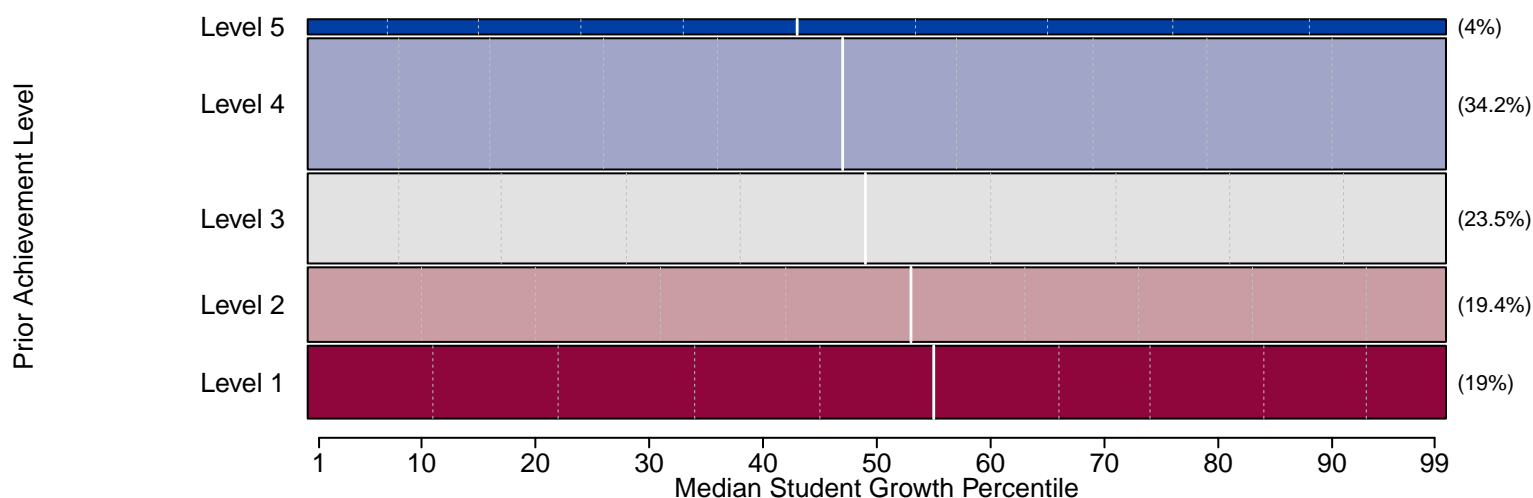# Student Growth Percentile Goodness–of–Fit Descriptives

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

SGP Deciles by Prior Achievement Level (ELA)

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

x-axis: Median Student Growth Percentile (1, 10, 20, 30, 40, 50, 60, 70, 80, 90, 99)

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:	[−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	0.0	7.7	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)	7.88	8.42	9.45	9.05	9.52	9.85	10.25	11.19	10.88	13.52	(10%)
2nd/[−1.42,−0.929)	8.98	8.84	9.40	8.37	8.80	9.76	9.25	10.87	11.06	14.67	(9.9%)
3rd/[−0.929,−0.558)	9.40	8.94	8.63	9.05	8.89	10.32	9.37	10.64	10.81	13.95	(9.8%)
4th/[−0.558,−0.232)	10.87	10.14	9.46	9.62	9.66	9.51	8.90	9.57	9.67	12.59	(10%)
5th/[−0.232,0.0632)	11.72	10.82	9.61	9.21	9.04	9.86	8.62	10.01	9.29	11.81	(10.3%)
6th/[0.0632,0.346)	11.92	10.07	9.64	9.63	9.01	9.31	9.27	9.40	9.93	11.80	(10%)
7th/[0.346,0.664)	11.49	10.57	9.42	9.33	9.33	9.61	8.88	10.09	9.44	11.83	(10%)
8th/[0.664,0.989)	11.58	10.79	9.95	9.00	9.54	9.72	9.43	9.61	9.46	10.90	(10%)
9th/[0.989,1.49)	12.69	10.97	10.36	9.66	9.46	9.66	9.15	9.15	8.92	9.98	(10%)
10th/[1.49,15]	13.49	11.85	10.69	9.88	9.31	9.29	9.10	8.85	8.84	8.70	(10.1%)

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

QQ–Plot: Student Growth Percentiles

Theoretical SGP Distribution (0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100)

Empirical SGP Distribution (0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100)