

# Illinois SGP Analyses for 2019

Damian W Betebenner

*Adam Van Iwaarden*

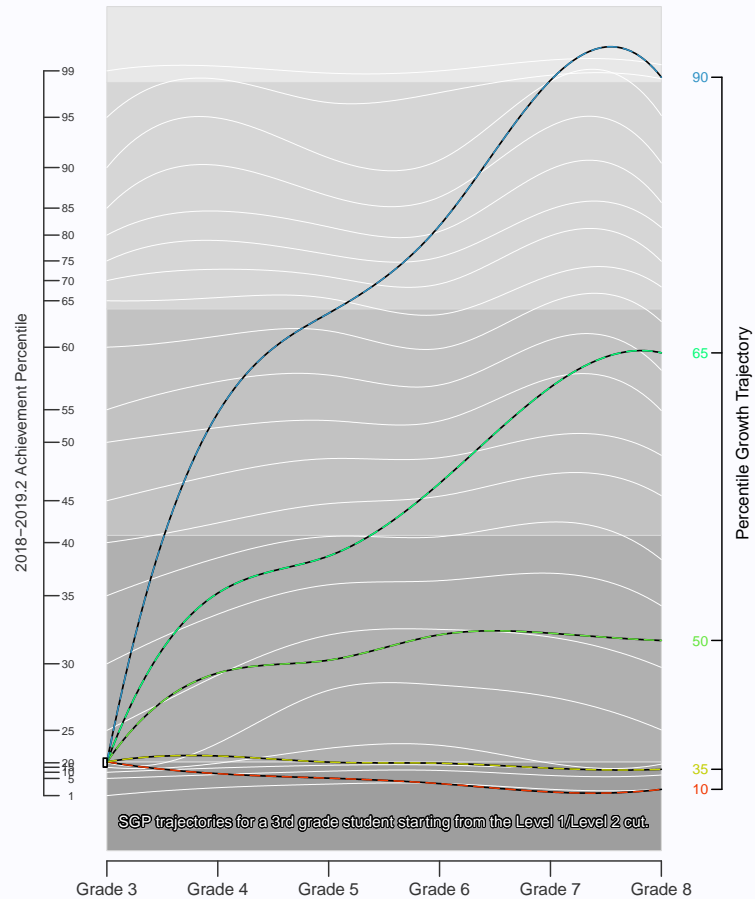
Chicago, Illinois

# December 2019 TAC Meeting

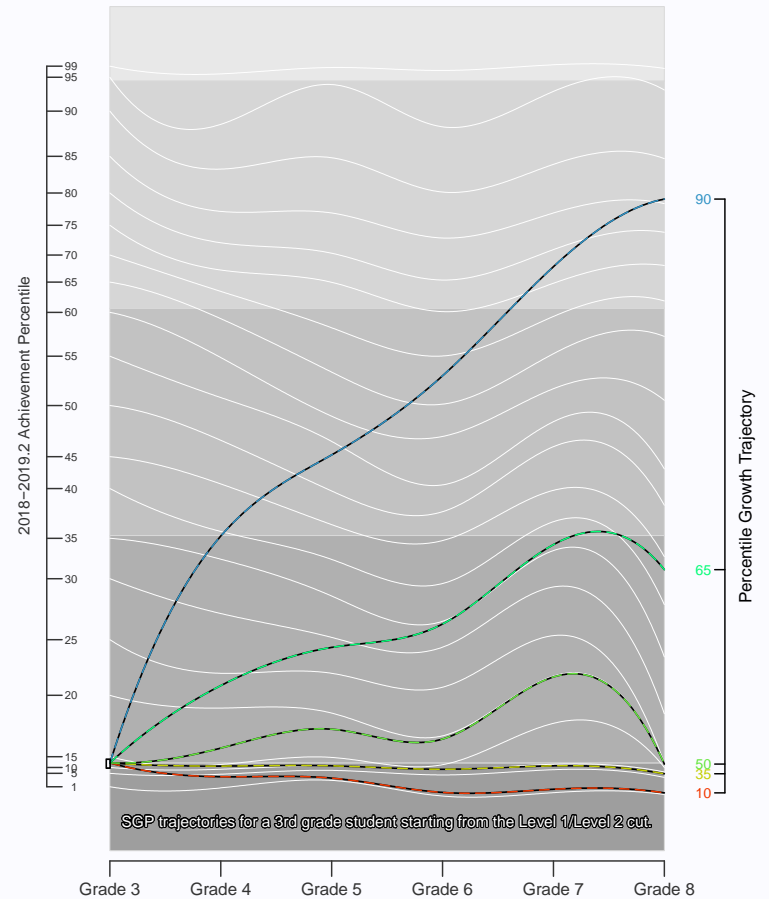
- At the December 2019 TAC Meeting:
  - An overview of all SGP analyses conducted for New Meridean was presented (NCIEA)
  - An overview of SGP results by form type was presented (Pearson)
  - Growth and achievement plots were shown illustrating growth-to-standard trajectories based upon annual growth norms.
  - TAC recommended an investigation of whether baseline referenced growth norms could be established for purposes of growth-to-standard.

