

APPENDIX 24: OPERATIONAL TEST RELIABILITY BY SUBPOPULATIONS

MATHEMATICS

Table 24–1. Mathematics Reliability by Ethnicity

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	White (Caucasian)	59	4933	45.48	12.03	0.71	0.93	3.22
	African American	59	373	37.51	12.75	0.59	0.93	3.48
	Hispanic	59	646	40.63	12.48	0.63	0.93	3.42
	Asian/Pac. Islander/Native Hawaiian	59	733	39.86	13.62	0.62	0.94	3.38
	Alaska Native and American Indian	59	2252	35.39	13.10	0.55	0.93	3.47
	Two or more races	59	783	42.54	12.86	0.66	0.93	3.32
4	White (Caucasian)	59	4930	46.26	11.55	0.72	0.92	3.28
	African American	59	347	38.73	12.54	0.61	0.92	3.50
	Hispanic	59	653	41.95	12.06	0.66	0.92	3.46
	Asian/Pac. Islander/Native Hawaiian	59	750	41.34	12.33	0.65	0.92	3.46
	Alaska Native and American Indian	59	2144	36.73	12.54	0.57	0.92	3.55
	Two or more races	59	708	42.88	12.35	0.67	0.92	3.41
5	White (Caucasian)	59	4831	45.28	12.33	0.71	0.93	3.27
	African American	59	330	36.53	13.28	0.57	0.93	3.59
	Hispanic	59	586	40.40	13.10	0.63	0.93	3.48
	Asian/Pac. Islander/Native Hawaiian	59	710	41.78	13.37	0.65	0.93	3.42
	Alaska Native and American Indian	59	2135	35.28	13.25	0.55	0.93	3.59
	Two or more races	59	674	42.79	12.96	0.67	0.93	3.36
6	White (Caucasian)	59	4936	44.22	12.32	0.69	0.93	3.35
	African American	59	329	35.47	13.39	0.55	0.93	3.51
	Hispanic	59	526	38.63	12.77	0.60	0.92	3.52
	Asian/Pac. Islander/Native Hawaiian	59	743	41.45	13.39	0.65	0.94	3.39
	Alaska Native and American Indian	59	2016	33.70	12.57	0.53	0.92	3.55
	Two or more races	59	665	40.90	13.11	0.64	0.93	3.46
7	White (Caucasian)	59	4955	41.76	12.27	0.65	0.93	3.34
	African American	59	298	32.27	11.76	0.50	0.91	3.55
	Hispanic	59	568	36.61	12.69	0.57	0.93	3.47
	Asian/Pac. Islander/Native Hawaiian	59	699	37.83	13.43	0.59	0.93	3.44
	Alaska Native and American Indian	59	2117	32.56	12.76	0.51	0.92	3.53
	Two or more races	59	633	37.99	12.96	0.59	0.93	3.44
8	White (Caucasian)	59	5154	42.48	12.25	0.66	0.92	3.45
	African American	59	337	31.70	12.62	0.50	0.92	3.56
	Hispanic	59	534	36.42	12.78	0.57	0.92	3.56
	Asian/Pac. Islander/Native Hawaiian	59	740	37.83	13.44	0.59	0.93	3.50
	Alaska Native and American Indian	59	1957	33.78	12.92	0.53	0.92	3.56
	Two or more races	59	612	38.85	12.91	0.61	0.93	3.52

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–1 (continued). Mathematics Reliability by Ethnicity

Grade	Subpopulation Group	Mean						
		<i>L</i>	<i>N</i>	Mean	<i>SD</i>	<i>p</i> -value	Reliability	<i>SEM</i>
9	White (Caucasian)	59	5280	41.57	12.66	0.65	0.93	3.44
	African American	59	320	32.84	12.55	0.51	0.92	3.63
	Hispanic	59	504	36.60	12.81	0.57	0.92	3.59
	Asian/Pac. Islander/Native Hawaiian	59	740	39.24	12.83	0.61	0.93	3.51
	Alaska Native and American Indian	59	2207	32.51	12.43	0.51	0.91	3.65
	Two or more races	59	540	36.74	13.21	0.57	0.93	3.57
10	White (Caucasian)	36	5109	26.73	6.93	0.67	0.85	2.69
	African American	36	312	22.32	7.01	0.56	0.85	2.73
	Hispanic	36	508	23.17	7.12	0.58	0.85	2.75
	Asian/Pac. Islander/Native Hawaiian	36	722	23.89	7.31	0.60	0.86	2.76
	Alaska Native and American Indian	36	1982	20.82	6.98	0.52	0.85	2.75
	Two or more races	36	489	25.09	7.05	0.63	0.85	2.75

