Previous	0.67	0.17	0.42	0.09	0.77	0.16	-0.48	0.87
	5	2021	0.64	0.18	0.39	0.11	0.96	0.25	-0.38	1.06
		Previous	0.67	0.15	0.41	0.10	0.82	0.23	-0.54	0.80
	6	2021	0.62	0.16	0.43	0.14	0.94	0.27	-0.26	0.76
		Previous	0.71	0.16	0.42	0.16	0.67	0.27	-0.82	0.92
	7	2021	0.64	0.17	0.47	0.13	0.98	0.27	-0.39	0.75
		Previous	0.72	0.15	0.44	0.14	0.79	0.24	-0.98	0.84
8	2021	0.60	0.15	0.46	0.14	0.91	0.29	-0.20	0.64	
	Previous	0.67	0.13	0.43	0.15	0.71	0.26	-0.54	0.77	
10	2021	0.72	0.10	0.46	0.09	0.92	0.26	-0.80	0.45	
	Previous	0.74	0.09	0.42	0.08	0.76	0.18	-0.96	0.56	
Mathematics	3	2021	0.63	0.11	0.43	0.11	1.00	0.28	-0.29	0.79
		Previous	0.72	0.12	0.41	0.08	0.88	0.21	-0.62	0.85
	4	2021	0.54	0.15	0.48	0.11	1.00	0.30	0.04	0.57
		Previous	0.63	0.15	0.47	0.11	0.99	0.26	-0.18	0.52
	5	2021	0.59	0.16	0.46	0.13	0.96	0.28	-0.13	0.75
		Previous	0.68	0.16	0.45	0.13	0.97	0.24	-0.41	0.75
	6	2021	0.54	0.15	0.43	0.17	1.03	0.30	0.26	1.16
		Previous	0.63	0.13	0.47	0.13	1.03	0.26	-0.12	0.91
	7	2021	0.55	0.21	0.50	0.12	1.14	0.32	-0.11	0.75
		Previous	0.61	0.19	0.50	0.13	1.03	0.27	-0.34	0.79
8	2021	0.54	0.15	0.47	0.12	1.21	0.43	0.15	0.66	
	Previous	0.61	0.15	0.49	0.10	1.08	0.33	-0.16	0.64	
10	2021	0.45	0.15	0.48	0.16	1.19	0.53	0.44	0.77	
	Previous	0.51	0.16	0.48	0.14	1.16	0.39	0.17	0.79	
Science	5	2021	0.67	0.16	0.39	0.10	0.79	0.24	-0.60	0.92
		Previous	0.71	0.15	0.38	0.09	0.74	0.20	-0.85	0.87
	8	2021	0.56	0.18	0.39	0.12	0.80	0.34	-0.12	1.04
		Previous	0.58	0.18	0.41	0.13	0.81	0.34	-0.31	1.07

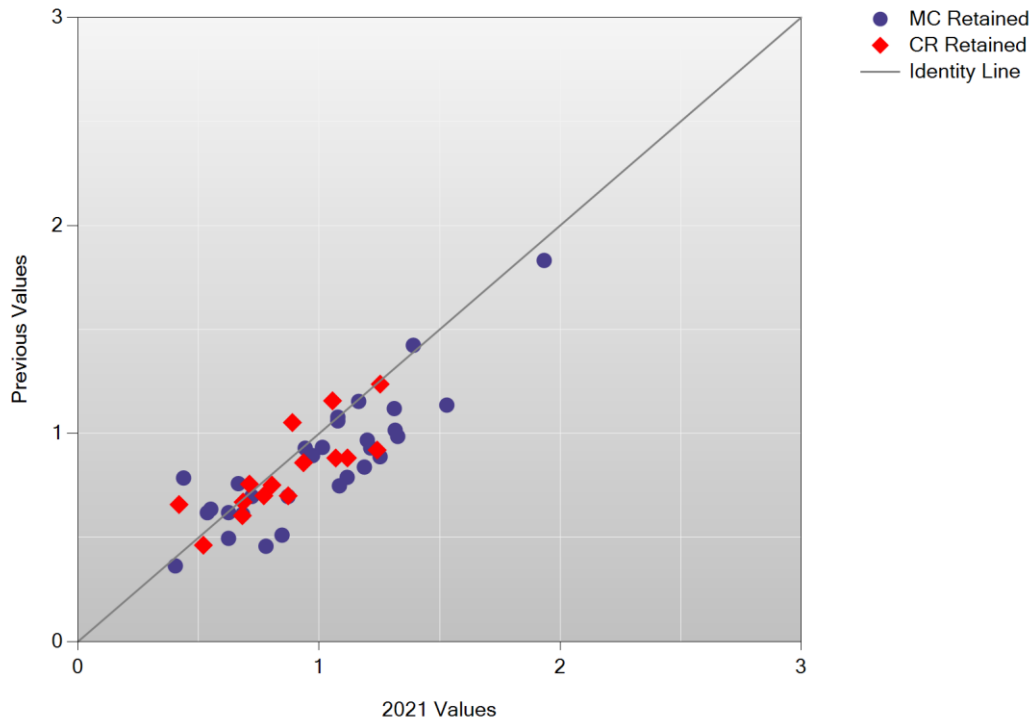
*Equating items include matrix equating items only



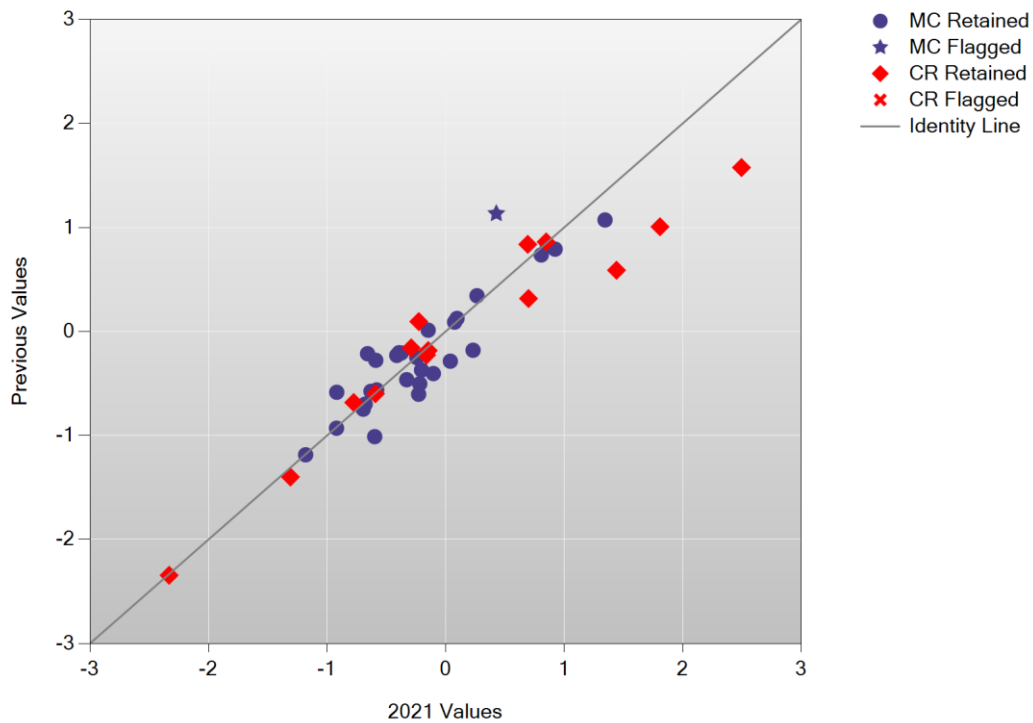
Section 2.1

A/A, B/B, Test Characteristic Curve, Test Information Function, and Cumulative Scale Score Distribution Plots

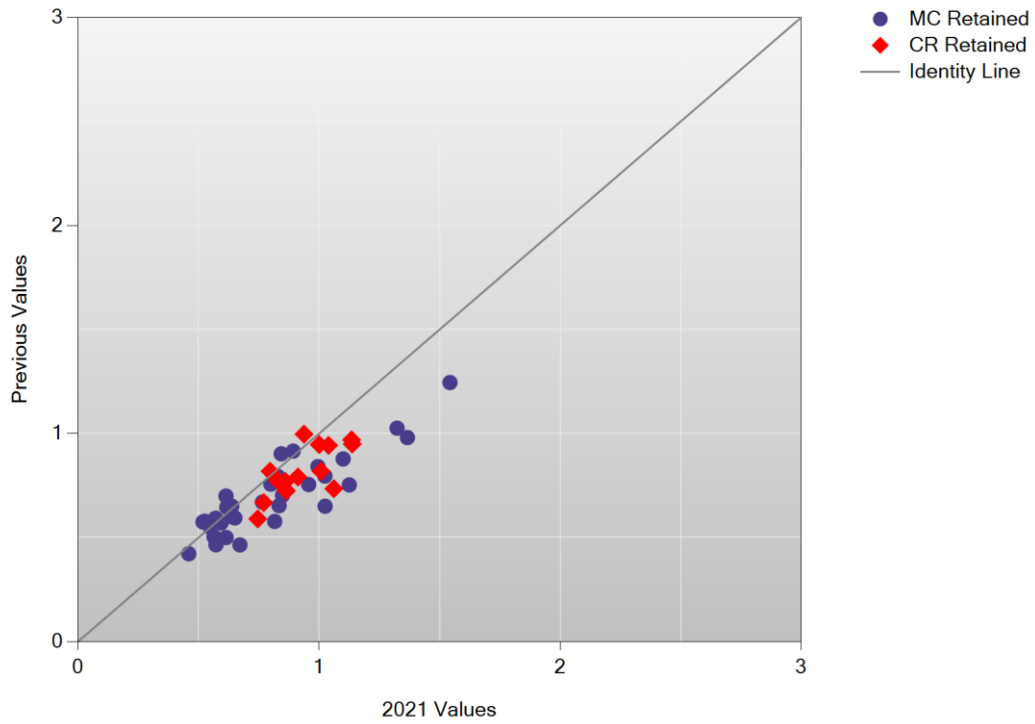
A/A Plot: English Language Arts Grade 3



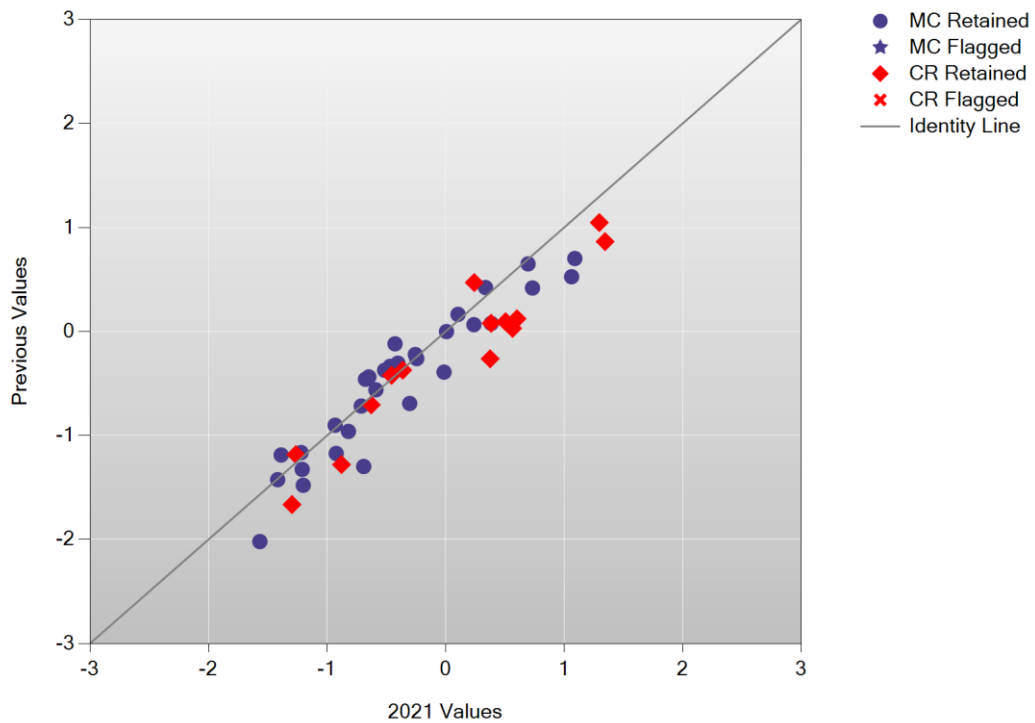
B/B Plot: English Language Arts Grade 3



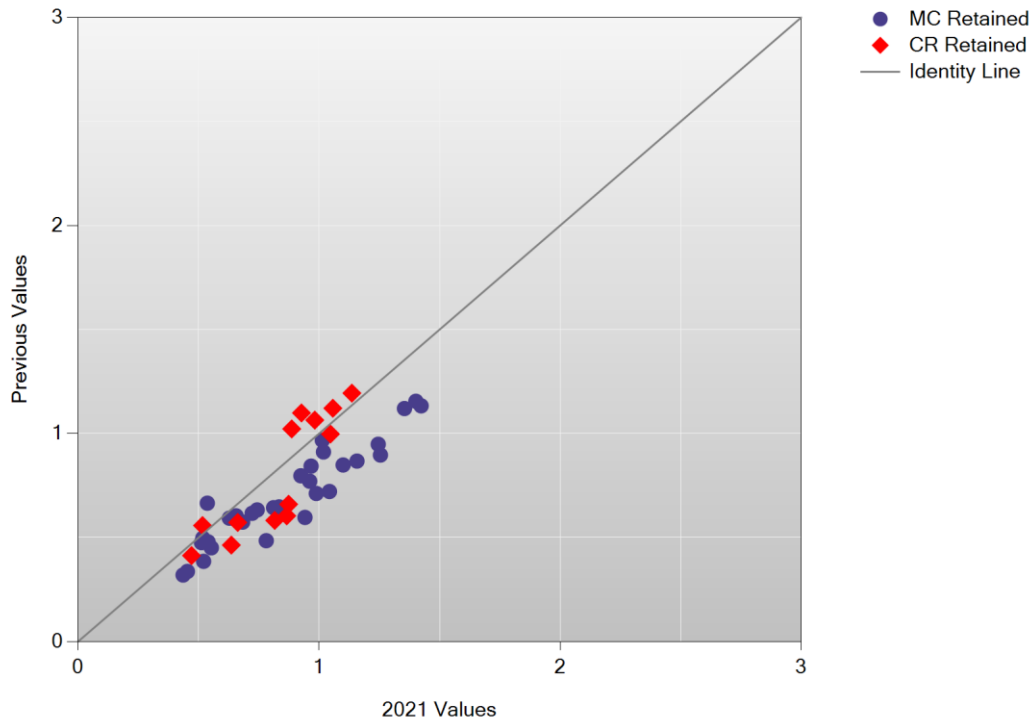
A/A Plot: English Language Arts Grade 4



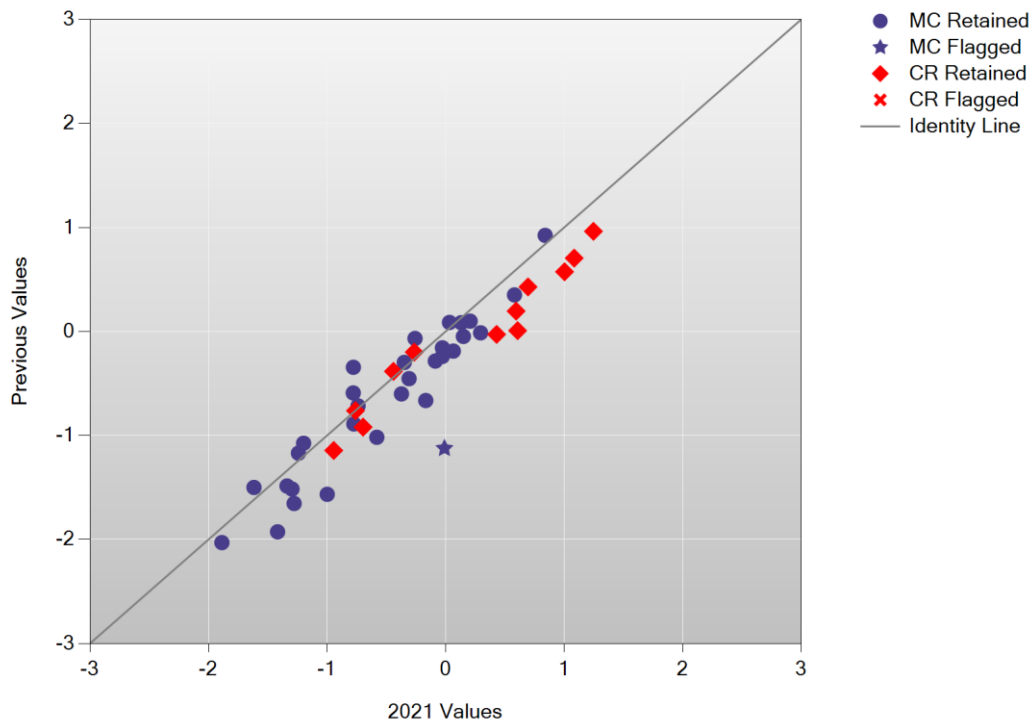
B/B Plot: English Language Arts Grade 4



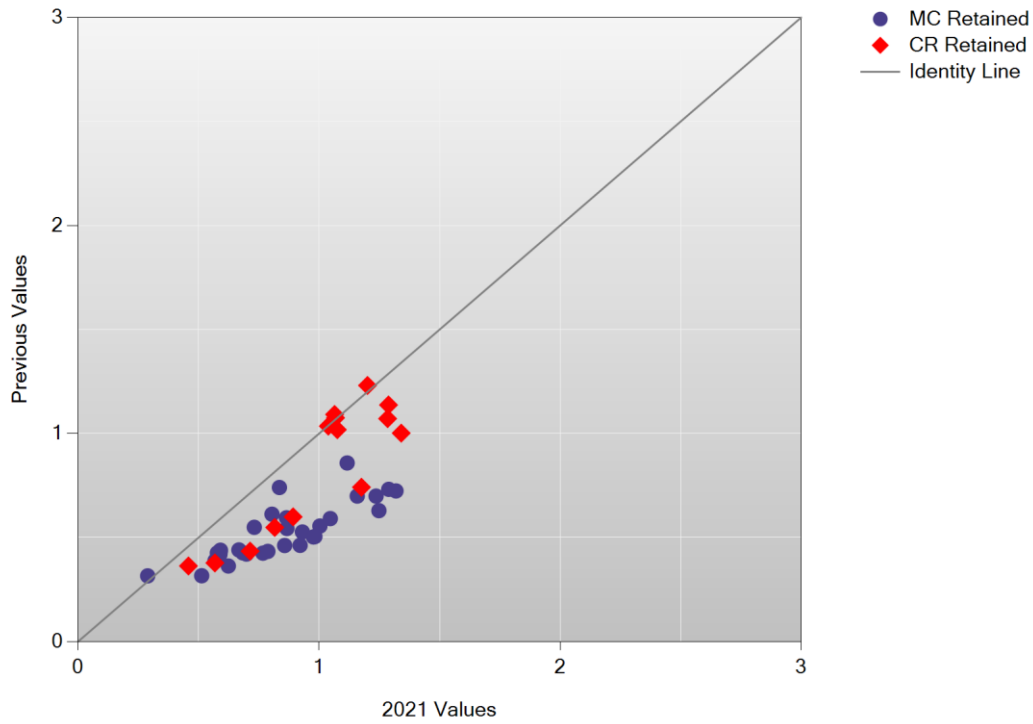
A/A Plot: English Language Arts Grade 5



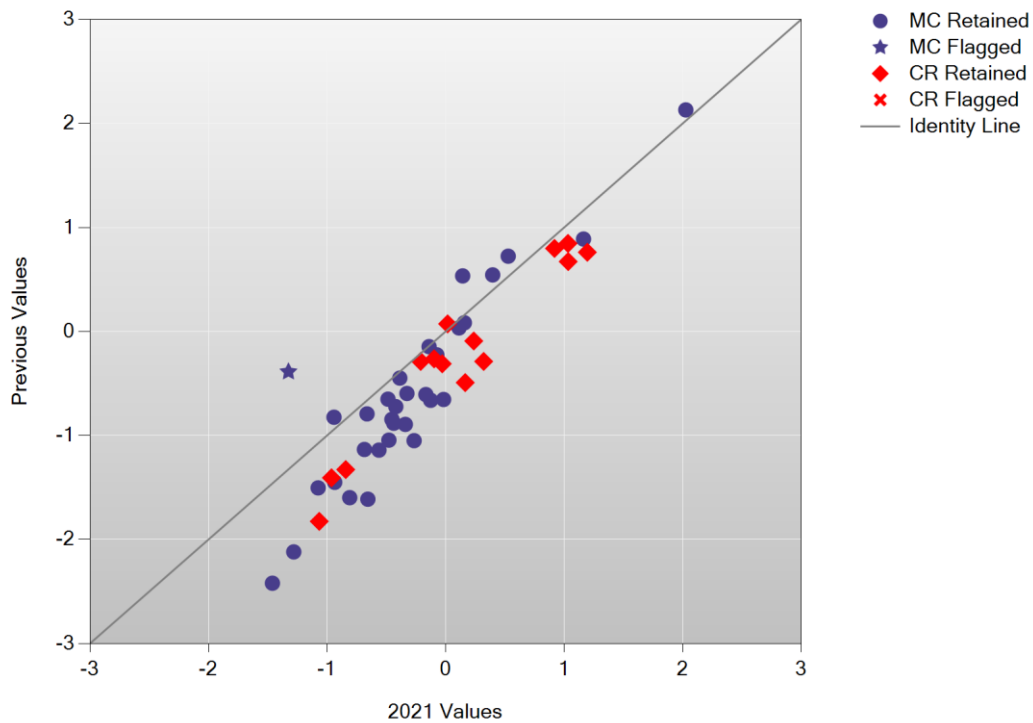
B/B Plot: English Language Arts Grade 5



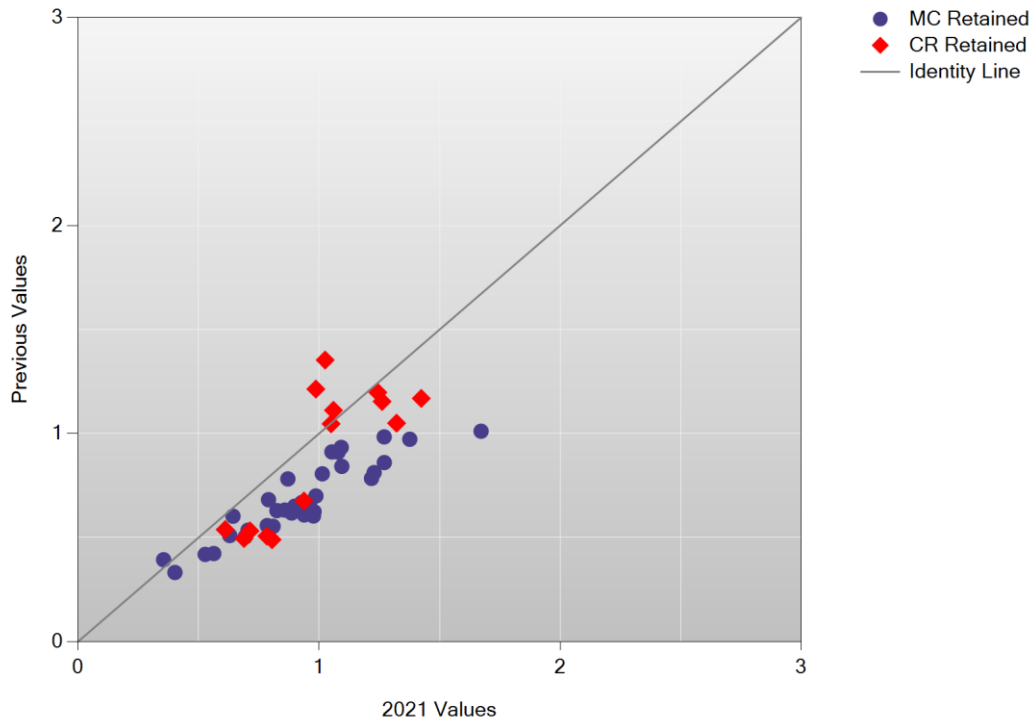
A/A Plot: English Language Arts Grade 6



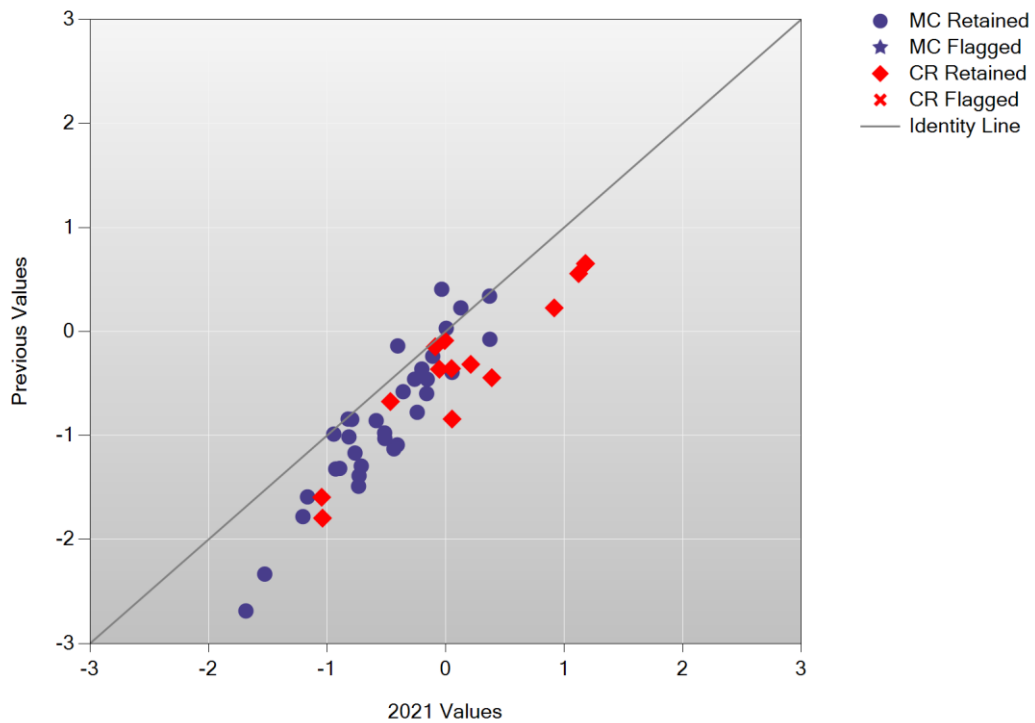
B/B Plot: English Language Arts Grade 6



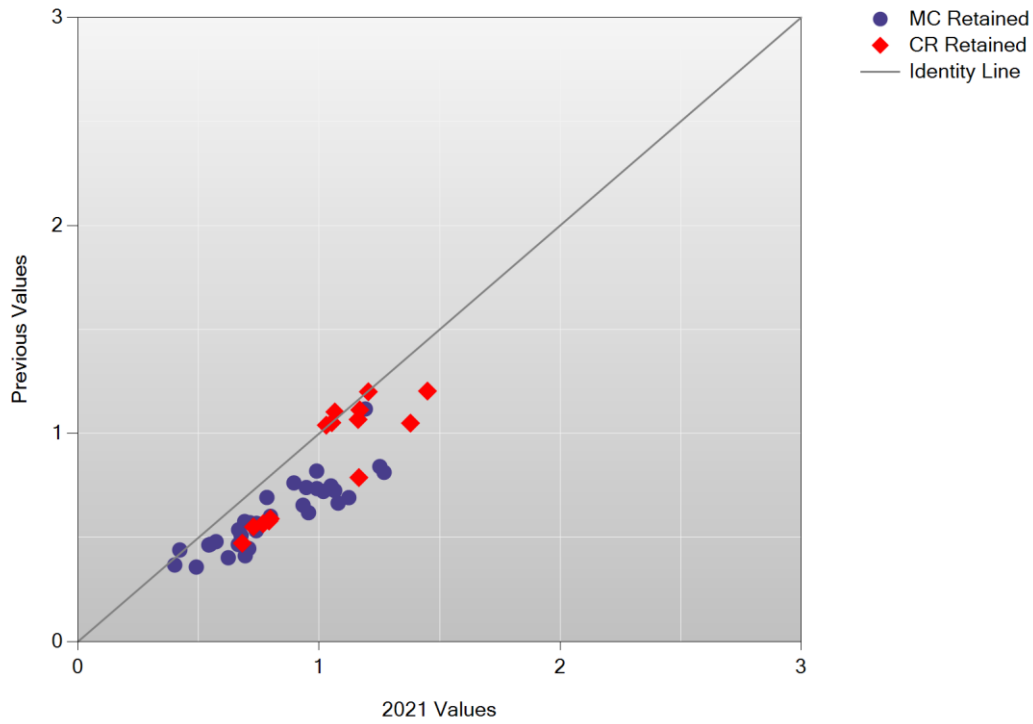
A/A Plot: English Language Arts Grade 7



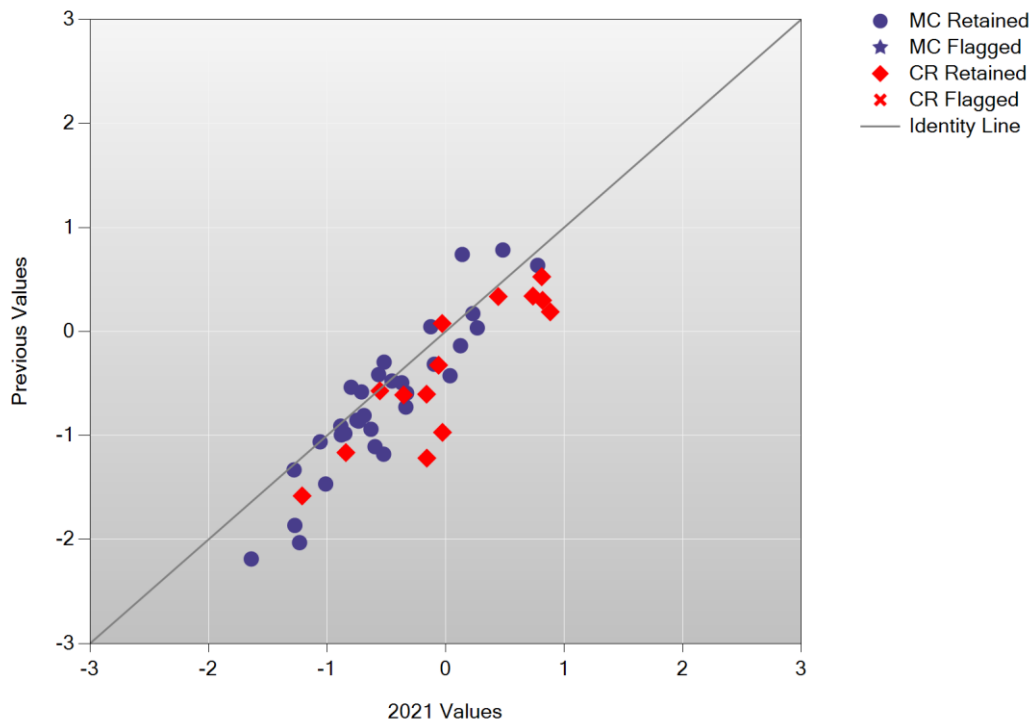
B/B Plot: English Language Arts Grade 7



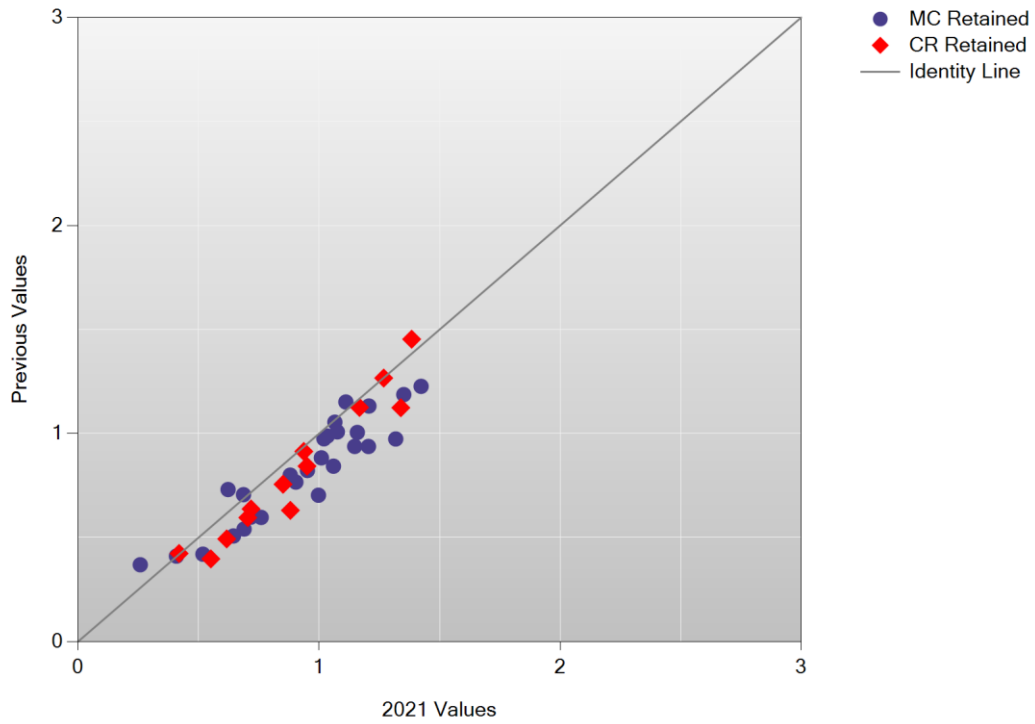
A/A Plot: English Language Arts Grade 8



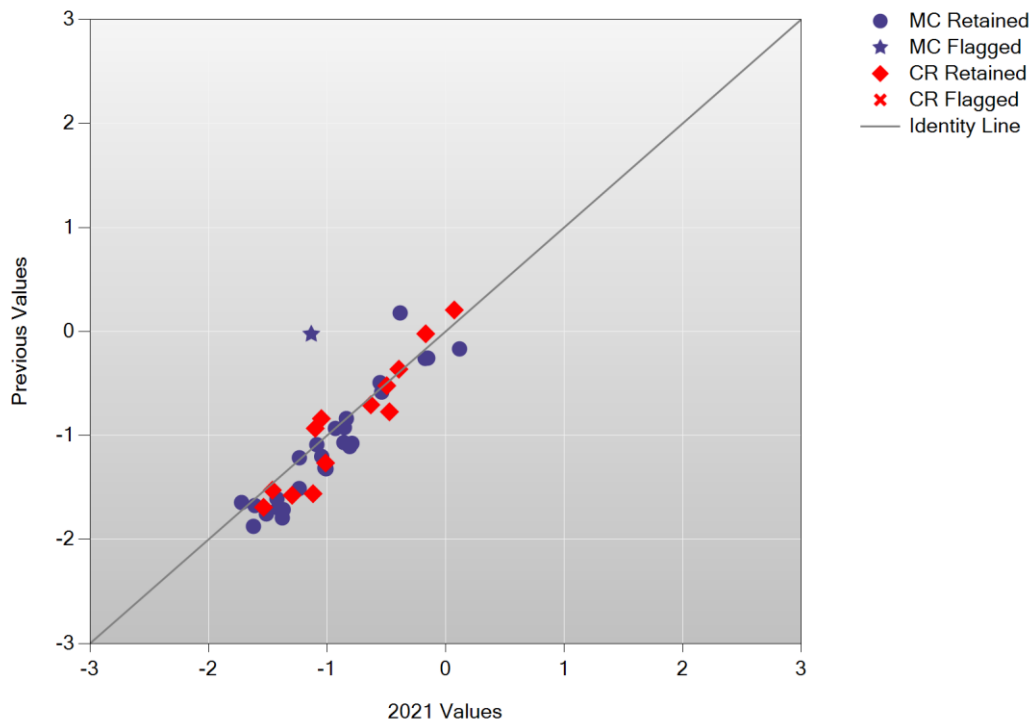
B/B Plot: English Language Arts Grade 8



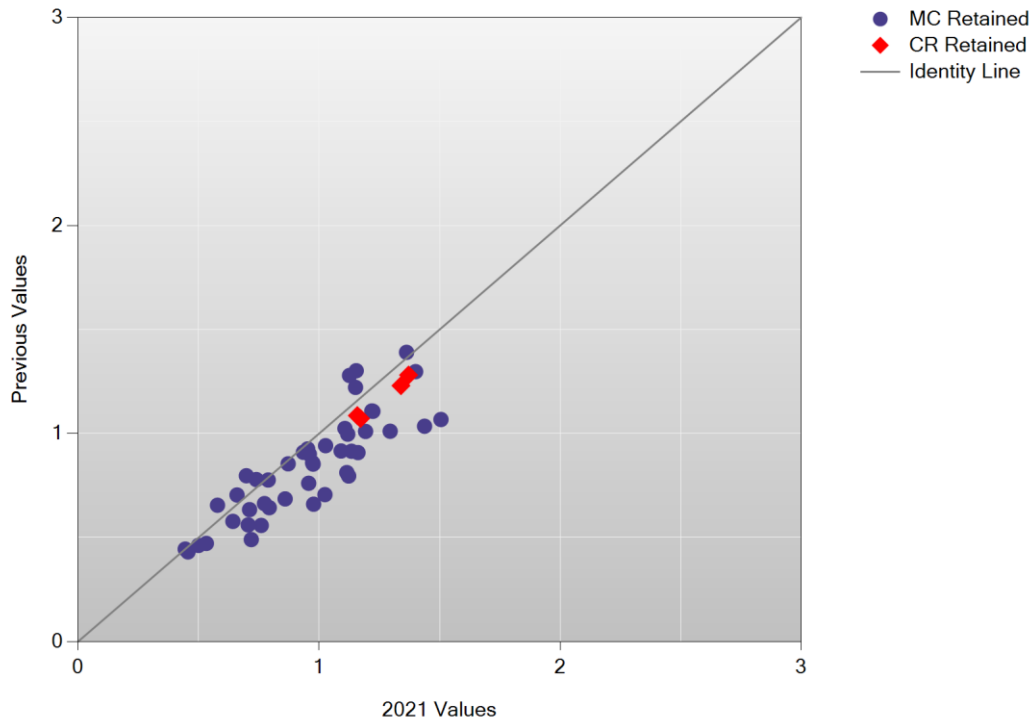
A/A Plot: English Language Arts Grade 10



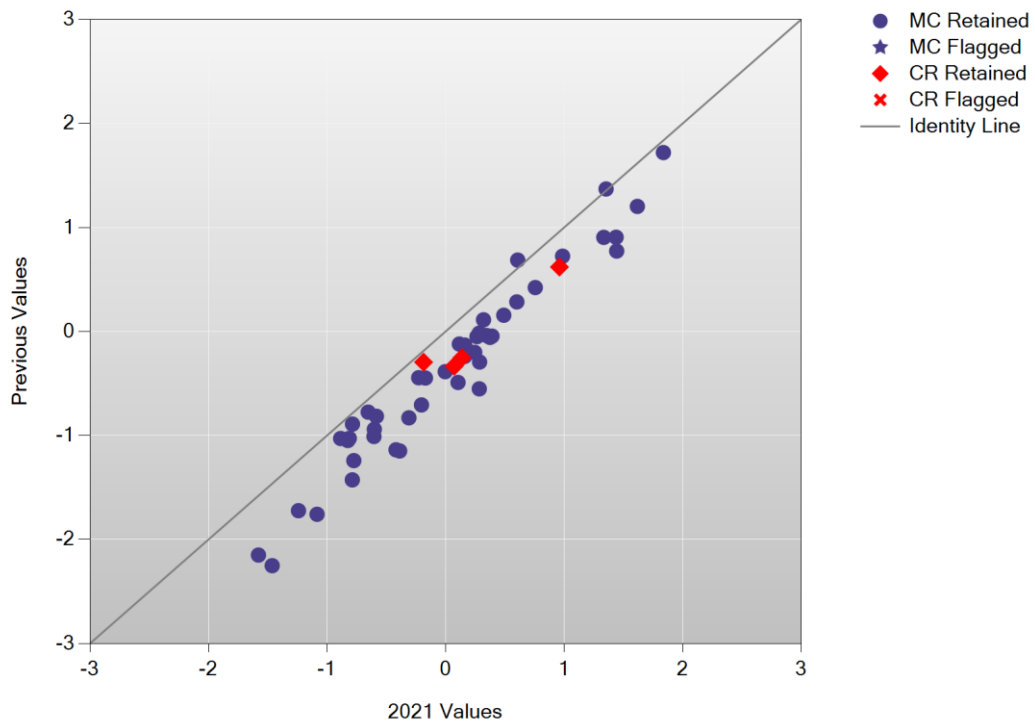
B/B Plot: English Language Arts Grade 10



