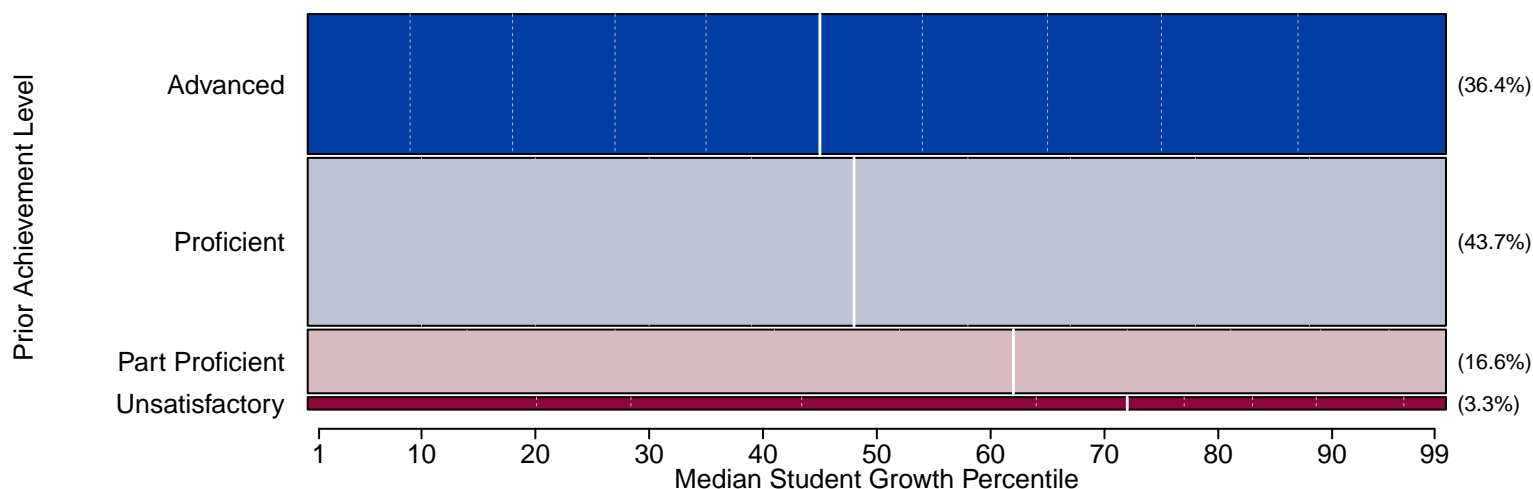# Student Growth Percentile Goodness–of–Fit Descriptives

## 2016–2017 Mathematics SGP SIMEX Ranked, Grade 4 (N = 4,245)

## SGP Deciles by Prior Achievement Level (Mathematics)



Prior Achievement Level:
- Advanced (36.4%)
- Proficient (43.7%)
- Part Proficient (16.6%)
- Unsatisfactory (3.3%)

Median Student Growth Percentile

## 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: | [180,304] | 36.0 | 8.0 | 20.0 | 12.0 | 4.0 | 12.0 | 0.0 | 4.0 | 0.0 | 4.0 | 0.0 | 0.0 | N = 25 |
| | [304,330] | 12.0 | 4.0 | 16.0 | 24.0 | 16.0 | 8.0 | 4.0 | 4.0 | 8.0 | 0.0 | 0.0 | 4.0 | N = 25 |
| Highest OSS: | [686,708] | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 40.0 | 56.0 | N = 25 |
| | [708,780] | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 | 80.0 | N = 25 |

### 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/[150,381] | 4.52 | 5.95 | 8.81 | 5.48 | 7.38 | 7.38 | 10.00 | 12.86 | 14.76 | 22.86 | (9.9%) |
| 2nd/[381,419] | 7.11 | 9.24 | 7.82 | 8.06 | 9.24 | 9.48 | 10.90 | 9.72 | 13.03 | 15.40 | (9.9%) |
| 3rd/[419,442] | 9.18 | 9.90 | 8.21 | 11.11 | 11.35 | 8.70 | 10.87 | 9.18 | 10.63 | 10.87 | (9.8%) |
| 4th/[442,463] | 9.11 | 9.83 | 11.99 | 12.47 | 8.39 | 8.87 | 11.27 | 10.31 | 10.79 | 6.95 | (9.8%) |
| 5th/[463,483] | 10.57 | 8.74 | 8.74 | 7.82 | 12.18 | 10.57 | 12.18 | 10.34 | 10.57 | 8.28 | (10.2%) |
| 6th/[483,502] | 10.51 | 10.51 | 10.51 | 11.45 | 9.35 | 14.25 | 7.94 | 7.71 | 9.81 | 7.94 | (10.1%) |
| 7th/[502,522] | 11.48 | 11.48 | 9.81 | 11.72 | 9.33 | 11.00 | 9.33 | 11.00 | 8.37 | 6.46 | (9.8%) |
| 8th/[522,552] | 10.53 | 10.07 | 9.38 | 13.73 | 9.61 | 11.90 | 9.15 | 9.15 | 7.55 | 8.92 | (10.3%) |
| 9th/[552,591] | 11.71 | 11.94 | 11.71 | 10.77 | 12.65 | 7.26 | 7.73 | 9.84 | 7.73 | 8.67 | (10.1%) |
| 10th/[591,700] | 8.90 | 13.35 | 12.88 | 7.73 | 10.54 | 9.84 | 10.30 | 10.07 | 7.73 | 8.67 | (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