L=Number of items, *N*=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, *SEM*=Standard error of measurement

Table 24–2. Mathematics Reliability by Socioeconomic Status

Grade	Subpopulation Group	Mean						
		<i>L</i>	<i>N</i>	Mean	<i>SD</i>	<i>p</i> -value	Reliability	<i>SEM</i>
3	Not Low Income	59	5262	45.23	12.12	0.71	0.93	3.23
	Low Income	59	4459	37.86	13.33	0.59	0.93	3.44
4	Not Low Income	59	5132	46.37	11.50	0.72	0.92	3.28
	Low Income	59	4400	38.87	12.61	0.61	0.92	3.53
5	Not Low Income	59	5104	45.34	12.42	0.71	0.93	3.25
	Low Income	59	4162	37.69	13.39	0.59	0.93	3.55
6	Not Low Income	59	5324	44.27	12.43	0.69	0.93	3.35
	Low Income	59	3893	36.11	13.02	0.56	0.93	3.53
7	Not Low Income	59	5496	41.67	12.44	0.65	0.93	3.34
	Low Income	59	3778	33.86	12.71	0.53	0.92	3.53
8	Not Low Income	59	5657	42.49	12.38	0.66	0.92	3.45
	Low Income	59	3677	34.42	12.79	0.54	0.92	3.56
9	Not Low Income	59	6008	41.14	12.79	0.64	0.93	3.45
	Low Income	59	3583	34.03	12.75	0.53	0.92	3.62
10	Not Low Income	36	6000	26.50	6.93	0.66	0.85	2.70
	Low Income	36	3124	21.49	7.16	0.54	0.85	2.76

L=Number of items, *N*=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, *SEM*=Standard error of measurement

Table 24–3. Mathematics Reliability by English Proficiency Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	English Proficient	59	8301	43.77	12.42	0.68	0.93	3.29
	Limited English Proficient	59	1420	30.64	12.06	0.48	0.91	3.54
4	English Proficient	59	8465	44.37	12.01	0.69	0.92	3.36
	Limited English Proficient	59	1067	31.35	11.04	0.49	0.89	3.60
5	English Proficient	59	8221	43.46	12.85	0.68	0.93	3.34
	Limited English Proficient	59	1045	29.64	11.27	0.46	0.89	3.71
6	English Proficient	59	8306	42.30	12.72	0.66	0.93	3.41
	Limited English Proficient	59	911	27.33	10.68	0.43	0.89	3.56
7	English Proficient	59	8357	39.98	12.56	0.62	0.93	3.39
	Limited English Proficient	59	917	24.84	9.89	0.39	0.87	3.59
8	English Proficient	59	8330	40.82	12.61	0.64	0.92	3.48
	Limited English Proficient	59	1004	26.83	10.60	0.42	0.89	3.55
9	English Proficient	59	8550	39.85	12.88	0.62	0.93	3.49
	Limited English Proficient	59	1041	27.28	10.49	0.43	0.88	3.70
10	English Proficient	36	8150	25.66	7.07	0.64	0.85	2.72
	Limited English Proficient	36	974	17.51	5.99	0.44	0.79	2.73

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–4. Mathematics Reliability by Migrant Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Non-Migrant	59	9146	42.10	13.16	0.66	0.94	3.33
	Migrant	59	575	37.90	13.38	0.59	0.93	3.43
4	Non-Migrant	59	8935	43.17	12.57	0.67	0.93	3.40
	Migrant	59	597	38.97	12.27	0.61	0.92	3.53
5	Non-Migrant	59	8689	42.26	13.38	0.66	0.94	3.38
	Migrant	59	577	36.61	12.87	0.57	0.92	3.57
6	Non-Migrant	59	8631	41.12	13.29	0.64	0.93	3.43
	Migrant	59	586	36.39	12.65	0.57	0.92	3.51
7	Non-Migrant	59	8651	38.79	13.08	0.61	0.93	3.41
	Migrant	59	623	34.25	12.95	0.54	0.93	3.53
8	Non-Migrant	59	8772	39.58	13.09	0.62	0.93	3.50
	Migrant	59	562	35.12	13.28	0.55	0.93	3.54
9	Non-Migrant	59	8995	38.71	13.26	0.60	0.93	3.52
	Migrant	59	596	35.00	12.28	0.55	0.91	3.63
10	Non-Migrant	36	8609	24.96	7.37	0.62	0.86	2.73
	Migrant	36	515	21.91	7.32	0.55	0.86	2.78

