

# **APPENDIX O**

## **INTERRATER CONSISTENCY**

**Table O-1. 2016 MCAS: Item-Level Interrater Consistency Statistics  
by Grade – ELA**

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
3	308893	5	1,966	67.85	31.08	0.73	0.97
	298241	3	2,014	72.14	27.51	0.59	0.35
	303634	3	1,949	76.86	22.73	0.77	0.41
	308817	3	1,971	74.33	24.56	0.59	1.12
	308814	3	1,963	77.94	21.29	0.56	0.61
4	298601	5	1,922	63.22	35.95	0.73	0.83
	309015	5	1,942	54.38	41.35	0.66	4.17
	307627	5	1,969	64.70	33.62	0.71	1.68
	312753	5	1,957	67.14	31.32	0.76	1.48
5	302388	5	1,948	65.45	33.83	0.74	0.72
	283382	5	1,967	57.60	38.49	0.68	3.66
	313048	5	1,963	63.47	35.10	0.72	1.43
	307290	5	1,942	61.07	36.20	0.77	2.73
6	302772	5	2,049	59.00	38.65	0.76	2.24
	308521	5	2,015	61.54	36.38	0.71	2.08
	303489	5	2,112	63.26	35.04	0.75	1.42
	302790	5	2,055	59.81	37.91	0.83	2.19
7	309114	5	1,944	62.60	35.44	0.73	1.90
	297214	5	1,976	61.44	36.84	0.70	1.47
	314035	5	1,951	58.59	38.75	0.72	2.56
	302946	5	2,005	61.75	36.81	0.74	1.35
8	297574	5	1,972	63.18	33.57	0.71	3.25
	302312	5	1,939	63.28	34.09	0.75	2.63
	293280	5	1,913	60.32	38.32	0.74	1.36
	303867	5	2,058	64.77	32.56	0.76	2.72
10	314701	5	66,454	61.91	36.53	0.76	1.56
	309181	5	66,970	59.74	38.46	0.70	1.79
	314838	5	67,040	64.93	34.26	0.70	0.81
	314417	5	66,733	68.20	31.20	0.78	0.60
	299602C	4	64,803	76.89	22.72	0.65	0.83
	299602T	6	64,803	69.93	29.47	0.67	0.83

**Table O-2. 2016 MCAS: Item-Level Interrater Consistency Statistics  
by Grade – Mathematics**

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
3	207826	2	1,972	98.83	1.17	0.95	0.00
	310894	2	1,955	98.06	1.94	0.96	0.00
	293503	3	1,961	90.82	9.08	0.92	0.10
	260579	2	1,958	98.98	1.02	0.97	0.00
	253598	3	1,970	96.45	2.79	0.95	0.76
	298985	2	1,973	98.63	1.37	0.95	0.00

continued

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
3	310887	2	1,965	97.20	2.80	0.93	0.00
	297641	3	1,963	95.06	4.79	0.94	0.15
	310884	2	1,964	99.03	0.97	0.98	0.00
	297404	3	1,969	94.82	5.18	0.95	0.00
4	293514	2	1,942	95.62	4.38	0.89	0.00
	307311	2	1,959	98.93	1.07	0.97	0.00
	307065	2	1,923	99.22	0.78	0.98	0.00
	302489	5	1,976	76.77	22.27	0.89	0.96
	307322	5	1,981	84.65	14.03	0.94	1.31
	307072	2	1,942	98.30	1.70	0.96	0.00
	307030	2	1,949	98.87	1.13	0.97	0.00
	299681	2	1,954	99.03	0.97	0.98	0.00
	293812	5	1,934	84.90	13.70	0.93	1.40
	307039	5	1,951	78.99	19.99	0.92	1.03
5	298105	2	1,965	98.47	1.53	0.96	0.00
	310322	2	1,976	94.13	5.87	0.86	0.00
	221205	2	1,981	99.34	0.66	0.96	0.00
	298005	5	1,976	86.29	11.59	0.92	2.13
	303764	5	1,982	83.96	15.39	0.95	0.66
	287421	2	1,976	98.79	1.21	0.95	0.00
	303757	2	1,977	98.03	1.97	0.95	0.00
	301183	2	1,976	97.98	2.02	0.95	0.00
	272901	5	1,979	84.74	13.90	0.95	1.36
	303765	5	1,968	81.25	15.60	0.91	3.15
6	311687	2	2,051	98.05	1.95	0.96	0.00
	311708	2	2,068	98.69	1.31	0.97	0.00
	303723	2	2,044	99.07	0.93	0.98	0.00
	303724	5	2,052	91.23	7.21	0.94	1.56
	301511	5	2,068	85.88	13.20	0.96	0.92
	298156	2	2,069	98.50	1.50	0.94	0.00
	311659	2	2,059	96.75	3.25	0.85	0.00
	298150	2	2,061	99.22	0.78	0.98	0.00
	311694	5	2,051	78.45	18.63	0.90	2.93
	296396	5	2,042	67.63	28.80	0.89	3.57
7	311079	5	2,022	75.67	23.00	0.90	1.34
	281696	2	1,997	98.25	1.75	0.92	0.00
	301860	2	1,995	97.89	2.11	0.95	0.00
	298174	2	1,997	98.75	1.25	0.96	0.00
	298212	5	1,977	87.15	10.98	0.96	1.87
	272156	5	1,989	82.00	16.54	0.93	1.46
	302318	2	1,997	99.45	0.55	0.98	0.00
	306598	2	1,995	99.50	0.50	0.97	0.00
	306606	2	2,003	98.85	1.15	0.97	0.00
	311134	5	1,983	79.63	19.36	0.93	1.01
8	301477	2	1,971	97.77	2.23	0.96	0.00
	296114	2	1,980	99.29	0.71	0.98	0.00
	228379	2	2,011	99.25	0.75	0.96	0.00
	301485	5	1,984	87.60	12.05	0.96	0.35