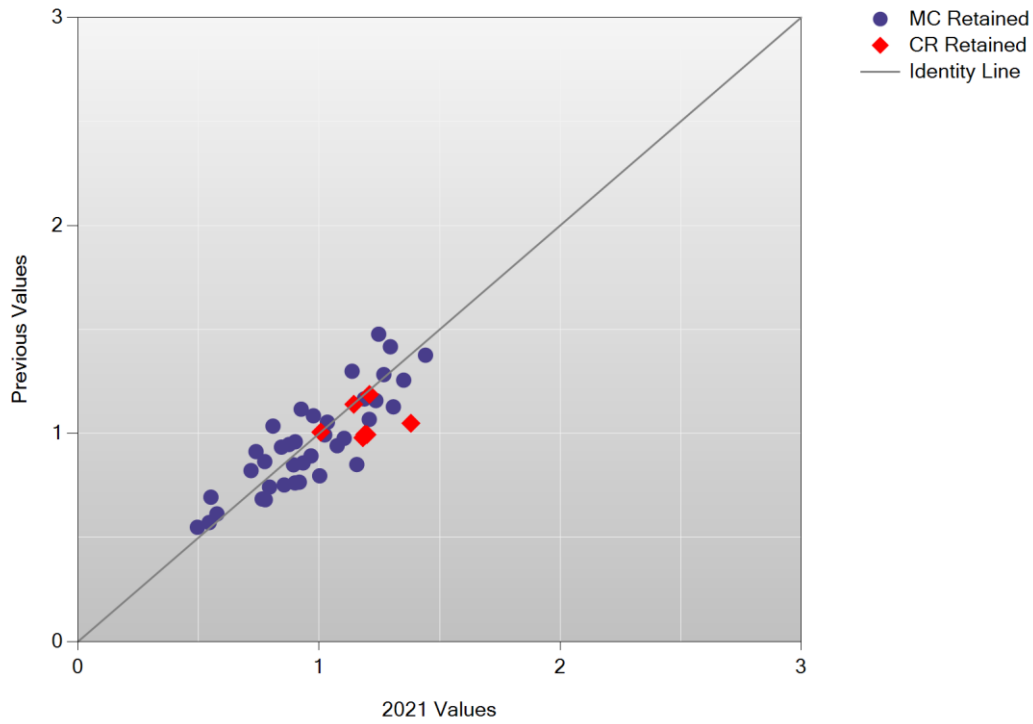
A/A Plot: Mathematics Grade 3



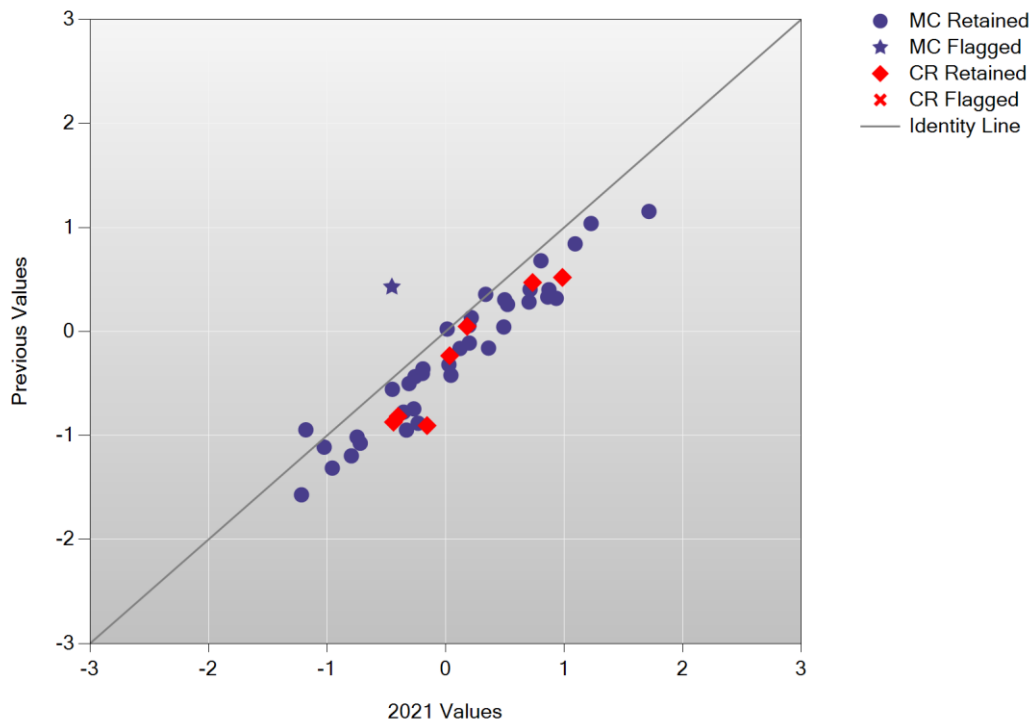
B/B Plot: Mathematics Grade 3



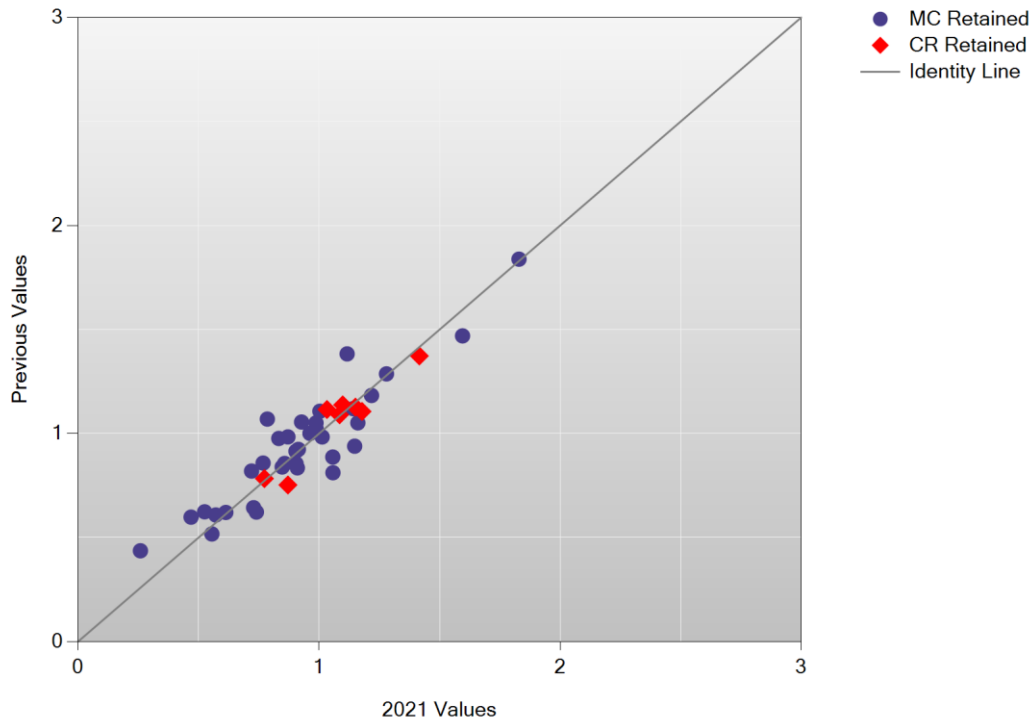
A/A Plot: Mathematics Grade 4



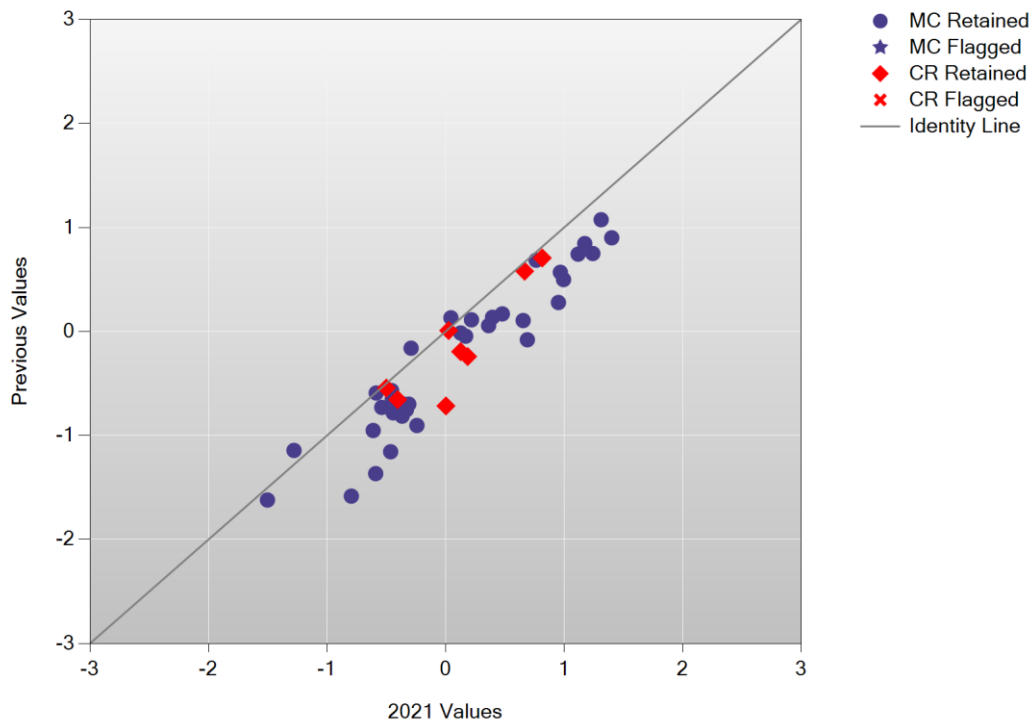
B/B Plot: Mathematics Grade 4



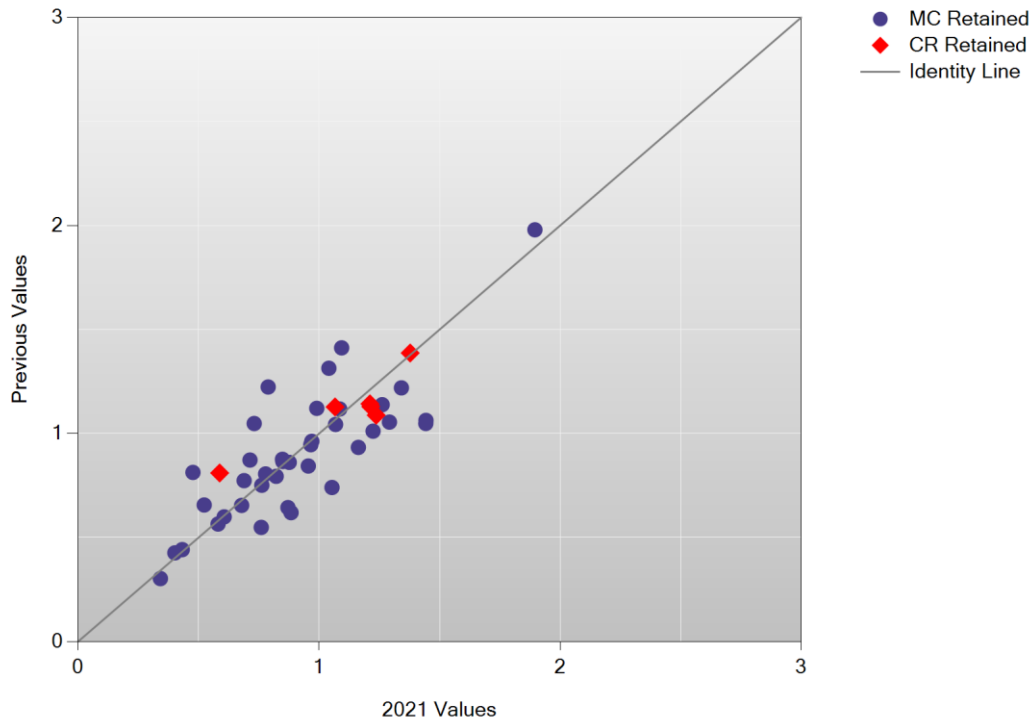
A/A Plot: Mathematics Grade 5



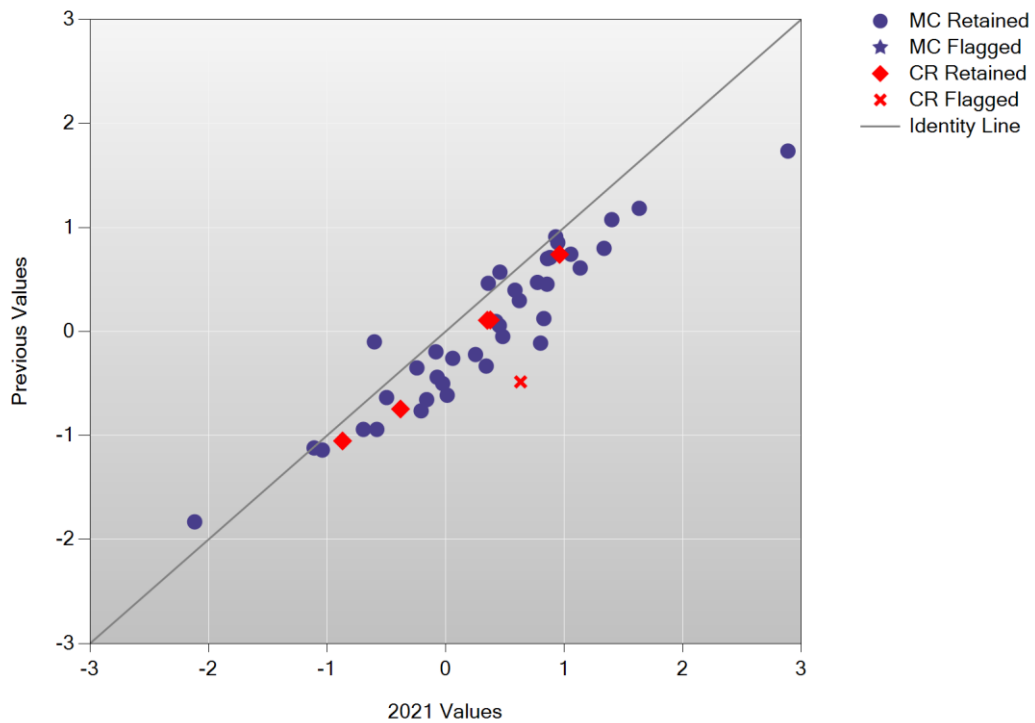
B/B Plot: Mathematics Grade 5



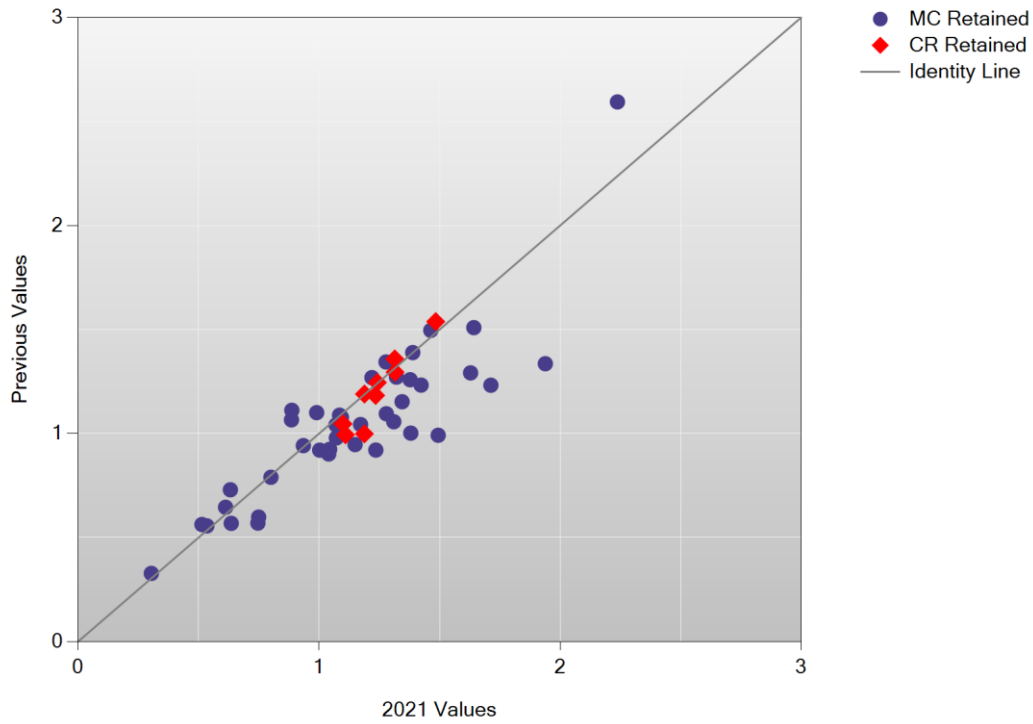
A/A Plot: Mathematics Grade 6



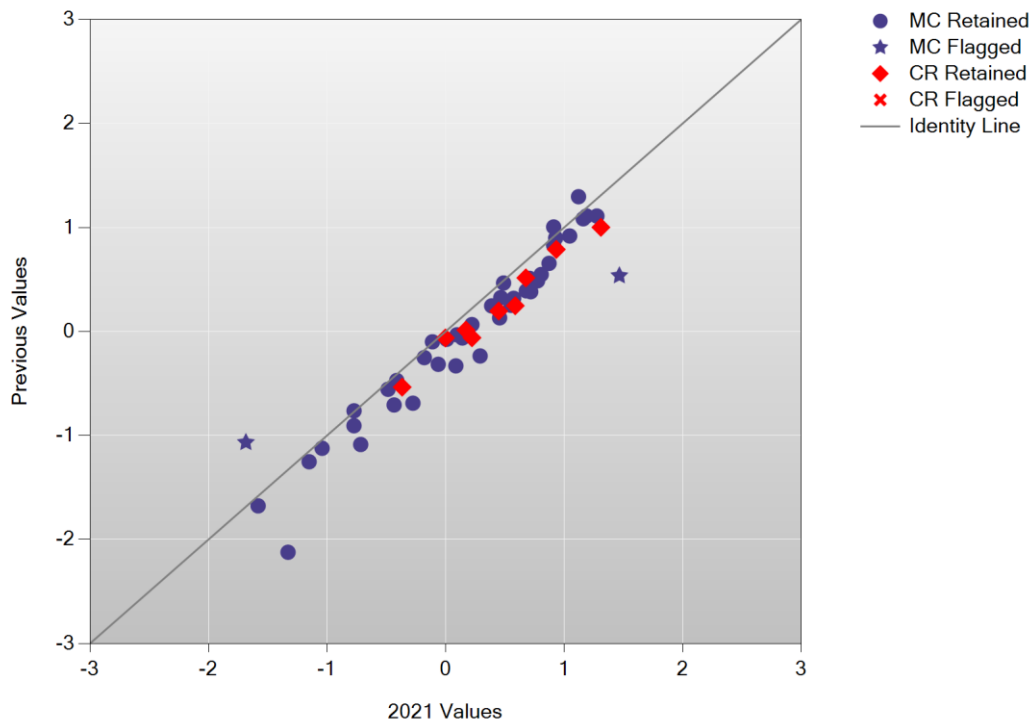
B/B Plot: Mathematics Grade 6



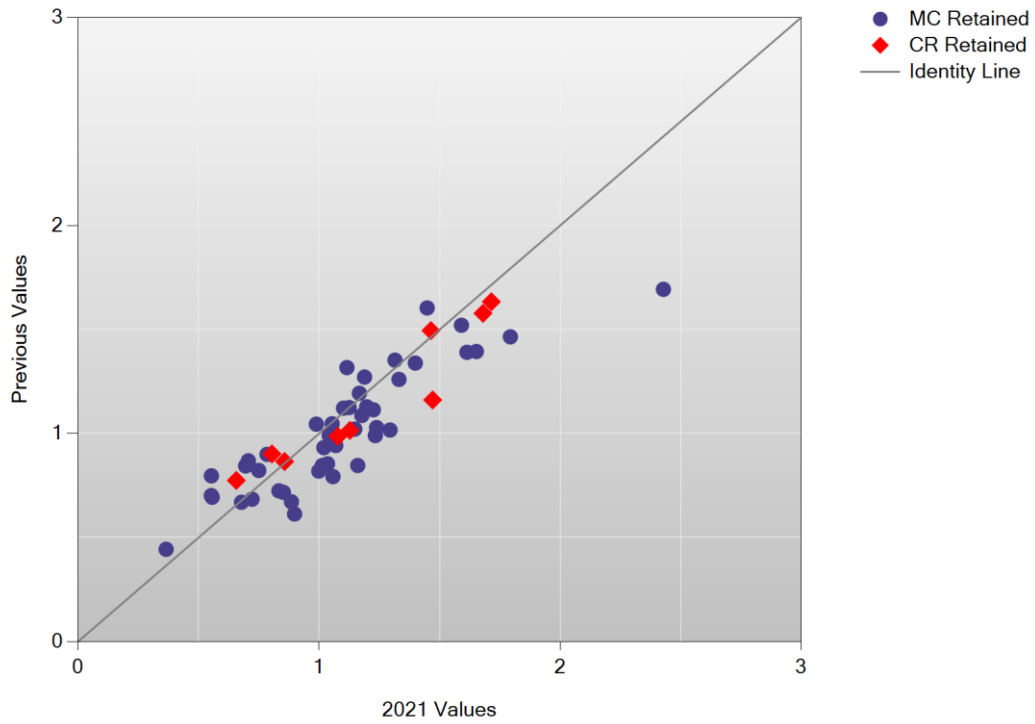
A/A Plot: Mathematics Grade 7



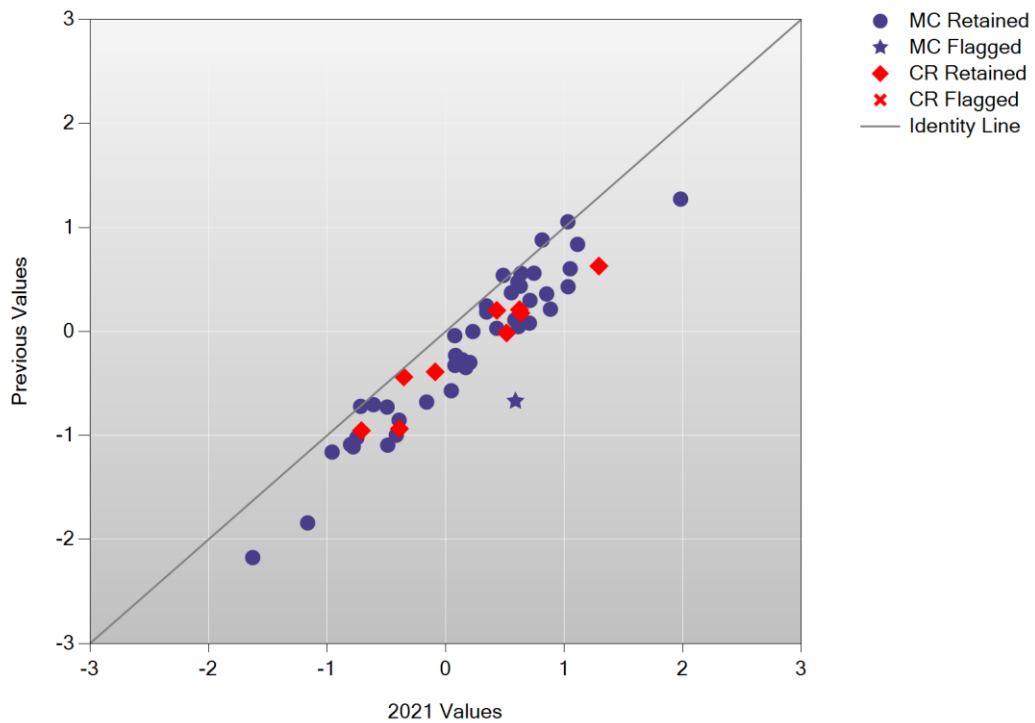
B/B Plot: Mathematics Grade 7



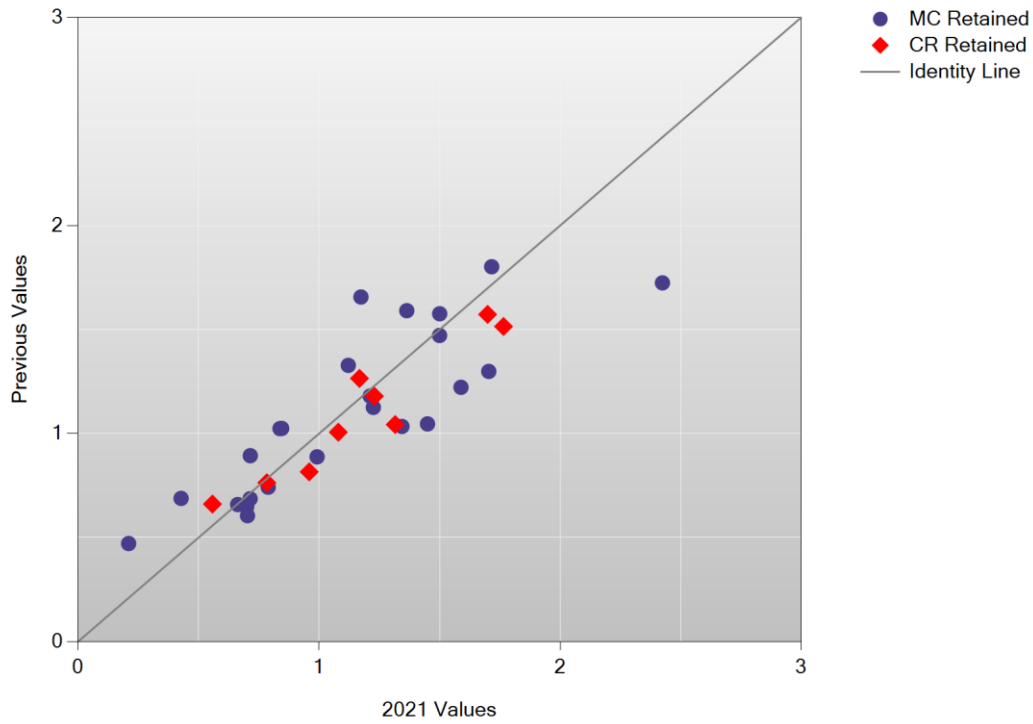
A/A Plot: Mathematics Grade 8



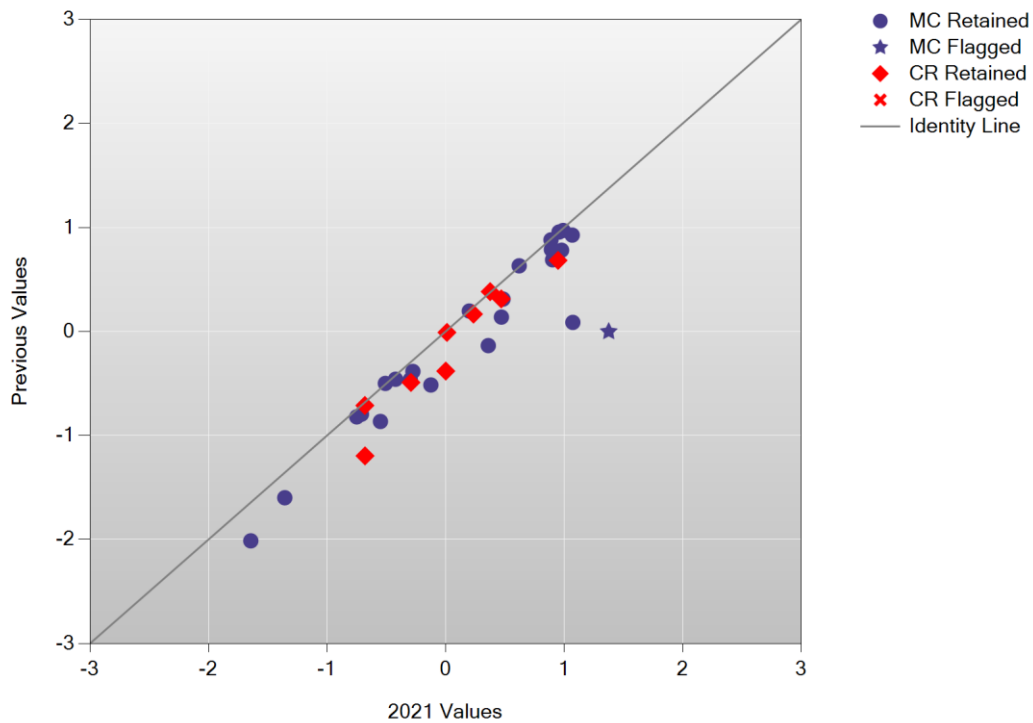
B/B Plot: Mathematics Grade 8



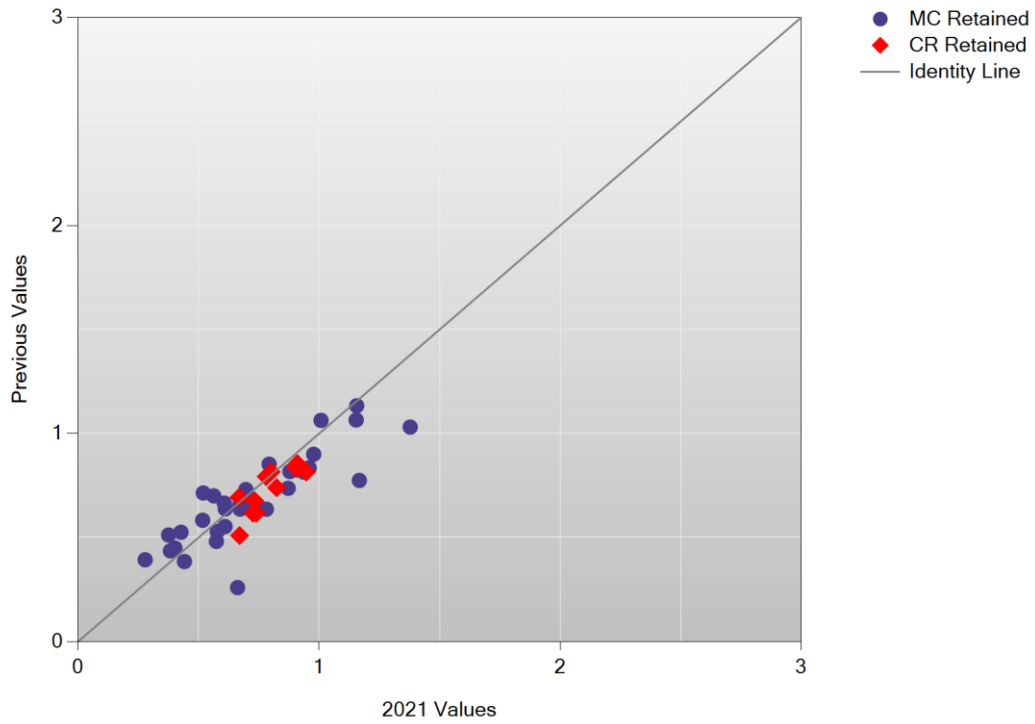
A/A Plot: Mathematics Grade 10



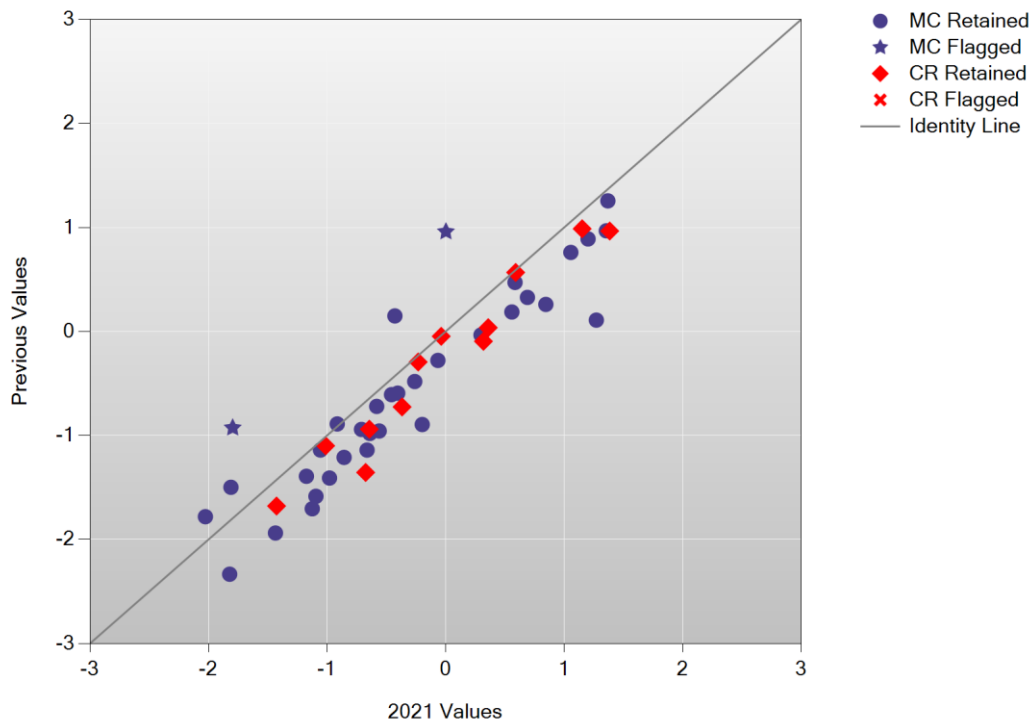
B/B Plot: Mathematics Grade 10



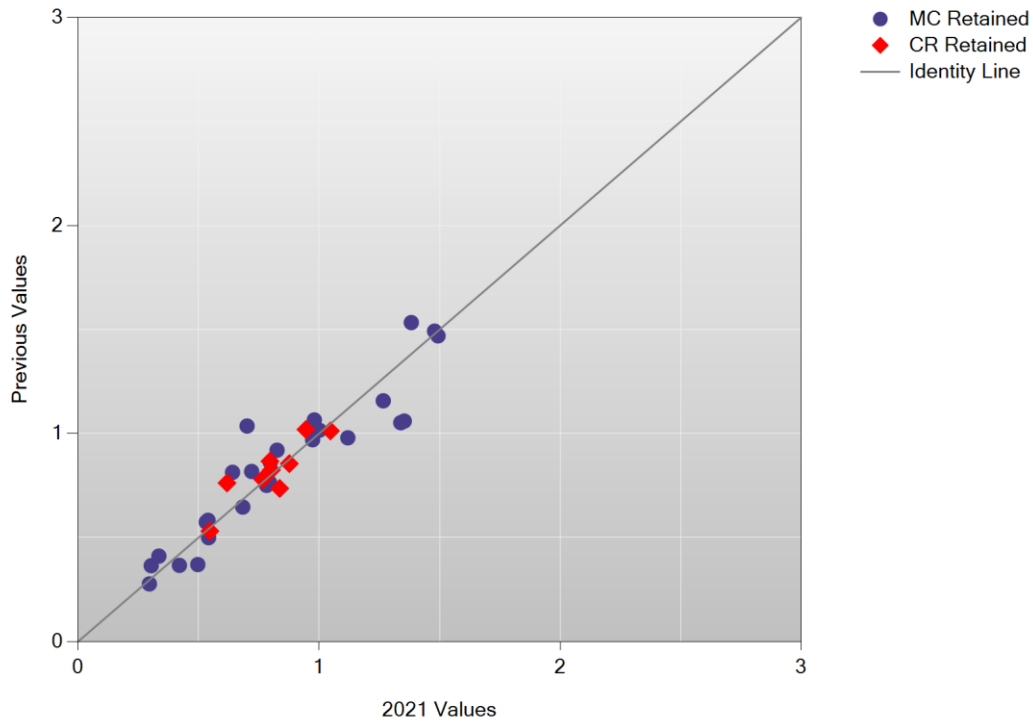
A/A Plot: Science Grade 5



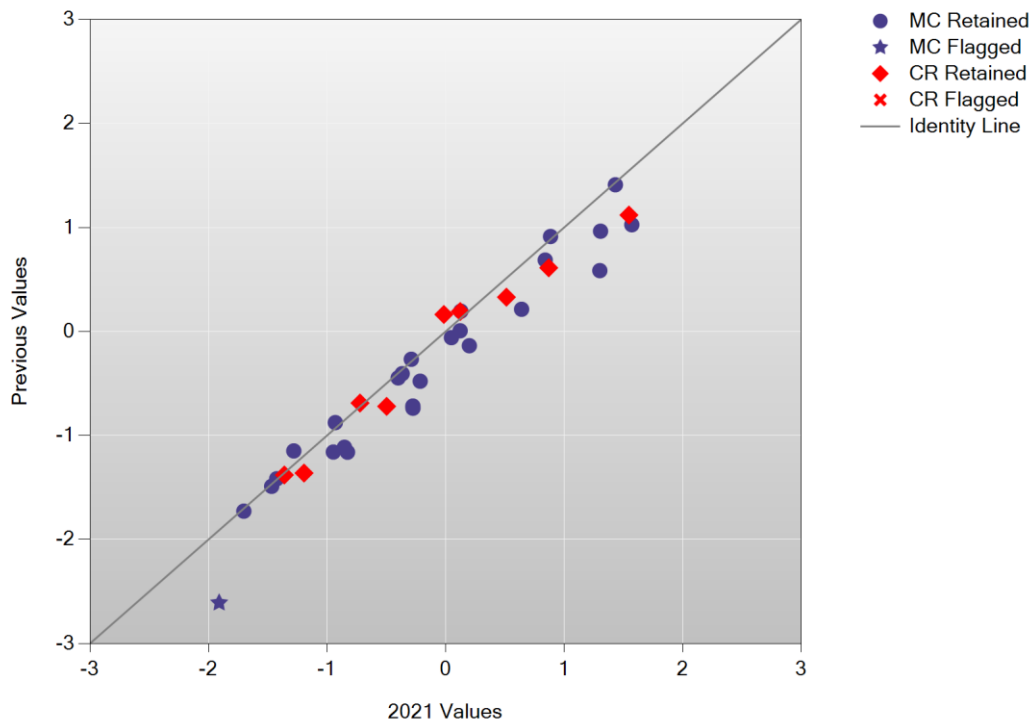
B/B Plot: Science Grade 5



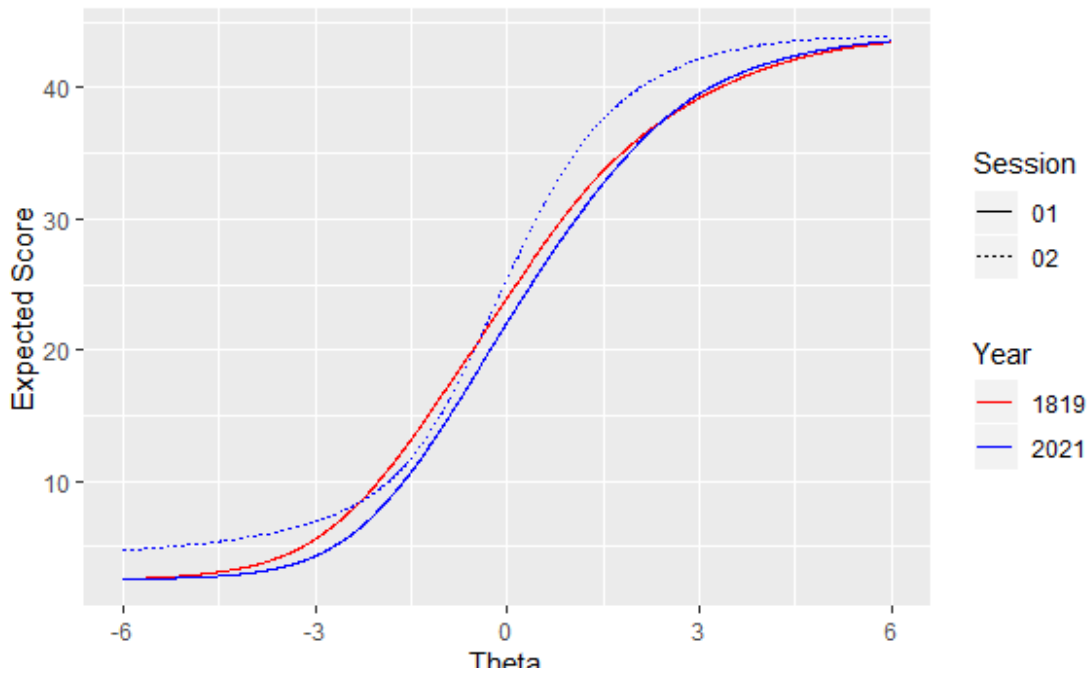
A/A Plot: Science Grade 8



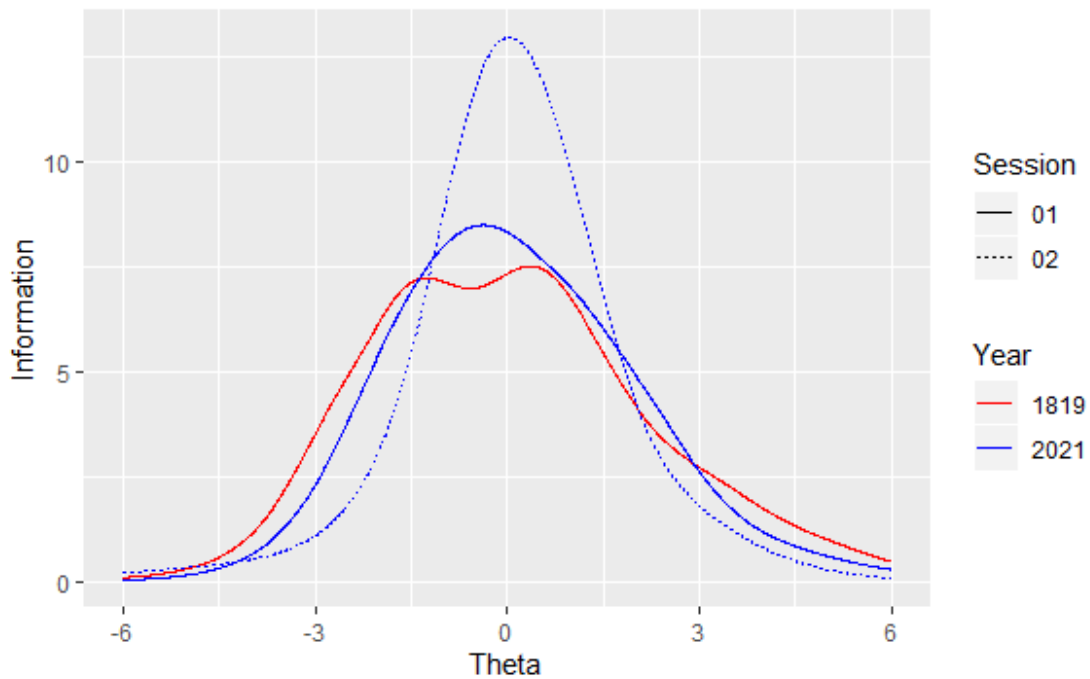
B/B Plot: Science Grade 8



Test Characteristic Curve: English Language Arts Grade 3

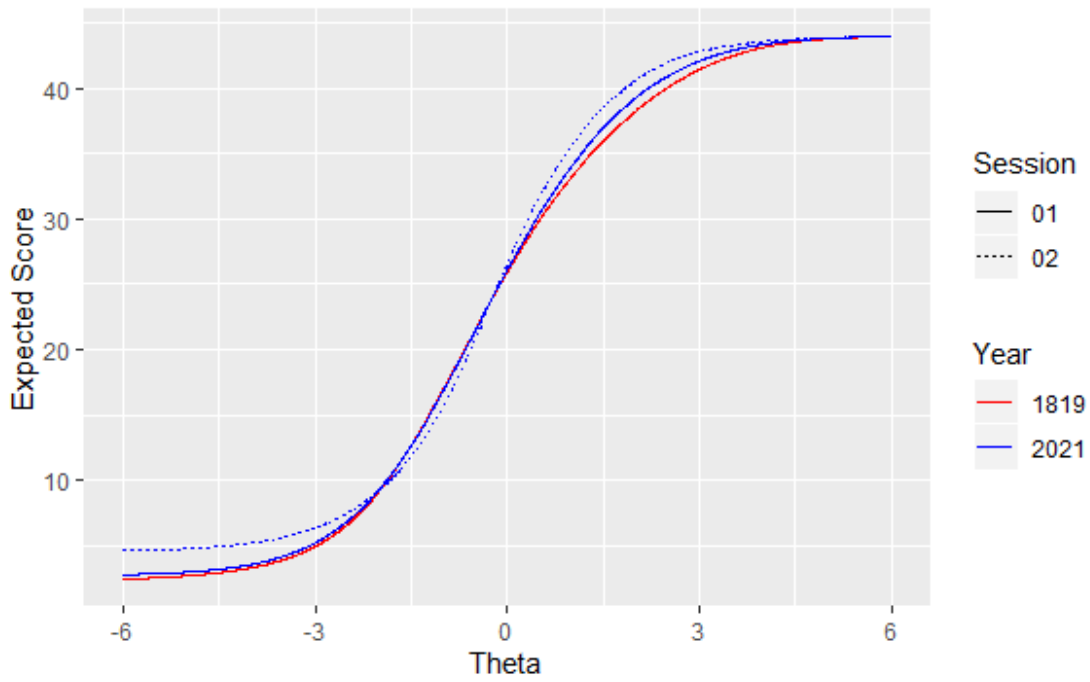


Test Information Function: English Language Arts Grade 3

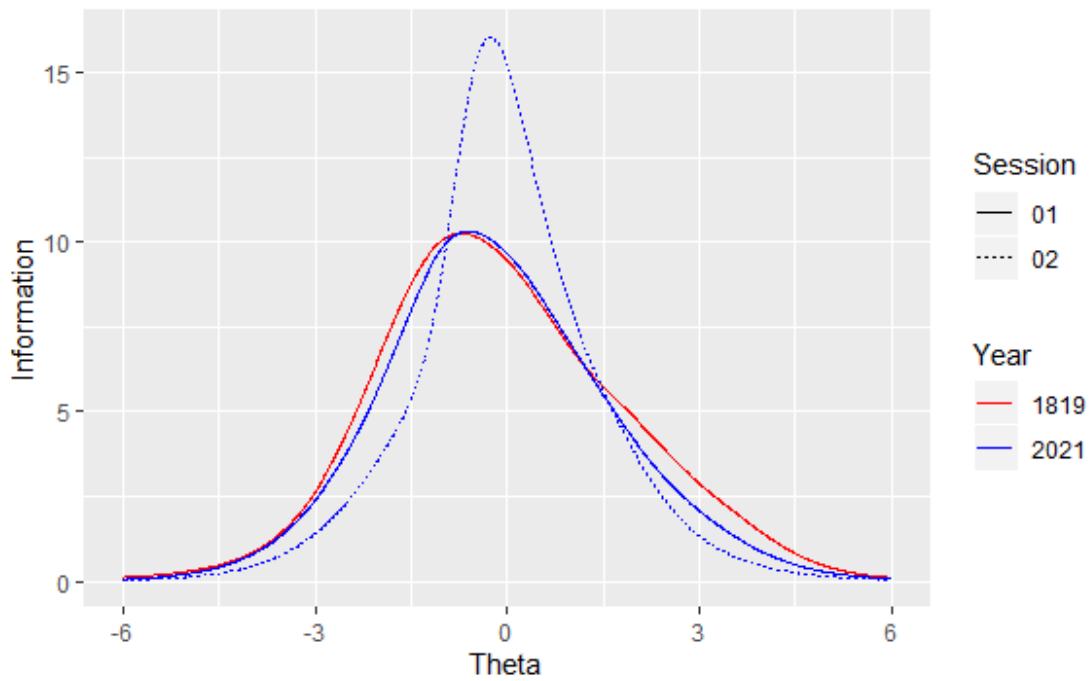


Note. All TCC and TIF values in 2021 have been proportionalized to match the total score point in 1819.