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–5. Mathematics Reliability by Special Education Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Regular Education	59	8302	43.43	12.51	0.68	0.93	3.30
	Individualized Education Plan	59	1419	32.60	13.43	0.51	0.93	3.51
4	Regular Education	59	8052	44.64	11.75	0.70	0.92	3.36
	Individualized Education Plan	59	1480	33.47	12.84	0.52	0.92	3.60
5	Regular Education	59	7928	43.89	12.45	0.69	0.93	3.34
	Individualized Education Plan	59	1338	30.12	12.88	0.47	0.92	3.66
6	Regular Education	59	8051	42.64	12.49	0.67	0.93	3.40
	Individualized Education Plan	59	1166	28.30	11.97	0.44	0.91	3.59
7	Regular Education	59	8172	40.21	12.35	0.63	0.92	3.39
	Individualized Education Plan	59	1102	25.67	11.46	0.40	0.90	3.57
8	Regular Education	59	8268	40.93	12.46	0.64	0.92	3.48
	Individualized Education Plan	59	1066	26.82	11.55	0.42	0.90	3.57
9	Regular Education	59	8569	40.07	12.59	0.63	0.92	3.50
	Individualized Education Plan	59	1022	25.19	10.70	0.39	0.88	3.66
10	Regular Education	36	8192	25.67	6.93	0.64	0.85	2.72
	Individualized Education Plan	36	932	16.98	6.83	0.42	0.83	2.79

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–6. Mathematics Reliability by Gender

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Female	59	4709	42.18	12.90	0.66	0.93	3.34
	Male	59	5012	41.54	13.49	0.65	0.94	3.33
4	Female	59	4580	43.11	12.23	0.67	0.92	3.40
	Male	59	4952	42.73	12.91	0.67	0.93	3.40
5	Female	59	4571	42.45	13.12	0.66	0.93	3.38
	Male	59	4695	41.37	13.68	0.65	0.94	3.41
6	Female	59	4487	41.11	13.06	0.64	0.93	3.41
	Male	59	4730	40.55	13.52	0.63	0.93	3.46
7	Female	59	4496	38.80	12.78	0.61	0.93	3.42
	Male	59	4778	38.19	13.43	0.60	0.94	3.41
8	Female	59	4536	39.52	12.95	0.62	0.93	3.51
	Male	59	4798	39.12	13.33	0.61	0.93	3.48
9	Female	59	4682	38.74	12.91	0.61	0.93	3.53
	Male	59	4909	38.24	13.52	0.60	0.93	3.51
10	Female	36	4422	24.71	7.20	0.62	0.85	2.74
	Male	36	4700	24.86	7.60	0.62	0.87	2.72

