APPENDIX C: THE 2009 MSA-READING CLASSICAL AND RASCH ITEM PARAMETERS

Table C.1 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 3 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	SE	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.94	0.24	-1.3708	0.0656	0.72	0.71			
2	SR	0.98	0.26	-3.3089	0.1397	1.00	0.41			
3	SR	0.75	0.47	-0.1994	0.0488	1.01	0.93			
4	SR	0.90	0.28	-1.1969	0.0621	0.96	1.03			
5	SR	0.92	0.29	-1.4394	0.0670	0.98	1.01			
6	SR	0.96	0.27	-2.1425	0.0860	0.96	0.72			
7	SR	0.72	0.32	0.1005	0.0463	1.11	1.18			
8	SR	0.71	0.35	0.4026	0.0446	1.05	1.04			
9	SR	0.79	0.34	-0.3764	0.0505	1.10	1.08			
10 A	SR	0.91	0.36	-1.0069	0.0588	0.79	0.64			
11 A	BCR	0.40	0.58	2.8042	0.0344	0.82	0.81	-3.5604	-0.5136	4.0741
12 A	SR	0.82	0.40	-0.3612	0.0503	0.94	0.94			
13 A	SR	0.81	0.43	-0.3214	0.0500	0.87	0.79			
14 A	BCR	0.40	0.55	2.4570	0.0355	0.85	0.85	-3.5613	-0.0615	3.6228
15 A	SR	0.69	0.29	0.3988	0.0448	1.10	1.10			
16 A	SR	0.67	0.24	0.8294	0.043	1.16	1.24			
17 A	BCR	0.35	0.33	3.0745	0.0341	1.18	1.19	-3.3108	-0.2529	3.5638
18 A	SR	0.81	0.38	-0.0978	0.0479	0.84	0.83			
19 A	SR	0.75	0.32	0.0727	0.0468	1.03	1.11			
20 A	BCR	0.40	0.35	2.5785	0.0335	1.15	1.16	-3.2384	-0.3404	3.5788
21 A	SR	0.77	0.35	0.2195	0.0457	0.90	0.90			
22	SR	0.82	0.36	-0.3948	0.0506	0.89	0.89			
23	SR	0.78	0.29	-0.0210	0.0473	1.00	1.07			
24	SR	0.71	0.43	0.2441	0.0456	0.93	0.87			
25	SR	0.55	0.41	1.0510	0.0429	0.98	0.98			
26	SR	0.76	0.43	-0.0453	0.0474	0.93	0.84			
27	SR	0.51	0.19	1.1168	0.0426	1.27	1.63			
28	SR	0.83	0.35	-0.7649	0.0552	1.07	1.10			
29	SR	0.70	0.46	0.2949	0.0453	0.94	0.85			
36	SR	0.62	0.30	0.5978	0.0438	1.13	1.20			
37	SR	0.89	0.41	-1.3870	0.0661	1.04	0.77			
38	SR	0.85	0.48	-0.8873	0.0572	0.95	0.78			
39	SR	0.78	0.43	-0.5402	0.0526	1.09	1.05			
40	SR	0.55	0.45	0.8290	0.0432	0.98	0.96			
41	SR	0.79	0.49	-0.5329	0.0525	0.96	0.79			
42	SR	0.64	0.47	0.3757	0.0450	0.97	0.88			
43	SR	0.60	0.42	0.5816	0.0441	1.04	1.07			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.2 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 3 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.94	0.23	-1.3708	0.0659	0.69	0.69			
2	SR	0.98	0.27	-3.3089	0.1403	0.90	0.37			
3	SR	0.75	0.46	-0.1994	0.0488	0.98	0.90			
4	SR	0.90	0.29	-1.1969	0.0623	0.97	0.97			
5	SR	0.92	0.31	-1.4394	0.0673	0.90	0.70			
6	SR	0.96	0.28	-2.1425	0.0865	0.82	0.59			
7	SR	0.73	0.32	0.1005	0.0463	1.10	1.10			
8	SR	0.71	0.35	0.4026	0.0445	1.01	0.98			
9	SR	0.79	0.35	-0.3764	0.0506	1.07	1.07			
10 B	SR	0.80	0.39	-0.0200	0.0472	0.88	0.82			
11 B	BCR	0.46	0.48	2.3012	0.0333	0.98	0.98	-3.2529	-0.9743	4.2273
12 B	SR	0.80	0.22	-0.6084	0.0532	1.29	1.72			
13 B	SR	0.77	0.43	-0.0259	0.0473	0.86	0.79			
14 B	BCR	0.54	0.53	1.3125	0.0354	0.92	0.89	-3.1596	-0.6624	3.822
15 B	SR	0.78	0.38	-0.1183	0.0483	0.93	0.83			
16 B	SR	0.59	0.24	0.9690	0.0426	1.19	1.28			
17 B	BCR	0.45	0.35	2.1899	0.0341	1.19	1.19	-3.3766	-0.4784	3.855
18 B	SR	0.69	0.43	0.3083	0.0450	0.93	0.89			
19 B	SR	0.80	0.44	-0.5740	0.0533	0.96	0.87			
