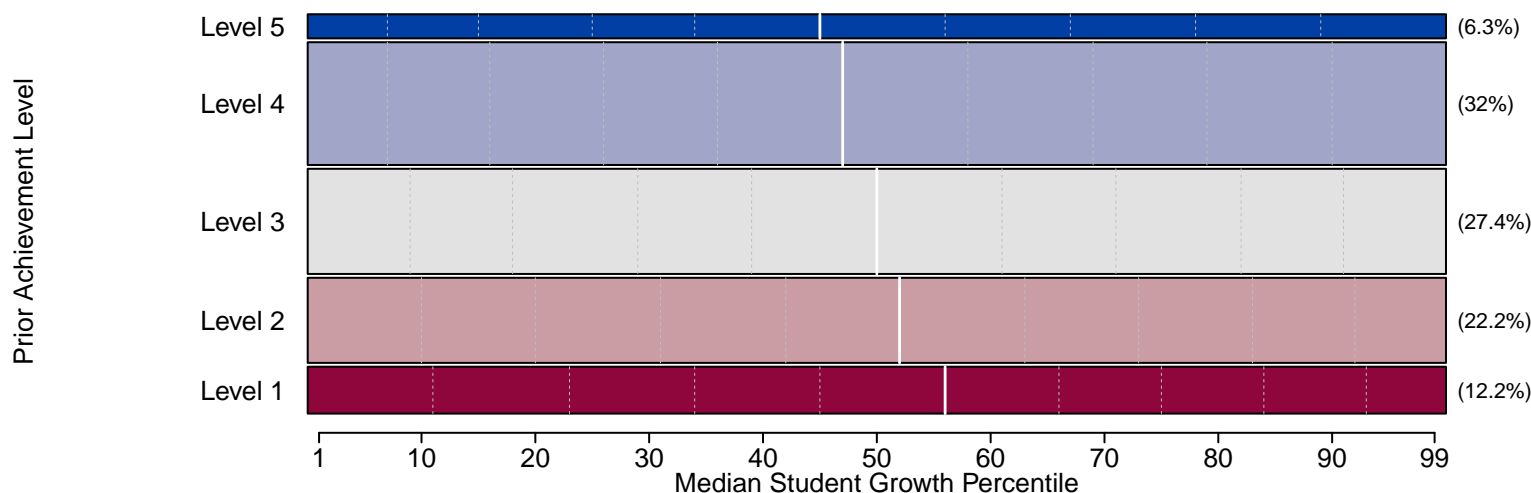# Student Growth Percentile Goodness–of–Fit Descriptives
2015–2016.2 Mathematics SGP SIMEX, Grade 4 (N = 422,426)

SGP Deciles by Prior Achievement Level (Mathematics)

Prior Achievement Level:

- Level 5 — (6.3%)
- Level 4 — (32%)
- Level 3 — (27.4%)
- Level 2 — (22.2%)
- Level 1 — (12.2%)

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,−4.529)	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 = 27
	[−4.529,−4.304)	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 = 28
Highest OSS:	[4.478,4.783)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	7.7	88.5	N = 26
	[4.783,15]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	96.8	N = 31

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/[−10,−1.359)	8.19	8.65	9.04	8.53	8.99	9.93	9.83	11.28	11.22	14.35	(9.9%)
2nd/[−1.359,−0.9153)	8.97	9.29	9.07	8.78	9.12	10.18	9.66	10.12	11.19	13.61	(10.1%)
3rd/[−0.9153,−0.5838)	10.05	9.69	9.82	9.22	9.38	9.24	9.58	10.16	10.39	12.48	(10%)
4th/[−0.5838,−0.2902)	10.62	10.11	9.72	9.20	9.40	9.74	9.64	9.76	9.80	12.02	(10%)
5th/[−0.2902,−0.0008)	10.86	10.06	9.88	9.16	9.38	9.29	9.54	9.83	10.09	11.91	(10%)
6th/[−0.0008,0.2752)	10.94	10.07	10.00	9.25	9.29	9.14	9.80	9.78	9.79	11.94	(10%)
7th/[0.2752,0.5767)	11.06	10.54	9.77	9.29	9.42	9.40	9.73	9.66	9.46	11.66	(10%)
8th/[0.5767,0.9124)	12.20	10.98	10.53	9.36	9.31	9.06	9.13	9.37	9.33	10.72	(10%)
9th/[0.9124,1.352)	13.07	11.35	10.18	9.63	9.75	8.70	9.16	8.96	9.01	10.20	(10%)
10th/[1.352,15]	12.96	11.24	10.39	9.83	9.35	9.38	9.18	8.68	9.27	9.72	(10%)

*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