

Student Benchmark Data Review

Fall Semester, 2020-21

Morgan Hill Unified School District
January 19, 2021



Glen Webb, Director of Curriculum, Instruction and Assessment

The Global View: Expectations and Actuals





Expectations:

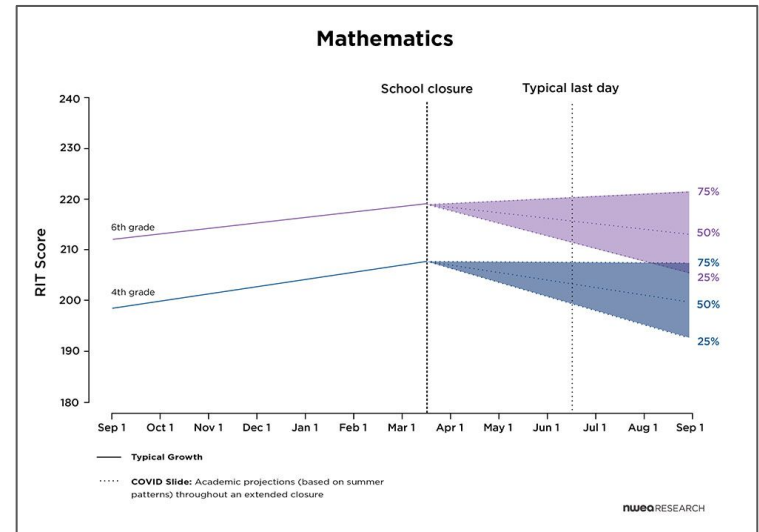
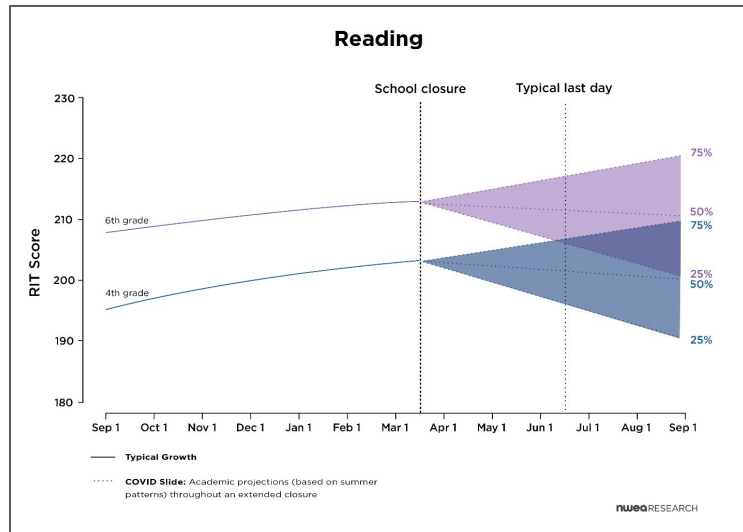
Last Spring, experts predicted a massive learning loss due to school closures as part of the Covid-19 Response





Expectations:

Those predictions were mainly based on linear extensions of “summer slide” data that measures loss when schools are closed.





But schools haven't really closed in the traditional sense, they have pivoted to distance learning.



Actuals:



While there is still much to learn about the long term impacts of distance learning, initial student achievement data in Reading and Math is showing that our expectations may have been more dire than actual. The data is suggesting a need to look at data differently and to ask different questions.



Actuals:



John Hattie, International researcher has noted a slight uptick in reading scores worldwide. He suggests areas of possible causal effects for more research, such as:

- The time spent reading has increased during distance learning
- The environment at home may have less distractions and social pressures.
- The net amount of parent supervision and involvement is much greater and reading with their child is a familiar activity compared to doing math problems (Math scores have ticked down worldwide during the pandemic).
- Possible parent participation in reading assessments may skew results, although math scores have not show a similar pattern suggesting that academic integrity concerns may be more presumptive than real.

