

5. COMPARATIVE CLASSICAL AND IRT STATS ACROSS YEARS FOR THE COMMON ITEMS USED IN GRADES 6-8

The p-values of common items were compared across the two years (2009 and 2010) for Grades 6 to 8 to collect information about how much a possible year-to-year linking common item had changed in consecutive years with regard to item difficulty. Grades 3-5 had no common items as this was the first year of administration.

Tables 5.1 to 5.3 provide both the p-values and the Rasch difficulties of the common items across the two years of administration for grades 6-8. Figures 5.1, 5.3, and 5.5 graphically display the shifts in p-values for the common items across the two years. Figures 5.2, 5.4 and 5.6 display the same for the Rasch item difficulty parameters prior to placing them on the common scale.

Table 5.1. P-Value and Unequated Rasch Difficulty Comparisons of Core Common Items Year 2009 with Year 2010: Grade 6

Item No	Item CID	P-Value 2009	P-Value 2010	Difference in P-Values	Rasch Difficulty 2009	Rasch Difficulty 2010
1	100000213662	0.69	0.69	0.00	-0.7867	-0.6640
2	100000213663	0.78	0.76	-0.02	-1.2831	-1.0811
3	100000213664	0.60	0.54	-0.06	-0.3530	0.0364
4	100000213665	0.63	0.65	0.02	-0.4888	-0.4854
5	100000213666	0.54	0.57	0.03	-0.0595	-0.1022
6	100000213668	0.65	0.68	0.03	-0.5508	-0.6483
7	100000213669	0.24	0.25	0.01	1.3285	1.4436
8	100000213670	0.71	0.77	0.06	-0.8831	-1.1560
9	100000213671	0.48	0.52	0.04	0.1881	0.1052
10	100000102192	0.62	0.60	-0.02	-0.4133	-0.2714
11	100000102194	0.56	0.54	-0.02	-0.1792	0.0364
12	100000102191	0.67	0.68	0.01	-0.6591	-0.6172
13	100000102195	0.59	0.61	0.02	-0.3109	-0.3000
14	100000102196	0.47	0.44	-0.03	0.2119	0.4491
15	100000102174	0.51	0.51	0.00	0.0695	0.1464
16	100000102175	0.34	0.33	-0.01	0.8270	0.9642
17	100000102173	0.63	0.64	0.01	-0.4815	-0.4457
18	100000102176	0.41	0.43	0.02	0.4870	0.4908
19	100000102178	0.45	0.51	0.06	0.3073	0.1738
20	100000102136	0.65	0.70	0.05	-0.5472	-0.7221
21	100000102137	0.52	0.54	0.02	0.0153	0.0088
22	100000102139	0.60	0.60	0.00	-0.3179	-0.2571
23	100000102140	0.58	0.55	-0.03	-0.2517	-0.0327
Mean Rasch					-0.0109	-0.0014