continued

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
8	301713	5	1,975	85.72	13.67	0.95	0.61
	297651	2	1,983	98.99	1.01	0.98	0.00
	311451	2	1,982	99.60	0.40	0.98	0.00
	297663	2	2,001	98.80	1.20	0.97	0.00
	311465	5	1,980	85.76	13.03	0.94	1.21
	298039	5	1,975	78.43	19.85	0.89	1.72
10	311174	5	67,140	77.43	21.20	0.93	1.37
	303454	5	68,308	89.99	9.63	0.96	0.38
	312317	5	67,059	92.31	7.40	0.96	0.30
	311163	2	68,447	99.03	0.97	0.97	0.00
	250773	2	68,472	98.66	1.34	0.97	0.00
	311224	5	68,387	85.67	13.91	0.91	0.43
	313788	5	67,931	80.37	18.27	0.94	1.36
	287942	2	67,489	98.33	1.67	0.97	0.00
	303461	2	68,219	97.98	2.02	0.96	0.00
	306491	5	68,085	82.33	16.35	0.92	1.32

**Table O-3. 2016 MCAS: Item-Level Interrater Consistency Statistics by Grade – STE**

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
5	291597	5	6,686	86.20	12.83	0.94	0.97
	294556	5	6,805	62.06	33.34	0.83	4.60
	273735	5	7,017	60.18	33.90	0.81	5.94
	273773	5	6,863	72.81	25.21	0.91	1.98
8	299004	5	7,026	63.48	32.02	0.84	4.50
	292041	5	7,108	56.02	37.06	0.81	6.98
	299510	5	6,894	75.73	22.28	0.89	1.99
	304691	5	6,861	75.40	23.50	0.91	1.11

**Table O-4. 2016 MCAS: Item-Level Interrater Consistency Statistics – High School Biology**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
304272	5	49,024	77.96	20.58	0.92	1.46
289126	5	48,255	86.49	12.93	0.94	0.58
314638	5	49,030	64.36	32.63	0.86	3.01
301354	5	49,257	59.70	36.09	0.80	4.22
310764	5	49,495	79.15	19.72	0.93	1.14

**Table O-5. 2016 MCAS: Item-Level Interrater Consistency Statistics – High School Chemistry**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
288237	5	789	72.75	23.45	0.86	3.80
309496	5	809	77.38	21.01	0.89	1.61
261486	5	805	76.40	20.00	0.90	3.60
288234	5	812	70.44	26.11	0.83	3.45
300145	5	797	62.86	32.37	0.83	4.77

**Table O-6. 2016 MCAS: Item-Level Interrater Consistency Statistics – High School Introductory Physics**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
299384	5	14,605	78.82	19.77	0.86	1.41
287404	5	14,694	81.78	17.83	0.90	0.39
287224	5	14,948	81.28	17.62	0.92	1.10
293950	5	14,718	86.17	12.65	0.92	1.19
246576	5	14,893	92.72	6.49	0.95	0.79