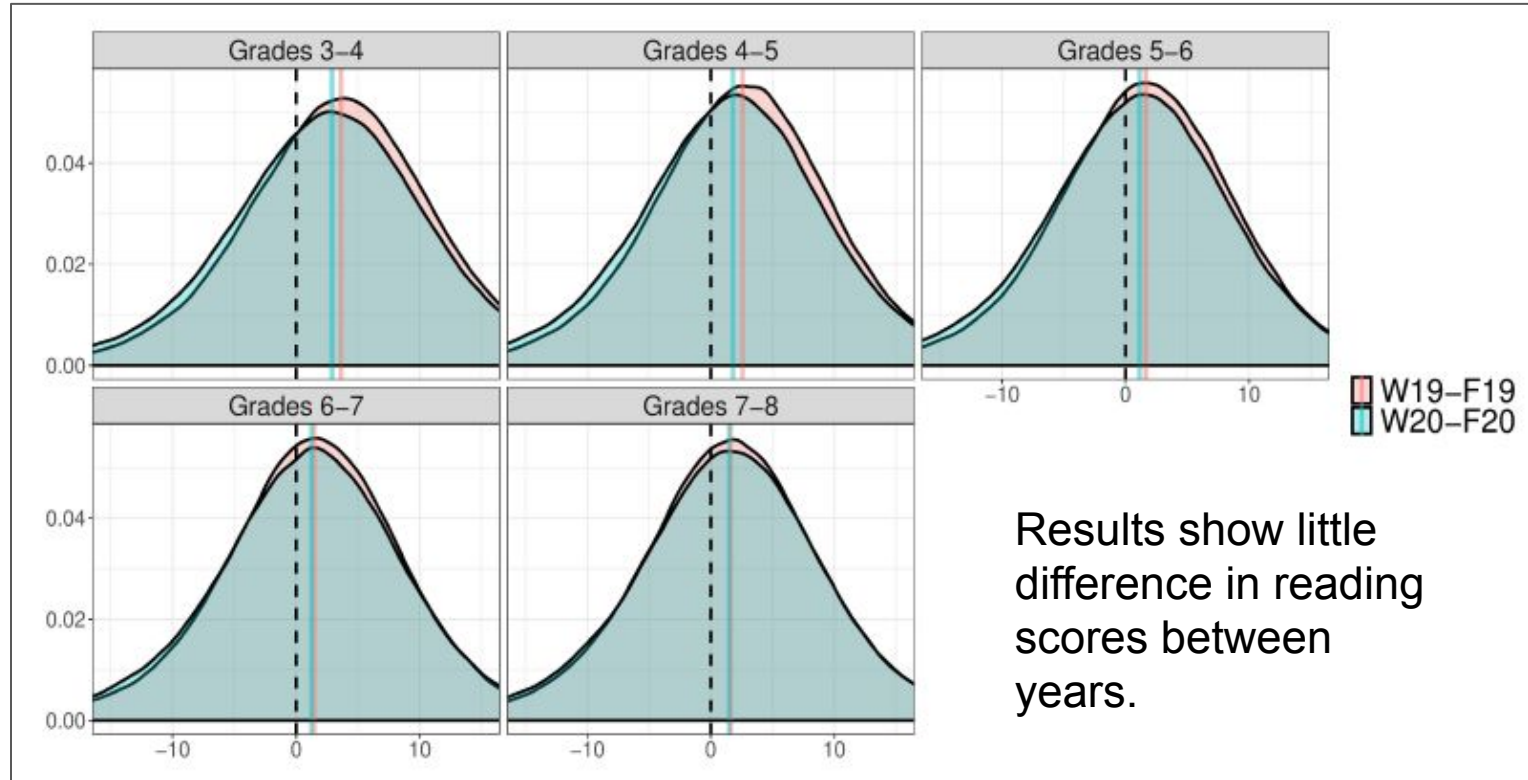
Actuals:



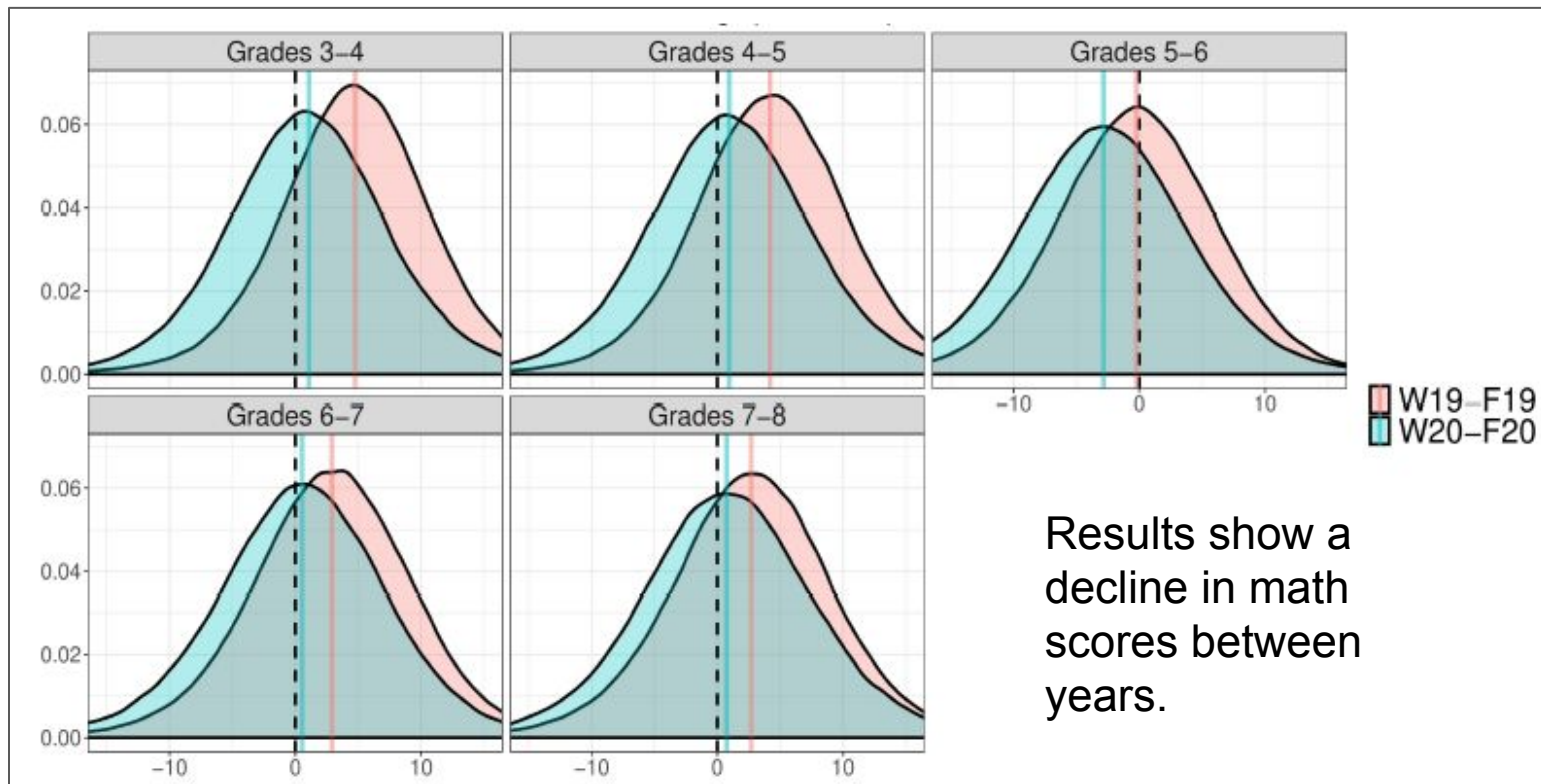
NWEA MAP National MAP test results for 4.4 million students in grades 3-8 demonstrate

- Maintenance of achievement in Reading
- Loss of 5 to 10 percentile points in Math
- Losses occurring at individual student level across all student groups but exacerbated within underserved communities.

Results for 4.4 million US Students taking NWEA MAP Reading test and comparing Fall of 2019 to Fall of 2020.



Results for 4.4 million US Students taking NWEA MAP Math test and comparing Fall of 2019 to Fall of 2020.



The Local View: MAP and F&P Fall 2020 Results





MAP Reading Results

- Comparing Fall 2019 to Fall 2020
- Context is National Normed Percentiles.
- Data is student level longitudinal
- Tests were administered in two different settings: In person vs. at distance. Learning conditions very different
- We typically test grades 2-11, but distance testing logistics precluded many younger students from testing and limited the n-size for Fall 2020.
- The test only measures ELA and Math, there are many other unmeasured factors of concern.