20 B	BCR	0.51	0.44	1.0425	0.0329	1.02	1.03	-3.1669	0.2284	2.9385
21 B	SR	0.75	0.42	0.2044	0.0462	0.86	0.79			
22	SR	0.83	0.35	-0.3948	0.0507	0.84	0.86			
23	SR	0.80	0.32	-0.021	0.0473	0.93	0.93			
24	SR	0.72	0.42	0.2441	0.0455	0.94	0.94			
25	SR	0.55	0.41	1.0510	0.0427	0.95	0.92			
26	SR	0.76	0.42	-0.0453	0.0474	0.93	0.85			
27	SR	0.50	0.18	1.1168	0.0425	1.26	1.40			
28	SR	0.83	0.34	-0.7649	0.0553	1.06	1.31			
29	SR	0.70	0.46	0.2949	0.0453	0.90	0.82			
36	SR	0.60	0.27	0.5978	0.0437	1.21	1.30			
37	SR	0.89	0.41	-1.3870	0.0665	0.96	0.76			
38	SR	0.85	0.47	-0.8873	0.0574	0.91	0.73			
39	SR	0.80	0.41	-0.5402	0.0528	1.04	1.04			
40	SR	0.56	0.45	0.8290	0.0432	0.95	0.94			
41	SR	0.79	0.50	-0.5329	0.0528	0.92	0.76			
42	SR	0.64	0.46	0.3757	0.0451	0.98	0.90			
43	SR	0.59	0.42	0.5816	0.0443	1.06	1.09			

Note. 'B indicates that it is a unique item appearing only on Form B

Table C.3 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 4 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	SE	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.65	0.44	0.8485	0.0434	0.94	0.88			
2	SR	0.79	0.38	-0.2773	0.0526	1.07	0.91			
3	SR	0.78	0.39	-0.0474	0.0499	0.99	0.90			
4	SR	0.94	0.34	-1.6940	0.0820	0.89	0.52			
5	SR	0.96	0.32	-2.0951	0.0960	0.90	0.47			
6	SR	0.97	0.26	-2.3950	0.1088	0.92	0.47			
7	SR	0.56	0.20	1.2863	0.0422	1.22	1.35			
8	SR	0.94	0.28	-1.7138	0.0827	0.81	0.92			
9	SR	0.89	0.33	-0.9493	0.0635	0.86	0.78			
10 A	SR	0.80	0.51	0.0996	0.0485	0.76	0.59			
11 A	BCR	0.51	0.54	2.4003	0.0358	0.87	0.87	-3.5824	-1.4379	5.0203
12 A	SR	0.79	0.42	0.2402	0.0473	0.80	0.76			
13 A	SR	0.78	0.34	0.3033	0.0470	0.89	0.86			
14 A	BCR	0.42	0.54	2.2747	0.0349	0.88	0.88	-3.4363	0.0236	3.4127
15 A	SR	0.62	0.36	0.4782	0.0457	1.18	1.27			
16 A	SR	0.47	0.40	1.9046	0.0423	1.00	1.00			
17 A	BCR	0.49	0.48	1.7568	0.0298	1.06	1.06	-2.0543	-0.7715	2.8258
18 A	SR	0.63	0.31	0.9083	0.0432	1.09	1.10			
19 A	SR	0.66	0.34	0.7115	0.0442	1.06	1.13			
20 A	BCR	0.47	0.51	1.9270	0.0312	0.96	0.96	-2.5007	-0.6058	3.1064
21 A	SR	0.78	0.48	0.1834	0.0479	0.82	0.70			
22	SR	0.64	0.42	1.0781	0.0426	0.95	0.95			
23	SR	0.77	0.40	0.5162	0.0452	0.86	0.80			
24	SR	0.68	0.43	0.7249	0.0441	0.94	0.89			
25	SR	0.46	0.21	1.3574	0.0422	1.20	1.24			
26	SR	0.61	0.16	0.9364	0.0431	1.26	1.39			
27	SR	0.55	0.31	1.4992	0.042	1.12	1.18			
28	SR	0.54	0.45	1.2577	0.0423	0.96	0.94			
29	SR	0.77	0.33	0.1196	0.0484	1.02	1.11			
36	SR	0.67	0.41	0.6644	0.0444	1.00	1.00			
37	SR	0.57	0.42	0.9481	0.0431	1.00	1.00			
38	SR	0.65	0.38	0.7393	0.0441	1.04	1.12			
39	SR	0.78	0.37	-0.0274	0.0500	1.00	1.02			
40	SR	0.58	0.41	1.0705	0.0430	1.01	1.02			
41	SR	0.74	0.50	0.0061	0.0499	0.94	0.78			
42	SR	0.74	0.43	0.0810	0.0492	0.97	0.97			
43	SR	0.48	0.32	1.4931	0.0426	1.09	1.17			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.4 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 4 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.65	0.45	0.8485	0.0433	0.91	0.83			
2	SR	0.80	0.38	-0.2773	0.0521	1.03	0.88			