**Table O-7. 2016 MCAS: Item-Level Interrater Consistency Statistics – High School Technology/Engineering**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
305095	5	2,587	73.91	24.78	0.84	1.31
279914	5	2,627	54.13	40.54	0.74	5.33
299306	5	2,573	72.99	25.46	0.84	1.55
300263	5	2,610	67.89	27.74	0.80	4.37
306842	5	2,566	81.37	17.23	0.91	1.40

**Table O-8. 2016 MCAS-Alt: Item-Level Interrater Consistency Statistics by Grade – ELA**

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
3	comp1	5	183	98.36	0.00	0.58	1.64
	comp2	5	184	99.46	0.00	0.82	0.54
	comp3	5	182	92.86	3.85	0.65	23.08
	ind1	4	170	98.82	0.59	0.93	1.18
	ind2	4	155	98.06	1.94	0.95	3.23
	ind3	4	159	97.48	1.89	0.96	11.32
	sk1	4	170	100.00	0.00	1.00	1.18
	sk2	4	155	98.71	1.29	0.90	3.23
	sk3	4	159	92.45	4.40	0.92	11.95

continued

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
4	comp1	5	324	99.38	0.62	0.95	0.93
	comp2	5	326	99.08	0.61	0.86	1.53
	comp3	5	324	97.53	0.93	0.72	19.14
	ind1	4	302	99.34	0.66	0.97	0.66
	ind2	4	282	100.00	0.00	1.00	0.71
	ind3	4	299	96.99	2.68	0.94	13.04
	sk1	4	302	99.67	0.33	0.99	0.99
	sk2	4	282	98.94	1.06	0.97	1.06
	sk3	4	299	86.96	8.70	0.84	16.39
5	comp1	5	366	98.36	0.55	0.70	3.28
	comp2	5	368	99.73	0.27	0.97	1.09
	comp3	5	367	92.64	3.81	0.55	22.34
	ind1	4	316	99.05	0.95	0.97	1.27
	ind2	4	304	98.68	1.32	0.97	1.32
	ind3	4	330	98.18	1.82	0.98	13.94
	sk1	4	316	99.37	0.63	0.95	0.95
	sk2	4	304	99.67	0.33	0.98	0.99
	sk3	4	330	90.00	7.27	0.87	15.76
6	comp1	5	173	98.84	0.58	0.73	1.73
	comp2	5	174	98.28	1.15	0.72	1.72
	comp3	5	173	94.22	2.89	0.59	18.50
	ind1	4	152	99.34	0.66	0.99	0.66
	ind2	4	137	99.27	0.73	0.98	0.73
	ind3	4	153	97.39	1.96	0.92	12.42
	sk1	4	152	100.00	0.00	1.00	0.00
	sk2	4	137	99.27	0.73	0.94	1.46
	sk3	4	153	91.50	5.88	0.90	11.76
7	comp1	5	281	97.86	0.71	0.45	2.14
	comp2	5	285	99.65	0.00	0.87	0.35
	comp3	5	285	96.14	1.75	0.72	15.79
	ind1	4	240	99.17	0.83	0.97	0.83
	ind2	4	210	97.62	2.38	0.93	2.38
	ind3	4	262	98.85	1.15	0.99	9.54
	sk1	4	240	99.17	0.83	0.94	0.83
	sk2	4	210	99.52	0.48	0.97	1.43
	sk3	4	262	91.60	3.82	0.87	12.60
8	comp1	5	282	98.23	0.35	0.58	2.48
	comp2	5	283	99.65	0.35	0.96	1.41
	comp3	5	285	94.39	2.46	0.60	20.70
	ind1	4	254	100.00	0.00	1.00	0.00
	ind2	4	222	99.55	0.45	0.99	0.90
	ind3	4	259	98.46	1.54	0.98	13.51
	sk1	4	254	99.61	0.39	0.97	0.39
	sk2	4	222	99.55	0.45	0.98	0.90
	sk3	4	259	92.28	6.18	0.92	14.67
HS	comp1	5	377	99.73	0.27	0.98	1.86
	comp2	5	379	99.74	0.00	0.90	3.17
	comp3	5	371	90.84	2.16	0.55	32.08

continued

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
HS	ind1	4	329	99.70	0.30	0.99	1.52
	ind2	4	273	98.53	1.47	0.97	1.83
	ind3	4	305	94.75	4.59	0.91	19.02
	sk1	4	329	98.78	1.22	0.95	1.52
	sk2	4	273	99.63	0.37	0.98	1.10
	sk3	4	305	87.54	8.52	0.88	21.31