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

READING

Table 24–7. Reading Reliability by Ethnicity

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	White (Caucasian)	55	4917	42.68	12.44	0.71	0.93	3.21
	African American	55	370	35.50	13.02	0.59	0.93	3.46
	Hispanic	55	642	37.58	12.84	0.63	0.93	3.42
	Asian/Pac. Islander/Native Hawaiian	55	727	35.75	13.46	0.60	0.93	3.49
	Alaska Native and American Indian	55	2253	30.10	12.97	0.50	0.92	3.55
	Two or more races	55	784	38.97	13.27	0.65	0.94	3.37
4	White (Caucasian)	55	4936	41.78	11.13	0.70	0.92	3.14
	African American	55	344	35.16	12.03	0.56	0.92	3.37
	Hispanic	55	646	36.81	12.03	0.60	0.92	3.33
	Asian/Pac. Islander/Native Hawaiian	55	739	34.43	11.73	0.58	0.92	3.39
	Alaska Native and American Indian	55	2154	30.21	11.75	0.51	0.91	3.43
	Two or more races	55	710	37.81	11.71	0.63	0.92	3.32
5	White (Caucasian)	55	4834	41.56	11.57	0.70	0.92	3.18
	African American	55	326	34.96	12.23	0.55	0.92	3.40
	Hispanic	55	578	36.72	12.97	0.60	0.93	3.33
	Asian/Pac. Islander/Native Hawaiian	55	701	34.66	12.66	0.60	0.93	3.39
	Alaska Native and American Indian	55	2137	28.81	12.50	0.53	0.92	3.46
	Two or more races	55	675	38.23	12.14	0.63	0.92	3.32
6	White (Caucasian)	55	4944	42.90	10.55	0.72	0.91	3.16
	African American	55	330	34.64	11.78	0.58	0.92	3.42
	Hispanic	55	533	36.80	11.93	0.61	0.92	3.37
	Asian/Pac. Islander/Native Hawaiian	55	739	36.82	12.23	0.61	0.93	3.35
	Alaska Native and American Indian	55	2015	30.28	11.66	0.50	0.91	3.46
	Two or more races	55	668	38.63	11.72	0.64	0.92	3.31
7	White (Caucasian)	55	4960	41.92	10.45	0.70	0.90	3.31
	African American	55	296	33.57	10.99	0.56	0.89	3.58
	Hispanic	55	567	36.14	11.23	0.60	0.90	3.51
	Asian/Pac. Islander/Native Hawaiian	55	694	34.80	11.93	0.58	0.91	3.53
	Alaska Native and American Indian	55	2121	30.89	11.85	0.51	0.91	3.56
	Two or more races	55	637	37.88	11.59	0.63	0.91	3.45
8	White (Caucasian)	55	5164	41.77	10.34	0.70	0.91	3.18
	African American	55	340	32.98	11.01	0.55	0.90	3.45
	Hispanic	55	534	35.96	11.57	0.60	0.91	3.38
	Asian/Pac. Islander/Native Hawaiian	55	732	35.74	11.10	0.60	0.91	3.38
	Alaska Native and American Indian	55	1960	31.92	11.19	0.53	0.90	3.45
	Two or more races	55	607	38.09	11.41	0.63	0.91	3.33

L=Number of items, N=Number of persons, Mean=Average person raw score
 SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–7(continued). Reading Reliability by Ethnicity

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
9	White (Caucasian)	55	5298	42.37	10.82	0.71	0.91	3.23
	African American	55	320	34.96	11.47	0.58	0.91	3.47
	Hispanic	55	502	37.55	11.52	0.63	0.91	3.44
	Asian/Pac. Islander/Native Hawaiian	55	735	36.01	11.46	0.60	0.91	3.50
	Alaska Native and American Indian	55	2236	31.48	11.79	0.52	0.91	3.55
	Two or more races	55	543	38.20	11.71	0.64	0.91	3.42
10	White (Caucasian)	65	5089	50.70	11.03	0.70	0.90	3.55
	African American	65	313	43.64	12.05	0.61	0.90	3.82
	Hispanic	65	500	43.90	12.14	0.61	0.90	3.76
	Asian/Pac. Islander/Native Hawaiian	65	713	42.44	12.42	0.59	0.91	3.83
	Alaska Native and American Indian	65	1971	38.16	12.74	0.53	0.91	3.88
	Two or more races	65	493	46.97	11.54	0.65	0.90	3.73

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–8. Reading Reliability by Socioeconomic Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Not Low Income	55	5255	42.27	12.50	0.70	0.93	3.24
	Low Income	55	4439	33.65	13.70	0.56	0.93	3.49
4	Not Low Income	55	5133	41.67	11.10	0.69	0.92	3.15
	Low Income	55	4396	33.11	12.24	0.55	0.92	3.39
5	Not Low Income	55	5099	41.32	11.71	0.69	0.93	3.19
	Low Income	55	4152	32.39	13.04	0.54	0.93	3.42
6	Not Low Income	55	5336	42.39	10.98	0.71	0.92	3.18
	Low Income	55	3895	33.65	12.13	0.56	0.92	3.42
7	Not Low Income	55	5509	41.28	10.85	0.69	0.91	3.32
	Low Income	55	3770	33.14	11.88	0.55	0.91	3.55
8	Not Low Income	55	5661	41.26	10.59	0.69	0.91	3.20
	Low Income	55	3676	33.84	11.43	0.56	0.91	3.43
9	Not Low Income	55	6029	41.64	11.05	0.69	0.91	3.28
	Low Income	55	3606	33.58	12.08	0.56	0.92	3.51
10	Not Low Income	65	5997	49.76	11.40	0.69	0.90	3.60
	Low Income	65	3083	40.19	12.90	0.56	0.91	3.84