3	SR	0.78	0.38	-0.0474	0.0495	0.97	0.85			
4	SR	0.94	0.33	-1.6940	0.0816	0.87	0.52			
5	SR	0.96	0.30	-2.0951	0.0958	0.84	0.46			
6	SR	0.97	0.25	-2.3950	0.1088	0.99	0.59			
7	SR	0.56	0.20	1.2863	0.0421	1.23	1.30			
8	SR	0.94	0.26	-1.7138	0.0825	0.77	0.63			
9	SR	0.89	0.32	-0.9493	0.0632	0.80	0.63			
10 B	SR	0.76	0.36	0.3535	0.0460	0.93	1.00			
11 B	BCR	0.35	0.54	3.0282	0.0300	0.92	0.91	-2.4597	-0.625	3.0847
12 B	SR	0.74	0.32	0.3765	0.0459	1.03	1.15			
13 B	SR	0.83	0.31	-0.2149	0.0515	0.93	1.00			
14 B	BCR	0.49	0.54	2.1630	0.0361	0.86	0.84	-3.7566	-0.6292	4.3858
15 B	SR	0.57	0.42	1.2219	0.0425	0.95	0.92			
16 B	SR	0.62	0.41	1.1396	0.0424	0.95	0.93			
17 B	BCR	0.30	0.52	3.0116	0.0285	0.97	0.97	-1.8045	-0.546	2.3505
18 B	SR	0.53	0.24	1.4526	0.0420	1.17	1.22			
19 B	SR	0.72	0.56	0.4873	0.0452	0.80	0.67			
20 B	BCR	0.39	0.54	2.5184	0.0318	0.89	0.89	-2.8116	-0.0477	2.8593
21 B	SR	0.82	0.41	-0.5476	0.0560	0.98	0.84			
22	SR	0.65	0.42	1.0781	0.0426	0.94	0.93			
23	SR	0.76	0.39	0.5162	0.0451	0.87	0.83			
24	SR	0.68	0.44	0.7249	0.0440	0.91	0.83			
25	SR	0.45	0.22	1.3574	0.0423	1.26	1.37			
26	SR	0.60	0.16	0.9364	0.0430	1.25	1.43			
27	SR	0.55	0.31	1.4992	0.0421	1.10	1.13			
28	SR	0.55	0.46	1.2577	0.0422	0.94	0.91			
29	SR	0.78	0.33	0.1196	0.0481	1.00	1.10			
36	SR	0.65	0.40	0.6644	0.0444	1.02	1.05			
37	SR	0.56	0.42	0.9481	0.0432	1.01	1.01			
38	SR	0.63	0.38	0.7393	0.0442	1.09	1.29			
39	SR	0.78	0.35	-0.0274	0.0499	0.98	0.96			
40	SR	0.56	0.39	1.0705	0.0432	1.08	1.12			
41	SR	0.74	0.49	0.0061	0.0498	0.96	0.81			
42	SR	0.73	0.44	0.0810	0.0493	0.98	1.00			
43	SR	0.48	0.32	1.4931	0.0429	1.09	1.20			

Note. 'B' indicates that it is a unique item appearing only on Form B

Table C.5 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 5 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.87	0.20	-0.6371	0.0556	1.01	1.12			
2	SR	0.80	0.07	-0.2093	0.0502	1.22	1.59			
3	SR	0.91	0.26	-1.2263	0.0663	0.87	0.79			
4	SR	0.93	0.32	-1.4827	0.0723	0.78	0.59			
5	SR	0.93	0.37	-1.3213	0.0685	0.76	0.49			
6	SR	0.96	0.27	-1.8707	0.0836	0.73	0.61			
7	SR	0.91	0.35	-1.0118	0.0622	0.75	0.58			
8	SR	0.49	0.09	1.4561	0.0421	1.31	1.42			
9	SR	0.93	0.36	-1.7612	0.0808	1.12	0.75			
10 A	SR	0.90	0.30	-0.8817	0.0595	0.79	0.73			
11 A	BCR	0.60	0.54	0.3206	0.0420	0.82	0.78	-4.3169	-0.3328	4.6497
12 A	SR	0.74	0.38	0.1471	0.0468	0.99	0.92			
13 A	SR	0.67	0.30	0.1540	0.0468	1.26	1.29			
14 A	BCR	0.45	0.54	2.1384	0.0295	0.92	0.92	-2.1325	-0.9141	3.0466
15 A	SR	0.75	0.42	0.1906	0.0468	0.85	0.78			
16 A	SR	0.75	0.29	-0.1963	0.0500	1.20	1.33			
17 A	BCR	0.49	0.42	1.8843	0.0361	1.00	1.01	-3.6346	-0.6491	4.2837
18 A	SR	0.91	0.40	-1.2429	0.0666	0.87	0.56			
19 A	SR	0.74	0.45	0.1071	0.0473	0.98	0.89			
20 A	BCR	0.39	0.53	2.5891	0.0341	0.86	0.86	-3.1967	-0.0013	3.198
21 A	SR	0.72	0.37	0.1229	0.0472	1.04	1.08			
22	SR	0.72	0.30	0.1781	0.0466	1.13	1.39			
23	SR	0.55	0.29	1.4551	0.0420	1.09	1.13			
24	SR	0.76	0.40	0.3030	0.0457	0.91	0.85			
25	SR	0.84	0.36	-0.5030	0.0539	0.89	0.76			