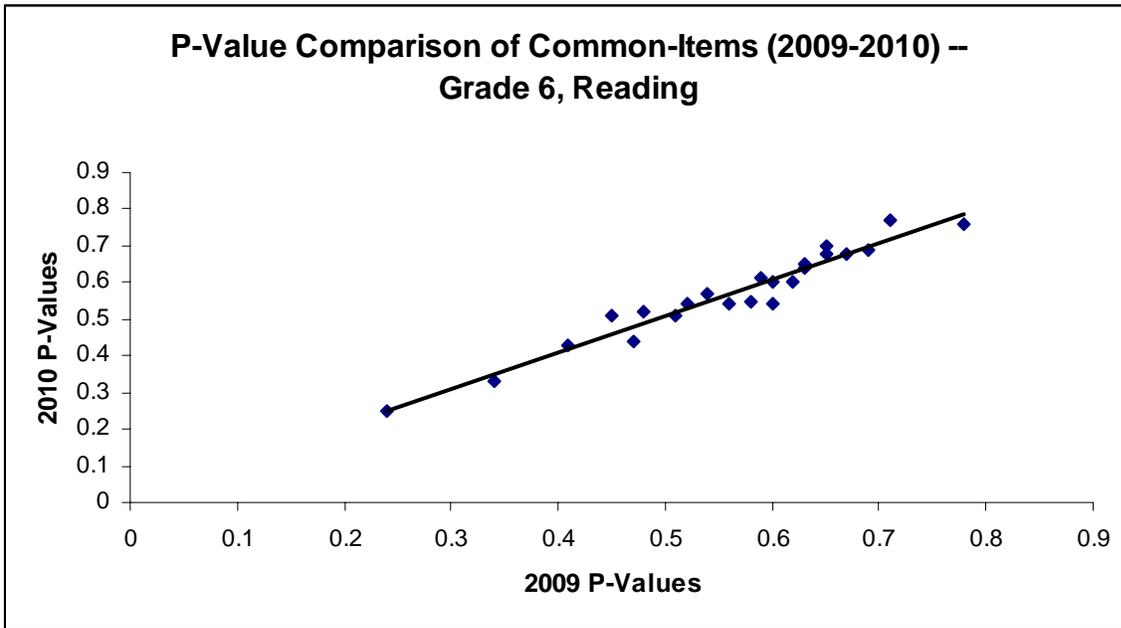


Figure 5.1. P-values of the common items for Grade 6, years 2009 and 2010

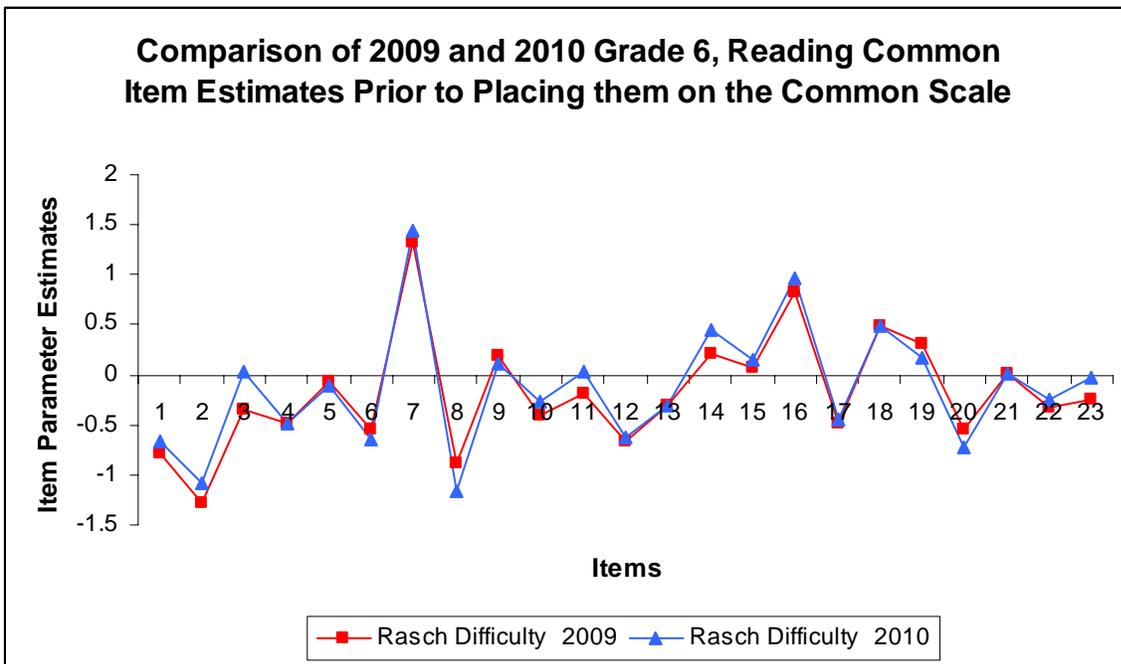


Figure 5.2. Rasch difficulty parameters for the common items, Grade 6, years 2009 and 2010