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–9. Reading Reliability by English Proficiency Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	English Proficient	55	8287	40.63	12.83	0.68	0.93	3.30
	Limited English Proficient	55	1407	24.76	10.86	0.41	0.89	3.59
4	English Proficient	55	8481	39.46	11.66	0.66	0.92	3.23
	Limited English Proficient	55	1048	23.68	8.71	0.39	0.84	3.46
5	English Proficient	55	8223	39.30	12.14	0.65	0.93	3.27
	Limited English Proficient	55	1028	21.44	9.07	0.36	0.85	3.46
6	English Proficient	55	8339	40.41	11.32	0.67	0.92	3.26
	Limited English Proficient	55	892	22.72	8.68	0.38	0.84	3.47
7	English Proficient	55	8374	39.65	11.09	0.66	0.91	3.39
	Limited English Proficient	55	905	22.46	8.00	0.37	0.80	3.58
8	English Proficient	55	8341	39.90	10.82	0.67	0.91	3.26
	Limited English Proficient	55	996	25.23	8.38	0.42	0.82	3.54
9	English Proficient	55	8593	40.33	11.32	0.67	0.91	3.33
	Limited English Proficient	55	1042	24.54	8.55	0.41	0.82	3.62
10	English Proficient	65	8120	48.41	11.70	0.67	0.90	3.64
	Limited English Proficient	65	960	30.44	9.66	0.42	0.83	3.96

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–10. Reading Reliability by Migrant Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Non-Migrant	55	9121	38.69	13.67	0.64	0.94	3.36
	Migrant	55	573	32.56	13.65	0.54	0.93	3.50
4	Non-Migrant	55	8931	38.08	12.34	0.63	0.93	3.26
	Migrant	55	598	32.43	12.00	0.54	0.92	3.42
5	Non-Migrant	55	8672	37.83	12.95	0.63	0.94	3.29
	Migrant	55	579	29.51	12.78	0.49	0.93	3.45
6	Non-Migrant	55	8646	39.13	12.19	0.65	0.93	3.28
	Migrant	55	585	32.39	11.62	0.54	0.91	3.46
7	Non-Migrant	55	8655	38.36	11.87	0.64	0.92	3.42
	Migrant	55	624	32.61	12.08	0.54	0.91	3.54
8	Non-Migrant	55	8777	38.69	11.44	0.64	0.92	3.29
	Migrant	55	560	32.83	11.29	0.55	0.91	3.45
9	Non-Migrant	55	9035	38.99	12.02	0.65	0.92	3.36
	Migrant	55	600	33.12	11.91	0.55	0.91	3.52
10	Non-Migrant	65	8563	46.93	12.64	0.65	0.92	3.68
	Migrant	65	517	39.59	12.80	0.55	0.91	3.85

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–11. Reading Reliability by Special Education Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Regular Education	55	8284	40.41	12.74	0.67	0.93	3.32
	Individualized Education Plan	55	1410	26.05	12.99	0.43	0.93	3.54
4	Regular Education	55	8052	39.66	11.47	0.66	0.92	3.23
	Individualized Education Plan	55	1477	27.19	11.97	0.45	0.92	3.42
5	Regular Education	55	7917	39.34	12.18	0.66	0.93	3.26
	Individualized Education Plan	55	1334	25.27	11.84	0.42	0.92	3.45
6	Regular Education	55	8066	40.45	11.37	0.67	0.92	3.25
	Individualized Education Plan	55	1165	26.62	11.38	0.44	0.91	3.46
7	Regular Education	55	8171	39.63	11.11	0.66	0.91	3.39
	Individualized Education Plan	55	1108	25.77	10.99	0.43	0.89	3.57
8	Regular Education	55	8270	39.85	10.72	0.66	0.91	3.26
	Individualized Education Plan	55	1067	26.63	10.75	0.44	0.90	3.48
9	Regular Education	55	8597	40.23	11.24	0.67	0.91	3.34
	Individualized Education Plan	55	1038	25.34	10.69	0.42	0.89	3.51
10	Regular Education	65	8153	48.07	11.79	0.67	0.90	3.66
	Individualized Education Plan	65	927	32.75	12.68	0.45	0.91	3.83

