

## **Appendix O—CLASSICAL RELIABILITIES**

**Table O-1. 2010 MEPA: Raw Score Descriptive Statistics, Cronbach's Alpha, and Standard Errors of Measurement (SEM) by Grade Span**

Grade Span	Sessions	Number of Students	Raw Score			Alpha	Standard Error
			Maximum	Mean	Standard Deviation		
K-2	A	13,141	54	32.06	10.54	0.91	3.21
	B	8,937	61	45.65	9.40	0.91	2.83
3-4	1&2	3,455	77	45.90	17.86	0.96	3.68
	2&3	7,760	79	55.80	9.43	0.89	3.17
5-6	1&2	2,176	77	41.87	17.16	0.95	3.80
	2&3	5,890	79	55.64	10.08	0.90	3.24
7-8	1&2	1,886	77	38.77	15.82	0.94	3.79
	2&3	4,431	79	54.88	10.94	0.91	3.36
9-12	1&2	3,448	77	40.59	14.41	0.94	3.66
	2&3	6,295	79	51.92	11.17	0.90	3.53

**Table O-2. 2010 MEPA: Subgroup Reliabilities**

Grade Span	Sessions	Subgroup	Number of Students	Raw Score			Alpha	Standard Error
				Maximum	Mean	Standard Deviation		
K-2	A	All Students	13,141	54	32.06	10.54	0.91	3.21
		Low Income	10,012	54	31.74	10.37	0.90	3.20
		African American	1,199	54	30.65	10.39	0.90	3.31
		Asian	2,456	54	33.08	10.82	0.92	3.11
		Hispanic	7,356	54	31.71	10.31	0.90	3.21
		Multi-race	131	54	34.71	10.39	0.91	3.15
		Native American	54	54	34.52	9.92	0.91	3.04
		Pacific Islander/Hawaiian	23	54	32.17	14.53	0.94	3.65
		White	1,856	54	33.26	10.49	0.91	3.18
		Female	6,105	54	32.76	10.42	0.91	3.21
		Male	6,970	54	31.57	10.51	0.91	3.20
		Plan 504	31	54	27.42	11.16	0.91	3.28
		Special Education	1,484	54	31.13	10.05	0.90	3.15
		Title I	9,838	54	31.58	10.47	0.90	3.23
	B	All Students	8,937	61	45.65	9.40	0.91	2.83
		Low Income	6,871	61	45.08	9.43	0.91	2.87
		African American	933	61	44.26	10.71	0.92	2.98
		Asian	2,022	61	47.26	8.68	0.90	2.69
		Hispanic	4,587	61	44.95	9.32	0.91	2.86
		Multi-race	84	61	46.70	10.77	0.93	2.75
Native American		18	61	46.89	8.81	0.90	2.77	
Pacific Islander/Hawaiian		17	61	46.00	7.56	0.86	2.80	
White		1,271	61	46.63	9.18	0.91	2.75	
Female		4,319	61	46.43	9.18	0.91	2.78	
3-4	1&2	All Students	3,455	77	45.90	17.86	0.96	3.68
		Low Income	2,824	77	45.95	17.23	0.96	3.66