MAP Reading: District Summary

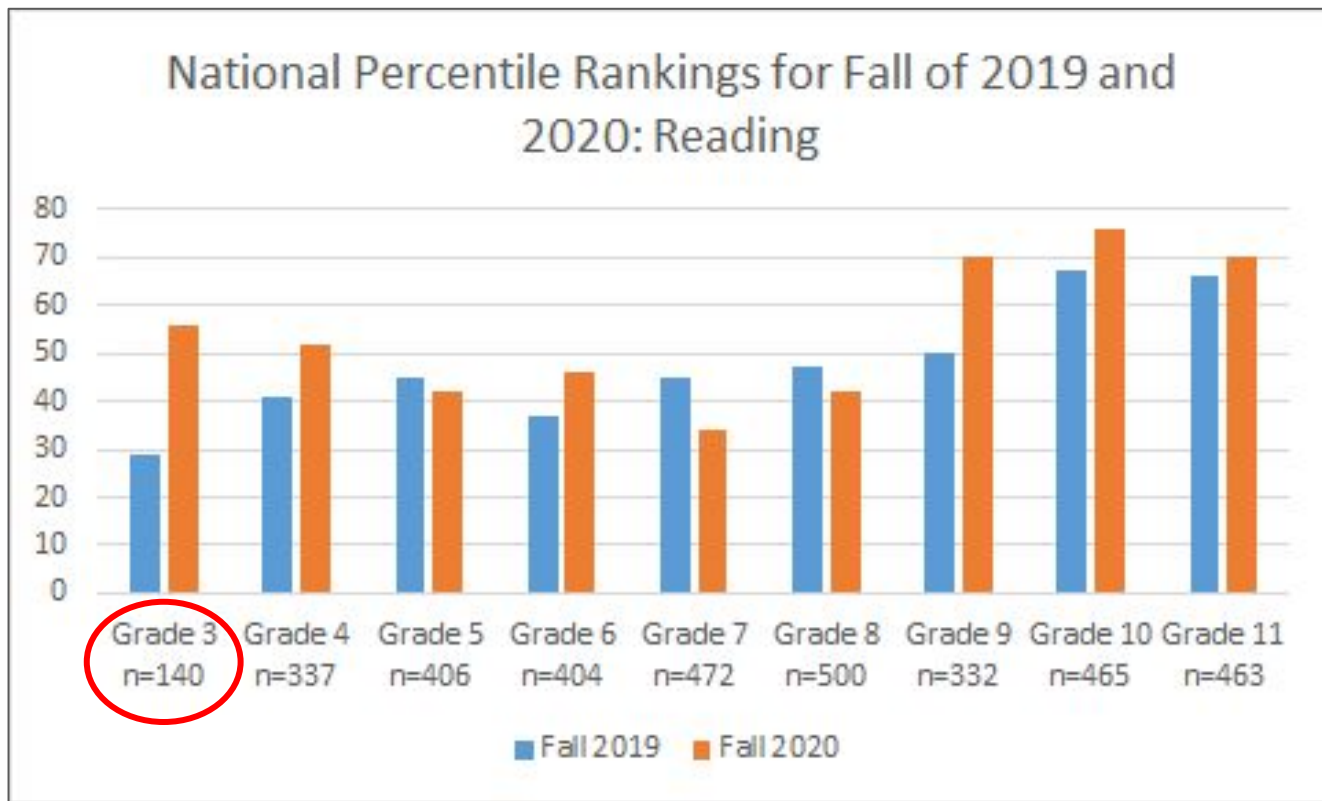


Language Arts: Reading

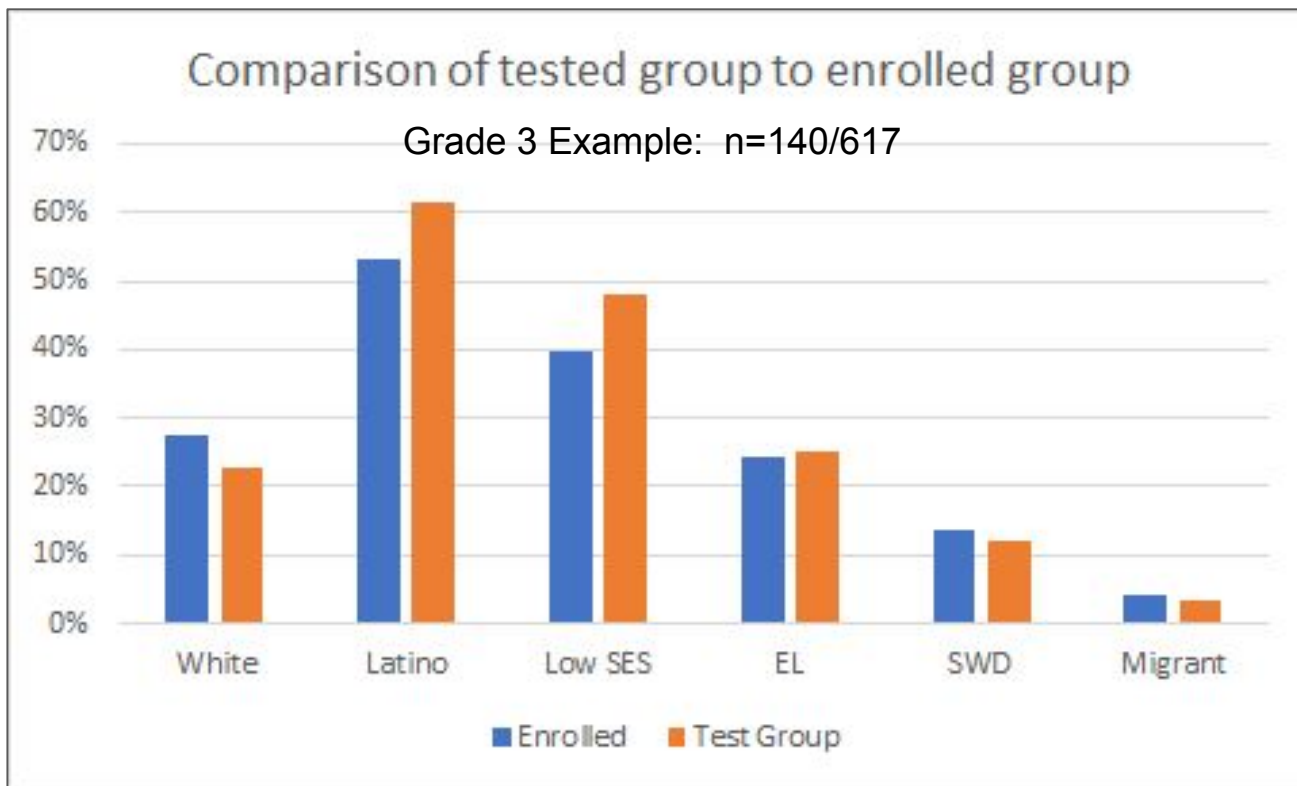
Grade (Fall 2020)	Growth Count†	Comparison Periods					
		Fall 2019			Fall 2020		
		Mean RIT	SD	Percentile	Mean RIT	SD	Percentile
-1	0	**			**		
0	0	**			**		
1	0	**			**		
2	0	**			**		
3	140	169.4	16.7	29	187.7	15.4	56
4	337	185.6	16.6	41	197.1	16.5	52
5	406	196.2	16.7	45	203.0	18.2	42