# Growth & Achievement Plots

**Illinois: 2018–2019.2 ELA**  
Norm & Criterion Referenced Growth & Achievement

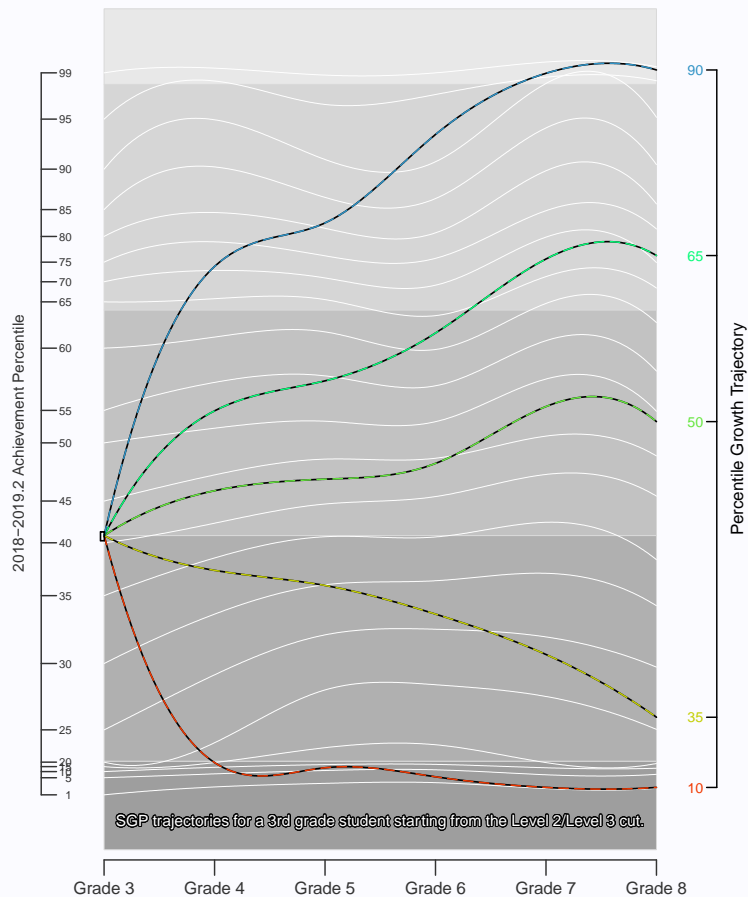


**Illinois: 2018–2019.2 Mathematics**  
Norm & Criterion Referenced Growth & Achievement

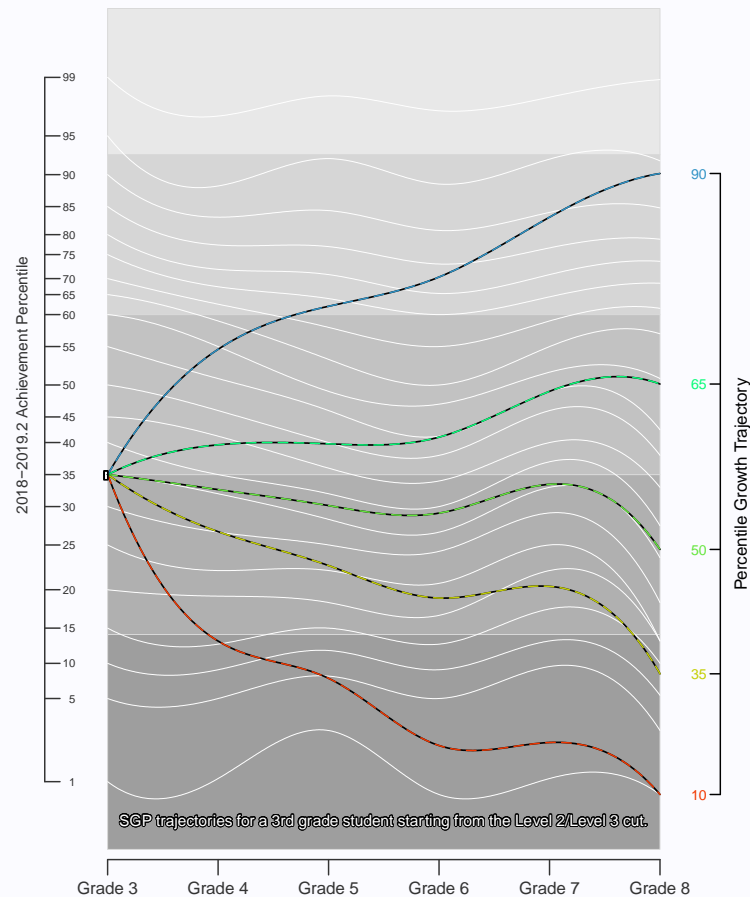


# Growth & Achievement Plots

Illinois: 2018–2019.2 ELA  