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–12. Reading Reliability by Gender

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Female	55	4712	39.89	13.30	0.66	0.94	3.34
	Male	55	4982	36.84	14.00	0.61	0.94	3.40
4	Female	55	4575	39.01	12.09	0.65	0.93	3.25
	Male	55	4954	36.54	12.56	0.61	0.93	3.29
5	Female	55	4572	38.73	12.77	0.65	0.93	3.27
	Male	55	4679	35.93	13.27	0.60	0.94	3.33
6	Female	55	4494	39.89	11.94	0.66	0.93	3.25
	Male	55	4737	37.57	12.46	0.63	0.93	3.32
7	Female	55	4500	38.61	11.70	0.64	0.91	3.42
	Male	55	4779	37.37	12.19	0.62	0.92	3.42
8	Female	55	4534	39.91	11.01	0.67	0.91	3.24
	Male	55	4803	36.85	11.78	0.61	0.92	3.34
9	Female	55	4696	40.02	11.51	0.67	0.92	3.33
	Male	55	4939	37.30	12.48	0.62	0.93	3.38
10	Female	65	4396	47.91	12.49	0.67	0.91	3.65
	Male	65	4683	45.19	12.87	0.63	0.92	3.71

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

WRITING

Table 24–13. Writing Reliability by Ethnicity

Grade	Subpopulation Group	L	N	Mean	SD	Mean		
						p-value	Reliability	SEM
3	White (Caucasian)	52	4926	41.42	12.19	0.69	0.93	3.22
	African American	52	369	34.99	12.66	0.58	0.92	3.48
	Hispanic	52	641	36.86	12.74	0.61	0.93	3.39
	Asian/Pac. Islander/Native Hawaiian	52	726	35.98	13.52	0.60	0.94	3.38
	Alaska Native and American Indian	52	2250	29.52	13.23	0.49	0.93	3.52
	Two or more races	52	783	37.83	13.04	0.63	0.93	3.35
4	White (Caucasian)	50	4928	39.71	10.09	0.66	0.89	3.29
	African American	50	343	34.30	10.50	0.57	0.89	3.44
	Hispanic	50	646	36.47	10.59	0.61	0.90	3.40
	Asian/Pac. Islander/Native Hawaiian	50	738	35.11	10.93	0.59	0.90	3.41
	Alaska Native and American Indian	50	2151	30.13	10.89	0.50	0.90	3.52
	Two or more races	50	710	36.14	11.06	0.60	0.90	3.43
5	White (Caucasian)	50	4840	42.40	10.15	0.71	0.90	3.17
	African American	50	329	36.61	10.99	0.61	0.90	3.41
	Hispanic	50	578	39.00	10.89	0.65	0.91	3.30
	Asian/Pac. Islander/Native Hawaiian	50	702	38.40	11.01	0.64	0.91	3.33
	Alaska Native and American Indian	50	2142	32.73	11.27	0.55	0.90	3.49
	Two or more races	50	674	39.80	10.68	0.66	0.91	3.28
6	White (Caucasian)	50	4946	42.17	9.90	0.70	0.89	3.23
	African American	50	328	35.81	10.84	0.60	0.90	3.45
	Hispanic	50	533	37.94	10.96	0.63	0.90	3.38
	Asian/Pac. Islander/Native Hawaiian	50	739	38.65	11.07	0.64	0.91	3.36
	Alaska Native and American Indian	50	2015	31.60	10.93	0.53	0.89	3.55
	Two or more races	50	666	39.10	11.03	0.65	0.91	3.33
7	White (Caucasian)	50	4953	42.64	9.73	0.71	0.90	3.07
	African American	50	299	36.75	10.22	0.61	0.90	3.29
	Hispanic	50	566	38.07	10.33	0.63	0.90	3.25
	Asian/Pac. Islander/Native Hawaiian	50	692	37.65	10.93	0.63	0.91	3.22
	Alaska Native and American Indian	50	2125	33.10	10.65	0.55	0.90	3.38
	Two or more races	50	636	39.11	10.79	0.65	0.91	3.20
8	White (Caucasian)	50	5152	41.42	10.04	0.69	0.90	3.16
	African American	50	335	35.18	10.82	0.59	0.90	3.36
	Hispanic	50	534	37.45	10.48	0.62	0.90	3.28
	Asian/Pac. Islander/Native Hawaiian	50	731	37.33	10.70	0.62	0.91	3.26
	Alaska Native and American Indian	50	1956	32.84	10.82	0.55	0.90	3.42
	Two or more races	50	609	38.56	10.77	0.64	0.91	3.31