6	404	202.4	17.4	37	209.4	17.1	46
7	472	209.5	16.0	45	211.2	18.6	34
8	500	213.9	16.8	47	216.4	19.0	42
9	332	218.2	17.4	50	223.8	17.9	70
10	465	223.3	16.6	67	227.6	16.9	76
11	463	225.2	16.4	66	227.9	17.3	70
12	85	225.9	18.2	61	227.1	19.7	64



MAP Reading: 2 year Average reading results for matched students by grade level



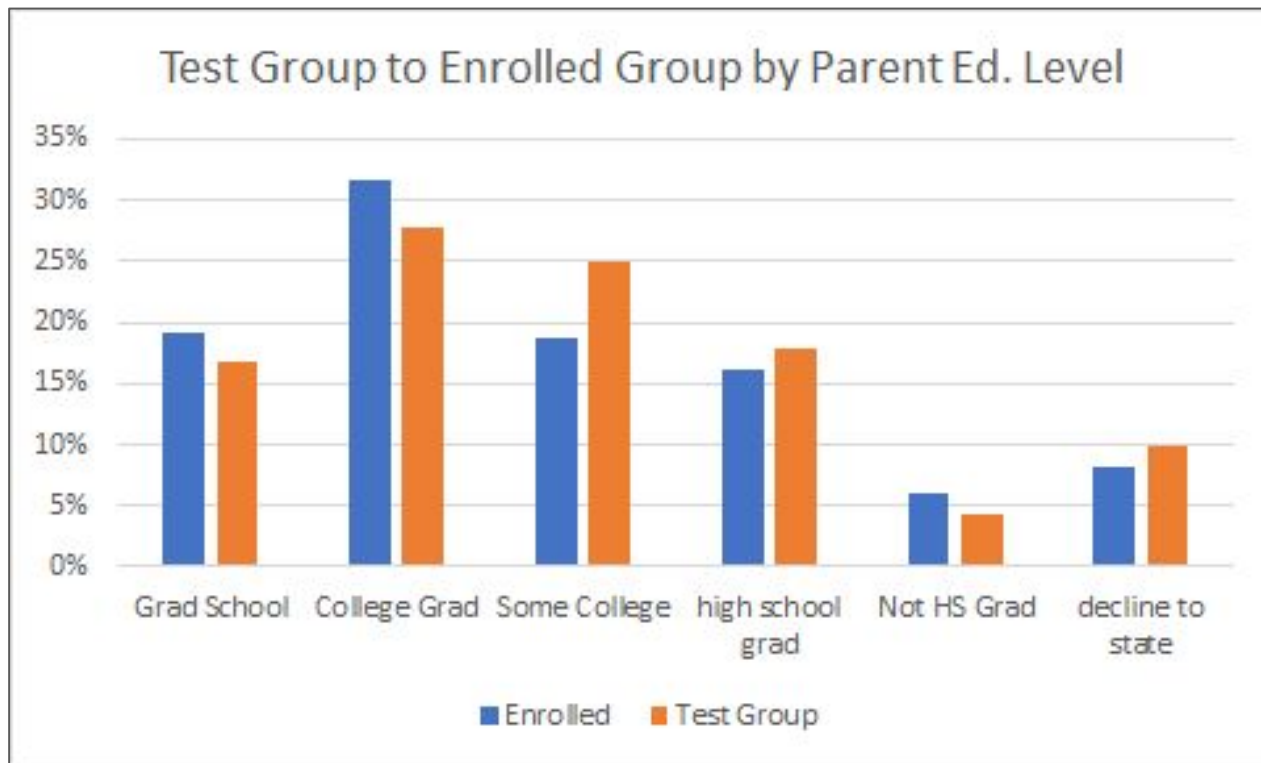
MAP Reading: Since not all kids tested, How similar is the test group?



