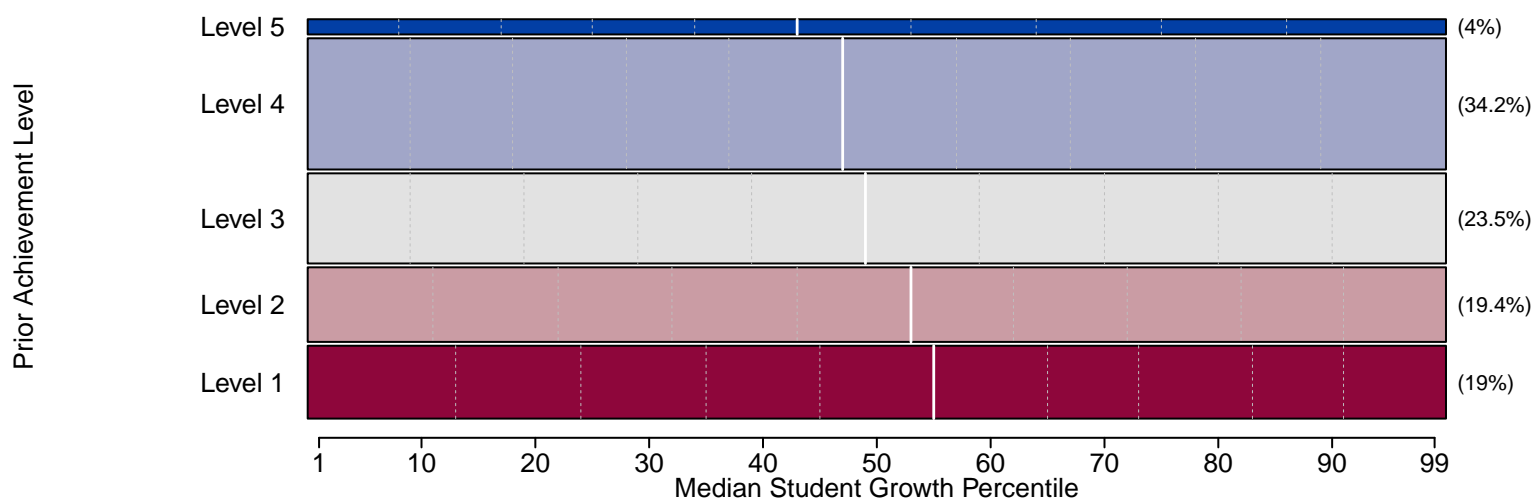# Student Growth Percentile Goodness–of–Fit Descriptives

2016–2017.2 ELA SGP SIMEX Ranked, Grade 4 (N = 398,880)

SGP Deciles by Prior Achievement Level (ELA)

Prior Achievement Level

Level	%
Level 5	(4%)
Level 4	(34.2%)
Level 3	(23.5%)
Level 2	(19.4%)
Level 1	(19%)

Median Student Growth Percentile: 1, 10, 20, 30, 40, 50, 60, 70, 80, 90, 99

Ceiling / Floor Effects Test

Current Observed Score Extremes (Range)

Student Growth Percentile 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:	[−15,−5.53)	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 = 16
	[−5.53,−4.33]	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 = 39
Highest OSS:	[4.17,4.45]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	3.8	3.8	88.5	N = 26
	[4.45,6.89]	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 = 34

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/[−15,−1.42)	6.88	8.11	9.39	9.75	10.24	10.22	11.88	10.42	11.22	11.89	(10%)
2nd/[−1.42,−0.929)	7.87	8.59	9.53	8.98	9.58	9.98	10.94	10.28	11.48	12.77	(9.9%)
3rd/[−0.929,−0.558)	8.08	8.92	8.79	9.17	10.01	10.67	10.62	10.75	10.56	12.43	(9.8%)
4th/[−0.558,−0.232)	9.28	9.83	10.34	9.91	10.56	9.74	9.52	9.97	9.58	11.26	(10%)
5th/[−0.232,0.0632)	10.21	10.48	10.25	9.81	9.81	10.03	9.33	10.15	9.74	10.19	(10.3%)
6th/[0.0632,0.346)	10.08	10.16	9.91	10.58	9.61	9.81	9.68	9.91	9.99	10.27	(10%)
7th/[0.346,0.664)	10.03	10.26	10.23	9.87	9.94	9.80	9.61	10.26	9.92	10.09	(10%)
8th/[0.664,0.989)	10.07	10.67	10.11	10.24	9.87	10.24	9.54	9.94	9.64	9.67	(10%)
9th/[0.989,1.49)	10.81	11.04	10.80	10.50	10.12	10.18	9.24	9.41	9.15	8.75	(10%)
10th/[1.49,15]	11.79	11.65	11.20	10.48	10.30	9.76	9.22	9.37	8.63	7.60	(10.1%)

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

QQ–Plot: Student Growth Percentiles

Theoretical SGP Distribution

Empirical SGP Distribution