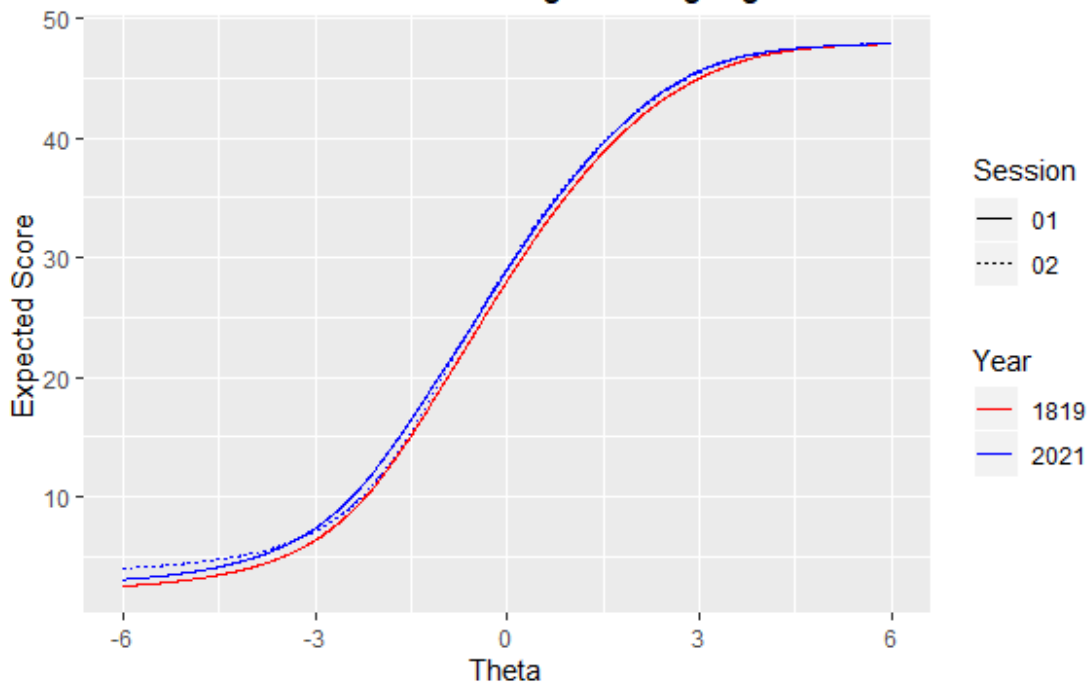
Test Characteristic Curve: English Language Arts Grade 4



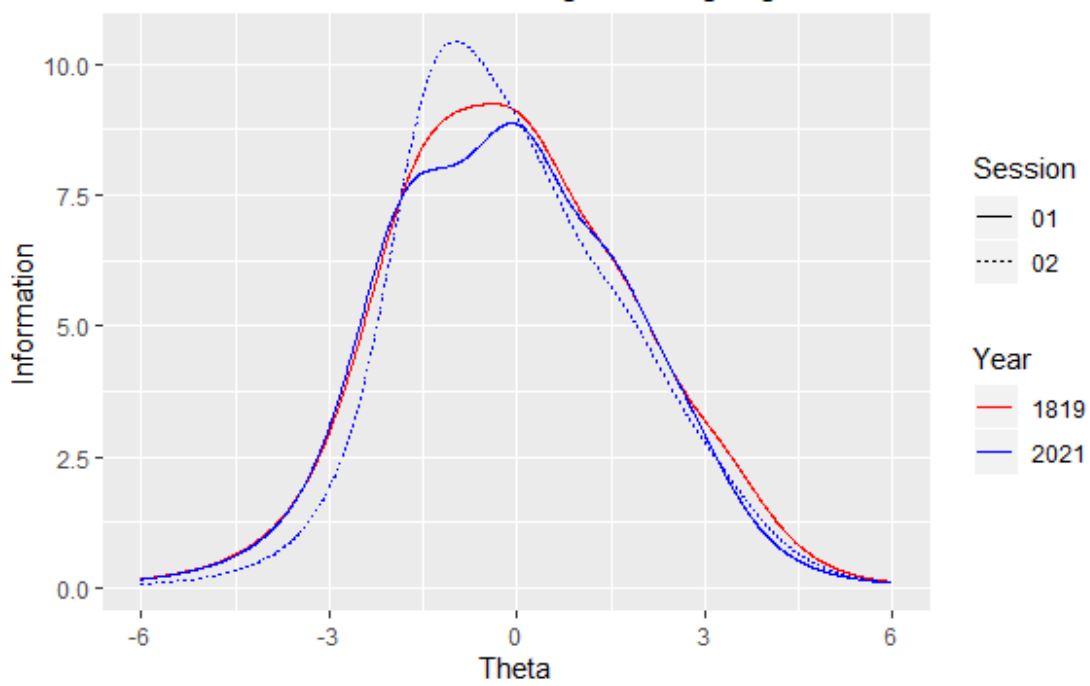
Test Information Function: English Language Arts Grade 4



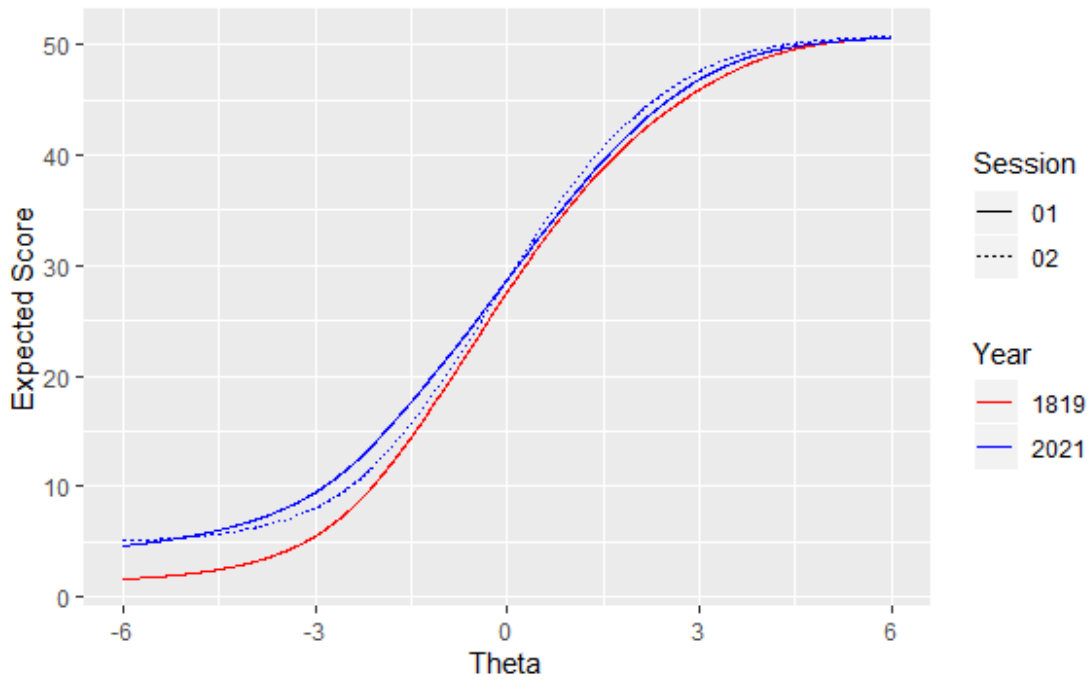
Test Characteristic Curve: English Language Arts Grade 5



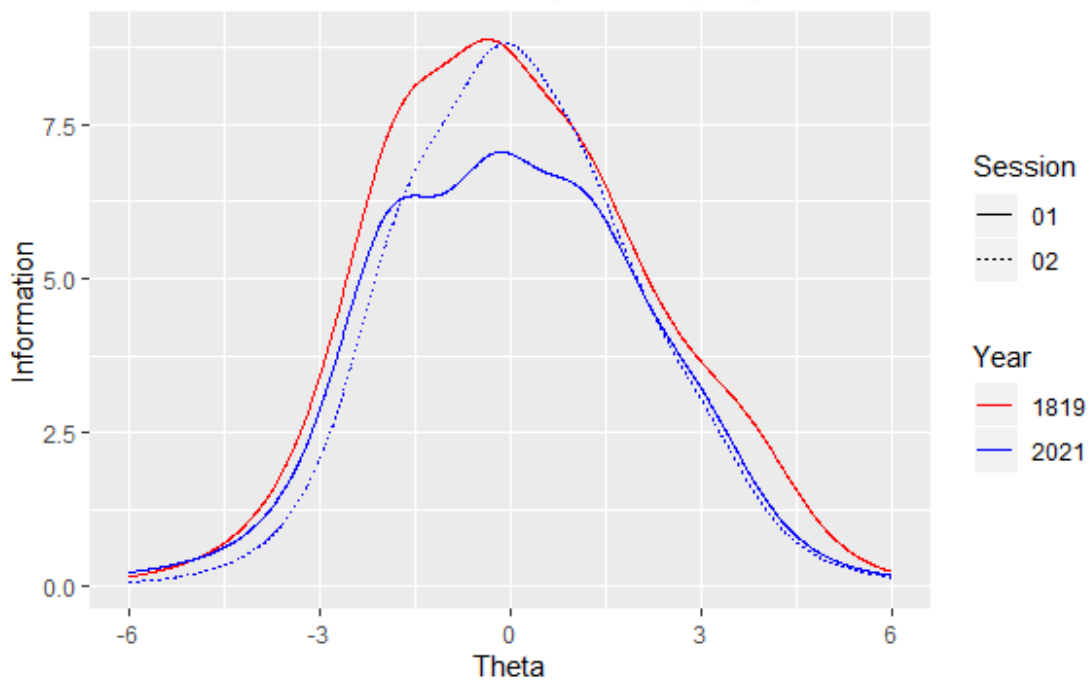
Test Information Function: English Language Arts Grade 5



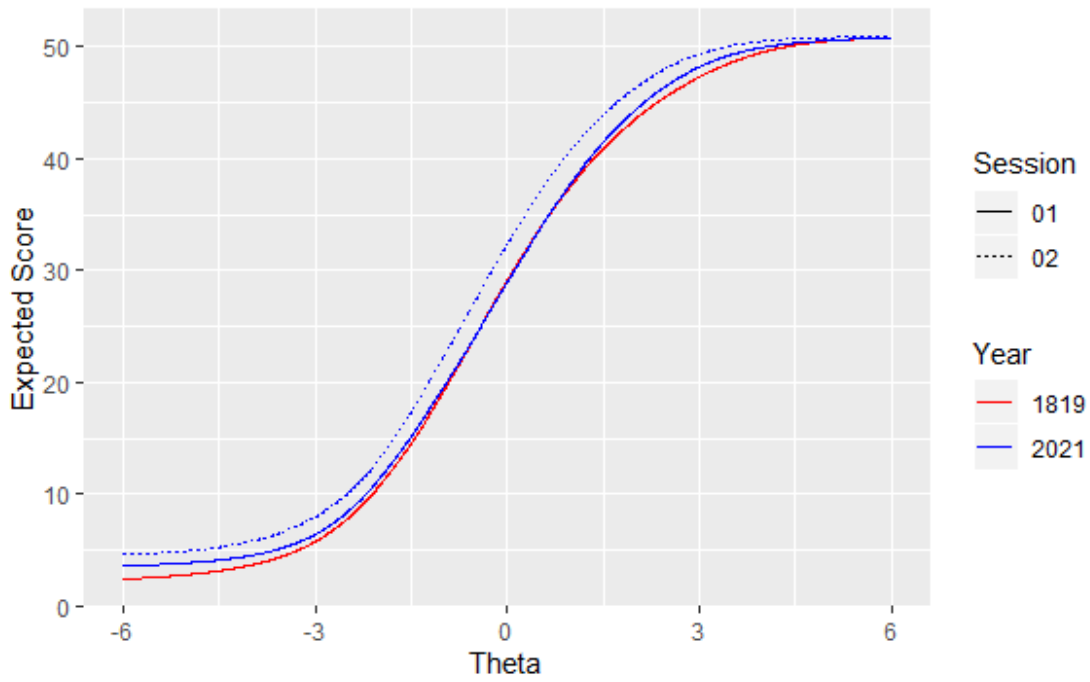
Test Characteristic Curve: English Language Arts Grade 6



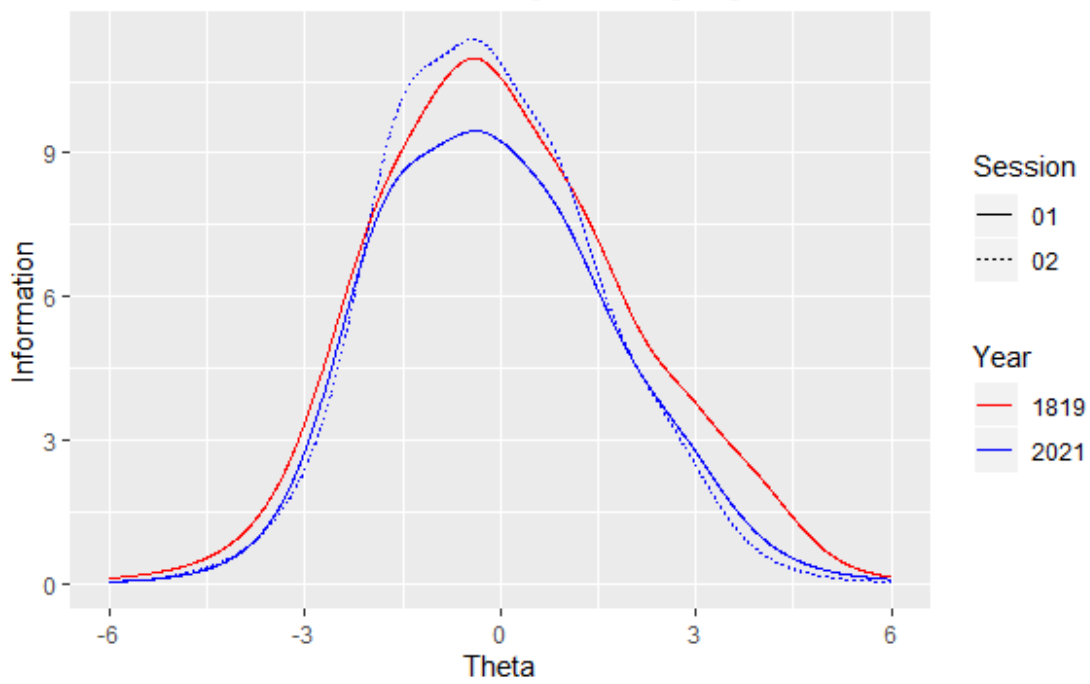
Test Information Function: English Language Arts Grade 6



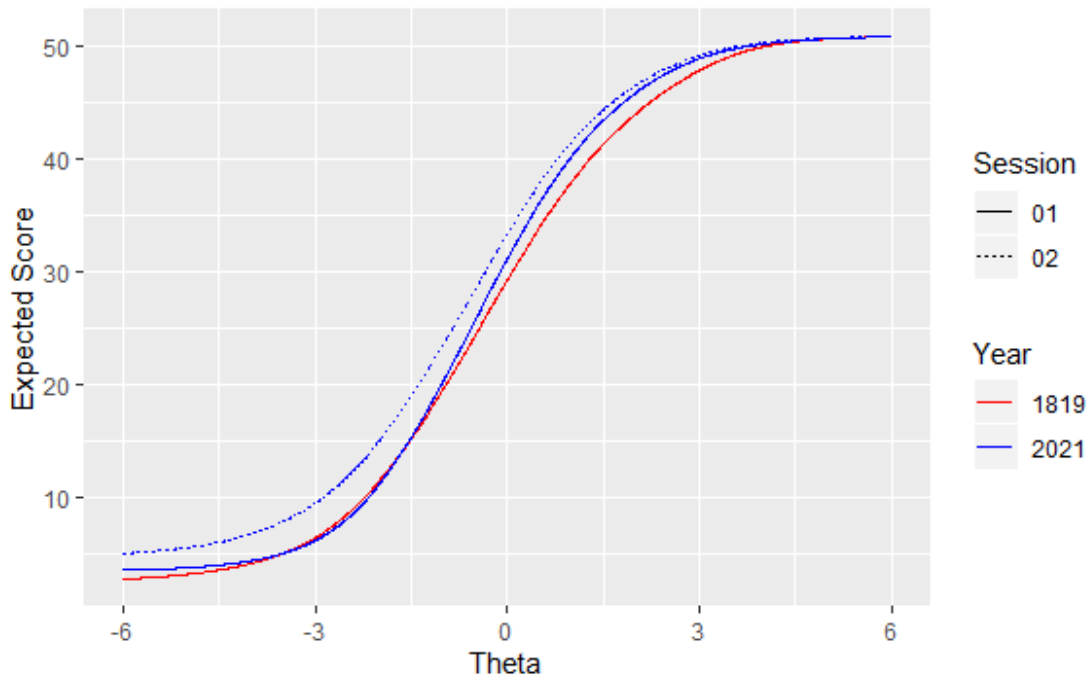
Test Characteristic Curve: English Language Arts Grade 7



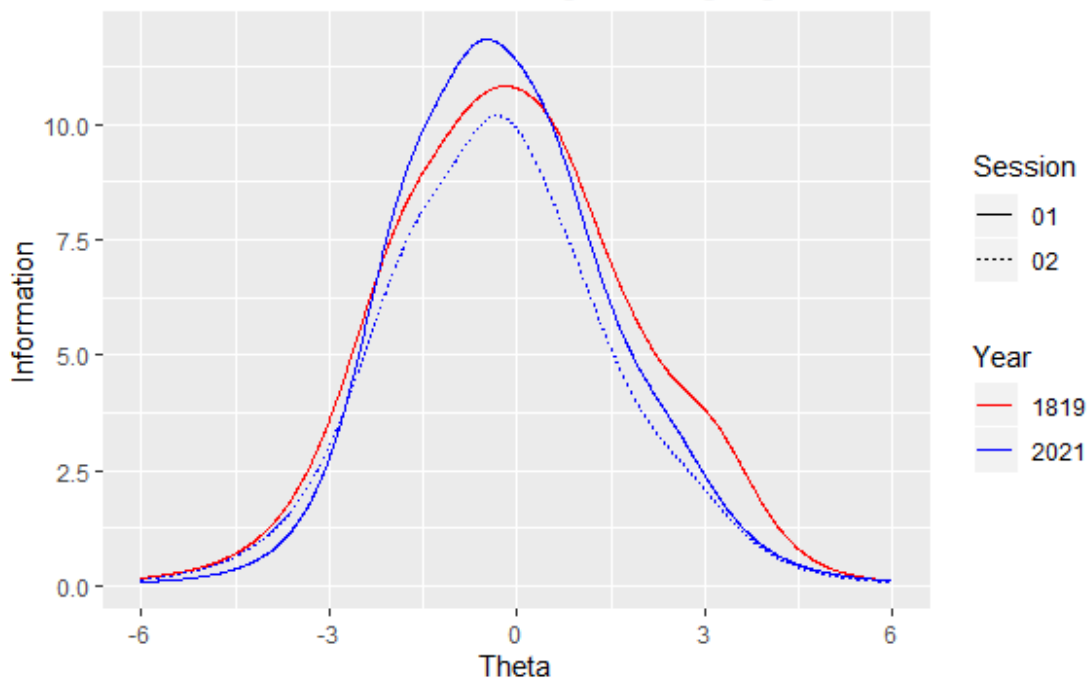
Test Information Function (TIF): English Language Arts Grade 7



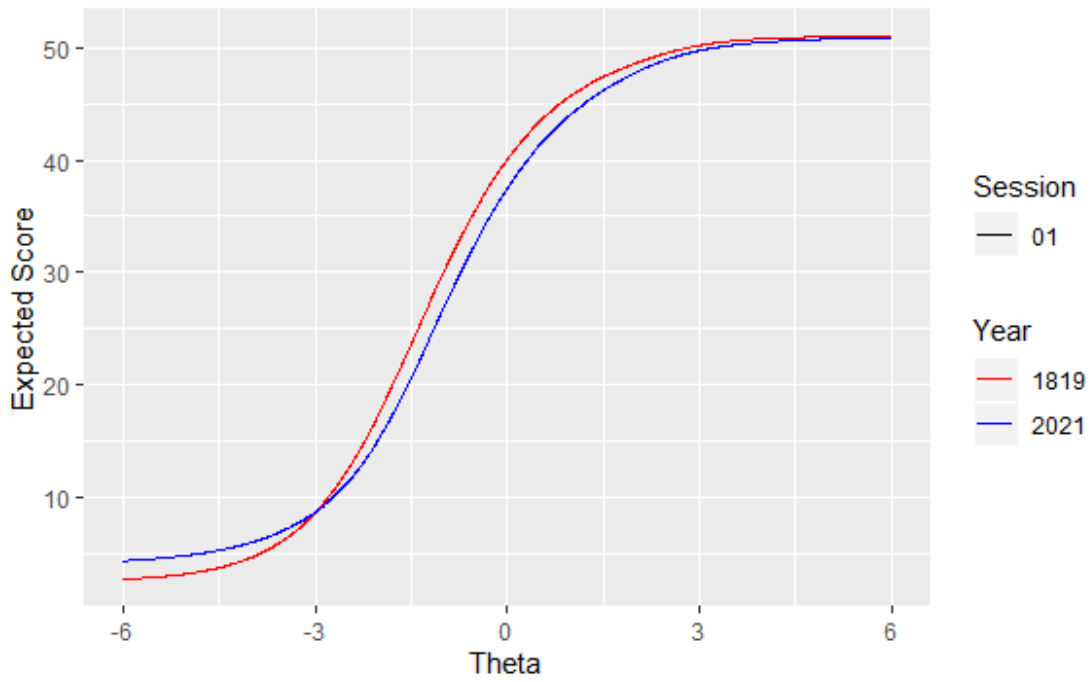
Test Characteristic Curve: English Language Arts Grade 8



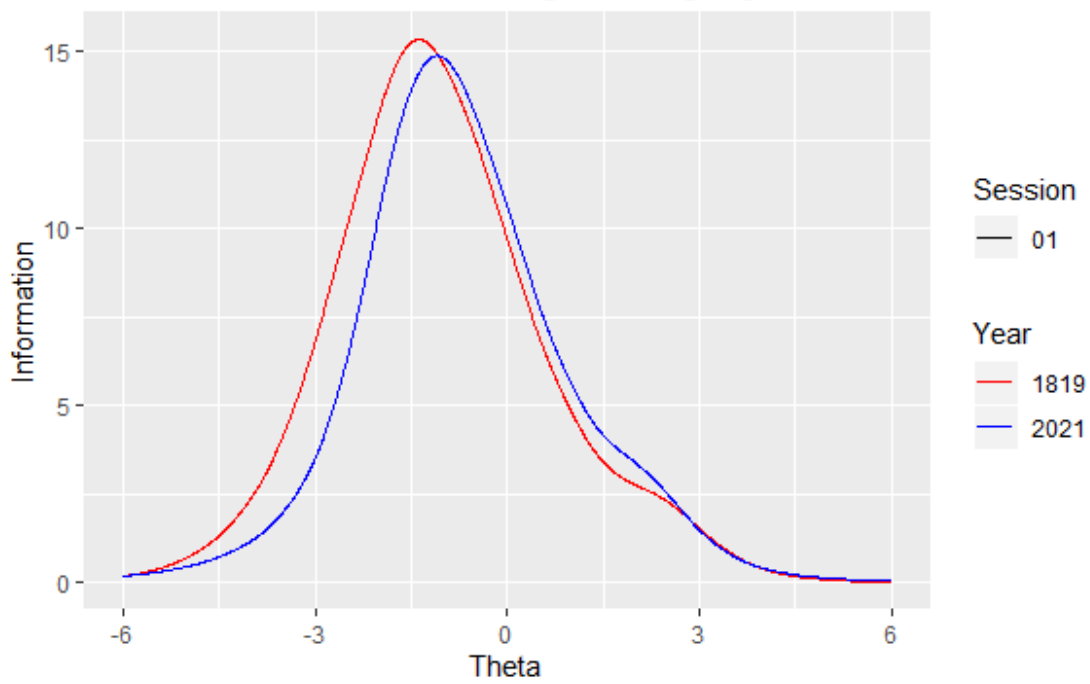
Test Information Function: English Language Arts Grade 8



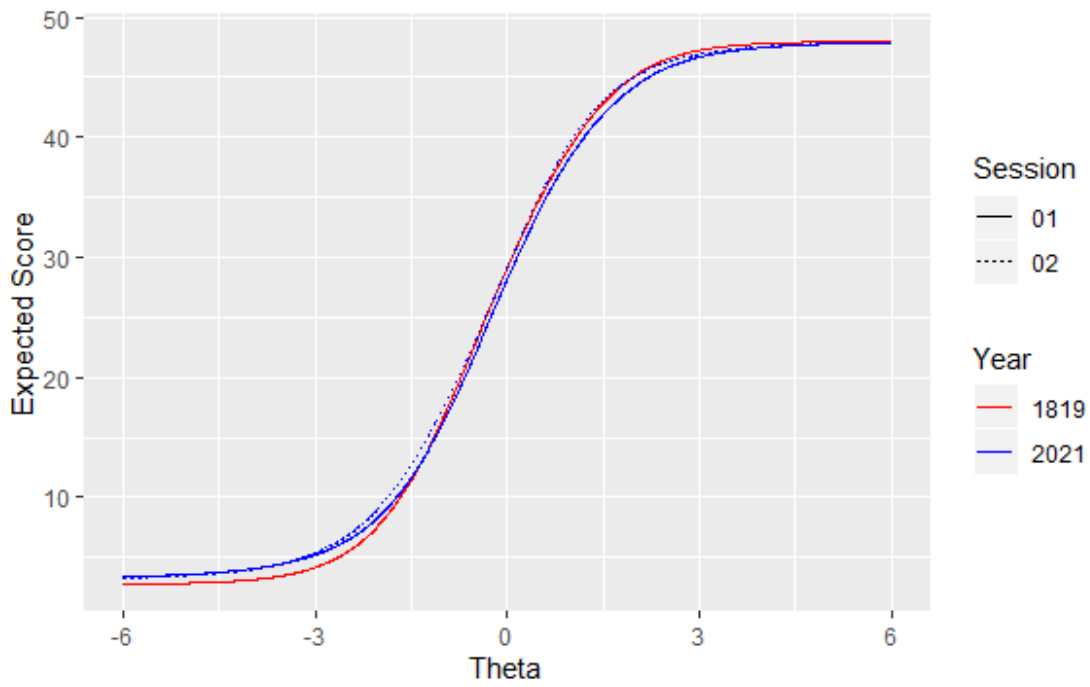
Test Characteristic Curve: English Language Arts Grade 10



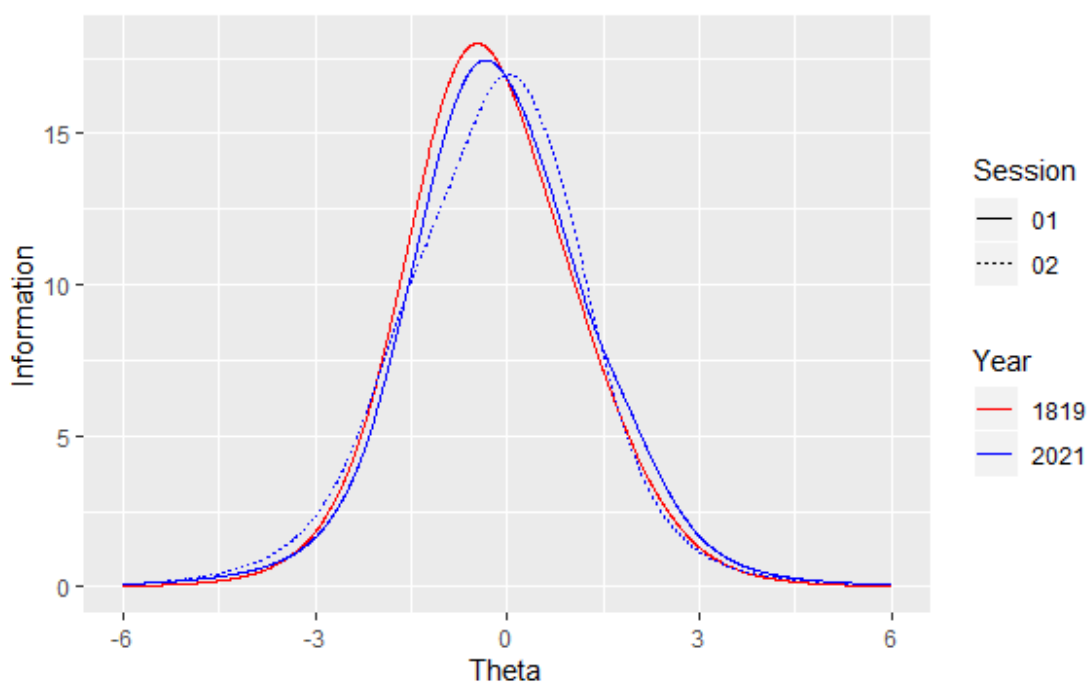
Test Information Function: English Language Arts Grade 10



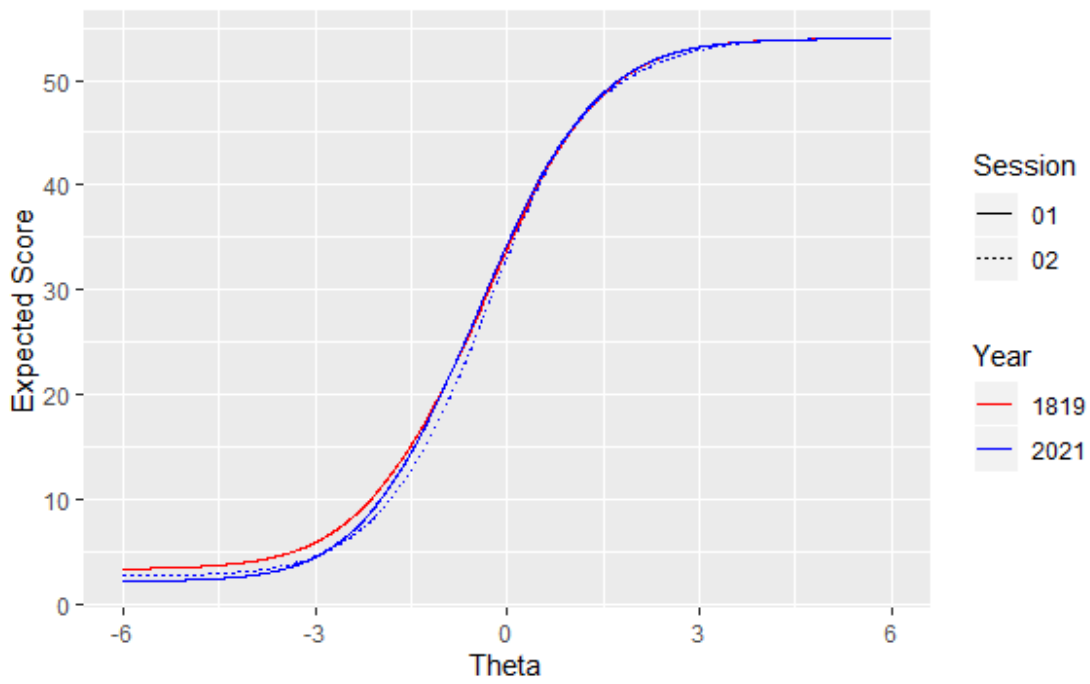
Test Characteristic Curve: Mathematics Grade 3



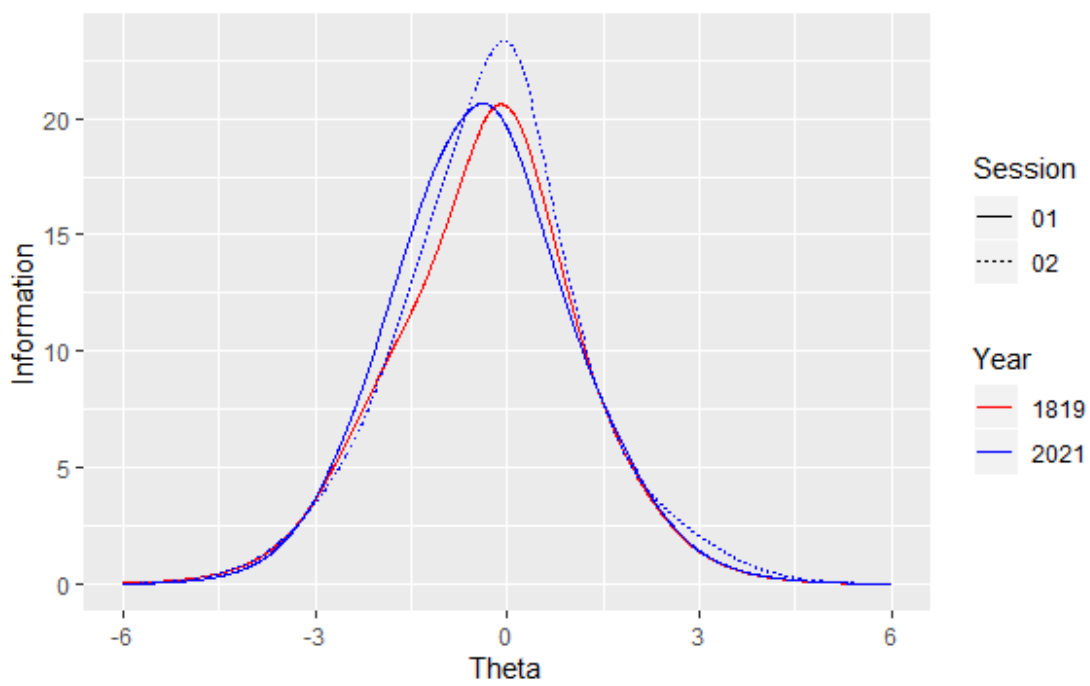
Test Information Function: Mathematics Grade 3



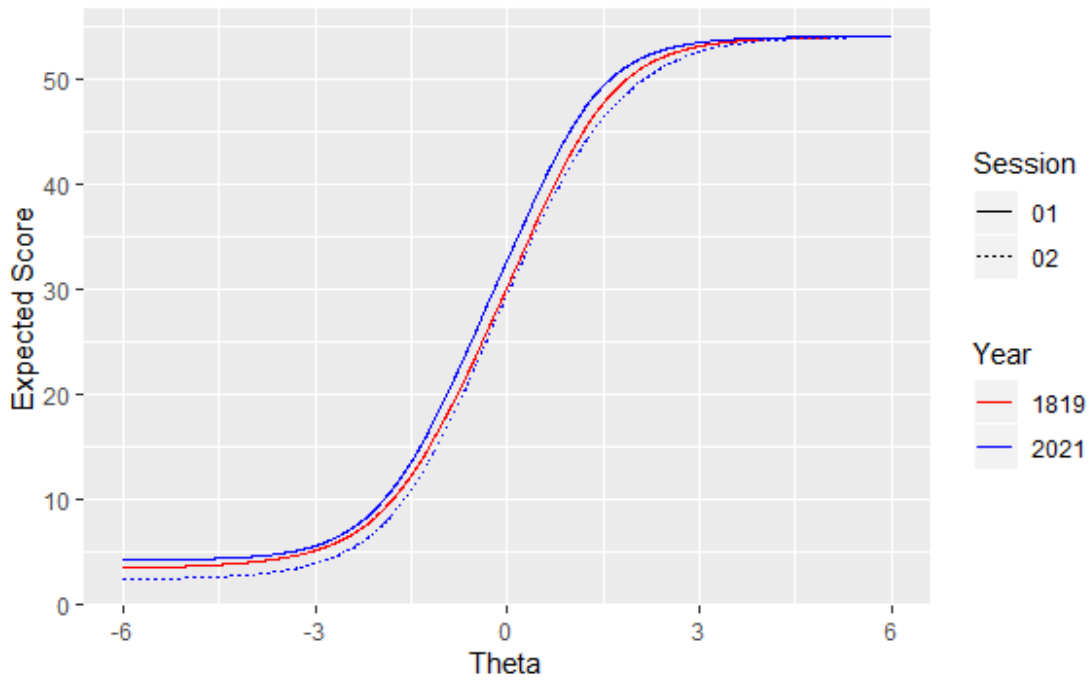
Test Characteristic Curve: Mathematics Grade 4



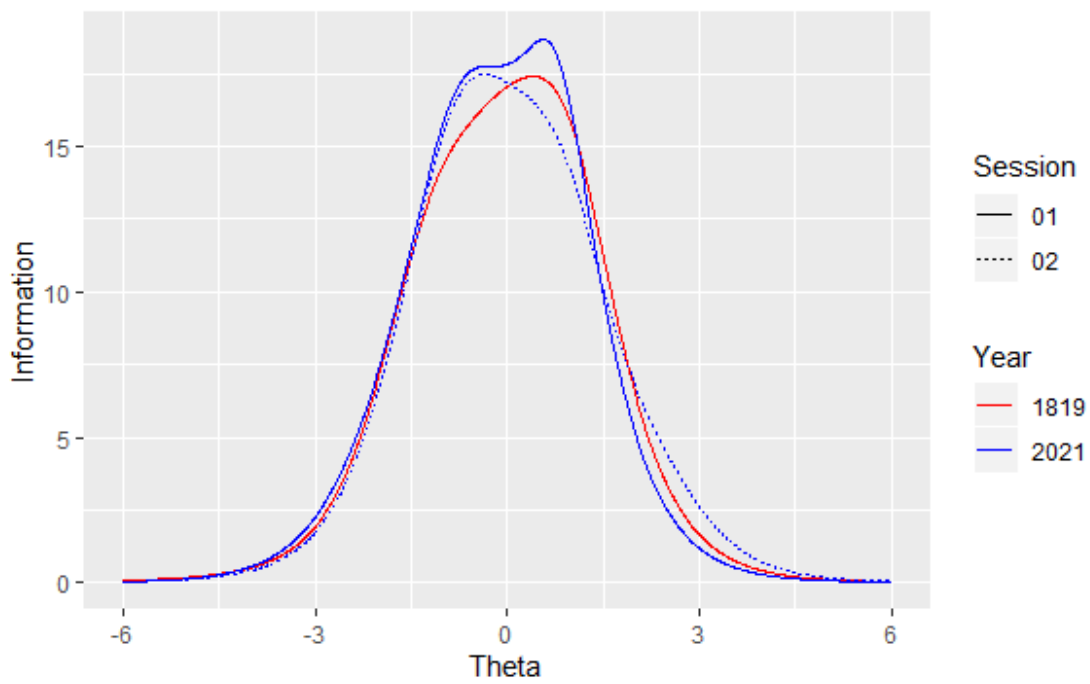
Test Information Function: Mathematics Grade 4