L=Number of items, N=Number of persons, Mean=Average person raw score
 SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–13 (continued). Writing Reliability by Ethnicity

Grade	Subpopulation Group	Mean						
		L	N	Mean	SD	p-value	Reliability	SEM
9	White (Caucasian)	50	5287	42.67	9.56	0.71	0.90	3.03
	African American	50	319	37.69	9.80	0.63	0.89	3.24
	Hispanic	50	499	38.89	10.13	0.65	0.90	3.22
	Asian/Pac. Islander/Native Hawaiian	50	730	38.28	10.04	0.64	0.90	3.21
	Alaska Native and American Indian	50	2227	33.96	10.25	0.57	0.89	3.36
	Two or more races	50	544	38.48	10.37	0.64	0.90	3.29
10	White (Caucasian)	34	5135	34.60	6.83	0.69	0.84	2.72
	African American	34	308	31.53	7.29	0.63	0.85	2.86
	Hispanic	34	506	31.25	7.70	0.62	0.86	2.90
	Asian/Pac. Islander/Native Hawaiian	34	720	31.52	7.38	0.63	0.85	2.82
	Alaska Native and American Indian	34	1999	28.02	7.72	0.56	0.85	2.99
	Two or more races	34	488	32.92	7.39	0.66	0.85	2.84

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–14. Writing Reliability by Socioeconomic Status

Grade	Subpopulation Group	Mean						
		L	N	Mean	SD	p-value	Reliability	SEM
3	Not Low Income	52	5249	41.12	12.47	0.69	0.93	3.22
	Low Income	52	4447	33.04	13.45	0.55	0.93	3.47
4	Not Low Income	50	5126	39.82	10.12	0.66	0.90	3.28
	Low Income	50	4390	32.64	11.04	0.54	0.90	3.50
5	Not Low Income	50	5100	42.49	10.12	0.71	0.90	3.16
	Low Income	50	4165	35.29	11.39	0.59	0.91	3.44
6	Not Low Income	50	5336	41.99	10.24	0.70	0.90	3.23
	Low Income	50	3893	34.64	11.13	0.58	0.90	3.49
7	Not Low Income	50	5499	42.37	9.90	0.71	0.90	3.07
	Low Income	50	3776	35.00	10.79	0.58	0.90	3.35
8	Not Low Income	50	5650	41.36	10.02	0.69	0.90	3.16
	Low Income	50	3667	34.50	10.95	0.57	0.90	3.39
9	Not Low Income	50	6021	42.23	9.55	0.70	0.90	3.06
	Low Income	50	3585	35.50	10.61	0.59	0.90	3.34
10	Not Low Income	34	6027	34.31	6.95	0.69	0.85	2.73
	Low Income	34	3131	29.14	7.78	0.58	0.85	2.97

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–15. Writing Reliability by English Proficiency Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	English Proficient	52	8291	39.49	12.77	0.66	0.93	3.29
	Limited English Proficient	52	1405	25.20	11.35	0.42	0.90	3.55
4	English Proficient	50	8468	37.86	10.62	0.63	0.90	3.35
	Limited English Proficient	50	1048	25.57	9.06	0.53	0.84	3.59
5	English Proficient	50	8235	40.74	10.58	0.65	0.91	3.24
	Limited English Proficient	50	1030	27.37	9.68	0.46	0.86	3.58
6	English Proficient	50	8335	40.30	10.53	0.66	0.90	3.30
	Limited English Proficient	50	894	25.72	8.65	0.59	0.83	3.61
7	English Proficient	50	8365	40.83	10.16	0.65	0.90	3.15
	Limited English Proficient	50	910	25.95	7.77	0.57	0.80	3.50
8	English Proficient	50	8325	39.99	10.39	0.67	0.90	3.22
	Limited English Proficient	50	992	27.46	8.62	0.46	0.83	3.52
9	English Proficient	50	8565	41.06	9.89	0.68	0.90	3.12
	Limited English Proficient	50	1041	28.65	8.40	0.48	0.83	3.51
10	English Proficient	34	8178	33.49	7.16	0.67	0.85	2.79
	Limited English Proficient	34	980	24.61	6.91	0.49	0.81	3.01