COMP = level of complexity; IND = independence; SK = demonstration of skills and concepts

**Table O-9. 2016 MCAS-Alt: Item-Level Interrater Consistency Statistics by Grade – Mathematics**

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
3	comp1	5	182	97.80	0.55	0.59	2.20
	comp5	5	182	97.80	0.00	0.58	2.75
	ind1	4	152	100.00	0.00	1.00	2.63
	ind5	4	163	98.16	1.84	0.95	2.45
	sk1	4	152	99.34	0.66	0.94	2.63
	sk5	4	163	100.00	0.00	1.00	1.84
4	comp1	5	317	99.37	0.63	0.93	0.95
	comp3	5	319	99.37	0.63	0.95	0.63
	ind1	4	293	98.63	1.37	0.97	1.71
	ind3	4	295	99.32	0.68	0.98	0.68
	sk1	4	293	99.66	0.34	0.98	1.71
	sk3	4	295	99.32	0.68	0.95	1.36
5	comp2	5	379	98.42	0.53	0.66	1.85
	comp3	5	379	98.42	0.79	0.67	2.11
	ind2	4	321	98.44	1.56	0.94	2.18
	ind3	4	330	99.70	0.30	0.99	0.61
	sk2	4	321	98.75	1.25	0.92	1.56
	sk3	4	330	99.70	0.30	0.98	0.61
6	comp1	5	177	98.87	1.13	0.93	1.69
	comp2	5	177	98.31	1.13	0.78	1.69
	ind1	4	161	100.00	0.00	1.00	0.00
	ind2	4	159	100.00	0.00	1.00	0.00
	sk1	4	161	100.00	0.00	1.00	0.00
	sk2	4	159	99.37	0.63	0.96	0.63
7	comp1	5	289	98.27	0.69	0.73	2.77
	comp4	5	288	99.65	0.00	0.86	1.04
	ind1	4	239	99.16	0.84	0.96	1.67
	ind4	4	241	99.17	0.83	0.96	1.66
	sk1	4	239	99.16	0.84	0.96	2.09
	sk4	4	241	100.00	0.00	1.00	1.66
8	comp2	5	295	97.29	1.36	0.71	5.08
	comp4	5	294	98.98	0.68	0.80	1.70
	ind2	4	252	100.00	0.00	1.00	0.40
	ind4	4	274	99.64	0.36	0.99	1.09

continued

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
8	sk2	4	252	100.00	0.00	1.00	0.40
	sk4	4	274	99.64	0.36	0.98	1.09
HS	comp1	5	78	100.00	0.00	1.00	1.28
	comp2	5	311	98.39	0.64	0.77	4.18
	comp3	5	257	99.22	0.39	0.82	3.50
	comp4	5	252	98.41	0.00	0.79	3.97
	comp5	5	224	98.21	0.89	0.84	5.36
	ind1	4	68	97.06	2.94	0.95	2.94
	ind2	4	260	100.00	0.00	1.00	0.77
	ind3	4	227	99.56	0.44	0.99	1.76
	ind4	4	218	99.54	0.46	0.99	1.38
	ind5	4	174	100.00	0.00	1.00	1.72
	sk1	4	68	100.00	0.00	1.00	2.94
	sk2	4	260	99.62	0.38	0.98	0.77
	sk3	4	227	100.00	0.00	1.00	1.76
	sk4	4	218	99.54	0.46	0.98	0.92
	sk5	4	174	100.00	0.00	1.00	1.72

COMP = level of complexity; IND = independence; SK = demonstration of skills and concepts