continued

Grade Span	Sessions	Subgroup	Number of Students	Raw Score			Alpha	Standard Error
				Maximum	Mean	Standard Deviation		
3-4	1&2	African American	428	77	41.33	18.33	0.96	3.80
		Asian	593	77	49.02	17.47	0.96	3.52
		Hispanic	1,935	77	45.54	17.26	0.95	3.68
		Multi-race	33	77	48.30	17.30	0.95	3.80
		Native American	6	77				
		Pacific Islander/Hawaiian	6	77				
		White	415	77	50.47	17.16	0.96	3.51
		Female	1,539	77	46.89	17.71	0.96	3.67
		Male	1,877	77	45.72	17.50	0.96	3.66
		Plan 504	33	77	51.42	11.42	0.92	3.31
		Special Education	817	77	50.13	12.82	0.92	3.52
	Title I	2,659	77	44.59	17.67	0.96	3.71	
	2&3	All Students	7,760	79	55.80	9.43	0.89	3.17
		Low Income	6,381	79	55.18	9.56	0.89	3.20
		African American	884	79	53.89	11.11	0.91	3.27
		Asian	1,653	79	58.34	8.50	0.87	3.05
		Hispanic	4,191	79	54.74	9.30	0.88	3.19
		Multi-race	79	79	56.49	7.98	0.84	3.20
		Native American	15	79	56.47	9.26	0.88	3.24
		Pacific Islander/Hawaiian	8	79				
White		924	79	57.88	8.52	0.87	3.06	
Female		3,762	79	56.83	9.26	0.88	3.16	
Male		3,992	79	54.84	9.46	0.89	3.16	
Plan 504	34	79	47.32	10.68	0.91	3.29		
Special Education	1,017	79	49.39	10.00	0.89	3.36		
Title I	6,352	79	55.28	9.65	0.89	3.20		
5-6	1&2	All Students	2,176	77	41.87	17.16	0.95	3.80
		Low Income	1,837	77	42.27	16.76	0.95	3.79
		African American	348	77	40.81	17.14	0.95	3.86
		Asian	311	77	46.18	17.95	0.96	3.60
		Hispanic	1,255	77	41.30	16.74	0.95	3.81
		Multi-race	10	77	47.10	15.04	0.94	3.56
		Native American	2	77				
		Pacific Islander/Hawaiian	1	77				
		White	216	77	43.18	16.22	0.95	3.69
		Female	1,008	77	42.58	17.20	0.95	3.82
		Male	1,135	77	41.76	16.83	0.95	3.75
	Plan 504	16	77	47.19	12.49	0.91	3.69	
	Special Education	443	77	47.64	12.88	0.92	3.57	
	Title I	1,678	77	41.20	17.16	0.95	3.80	
	2&3	All Students	5,890	79	55.64	10.08	0.90	3.24
		Low Income	5,002	79	54.89	10.12	0.89	3.28
		African American	802	79	52.89	11.30	0.91	3.39
		Asian	1,097	79	58.97	8.89	0.88	3.10
		Hispanic	3,245	79	54.48	9.82	0.89	3.26
		Multi-race	31	79	54.19	12.31	0.93	3.32
Native American		6	79					
Pacific Islander/Hawaiian		7	79					

continued

Grade Span	Sessions	Subgroup	Number of Students	Raw Score			Alpha	Standard Error
				Maximum	Mean	Standard Deviation		
5-6	2&3	White	694	79	59.08	9.24	0.89	3.04
		Female	2,806	79	56.69	9.88	0.89	3.22
		Male	3,076	79	54.68	10.16	0.90	3.25
		Plan 504	35	79	50.77	11.09	0.91	3.31
		Special Education	1,212	79	49.70	9.54	0.87	3.43
		Title I	4,752	79	55.10	10.12	0.90	3.27
7-8	1&2	All Students	1,886	77	38.77	15.82	0.94	3.79
		Low Income	1,596	77	38.86	15.65	0.94	3.78
		African American	335	77	38.50	15.80	0.94	3.80
		Asian	254	77	39.59	15.81	0.95	3.62
		Hispanic	1,078	77	38.49	15.81	0.94	3.83
		Multi-race	14	77	45.64	14.62	0.94	3.58
	2&3	Native American	7	77				
		Pacific Islander/Hawaiian	6	77				
		White	165	77	41.06	15.14	0.94	3.60
		Female	821	77	39.17	15.91	0.94	3.79
		Male	1,038	77	38.75	15.64	0.94	3.77
		Plan 504	5	77				
		Special Education	256	77	44.68	14.78	0.94	3.74
		Title I	1,346	77	38.55	15.45	0.94	3.80
		All Students	4,431	79	54.88	10.94	0.91	3.36
9-12	1&2	Low Income	3,806	79	54.18	10.99	0.90	3.40
		African American	747	79	52.55	12.25	0.92	3.39
		Asian	747	79	59.32	8.58	0.86	3.18
		Hispanic	2,430	79	53.54	10.90	0.90	3.41
		Multi-race	32	79	54.56	11.80	0.92	3.39
		Native American	8	79				
	2&3	Pacific Islander/Hawaiian	9	79				
		White	449	79	58.90	9.06	0.88	3.10
		Female	2,076	79	56.29	10.59	0.90	3.32
		Male	2,346	79	53.65	11.08	0.91	3.38
		Plan 504	21	79	48.52	9.00	0.87	3.26
		Special Education	977	79	49.74	10.53	0.89	3.49
		Title I	2,845	79	54.73	10.12	0.89	3.33
		All Students	3,448	77	40.59	14.41	0.94	3.66
		Low Income	2,861	77	40.74	14.23	0.93	3.66
9-12	1&2	African American	827	77	42.51	13.72	0.93	3.57
		Asian	450	77	42.61	13.36	0.93	3.59
		Hispanic	1,821	77	39.17	14.66	0.94	3.69
		Multi-race	22	77	41.68	14.21	0.93	3.75
		Native American	7	77				
		Pacific Islander/Hawaiian	5	77				
	2&3	White	261	77	42.60	14.77	0.94	3.58
		Female	1,551	77	41.08	14.24	0.93	3.66
		Male	1,842	77	40.41	14.45	0.94	3.65
		Plan 504	16	77	46.38	10.36	0.87	3.79
		Special Education	323	77	44.10	15.38	0.94	3.86
		Title I	1,799	77	40.27	14.19	0.93	3.67