MAP Reading: How similar is the test group?



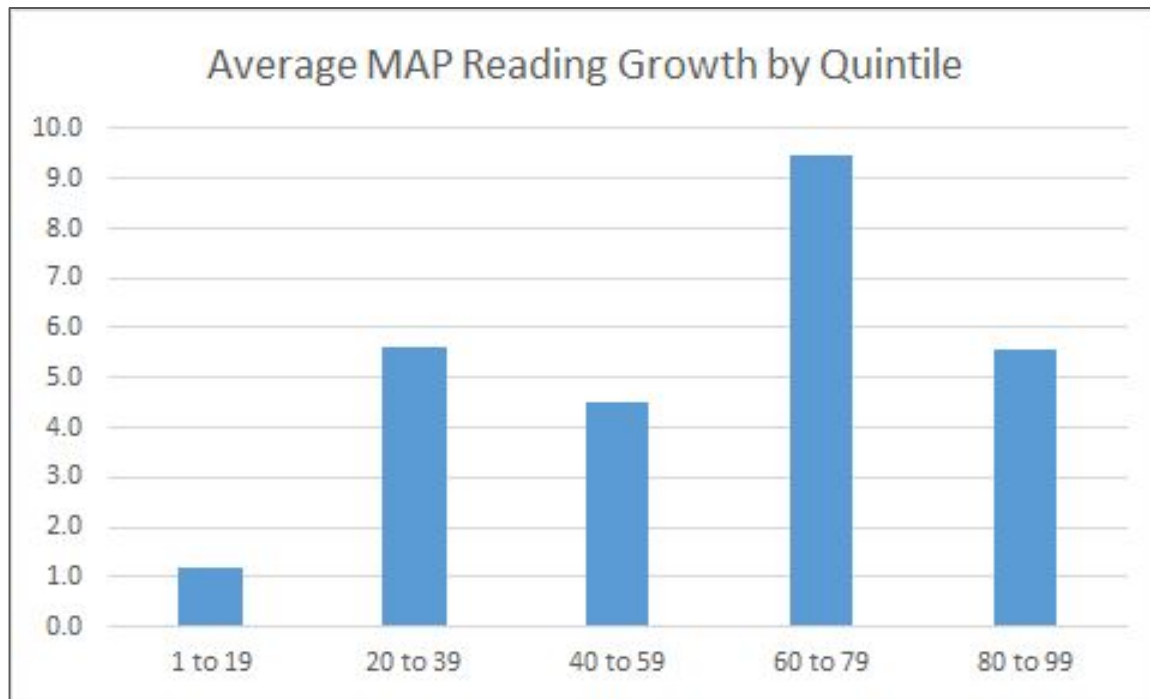
Grade 3, n=140





MAP Reading: Who are the students with growing National Percentile Ranks?