**Table O-10. 2016 MCAS-Alt: Item-Level Interrater Consistency Statistics  
by Grade – STE**

Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
5	comp1	5	312	99.36	0.64	0.94	1.92
	comp2	5	297	98.99	1.01	0.90	2.02
	comp3	5	243	99.59	0.41	0.97	2.47
	comp4	5	166	100.00	0.00	1.00	1.81
	ind1	4	282	97.87	2.13	0.92	2.13
	ind2	4	274	99.64	0.36	0.99	0.73
	ind3	4	221	99.55	0.45	0.99	0.45
	ind4	4	152	100.00	0.00	1.00	0.00
	sk1	4	282	100.00	0.00	1.00	1.06
	sk2	4	274	99.64	0.36	0.96	0.73
	sk3	4	221	99.55	0.45	0.97	0.90
	sk4	4	152	99.34	0.66	0.93	0.66
8	comp1	5	238	99.16	0.84	0.93	1.68
	comp2	5	250	98.00	0.80	0.59	2.40
	comp3	5	183	99.45	0.00	0.74	1.09
	comp4	5	145	99.31	0.00	0.81	0.69
	ind1	4	215	99.53	0.47	0.98	1.40
	ind2	4	225	99.11	0.89	0.97	2.22
	ind3	4	164	99.39	0.61	0.97	1.22
	ind4	4	129	100.00	0.00	1.00	0.00
	sk1	4	215	98.60	1.40	0.93	1.86
	sk2	4	225	98.22	1.78	0.91	2.67

continued



Grade	Item Number	Number of		Percent		Correlation	Percent of Third Scores
		Score Categories	Responses Scored Twice	Exact	Adjacent		
8	sk3	4	164	100.00	0.00	1.00	1.22
	sk4	4	129	100.00	0.00	1.00	0.00

COMP = level of complexity; IND = independence; SK = demonstration of skills and concepts

**Table O-11. 2016 MCAS-Alt: Item-Level Interrater Consistency Statistics – High School Biology**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
comp1	5	282	97.52	1.06	0.55	3.90
comp2	5	274	97.81	1.09	0.66	4.74
comp3	5	271	98.89	0.74	0.83	2.95
comp4	5	2				
ind1	4	231	98.70	1.30	0.96	1.30
ind2	4	236	97.88	2.12	0.94	3.81
ind3	4	235	98.30	1.70	0.98	2.13
ind4	4	2				
sk1	4	231	99.57	0.43	0.99	1.73
sk2	4	236	98.31	1.69	0.95	3.39
sk3	4	235	99.15	0.85	0.96	1.70
sk4	4	2				

COMP = level of complexity; IND = independence; SK = demonstration of skills and concepts

**Table O-12. 2016 MCAS-Alt: Item-Level Interrater Consistency Statistics – High School Chemistry**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
comp1	5	16	100.00	0.00		6.25
comp2	5	16	93.75	0.00		12.50
comp3	5	16	100.00	0.00		0.00
ind1	4	14	92.86	7.14	0.78	21.43
ind2	4	15	93.33	6.67	0.78	20.00
ind3	4	11	100.00	0.00	1.00	0.00
sk1	4	14	85.71	14.29	0.84	21.43
sk2	4	15	86.67	13.33	0.65	20.00
sk3	4	11	100.00	0.00	1.00	0.00

COMP = level of complexity; IND = independence; SK = demonstration of skills and concepts

**Table O-13. 2016 MCAS-Alt: Item-Level Interrater Consistency Statistics –  
High School Introductory Physics**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
comp1	5	20	100.00	0.00	1.00	0.00
comp2	5	20	100.00	0.00	1.00	0.00
comp3	5	20	100.00	0.00	1.00	0.00
ind1	4	18	100.00	0.00	1.00	0.00
ind2	4	17	100.00	0.00	1.00	5.88
ind3	4	18	100.00	0.00	1.00	0.00
sk1	4	18	100.00	0.00	1.00	0.00
sk2	4	17	94.12	5.88	0.94	5.88
sk3	4	18	100.00	0.00	1.00	0.00

COMP = level of complexity; IND = independence; SK = demonstration of skills and concepts

**Table O-14. 2016 MCAS-Alt: Item-Level Interrater Consistency Statistics –  
High School Technology/Engineering**

Item Number	Number of		Percent		Correlation	Percent of Third Scores
	Score Categories	Responses Scored Twice	Exact	Adjacent		
comp1	5	37	100.00	0.00	1.00	5.41
comp2	5	35	94.29	2.86	0.65	8.57
comp3	5	34	97.06	2.94	0.88	5.88
ind1	4	31	100.00	0.00	1.00	0.00
ind2	4	30	100.00	0.00	1.00	0.00
ind3	4	31	100.00	0.00	1.00	0.00
sk1	4	31	100.00	0.00	1.00	0.00
sk2	4	30	100.00	0.00	1.00	0.00
sk3	4	31	100.00	0.00	1.00	0.00

COMP = level of complexity; IND = independence; SK = demonstration of skills and concepts