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–16. Writing Reliability by Migrant Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Non-Migrant	52	9119	37.77	13.45	0.63	0.94	3.34
	Migrant	52	577	31.85	13.68	0.53	0.94	3.48
4	Non-Migrant	50	8918	36.77	11.12	0.61	0.91	3.38
	Migrant	50	598	32.52	10.86	0.54	0.90	3.51
5	Non-Migrant	50	8688	39.60	11.23	0.66	0.91	3.28
	Migrant	50	577	34.04	10.91	0.57	0.90	3.48
6	Non-Migrant	50	8644	39.23	11.16	0.65	0.91	3.33
	Migrant	50	585	33.82	10.96	0.56	0.90	3.49
7	Non-Migrant	50	8651	39.72	10.81	0.66	0.91	3.18
	Migrant	50	624	34.57	10.91	0.58	0.91	3.35
8	Non-Migrant	50	8757	38.99	10.84	0.65	0.91	3.25
	Migrant	50	560	33.49	10.97	0.56	0.90	3.39
9	Non-Migrant	50	9010	39.99	10.42	0.67	0.91	3.16
	Migrant	50	596	35.58	10.39	0.59	0.90	3.31
10	Non-Migrant	34	8638	32.73	7.60	0.65	0.86	2.81
	Migrant	34	520	29.36	7.75	0.59	0.86	2.93

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–17. Writing Reliability by Special Education Status

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Regular Education	52	8279	39.10	13.00	0.65	0.94	3.30
	Individualized Education Plan	52	1417	27.58	12.40	0.46	0.92	3.53
4	Regular Education	50	8035	38.04	10.56	0.63	0.90	3.35
	Individualized Education Plan	50	1481	28.20	10.58	0.47	0.89	3.51
5	Regular Education	50	7922	40.87	10.56	0.68	0.91	3.23
	Individualized Education Plan	50	1343	29.71	10.78	0.50	0.89	3.54
6	Regular Education	50	8059	40.45	10.53	0.67	0.90	3.29
	Individualized Education Plan	50	1170	28.16	9.96	0.47	0.87	3.61
7	Regular Education	50	8169	40.95	10.01	0.68	0.90	3.14
	Individualized Education Plan	50	1106	27.66	9.95	0.46	0.88	3.48
8	Regular Education	50	8250	40.17	10.11	0.67	0.90	3.20
	Individualized Education Plan	50	1067	27.02	9.92	0.45	0.87	3.53
9	Regular Education	50	8576	41.17	9.59	0.69	0.90	3.11
	Individualized Education Plan	50	1030	27.62	9.67	0.46	0.87	3.51
10	Regular Education	34	8221	33.56	6.93	0.67	0.84	2.77
	Individualized Education Plan	34	937	23.59	7.84	0.47	0.84	3.13

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement

Table 24–18. Writing Reliability by Gender

Grade	Subpopulation Group	L	N	Mean	SD	Mean p-value	Reliability	SEM
3	Female	52	4708	39.54	13.06	0.66	0.94	3.28
	Male	52	4988	35.41	13.68	0.59	0.94	3.39
4	Female	50	4572	38.75	10.65	0.65	0.90	3.31
	Male	50	4944	34.43	11.20	0.57	0.91	3.42
5	Female	50	4574	41.32	10.78	0.69	0.91	3.19
	Male	50	4691	37.24	11.42	0.62	0.91	3.35
6	Female	50	4493	41.14	10.61	0.69	0.91	3.25
	Male	50	4736	36.76	11.38	0.61	0.91	3.40
7	Female	50	4497	41.87	10.07	0.70	0.91	3.05
	Male	50	4778	37.02	11.10	0.62	0.91	3.28
8	Female	50	4524	41.20	10.17	0.69	0.91	3.13
	Male	50	4793	36.26	11.06	0.60	0.91	3.34
9	Female	50	4684	42.01	9.42	0.70	0.90	3.03
	Male	50	4922	37.53	10.95	0.63	0.91	3.26
10	Female	34	4436	34.14	7.02	0.68	0.85	2.70
	Male	34	4720	31.04	7.90	0.62	0.87	2.88

L=Number of items, N=Number of persons, Mean=Average person raw score
SD=Standard deviation of person raw scores, SEM=Standard error of measurement