Change in
percentile
ranking
(2020)

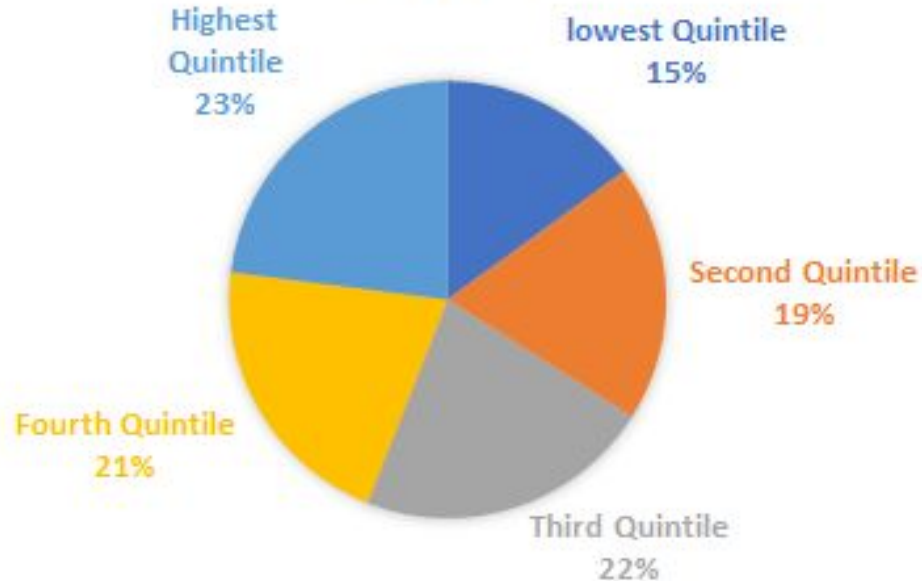


Prior Percentile Ranking (2019) divided into Quintiles

MAP Reading: Who are the students with Lower National Percentile Ranks

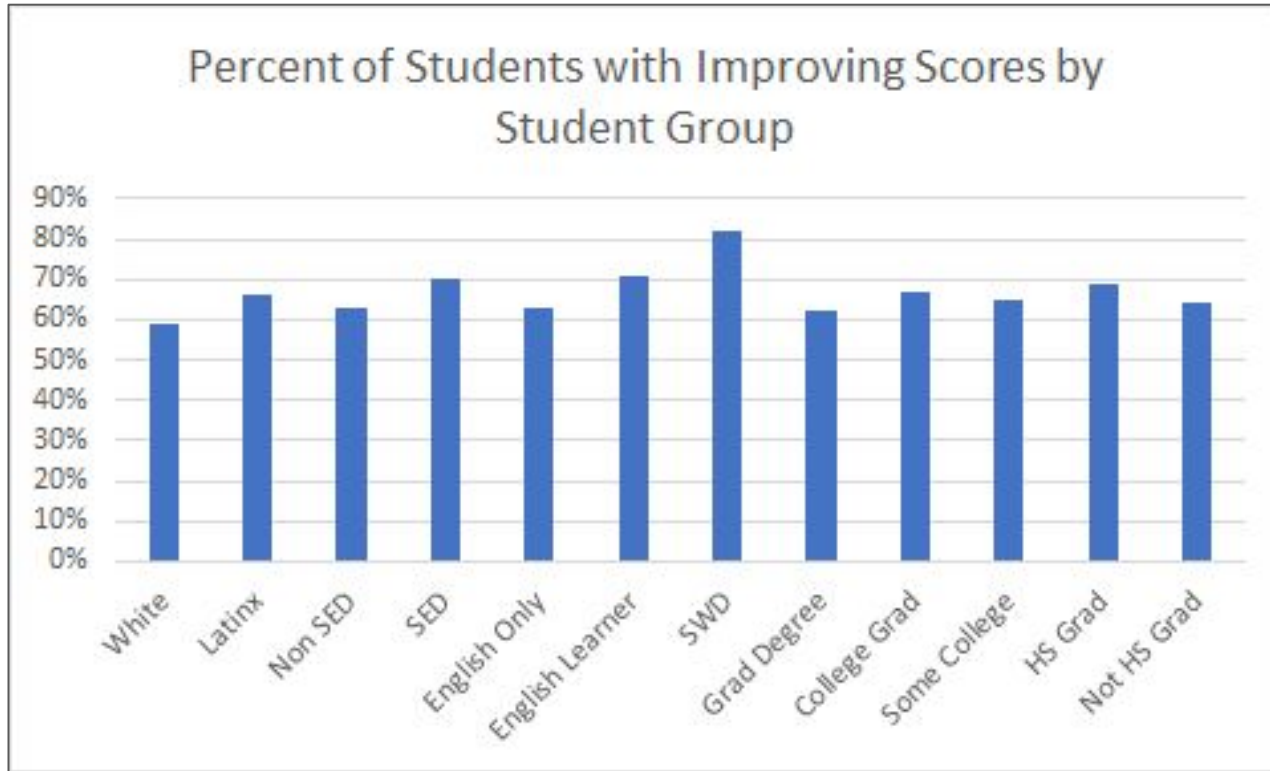


PERCENT OF STUDENTS WITH FALLING SCORES





MAP Reading: Percent of students scoring Higher National Percentile Ranks by Student Group