26	SR	0.71	0.30	0.2006	0.0465	1.07	1.07			
27	SR	0.62	0.23	0.6870	0.0436	1.15	1.22			
28	SR	0.69	0.32	0.5988	0.0441	1.00	1.06			
29	SR	0.71	0.35	0.7593	0.0433	0.93	0.87			
36	SR	0.66	0.21	0.4436	0.0448	1.27	1.55			
37	SR	0.68	0.45	0.8269	0.0431	0.88	0.86			
38	SR	0.63	0.47	0.7861	0.0432	0.89	0.84			
39	SR	0.54	0.37	1.1761	0.0424	1.00	1.01			
40	SR	0.60	0.31	0.7230	0.0436	1.13	1.23			
41	SR	0.66	0.40	0.3088	0.0459	1.05	1.01			
42	SR	0.74	0.48	-0.0371	0.0488	0.95	0.80			
43	SR	0.74	0.45	-0.1849	0.0503	1.07	0.93			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.6 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 5 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	SE	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.87	0.20	-0.6371	0.0551	0.97	1.04			
2	SR	0.80	0.05	-0.2093	0.0495	1.17	1.60			
3	SR	0.92	0.26	-1.2263	0.0663	0.83	0.75			
4	SR	0.94	0.30	-1.4827	0.0725	0.72	0.51			
5	SR	0.93	0.35	-1.3213	0.0685	0.77	0.52			
6	SR	0.96	0.26	-1.8707	0.0840	0.72	0.52			
7	SR	0.91	0.34	-1.0118	0.0619	0.75	0.60			
8	SR	0.49	0.10	1.4561	0.0414	1.24	1.34			
9	SR	0.93	0.36	-1.7612	0.0807	0.97	0.61			
10 B	SR	0.95	0.29	-1.8196	0.0822	0.91	0.90			
11 B	BCR	0.52	0.42	1.3236	0.0389	0.95	0.95	-4.3522	-0.4184	4.7706
12 B	SR	0.74	0.29	-0.2621	0.0501	1.25	1.31			
13 B	SR	0.63	0.37	0.7193	0.0426	0.97	0.96			
14 B	BCR	0.58	0.39	0.8486	0.0434	0.96	0.97	-4.5717	-0.7313	5.303
15 B	SR	0.69	0.41	0.1364	0.0462	1.04	0.99			
16 B	SR	0.74	0.32	-0.2328	0.0497	1.21	1.29			
17 B	BCR	0.31	0.33	2.9082	0.0300	1.11	1.11	-2.2503	-0.2926	2.5429
18 B	SR	0.60	0.40	0.5029	0.0437	1.06	1.06			
19 B	SR	0.53	0.28	1.1421	0.0418	1.06	1.07			
20 B	BCR	0.26	0.42	3.4047	0.0327	1.00	0.99	-2.5754	-0.0174	2.5928
21 B	SR	0.80	0.32	-0.4039	0.0523	1.01	0.99			
22	SR	0.74	0.29	0.1781	0.0458	0.99	1.05			
23	SR	0.53	0.29	1.4551	0.0414	1.07	1.10			
24	SR	0.76	0.38	0.3030	0.0450	0.87	0.78			
25	SR	0.86	0.35	-0.5030	0.0534	0.73	0.62			
26	SR	0.72	0.31	0.2006	0.0456	1.07	1.01			
27	SR	0.63	0.23	0.6870	0.0427	1.08	1.14			
28	SR	0.69	0.31	0.5988	0.0432	0.98	0.98			
29	SR	0.71	0.34	0.7593	0.0426	0.93	0.88			
36	SR	0.66	0.21	0.4436	0.0440	1.17	1.27			
37	SR	0.68	0.43	0.8269	0.0423	0.88	0.85			
38	SR	0.63	0.45	0.7861	0.0424	0.90	0.86			
39	SR	0.54	0.37	1.1761	0.0416	0.96	0.97			
40	SR	0.61	0.30	0.7230	0.0428	1.09	1.17			
41	SR	0.67	0.40	0.3088	0.0451	1.04	1.02			
42	SR	0.72	0.46	-0.0371	0.0481	0.97	0.93			
43	SR	0.74	0.43	-0.1849	0.0496	1.01	0.90			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.7 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 6 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.93	0.27	-1.3336	0.0710	0.69	0.55			
2	SR	0.97	0.23	-2.7349	0.1244	0.95	0.79			
3	SR	0.85	0.19	-0.9089	0.0621	1.27	1.77			
4	SR	0.88	0.27	-1.1479	0.0667	1.04	1.01			
5	SR	0.81	0.27	-0.5668	0.0561	1.12	1.15			
6	SR	0.93	0.35	-1.4246	0.0735	0.76	0.55			
7	SR	0.50	0.34	1.0944	0.0432	1.03	1.04			
8	SR	0.80	0.36	-0.4850	0.0551	1.08	0.95			
9	SR	0.93	0.29	-1.5147	0.0763	0.72	0.51			