continued

Grade Span	Sessions	Subgroup	Number of Students	Raw Score			Alpha	Standard Error
				Maximum	Mean	Standard Deviation		
9–12	2&3	All Students	6,295	79	51.92	11.17	0.90	3.53
		Low Income	5,139	79	51.37	11.23	0.90	3.56
		African American	1,347	79	51.72	11.09	0.90	3.53
		Asian	1,176	79	54.26	10.65	0.89	3.45
		Hispanic	3,054	79	50.30	11.25	0.90	3.53
		Multi-race	41	79	53.22	9.78	0.87	3.48
		Native American	10	79	54.50	6.84	0.78	3.23
		Pacific Islander/Hawaiian	15	79	51.60	11.26	0.90	3.57
		White	623	79	55.70	10.22	0.89	3.39
		Female	2,936	79	53.07	11.13	0.90	3.52
		Male	3,330	79	50.90	11.08	0.90	3.52
		Plan 504	42	79	47.45	9.74	0.88	3.44
		Special Education	692	79	46.09	10.16	0.88	3.59
Title I	2,916	79	51.30	11.27	0.90	3.59		

**Table O-3. 2010 MEPA: Reliabilities by Reporting Category**

Grade Span	Sessions	Reporting Category	Number of Students	Raw Score			Alpha	Standard Error
				Maximum	Mean	Standard Deviation		
K–2	A	Reading	18	18	11.94	4.01	0.82	1.72
		Writing	7	11	5.31	3.38	0.82	1.43
		Listening	1	5	3.21	1.12		
		Speaking	4	20	11.60	4.44	0.97	0.77
	B	Reading	14	14	10.96	3.00	0.82	1.28
		Writing	13	22	15.48	4.65	0.86	1.77
		Listening	1	5	4.04	0.83		
		Speaking	4	20	15.17	3.31	0.95	0.74
3–4	1&2	Reading	23	28	18.23	6.76	0.91	2.07
		Writing	15	24	13.09	6.53	0.91	1.96
		Listening	1	5	3.12	1.25		
		Speaking	4	20	11.47	4.99	0.98	0.74
	2&3	Reading	22	28	18.63	4.40	0.81	1.94
		Writing	14	26	16.85	3.98	0.77	1.90
		Listening	1	5	4.23	0.74		
		Speaking	4	20	16.08	2.87	0.94	0.72
5–6	1&2	Reading	23	28	15.42	6.24	0.88	2.19
		Writing	15	24	13.49	6.22	0.90	1.93
		Listening	1	5	2.84	1.30		
		Speaking	4	20	10.12	5.10	0.98	0.72
	2&3	Reading	22	28	18.44	5.16	0.84	2.06
		Writing	14	26	16.59	3.81	0.76	1.86
		Listening	1	5	4.32	0.74		
		Speaking	4	20	16.30	3.02	0.94	0.72
7–8	1&2	Reading	23	28	14.16	5.78	0.84	2.29
		Writing	15	24	12.80	5.93	0.90	1.92
		Listening	1	5	2.63	1.24		
		Speaking	4	20	9.19	4.77	0.98	0.70

continued

Grade Span	Sessions	Reporting Category	Number of Students	Raw Score			Alpha	Standard Error
				Maximum	Mean	Standard Deviation		
7-8	2&3	Reading	22	28	17.45	5.25	0.84	2.09
		Writing	14	26	17.85	4.10	0.80	1.82
		Listening	1	5	4.14	0.87		
		Speaking	4	20	15.44	3.53	0.96	0.73
9-12	1&2	Reading	23	28	15.02	5.38	0.83	2.21
		Writing	15	24	13.22	5.72	0.88	1.99
		Listening	1	5	2.75	1.12		
		Speaking	4	20	9.60	4.23	0.97	0.72
	2&3	Reading	22	28	17.11	5.37	0.84	2.15
		Writing	14	26	15.91	4.32	0.75	2.15
		Listening	1	5	4.08	0.84		
		Speaking	4	20	14.82	3.32	0.95	0.74