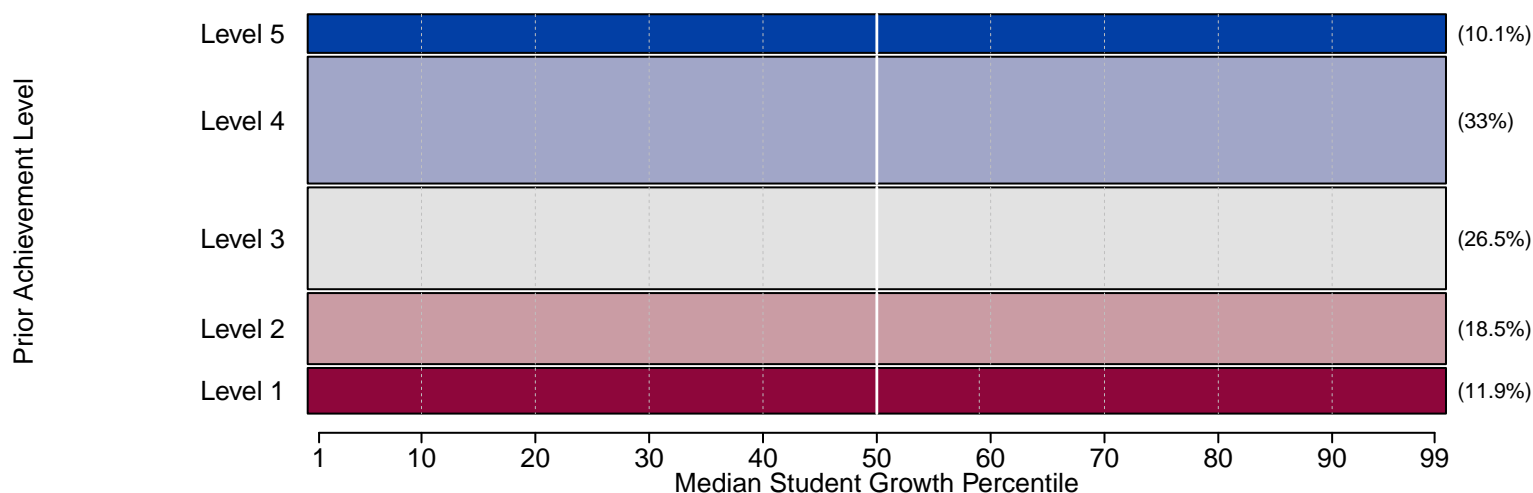# Student Growth Percentile Goodness–of–Fit Descriptives
2017–2018.2 Mathematics SGP, Grade 4 (N = 330,982)

SGP Deciles by Prior Achievement Level (Mathematics)

Prior Achievement Level:

- Level 5 — (10.1%)
- Level 4 — (33%)
- Level 3 — (26.5%)
- Level 2 — (18.5%)
- Level 1 — (11.9%)

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,−4.54)	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
	[−4.54,−4.331]	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
Highest OSS:	[15]	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 = 51

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,−1.52)	9.71	10.21	9.76	10.21	10.07	10.15	10.21	9.73	9.84	10.13	(9.9%)
2nd/[−1.52,−1.051)	8.99	9.79	10.24	9.87	10.06	9.76	9.76	10.19	10.31	11.03	(9.6%)
3rd/[−1.051,−0.6686)	9.77	10.05	10.04	9.64	10.05	9.87	9.93	9.99	10.26	10.40	(10.3%)
4th/[−0.6686,−0.3415)	9.70	10.19	10.13	10.26	9.79	10.27	9.58	10.47	9.23	10.38	(9.6%)
5th/[−0.3415,−0.0567)	9.49	9.86	9.76	9.83	10.17	9.89	10.84	9.43	10.34	10.39	(10.4%)
6th/[−0.0567,0.2409)	9.42	9.84	9.87	10.38	10.04	10.13	9.43	10.39	9.90	10.60	(10.1%)
7th/[0.2409,0.545)	9.11	9.91	10.48	9.65	10.04	9.91	10.26	9.79	10.19	10.67	(10%)
8th/[0.545,0.886)	9.90	10.23	9.69	10.03	9.89	9.74	9.81	10.30	9.96	10.45	(10%)
9th/[0.886,1.394)	9.65	10.27	9.76	10.17	10.23	10.37	9.89	9.86	9.57	10.25	(10%)
10th/[1.394,15]	9.36	9.72	10.28	9.89	9.94	9.82	10.28	9.89	10.26	10.55	(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