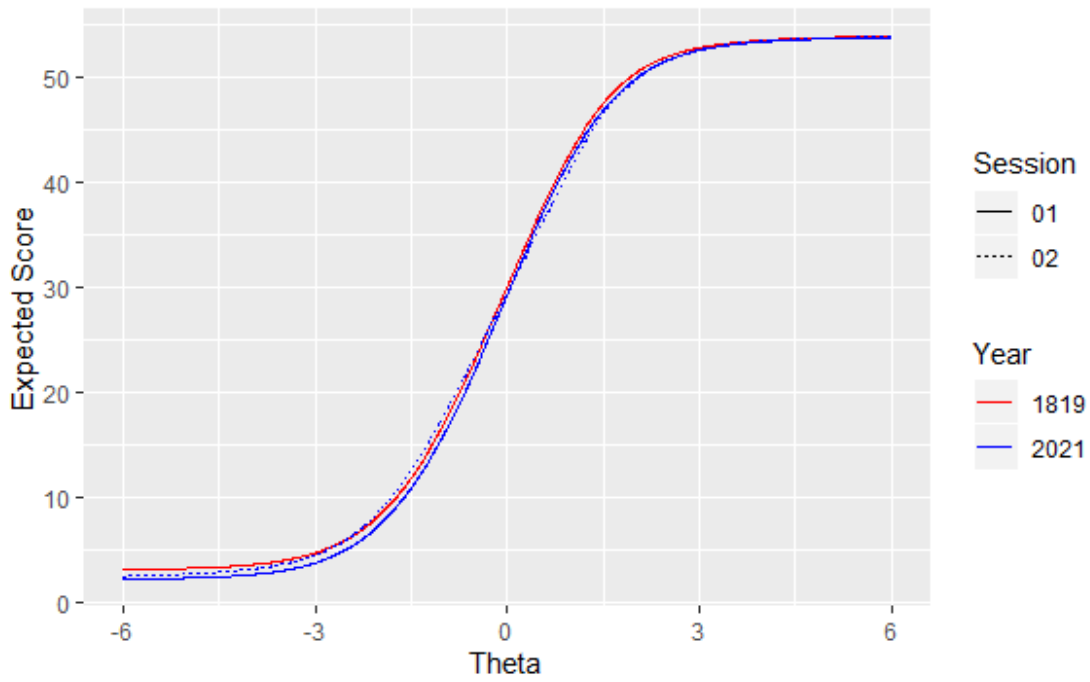
Test Characteristic Curve: Mathematics Grade 5



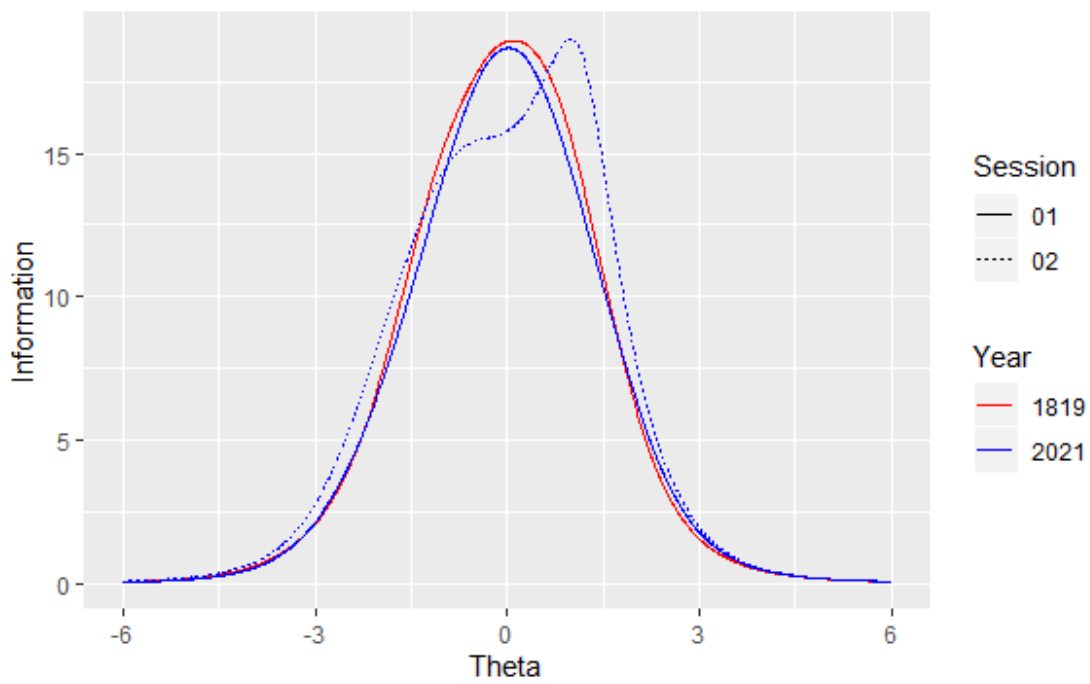
Test Information Function: Mathematics Grade 5



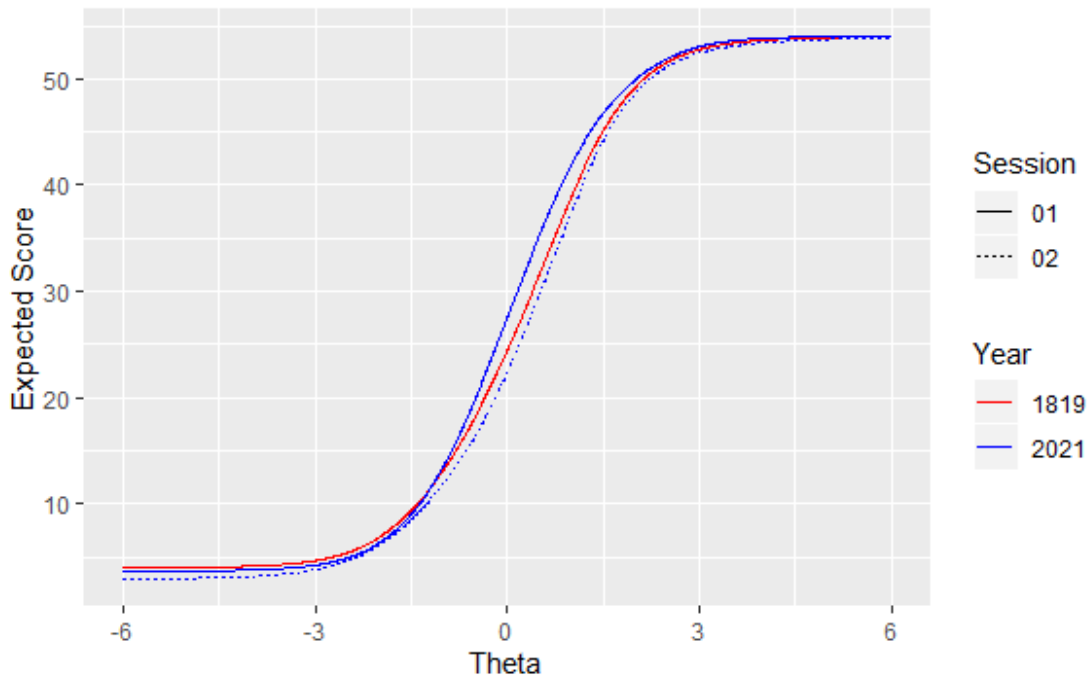
Test Characteristic Curve: Mathematics Grade 6



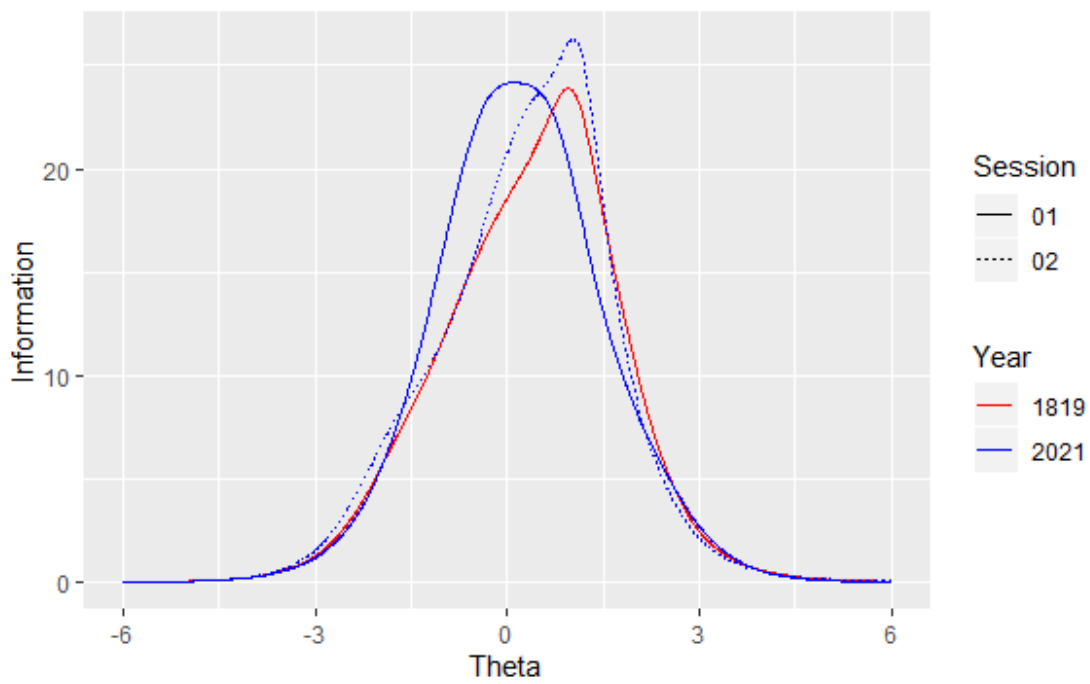
Test Information Function: Mathematics Grade 6



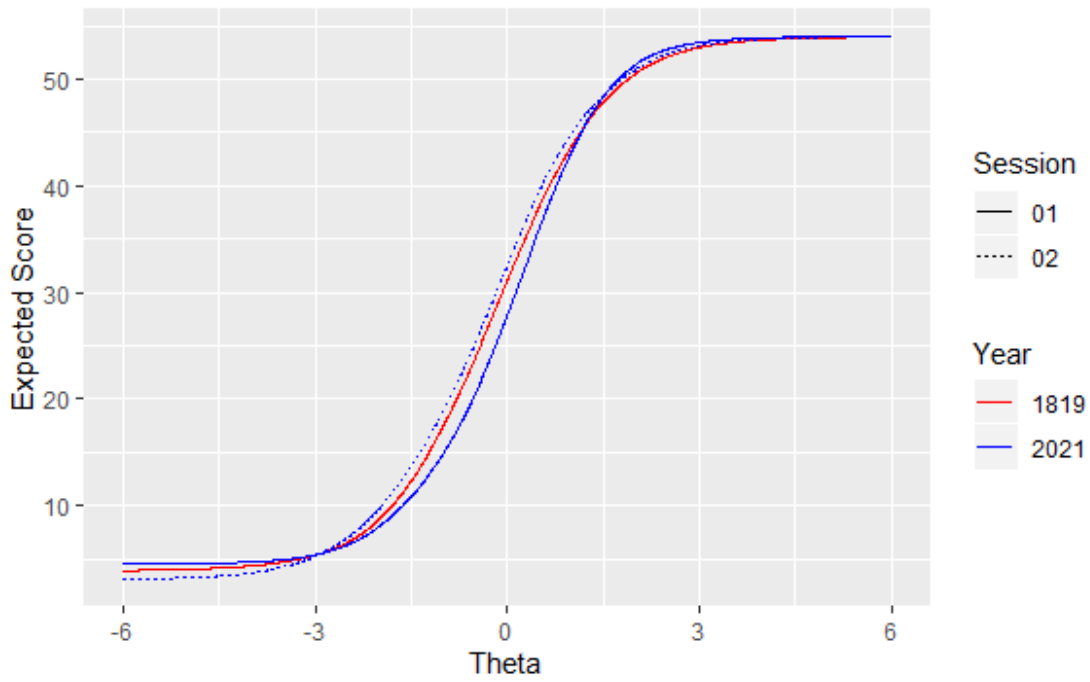
Test Characteristic Curve: Mathematics Grade 7



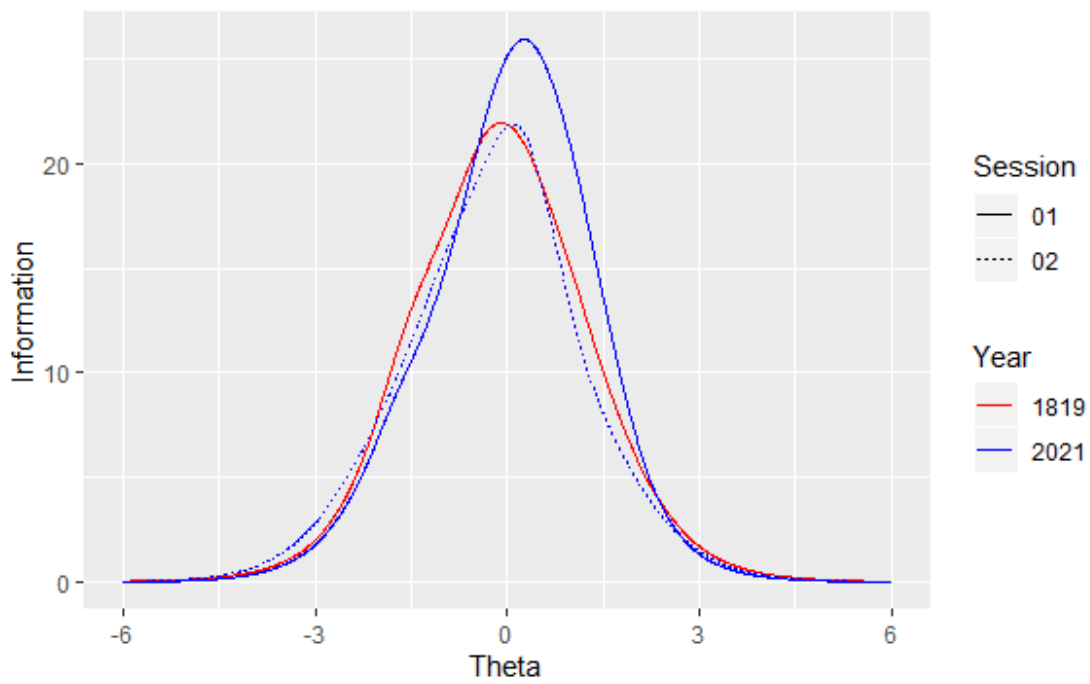
Test Information Function: Mathematics Grade 7



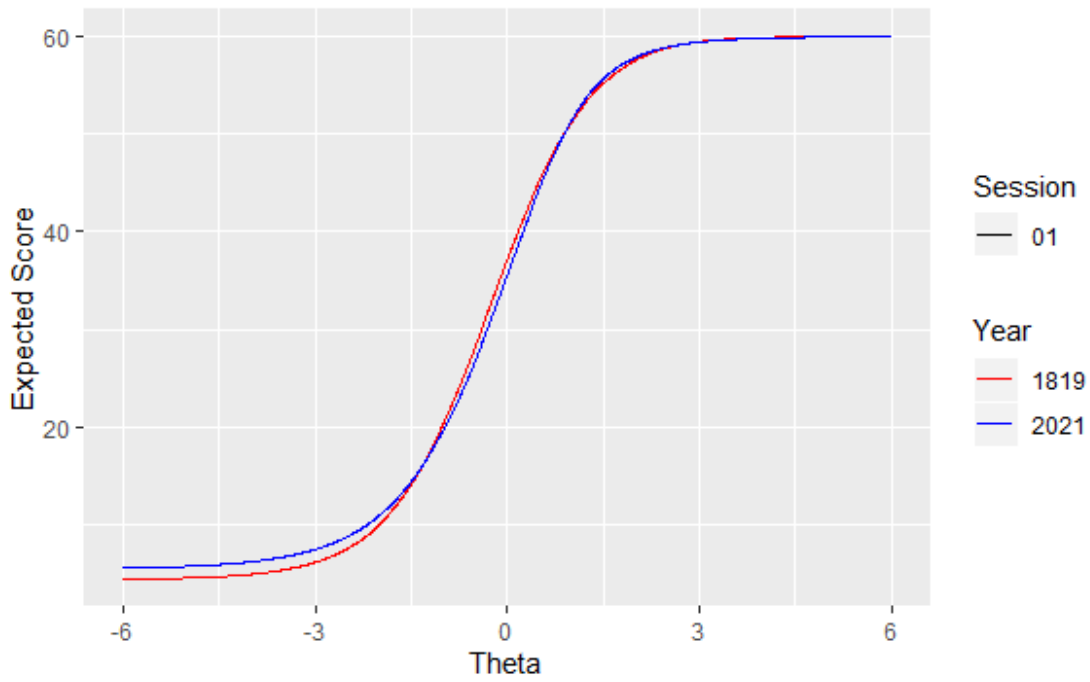
Test Characteristic Curve: Mathematics Grade 8



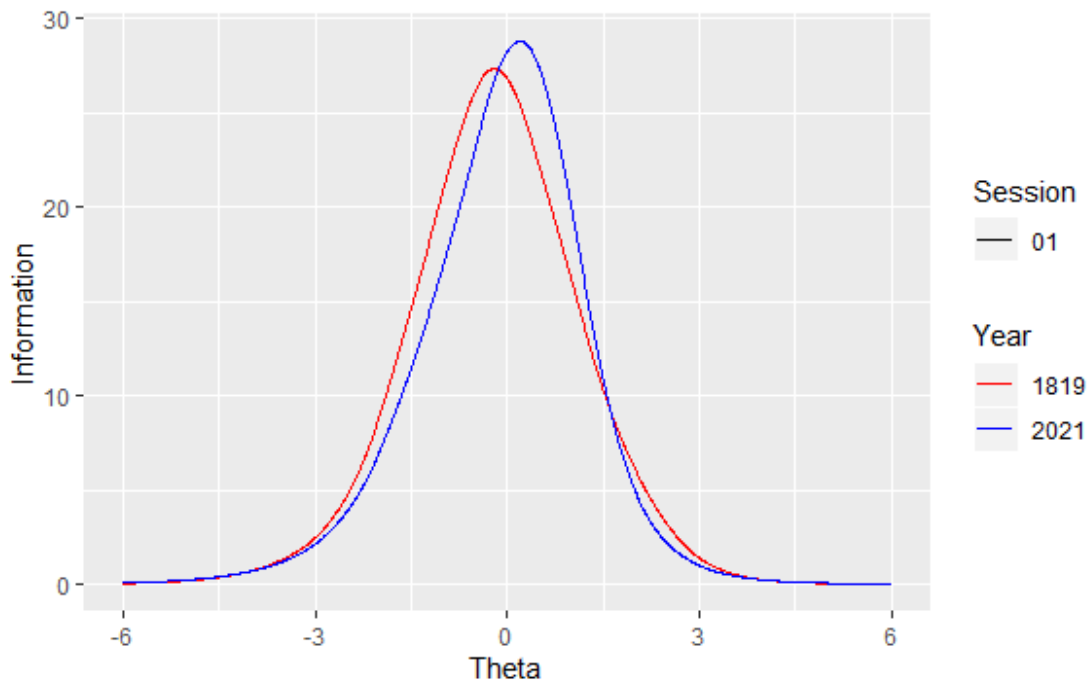
Test Information Function: Mathematics Grade 8



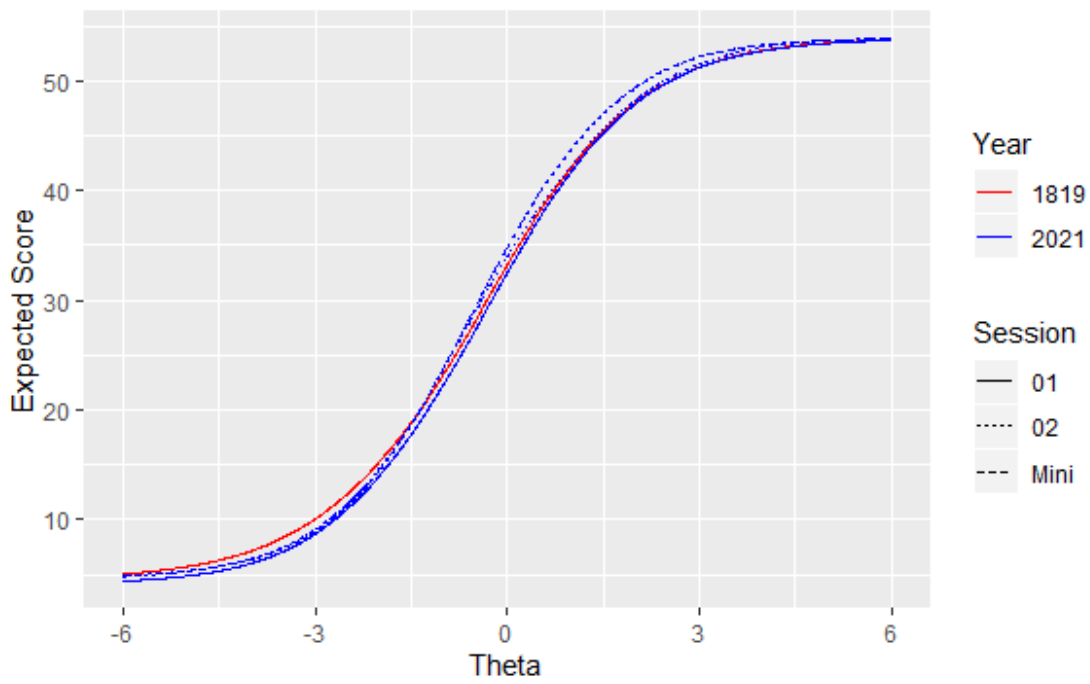
Test Characteristic Curve: Mathematics Grade 10



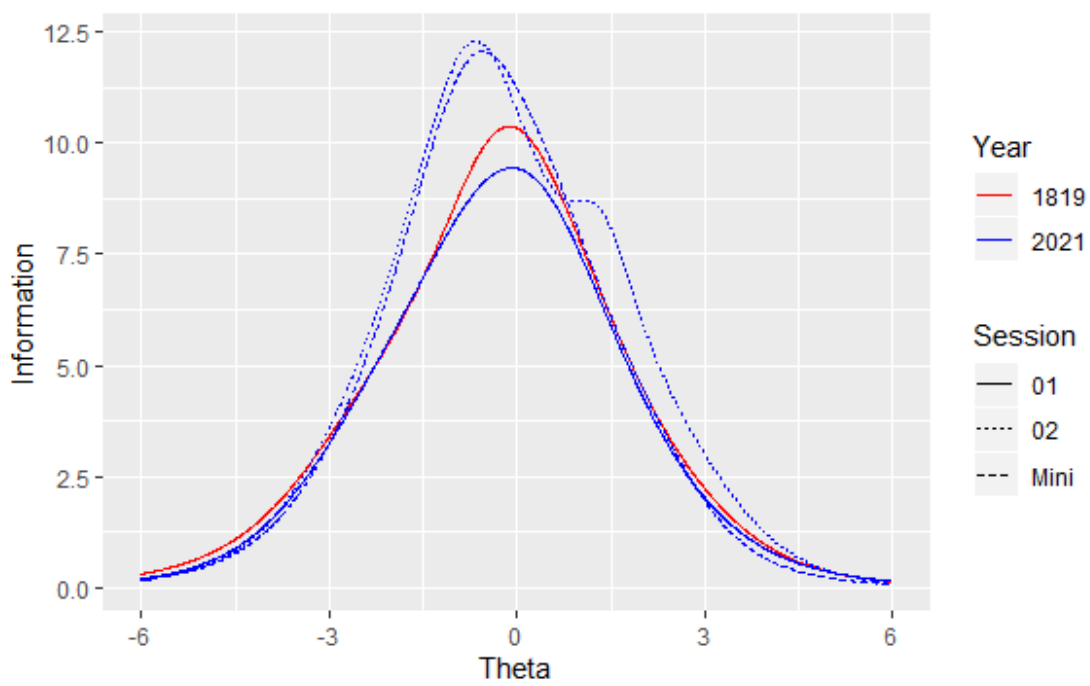
Test Information Function: Mathematics Grade 10



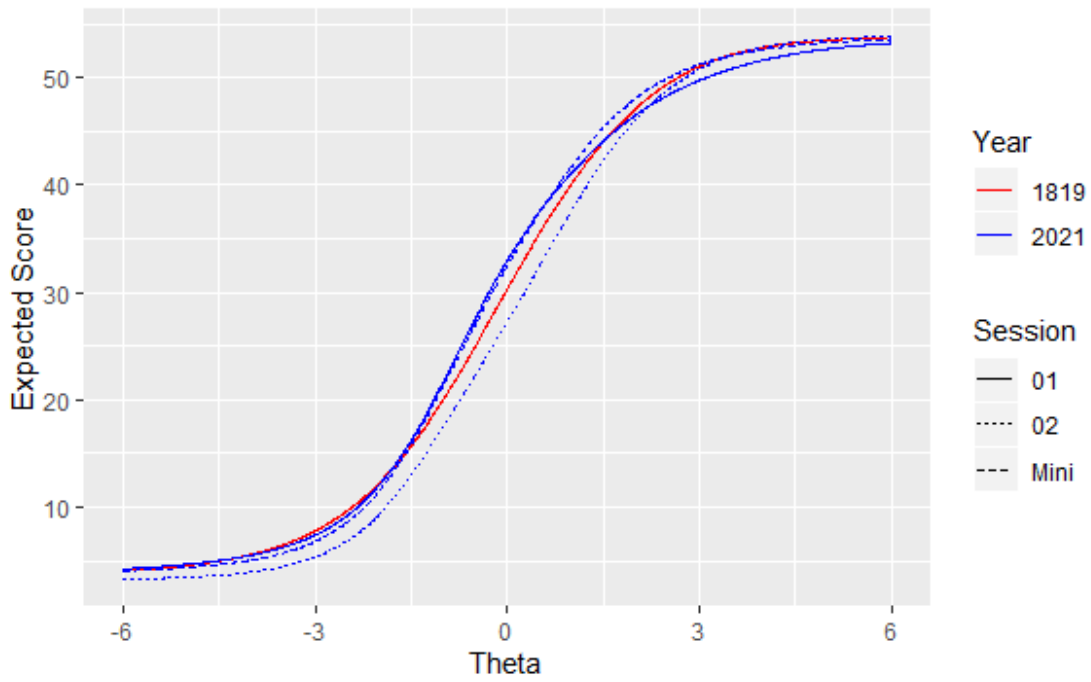
Test Characteristic Curve: Science Grade 5



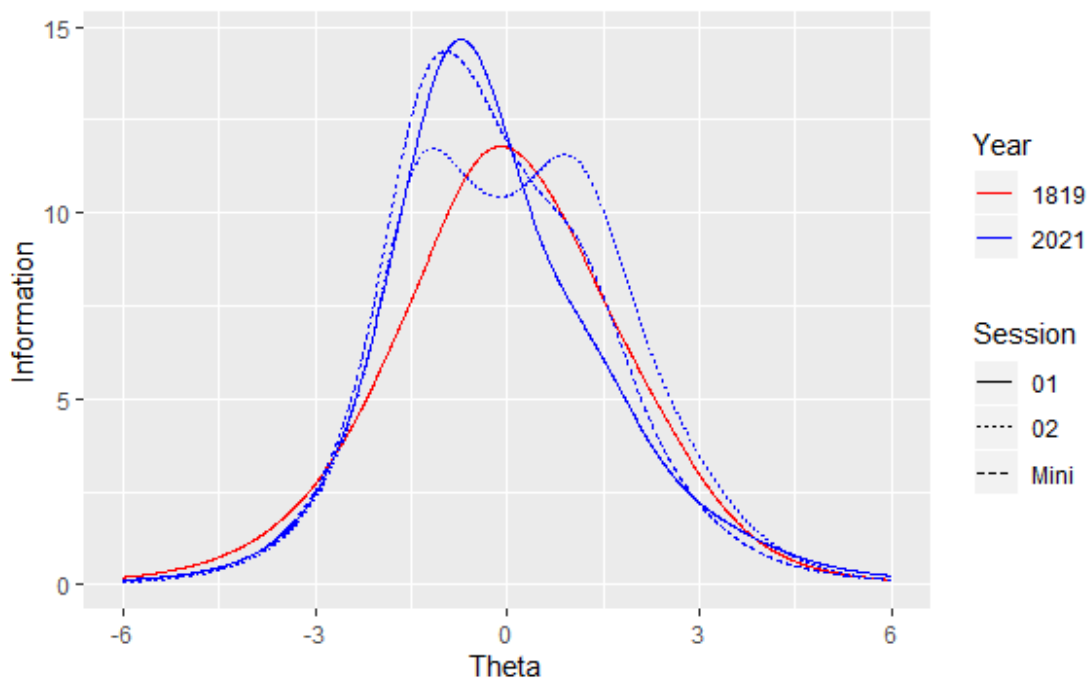
Test Information Function: Science Grade 5



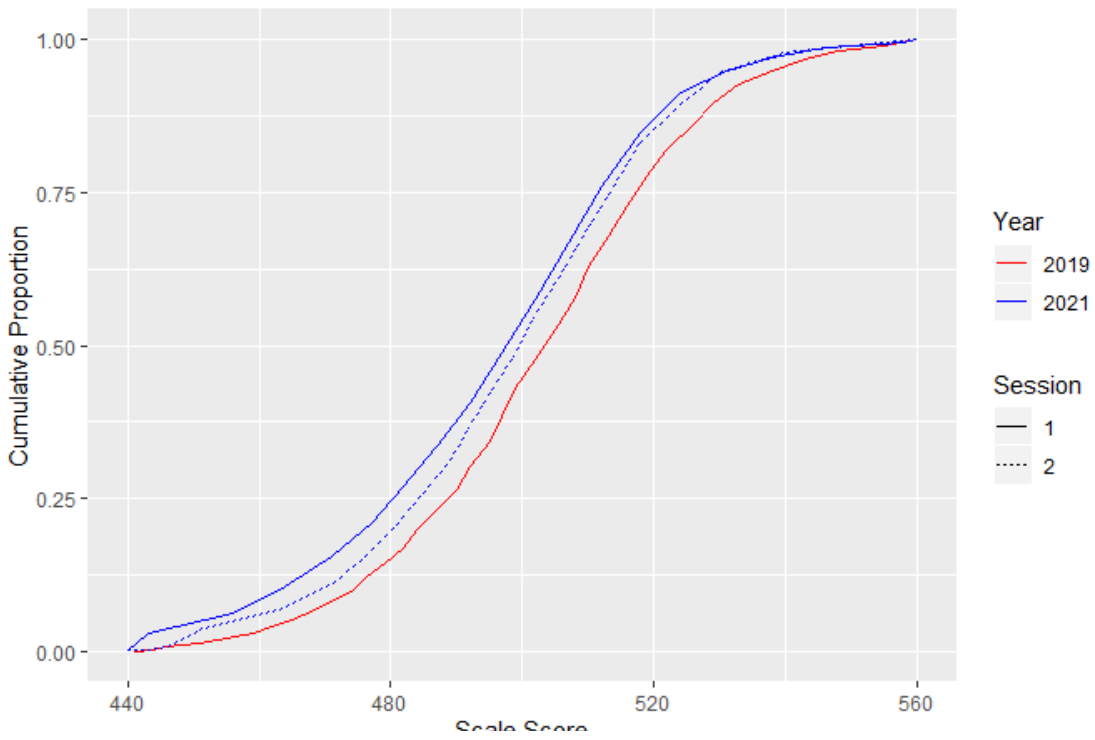
Test Characteristic Curve: Science Grade 8



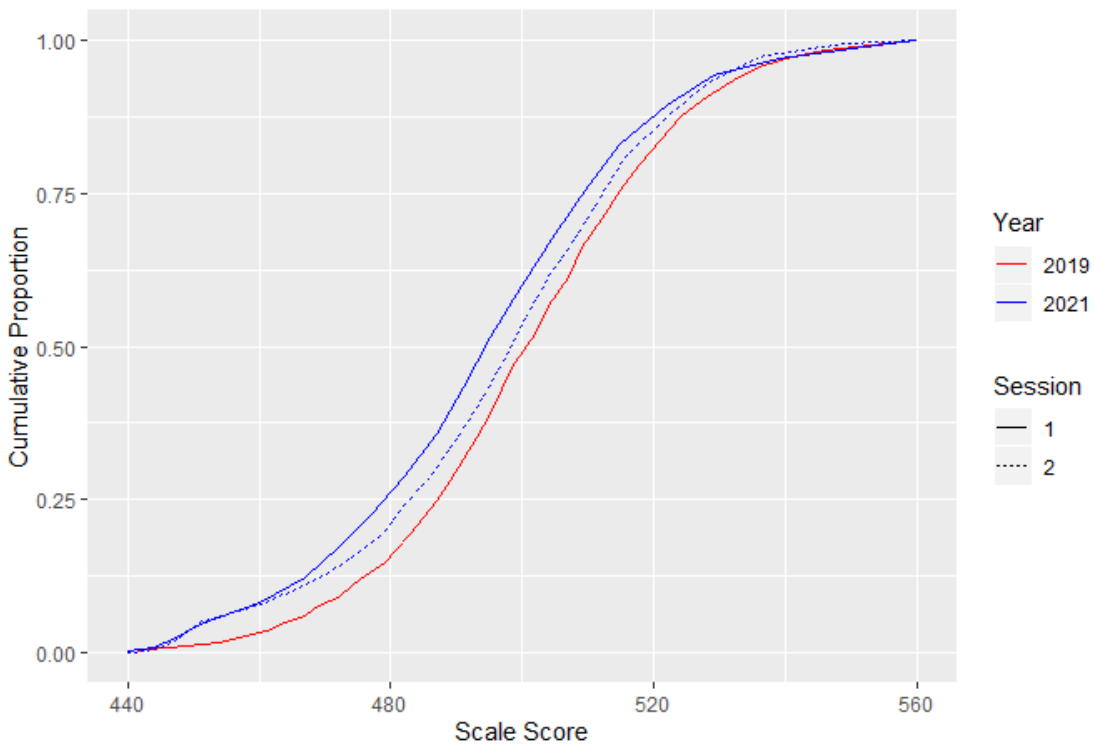
Test Information Function: Science Grade 8



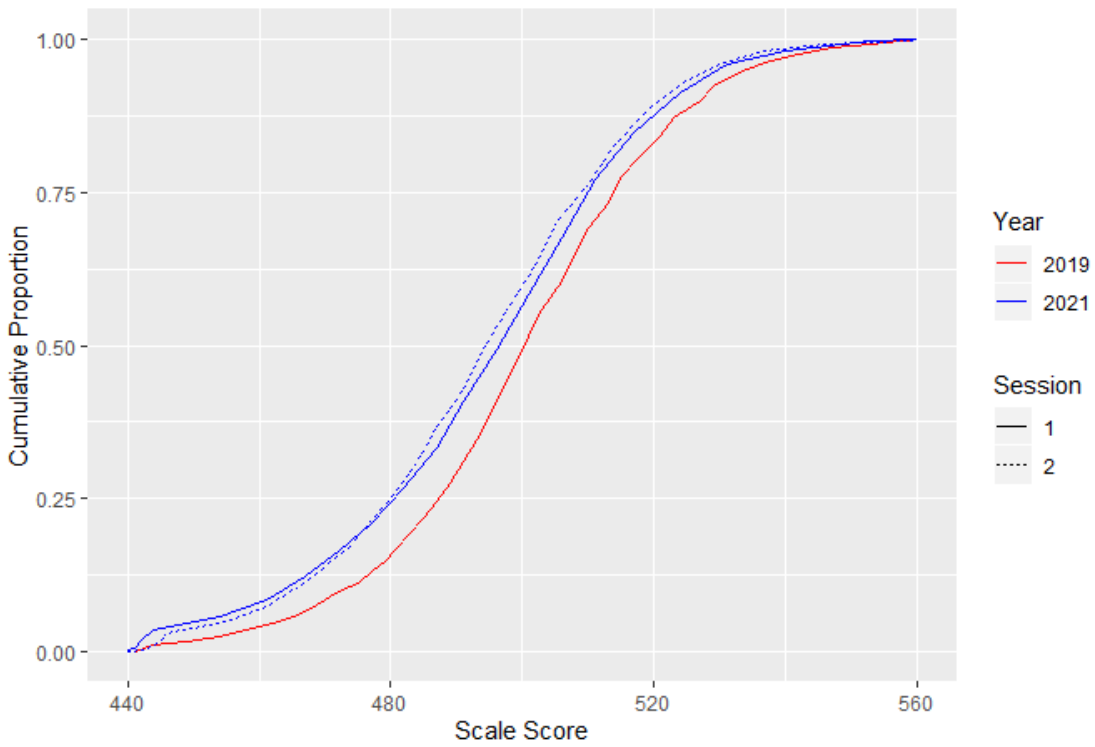
Cumulative Scale Score Distribution: English Language Arts Grade 3



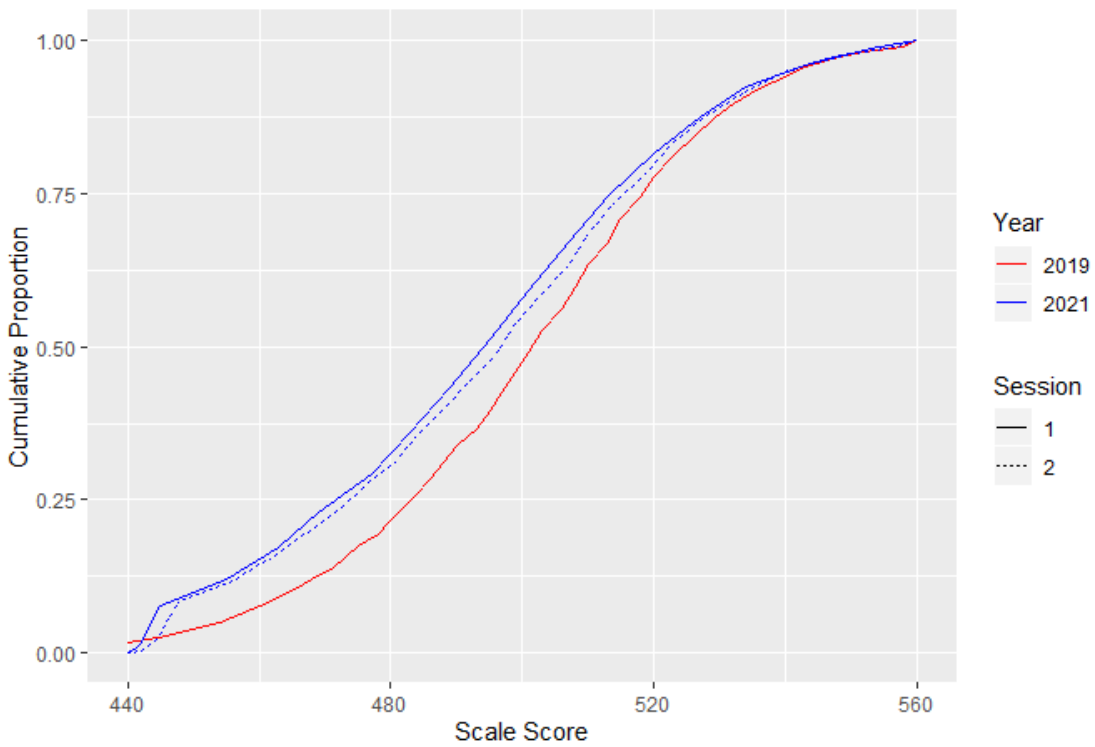
Cumulative Scale Score Distribution: English Language Arts Grade 4



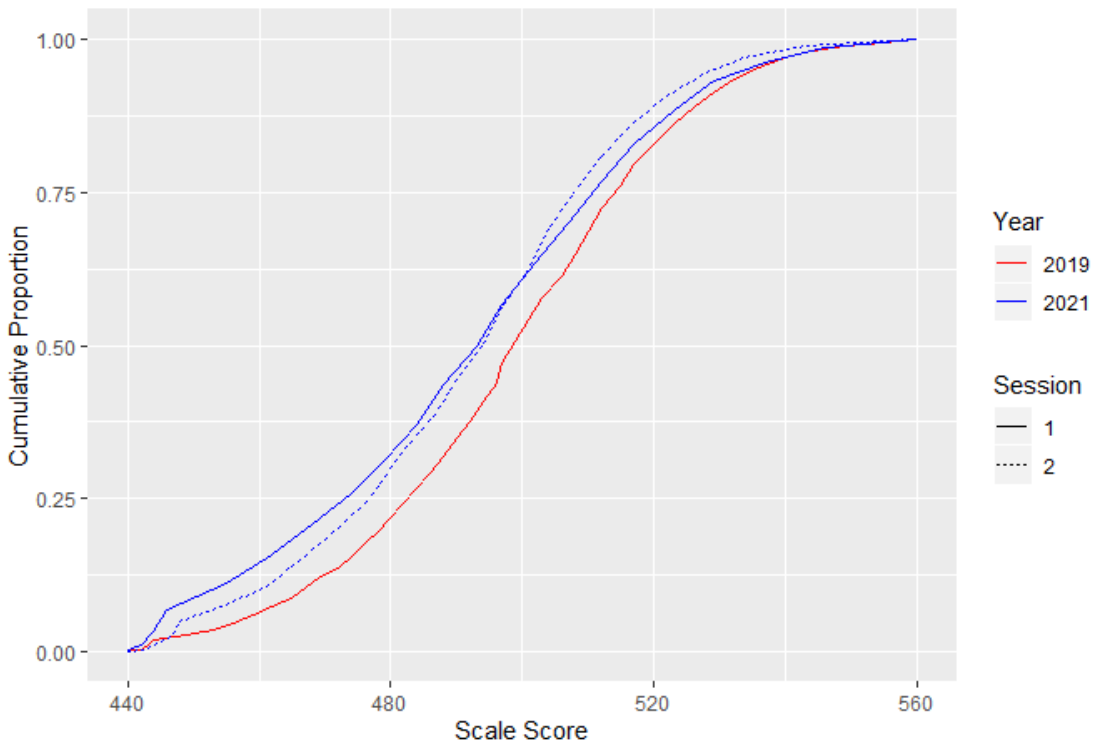
Cumulative Scale Score Distribution: English Language Arts Grade 5