Norm & Criterion Referenced Growth & Achievement

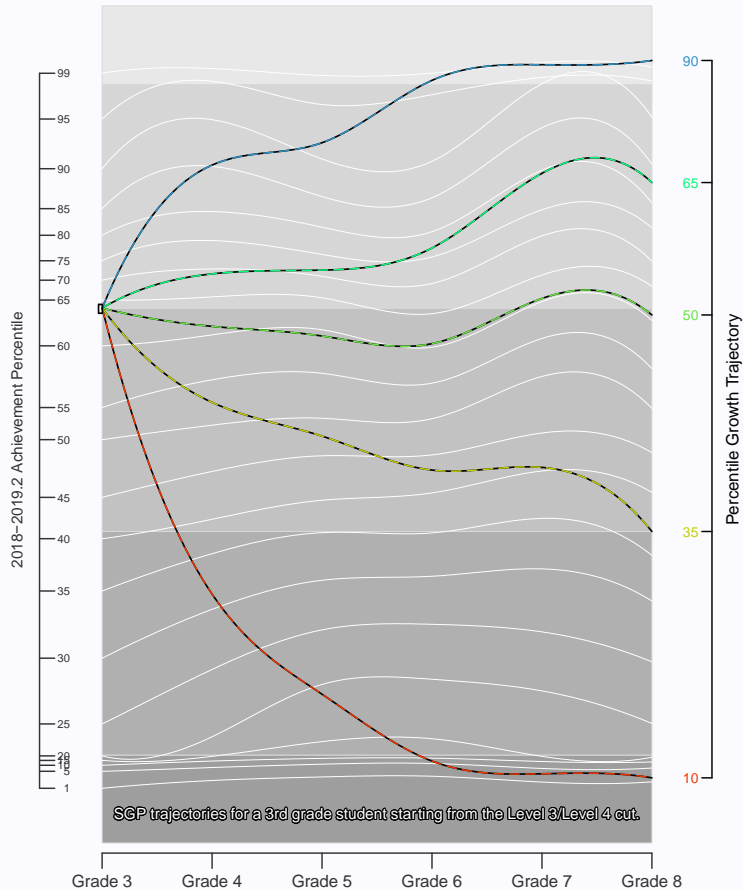


Illinois: 2018–2019.2 Math  
Norm & Criterion Referenced Growth & Achievement

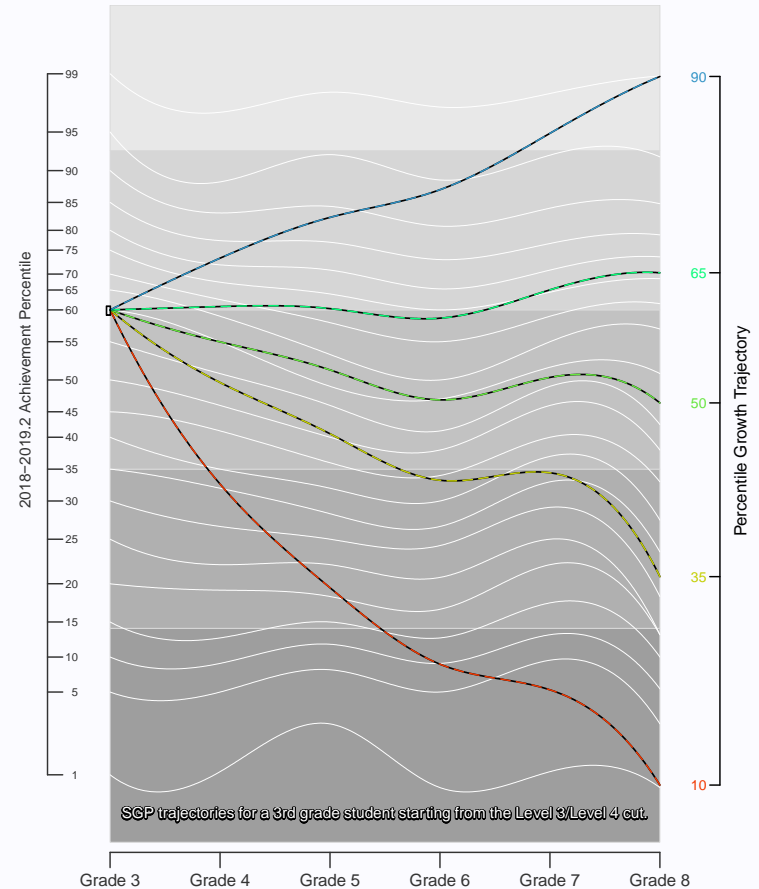


# Growth & Achievement Plots

Illinois: 2018–2019.2 ELA  
Norm & Criterion Referenced Growth & Achievement

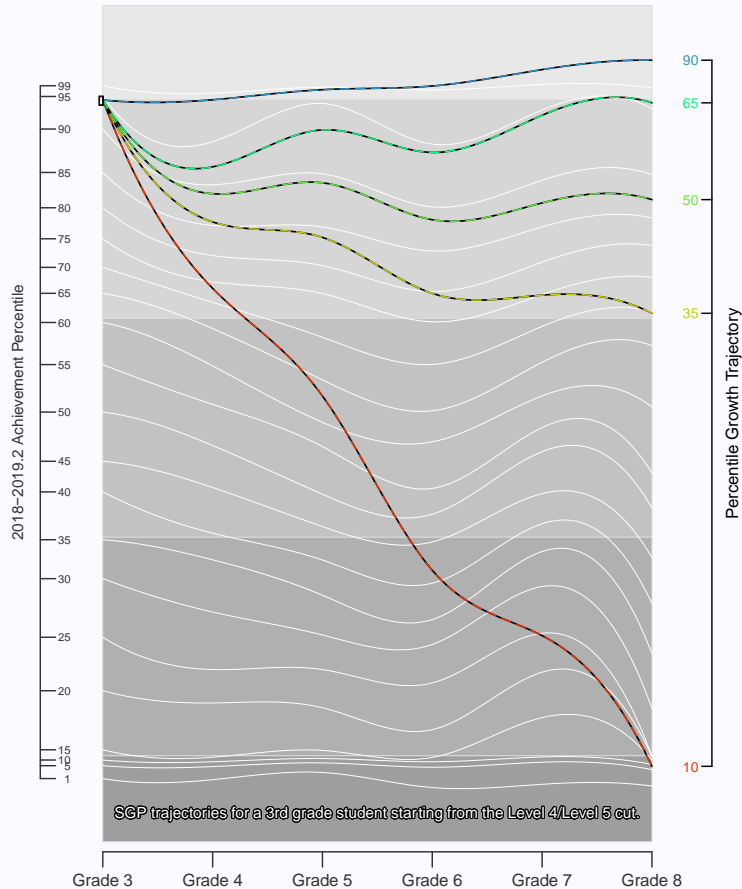