10 A	SR	0.85	0.31	-0.5665	0.0561	0.89	0.88			
11 A	BCR	0.58	0.46	1.1024	0.0385	0.90	0.89	-2.6691	-1.1491	3.8183
12 A	SR	0.79	0.33	0.0720	0.0485	0.85	0.95			
13 A	SR	0.76	0.20	-0.1510	0.0507	1.28	1.70			
14 A	BCR	0.54	0.54	1.4032	0.0374	0.84	0.83	-2.7761	-1.1685	3.9446
15 A	SR	0.73	0.25	0.2778	0.0470	1.08	1.28			
16 A	SR	0.68	0.26	0.1214	0.0481	1.25	1.41			
17 A	BCR	0.45	0.40	1.3735	0.0392	0.99	0.98	-4.4358	0.7564	3.6794
18 A	SR	0.80	0.37	-0.2321	0.0517	0.93	0.84			
19 A	SR	0.78	0.37	0.0309	0.0491	0.87	0.81			
20 A	BCR	0.43	0.37	1.4715	0.0405	1.02	1.03	-4.5049	0.9811	3.5239
21 A	SR	0.58	0.29	1.0627	0.0434	1.03	1.04			
22	SR	0.51	0.30	1.2935	0.0429	1.04	1.05			
23	SR	0.88	0.33	-0.9772	0.0632	0.95	0.92			
24	SR	0.86	0.43	-0.6738	0.0577	0.78	0.56			
25	SR	0.82	0.29	-0.3487	0.0531	0.98	1.01			
26	SR	0.56	0.21	1.0501	0.0432	1.19	1.26			
27	SR	0.72	0.29	0.4286	0.0458	1.00	1.01			
28	SR	0.75	0.31	0.2397	0.0472	0.95	0.91			
29	SR	0.45	0.38	1.7013	0.0433	0.95	0.97			
36	SR	0.66	0.41	0.5357	0.0452	0.95	0.91			
37	SR	0.50	0.29	1.2684	0.0430	1.06	1.08			
38	SR	0.62	0.44	0.7073	0.0444	0.91	0.85			
39	SR	0.76	0.39	-0.1523	0.0512	0.95	0.82			
40	SR	0.85	0.43	-0.8265	0.0605	0.91	0.65			
41	SR	0.64	0.37	0.5323	0.0453	0.99	0.99			
42	SR	0.52	0.24	1.3246	0.0430	1.11	1.15			
43	SR	0.56	0.48	0.8915	0.0438	0.91	0.86			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.8 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 6 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	SE	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.93	0.25	-1.3336	0.0697	0.75	0.64			
2	SR	0.97	0.21	-2.7349	0.1227	1.04	0.71			
3	SR	0.85	0.19	-0.9089	0.0609	1.16	1.43			
4	SR	0.88	0.26	-1.1479	0.0655	1.13	1.20			
5	SR	0.81	0.27	-0.5668	0.0551	1.17	1.23			
6	SR	0.93	0.34	-1.4246	0.0722	0.75	0.56			
7	SR	0.50	0.35	1.0944	0.0429	1.04	1.04			
8	SR	0.80	0.36	-0.4850	0.0541	0.99	0.86			
9	SR	0.94	0.29	-1.5147	0.0748	0.72	0.58			
10 B	SR	0.59	0.33	0.7440	0.0437	1.05	1.07			
11 B	BCR	0.49	0.42	1.5577	0.0320	1.05	1.05	-2.4112	-0.6607	3.0719
12 B	SR	0.69	0.13	0.1213	0.0474	1.31	1.51			
13 B	SR	0.81	0.32	-0.0287	0.0487	0.86	0.86			
14 B	BCR	0.58	0.41	1.0770	0.0396	0.94	0.94	-2.8849	-1.1457	4.0306
15 B	SR	0.61	0.19	0.5913	0.0445	1.23	1.38			
16 B	SR	0.84	0.42	-0.3767	0.0525	0.76	0.60			
17 B	BCR	0.49	0.34	1.0755	0.0391	1.06	1.06	-4.5144	0.1215	4.3928
18 B	SR	0.82	0.35	-0.5113	0.0543	0.99	0.93			
19 B	SR	0.68	0.31	0.4651	0.0451	1.01	1.00			
20 B	BCR	0.50	0.36	0.9476	0.0382	1.05	1.07	-4.4842	0.4649	4.0192
21 B	SR	0.76	0.40	-0.0913	0.0495	0.95	0.83			
22	SR	0.53	0.31	1.2935	0.0426	1.02	1.05			
23	SR	0.87	0.35	-0.9772	0.0620	0.98	0.84			
24	SR	0.86	0.41	-0.6738	0.0567	0.75	0.55			
25	SR	0.81	0.30	-0.3487	0.0523	0.92	0.95			
26	SR	0.56	0.23	1.0501	0.0429	1.08	1.09			
27	SR	0.71	0.30	0.4286	0.0452	0.98	0.99			
28	SR	0.75	0.30	0.2397	0.0465	0.94	0.90			
29	SR	0.44	0.38	1.7013	0.0432	0.96	0.99			
36	SR	0.66	0.42	0.5357	0.0447	0.91	0.90			
37	SR	0.49	0.28	1.2684	0.0428	1.05	1.07			
38	SR	0.60	0.44	0.7073	0.0440	0.92	0.88			