Table 5.2. P-Value and Rasch Difficulty Comparisons of Core Linking Items Year 2009 with Year 2010: Grade 7

Item No.	Item CID	P-Value 2009	P-Value 2010	Difference in P-Values	Rasch Difficulty 2009	Rasch Difficulty 2010
1	100000213674	0.69	0.67	-0.02	-0.7780	-0.5090
2	100000213675	0.80	0.78	-0.02	-1.3540	-1.1078
3	100000213676	0.34	0.35	0.01	0.8276	0.9922
4	100000213678	0.72	0.74	0.02	-0.9143	-0.8588
5	100000213679	0.71	0.68	-0.03	-0.8469	-0.5615
6	100000102276	0.50	0.48	-0.02	0.0908	0.3745
7	100000102277	0.36	0.34	-0.02	0.7546	1.0260
8	100000102274	0.42	0.41	-0.01	0.4769	0.7183
9	100000102278	0.51	0.46	-0.05	0.0775	0.4595
10	100000102279	0.42	0.41	-0.01	0.4687	0.7064
11	100000102263	0.55	0.58	0.03	-0.1197	-0.0485
12	100000102267	0.43	0.43	0.00	0.4089	0.6273
13	100000102268	0.52	0.50	-0.02	0.0297	0.2819
14	100000102269	0.43	0.42	-0.01	0.4035	0.6628
15	100000102266	0.37	0.33	-0.04	0.6886	1.1033
16	100000102244	0.84	0.84	0.00	-1.6963	-1.4900
17	100000102246	0.57	0.58	0.01	-0.1924	-0.0761
18	100000102247	0.76	0.75	-0.01	-1.1534	-0.9085
19	100000102248	0.52	0.51	-0.01	0.0244	0.2742
20	100000102245	0.80	0.80	0.00	-1.3660	-1.2209
21	100000102218	0.48	0.50	0.02	0.1918	0.2973
22	100000102220	0.59	0.58	-0.01	-0.2739	-0.0642
23	100000102221	0.49	0.47	-0.02	0.1732	0.4208
24	100000102222	0.62	0.61	-0.01	-0.4429	-0.1798
25	100000102217	0.64	0.63	-0.01	-0.5024	-0.2937
Mean Rasch					-0.2010	0.0250