Illinois: 2018–2019.2 Math  
Norm & Criterion Referenced Growth & Achievement

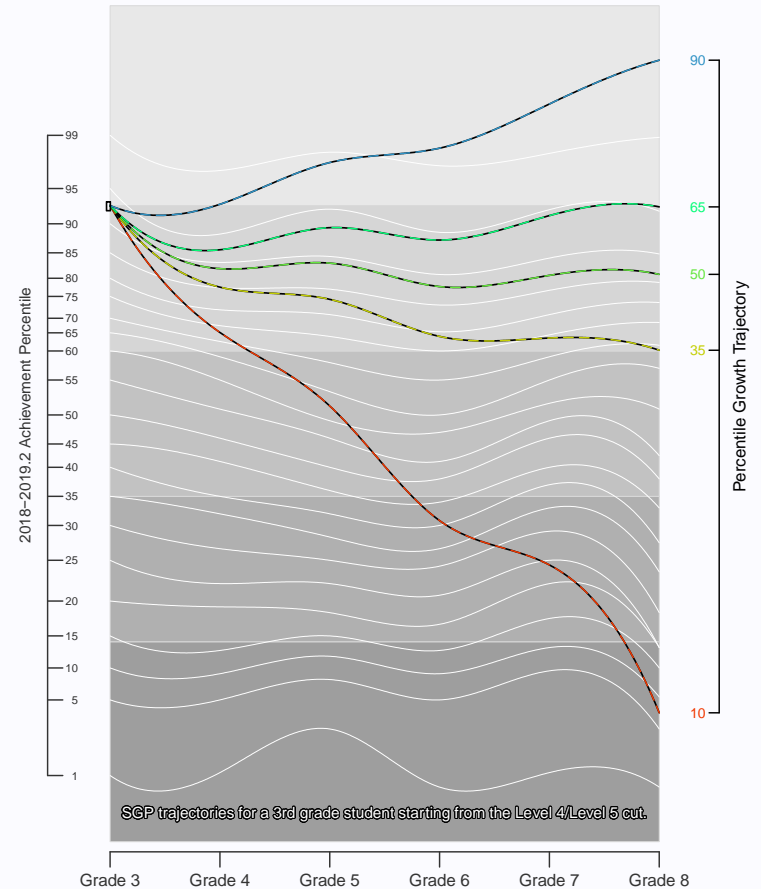


# Growth & Achievement Plots

Illinois: 2018–2019.2 Mathematics  
Norm & Criterion Referenced Growth & Achievement



Illinois: 2018–2019.2 Math  
Norm & Criterion Referenced Growth & Achievement



# Analysis

- To investigate the stability of AGPs across years 3 years of target data are analyses: 2016-2017, 2017-2018, 2018-2019.
- AGPs are reported for students:
  - Starting at each of the 4 cuts between each of the 5 performance levels (in grade 3).
  - With 8th grade targets for each of the 4 cuts between each of the 5 performance levels.
  - For each of the 3 years indicated above.