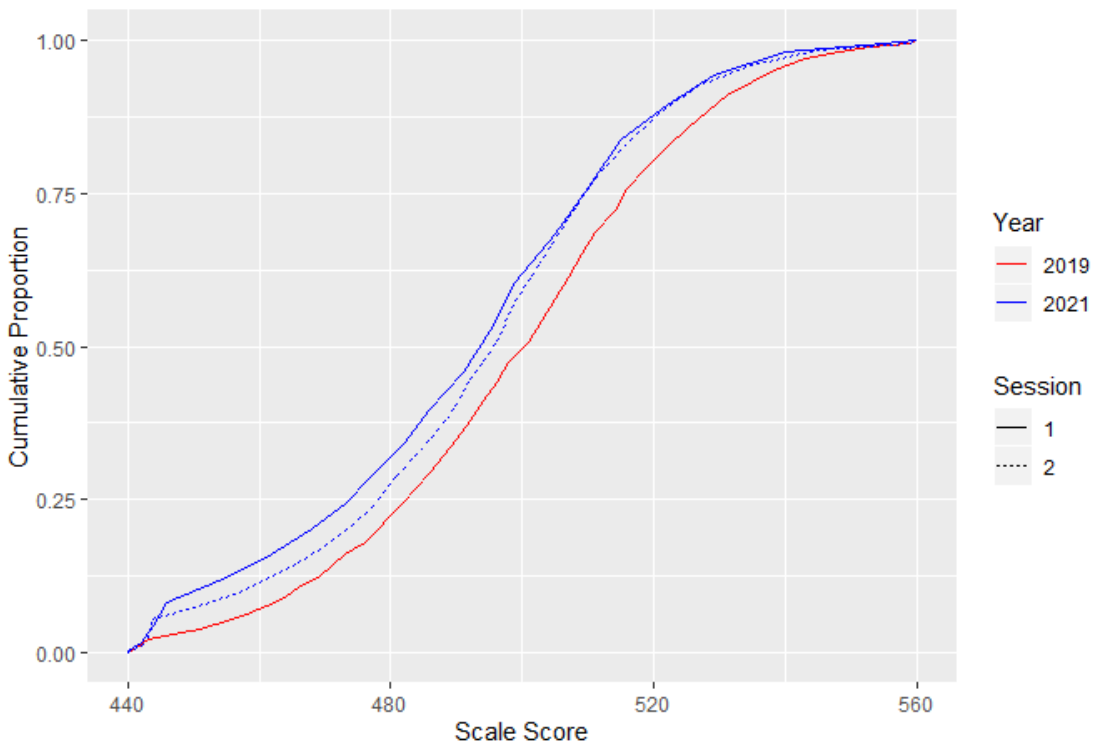
Cumulative Scale Score Distribution: English Language Arts Grade 6



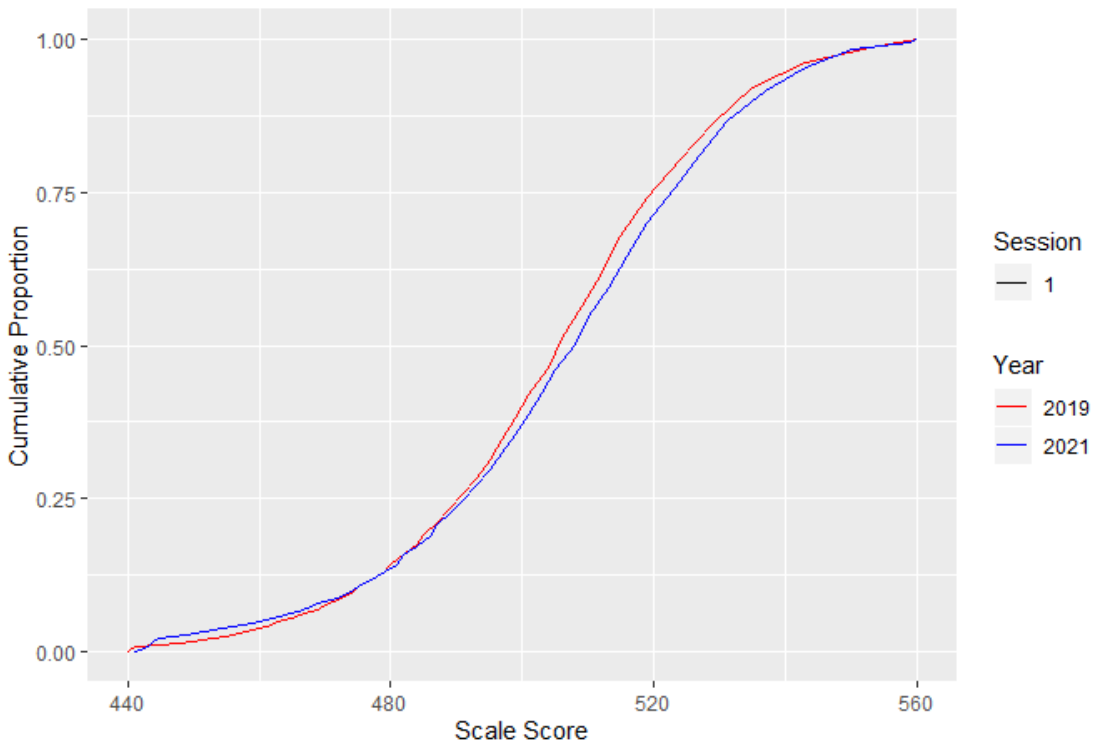
Cumulative Scale Score Distribution: English Language Arts Grade 7



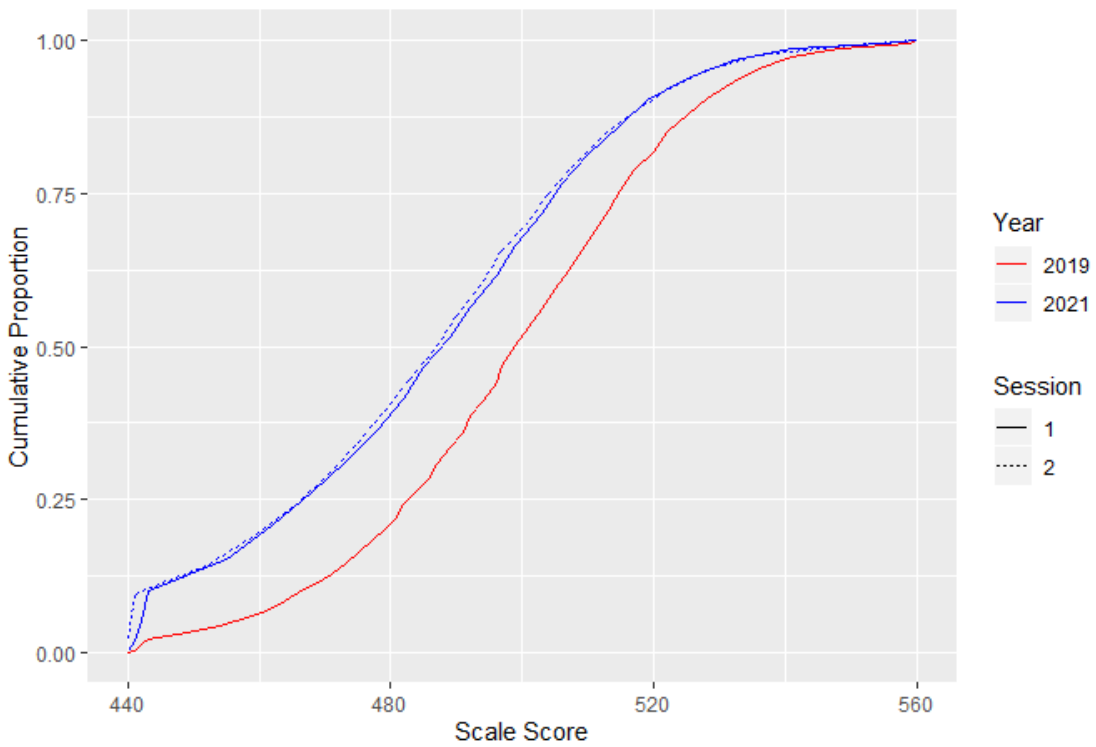
Cumulative Scale Score Distribution: English Language Arts Grade 8



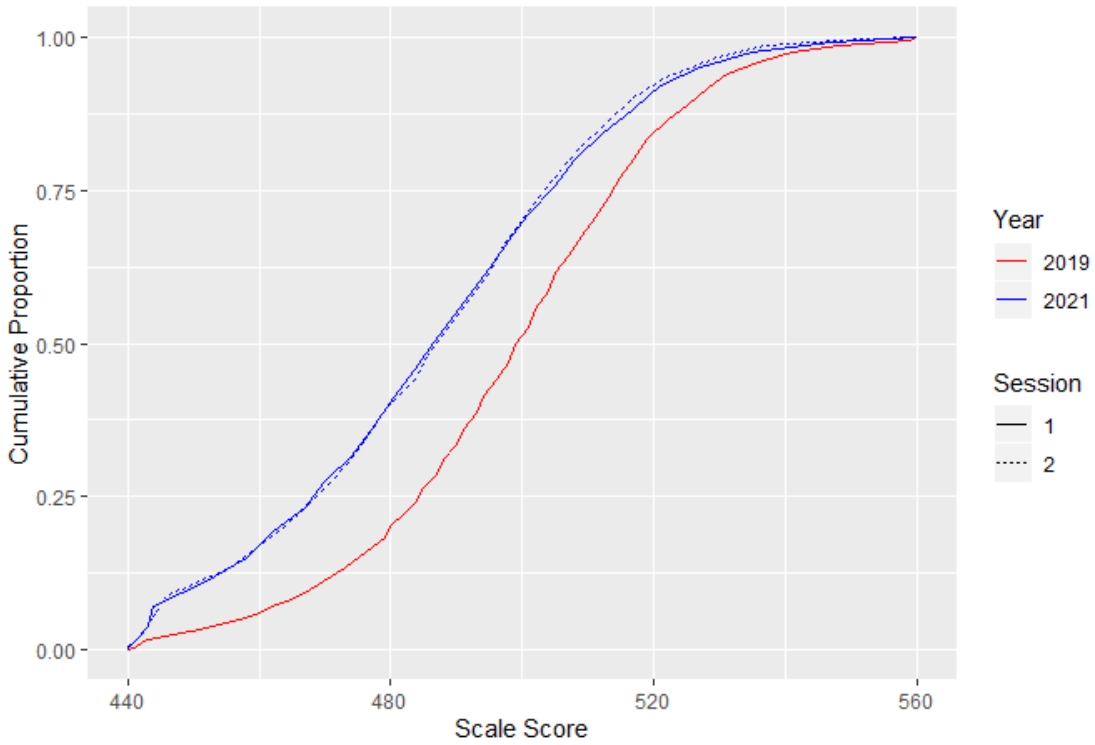
Cumulative Scale Score Distribution: English Language Arts Grade 10



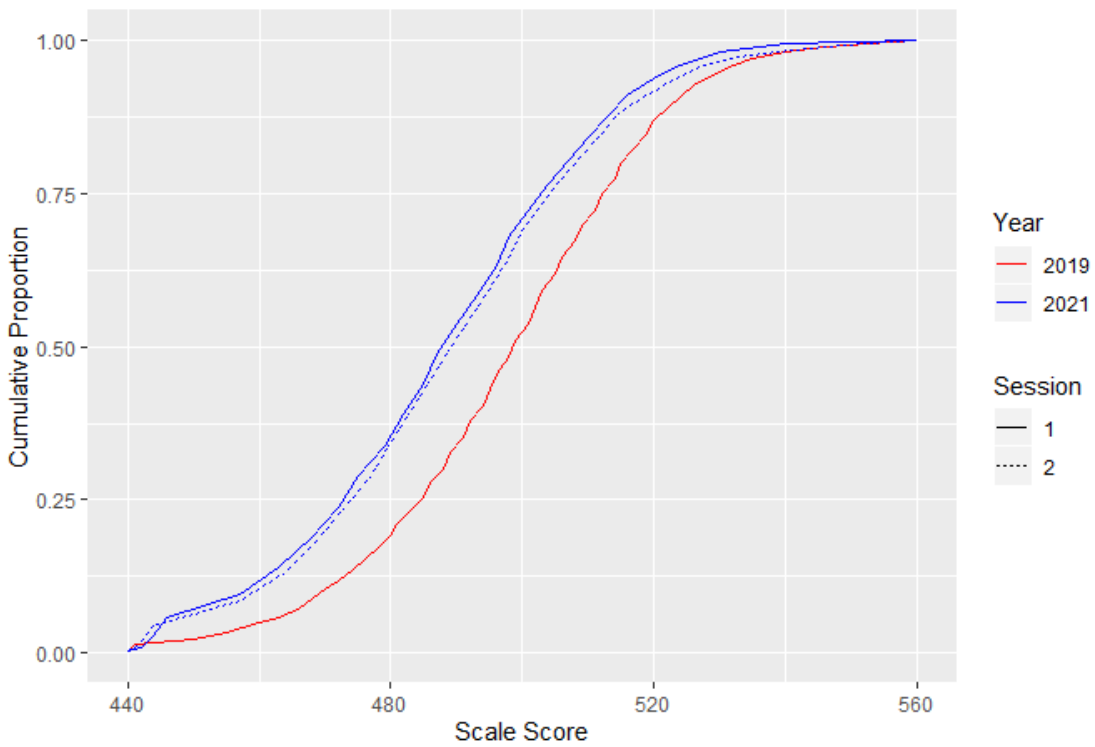
Cumulative Scale Score Distribution: Mathematics Grade 3



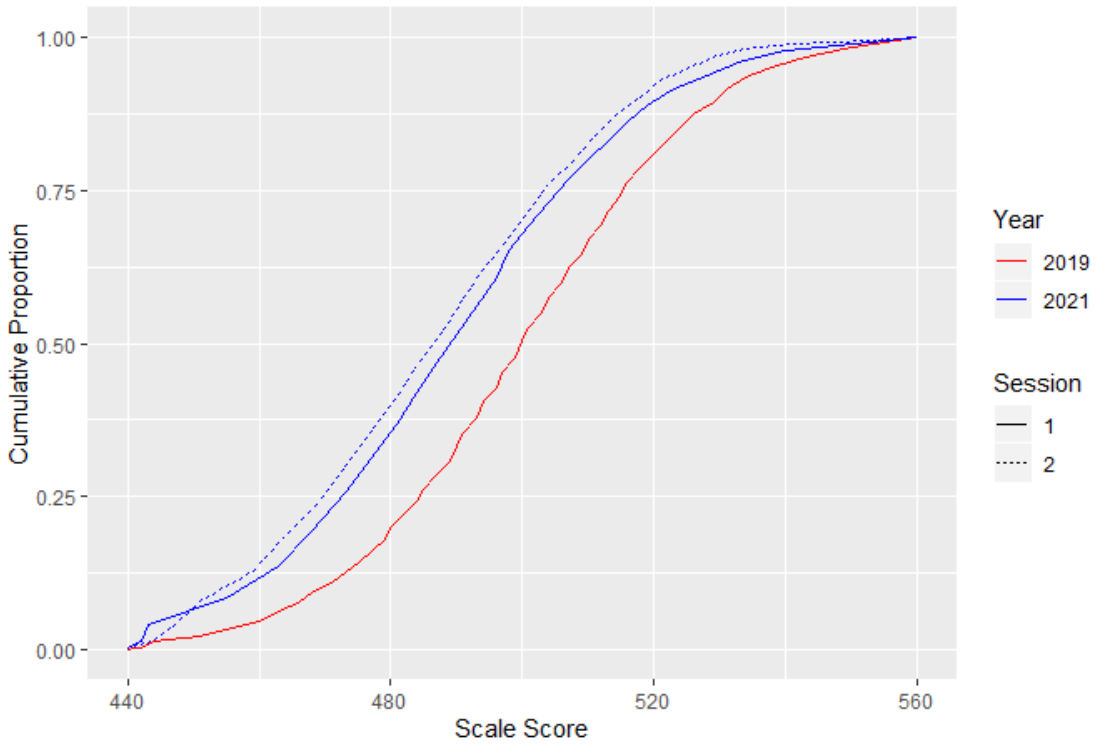
Cumulative Scale Score Distribution: Mathematics Grade 4



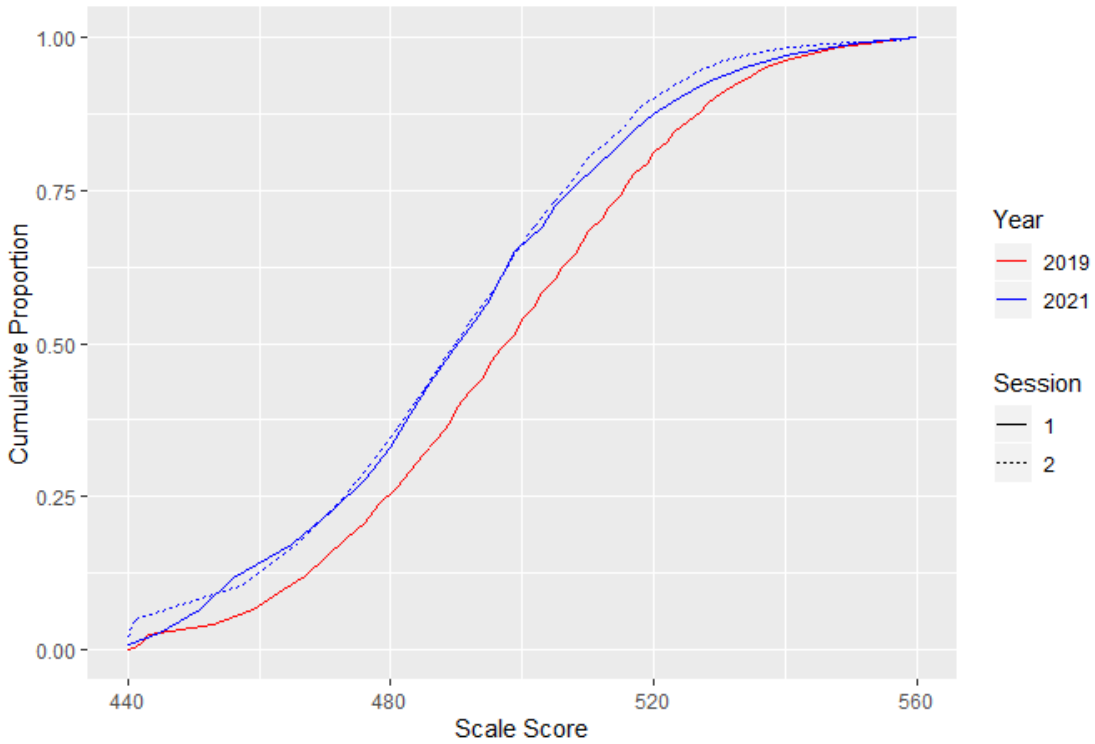
Cumulative Scale Score Distribution: Mathematics Grade 5



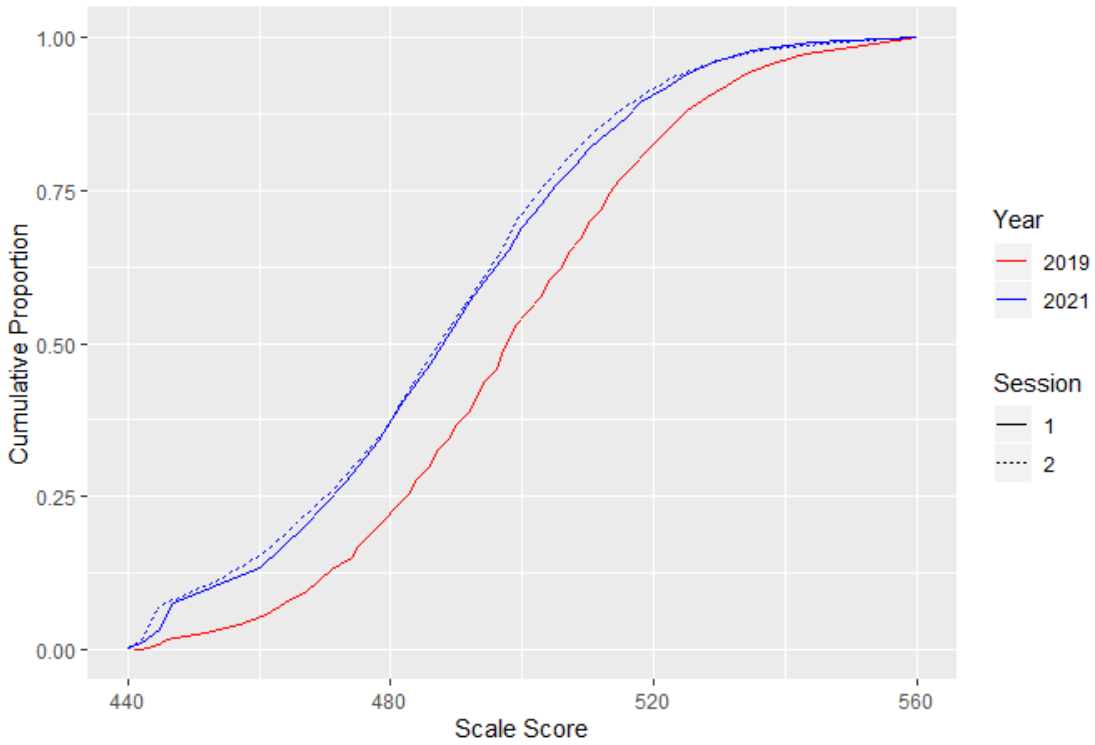
Cumulative Scale Score Distribution: Mathematics Grade 6



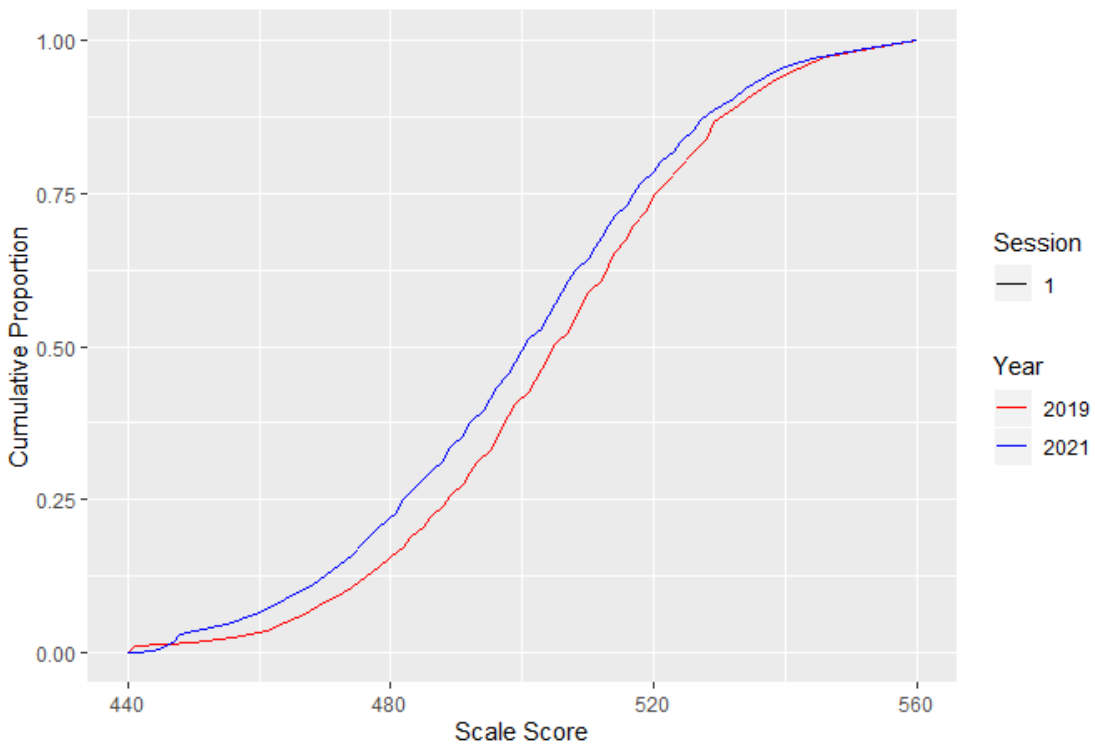
Cumulative Scale Score Distribution: Mathematics Grade 7



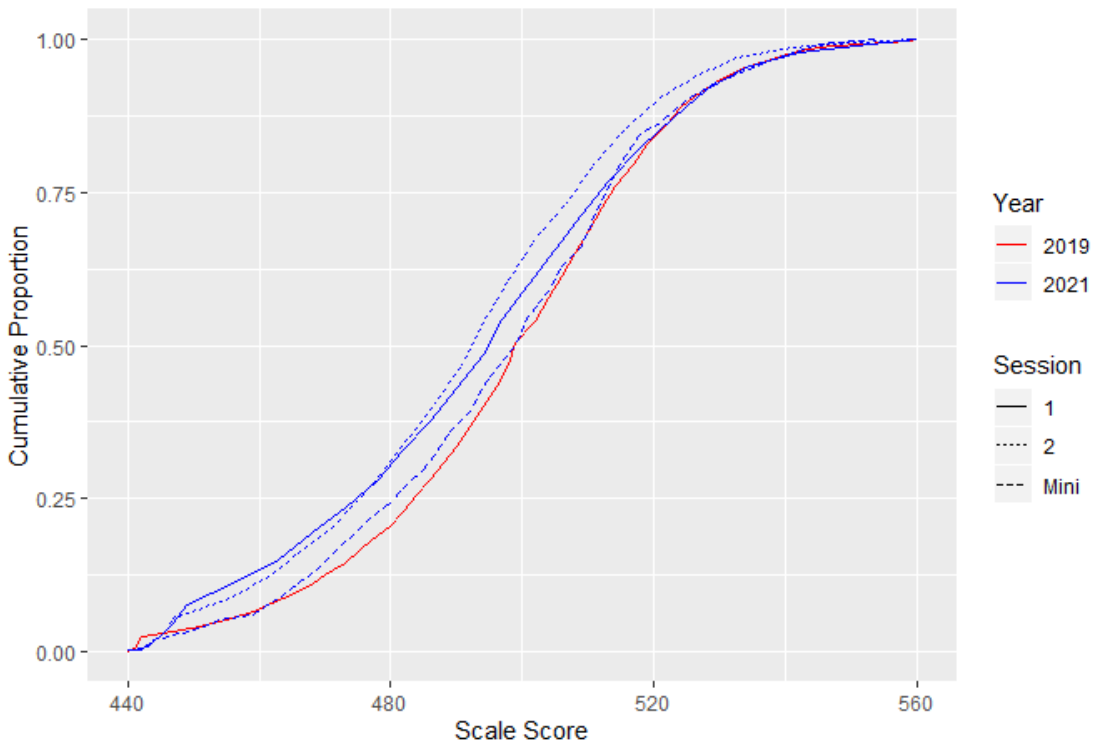
Cumulative Scale Score Distribution: Mathematics Grade 8



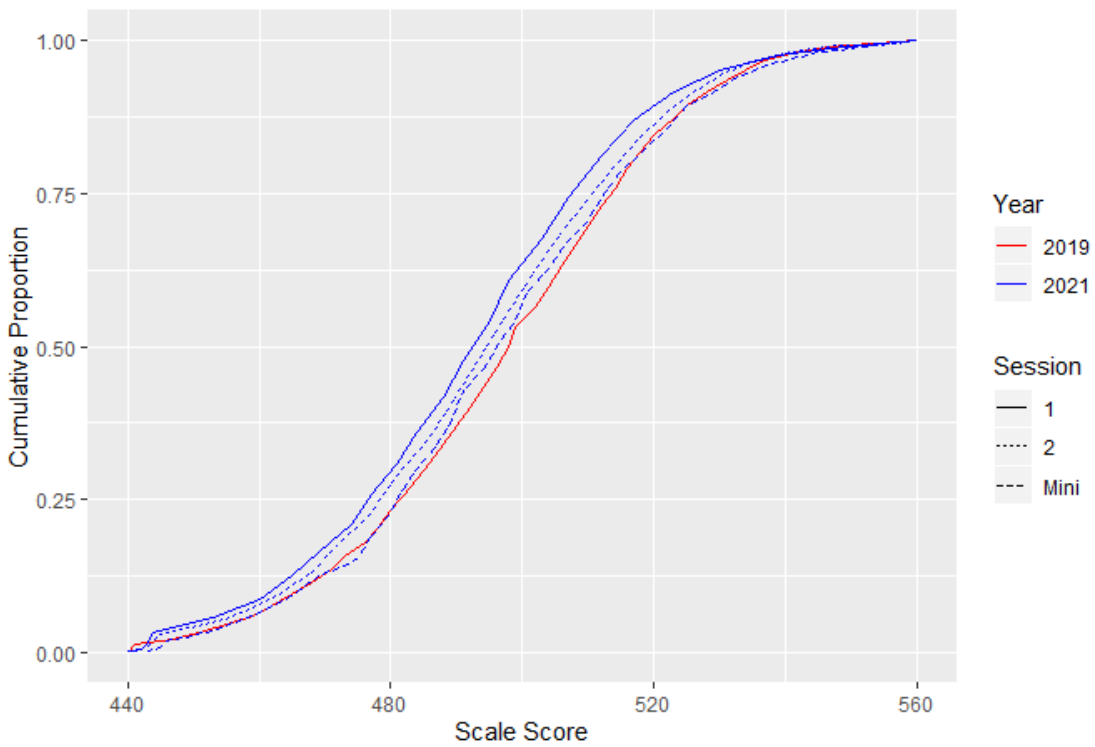
Cumulative Scale Score Distribution: Mathematics Grade 10



Cumulative Scale Score Distribution: Science Grade 5



Cumulative Scale Score Distribution: Science Grade 8



Section 2.2

Lookup Tables

Table 2.2.1—Raw Score to Scale Score Lookup Table: English Language Arts Grade 3

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.173	-3.173	440	440	10.000	10.000	1	1
1	-3.103	-3.026	441	443	10.000	10.000	1	1
2	-3.033	-2.878	443	446	10.000	10.000	1	1
3	-2.335	-2.730	456	448	10.000	10.000	1	1
4	-1.890	-2.582	464	451	10.000	10.000	1	1
5	-1.536	-1.945	471	463	10.000	10.000	2	1
6	-1.226	-1.543	477	471	9.919	10.000	2	2
7	-0.941	-1.245	482	476	9.600	9.824	2	2
8	-0.672	-1.002	487	481	9.422	8.830	2	2
9	-0.409	-0.789	492	485	9.357	8.187	2	2
10	-0.148	-0.595	497	489	9.393	7.763	2	2
11	0.117	-0.410	502	492	9.518	7.487	3	2
12	0.390	-0.231	507	495	9.714	7.322	3	2
13	0.674	-0.051	512	499	9.969	7.246	3	2
14	0.973	0.132	518	502	10.000	7.250	3	3
15	1.290	0.322	524	506	10.000	7.336	3	3
16	1.633	0.524	531	510	10.000	7.516	4	3
17	2.017	0.742	538	514	10.000	7.819	4	3
18	2.474	0.986	546	518	10.000	8.309	4	3
19	3.085	1.270	558	524	10.000	9.120	4	3
20	3.196	1.626	560	530	10.000	10.000	4	4
21	3.196	2.122	560	540	10.000	10.000	4	4
22		2.949		555		10.000		4
23		3.196		560		10.000		4

Table 2.2.2—Raw Score to Scale Score Lookup Table: English Language Arts Grade 4

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.153	-3.153	440	440	10.000	10.000	1	1
1	-2.959	-3.005	444	443	10.000	10.000	1	1
2	-2.765	-2.857	447	446	10.000	10.000	1	1
3	-2.571	-2.710	451	448	10.000	10.000	1	1
4	-2.091	-2.562	460	451	10.000	10.000	1	1
5	-1.731	-2.017	467	461	10.000	10.000	1	1
6	-1.431	-1.639	472	469	9.690	10.000	2	1
7	-1.165	-1.346	477	474	9.122	10.000	2	2
8	-0.917	-1.106	482	479	8.818	8.951	2	2
9	-0.680	-0.903	487	482	8.705	7.856	2	2
10	-0.445	-0.722	491	486	8.725	7.094	2	2
11	-0.209	-0.555	495	489	8.836	6.643	2	2
12	0.033	-0.396	500	492	9.026	6.424	3	2
13	0.286	-0.238	505	495	9.308	6.373	3	2
14	0.556	-0.079	510	498	9.714	6.455	3	2
15	0.852	0.087	515	501	10.000	6.659	3	3
16	1.188	0.263	522	504	10.000	6.986	3	3
17	1.585	0.454	529	508	10.000	7.438	3	3
18	2.097	0.665	539	512	10.000	8.018	4	3
19	2.870	0.902	554	516	10.000	8.726	4	3
20	3.215	1.176	560	522	10.000	9.598	4	3
21		1.505		528		10.000		3
22		1.934		536		10.000		4
23		2.620		549		10.000		4
24		3.215		560		10.000		4

Table 2.2.3—Raw Score to Scale Score Lookup Table: English Language Arts Grade 5

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.360	-3.360	440	440	10.000	10.000	1	1
1	-3.292	-3.272	441	442	10.000	10.000	1	1
2	-3.224	-3.183	442	443	10.000	10.000	1	1
3	-3.157	-3.095	444	445	10.000	10.000	1	1
4	-2.594	-3.007	454	446	10.000	10.000	1	1
5	-2.192	-2.502	461	455	10.000	10.000	1	1
6	-1.860	-2.153	467	461	9.724	9.971	1	1
7	-1.561	-1.879	472	466	9.521	8.664	2	1
8	-1.276	-1.646	477	470	9.449	8.003	2	2
9	-0.998	-1.436	482	474	9.403	7.588	2	2
10	-0.725	-1.240	487	477	9.283	7.379	2	2
11	-0.454	-1.049	491	481	9.110	7.303	2	2
12	-0.185	-0.861	496	484	8.986	7.314	2	2
13	0.087	-0.673	501	487	9.013	7.383	3	2
14	0.372	-0.482	506	491	9.245	7.491	3	2
15	0.677	-0.286	511	494	9.644	7.628	3	2
16	1.011	-0.084	517	498	10.000	7.792	3	2
17	1.380	0.126	524	502	10.000	7.988	3	3
18	1.799	0.346	531	505	10.000	8.231	4	3
19	2.313	0.580	540	510	10.000	8.536	4	3
20	3.056	0.832	553	514	10.000	8.901	4	3
21	3.430	1.107	560	519	10.000	9.298	4	3
22		1.410		524		9.709		3
23		1.749		530		10.000		4
24		2.145		537		10.000		4
25		2.642		546		10.000		4
26		3.373		559		10.000		4
27		3.430		560		10.000		4

Table 2.2.4—Raw Score to Scale Score Lookup Table: English Language Arts Grade 6

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.171	-3.171	440	440	10	10.000	1	1
1	-3.110	-3.088	441	442	10	10.000	1	1
2	-3.049	-3.004	442	443	10	10.000	1	1
3	-2.988	-2.921	443	445	10	10.000	1	1
4	-2.927	-2.838	445	446	10	10.000	1	1
5	-2.386	-2.754	455	448	10	10.000	1	1
6	-1.967	-2.326	463	456	10	10.000	1	1
7	-1.596	-2.000	469	462	10	10.000	1	1
8	-1.245	-1.724	477	467	10	10.000	2	1
9	-0.905	-1.478	483	472	10	9.668	2	2
10	-0.577	-1.250	489	476	10	9.392	2	2
11	-0.260	-1.034	495	481	10	9.169	2	2
12	0.055	-0.828	501	484	10	8.960	3	2
13	0.373	-0.629	507	488	10	8.767	3	2
14	0.700	-0.435	513	492	10	8.609	3	2
15	1.038	-0.244	520	496	10	8.510	3	2
16	1.396	-0.054	527	499	10	8.481	3	2
17	1.790	0.137	534	503	10	8.522	4	3
18	2.244	0.333	543	507	10	8.626	4	3
19	2.803	0.535	553	510	10	8.776	4	3
20	3.150	0.747	560	514	10	8.967	4	3
21	3.150	0.970	560	519	10	9.210	4	3
22		1.208		523		9.541		3
23		1.467		528		10.000		3
24		1.756		534		10.000		4
25		2.086		540		10.000		4
26		2.478		547		10.000		4
27		2.973		557		10.000		4
28		3.150		560		10.000		4
29		3.150		560		10.000		4

Table 2.2.5—Raw Score to Scale Score Lookup Table: English Language Arts Grade 7

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.131	-3.131	440	440	10.000	10.000	1	1
1	-3.034	-3.044	442	442	10.000	10.000	1	1
2	-2.938	-2.958	444	443	10.000	10.000	1	1
3	-2.842	-2.871	446	445	10.000	10.000	1	1
4	-2.335	-2.785	455	447	10.000	10.000	1	1
5	-1.968	-2.699	462	448	10.000	10.000	1	1
6	-1.658	-2.334	468	455	10.000	10.000	1	1
7	-1.376	-2.050	474	461	9.815	9.544	2	1
8	-1.109	-1.812	479	465	9.676	8.698	2	1
9	-0.853	-1.601	484	469	9.570	8.230	2	1
10	-0.605	-1.404	488	473	9.485	7.989	2	2
11	-0.361	-1.216	493	477	9.454	7.873	2	2
12	-0.120	-1.033	497	480	9.504	7.808	2	2
13	0.122	-0.853	502	483	9.633	7.751	3	2
14	0.370	-0.675	507	487	9.820	7.691	3	2
15	0.627	-0.498	512	490	10.000	7.649	3	2
16	0.900	-0.320	517	494	10.000	7.653	3	2
17	1.198	-0.139	523	497	10.000	7.722	3	2
18	1.535	0.048	529	501	10.000	7.852	3	3
19	1.935	0.243	537	504	10.000	8.016	4	3
20	2.439	0.447	546	508	10.000	8.185	4	3
21	3.153	0.665	560	512	10.000	8.374	4	3
22	3.153	0.899	560	517	10.000	8.663	4	3
23		1.159		522		9.177		3
24		1.458		528		10.000		3
25		1.815		534		10.000		4
26		2.262		543		10.000		4
27		2.897		555		10.000		4
28		3.153		560		10.000		4

Table 2.2.6—Raw Score to Scale Score Lookup Table: English Language Arts Grade 8

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-2.964	-2.964	440	440	10.000	10.000	1	1
1	-2.868	-2.926	442	441	10.000	10.000	1	1
2	-2.772	-2.889	444	441	10.000	10.000	1	1
3	-2.676	-2.851	446	442	10.000	10.000	1	1
4	-2.209	-2.813	455	443	10.000	10.000	1	1
5	-1.868	-2.776	462	444	10.000	10.000	1	1
6	-1.581	-2.738	468	444	9.986	10.000	1	1
7	-1.323	-2.403	473	451	9.628	10.000	2	1
8	-1.082	-2.125	477	457	9.358	10.000	2	1
9	-0.853	-1.881	482	462	9.153	9.895	2	1
10	-0.631	-1.660	486	466	9.033	9.472	2	1
11	-0.411	-1.453	491	470	9.014	9.189	2	2
12	-0.189	-1.256	495	474	9.086	8.974	2	2
13	0.040	-1.067	499	478	9.228	8.783	2	2
14	0.280	-0.882	505	481	9.441	8.604	3	2
15	0.537	-0.702	510	485	9.782	8.444	3	2
16	0.821	-0.525	515	489	10.000	8.326	3	2
17	1.149	-0.348	522	492	10.000	8.270	3	2
18	1.549	-0.169	529	496	10.000	8.291	3	2
19	2.068	0.014	540	499	10.000	8.398	4	2
20	2.836	0.204	555	503	10.000	8.589	4	3
21	3.066	0.404	560	507	10.000	8.863	4	3
22		0.619		511		9.226		3
23		0.853		516		9.708		3
24		1.116		521		10.000		3
25		1.423		527		10.000		3
26		1.799		535		10.000		4
27		2.295		545		10.000		4
28		3.039		559		10.000		4
29		3.066		560		10.000		4

Table 2.2.7—Raw Score to Scale Score Lookup Table: English Language Arts Grade 10

Raw Score	Theta	Scale Score	SE(Scale Score)	Performance level
0	-3.157	440	10.000	1
1	-3.131	441	10.000	1
2	-3.106	441	10.000	1
3	-3.081	442	10.000	1
4	-3.055	442	10.000	1
5	-3.030	443	10.000	1
6	-3.005	443	10.000	1
7	-2.979	444	10.000	1
8	-2.954	444	10.000	1
9	-2.929	445	10.000	1
10	-2.721	449	9.493	1
11	-2.546	453	8.570	1
12	-2.394	456	7.869	1
13	-2.260	459	7.327	1
14	-2.138	461	6.903	1
15	-2.026	464	6.568	1
16	-1.922	466	6.303	1
17	-1.824	468	6.092	1
18	-1.731	469	5.924	1
19	-1.642	472	5.790	2
20	-1.555	474	5.684	2
21	-1.470	475	5.601	2
22	-1.387	477	5.538	2
23	-1.305	479	5.492	2
24	-1.224	481	5.462	2
25	-1.144	482	5.447	2
26	-1.063	484	5.445	2
27	-0.981	486	5.458	2
28	-0.899	487	5.484	2
29	-0.816	489	5.524	2
30	-0.731	491	5.578	2
31	-0.644	493	5.644	2
32	-0.555	495	5.724	2
33	-0.463	497	5.816	2
34	-0.367	499	5.922	2
35	-0.268	501	6.044	3
36	-0.165	503	6.186	3
37	-0.056	505	6.353	3
38	0.060	508	6.551	3
39	0.183	510	6.787	3
40	0.314	513	7.068	3
41	0.457	516	7.401	3

continued



Raw Score	Theta	Scale Score	SE(Scale Score)	Performance level
42	0.613	519	7.793	3
43	0.785	523	8.255	3
44	0.978	527	8.805	3
45	1.196	531	9.449	4
46	1.447	537	10.000	4
47	1.739	543	10.000	4
48	2.086	550	10.000	4
49	2.528	559	10.000	4
50	2.559	560	10.000	4
51	2.559	560	10.000	4