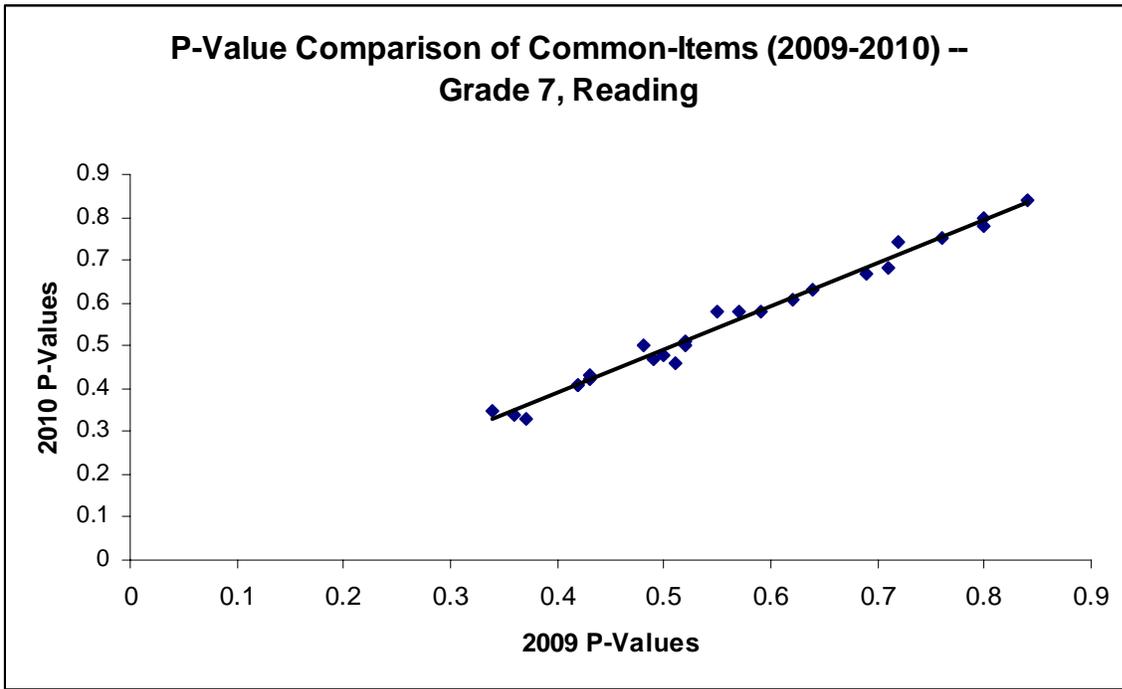


Figure 5.3. P-values of the common items for Grade 7, years 2009 and 2010

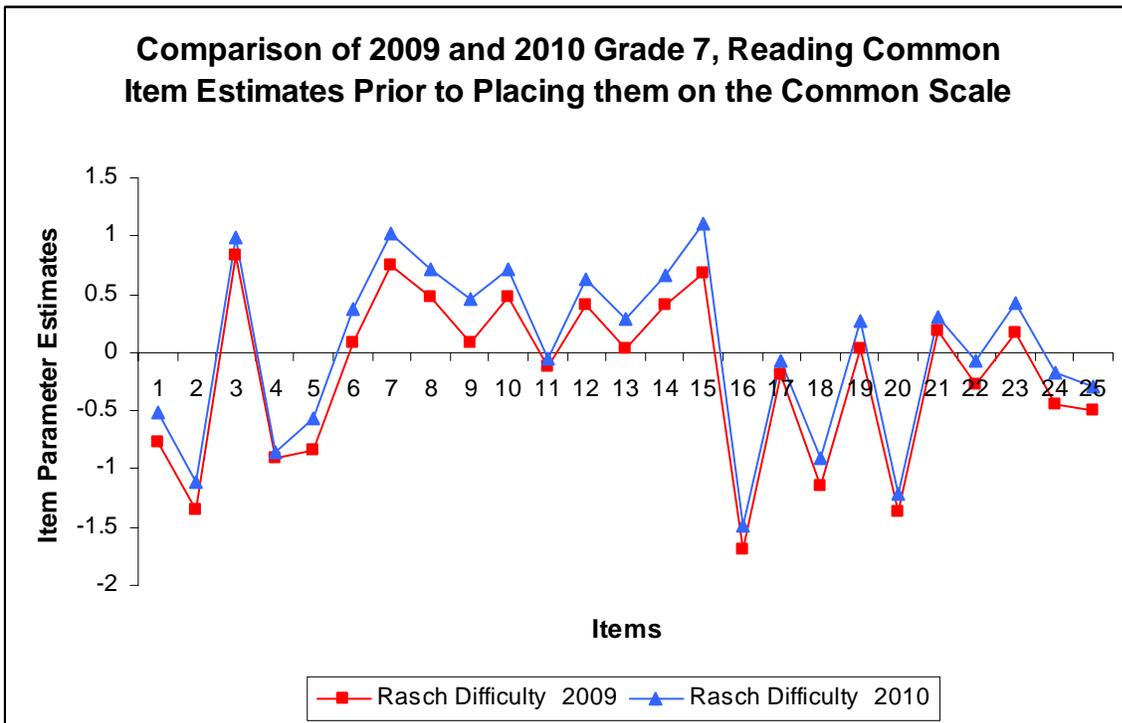


Figure 5.4. Rasch difficulty parameters for the common items, Grade 7, years 2009 and 2010