39	SR	0.77	0.38	-0.1523	0.0503	0.89	0.78			
40	SR	0.85	0.42	-0.8265	0.0594	0.90	0.65			
41	SR	0.63	0.37	0.5323	0.0448	1.02	1.05			
42	SR	0.51	0.26	1.3246	0.0428	1.09	1.15			
43	SR	0.56	0.49	0.8915	0.0434	0.87	0.82			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.9 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 7 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.96	0.25	-2.4364	0.1119	0.95	0.72			
2	SR	0.93	0.21	-1.5468	0.0789	0.81	0.97			
3	SR	0.81	0.42	-0.5743	0.0580	1.02	0.83			
4	SR	0.91	0.15	-1.1399	0.0687	0.97	1.25			
5	SR	0.95	0.31	-1.8025	0.0870	0.70	0.50			
6 A	SR	0.85	0.37	-0.5886	0.0582	0.86	0.84			
7 A	BCR	0.58	0.48	0.4728	0.0420	0.96	0.96	-4.1484	-0.2496	4.398
8 A	SR	0.77	0.44	-0.0097	0.0510	0.89	0.83			
9 A	SR	0.87	0.37	-0.9725	0.0650	1.05	1.07			
10 A	BCR	0.52	0.51	1.3428	0.0375	0.93	0.93	-3.1612	-0.6117	3.7729
11 A	SR	0.68	0.36	0.4505	0.0473	1.04	1.07			
12 A	SR	0.69	0.34	0.5064	0.0469	1.04	1.09			
13 A	BCR	0.37	0.39	2.4622	0.0310	1.16	1.16	-2.2283	-0.2021	2.4304
14 A	SR	0.62	0.43	0.7000	0.0458	0.94	0.92			
15 A	SR	0.73	0.37	0.1619	0.0494	1.00	0.96			
16 A	BCR	0.55	0.52	0.7640	0.0384	0.90	0.90	-4.1250	0.2255	3.8995
17 A	SR	0.57	0.33	1.0169	0.0447	1.04	1.03			
18	SR	0.72	0.30	0.5791	0.0465	0.99	1.11			
19	SR	0.86	0.40	-0.5545	0.0578	0.86	0.73			
20	SR	0.66	0.13	0.4841	0.0471	1.33	1.71			
21	SR	0.70	0.30	0.6747	0.0460	0.99	0.96			
22	SR	0.85	0.32	-0.6174	0.0587	0.96	0.98			
23	SR	0.67	0.28	0.6158	0.0463	1.10	1.18			
24	SR	0.70	0.40	0.5929	0.0465	0.94	0.95			
25	SR	0.95	0.36	-2.2676	0.1046	0.89	0.42			
32	SR	0.88	0.43	-1.0643	0.0670	0.84	0.59			
33	SR	0.61	0.29	0.5496	0.0467	1.19	1.35			
34	SR	0.75	0.46	-0.0205	0.0512	0.91	0.81			
35	SR	0.75	0.38	0.0420	0.0507	0.95	0.86			
36	SR	0.54	0.41	0.9240	0.0451	1.03	1.07			
37	SR	0.71	0.44	0.1653	0.0495	0.97	0.91			
38	SR	0.83	0.47	-0.8093	0.0621	0.97	0.77			
39	SR	0.82	0.44	-0.4818	0.0570	0.93	0.76			
40	SR	0.73	0.41	-0.1892	0.0532	1.13	1.23			
41	SR	0.80	0.40	-0.5607	0.0585	0.98	0.91			
42	SR	0.74	0.46	-0.3731	0.0557	1.13	1.02			
43	SR	0.50	0.37	1.3477	0.0446	1.05	1.05			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.10 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 7 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	SE	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.96	0.25	-2.4364	0.1117	0.98	0.92			
2	SR	0.93	0.20	-1.5468	0.0784	0.79	0.88			
3	SR	0.82	0.42	-0.5743	0.0576	0.97	0.80			
4	SR	0.91	0.15	-1.1399	0.0683	0.90	1.30			
5	SR	0.95	0.31	-1.8025	0.0867	0.68	0.51			
6 B	SR	0.73	0.42	0.4223	0.0470	0.88	0.79			
7 B	BCR	0.48	0.47	0.8441	0.0408	0.92	0.91	-5.4570	0.8736	4.5834
8 B	SR	0.83	0.42	-0.5513	0.0572	0.90	0.75			
9 B	SR	0.81	0.38	-0.4917	0.0563	1.02	0.87			
10 B	BCR	0.44	0.47	1.4321	0.0429	0.87	0.85	-5.1787	0.9201	4.2586
11 B	SR	0.73	0.34	-0.2130	0.0527	1.16	1.19			
12 B	SR	0.68	0.19	0.4182	0.0470	1.19	1.58			
13 B	BCR	0.35	0.46	2.5970	0.0287	1.07	1.07	-1.6856	-0.9921	2.6777
14 B	SR	0.79	0.34	-0.4213	0.0553	1.06	1.01			