Table 2.2.8—Raw Score to Scale Score Lookup Table: Mathematics Grade 3

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-2.782	-2.782	440	440	10.000	10.000	1	1
1	-2.735	-2.769	441	440	10.000	10.000	1	1
2	-2.689	-2.755	442	441	10.000	10.000	1	1
3	-2.642	-2.742	443	441	10.000	10.000	1	1
4	-2.087	-2.213	455	452	10.000	10.000	1	1
5	-1.729	-1.861	462	460	10.000	10.000	1	1
6	-1.454	-1.583	468	466	9.185	9.750	1	1
7	-1.225	-1.347	473	471	8.409	9.142	2	2
8	-1.023	-1.135	478	475	7.909	8.712	2	2
9	-0.838	-0.940	482	479	7.582	8.364	2	2
10	-0.666	-0.758	485	483	7.377	8.062	2	2
11	-0.500	-0.584	489	487	7.266	7.802	2	2
12	-0.338	-0.418	492	490	7.232	7.591	2	2
13	-0.177	-0.255	496	494	7.264	7.438	2	2
14	-0.015	-0.093	499	497	7.356	7.351	2	2
15	0.152	0.070	503	501	7.504	7.336	3	3
16	0.326	0.237	506	504	7.713	7.396	3	3
17	0.510	0.412	510	508	8.000	7.539	3	3
18	0.711	0.599	515	512	8.398	7.779	3	3
19	0.936	0.804	519	517	8.963	8.158	3	3
20	1.197	1.036	525	522	9.756	8.780	3	3
21	1.513	1.319	532	528	10.000	9.893	4	3
22	1.926	1.702	541	536	10.000	10.000	4	4
23	2.587	2.372	555	550	10.000	10.000	4	4
24	2.837	2.837	560	560	10.000	10.000	4	4

Table 2.2.9—Raw Score to Scale Score Lookup Table: Mathematics Grade 4

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-2.812	-2.812	440	440	10.000	10.000	1	1
1	-2.741	-2.719	441	442	10.000	10.000	1	1
2	-2.671	-2.626	443	444	10.000	10.000	1	1
3	-2.601	-2.534	444	446	10.000	10.000	1	1
4	-2.244	-2.118	452	455	10.000	10.000	1	1
5	-1.971	-1.819	458	461	8.969	9.272	1	1
6	-1.744	-1.580	462	466	8.236	8.468	1	1
7	-1.545	-1.376	467	470	7.727	7.915	1	2
8	-1.364	-1.196	470	474	7.365	7.507	2	2
9	-1.196	-1.031	474	477	7.102	7.190	2	2
10	-1.038	-0.878	477	480	6.906	6.933	2	2
11	-0.886	-0.733	480	484	6.758	6.719	2	2
12	-0.739	-0.595	483	486	6.646	6.538	2	2
13	-0.595	-0.461	486	489	6.567	6.386	2	2
14	-0.454	-0.330	489	492	6.525	6.264	2	2
15	-0.313	-0.200	492	495	6.523	6.177	2	2
16	-0.171	-0.069	495	497	6.569	6.137	2	2
17	-0.026	0.063	498	500	6.669	6.158	2	3
18	0.124	0.201	501	503	6.829	6.257	3	3
19	0.282	0.346	505	506	7.057	6.453	3	3
20	0.451	0.503	508	509	7.366	6.764	3	3
21	0.636	0.678	512	513	7.776	7.219	3	3
22	0.842	0.878	517	517	8.318	7.861	3	3
23	1.080	1.117	521	522	9.043	8.784	3	3
24	1.367	1.419	527	529	10.000	10.000	3	3
25	1.738	1.839	535	537	10.000	10.000	4	4
26	2.315	2.518	547	552	10.000	10.000	4	4
27	2.920	2.920	560	560	10.000	10.000	4	4

Table 2.2.10—Raw Score to Scale Score Lookup Table: Mathematics Grade 5

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.126	-3.126	440	440	10.000	10.000	1	1
1	-3.020	-3.030	442	442	10.000	10.000	1	1
2	-2.914	-2.933	444	444	10.000	10.000	1	1
3	-2.808	-2.256	446	457	10.000	10.000	1	1
4	-2.257	-1.876	457	464	10.000	9.747	1	1
5	-1.922	-1.600	463	469	9.539	8.472	1	1
6	-1.669	-1.375	468	473	8.496	7.700	1	2
7	-1.457	-1.182	472	477	7.797	7.200	2	2
8	-1.271	-1.007	475	480	7.298	6.872	2	2
9	-1.100	-0.845	479	483	6.939	6.661	2	2
10	-0.940	-0.691	482	486	6.691	6.533	2	2
11	-0.787	-0.542	485	489	6.532	6.465	2	2
12	-0.638	-0.396	487	492	6.441	6.440	2	2
13	-0.492	-0.251	490	495	6.400	6.444	2	2
14	-0.346	-0.106	493	498	6.389	6.467	2	2
15	-0.200	0.040	496	500	6.388	6.501	2	3
16	-0.054	0.188	498	503	6.383	6.544	2	3
17	0.093	0.340	501	506	6.360	6.596	3	3
18	0.242	0.496	504	509	6.316	6.666	3	3
19	0.393	0.659	507	512	6.262	6.772	3	3
20	0.547	0.832	510	515	6.229	6.942	3	3
21	0.709	1.018	513	519	6.272	7.217	3	3
22	0.883	1.227	516	523	6.460	7.654	3	3
23	1.078	1.468	520	527	6.884	8.337	3	3
24	1.312	1.764	524	533	7.689	9.389	3	4
25	1.621	2.155	530	541	9.225	10.000	4	4
26	2.122	2.758	540	552	10.000	10.000	4	4
27	3.176	3.176	560	560	10.000	10.000	4	4

Table 2.2.11—Raw Score to Scale Score Lookup Table: Mathematics Grade 6

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.028	-3.028	440	440	10.000	10.000	1	1
1	-2.946	-2.851	442	444	10.000	10.000	1	1
2	-2.865	-2.674	443	447	10.000	10.000	1	1
3	-2.261	-2.497	455	451	10.000	10.000	1	1
4	-1.889	-2.096	463	459	10.000	10.000	1	1
5	-1.606	-1.801	468	464	9.141	9.012	1	1
6	-1.373	-1.557	473	469	8.384	8.338	2	1
7	-1.169	-1.343	477	473	7.846	7.890	2	2
8	-0.987	-1.148	481	477	7.448	7.587	2	2
9	-0.819	-0.966	484	481	7.148	7.387	2	2
10	-0.662	-0.791	487	484	6.922	7.261	2	2
11	-0.513	-0.622	490	488	6.755	7.188	2	2
12	-0.369	-0.455	493	491	6.635	7.149	2	2
13	-0.229	-0.289	496	494	6.556	7.127	2	2
14	-0.090	-0.123	498	498	6.513	7.103	2	2
15	0.047	0.043	501	501	6.504	7.059	3	3
16	0.186	0.209	504	504	6.528	6.984	3	3
17	0.327	0.376	507	508	6.587	6.873	3	3
18	0.473	0.542	510	511	6.688	6.736	3	3
19	0.625	0.709	513	514	6.838	6.592	3	3
20	0.787	0.877	516	518	7.053	6.479	3	3
21	0.963	1.051	519	521	7.352	6.463	3	3
22	1.158	1.236	523	525	7.769	6.643	3	3
23	1.384	1.444	528	529	8.374	7.164	3	3
24	1.657	1.697	533	534	9.334	8.246	4	4
25	2.022	2.044	540	541	10.000	10.000	4	4
26	2.643	2.634	553	553	10.000	10.000	4	4
27	3.011	3.011	560	560	10.000	10.000	4	4

Table 2.2.12—Raw Score to Scale Score Lookup Table: Mathematics Grade 7

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-2.859	-2.859	440	440	10.000	10.000	1	1
1	-2.602	-2.847	445	440	10.000	10.000	1	1
2	-2.345	-2.835	451	441	10.000	10.000	1	1
3	-2.088	-2.027	456	457	10.000	10.000	1	1
4	-1.658	-1.592	465	466	10.000	9.985	1	1
5	-1.370	-1.258	471	473	8.729	9.176	2	2
6	-1.145	-0.980	476	479	7.810	8.532	2	2
7	-0.956	-0.742	480	484	7.189	7.944	2	2
8	-0.789	-0.535	483	488	6.754	7.440	2	2
9	-0.637	-0.350	486	492	6.451	7.035	2	2
10	-0.495	-0.182	489	496	6.244	6.720	2	2
11	-0.359	-0.026	492	499	6.110	6.479	2	2
12	-0.228	0.120	495	502	6.030	6.299	2	3
13	-0.100	0.259	497	505	5.989	6.171	2	3
14	0.028	0.393	499	508	5.972	6.084	2	3
15	0.156	0.525	503	510	5.971	6.021	3	3
16	0.285	0.654	505	513	5.980	5.955	3	3
17	0.416	0.782	508	516	6.001	5.867	3	3
18	0.551	0.910	511	518	6.047	5.771	3	3
19	0.692	1.040	514	521	6.143	5.730	3	3
20	0.841	1.176	517	524	6.324	5.835	3	3
21	1.004	1.321	520	527	6.626	6.169	3	3
22	1.188	1.484	524	530	7.093	6.796	3	4
23	1.403	1.675	528	534	7.777	7.758	3	4
24	1.667	1.911	534	539	8.754	9.155	4	4
25	2.012	2.233	541	546	10.000	10.000	4	4
26	2.528	2.788	552	557	10.000	10.000	4	4
27	2.922	2.922	560	560	10.000	10.000	4	4

Table 2.2.13—Raw Score to Scale Score Lookup Table: Mathematics Grade 8

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-2.983	-2.983	440	440	10.000	10.000	1	1
1	-2.869	-2.907	442	442	10.000	10.000	1	1
2	-2.754	-2.831	445	443	10.000	10.000	1	1
3	-2.640	-2.756	447	445	10.000	10.000	1	1
4	-2.012	-2.290	460	454	10.000	10.000	1	1
5	-1.634	-1.957	467	461	9.175	9.974	1	1
6	-1.341	-1.689	473	466	8.354	9.004	2	1
7	-1.097	-1.460	478	471	7.726	8.314	2	2
8	-0.887	-1.257	482	475	7.185	7.799	2	2
9	-0.704	-1.074	486	479	6.746	7.407	2	2
10	-0.541	-0.904	489	482	6.405	7.104	2	2
11	-0.391	-0.744	492	485	6.141	6.863	2	2
12	-0.252	-0.593	495	488	5.939	6.663	2	2
13	-0.120	-0.447	498	491	5.790	6.491	2	2
14	0.008	-0.306	500	494	5.687	6.341	3	2
15	0.132	-0.169	503	497	5.626	6.218	3	2
16	0.254	-0.032	505	499	5.605	6.134	3	2
17	0.377	0.104	508	502	5.623	6.104	3	3
18	0.501	0.244	510	505	5.678	6.149	3	3
19	0.630	0.390	513	508	5.775	6.291	3	3
20	0.765	0.545	516	511	5.919	6.557	3	3
21	0.908	0.716	518	515	6.123	6.982	3	3
22	1.065	0.910	522	519	6.414	7.606	3	3
23	1.243	1.138	525	523	6.849	8.480	3	3
24	1.455	1.419	529	529	7.557	9.681	3	3
25	1.733	1.788	535	536	8.894	10.000	4	4
26	2.182	2.361	544	548	10.000	10.000	4	4
27	2.966	2.966	560	560	10.000	10.000	4	4

Table 2.2.14—Raw Score to Scale Score Lookup Table: Mathematics Grade 10

Raw Score	Theta	Scale Score	SE(Scale Score)	Performance level
0	-3.124	440	10.000	1
1	-3.078	441	10.000	1
2	-3.031	442	10.000	1
3	-2.984	443	10.000	1
4	-2.937	444	10.000	1
5	-2.891	445	10.000	1
6	-2.844	446	10.000	1
7	-2.797	447	10.000	1
8	-2.750	448	10.000	1
9	-2.423	455	10.000	1
10	-2.178	460	8.953	1
11	-1.981	464	8.000	1
12	-1.816	468	7.326	1
13	-1.673	471	6.827	2
14	-1.546	474	6.441	2
15	-1.431	476	6.130	2
16	-1.325	478	5.871	2
17	-1.228	481	5.651	2
18	-1.136	482	5.461	2
19	-1.051	484	5.295	2
20	-0.969	486	5.148	2
21	-0.892	488	5.016	2
22	-0.819	489	4.897	2
23	-0.748	491	4.788	2
24	-0.680	492	4.688	2
25	-0.614	494	4.595	2
26	-0.550	495	4.509	2
27	-0.488	496	4.429	2
28	-0.428	498	4.357	2
29	-0.368	499	4.291	2
30	-0.310	500	4.232	3
31	-0.253	501	4.180	3
32	-0.197	503	4.135	3
33	-0.141	504	4.096	3
34	-0.086	505	4.063	3
35	-0.031	506	4.036	3
36	0.023	507	4.015	3
37	0.078	508	3.999	3
38	0.133	510	3.990	3
39	0.188	511	3.986	3
40	0.244	512	3.988	3
41	0.301	513	3.997	3

continued

Raw Score	Theta	Scale Score	SE(Scale Score)	Performance level
42	0.358	514	4.013	3
43	0.416	516	4.037	3
44	0.476	517	4.070	3
45	0.538	518	4.113	3
46	0.601	520	4.167	3
47	0.667	521	4.235	3
48	0.736	523	4.319	3
49	0.808	524	4.423	3
50	0.885	526	4.552	3
51	0.968	527	4.713	3
52	1.058	529	4.918	3
53	1.157	532	5.185	4
54	1.269	534	5.541	4
55	1.399	537	6.037	4
56	1.556	540	6.768	4
57	1.759	544	7.937	4
58	2.050	551	10.000	4
59	2.490	560	10.000	4
60	2.490	560	10.000	4

Table 2.2.15—Raw Score to Scale Score Lookup Table: Science Grade 5

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-3.130	-3.130	440	440	10.000	10.000	1	1
1	-3.043	-3.061	442	441	10.000	10.000	1	1
2	-2.955	-2.992	443	443	10.000	10.000	1	1
3	-2.868	-2.922	445	444	10.000	10.000	1	1
4	-2.780	-2.853	447	446	10.000	10.000	1	1
5	-2.693	-2.784	449	447	10.000	10.000	1	1
6	-2.312	-2.398	456	455	10.000	10.000	1	1
7	-1.996	-2.085	463	461	10.000	10.000	1	1
8	-1.720	-1.817	468	466	10.000	9.894	1	1
9	-1.472	-1.579	473	471	10.000	9.244	2	2
10	-1.243	-1.361	478	475	10.000	8.754	2	2
11	-1.028	-1.158	482	479	9.841	8.398	2	2
12	-0.824	-0.964	486	483	9.581	8.162	2	2
13	-0.627	-0.774	490	487	9.384	8.041	2	2
14	-0.433	-0.586	494	491	9.248	8.029	2	2
15	-0.242	-0.395	497	494	9.170	8.125	2	2
16	-0.050	-0.199	501	498	9.151	8.320	3	2
17	0.146	0.007	505	502	9.195	8.598	3	3
18	0.347	0.225	509	507	9.313	8.929	3	3
19	0.558	0.456	513	511	9.518	9.256	3	3
20	0.784	0.703	518	516	9.836	9.483	3	3
21	1.029	0.965	523	521	10.000	9.532	3	3
22	1.304	1.247	528	527	10.000	9.568	3	3
23	1.622	1.562	534	533	10.000	10.000	4	4
24	2.012	1.944	542	541	10.000	10.000	4	4
25	2.537	2.446	553	551	10.000	10.000	4	4
26	2.907	2.907	560	560	10.000	10.000	4	4
27	2.907	2.907	560	560	10.000	10.000	4	4

Table 2.2.16—Raw Score to Scale Score Lookup Table: Science Grade 8

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2	Session 1	Session 2
0	-2.978	-2.978	440	440	10.000	10.000	1	1
1	-2.934	-2.899	441	442	10.000	10.000	1	1
2	-2.891	-2.821	442	443	10.000	10.000	1	1
3	-2.848	-2.743	443	445	10.000	10.000	1	1
4	-2.805	-2.233	444	455	10.000	10.000	1	1
5	-2.335	-1.889	453	462	10.000	9.932	1	1
6	-2.005	-1.615	460	468	10.000	8.907	1	1
7	-1.744	-1.376	465	472	9.405	8.471	1	2
8	-1.522	-1.154	469	477	8.634	8.372	1	2
9	-1.325	-0.941	474	481	8.123	8.451	2	2
10	-1.143	-0.731	477	486	7.791	8.599	2	2
11	-0.970	-0.525	481	490	7.592	8.745	2	2
12	-0.801	-0.321	484	494	7.502	8.847	2	2
13	-0.633	-0.120	488	498	7.507	8.885	2	2
14	-0.462	0.078	491	502	7.604	8.850	2	3
15	-0.285	0.273	495	506	7.794	8.754	2	3
16	-0.098	0.466	498	510	8.082	8.625	2	3
17	0.104	0.658	503	514	8.473	8.504	3	3
18	0.323	0.850	507	518	8.962	8.438	3	3
19	0.566	1.047	512	522	9.522	8.468	3	3
20	0.836	1.252	517	526	10.000	8.636	3	3
21	1.138	1.471	523	530	10.000	8.989	3	4
22	1.480	1.714	530	535	10.000	9.584	4	4
23	1.884	1.993	539	541	10.000	10.000	4	4
24	2.395	2.333	549	548	10.000	10.000	4	4
25	2.937	2.777	560	557	10.000	10.000	4	4
26	2.937	2.937	560	560	10.000	10.000	4	4
27	2.937	2.937	560	560	10.000	10.000	4	4

Table 2.2.17—Raw Score to Scale Score Lookup Table: Mini Science Form

Raw Score	Theta		Scale Score		SE(Scale Score)		Performance Level	
	Grade 5	Grade8	Grade 5	Grade8	Grade 5	Grade8	Grade 5	Grade8
0	-3.130	-2.978	440	440	10.000	10.000	1	1
1	-3.101	-2.925	441	441	10.000	10.000	1	1
2	-3.072	-2.872	441	442	10.000	10.000	1	1
3	-3.043	-2.819	442	443	10.000	10.000	1	1
4	-3.014	-2.766	442	444	10.000	10.000	1	1
5	-2.985	-2.713	443	445	10.000	10.000	1	1
6	-2.956	-2.660	443	446	10.000	10.000	1	1
7	-2.927	-2.366	444	452	10.000	9.992	1	1
8	-2.632	-2.138	450	457	10.000	8.734	1	1
9	-2.388	-1.948	455	461	9.965	7.873	1	1
10	-2.178	-1.783	459	464	9.242	7.274	1	1
11	-1.991	-1.636	463	467	8.676	6.857	1	1
12	-1.822	-1.500	466	469	8.221	6.570	1	1
13	-1.666	-1.372	469	473	7.849	6.377	1	2
14	-1.520	-1.250	472	475	7.542	6.254	2	2
15	-1.383	-1.131	475	477	7.289	6.183	2	2
16	-1.251	-1.016	477	480	7.081	6.151	2	2
17	-1.125	-0.901	480	482	6.913	6.150	2	2
18	-1.003	-0.788	482	484	6.782	6.175	2	2
19	-0.883	-0.674	485	487	6.684	6.221	2	2
20	-0.765	-0.559	487	489	6.617	6.285	2	2
21	-0.648	-0.443	489	491	6.580	6.366	2	2
22	-0.532	-0.325	492	494	6.570	6.460	2	2
23	-0.415	-0.204	494	496	6.586	6.566	2	2
24	-0.297	-0.081	496	499	6.625	6.679	2	2
25	-0.177	0.046	499	501	6.687	6.796	2	3
26	-0.054	0.176	501	504	6.768	6.912	3	3
27	0.072	0.310	504	507	6.868	7.022	3	3
28	0.202	0.448	506	510	6.987	7.124	3	3
29	0.337	0.591	509	512	7.125	7.221	3	3
30	0.478	0.740	512	515	7.286	7.319	3	3
31	0.627	0.894	515	519	7.478	7.435	3	3
32	0.785	1.057	518	522	7.712	7.592	3	3
33	0.954	1.230	521	525	8.003	7.822	3	3
34	1.139	1.417	525	529	8.370	8.169	3	3
35	1.343	1.626	529	533	8.837	8.694	3	4
36	1.574	1.867	534	538	9.439	9.494	4	4
37	1.844	2.158	539	544	10.000	10.000	4	4
38	2.172	2.534	545	552	10.000	10.000	4	4
39	2.607	2.937	554	560	10.000	10.000	4	4
40	2.907	2.937	560	560	10.000	10.000	4	4
41	2.907	2.937	560	560	10.000	10.000	4	4

Section 2.3

Rescore Analysis Results



Table 2.3.1—Rescore Analysis

Subject	Grade	UIN	LastYearMean	ThisYearMean	LastYearStDev	ThisYearStDev	EffectSize	AbsDiff
English Language Art	3	EL308855	1.457	1.477	0.827	0.797	0.024	0.020
	3	EL308857	1.290	1.485	0.830	0.839	0.235	0.195
	3	EL626052459	2.162	1.545	1.761	1.556	-0.350	0.616
	4	EL307728	1.641	1.591	0.759	0.767	-0.067	0.051
	4	EL307729	1.541	1.561	0.747	0.724	0.027	0.020
	4	EL624655949	2.832	2.863	1.859	2.012	0.016	0.030
	5	EL626356806	3.246	3.040	1.808	1.249	-0.114	0.206
	6	EL303519	3.645	3.619	2.142	1.129	-0.012	0.025
	6	EL626869132	3.714	3.847	2.100	1.780	0.063	0.133
	7	EL292181	3.837	3.893	2.039	1.401	0.028	0.056
	7	EL628749729	4.643	4.211	1.979	2.048	-0.218	0.432
	8	EL290818	4.548	4.274	1.891	2.002	-0.145	0.274
	8	EL623953378	4.472	4.221	2.008	0.925	-0.125	0.251
Mathematics	4	MA250543	1.653	1.709	1.324	2.042	0.042	0.055
	4	MA311581	2.381	2.335	1.153	2.253	-0.040	0.046
	5	MA311366	1.621	1.616	1.415	1.131	-0.004	0.005
	6	MA307339	3.155	3.155	0.925	1.786	0.000	0.000
	7	MA316886	2.221	2.196	1.124	2.177	-0.022	0.025
	8	MA297652	3.173	3.138	1.228	1.239	-0.029	0.036
	8	MA314812	2.668	2.714	1.481	1.465	0.031	0.045

Section 2.4

Tabled B/B Analysis Results

Table 2.4.1
b/b Analysis
English Language Arts Grade 3

Item Id	Old b	New b	Std Dist	Flag
IA00279	-0.92977	-0.92050	-0.78234	False
IA00280	-0.56172	-0.58150	-1.25408	False
IA00281	0.09026	0.07620	-0.63383	False
IA00282	-0.60316	-0.22780	0.74601	False
IA00283	-0.28528	0.03980	0.17490	False
IA00284	-0.46364	-0.32790	-0.60615	False
IA00285	-0.74705	-0.69470	-0.74616	False
IA00286	0.73610	0.80710	-0.42140	False
IA00287	0.31714	0.69943	-0.13528	False
IA00288	0.86123	0.84847	0.12730	False
IA00422	1.07233	1.34520	-1.10870	False
IA00423	-0.25057	-0.24270	-1.08424	False
IA00424	0.82170	0.85880	-0.16453	False
IA00425	-0.20617	-0.37420	-0.14943	False
IA00426	-0.27711	-0.58910	0.50883	False
IA00428	-0.37066	-0.20300	-0.53712	False
IA00432	-0.58426	-0.91850	0.31564	False
IA00433	-0.68279	-0.77485	-1.00867	False
IA00434	-2.34449	-2.33250	0.64014	False
IA00436	0.09548	-0.22600	0.92788	False
IA00438	0.83810	0.69330	0.77279	False
IA00443	-1.01130	-0.59810	1.34400	False
IA00444	-0.50278	-0.21830	0.18592	False
IA00445	-0.18325	-0.14670	-1.16242	False
IA00446	-0.18033	0.23180	0.51115	False
IA00450	-0.20396	-0.39280	-0.04186	False
IA00451	0.79202	0.92430	-0.67599	False
IA00452	-0.22588	-0.16055	-1.19940	False
IA00453	-0.40439	-0.10340	0.17154	False
IA00458A	1.00727	1.80937	1.30305	False
IA00458D	1.57680	2.49710	1.33442	False
IA00691	-0.57526	-0.62980	-1.09156	False
IA03674	-0.22980	-0.41190	-0.10172	False
IA03675	0.12560	0.09640	-0.52198	False
IA03685	-0.69840	-0.67850	-0.95890	False
IA03686	0.34410	0.26470	-0.05024	False
IA03689	-1.18550	-1.18090	-0.55134	False
IA03690	-0.21350	-0.65870	1.24663	False
IA03691	0.01260	-0.14710	0.02624	False
IA03692	-1.39910	-1.30925	0.09299	False
IA03693	-0.15755	-0.29020	-0.28015	False
IA03694	-0.59830	-0.59200	-1.12744	False
IA03696A	0.58883	1.44203	1.97848	False
IA03696D	2.32673	3.14558	0.07400	False
IA03697	1.13460	0.42790	3.91301	True

Table 2.4.2
b/b Analysis
English Language Arts Grade 4

Item Id	Old b	New b	Std Dist	Flag
IA00218	-1.47899	-1.20120	0.01224	False
IA00219	-1.32580	-1.20980	-1.32455	False
IA00220	0.41841	0.73300	-0.86077	False
IA00221	0.06591	0.23880	-1.71482	False
IA00222	-1.17271	-0.92330	-0.39246	False
IA00223	0.07812	0.38490	-0.71350	False
IA00224	-0.71688	-0.71180	-0.90193	False
IA00225	-0.26222	0.37623	2.04296	False
IA00226	0.03026	0.56487	1.06666	False
IA00289	-0.35621	-0.46150	0.16604	False
IA00407	0.52679	1.06320	0.77805	False
IA00408	-0.39052	-0.01300	0.11567	False
IA00411	-1.29795	-0.69120	2.43023	False
IA00412	-2.02010	-1.56740	1.68616	False
IA00414	0.70188	1.09030	-0.46601	False
IA00415	-0.69205	-0.30290	0.38874	False
IA00416	-1.27948	-0.87780	0.84288	False
IA00419	-1.66447	-1.29605	0.82178	False
IA00421A	0.12301	0.60267	0.58783	False
IA00421D	1.04752	1.29710	-1.70627	False
IA04158	-1.16400	-1.21910	-0.71178	False
IA04159	-0.42150	-0.45610	-0.41703	False
IA04161	-0.30460	-0.40300	0.14453	False
IA04163	0.07916	0.38440	-0.72597	False
IA04165	-0.33510	-0.46780	0.38957	False
IA04167	-0.37165	-0.36140	-0.73137	False
IA04168	-0.11850	-0.42700	1.87266	False
IA04170	0.47075	0.24205	1.61829	False
IA04171	-0.43670	-0.64750	0.92793	False
IA04172	0.16450	0.10460	0.13439	False
IA04174	0.65010	0.69600	-0.38294	False
IA04175	-0.56070	-0.58790	-0.55870	False
IA04176	-0.45900	-0.67620	0.96353	False
IA04391	-1.18750	-1.38720	0.38525	False
IA04392	-1.42470	-1.41690	-1.35402	False
IA04394	-0.26050	-0.24360	-0.71477	False
IA04395	-0.96070	-0.81980	-1.35558	False
IA04396	-0.37280	-0.51410	0.43270	False
IA04397	-0.00080	0.00760	-0.49124	False
IA04398	-0.22090	-0.25530	-0.29637	False
IA04402	0.42280	0.33650	0.49464	False
IA04403	-0.90140	-0.93210	-0.73934	False
IA04408A	0.09393	0.50640	0.08917	False
IA04408D	0.86440	1.34603	0.15133	False
IA04410	-1.18320	-1.26340	-0.53057	False
IA04411	-0.70505	-0.62730	-1.45325	False

Table 2.4.3
b/b Analysis
English Language Arts Grade 5

Item Id	Old b	New b	Std Dist	Flag
IA00209	-0.60004	-0.37240	-0.61860	False
IA00210	-0.18819	0.06500	-0.80420	False
IA00211	-0.04726	0.15000	-0.83272	False
IA00212	-0.45337	-0.30820	-0.90993	False
IA00213	0.08463	0.13190	-0.15108	False
IA00214	-0.23991	-0.02790	-0.93026	False
IA00215	-0.01254	0.29540	-0.71085	False
IA00216	-1.65386	-1.27800	0.69652	False
IA00495	-1.56540	-0.99890	1.38499	False
IA00497	-0.34409	-0.77810	1.44430	False
IA00500	-1.01730	-0.58040	0.49443	False
IA00502	-1.51485	-1.29620	-0.01846	False
IA00503	-2.36647	-3.71650	3.64275	True
IA00506	-0.29694	-0.34850	-0.02739	False
IA00508	0.42877	0.69565	-0.77590	False
IA00509A	0.00829	0.60787	0.42190	False
IA00509D	0.70574	1.08500	-0.92927	False
IA00638	-0.66376	-0.16750	0.48234	False
IA03728	-1.92640	-1.41780	1.40801	False
IA03731	-0.71540	-0.73860	-0.42964	False
IA03733	0.09960	0.20710	-0.37761	False
IA03734	-1.16970	-1.24180	-0.55288	False
IA03736	0.92440	0.84010	0.94984	False
IA03737	0.08690	0.03270	0.24965	False
IA03738	-1.12340	-0.00980	3.23008	True
IA03741	-0.91940	-0.69610	-0.41382	False
IA03743	-0.19840	-0.26405	0.09649	False
IA03744A	0.19626	0.59527	-0.49767	False
IA03744D	0.96352	1.24750	-0.47168	False
IA03859	-1.48580	-1.33800	-0.31734	False
IA03860	-1.14405	-0.94335	-0.34666	False
IA03861	-1.07430	-1.19810	-0.28323	False
IA03862	-0.59090	-0.77940	0.30709	False
IA03864	-2.03020	-1.88760	0.04038	False
IA03866	-1.49950	-1.61710	-0.60300	False
IA03867	-0.38320	-0.43990	-0.06709	False
IA03868	-0.28420	-0.08690	-0.95735	False
IA03872	-0.76150	-0.75995	-0.55903	False
IA03873	-0.06710	-0.25820	0.68119	False
IA03874	-0.15730	-0.02680	-0.64655	False
IA03876A	-0.02759	0.43043	-0.11001	False
IA03876D	0.57453	1.00355	-0.64238	False
IA04457	-0.88890	-0.77410	-0.86181	False
IA04458	0.35170	0.58150	-0.68358	False

Table 2.4.4
b/b Analysis
English Language Arts Grade 6

Item Id	Old b	New b	Std Dist	Flag
IA00173	-1.61264	-0.65580	1.06213	False
IA00174	-0.89312	-0.33970	-0.23904	False
IA00175	-0.65354	-0.01700	0.42021	False
IA00176	-1.59790	-0.80900	0.23324	False
IA00177	-2.42062	-1.46110	0.26069	False
IA00178	-1.14059	-0.56250	-0.36468	False
IA00179	-0.66142	-0.12580	-0.09478	False
IA00180	0.08389	0.15810	-0.43496	False
IA00181A	-0.28780	0.32123	0.65088	False
IA00181D	0.76188	1.19610	0.83126	False
IA00515	-2.11926	-1.28110	-0.04510	False
IA00517	-1.13436	-0.68490	-1.00466	False
IA00518	-1.04450	-0.47860	-0.32901	False
IA00520	0.88895	1.16370	0.15822	False
IA00522	-0.88194	-0.43750	-0.77529	False
IA00523	-0.72268	-0.42020	-0.76834	False
IA00528	-1.82572	-1.06575	-0.14188	False
IA00530	-1.32762	-0.84235	-1.01966	False
IA00531A	-0.49144	0.16563	0.68686	False
IA00531D	0.67275	1.03418	0.37566	False
IA03671A	-0.26313	-0.09693	-0.54712	False
IA03671D	0.84700	1.03288	-0.33059	False
IA03680	0.53460	0.14390	1.44626	False
IA03683	-0.22440	-0.07380	-0.50782	False
IA03699	-0.14550	-0.13950	0.13910	False
IA03700	-0.28760	-0.20995	-0.07757	False
IA03701	-0.84520	-0.45280	-0.99970	False
IA03702	0.03450	0.11280	-0.40569	False
IA03706	-0.44790	-0.38640	0.16525	False
IA03707	-0.60640	-0.16640	-0.51970	False
IA03708	0.54430	0.39740	0.21158	False
IA03858	-0.09130	0.23750	-0.55888	False
IA03973	-1.45040	-0.93550	-0.99462	False
IA03974	-0.59580	-0.32630	-0.73061	False
IA03975	-1.50370	-1.07550	-0.61227	False
IA03977	-0.82450	-0.94170	1.44289	False
IA03979	0.72430	0.52840	0.27623	False
IA03981	-0.65050	-0.48610	-0.14740	False
IA03982	-0.79250	-0.66310	0.17166	False
IA03984A	-0.31049	-0.02790	-1.01211	False
IA03984D	0.79891	0.91920	-0.70863	False
IA04006	-0.38680	-1.32590	5.13081	True
IA04007	0.07305	0.01695	0.23068	False
IA04141	-1.04960	-0.26580	0.76061	False
IA04142	-1.40700	-0.96280	-0.79019	False
IA04453	2.13110	2.02670	-0.49391	False

Table 2.4.5
b/b Analysis
English Language Arts Grade 7

Item Id	Old b	New b	Std Dist	Flag
IA00065	-1.29375	-0.71170	-0.70647	False
IA00066	-1.09050	-0.40780	0.14962	False
IA00067	-0.07467	0.37360	-0.43025	False
IA00068	-1.12877	-0.43570	0.18160	False
IA00069	-0.45904	-0.15500	-1.16040	False
IA00070	-0.13875	-0.40380	2.28470	False
IA00071A	-0.44445	0.38977	1.76129	False
IA00071D	0.65225	1.17912	0.77782	False
IA00081	-1.02931	-0.51280	-0.88715	False
IA00082	-0.39273	0.05430	-0.74043	False
IA00257	-1.78014	-1.20400	-1.20725	False
IA00258	-1.79449	-1.03880	-0.03798	False
IA00262	-0.77688	-0.23960	-0.51062	False
IA00265	-2.68728	-1.68470	0.74081	False
IA00269	-2.33283	-1.52620	-0.21356	False
IA00655	-1.16859	-0.76440	-1.14645	False
IA00657	-1.48855	-0.73440	0.24238	False
IA00658	-1.59407	-1.04560	-1.21287	False
IA00665A	-0.84178	0.05467	1.79399	False
IA00665D	0.22706	0.91654	1.44538	False
IA04038A	-0.31577	0.21210	-0.13477	False
IA04038D	0.65322	1.18100	0.78474	False
IA04040	-0.36235	-0.05235	-1.29148	False
IA04042	-0.85720	-0.58560	-0.56861	False
IA04043	-0.23860	-0.10890	-0.22115	False
IA04044	-0.97580	-0.51430	-1.19876	False
IA04045	-1.32190	-0.92720	-0.93835	False
IA04046	-0.84500	-0.79200	0.85997	False
IA04050	-0.45860	-0.26190	-0.45365	False
IA04052	-0.67375	-0.46585	-0.32314	False
IA04054	-0.84210	-0.82250	1.07726	False
IA04055	-1.01370	-0.81560	0.06422	False
IA04057	-0.98680	-0.94380	1.06050	False
IA04058	-0.36040	-0.20070	-0.30314	False
IA04060	-0.57870	-0.35820	-0.49641	False
IA04061	-0.14700	-0.08685	0.15008	False
IA04062	-1.38740	-0.73020	-0.30029	False
IA04064	0.34020	0.37050	-0.11589	False
IA04065	0.22710	0.12830	0.84203	False
IA04066	0.40630	-0.03260	2.91250	False
IA04067	-1.59060	-1.16500	-0.88678	False
IA04068	-1.31680	-0.89380	-1.12964	False
IA04069	-0.08690	-0.00730	-0.03513	False
IA04071	0.03090	0.00540	0.54543	False
IA04072	-0.59690	-0.15990	-1.00038	False
IA04079A	-0.35673	0.05027	-0.96999	False
IA04079D	0.55673	1.12300	0.94669	False

Table 2.4.6
b/b Analysis
English Language Arts Grade 8

Item Id	Old b	New b	Std Dist	Flag
IA00056	-2.03056	-1.23210	0.80790	False
IA00057	-1.86465	-1.27210	-0.20198	False
IA00058	-0.98095	-0.85010	-0.44120	False
IA00059	-0.49291	-0.36970	-0.75435	False
IA00060	-0.94041	-0.62970	-1.07701	False
IA00061	-0.42532	0.03760	0.13352	False
IA00062	0.03451	0.26750	-0.79439	False
IA00063	0.63593	0.77680	-0.86260	False
IA00064A	-0.97008	-0.02620	2.37798	False
IA00064D	0.18878	0.88348	1.85299	False
IA00368	-1.17975	-0.52300	0.64886	False
IA00371	-0.60996	-0.35400	-1.13719	False
IA00373	0.33642	0.44470	-1.25947	False
IA00374	-0.58072	-0.70960	0.69371	False
IA00376A	-1.21775	-0.15837	2.83197	False
IA00376D	0.34044	0.73718	0.32732	False
IA00378	-0.13654	0.12570	-0.75824	False
IA00379	0.74075	0.14050	2.32037	False
IA00383	-0.72677	-0.33540	-0.47868	False
IA00699	-0.99454	-0.87980	-0.34285	False
IA04153	-0.47610	-0.45220	-0.22129	False
IA04154	-0.57095	-0.55470	-0.11028	False
IA04155	-0.85350	-0.74870	-0.39089	False
IA04156	-0.90990	-0.88450	0.08611	False
IA04179	-0.86120	-0.73400	-0.50828	False
IA04184	0.07690	-0.02860	0.08684	False
IA04190	-0.29480	-0.51890	1.00850	False
IA04193	-0.59250	-0.32910	-1.08363	False
IA04195	-1.16430	-0.84150	-1.17353	False
IA04196	-0.53620	-0.79690	1.38510	False
IA04197	0.04580	-0.12500	0.46802	False
IA04198	-0.80820	-0.68820	-0.50731	False
IA04199	0.17240	0.22980	-0.87709	False
IA04200A	-0.60278	-0.16007	-0.10655	False
IA04200D	0.29988	0.81858	0.96745	False
IA04204	-1.33050	-1.27860	0.24663	False
IA04205	-0.41440	-0.56520	0.69305	False
IA04206	-1.06080	-1.05860	0.32329	False
IA04207	-1.46650	-1.01200	-0.67028	False
IA04208	0.78380	0.48300	0.64484	False
IA04227A	-0.32381	-0.05900	-0.88039	False
IA04227D	0.52657	0.81132	-0.15216	False
IA04387	-0.31460	-0.09520	-1.12302	False
IA04388	-1.10730	-0.59560	-0.09486	False
IA04417	-1.58075	-1.21020	-1.21436	False
IA04465	-2.18740	-1.63960	-0.68253	False

Table 2.4.7
b/b Analysis
English Language Arts Grade 10

Item Id	Old b	New b	Std Dist	Flag
IA03746	-1.06790	-0.85840	-0.18616	False
IA03749	-1.21430	-1.23380	-0.01856	False
IA03750	-1.69050	-1.53590	-0.45682	False
IA03751	-0.93230	-0.92980	-0.50457	False
IA03752	-1.51000	-1.23480	-0.35100	False
IA03757	-1.64460	-1.72160	0.86565	False
IA03758	-1.60810	-1.42270	-0.74407	False
IA03759	0.17870	-0.38330	1.46140	False
IA03763A	-0.93126	-1.09937	0.51086	False
IA03763D	-0.02185	-0.16788	-0.76520	False
IA03765	-1.08820	-1.08680	-0.30181	False
IA03766	-0.02420	-1.13330	4.97722	True
IA03769	-1.71300	-1.37040	-0.20480	False
IA03770	-1.20210	-1.04540	-0.66971	False
IA03773	-1.67360	-1.60930	0.06006	False
IA03775	-0.58270	-0.53940	-0.56601	False
IA03777	-0.25580	-0.15060	0.21429	False
IA03779	-1.26405	-1.01280	-0.18420	False
IA03781	-1.69870	-1.41240	-0.52233	False
IA03784	-1.07510	-0.79050	0.25234	False
IA03787	-1.32060	-1.00890	0.10489	False
IA03790	-1.55985	-1.11805	0.57913	False
IA03846	-0.36260	-0.39425	-0.73568	False
IA03849	-0.16700	0.11760	1.39519	False
IA03852	-0.52145	-0.49660	-0.59888	False
IA03853	-1.52575	-1.46125	-0.12720	False
IA03856A	-0.83792	-1.04783	0.64254	False
IA03856D	0.20686	0.07338	-0.62588	False
IA04029	-1.57485	-1.29490	-0.40430	False
IA04031	-1.31200	-1.01890	0.00486	False
IA04033	-1.87350	-1.62120	-0.80876	False
IA04036	-0.92350	-0.85390	-0.83817	False
IA04110	-0.77245	-0.47400	0.71577	False
IA04111	-1.75420	-1.51210	-0.85558	False
IA04132	-1.79230	-1.37790	0.12330	False
IA04260	-1.10620	-0.80910	0.28770	False
IA04297	-0.25870	-0.17300	0.09443	False
IA04412	-0.83710	-0.83750	-0.60709	False
IA04439	-0.49140	-0.55320	-0.67624	False
IA04440	-0.70495	-0.63090	-0.53660	False