Table 5.3. P-Value and Rasch Difficulty Comparisons of Core Linking Items Year 2009 with Year 2010: Grade 8

Item No.	Item CID	P-Value 2009	P-Value 2010	Difference in P-Values	Rasch Difficulty 2009	Rasch Difficulty 2010
1	100000213683	0.80	0.83	0.03	-1.1648	-1.3041
2	100000213684	0.67	0.67	0.00	-0.4197	-0.3775
3	100000213686	0.48	0.50	0.02	0.4446	0.3926
4	100000213687	0.58	0.60	0.02	0.0045	-0.0457
5	100000213688	0.63	0.63	0.00	-0.1989	-0.1547
6	100000102331	0.83	0.86	0.03	-1.3174	-1.5258
7	100000102329	0.52	0.56	0.04	0.2613	0.1423
8	100000102330	0.57	0.60	0.03	0.0618	-0.0170
9	100000102334	0.51	0.47	-0.04	0.3175	0.5589
10	100000102335	0.80	0.85	0.05	-1.1686	-1.4334
11	100000102341	0.64	0.67	0.03	-0.2773	-0.3581
12	100000102343	0.53	0.57	0.04	0.2393	0.1213
13	100000102344	0.70	0.70	0.00	-0.5397	-0.5208
14	100000102346	0.52	0.55	0.03	0.2686	0.1913
15	100000102345	0.60	0.63	0.03	-0.0760	-0.1806
16	100000102320	0.77	0.78	0.01	-0.9453	-0.9953
17	100000102322	0.64	0.65	0.01	-0.2879	-0.2740
18	100000102323	0.52	0.51	-0.01	0.2760	0.3822
19	100000102324	0.57	0.62	0.05	0.0370	-0.1072
20	100000102321	0.76	0.76	0.00	-0.8923	-0.8741
21	100000102304	0.52	0.57	0.05	0.2711	0.1002
22	100000102305	0.64	0.66	0.02	-0.2458	-0.3158
23	100000102302	0.48	0.53	0.05	0.4618	0.2783
24	100000102307	0.65	0.68	0.03	-0.3358	-0.4206
25	100000102308	0.62	0.66	0.04	-0.1834	-0.3043
Mean Rasch					-0.2164	-0.2817