15 B	SR	0.60	0.16	0.5905	0.0460	1.34	1.54			
16 B	BCR	0.59	0.48	0.5434	0.0320	0.98	1.00	-3.0723	0.531	2.5413
17 B	SR	0.64	0.46	0.3397	0.0476	1.02	0.96			
18	SR	0.69	0.26	0.5791	0.0460	1.06	1.09			
19	SR	0.87	0.39	-0.5545	0.0573	0.74	0.57			
20	SR	0.66	0.12	0.4841	0.0466	1.31	1.68			
21	SR	0.71	0.31	0.6747	0.0457	0.97	0.90			
22	SR	0.86	0.32	-0.6174	0.0582	0.86	0.81			
23	SR	0.66	0.28	0.6158	0.0458	1.10	1.12			
24	SR	0.70	0.39	0.5929	0.0460	0.89	0.84			
25	SR	0.95	0.34	-2.2676	0.1045	0.89	0.48			
32	SR	0.89	0.41	-1.0643	0.0666	0.74	0.49			
33	SR	0.61	0.28	0.5496	0.0462	1.19	1.27			
34	SR	0.76	0.46	-0.0205	0.0507	0.88	0.75			
35	SR	0.75	0.37	0.0420	0.0502	0.94	0.86			
36	SR	0.54	0.41	0.9240	0.0446	1.01	1.01			
37	SR	0.72	0.44	0.1653	0.0490	0.94	0.89			
38	SR	0.84	0.45	-0.8093	0.0617	0.93	0.75			
39	SR	0.82	0.43	-0.4818	0.0565	0.88	0.71			
40	SR	0.73	0.40	-0.1892	0.0528	1.08	1.18			
41	SR	0.80	0.40	-0.5607	0.0578	0.99	0.96			
42	SR	0.74	0.46	-0.3731	0.0552	1.05	0.95			
43	SR	0.50	0.36	1.3477	0.0441	1.01	1.04			

Note. 'B' indicates that it is a unique item appearing only on Form B.

Table C.11 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 8 Form A

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.95	0.24	-2.2671	0.0984	0.97	0.83			
2	SR	0.93	0.34	-1.6274	0.0765	0.86	0.67			
3	SR	0.85	0.34	-0.6076	0.0551	0.95	0.88			
4	SR	0.84	0.39	-0.6192	0.0553	1.03	0.96			
5	SR	0.91	0.36	-1.3966	0.0705	0.87	0.62			
6 A	SR	0.76	0.29	0.1001	0.0470	0.97	1.06			
7 A	BCR	0.59	0.54	1.1815	0.0341	0.87	0.87	-3.1976	0.0552	3.1424
8 A	SR	0.59	0.17	0.2165	0.0461	1.50	1.76			
9 A	SR	0.89	0.41	-0.3128	0.0512	0.89	0.79			
10 A	BCR	0.46	0.49	1.7222	0.0312	0.95	0.94	-2.4424	-0.4761	2.9186
11 A	SR	0.73	0.29	0.1675	0.0467	1.04	1.03			
12 A	SR	0.91	0.27	-1.2042	0.0659	0.93	0.85			
13 A	BCR	0.41	0.57	2.5193	0.0325	0.81	0.81	-2.9607	-0.5414	3.5021
14 A	SR	0.74	0.44	0.2223	0.0461	0.84	0.78			
15 A	SR	0.77	0.49	-0.0622	0.0485	0.92	0.84			
16 A	BCR	0.35	0.48	2.5818	0.0344	0.89	0.89	-3.0308	0.0831	2.9476
17 A	SR	0.72	0.37	0.2274	0.0462	0.95	0.9			
18	SR	0.75	0.41	0.4748	0.0444	0.83	0.78			
19	SR	0.72	0.45	0.5684	0.0439	0.83	0.76			
20	SR	0.83	0.42	-0.2440	0.0504	0.76	0.67			
21	SR	0.69	0.25	0.5198	0.0442	1.04	1.12			
22	SR	0.71	0.11	0.2093	0.0462	1.20	1.35			
23	SR	0.89	0.31	-1.2370	0.0666	0.98	0.96			
24	SR	0.57	0.14	0.7855	0.0430	1.23	1.37			
25	SR	0.63	0.26	0.3464	0.0452	1.16	1.21			
32	SR	0.72	0.49	0.2219	0.0461	0.93	0.87			
33	SR	0.52	0.22	1.2743	0.0421	1.09	1.14			
34	SR	0.72	0.25	0.0242	0.0477	1.11	1.32			
35	SR	0.87	0.16	-1.0659	0.0635	0.99	1.2			
36	SR	0.63	0.39	0.6577	0.0436	0.95	0.92			
37	SR	0.83	0.43	-0.6796	0.0563	0.99	0.83			
38	SR	0.49	0.21	1.0443	0.0424	1.15	1.18			
39	SR	0.88	0.43	-1.1736	0.0654	0.93	0.64			
40	SR	0.89	0.49	-0.3586	0.0519	0.92	0.79			
41	SR	0.27	0.09	2.5515	0.0473	1.15	1.52			
42	SR	0.59	0.27	0.4998	0.0445	1.18	1.21			
43	SR	0.54	0.37	1.2325	0.0422	0.96	0.96			

Note. 'A' indicates that it is a unique item appearing only on Form A.