# ELA: Beginning Grade 3 at Level 1-2 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	45	58	72	90
2017-2018	46	58	73	90
2018-2019	44	55	68	88

Level 1-2 cut in ELA is at the 22<sup>nd</sup>, 22<sup>nd</sup>, and 23<sup>rd</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.



# ELA: Beginning Grade 3 at Level 2-3 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	34	47	62	84
2017-2018	35	47	63	85
2018-2019	33	44	59	82

Level 2-3 cut in ELA is at the 42<sup>nd</sup>, 42<sup>nd</sup>, 42<sup>nd</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.

# ELA: Beginning Grade 3 at Level 3-4 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	25	36	52	77
2017-2018	26	37	53	77
2018-2019	25	36	51	75

Level 3-4 cut in ELA is at the 65<sup>th</sup>, 64<sup>th</sup>, 65<sup>th</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.

# ELA: Beginning Grade 3 at Level 4-5 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	12	19	31	59
2017-2018	12	19	31	56
2018-2019	13	29	32	59

Level 4-5 cut in ELA is at the 97<sup>th</sup>, 97<sup>th</sup>, 97<sup>th</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.

# Math: Beginning Grade 3 at Level 1-2 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	53	68	80	96
2017-2018	55	69	81	96
2018-2019	53	68	81	96

Level 1-2 cut in Math is at the 14<sup>th</sup>, 16<sup>th</sup>, 15<sup>th</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.

# Math: Beginning Grade 3 at Level 2-3 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	42	56	70	92
2017-2018	44	57	71	92
2018-2019	43	57	72	92

Level 2-3 cut in Math is at the 35<sup>th</sup>, 36<sup>th</sup>, 36<sup>th</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.

# Math: Beginning Grade 3 at Level 3-4 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	30	42	57	84
2017-2018	32	45	59	84
2018-2019	31	45	59	84

Level 3-4 cut in Math is at the 61<sup>st</sup>, 63<sup>rd</sup>, 62<sup>nd</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.

# Math: Beginning Grade 3 at Level 4-5 Cut

	Grade 8 Target Level 1-2	Grade 8 Target Level 2-3	Grade 8 Target Level 3-4	Grade 8 Target Level 4-5
2016-2017	14	21	32	63
2017-2018	16	24	35	65
2018-2019	16	25	35	66

Level 4-5 cut in Math is at the 92<sup>nd</sup>, 93<sup>rd</sup>, 93<sup>rd</sup> percentile in 2016-2017, 2017-2018, and 2018-2019 respectively.

# Results

- The AGPs across years, with different starting points and different ending points are extremely consistent.
- This is consistent with (but does not prove)
  - A stable scale from year to year.
  - Stable rates of progress from year-to-year. That is, no appreciable increases/decreases in rates of learning in Illinois across the three years.
- AGPs are one means by which states anchor/baseline growth across years (i.e., targets/time frames don't change)
- Ideally, greater and greater percentages of students will grow at rates putting them on track to reach their targets.



# Results

- Given the consistency in AGPs across years, it is likely that baseline referenced SGPs (fixed growth norms) can be constructed.
- Based upon previous such analyses:
  - It's desirable to merge cohorts across years to “average” across any year-to-year scale fluctuations.
  - For example, 2016/Grade 3;2017/Grade 4;2018/Grade 5 can be combined with 2017/Grade 3;2018/Grade 4;2019/Grade 5 to create a super-cohort of students for the calculation of Grade 5 growth norms.
  - Using 2 priors, 4 years of data would be required to create super-cohorts containing two cohorts of data.