Table 2.4.8
b/b Analysis
Mathematics Grade 3

Item Id	Old b	New b	Std Dist	Flag
IA00769	-2.14981	-1.57920	-0.79241	False
IA00799	0.28471	0.60100	-1.05190	False
IA00834	-0.89072	-0.78570	1.50883	False
IA00838	-1.13737	-0.41840	1.12525	False
IA00850	-0.82994	-0.30980	-0.38185	False
IA00852	-0.44454	-0.22700	0.25987	False
IA00886	-1.24169	-0.77450	-1.09846	False
IA00922	0.15643	0.49070	-1.12401	False
IA00924	0.90644	1.43880	0.83182	False
IA00925	-0.77521	-0.65320	1.28950	False
IA00930	-0.44719	-0.17030	-0.24691	False
IA00932	0.68670	0.60840	2.07194	False
IA01071	-1.04802	-0.82500	0.59835	False
IA02097	-0.12040	0.11600	-0.10873	False
IA02098	-0.29490	-0.18547	1.09049	False
IA02203	-1.02880	-0.88580	1.27163	False
IA02227	-0.33403	0.07183	-1.04417	False
IA02372	0.77350	1.44340	1.92527	False
IA02379	0.72417	0.98700	-0.87456	False
IA02511	-0.49010	0.10460	0.47398	False
IA02515	0.90510	1.33460	-0.05027	False
IA02909	-2.25205	-1.46310	1.01288	False
IA04480	0.42250	0.75670	-1.17496	False
IA04547	-1.75750	-1.08470	0.33364	False
IA04548	-0.25253	0.13823	-1.12148	False
IA04567	-0.04870	0.26490	-0.81592	False
IA04622	1.20310	1.61790	0.01411	False
IA04702	-0.03860	0.34650	-1.03337	False
IA04703	-1.14860	-0.38790	1.47559	False
IA04743	1.37080	1.35400	1.10814	False
IA04753	-1.42680	-0.78710	0.26127	False
IA04754	-1.00980	-0.60470	-0.98600	False
IA04760	-1.72290	-1.24150	-1.18425	False
IA04809	-0.55120	0.28400	2.49540	False
IA04813	-0.94020	-0.60160	-0.46073	False
IA04829	-0.81510	-0.58370	0.37779	False
IA04831	-1.02720	-0.81260	0.65719	False
IA04834	-0.05650	0.37460	-0.65071	False
IA04835	-0.20080	0.24550	-0.61264	False
IA04841	-0.38640	-0.00350	-1.19395	False
IA04844	-0.23920	0.16120	-1.03041	False
IA04852	-0.13070	0.16170	-0.58192	False
IA04853	-0.70610	-0.20380	-0.45559	False
IA04857	-0.01580	0.28400	-0.71870	False
IA04858	0.62033	0.96107	-0.99261	False
IA04860	-0.29360	0.28680	0.47697	False
IA04877	0.11250	0.31990	-0.00902	False
IA05016	1.72090	1.83770	-0.26006	False
IA05017	-0.04420	0.39140	-0.60430	False

Table 2.4.9
b/b Analysis
Mathematics Grade 4

Item Id	Old b	New b	Std Dist	Flag
IA00789	0.47116	0.73390	-0.77785	False
IA00841	-0.50085	-0.30820	-0.48436	False
IA00861	-0.94584	-1.17930	1.70941	False
IA00906	-0.55570	-0.44910	-0.03872	False
IA00913	0.33169	0.86210	0.26897	False
IA00958	0.28365	0.70390	-0.30320	False
IA00961	0.35737	0.33820	0.68706	False
IA01048	0.30497	0.49860	-0.42909	False
IA01049	-0.35950	-0.19110	-0.34702	False
IA01052	0.13356	0.21640	0.13712	False
IA01057	-0.23292	0.03440	-0.85455	False
IA02046	-0.74423	-0.26850	0.06381	False
IA02175	-0.94805	-0.33020	0.82189	False
IA02426	0.40190	0.87170	-0.05308	False
IA02582	-0.40320	-0.19580	-0.55413	False
IA02819	0.42930	-0.45330	5.20529	True
IA02820	-0.90500	-0.15595	1.50440	False
IA02825	0.26010	0.52260	-0.79241	False
IA02841	0.04340	0.49090	-0.14277	False
IA02899	-0.81585	-0.40025	-0.24510	False
IA02902	0.31890	0.93380	0.71152	False
IA02957	0.52022	0.98605	-0.08270	False
IA04488	-0.31910	0.02780	-0.64140	False
IA04618	-0.15940	0.36210	0.25920	False
IA04661	-0.88210	-0.23250	0.98289	False
IA04720	-1.07420	-0.72020	-0.54770	False
IA04750	-1.31340	-0.95600	-0.51201	False
IA04755	0.68040	0.80430	-0.03650	False
IA04889	-1.01540	-0.74690	-0.91936	False
IA04891	-0.16280	0.12170	-0.93909	False
IA04898	0.84270	1.09310	-0.68551	False
IA04923	-1.19610	-0.79500	-0.29239	False
IA04927	0.40430	0.71290	-0.89579	False
IA04928	1.15450	1.71610	0.37032	False
IA04937	-1.11220	-1.02460	0.01888	False
IA04942	0.02370	0.01310	0.61726	False
IA04951	-0.11120	0.20000	-0.84357	False
IA04959	-0.87127	-0.43990	-0.15853	False
IA04965	-0.42060	0.04500	-0.01339	False
IA04975	0.04895	0.18135	-0.12825	False
IA05040	1.03840	1.22740	-0.34993	False
IA05043	0.05700	0.19680	-0.16633	False
IA05044	-0.77550	-0.35480	-0.22147	False
IA05056	-1.57030	-1.21610	-0.50948	False
IA05066	-0.43410	-0.25810	-0.39233	False

Table 2.4.10
b/b Analysis
Mathematics Grade 5

Item Id	Old b	New b	Std Dist	Flag
IA00776	-0.64768	-0.44940	-0.54628	False
IA00803	-0.59114	-0.58580	0.75960	False
IA00806	0.10558	0.65420	0.21106	False
IA00826	-1.62060	-1.50310	-0.03927	False
IA00871	0.13186	0.04500	1.41139	False
IA00872	-0.16060	-0.29120	1.69527	False
IA00874	-0.81403	-0.36670	-0.43665	False
IA00885	-0.78241	-0.44200	-1.16034	False
IA00936	-0.90358	-0.24230	1.01250	False
IA00943	0.11250	0.21810	0.11024	False
IA00989	-1.58309	-0.79540	1.89370	False
IA01032	0.58016	0.66688	0.25648	False
IA01158	0.70715	0.81563	0.11452	False
IA01159	-0.24085	0.18623	-0.59636	False
IA02101	-0.95168	-0.61110	-1.15244	False
IA02306	0.74396	1.11810	-0.99329	False
IA02342	-0.72945	-0.53860	-0.49934	False
IA02396	-1.14380	-1.27910	1.68783	False
IA02545	-0.69890	-0.31070	-0.84077	False
IA02552	0.90100	1.40170	-0.14443	False
IA02680	-0.65517	-0.40415	-0.90292	False
IA02729	0.00920	0.02585	0.70712	False
IA02735	-0.71588	0.00312	1.39505	False
IA02736	-0.19382	0.12705	-1.31583	False
IA02919	-0.04520	0.16910	-0.63050	False
IA02927	-1.36660	-0.59010	1.80947	False
IA04604	-0.07920	0.68990	1.70814	False
IA04705	0.27900	0.95180	1.04319	False
IA04931	0.84570	1.17430	-1.30504	False
IA04933	-0.01410	0.12740	-0.13738	False
IA04938	0.56940	0.96810	-0.82039	False
IA04970	-0.56790	-0.45610	0.04122	False
IA05005	0.13670	0.39590	-0.92662	False
IA05015	1.07490	1.31220	-0.74125	False
IA05019	0.16950	0.47870	-1.26315	False
IA05020	0.05660	0.36270	-1.24670	False
IA05021	0.68560	0.76380	0.31822	False
IA05024	-0.54380	-0.49970	0.49960	False
IA05031	0.49940	0.99520	-0.16152	False
IA05062	-1.15620	-0.46370	1.23352	False
IA05063	-0.75360	-0.33150	-0.60953	False
IA05103	-0.69430	-0.36550	-1.24229	False
IA05179	0.74990	1.24210	-0.19583	False

Table 2.4.11
b/b Analysis
Mathematics Grade 6

Item Id	Old b	New b	Std Dist	Flag
IA00778	-1.11977	-1.10960	-0.51109	False
IA00818	0.85530	0.94660	0.64359	False
IA00827	-0.43982	-0.07120	-0.61345	False
IA00845	-0.11171	0.80120	1.77472	False
IA00846	-0.33236	0.34270	0.79171	False
IA00972	-1.05234	-0.86945	-1.03579	False
IA00992	1.73513	2.88830	1.49405	False
IA01058	0.47245	0.77540	-0.68539	False
IA01136	-0.48436	0.63265	3.05900	True
IA02692	-0.94150	-0.69390	-0.80820	False
IA02704	0.10787	0.35203	-0.68555	False
IA04605	0.70090	0.85940	0.19587	False
IA04656	-1.83050	-2.11730	0.37491	False
IA04722	0.29760	0.62240	-0.92872	False
IA04725	0.91070	0.92890	1.04234	False
IA04758	-0.65520	-0.15970	0.17217	False
IA04763	-0.74532	-0.38055	-0.39256	False
IA04764	0.11070	0.37728	-0.79230	False
IA04776	-0.04830	0.48210	-0.13418	False
IA04855	-0.19520	-0.08180	-0.28771	False
IA04875	0.09640	0.42470	-1.10353	False
IA04878	-0.61290	0.01360	0.77571	False
IA04879	-0.09920	-0.60080	2.77676	False
IA04882	0.05710	0.45340	-0.86863	False
IA04884	-0.94140	-0.58020	-0.25613	False
IA04885	-0.63510	-0.49790	-0.74840	False
IA04886	-0.22150	0.25240	-0.27296	False
IA04893	0.71170	0.88130	0.15039	False
IA04903	0.74320	1.05660	-0.52384	False
IA04904	0.45480	0.85570	-1.15818	False
IA04905	0.39700	0.58540	-0.18780	False
IA04908	0.46360	0.36000	1.28369	False
IA04909	-0.76250	-0.20640	0.55086	False
IA04911	-0.50070	-0.02440	-0.04233	False
IA04914	-1.14000	-1.03990	-0.96406	False
IA05124	1.18450	1.63380	-0.83827	False
IA05126	-0.25800	0.06000	-1.00208	False
IA05128	0.12430	0.82880	0.57665	False
IA05129	1.07540	1.40230	-0.32891	False
IA05135	-0.35000	-0.24200	-0.38287	False
IA05136	0.79960	1.33700	-0.76515	False
IA05137	0.74075	0.96170	-0.07641	False
IA05140	0.61100	1.13580	-0.67848	False
IA05142	0.57080	0.45840	1.41054	False

Table 2.4.12
b/b Analysis
Mathematics Grade 7

Item Id	Old b	New b	Std Dist	Flag
IA00796	0.13145	0.45580	-0.05909	False
IA00807	-0.23550	0.29130	1.18982	False
IA00831	-0.76278	-0.77240	0.21939	False
IA00842	1.00188	1.31015	-0.22851	False
IA00847	-0.33040	0.08650	0.53640	False
IA00883	-1.06622	-1.68510	3.86039	True
IA00909	-1.67685	-1.58190	-0.48618	False
IA00910	0.38259	0.71810	-0.01289	False
IA00945	-1.08666	-0.71650	0.31827	False
IA00948	-1.25261	-1.15150	-0.48783	False
IA00949	-0.31555	-0.06210	-0.44842	False
IA01004	1.08389	1.16100	-0.14836	False
IA01006	-2.12289	-1.32940	2.95223	False
IA01011	0.25144	0.55270	-0.20805	False
IA01016	0.06674	0.22190	-0.70295	False
IA01017	-0.90608	-0.77300	-0.65129	False
IA01018	0.32590	0.46550	-0.58768	False
IA01069	-0.05988	0.22218	-0.29763	False
IA01097	0.46659	0.48910	0.12867	False
IA01108	0.24764	0.58790	0.02696	False
IA02090	-1.12290	-1.04200	-0.35539	False
IA02401	-0.55580	-0.48570	-0.24306	False
IA02711	0.78935	0.93390	-0.57878	False
IA02715	-0.53515	-0.36605	-0.83708	False
IA02722	0.01352	0.17168	-0.72542	False
IA02871	-0.25110	-0.17980	-0.22484	False
IA02875	-0.68960	-0.27570	0.54834	False
IA02884	0.54810	0.80660	-0.49013	False
IA04486	-0.47100	-0.41240	-0.16678	False
IA04490	0.48720	0.77550	-0.30572	False
IA04513	0.91880	1.04670	-0.46778	False
IA04538	-0.70640	-0.43440	-0.30417	False
IA04539	-0.06220	0.14110	-0.77136	False
IA04575	-0.06187	-0.00157	-0.14282	False
IA04625	1.29620	1.12140	1.38527	False
IA04643	0.89990	0.92870	0.12699	False
IA04647	0.31880	0.57430	-0.48904	False
IA04649	-0.07470	0.00920	-0.28594	False
IA04688	1.11070	1.27650	-0.67983	False
IA04690	0.51120	0.70770	-0.86015	False
IA04694	0.19675	0.44818	-0.50338	False
IA04766	0.65510	0.87290	-0.74398	False
IA04767	1.00560	0.91180	0.87358	False
IA04770	0.24670	0.38850	-0.60753	False
IA04771	0.53750	1.46610	3.54320	True
IA05035	0.39090	0.68100	-0.28685	False
IA05086	1.11110	1.18920	-0.15205	False
IA05106	0.82770	0.91180	-0.21181	False
IA05107	-0.09910	-0.11120	0.28972	False
IA05119	-0.03150	0.09540	-0.54109	False
IA05121	0.51532	0.67710	-0.70534	False

Table 2.4.13
b/b Analysis
Mathematics Grade 8

Item Id	Old b	New b	Std Dist	Flag
IA00792	0.43628	0.63010	-0.18837	False
IA00849	-0.72688	-0.49390	-0.28107	False
IA00858	-1.10940	-0.77950	-0.91516	False
IA00864	-0.95344	-0.71038	-0.31677	False
IA00865	0.37275	0.55500	-0.09497	False
IA00903	-0.71994	-0.71720	1.37147	False
IA00905	0.08071	0.70700	0.48359	False
IA00979	0.55941	0.63620	0.63222	False
IA00985	0.21467	0.88460	0.81875	False
IA01033	-0.00034	0.23010	-0.38061	False
IA01035	0.53980	0.48630	1.57118	False
IA01037	0.18734	0.34640	0.10164	False
IA01042	-0.66870	0.58930	4.89926	True
IA01044	-0.70369	-0.60850	0.70483	False
IA01066	-0.38827	-0.08768	-0.82159	False
IA01125	0.17761	0.63530	-0.71164	False
IA02165	-1.08712	-0.80200	-0.59715	False
IA02480	-0.99686	-0.41620	-0.01883	False
IA02495	0.24613	0.34470	0.52657	False
IA02565	-0.01416	0.51440	-0.23372	False
IA02746	0.13270	0.62870	-0.44376	False
IA02747	0.60320	1.05130	-0.71152	False
IA02764	0.21000	0.62323	-1.02575	False
IA02893	-0.43725	-0.35223	0.73464	False
IA02935	0.43080	1.03380	0.37307	False
IA02942	-1.09310	-0.48800	0.14111	False
IA02947	-0.22980	0.08380	-0.94069	False
IA04594	1.05500	1.03160	1.27147	False
IA04607	-0.56970	0.04800	0.31646	False
IA04612	0.20320	0.43223	-0.40344	False
IA04633	1.27370	1.98280	1.27177	False
IA04665	0.29860	0.71190	-1.01085	False
IA04666	0.56040	0.74560	-0.14658	False
IA04671	-1.02230	-0.74880	-0.52420	False
IA04678	0.83780	1.11330	-0.84012	False
IA04712	-0.04010	0.07700	0.43989	False
IA04715	-0.34660	0.17030	-0.37136	False
IA04779	-0.32640	0.07880	-1.17035	False
IA04916	-0.29780	0.20450	-0.46831	False
IA04918	-1.84080	-1.16400	0.53487	False
IA04919	0.47550	0.60940	0.23564	False
IA04920	-2.17420	-1.62750	-0.45360	False
IA04941	0.62935	1.29370	0.84590	False
IA04946	0.36110	0.85270	-0.43834	False
IA04950	-0.85300	-0.39240	-0.85782	False
IA04969	0.11120	0.58450	-0.61029	False
IA05057	-1.15930	-0.95750	0.01298	False
IA05059	-0.67840	-0.16020	-0.41581	False
IA05070	0.88020	0.81480	1.60147	False
IA05073	-0.93480	-0.38900	-0.25914	False
IA05076	0.04710	0.61380	0.05015	False
IA05093	0.03050	0.43150	-1.14266	False
IA05095	-0.28730	0.13700	-1.02683	False
IA05098	-0.27140	0.13990	-1.11762	False

Table 2.4.14
b/b Analysis
Mathematics Grade 10

Item Id	Old b	New b	Std Dist	Flag
IA04800	-0.13540	0.36000	0.34845	False
IA04803	-0.86530	-0.54990	-0.46849	False
IA04805	-0.71130	-0.68090	-0.00928	False
IA04810	0.68370	0.94925	-0.72706	False
IA04815	-0.82070	-0.74990	-0.19768	False
IA04819	-0.38460	-0.27580	-0.36494	False
IA04822	-0.38065	0.00170	-0.16857	False
IA04824	0.31220	0.48430	-0.64411	False
IA04839	-0.45910	-0.42270	-0.03231	False
IA04842	0.78180	0.97860	-0.74939	False
IA04846	-1.59870	-1.35680	-0.79404	False
IA04847	0.78710	0.89250	-0.32763	False
IA04862	-0.46300	-0.29810	-0.62520	False
IA04867	0.63180	0.62080	0.20650	False
IA04871	0.19690	0.20010	0.13296	False
IA04913	0.97160	0.99180	0.06883	False
IA04977	-0.51440	-0.12430	-0.13035	False
IA04991	0.95670	0.95700	0.16037	False
IA04993	0.92740	1.06830	-0.48882	False
IA04996	-0.00890	0.01135	0.05051	False
IA04997	0.38330	0.37595	0.18508	False
IA05048	0.13870	0.47100	-0.40906	False
IA05078	-0.49920	-0.50820	0.17640	False
IA05085	-1.19595	-0.67945	0.46536	False
IA05096	-0.49005	-0.29215	-0.77794	False
IA05117	0.08760	1.07350	2.60720	False
IA05144	-0.00030	1.37640	4.41174	True
IA05145	0.68950	0.90250	-0.82583	False
IA05146	-0.79500	-0.70990	-0.26318	False
IA05147	-2.01320	-1.64370	-0.19772	False
IA05155	0.88120	0.88900	0.12437	False
IA05165	0.16730	0.23508	-0.16549	False
IA05170	0.31372	0.46990	-0.57064	False

Table 2.4.15
b/b Analysis
Science Grade 5

Item Id	Old b	New b	Std Dist	Flag
IA05192	0.96646	1.38467	-0.37812	False
IA05337	-0.29330	-0.23093	-0.30334	False
IA05406	0.03653	0.36007	-0.61982	False
IA05466	-1.78080	-2.02670	0.65414	False
IA05478	0.89030	1.20190	-0.75774	False
IA05479	0.76050	1.05670	-0.79943	False
IA05500	-1.14030	-0.66280	0.07081	False
IA05519	-1.35540	-0.67430	0.83570	False
IA05523	-0.59270	-0.40390	-0.79668	False
IA05526	-1.93810	-1.43570	0.24972	False
IA05530	-0.92610	-1.79640	3.02149	True
IA05538	0.18780	0.55900	-0.46307	False
IA05539	0.14980	-0.42810	2.07622	False
IA05545	0.32770	0.69040	-0.50949	False
IA05560	-0.98020	-0.63900	-0.44303	False
IA05561	-0.03350	0.29860	-0.58090	False
IA05562	-0.72520	-0.36700	-0.40937	False
IA05565	-0.72050	-0.58140	-0.62992	False
IA05566	-1.67815	-1.42600	-0.68994	False
IA05567	-0.95690	-0.56030	-0.24396	False
IA05573	-1.49810	-1.81110	0.92966	False
IA05628	-0.60710	-0.45640	-0.65959	False
IA05630	-0.89430	-0.19710	0.84328	False
IA05631	-0.48110	-0.26050	-0.90008	False
IA05634	0.98793	1.15243	-0.53335	False
IA05657	0.56765	0.59110	-0.06643	False
IA05660	-0.88900	-0.91420	-0.05052	False
IA05661	-0.94170	-0.70970	-0.84477	False
IA05662	-0.93950	-0.64315	-0.61079	False
IA05664	-1.40920	-0.97970	-0.07416	False
IA05677	0.10950	1.27180	2.42515	False
IA05678	-2.33390	-1.82200	0.32809	False
IA05681	0.96850	1.35600	-0.49012	False
IA05688	-1.70450	-1.12520	0.50378	False
IA05697	-0.09445	0.31950	-0.27623	False
IA05701	1.25620	1.36900	-0.31547	False
IA05702	0.47190	0.58580	-0.40626	False
IA05746	-1.14000	-1.05590	-0.47614	False
IA05755	-1.21050	-0.85670	-0.37169	False
IA05756	-1.09900	-1.01185	-0.48270	False
IA05763	-1.39220	-1.17430	-0.84625	False
IA05765	-1.58470	-1.09390	0.16839	False
IA05766	-0.27820	-0.06480	-0.85143	False
IA05768	0.96040	0.00260	3.54872	True
IA05770	0.26030	0.84590	0.30931	False
IA05773	-0.04620	-0.03667	-0.08369	False

Table 2.4.16
b/b Analysis
Science Grade 8

Item Id	Old b	New b	Std Dist	Flag
IA05243	1.02660	1.57120	0.93868	False
IA05245	0.21380	0.64110	0.29938	False
IA05491	-0.40550	-0.36660	-0.38684	False
IA05499	-1.72770	-1.70240	-0.71116	False
IA05522	-0.05890	0.04910	-0.80634	False
IA05524	-1.41600	-1.42520	-0.34442	False
IA05543	0.96450	1.30730	-0.59473	False
IA05550	0.68700	0.84030	-0.91306	False
IA05551	-0.13680	0.20030	-0.28127	False
IA05555	1.41100	1.43260	0.33575	False
IA05581	0.91380	0.88540	0.55935	False
IA05649	-1.15920	-0.94720	-0.91261	False
IA05652	-1.48890	-1.46760	-0.60288	False
IA05653	-0.26680	-0.28960	0.13316	False
IA05654	-0.73780	-0.27550	0.87759	False
IA05665	-2.60860	-1.91070	3.29839	True
IA05675	-0.87610	-0.93060	0.17950	False
IA05685	-1.16070	-0.82740	0.02171	False
IA05686	-0.72010	-0.49740	-0.97271	False
IA05687	-1.37975	-1.36020	-0.55399	False
IA05690	0.19550	0.12800	0.62729	False
IA05691	0.16385	-0.01445	1.47002	False
IA05693	-1.36135	-1.19410	-1.19153	False
IA05694	0.58560	1.30120	2.39822	False
IA05718	-1.11330	-0.85350	-0.55952	False
IA05720	-0.71690	-0.27620	0.70452	False
IA05727	0.00710	0.12280	-0.84421	False
IA05729	0.61243	0.87010	-1.13587	False
IA05732	1.11996	1.54713	0.00438	False
IA05737	0.33030	0.51345	-1.25860	False
IA05750	0.19206	0.12317	0.63690	False
IA05760	-0.47800	-0.21450	-0.73717	False
IA05761	-0.44600	-0.40010	-0.45387	False
IA05776	-1.14820	-1.28080	0.69247	False
IA05777	-0.68805	-0.72215	0.08347	False

Section 2.5

Final Item Parameters

Table 2.5.1
IRT Parameters for Dichotomous Items
English Language Arts Grade 3

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA00422	1.15432	0.00000	1.07230	0.00000	0.16060	0.00000
IA00423	0.92910	0.00000	-0.25060	0.00000	0.29970	0.00000
IA00424	0.63592	0.00000	0.82170	0.00000	0.17540	0.00000
IA00425	0.61917	0.00000	-0.20620	0.00000	0.12360	0.00000
IA00426	1.07866	0.00000	-0.27710	0.00000	0.17570	0.00000
IA00428	1.01564	0.00000	-0.37070	0.00000	0.13380	0.00000
IA00432	0.51111	0.00000	-0.58430	0.00000	0.30860	0.00000
IA00691	0.69718	0.00000	-0.57530	0.00000	0.07840	0.00000
IA03674	0.96814	0.00000	-0.22980	0.00000	0.20090	0.00000
IA03675	0.61158	0.00000	0.12560	0.00000	0.10130	0.00000
IA03685	0.88824	0.00000	-0.69840	0.00000	0.13380	0.00000
IA03686	0.83862	0.00000	0.34410	0.00000	0.14000	0.00000
IA03689	1.06061	0.00000	-1.18550	0.00000	0.14870	0.00000
IA03690	0.61964	0.00000	-0.21350	0.00000	0.12580	0.00000
IA03691	0.49583	0.00000	0.01260	0.00000	0.10550	0.00000
IA03697	0.78601	0.00000	1.13460	0.00000	0.21820	0.00000
IA06351	1.10800	0.04156	0.29900	0.02580	0.20570	0.01140
IA06352	1.19148	0.04192	0.27700	0.02260	0.19040	0.01020
IA06353	1.06808	0.03810	0.74850	0.01820	0.12850	0.00750
IA06354	0.76384	0.02381	0.00400	0.03800	0.02720	0.01700
IA06355	0.76772	0.02857	-0.68910	0.07510	0.12430	0.03530
IA06356	1.07472	0.03186	-0.43580	0.03490	0.09410	0.01920

Table 2.5.2
IRT Parameters for Polytomous Items
English Language Arts Grade 3

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA00433	1.23739	0.00000	-0.68275	0.00000	0.16025	0.00000	-0.16025	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA00434	0.46290	0.00000	-2.34450	0.00000	1.92710	0.00000	-1.92710	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA00436	0.65826	0.00000	0.09545	0.00000	0.78615	0.00000	-0.78615	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA00438	0.75655	0.00000	0.83813	0.00000	2.39983	0.00000	-0.29987	0.00000	-2.09997	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03692	0.92022	0.00000	-1.39910	0.00000	0.84870	0.00000	-0.84870	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03693	0.67019	0.00000	-0.15755	0.00000	0.84125	0.00000	-0.84125	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03694	0.70024	0.00000	-0.59830	0.00000	0.57480	0.00000	-0.57480	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03696A	1.05250	0.00000	0.58887	0.00000	2.42167	0.00000	-0.78153	0.00000	-1.64013	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03696D	0.60494	0.00000	2.32673	0.00000	1.79433	0.00000	0.61423	0.00000	-0.59458	0.00000	-1.81398	0.00000	0.00000	0.00000	n/a	n/a

Table 2.5.3
IRT Parameters for Dichotomous Items
English Language Arts Grade 4

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA04158	0.56955	0.00000	-1.16400	0.00000	0.05230	0.00000
IA04161	0.42175	0.00000	-0.30460	0.00000	0.07170	0.00000
IA04165	0.49976	0.00000	-0.33510	0.00000	0.05300	0.00000
IA04168	0.69935	0.00000	-0.11850	0.00000	0.22090	0.00000
IA04171	0.59253	0.00000	-0.43670	0.00000	0.07620	0.00000
IA04172	0.57731	0.00000	0.16450	0.00000	0.13050	0.00000
IA04174	0.75262	0.00000	0.65010	0.00000	0.10910	0.00000
IA04175	0.75450	0.00000	-0.56070	0.00000	0.16710	0.00000
IA04176	0.57460	0.00000	-0.45900	0.00000	0.08820	0.00000
IA04391	0.79347	0.00000	-1.18750	0.00000	0.12610	0.00000
IA04392	0.46473	0.00000	-1.42470	0.00000	0.06600	0.00000
IA04394	0.79547	0.00000	-0.26050	0.00000	0.10620	0.00000
IA04395	1.24491	0.00000	-0.96070	0.00000	0.13420	0.00000
IA04396	0.54909	0.00000	-0.37280	0.00000	0.07950	0.00000
IA04397	0.84086	0.00000	-0.00080	0.00000	0.23450	0.00000
IA04398	0.65297	0.00000	-0.22090	0.00000	0.08180	0.00000
IA04402	0.50265	0.00000	0.42280	0.00000	0.23830	0.00000
IA04403	0.70306	0.00000	-0.90140	0.00000	0.16070	0.00000
IA06363	1.40112	0.04691	-0.10680	0.02300	0.26640	0.01080
IA06364	1.39371	0.04979	-0.18120	0.02680	0.33450	0.01180
IA06365	1.99765	0.07866	-0.67040	0.02530	0.32270	0.01470
IA06366	1.05050	0.03868	0.22170	0.02690	0.23320	0.01120
IA06367	1.57084	0.04780	-0.29530	0.02100	0.22890	0.01090
IA06368	1.42928	0.03745	-0.47240	0.02130	0.11810	0.01200

Table 2.5.4
IRT Parameters for Polytomous Items
English Language Arts Grade 4

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA04159	0.66755	0.00000	-0.42150	0.00000	0.98810	0.00000	-0.98810	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04163	0.99683	0.00000	0.07917	0.00000	1.27437	0.00000	0.01167	0.00000	-1.28603	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04167	0.76943	0.00000	-0.37165	0.00000	1.20965	0.00000	-1.20965	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04170	0.58948	0.00000	0.47075	0.00000	0.30135	0.00000	-0.30135	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04408A	0.94656	0.00000	0.09393	0.00000	1.47183	0.00000	-0.13437	0.00000	-1.33747	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04408D	0.81846	0.00000	0.86440	0.00000	1.76310	0.00000	0.71020	0.00000	-0.56630	0.00000	-1.90700	0.00000	0.00000	0.00000	n/a	n/a
IA04410	0.77055	0.00000	-1.18320	0.00000	1.04110	0.00000	-1.04110	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04411	0.79077	0.00000	-0.70505	0.00000	1.16315	0.00000	-1.16315	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

Table 2.5.5
IRT Parameters for Dichotomous Items
English Language Arts Grade 5

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA03728	0.31946	0.00000	-1.92640	0.00000	0.16830	0.00000
IA03731	1.13298	0.00000	-0.71540	0.00000	0.22820	0.00000
IA03733	0.49700	0.00000	0.09960	0.00000	0.10500	0.00000
IA03734	0.59277	0.00000	-1.16970	0.00000	0.13720	0.00000
IA03736	0.71176	0.00000	0.92440	0.00000	0.15590	0.00000
IA03737	0.57396	0.00000	0.08690	0.00000	0.07840	0.00000
IA03738	0.33668	0.00000	-1.12340	0.00000	0.14930	0.00000
IA03859	0.86737	0.00000	-1.48580	0.00000	0.07170	0.00000
IA03861	0.64327	0.00000	-1.07430	0.00000	0.10700	0.00000
IA03862	0.64709	0.00000	-0.59090	0.00000	0.17510	0.00000
IA03864	0.38548	0.00000	-2.03020	0.00000	0.14610	0.00000
IA03866	0.45056	0.00000	-1.49950	0.00000	0.13910	0.00000
IA03868	0.94821	0.00000	-0.28420	0.00000	0.18550	0.00000
IA03873	0.60417	0.00000	-0.06710	0.00000	0.13020	0.00000
IA03874	0.59641	0.00000	-0.15730	0.00000	0.17700	0.00000
IA04457	0.47895	0.00000	-0.88890	0.00000	0.11160	0.00000
IA04458	0.63245	0.00000	0.35170	0.00000	0.12660	0.00000
IA06344	0.34827	0.01481	-1.26810	0.17590	0.05560	0.04690
IA06345	0.76408	0.02404	-1.28010	0.07110	0.07730	0.03550
IA06346	0.71046	0.02305	-0.94550	0.06560	0.06320	0.02950
IA06347	0.84421	0.02510	-0.75150	0.04340	0.05670	0.02070
IA06348	1.32528	0.04527	-1.50800	0.04980	0.15700	0.03430
IA06349	0.58377	0.03075	0.43410	0.05980	0.20470	0.01880
IA06350	0.91376	0.03233	-1.35440	0.07180	0.17290	0.03740

Table 2.5.6
IRT Parameters for Polytomous Items
English Language Arts Grade 5

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA03741	0.55750	0.00000	-0.91940	0.00000	0.42910	0.00000	-0.42910	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03743	0.65973	0.00000	-0.19840	0.00000	0.76790	0.00000	-0.76790	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03744A	1.02205	0.00000	0.19627	0.00000	1.60067	0.00000	-0.09233	0.00000	-1.50833	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03744D	0.99730	0.00000	0.96353	0.00000	2.32313	0.00000	0.69993	0.00000	-0.93778	0.00000	-2.08528	0.00000	0.00000	0.00000	n/a	n/a
IA03860	0.41287	0.00000	-1.14405	0.00000	0.17435	0.00000	-0.17435	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03867	0.46337	0.00000	-0.38320	0.00000	2.08050	0.00000	-2.08050	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03872	0.60400	0.00000	-0.76150	0.00000	0.29660	0.00000	-0.29660	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03876A	1.09877	0.00000	-0.02757	0.00000	1.69643	0.00000	-0.12827	0.00000	-1.56817	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03876D	1.06443	0.00000	0.57453	0.00000	2.56513	0.00000	0.41253	0.00000	-0.90178	0.00000	-2.07588	0.00000	0.00000	0.00000	n/a	n/a

Table 2.5.7
IRT Parameters for Dichotomous Items
English Language Arts Grade 6

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA03680	0.46149	0.00000	0.53460	0.00000	0.09490	0.00000
IA03683	0.59101	0.00000	-0.22440	0.00000	0.10380	0.00000
IA03699	0.72387	0.00000	-0.14550	0.00000	0.36940	0.00000
IA03701	0.69900	0.00000	-0.84520	0.00000	0.20030	0.00000
IA03702	0.55509	0.00000	0.03450	0.00000	0.12760	0.00000
IA03706	0.62898	0.00000	-0.44790	0.00000	0.11290	0.00000
IA03707	0.50441	0.00000	-0.60640	0.00000	0.14800	0.00000
IA03708	0.43322	0.00000	0.54430	0.00000	0.20570	0.00000
IA03973	0.52646	0.00000	-1.45040	0.00000	0.09980	0.00000
IA03974	0.36296	0.00000	-0.59580	0.00000	0.10640	0.00000
IA03975	0.38842	0.00000	-1.50370	0.00000	0.07600	0.00000
IA03977	0.42716	0.00000	-0.82450	0.00000	0.23650	0.00000
IA03979	0.46226	0.00000	0.72430	0.00000	0.17280	0.00000
IA03981	0.41834	0.00000	-0.65050	0.00000	0.09160	0.00000
IA03982	0.54903	0.00000	-0.79250	0.00000	0.23910	0.00000
IA04006	0.31558	0.00000	-0.38680	0.00000	0.20610	0.00000
IA04141	0.54339	0.00000	-1.04960	0.00000	0.22960	0.00000
IA04453	0.42575	0.00000	2.13110	0.00000	0.26910	0.00000
IA06450	0.51717	0.01811	0.02990	0.05850	0.06970	0.01740
IA06451	1.00024	0.03310	-0.01210	0.02930	0.25360	0.00970
IA06452	0.55344	0.02099	-0.66990	0.08730	0.17950	0.02590
IA06453	0.60018	0.01570	-0.87440	0.05570	0.02200	0.02030
IA06454	0.36626	0.01217	-1.48360	0.14100	0.04170	0.03860
IA06455	0.47978	0.01382	-1.27230	0.09240	0.03510	0.03070
IA06456	0.69042	0.02910	0.79190	0.03640	0.25090	0.00990
IA06457	0.90976	0.02945	-1.32390	0.05840	0.20900	0.02500

Table 2.5.8
IRT Parameters for Polytomous Items
English Language Arts Grade 6

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA03671A	1.01822	0.00000	-0.26310	0.00000	1.54380	0.00000	-0.11350	0.00000	-1.43030	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03671D	1.09142	0.00000	0.84700	0.00000	2.56740	0.00000	1.01660	0.00000	-0.23830	0.00000	-1.23070	0.00000	-2.11500	0.00000	0.00000	0.00000
IA03700	0.54809	0.00000	-0.28760	0.00000	0.65870	0.00000	-0.65870	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03858	0.37772	0.00000	-0.09130	0.00000	0.43240	0.00000	-0.43240	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03984A	1.07513	0.00000	-0.31050	0.00000	1.58880	0.00000	-0.10600	0.00000	-1.48280	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03984D	1.03557	0.00000	0.79892	0.00000	2.69782	0.00000	0.98892	0.00000	-0.26568	0.00000	-1.26638	0.00000	-2.15468	0.00000	0.00000	0.00000
IA04007	0.43427	0.00000	0.07305	0.00000	0.19875	0.00000	-0.19875	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04142	0.36302	0.00000	-1.40700	0.00000	2.61250	0.00000	-2.61250	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

Table 2.5.9
IRT Parameters for Dichotomous Items
English Language Arts Grade 7

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA04042	0.63180	0.00000	-0.85720	0.00000	0.16340	0.00000
IA04043	0.62393	0.00000	-0.23860	0.00000	0.17140	0.00000
IA04044	0.55726	0.00000	-0.97580	0.00000	0.12140	0.00000
IA04045	1.01105	0.00000	-1.32190	0.00000	0.15850	0.00000
IA04046	0.78166	0.00000	-0.84500	0.00000	0.20220	0.00000
IA04050	0.69947	0.00000	-0.45860	0.00000	0.19090	0.00000
IA04054	0.50952	0.00000	-0.84210	0.00000	0.18210	0.00000
IA04055	0.66543	0.00000	-1.01370	0.00000	0.17320	0.00000
IA04057	0.62928	0.00000	-0.98680	0.00000	0.14720	0.00000
IA04058	0.55362	0.00000	-0.36040	0.00000	0.15170	0.00000
IA04060	0.84198	0.00000	-0.57870	0.00000	0.26650	0.00000
IA04062	0.78407	0.00000	-1.38740	0.00000	0.09060	0.00000
IA04064	0.65038	0.00000	0.34020	0.00000	0.15060	0.00000
IA04065	0.42287	0.00000	0.22710	0.00000	0.06210	0.00000
IA04066	0.60829	0.00000	0.40630	0.00000	0.19230	0.00000
IA04067	0.86026	0.00000	-1.59060	0.00000	0.08820	0.00000
IA04068	0.97237	0.00000	-1.31680	0.00000	0.20490	0.00000
IA04071	0.41858	0.00000	0.03090	0.00000	0.18230	0.00000
IA04072	0.33163	0.00000	-0.59690	0.00000	0.06800	0.00000
IA06496	0.74962	0.02469	-0.29710	0.03910	0.09110	0.01560
IA06497	0.53333	0.01911	-1.49120	0.11590	0.07840	0.04400
IA06498	0.68942	0.03639	0.60550	0.04170	0.28170	0.01280
IA06499	0.68889	0.01687	-2.28710	0.07930	0.04650	0.04320
IA06500	0.56831	0.02440	-0.87490	0.10080	0.14830	0.03450
IA06501	0.67019	0.02869	0.27130	0.04160	0.17060	0.01430
IA06502	0.52216	0.02063	-1.03570	0.10710	0.08630	0.03720

Table 2.5.10
IRT Parameters for Polytomous Items
English Language Arts Grade 7

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA04038A	1.35309	0.00000	-0.31577	0.00000	1.23333	0.00000	-0.06147	0.00000	-1.17187	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04038D	1.21370	0.00000	0.65324	0.00000	2.27984	0.00000	0.95534	0.00000	-0.15066	0.00000	-1.16276	0.00000	-1.92176	0.00000	0.00000	0.00000
IA04040	0.53768	0.00000	-0.36235	0.00000	1.00715	0.00000	-1.00715	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04052	0.48936	0.00000	-0.67375	0.00000	0.16905	0.00000	-0.16905	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04061	0.49512	0.00000	-0.14700	0.00000	0.26580	0.00000	-0.26580	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04069	0.53163	0.00000	-0.08690	0.00000	0.19600	0.00000	-0.19600	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04079A	1.11152	0.00000	-0.35673	0.00000	1.41817	0.00000	-0.21913	0.00000	-1.19903	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04079D	1.04621	0.00000	0.55672	0.00000	2.67102	0.00000	0.87042	0.00000	-0.24068	0.00000	-1.18408	0.00000	-2.11668	0.00000	0.00000	0.00000

Table 2.5.11
IRT Parameters for Dichotomous Items
English Language Arts Grade 8

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA04153	0.57660	0.00000	-0.47610	0.00000	0.19010	0.00000
IA04155	0.66520	0.00000	-0.85350	0.00000	0.12780	0.00000
IA04156	0.61922	0.00000	-0.90990	0.00000	0.06750	0.00000
IA04179	0.74027	0.00000	-0.86120	0.00000	0.15530	0.00000
IA04190	0.36772	0.00000	-0.29480	0.00000	0.17790	0.00000
IA04193	0.69248	0.00000	-0.59250	0.00000	0.21560	0.00000
IA04196	0.47995	0.00000	-0.53620	0.00000	0.20200	0.00000
IA04197	0.53674	0.00000	0.04580	0.00000	0.20330	0.00000
IA04198	0.65497	0.00000	-0.80820	0.00000	0.08000	0.00000
IA04199	0.57090	0.00000	0.17240	0.00000	0.16000	0.00000
IA04204	0.56808	0.00000	-1.33050	0.00000	0.11140	0.00000
IA04205	0.72563	0.00000	-0.41440	0.00000	0.19620	0.00000
IA04206	0.35791	0.00000	-1.06080	0.00000	0.08880	0.00000
IA04207	0.46684	0.00000	-1.46650	0.00000	0.15750	0.00000
IA04208	0.44680	0.00000	0.78380	0.00000	0.14600	0.00000
IA04387	0.76243	0.00000	-0.31460	0.00000	0.17680	0.00000
IA04388	0.84098	0.00000	-1.10730	0.00000	0.22120	0.00000
IA04465	0.74785	0.00000	-2.18740	0.00000	0.08020	0.00000
IA06427	0.47008	0.01540	-1.17260	0.09410	0.03160	0.03130
IA06428	0.84068	0.02316	-0.53660	0.03400	0.09710	0.01370
IA06429	1.15315	0.03668	-0.31790	0.02620	0.22460	0.01100
IA06430	0.70782	0.02299	-1.51270	0.08180	0.12970	0.03510
IA06431	0.54697	0.02463	0.02340	0.06850	0.19320	0.02000
IA06432	0.74397	0.02845	-0.26980	0.04930	0.23860	0.01670
IA06464	0.70535	0.02698	-0.96390	0.07510	0.22720	0.02670
IA06465	0.60982	0.02105	-0.87160	0.07270	0.10670	0.02620