Table C.12 The 2009 MSA-Reading Classical and Rasch Item Difficulty Parameters: Grade 8 Form B

Item Number	Item Type	P-Value	Point-Biserial	Rasch Difficulty	*SE*	Ms. Infit	Ms. Outfit	Step 0-1	Step 1-2	Step 2-3
1	SR	0.96	0.23	-2.2671	0.1014	0.77	0.54			
2	SR	0.93	0.32	-1.6274	0.0784	0.74	0.55			
3	SR	0.85	0.34	-0.6076	0.0557	0.94	0.87			
4	SR	0.84	0.29	-0.6192	0.0560	0.98	0.90			
5	SR	0.91	0.34	-1.3966	0.0719	0.91	0.64			
6 B	SR	0.76	0.33	0.2076	0.0463	0.91	0.85			
7 B	BCR	0.36	0.50	2.4400	0.0301	0.89	0.89	-2.2582	-0.1749	2.4331
8 B	SR	0.60	0.30	0.5854	0.0438	1.08	1.10			
9 B	SR	0.77	0.38	-0.0108	0.0483	0.86	0.81			
10 B	BCR	0.44	0.53	1.9256	0.0377	0.84	0.83	-3.8668	0.1164	3.7504
11 B	SR	0.87	0.30	-1.1335	0.0657	0.96	0.85			
12 B	SR	0.94	0.33	-1.8534	0.0855	0.93	0.61			
13 B	BCR	0.45	0.45	1.1781	0.0400	0.86	0.84	-5.0342	0.7254	4.3088
14 B	SR	0.75	0.38	-0.0088	0.0482	0.93	0.87			
15 B	SR	0.66	0.28	0.4904	0.0445	1.06	1.07			
16 B	BCR	0.38	0.37	2.2508	0.0429	0.97	0.97	-4.0963	0.8369	3.2594
17 B	SR	0.65	0.32	0.3771	0.0452	1.09	1.12			
18	SR	0.74	0.39	0.4748	0.0444	0.81	0.76			
19	SR	0.73	0.43	0.5684	0.0439	0.82	0.75			
20	SR	0.83	0.41	-0.2440	0.0507	0.78	0.66			
21	SR	0.69	0.23	0.5198	0.0442	1.05	1.12			
22	SR	0.72	0.09	0.2093	0.0463	1.17	1.28			
23	SR	0.89	0.29	-1.2370	0.0678	1.03	0.97			
24	SR	0.56	0.12	0.7855	0.0429	1.28	1.41			
25	SR	0.63	0.26	0.3464	0.0453	1.21	1.31			
32	SR	0.72	0.39	0.2219	0.0462	0.94	0.86			
33	SR	0.51	0.22	1.2743	0.0420	1.09	1.13			
34	SR	0.73	0.23	0.0242	0.0480	1.17	1.46			
35	SR	0.87	0.15	-1.0659	0.0647	1.03	1.23			
36	SR	0.62	0.38	0.6577	0.0436	0.97	0.93			
37	SR	0.84	0.41	-0.6796	0.0571	0.97	0.86			
38	SR	0.48	0.20	1.0443	0.0423	1.15	1.24			
39	SR	0.88	0.42	-1.1736	0.0668	0.89	0.59			
40	SR	0.80	0.38	-0.3586	0.0525	0.93	0.84			
41	SR	0.27	0.09	2.5515	0.0472	1.17	1.39			
42	SR	0.59	0.27	0.4998	0.0446	1.18	1.22			
43	SR	0.54	0.39	1.2325	0.0422	0.94	0.93			

Note. 'B' indicates that it is a unique item appearing only on Form B.