Appendix N:
STUDENT GROWTH PERCENTILES MODEL FIT PLOTS

Figure N.1 Model Fit Results for Grade 4 ELA.

Figure N.2 Model Fit Results for Grade 5 ELA.

Figure N.3 Model Fit Results for Grade 6 ELA.

		1 to 5	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 94	95 to 99	
Lowest OSS:	[236,322]	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N = 44
	[322,327]	95.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N = 44
Highest OSS:	[755]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	9.9	84.5	N = 71
	(755,820]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	N = 26

	1 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 99	
1st/[285,442)	6.28	7.81	8.65	10.52	9.11	9.43	11.78	11.85	11.36	13.20	(9.4%)
2nd/[442,467)	7.75	7.67	10.56	8.47	11.78	8.95	10.09	9.93	12.10	12.69	(10.3%)
3rd/[467,485)	8.49	8.90	9.28	9.22	10.51	9.19	11.91	9.13	10.56	12.82	(9.5%)
4th/[485,501)	7.95	10.34	8.02	10.30	8.87	11.31	9.86	10.91	10.27	12.17	(10.8%)
5th/[501,513)	8.79	11.17	9.81	9.51	10.08	8.88	10.08	9.67	10.25	11.75	(8.9%)
6th/[513,528)	8.79	9.73	10.31	10.49	9.75	10.23	9.44	10.52	10.16	10.58	(11%)
7th/[528,543)	9.78	10.94	10.31	9.54	10.39	9.76	9.69	10.61	9.46	9.53	(9.8%)
8th/[543,558)	11.96	10.13	10.31	11.52	8.85	10.38	10.95	8.65	8.16	9.07	(9.5%)
9th/[558,582)	11.73	11.54	12.16	9.31	10.75	9.69	9.43	9.66	8.38	7.34	(10.9%)
10th/[582,760]	12.97	11.34	12.11	9.85	10.25	11.72	8.02	8.12	9.57	6.04	(10%)

*Prior score deciles can be uneven depending upon the prior score distribution

Figure N.4 Model Fit Results for Grade 7 ELA.

Figure N.5 Model Fit Results for Grade 8 ELA.

Figure N.6 Model Fit Results for Grade 4 Mathematics.

Figure N.7 Model Fit Results for Grade 5 Mathematics.

Figure N.8 Model Fit Results for Grade 6 Mathematics.

Figure N.9 Model Fit Results for Grade 7 Mathematics.

Figure N.10 Model Fit Results for Grade 8 Mathematics.

Figure N.11 Model Fit Results for Algebra I with a Grade 7 Prior.

Figure N.12 Model Fit Results for Algebra I with a Grade 8 Prior.

		1 to 5	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 94	95 to 99	
Lowest OSS:	[200,348)	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N = 23
	[348,362]	97.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N = 35
Highest OSS:	[757,785)	0.0	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	14.3	2.9	74.3	N = 35
	[785]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	N = 44

Student Growth Percentile Range

Prior Scale Score Decile/Range *	1 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 99	
1st/[307,444)	6.77	8.47	8.39	10.43	9.99	9.95	9.52	11.14	11.92	13.41	(9.1%)
2nd/[444,461)	7.49	9.19	7.10	10.56	9.70	9.95	10.42	11.81	11.57	12.20	(9.3%)
3rd/[461,474)	7.81	8.57	9.81	9.99	9.96	9.33	12.24	9.24	11.40	11.64	(10.6%)
4th/[474,488)	8.51	9.29	10.49	9.23	8.66	11.10	9.53	10.96	11.59	10.64	(10.8%)
5th/[488,499)	9.69	10.60	10.87	7.84	11.40	9.78	11.19	8.86	9.72	10.04	(9.6%)
6th/[499,510)	11.23	8.75	10.68	9.43	9.92	9.16	10.81	10.70	8.74	10.57	(9.4%)
7th/[510,522)	10.34	9.61	12.24	10.58	8.06	10.02	9.35	9.51	10.24	10.06	(10.4%)
8th/[522,537)	9.58	11.53	10.44	10.59	9.66	12.03	7.93	10.62	7.96	9.65	(9%)
9th/[537,563)	11.30	11.85	9.40	9.97	11.46	9.84	9.50	9.20	8.47	9.01	(11.7%)
10th/[563,755]	11.79	11.99	10.21	11.72	9.59	10.17	9.36	8.66	8.53	7.98	(10.1%)

*Prior score deciles can be uneven depending upon the prior score distribution

Figure N.13 Model fit Results for Algebra I (2023) with an Algebra I (2022) Prior.

Figure N.14 Model fit Results for Coordinate Algebra with a Grade 8 Prior.

Student Growth Percentile Goodness-of-Fit Descriptives

2023 Coordinate Algebra SGP SIMEX Ranked, Grade EOCT (N = 8,945)

SGP Deciles by Prior Achievement Level (Mathematics)

Ceiling / Floor Effects Test

Student Growth Percentile Range

Current Observed Score Extremes (Range)		1 to 5	5 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 94	95 to 99	
Lowest OSS:	[316,391)	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N = 22
	[391,392]	97.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N = 34
Highest OSS:	[681,700)	0.0	0.0	0.0	0.0	0.0	0.0	4.2	12.5	12.5	37.5	12.5	20.8	N = 24
	[700,790]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	21.4	17.9	7.1	46.4	N = 28

Student Growth Percentile Range

Prior Scale Score Decile/Range *	1 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 to 99	
1st/[339,444)	7.90	7.67	8.59	11.80	9.97	9.05	10.31	12.37	10.65	11.68	(9.8%)
2nd/[444,461)	6.57	7.13	9.29	9.63	13.25	8.49	8.04	11.66	12.12	13.82	(9.9%)
3rd/[461,473)	8.40	9.63	9.38	7.65	11.73	10.62	7.78	11.85	10.00	12.96	(9.1%)
4th/[473,485)	7.94	10.32	7.71	10.32	12.59	8.73	12.02	8.50	11.79	10.09	(9.9%)
5th/[485,497)	10.60	9.65	10.81	10.18	9.76	9.23	11.12	10.49	6.72	11.44	(10.7%)
6th/[497,510)	9.26	8.34	10.51	10.40	8.11	12.34	10.63	7.66	11.54	11.20	(9.8%)
7th/[510,525)	11.58	8.33	11.80	8.66	8.66	9.52	11.36	9.42	11.47	9.20	(10.3%)
8th/[525,541)	9.43	10.83	12.36	10.45	11.34	11.85	7.64	8.54	9.30	8.28	(8.8%)
9th/[541,573)	10.83	11.89	10.74	9.68	9.49	8.44	10.83	9.20	8.44	10.45	(11.7%)
10th/[573,755]	12.21	14.29	10.25	11.45	6.76	11.12	9.16	9.81	8.18	6.76	(10.3%)

*Prior score deciles can be uneven depending upon the prior score distribution

QQ-Plot: Student Growth Percentiles