Table 2.5.12
IRT Parameters for Polytomous Items
English Language Arts Grade 8

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA04154	0.78818	0.00000	-0.57095	0.00000	0.56425	0.00000	-0.56425	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04184	0.47237	0.00000	0.07690	0.00000	2.05960	0.00000	-2.05960	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04195	0.57937	0.00000	-1.16430	0.00000	0.83850	0.00000	-0.83850	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04200A	1.20071	0.00000	-0.60280	0.00000	1.21030	0.00000	-0.09880	0.00000	-1.11150	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04200D	1.06720	0.00000	0.29990	0.00000	2.18850	0.00000	0.97140	0.00000	-0.11330	0.00000	-1.00270	0.00000	-2.04390	0.00000	0.00000	0.00000
IA04227A	1.10364	0.00000	-0.32383	0.00000	1.29237	0.00000	-0.17783	0.00000	-1.11453	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04227D	1.05203	0.00000	0.52656	0.00000	2.32646	0.00000	0.85316	0.00000	-0.17324	0.00000	-0.91954	0.00000	-2.08684	0.00000	0.00000	0.00000
IA04417	0.56584	0.00000	-1.58075	0.00000	1.17315	0.00000	-1.17315	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

Table 2.5.13
 IRT Parameters for Dichotomous Items
 English Language Arts Grade 10

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA03746	1.00511	0.00000	-1.06790	0.00000	0.13910	0.00000
IA03749	0.98789	0.00000	-1.21430	0.00000	0.21700	0.00000
IA03751	0.97449	0.00000	-0.93230	0.00000	0.25800	0.00000
IA03752	1.13186	0.00000	-1.51000	0.00000	0.29530	0.00000
IA03757	0.54033	0.00000	-1.64460	0.00000	0.12000	0.00000
IA03758	0.59647	0.00000	-1.60810	0.00000	0.17950	0.00000
IA03759	0.41046	0.00000	0.17870	0.00000	0.10500	0.00000
IA03765	1.05432	0.00000	-1.08820	0.00000	0.12670	0.00000
IA03766	0.36890	0.00000	-0.02420	0.00000	0.25480	0.00000
IA03769	0.59765	0.00000	-1.71300	0.00000	0.15180	0.00000
IA03770	1.00782	0.00000	-1.20210	0.00000	0.12600	0.00000
IA03773	1.18707	0.00000	-1.67360	0.00000	0.15110	0.00000
IA03775	0.50741	0.00000	-0.58270	0.00000	0.32250	0.00000
IA03777	0.93768	0.00000	-0.25580	0.00000	0.30940	0.00000
IA03781	0.79976	0.00000	-1.69870	0.00000	0.15180	0.00000
IA03784	1.22675	0.00000	-1.07510	0.00000	0.16060	0.00000
IA03787	1.15150	0.00000	-1.32060	0.00000	0.25000	0.00000
IA03849	0.70600	0.00000	-0.16700	0.00000	0.23860	0.00000
IA04031	0.70329	0.00000	-1.31200	0.00000	0.19520	0.00000
IA04033	0.88283	0.00000	-1.87350	0.00000	0.10910	0.00000
IA04036	0.76626	0.00000	-0.92350	0.00000	0.09990	0.00000

Table 2.5.14
IRT Parameters for Polytomous Items
English Language Arts Grade 10

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA03750	0.42322	0.00000	-1.69050	0.00000	0.65080	0.00000	-0.65080	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03763A	1.45350	0.00000	-0.93127	0.00000	0.70323	0.00000	0.03153	0.00000	-0.73477	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03763D	1.26667	0.00000	-0.02184	0.00000	1.72966	0.00000	0.99766	0.00000	0.11216	0.00000	-0.82474	0.00000	-2.01474	0.00000	0.00000	0.00000
IA03779	0.91364	0.00000	-1.26405	0.00000	0.27885	0.00000	-0.27885	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03790	0.59530	0.00000	-1.55985	0.00000	1.86345	0.00000	-1.86345	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03846	0.39712	0.00000	-0.36260	0.00000	2.33960	0.00000	-2.33960	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03852	0.49300	0.00000	-0.52145	0.00000	0.37375	0.00000	-0.37375	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03853	0.84280	0.00000	-1.52575	0.00000	1.07015	0.00000	-1.07015	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03856A	1.12387	0.00000	-0.83790	0.00000	1.01590	0.00000	0.02740	0.00000	-1.04330	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03856D	1.12516	0.00000	0.20686	0.00000	2.04876	0.00000	1.00776	0.00000	-0.07924	0.00000	-0.90714	0.00000	-2.07014	0.00000	0.00000	0.00000
IA04029	0.63710	0.00000	-1.57485	0.00000	0.61355	0.00000	-0.61355	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

Table 2.5.15
IRT Parameters for Dichotomous Items
Mathematics Grade 3

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA00886	1.10841	0.00000	-1.24170	0.00000	0.06770	0.00000
IA00922	1.39018	0.00000	0.15640	0.00000	0.12250	0.00000
IA02081	0.91335	0.03163	-1.46060	0.06500	0.16940	0.03240
IA02097	0.90088	0.00000	-0.12040	0.00000	0.23790	0.00000
IA02203	1.10664	0.00000	-1.02880	0.00000	0.09330	0.00000
IA02230	0.96073	0.03022	-0.85050	0.03870	0.13850	0.01790
IA02372	0.94150	0.00000	0.77350	0.00000	0.34900	0.00000
IA02379	1.29730	0.00000	0.72420	0.00000	0.18380	0.00000
IA02511	1.00994	0.00000	-0.49010	0.00000	0.12460	0.00000
IA02515	0.85414	0.00000	0.90510	0.00000	0.24490	0.00000
IA04622	0.76055	0.00000	1.20310	0.00000	0.25070	0.00000
IA04702	1.02416	0.00000	-0.03860	0.00000	0.28290	0.00000
IA04703	0.64333	0.00000	-1.14860	0.00000	0.18370	0.00000
IA04829	0.90952	0.00000	-0.81510	0.00000	0.19160	0.00000
IA04857	1.30188	0.00000	-0.01580	0.00000	0.14500	0.00000
IA07545	0.47584	0.02975	-0.95170	0.17720	0.33120	0.04200
IA07601	0.64239	0.02369	0.08570	0.03790	0.09430	0.01340
IA02909	0.55802	0.00000	-2.25210	0.00000	0.00000	0.00000
IA04480	0.48995	0.00000	0.42250	0.00000	0.00000	0.00000
IA04547	0.66002	0.00000	-1.75750	0.00000	0.00000	0.00000
IA04567	0.91464	0.00000	-0.04870	0.00000	0.00000	0.00000
IA04743	0.46190	0.00000	1.37080	0.00000	0.00000	0.00000
IA04753	0.56049	0.00000	-1.42680	0.00000	0.00000	0.00000
IA04754	0.63386	0.00000	-1.00980	0.00000	0.00000	0.00000
IA04809	0.57743	0.00000	-0.55120	0.00000	0.00000	0.00000
IA04831	0.44421	0.00000	-1.02720	0.00000	0.00000	0.00000
IA04834	0.92575	0.00000	-0.05650	0.00000	0.00000	0.00000
IA04835	0.43069	0.00000	-0.20080	0.00000	0.00000	0.00000
IA04841	1.01088	0.00000	-0.38640	0.00000	0.00000	0.00000
IA04852	0.91587	0.00000	-0.13070	0.00000	0.00000	0.00000
IA04853	0.70611	0.00000	-0.70610	0.00000	0.00000	0.00000
IA04860	0.90823	0.00000	-0.29360	0.00000	0.00000	0.00000
IA04877	0.85944	0.00000	0.11250	0.00000	0.00000	0.00000
IA05016	0.47155	0.00000	1.72090	0.00000	0.00000	0.00000
IA05017	0.79677	0.00000	-0.04420	0.00000	0.00000	0.00000
IA07645	1.19912	0.01946	-0.34220	0.00920	0.00000	0.00000

Table 2.5.16
IRT Parameters for Polytomous Items
Mathematics Grade 3

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02098	1.07202	0.00000	-0.29490	0.00000	1.02580	0.00000	-0.23310	0.00000	-0.79270	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA02227	1.22992	0.00000	-0.33403	0.00000	1.28547	0.00000	-0.06203	0.00000	-1.22343	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04548	1.08618	0.00000	-0.25253	0.00000	1.10637	0.00000	0.13167	0.00000	-1.23803	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA04858	1.28095	0.00000	0.62033	0.00000	1.26173	0.00000	-0.09257	0.00000	-1.16917	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a

Table 2.5.17
IRT Parameters for Dichotomous Items
Mathematics Grade 4

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA01052	1.41705	0.00000	0.13360	0.00000	0.43050	0.00000
IA02426	0.85068	0.00000	0.40190	0.00000	0.09430	0.00000
IA02438	0.93710	0.03175	-2.48420	0.10670	0.21020	0.07010
IA05043	1.05432	0.00000	0.05700	0.00000	0.33930	0.00000
IA07522	1.72887	0.05015	0.06630	0.01160	0.11860	0.00530
IA07529	0.77396	0.02193	-1.31330	0.05800	0.06770	0.02850
IA07569	0.84480	0.03762	-1.10990	0.08240	0.44460	0.02640
IA07594	1.38436	0.03251	-0.62890	0.01710	0.08510	0.00900
IA07617	0.93792	0.03004	0.03110	0.02390	0.13080	0.01000
IA07659	1.06502	0.03651	-0.26310	0.02850	0.24430	0.01190
IA07660	0.68501	0.02857	-0.87460	0.08140	0.25990	0.02830
IA00913	0.84938	0.00000	0.33170	0.00000	0.00000	0.00000
IA02046	0.75250	0.00000	-0.74420	0.00000	0.00000	0.00000
IA02582	0.93445	0.00000	-0.40320	0.00000	0.00000	0.00000
IA02825	1.08513	0.00000	0.26010	0.00000	0.00000	0.00000
IA04488	1.29941	0.00000	-0.31910	0.00000	0.00000	0.00000
IA04618	0.76573	0.00000	-0.15940	0.00000	0.00000	0.00000
IA04720	0.82158	0.00000	-1.07420	0.00000	0.00000	0.00000
IA04750	0.74233	0.00000	-1.31340	0.00000	0.00000	0.00000
IA04755	0.94697	0.00000	0.68040	0.00000	0.00000	0.00000
IA04889	0.97672	0.00000	-1.01540	0.00000	0.00000	0.00000
IA04891	1.16608	0.00000	-0.16280	0.00000	0.00000	0.00000
IA04898	0.68513	0.00000	0.84270	0.00000	0.00000	0.00000
IA04923	1.37643	0.00000	-1.19610	0.00000	0.00000	0.00000
IA04927	0.86496	0.00000	0.40430	0.00000	0.00000	0.00000
IA04928	0.57184	0.00000	1.15450	0.00000	0.00000	0.00000
IA04937	0.91287	0.00000	-1.11220	0.00000	0.00000	0.00000
IA04942	0.68160	0.00000	0.02370	0.00000	0.00000	0.00000
IA04951	1.15826	0.00000	-0.11120	0.00000	0.00000	0.00000
IA05040	0.79647	0.00000	1.03840	0.00000	0.00000	0.00000
IA05044	0.94121	0.00000	-0.77550	0.00000	0.00000	0.00000
IA05056	0.89224	0.00000	-1.57030	0.00000	0.00000	0.00000
IA05066	0.99318	0.00000	-0.43410	0.00000	0.00000	0.00000
IA07571	0.75597	0.01270	-0.29330	0.01230	0.00000	0.00000

Table 2.5.18
IRT Parameters for Polytomous Items
Mathematics Grade 4

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02820	0.97972	0.00000	-0.90500	0.00000	0.82470	0.00000	-0.82470	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02899	1.18754	0.00000	-0.81585	0.00000	0.56855	0.00000	-0.56855	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02957	1.00635	0.00000	0.52023	0.00000	1.78243	0.00000	0.79393	0.00000	-0.51998	0.00000	-2.05638	0.00000	0.00000	0.00000	n/a	n/a
IA04959	0.99541	0.00000	-0.87128	0.00000	1.32793	0.00000	0.52793	0.00000	-0.32948	0.00000	-1.52638	0.00000	0.00000	0.00000	n/a	n/a
IA04975	1.14051	0.00000	0.04895	0.00000	1.56585	0.00000	0.42585	0.00000	-0.46105	0.00000	-1.53065	0.00000	0.00000	0.00000	n/a	n/a
IA07543	1.01246	0.01211	-0.87275	0.00821	1.84895	0.02650	0.38315	0.01529	-0.53785	0.01263	-1.69425	0.01589	0.00000	0.00000	n/a	n/a

Table 2.5.19
IRT Parameters for Dichotomous Items
Mathematics Grade 5

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA00871	1.05509	0.00000	0.13190	0.00000	0.27950	0.00000
IA00874	1.46937	0.00000	-0.81400	0.00000	0.11820	0.00000
IA02101	0.85497	0.00000	-0.95170	0.00000	0.15550	0.00000
IA02306	1.83821	0.00000	0.74400	0.00000	0.16660	0.00000
IA02342	1.02128	0.00000	-0.72950	0.00000	0.13020	0.00000
IA02545	1.05068	0.00000	-0.69890	0.00000	0.14530	0.00000
IA04604	0.81146	0.00000	-0.07920	0.00000	0.30660	0.00000
IA04931	1.38266	0.00000	0.84570	0.00000	0.21680	0.00000
IA05062	0.51705	0.00000	-1.15620	0.00000	0.16010	0.00000
IA05063	0.60835	0.00000	-0.75360	0.00000	0.18430	0.00000
IA07516	0.86120	0.02728	-0.75270	0.04820	0.11830	0.02340
IA07523	0.73733	0.03069	0.40240	0.03100	0.11020	0.01240
IA07525	0.89218	0.05203	0.71720	0.03230	0.35100	0.00980
IA07537	1.20123	0.03786	-1.05720	0.03740	0.16530	0.02200
IA07540	1.18677	0.03169	-0.99490	0.03140	0.06760	0.02000
IA07575	0.97819	0.05485	1.38130	0.03080	0.20480	0.00600
IA07576	0.73092	0.02834	0.55470	0.02760	0.06720	0.01100
IA07603	1.15708	0.06032	0.68080	0.02370	0.33910	0.00740
IA02396	0.85597	0.00000	-1.14380	0.00000	0.00000	0.00000
IA02919	0.88677	0.00000	-0.04520	0.00000	0.00000	0.00000
IA02927	0.64315	0.00000	-1.36660	0.00000	0.00000	0.00000
IA04705	0.43616	0.00000	0.27900	0.00000	0.00000	0.00000
IA04933	0.83904	0.00000	-0.01410	0.00000	0.00000	0.00000
IA04938	0.62205	0.00000	0.56940	0.00000	0.00000	0.00000
IA05005	0.91440	0.00000	0.13670	0.00000	0.00000	0.00000
IA05015	0.81928	0.00000	1.07490	0.00000	0.00000	0.00000
IA05019	0.98336	0.00000	0.16950	0.00000	0.00000	0.00000
IA05020	1.00053	0.00000	0.05660	0.00000	0.00000	0.00000
IA05021	1.05132	0.00000	0.68560	0.00000	0.00000	0.00000
IA05031	0.92352	0.00000	0.49940	0.00000	0.00000	0.00000
IA05103	1.06937	0.00000	-0.69430	0.00000	0.00000	0.00000
IA05179	0.62046	0.00000	0.74990	0.00000	0.00000	0.00000
IA07517	0.76432	0.01346	-0.32440	0.01200	0.00000	0.00000
IA07582	0.84103	0.01699	-1.81640	0.02320	0.00000	0.00000

Table 2.5.20
IRT Parameters for Polytomous Items
Mathematics Grade 5

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01158	1.09006	0.00000	0.70715	0.00000	1.54125	0.00000	0.45705	0.00000	-0.37285	0.00000	-1.62545	0.00000	0.00000	0.00000	n/a	n/a
IA01159	1.13762	0.00000	-0.24085	0.00000	1.24365	0.00000	0.42965	0.00000	-0.27755	0.00000	-1.39575	0.00000	0.00000	0.00000	n/a	n/a
IA02680	1.12681	0.00000	-0.65518	0.00000	1.04863	0.00000	0.24553	0.00000	-0.26258	0.00000	-1.03158	0.00000	0.00000	0.00000	n/a	n/a
IA02729	1.10588	0.00000	0.00920	0.00000	0.69290	0.00000	-0.69290	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02735	1.11540	0.00000	-0.71588	0.00000	0.90343	0.00000	0.54393	0.00000	-0.30538	0.00000	-1.14198	0.00000	0.00000	0.00000	n/a	n/a
IA05024	0.78313	0.00000	-0.54380	0.00000	1.13220	0.00000	-1.13220	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

Table 2.5.21
IRT Parameters for Dichotomous Items
Mathematics Grade 6

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA00846	0.86537	0.00000	-0.33240	0.00000	0.05680	0.00000
IA02151	1.19953	0.02781	-0.61410	0.01940	0.04040	0.01030
IA04605	1.01117	0.00000	0.70090	0.00000	0.18470	0.00000
IA04656	0.79412	0.00000	-1.83050	0.00000	0.16130	0.00000
IA04722	1.06302	0.00000	0.29760	0.00000	0.13190	0.00000
IA04725	1.04356	0.00000	0.91070	0.00000	0.15040	0.00000
IA04878	0.84356	0.00000	-0.61290	0.00000	0.12630	0.00000
IA04879	1.04797	0.00000	-0.09920	0.00000	0.33290	0.00000
IA04904	0.56479	0.00000	0.45480	0.00000	0.09310	0.00000
IA04905	0.74045	0.00000	0.39700	0.00000	0.34250	0.00000
IA05124	1.97937	0.00000	1.18450	0.00000	0.04990	0.00000
IA05129	1.12093	0.00000	1.07540	0.00000	0.13590	0.00000
IA07531	0.81135	0.02716	-0.75180	0.04890	0.10420	0.02260
IA07618	0.30653	0.01758	-2.57470	0.38540	0.20910	0.08590
IA02284	0.89794	0.01440	-0.68500	0.01170	0.00000	0.00000
IA02692	0.65432	0.00000	-0.94150	0.00000	0.00000	0.00000
IA04758	1.13845	0.00000	-0.65520	0.00000	0.00000	0.00000
IA04776	0.65614	0.00000	-0.04830	0.00000	0.00000	0.00000
IA04855	0.64362	0.00000	-0.19520	0.00000	0.00000	0.00000
IA04875	0.87596	0.00000	0.09640	0.00000	0.00000	0.00000
IA04882	0.87231	0.00000	0.05710	0.00000	0.00000	0.00000
IA04885	0.94609	0.00000	-0.63510	0.00000	0.00000	0.00000
IA04886	0.86108	0.00000	-0.22150	0.00000	0.00000	0.00000
IA04893	1.21934	0.00000	0.71170	0.00000	0.00000	0.00000
IA04903	1.11781	0.00000	0.74320	0.00000	0.00000	0.00000
IA04908	0.59912	0.00000	0.46360	0.00000	0.00000	0.00000
IA04909	0.77325	0.00000	-0.76250	0.00000	0.00000	0.00000
IA04911	0.75109	0.00000	-0.50070	0.00000	0.00000	0.00000
IA04914	1.31382	0.00000	-1.14000	0.00000	0.00000	0.00000
IA05128	0.44162	0.00000	0.12430	0.00000	0.00000	0.00000
IA05136	0.30247	0.00000	0.79960	0.00000	0.00000	0.00000
IA05140	0.42604	0.00000	0.61100	0.00000	0.00000	0.00000
IA05142	0.54850	0.00000	0.57080	0.00000	0.00000	0.00000
IA07664	1.25585	0.02340	0.68400	0.01210	0.00000	0.00000

Table 2.5.22
IRT Parameters for Polytomous Items
Mathematics Grade 6

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA01136	0.81011	0.00000	-0.48435	0.00000	0.75235	0.00000	-0.75235	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02704	1.14256	0.00000	0.10788	0.00000	1.88588	0.00000	0.64888	0.00000	-0.76553	0.00000	-1.76923	0.00000	0.00000	0.00000	n/a	n/a
IA04763	1.12928	0.00000	-0.74533	0.00000	1.26598	0.00000	0.44378	0.00000	-0.29413	0.00000	-1.41563	0.00000	0.00000	0.00000	n/a	n/a
IA04764	1.08801	0.00000	0.11070	0.00000	1.47720	0.00000	0.27120	0.00000	-0.34640	0.00000	-1.40200	0.00000	0.00000	0.00000	n/a	n/a
IA05137	1.12769	0.00000	0.74075	0.00000	0.72835	0.00000	-0.72835	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA07663	1.00265	0.01217	-0.67445	0.00661	1.28645	0.01927	0.44345	0.01388	-0.56365	0.01141	-1.16625	0.01344	0.00000	0.00000	n/a	n/a

Table 2.5.23
IRT Parameters for Dichotomous Items
Mathematics Grade 7

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA00807	1.23216	0.00000	-0.23550	0.00000	0.10390	0.00000
IA00883	0.55579	0.00000	-1.06620	0.00000	0.14530	0.00000
IA02090	1.27102	0.00000	-1.12290	0.00000	0.13530	0.00000
IA02401	1.50911	0.00000	-0.55580	0.00000	0.10870	0.00000
IA04490	1.11152	0.00000	0.48720	0.00000	0.07280	0.00000
IA04513	0.94668	0.00000	0.91880	0.00000	0.44660	0.00000
IA04539	1.25850	0.00000	-0.06220	0.00000	0.23720	0.00000
IA04625	0.32734	0.00000	1.29620	0.00000	0.10430	0.00000
IA04643	1.04292	0.00000	0.89990	0.00000	0.28090	0.00000
IA04647	0.99148	0.00000	0.31880	0.00000	0.36430	0.00000
IA04688	2.59424	0.00000	1.11070	0.00000	0.15900	0.00000
IA05086	1.23269	0.00000	1.11110	0.00000	0.27470	0.00000
IA07532	1.20394	0.03810	-0.18720	0.02550	0.21620	0.01210
IA07549	0.99994	0.02804	-0.23450	0.02700	0.14570	0.01210
IA07596	0.62369	0.01952	0.41390	0.03140	0.00680	0.01210
IA07613	1.32646	0.04415	0.37920	0.01800	0.23840	0.00690
IA07614	1.81382	0.06590	0.70590	0.01370	0.22610	0.00460
IA02871	1.34380	0.00000	-0.25110	0.00000	0.00000	0.00000
IA02875	0.97878	0.00000	-0.68960	0.00000	0.00000	0.00000
IA02884	1.49588	0.00000	0.54810	0.00000	0.00000	0.00000
IA04649	1.09494	0.00000	-0.07470	0.00000	0.00000	0.00000
IA04690	1.08801	0.00000	0.51120	0.00000	0.00000	0.00000
IA04766	1.07219	0.00000	0.65510	0.00000	0.00000	0.00000
IA04767	1.05673	0.00000	1.00560	0.00000	0.00000	0.00000
IA04770	0.56249	0.00000	0.24670	0.00000	0.00000	0.00000
IA04771	0.64521	0.00000	0.53750	0.00000	0.00000	0.00000
IA05035	0.72939	0.00000	0.39090	0.00000	0.00000	0.00000
IA05106	0.94156	0.00000	0.82770	0.00000	0.00000	0.00000
IA05107	0.91452	0.00000	-0.09910	0.00000	0.00000	0.00000
IA05119	0.91999	0.00000	-0.03150	0.00000	0.00000	0.00000
IA07518	1.04633	0.01670	-0.83000	0.01110	0.00000	0.00000
IA07521	0.79636	0.01423	-1.45530	0.01970	0.00000	0.00000
IA07550	0.80453	0.01429	-0.85150	0.01380	0.00000	0.00000
IA07570	1.25320	0.02122	0.67930	0.01060	0.00000	0.00000

Table 2.5.24
IRT Parameters for Polytomous Items
Mathematics Grade 7

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA00842	1.24480	0.00000	1.00188	0.00000	1.66928	0.00000	-0.19863	0.00000	-0.62903	0.00000	-0.84163	0.00000	0.00000	0.00000	n/a	n/a
IA02711	1.18307	0.00000	0.78935	0.00000	0.46695	0.00000	-0.46695	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02715	1.29465	0.00000	-0.53515	0.00000	0.82895	0.00000	-0.82895	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04575	1.35873	0.00000	-0.06188	0.00000	1.79763	0.00000	0.12663	0.00000	-0.64838	0.00000	-1.27588	0.00000	0.00000	0.00000	n/a	n/a
IA04694	1.18983	0.00000	0.19675	0.00000	1.69555	0.00000	0.70245	0.00000	-0.43815	0.00000	-1.95985	0.00000	0.00000	0.00000	n/a	n/a
IA05121	0.99835	0.00000	0.51533	0.00000	0.97253	0.00000	0.60923	0.00000	-0.00807	0.00000	-1.57368	0.00000	0.00000	0.00000	n/a	n/a

Table 2.5.25
IRT Parameters for Dichotomous Items
Mathematics Grade 8

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA00792	1.35262	0.00000	0.43630	0.00000	0.57250	0.00000
IA02161	1.03639	0.03245	-0.52150	0.03320	0.21240	0.01520
IA02165	0.66931	0.00000	-1.08710	0.00000	0.04720	0.00000
IA02480	1.01658	0.00000	-0.99690	0.00000	0.30970	0.00000
IA04594	0.84397	0.00000	1.05500	0.00000	0.24240	0.00000
IA04607	0.68419	0.00000	-0.56970	0.00000	0.17740	0.00000
IA04633	0.84621	0.00000	1.27370	0.00000	0.28800	0.00000
IA04671	1.11411	0.00000	-1.02230	0.00000	0.15190	0.00000
IA04712	1.27149	0.00000	-0.04010	0.00000	0.25940	0.00000
IA04715	1.39048	0.00000	-0.34660	0.00000	0.36570	0.00000
IA04918	0.89965	0.00000	-1.84080	0.00000	0.19300	0.00000
IA04920	0.69365	0.00000	-2.17420	0.00000	0.15060	0.00000
IA05098	0.72416	0.00000	-0.27140	0.00000	0.09530	0.00000
IA07520	1.58225	0.05285	0.16780	0.01510	0.23890	0.00610
IA07544	1.35156	0.04956	0.18580	0.01940	0.30470	0.00720
IA07620	0.76661	0.03422	0.49860	0.03110	0.18960	0.01100
IA01035	1.12199	0.00000	0.53980	0.00000	0.00000	0.00000
IA02746	1.12816	0.00000	0.13270	0.00000	0.00000	0.00000
IA02747	0.79647	0.00000	0.60320	0.00000	0.00000	0.00000
IA02935	0.99106	0.00000	0.43080	0.00000	0.00000	0.00000
IA02942	0.79283	0.00000	-1.09310	0.00000	0.00000	0.00000
IA02947	0.99001	0.00000	-0.22980	0.00000	0.00000	0.00000
IA04666	1.33857	0.00000	0.56040	0.00000	0.00000	0.00000
IA04779	0.44321	0.00000	-0.32640	0.00000	0.00000	0.00000
IA04916	1.04497	0.00000	-0.29780	0.00000	0.00000	0.00000
IA04919	0.71711	0.00000	0.47550	0.00000	0.00000	0.00000
IA04946	1.52052	0.00000	0.36110	0.00000	0.00000	0.00000
IA04950	1.26002	0.00000	-0.85300	0.00000	0.00000	0.00000
IA04969	1.12481	0.00000	0.11120	0.00000	0.00000	0.00000
IA05076	0.82222	0.00000	0.04710	0.00000	0.00000	0.00000
IA05093	0.94209	0.00000	0.03050	0.00000	0.00000	0.00000
IA05095	1.19347	0.00000	-0.28730	0.00000	0.00000	0.00000
IA07519	0.97549	0.02034	-1.86180	0.02070	0.00000	0.00000
IA07568	0.81576	0.01329	-0.54550	0.01150	0.00000	0.00000

Table 2.5.26
IRT Parameters for Polytomous Items
Mathematics Grade 8

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02565	0.98630	0.00000	-0.01418	0.00000	1.46713	0.00000	0.42263	0.00000	-0.43088	0.00000	-1.45888	0.00000	0.00000	0.00000	n/a	n/a
IA02764	1.49477	0.00000	0.21000	0.00000	1.82400	0.00000	0.03090	0.00000	-0.60600	0.00000	-1.24890	0.00000	0.00000	0.00000	n/a	n/a
IA02893	1.01476	0.00000	-0.43725	0.00000	1.71155	0.00000	0.67945	0.00000	-0.45035	0.00000	-1.94065	0.00000	0.00000	0.00000	n/a	n/a
IA04612	1.63357	0.00000	0.20320	0.00000	0.81530	0.00000	0.27200	0.00000	-0.23580	0.00000	-0.85150	0.00000	0.00000	0.00000	n/a	n/a
IA04941	0.77419	0.00000	0.62935	0.00000	0.63965	0.00000	-0.63965	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05073	0.90182	0.00000	-0.93480	0.00000	0.79040	0.00000	-0.79040	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a

Table 2.5.27
IRT Parameters for Dichotomous Items
Mathematics Grade 10

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA02305	1.92898	0.03039	-0.23750	0.00820	0.22710	0.00430
IA02406	0.76367	0.01511	-0.52390	0.03140	0.15990	0.01280
IA02602	1.18442	0.02093	0.06310	0.01380	0.28060	0.00540
IA02603	0.75132	0.01399	-0.64140	0.03290	0.14690	0.01360
IA02629	0.72751	0.01928	0.08980	0.03210	0.31500	0.00990
IA02641	1.00611	0.02587	0.64450	0.01650	0.35800	0.00500
IA02647	0.62616	0.01099	-1.90720	0.06550	0.03780	0.03420
IA04624	0.92969	0.03839	1.85390	0.02600	0.27980	0.00340
IA04674	0.89506	0.01958	0.25790	0.01950	0.28900	0.00660
IA04736	1.54362	0.03286	0.54200	0.01050	0.34760	0.00360
IA04867	1.80176	0.00000	0.63180	0.00000	0.14390	0.00000
IA05078	0.74180	0.00000	-0.49920	0.00000	0.12350	0.00000
IA07528	1.49053	0.02657	0.20380	0.00950	0.23270	0.00400
IA07530	1.48942	0.03016	0.22300	0.01130	0.34920	0.00430
IA07538	1.63739	0.02352	-0.17120	0.00790	0.11850	0.00400
IA07542	0.60576	0.01399	-0.56630	0.04860	0.13610	0.01760
IA07548	1.69024	0.03945	0.15430	0.01300	0.51390	0.00410
IA07556	1.01199	0.01911	-0.19550	0.01800	0.22050	0.00760
IA07623	0.84586	0.02322	0.28880	0.02690	0.43930	0.00720
IA07648	1.14098	0.02428	0.58810	0.01260	0.27110	0.00430
IA07651	1.75585	0.02834	0.11970	0.00830	0.23870	0.00370
IA07670	1.09001	0.01881	-0.66940	0.01990	0.18320	0.01000
IA02776	0.36825	0.00558	-0.33470	0.01390	0.00000	0.00000
IA02798	1.50911	0.01352	0.60800	0.00560	0.00000	0.00000
IA02831	1.07313	0.00888	-0.28500	0.00590	0.00000	0.00000
IA02870	0.50894	0.00623	-0.29120	0.01020	0.00000	0.00000
IA04803	0.88765	0.00000	-0.86530	0.00000	0.00000	0.00000
IA04815	0.68624	0.00000	-0.82070	0.00000	0.00000	0.00000
IA04839	1.17989	0.00000	-0.45910	0.00000	0.00000	0.00000
IA04862	1.03392	0.00000	-0.46300	0.00000	0.00000	0.00000
IA04977	1.02357	0.00000	-0.51440	0.00000	0.00000	0.00000
IA05146	0.64821	0.00000	-0.79500	0.00000	0.00000	0.00000

Table 2.5.28
IRT Parameters for Polytomous Items
Mathematics Grade 10

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA02767	1.56590	0.01141	0.22820	0.00363	0.38610	0.00578	-0.38610	0.00676	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02808	0.88836	0.00711	-0.96355	0.00629	0.78285	0.01241	-0.78285	0.00911	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA02853	0.59647	0.00564	-1.42660	0.01247	1.43380	0.02643	-1.43380	0.01532	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04696	1.57302	0.01035	0.16665	0.00254	0.70135	0.00526	0.14585	0.00552	-0.21965	0.00579	-0.62755	0.00615	0.00000	0.00000	n/a	n/a
IA04805	0.76308	0.00000	-0.71130	0.00000	0.73650	0.00000	-0.73650	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04822	1.04303	0.00000	-0.38065	0.00000	0.79455	0.00000	-0.79455	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA04996	1.17925	0.00000	-0.00890	0.00000	1.27550	0.00000	0.39840	0.00000	-0.33400	0.00000	-1.33990	0.00000	0.00000	0.00000	n/a	n/a
IA05085	0.81552	0.00000	-1.19595	0.00000	0.63345	0.00000	-0.63345	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA07581	1.55473	0.00941	-0.22540	0.00298	1.34020	0.00761	0.56040	0.00608	-0.55460	0.00565	-1.34600	0.00715	0.00000	0.00000	n/a	n/a
IA07604	1.70182	0.01046	0.01373	0.00253	0.96733	0.00578	0.32593	0.00516	-0.26418	0.00516	-1.02908	0.00642	0.00000	0.00000	n/a	n/a

Table 2.5.29
IRT Parameters for Dichotomous Items
Science Grade 5

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA03073	0.39048	0.01317	-1.63240	0.12070	0.03090	0.03690
IA03100	1.23574	0.04209	-0.65490	0.02940	0.18500	0.01500
IA03166	0.42857	0.04533	1.42890	0.08590	0.28180	0.02330
IA03171	0.65168	0.03233	-0.51990	0.09020	0.28600	0.02820
IA03179	0.70429	0.01846	-1.57880	0.06340	0.02770	0.03180
IA05478	0.85244	0.00000	0.89030	0.00000	0.29900	0.00000
IA05479	0.83474	0.00000	0.76050	0.00000	0.13770	0.00000
IA05500	0.48119	0.00000	-1.14030	0.00000	0.22020	0.00000
IA05538	0.81705	0.00000	0.18780	0.00000	0.23900	0.00000
IA05539	0.58277	0.00000	0.14980	0.00000	0.22240	0.00000
IA05565	0.73039	0.00000	-0.72050	0.00000	0.14120	0.00000
IA05573	0.63774	0.00000	-1.49810	0.00000	0.12450	0.00000
IA05677	0.71376	0.00000	0.10950	0.00000	0.29170	0.00000
IA05701	0.51176	0.00000	1.25620	0.00000	0.08570	0.00000
IA05746	1.06508	0.00000	-1.14000	0.00000	0.12770	0.00000
IA05755	0.90000	0.00000	-1.21050	0.00000	0.17460	0.00000
IA05763	0.63616	0.00000	-1.39220	0.00000	0.16370	0.00000
IA05768	0.43568	0.00000	0.96040	0.00000	0.20760	0.00000
IA08354	1.64544	0.12992	1.28300	0.02630	0.27690	0.00470
IA08355	0.33751	0.01852	-1.05620	0.21400	0.08120	0.05330
IA08440	0.95938	0.04491	0.52530	0.02840	0.27090	0.00990
IA08480	0.91152	0.03880	-0.12420	0.04260	0.30720	0.01500
IA03095	0.61817	0.01317	-1.49550	0.02410	0.00000	0.00000
IA03099	0.86731	0.01658	-1.27420	0.01610	0.00000	0.00000
IA03101	0.45832	0.01082	-1.12280	0.02460	0.00000	0.00000
IA03302	0.81434	0.01452	-0.36200	0.01230	0.00000	0.00000
IA05561	0.44915	0.00000	-0.03350	0.00000	0.00000	0.00000
IA05567	0.55267	0.00000	-0.95690	0.00000	0.00000	0.00000
IA05660	0.65714	0.00000	-0.88900	0.00000	0.00000	0.00000
IA05765	0.25902	0.00000	-1.58470	0.00000	0.00000	0.00000
IA05766	0.73657	0.00000	-0.27820	0.00000	0.00000	0.00000
IA05770	0.39271	0.00000	0.26030	0.00000	0.00000	0.00000

Table 2.5.30
IRT Parameters for Polytomous Items
Science Grade 5

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA03103	1.04062	0.01511	0.79227	0.01117	1.35527	0.01519	-0.01583	0.01799	-1.33943	0.03070	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03180	0.73886	0.01252	0.38370	0.01321	0.82870	0.01888	-0.82870	0.02626	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05337	0.67566	0.00000	-0.29330	0.00000	1.68980	0.00000	0.08210	0.00000	-1.77190	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA05406	0.85532	0.00000	0.03653	0.00000	2.68713	0.00000	0.24763	0.00000	-2.93477	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA05519	0.61675	0.00000	-1.35540	0.00000	0.95170	0.00000	-0.95170	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05566	0.73951	0.00000	-1.67815	0.00000	0.87735	0.00000	-0.87735	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05697	0.61640	0.00000	-0.09445	0.00000	0.66735	0.00000	-0.66735	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05756	0.81564	0.00000	-1.09900	0.00000	0.78550	0.00000	-0.78550	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05773	0.69347	0.00000	-0.04620	0.00000	1.54660	0.00000	0.03680	0.00000	-1.58340	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a

Table 2.5.31
IRT Parameters for Dichotomous Items
Science Grade 8

Item ID	Parameters and Measures of Standard Error					
	a	SE(a)	b	SE(b)	c	SE(c)
IA03090	1.08119	0.04744	0.94250	0.02160	0.19800	0.00720
IA03247	0.62757	0.03604	0.66620	0.05220	0.20630	0.01790
IA03298	1.16861	0.04650	-0.74510	0.04580	0.35090	0.02060
IA03325	0.81311	0.03815	0.29270	0.04400	0.29640	0.01520
IA03341	0.98319	0.03422	-0.95950	0.05380	0.18910	0.02800
IA03363	0.82205	0.02011	-1.36490	0.05120	0.02500	0.02960
IA03364	1.14192	0.05220	1.15480	0.02110	0.14590	0.00580
IA05543	1.05979	0.00000	0.96450	0.00000	0.10260	0.00000
IA05652	1.53333	0.00000	-1.48890	0.00000	0.11660	0.00000
IA05654	0.97919	0.00000	-0.73780	0.00000	0.17990	0.00000
IA05694	0.41046	0.00000	0.58560	0.00000	0.05600	0.00000
IA05760	1.01570	0.00000	-0.47800	0.00000	0.22890	0.00000
IA05776	0.91964	0.00000	-1.14820	0.00000	0.07410	0.00000
IA08264	0.52622	0.02504	-1.17540	0.14900	0.13190	0.05390
IA08294	0.58789	0.03298	0.67630	0.05510	0.18150	0.01860
IA08329	0.29894	0.01440	-2.33010	0.27290	0.09970	0.06540
IA08349	0.70994	0.02222	-1.11940	0.06700	0.03980	0.03310
IA08359	0.59918	0.04803	0.55180	0.07860	0.38200	0.02090
IA08362	0.84192	0.03222	0.23630	0.03290	0.14290	0.01380
IA08366	1.14033	0.03680	-1.33330	0.05160	0.09940	0.03510
IA08392	0.83474	0.02869	-0.34660	0.04090	0.11170	0.01830
IA08393	0.45926	0.01493	-1.20400	0.09670	0.02730	0.03400
IA03022	0.26508	0.00941	1.02230	0.05180	0.00000	0.00000
IA03148	0.77349	0.01693	-1.70660	0.02760	0.00000	0.00000
IA03189	0.83222	0.01840	-1.81110	0.02840	0.00000	0.00000
IA03266	0.40541	0.01076	1.09010	0.03640	0.00000	0.00000
IA03365	0.40658	0.01064	0.14820	0.02110	0.00000	0.00000
IA05491	0.36443	0.00000	-0.40550	0.00000	0.00000	0.00000
IA05524	0.81346	0.00000	-1.41600	0.00000	0.00000	0.00000
IA05653	0.64621	0.00000	-0.26680	0.00000	0.00000	0.00000
IA05685	1.15726	0.00000	-1.16070	0.00000	0.00000	0.00000
IA05761	0.75056	0.00000	-0.44600	0.00000	0.00000	0.00000

Table 2.5.32
IRT Parameters for Polytomous Items
Science Grade 8

Item ID	Parameters and Measures of Standard Error															
	a	SE(a)	b	SE(b)	d0	SE(d0)	d1	SE(d1)	d2	SE(d2)	d3	SE(d3)	d4	SE(d4)	d5	SE(d5)
IA03032	0.83880	0.01287	1.03497	0.01337	1.55037	0.01831	-0.25783	0.02373	-1.29253	0.03533	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03210	0.29565	0.00864	1.00465	0.04992	2.06575	0.06172	-2.06575	0.10555	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03215	0.65708	0.01152	0.12020	0.01090	0.46710	0.01727	-0.46710	0.02036	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA03336	0.84968	0.01311	1.15303	0.01432	1.52063	0.01849	-0.04287	0.02316	-1.47777	0.03977	0.00000	0.00000	n/a	n/a	n/a	n/a
IA03342	1.02957	0.01423	0.09547	0.00834	1.15367	0.01536	0.15777	0.01279	-1.31143	0.02084	0.00000	0.00000	n/a	n/a	n/a	n/a
IA05686	0.82457	0.00000	-0.72010	0.00000	0.75130	0.00000	-0.75130	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05691	0.86643	0.00000	0.16385	0.00000	0.99635	0.00000	-0.99635	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a
IA05732	0.76196	0.00000	1.11997	0.00000	2.59307	0.00000	-0.59243	0.00000	-2.00063	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a
IA05737	1.01246	0.00000	0.33030	0.00000	0.75990	0.00000	-0.75990	0.00000	0.00000	0.00000	n/a	n/a	n/a	n/a	n/a	n/a