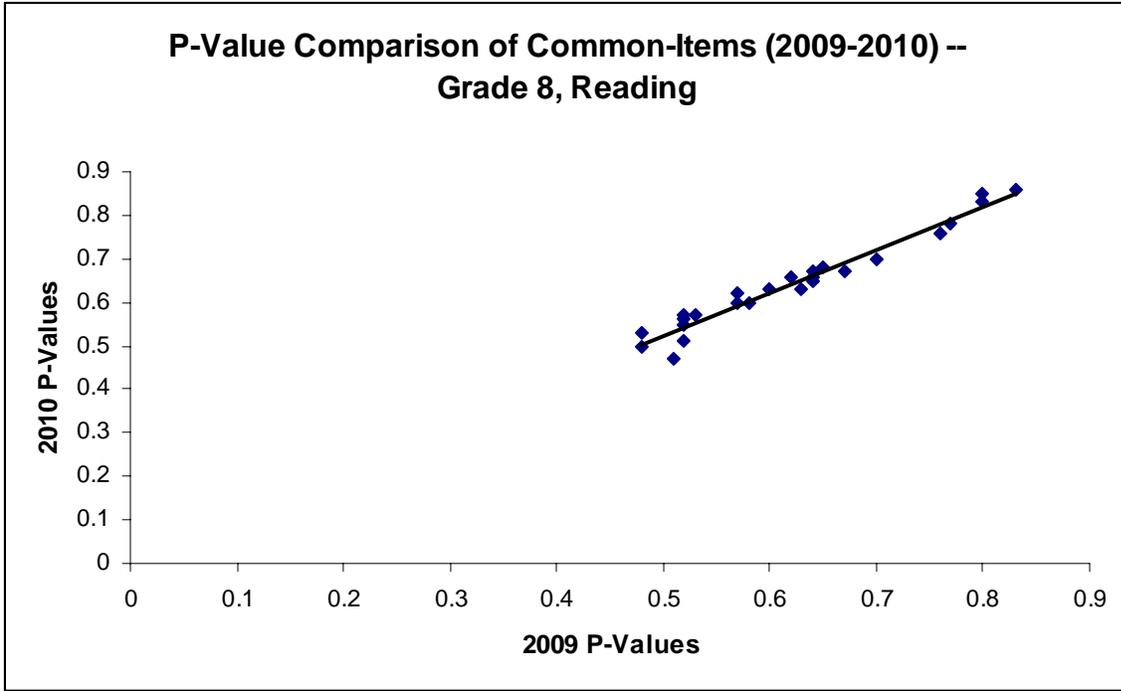


Figure 5.5. P-values of the common items for Grade 8, years 2009 and 2010

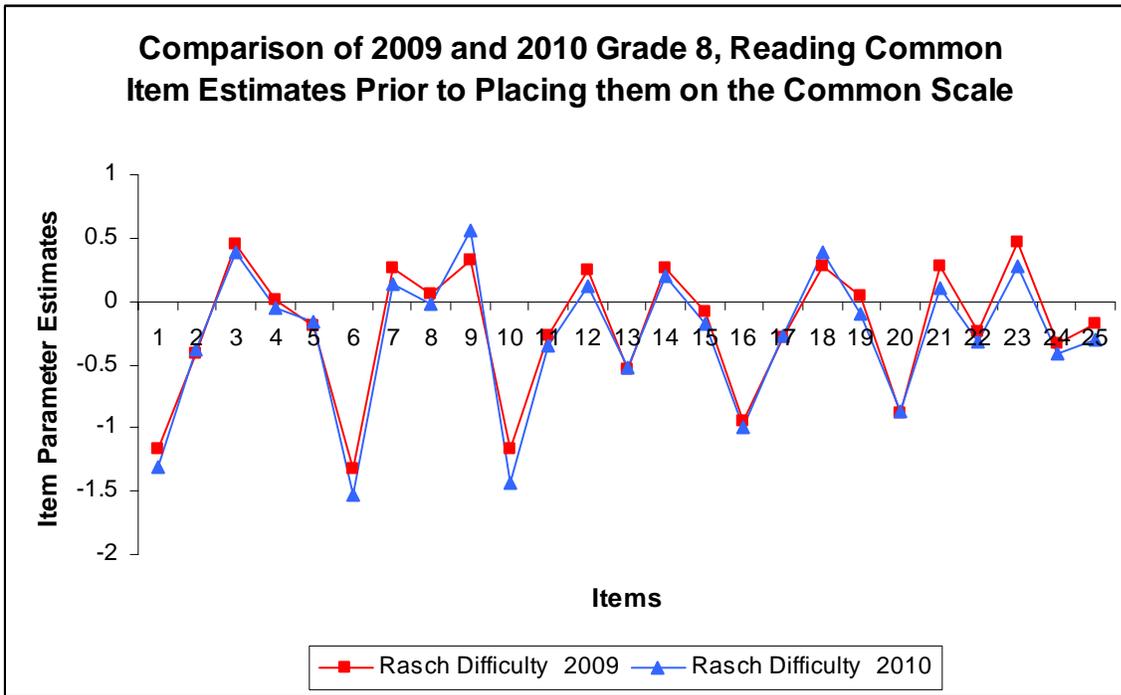


Figure 5.6. Rasch difficulty parameters for the common items, Grade 8, years 2009 and 2010