MAP Reading Data Observations

OBSERVATIONS

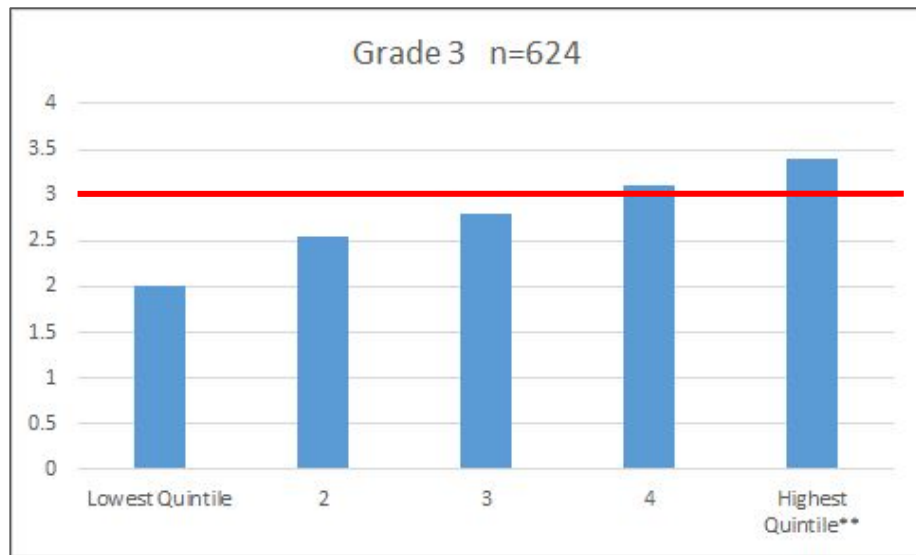
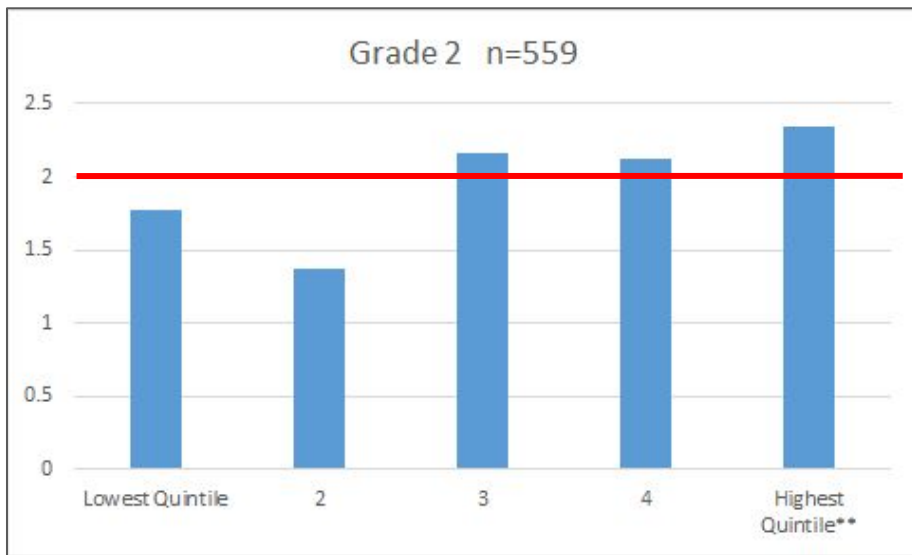
- Reading scores show overall improvement in NPR in seven of ten grades
- Although testing data is student level longitudinal, not all students tested
- Testing sample is reasonably similar to class enrollment; however, untested students present unknowns in this data.
- Historical patterns of student group achievement are not as present in this fall's benchmark data as in previous administrations of standardized tests.
- Students who are thriving or struggling in distance learning can be found in every student group.
- Strategic Planning and accountability measures based on student groups will be less productive than systems that respond to individual student needs in the wake of the pandemic.
- **Problem solve to facilitate testing of all students by March 5 and plan MTSS instructional supports to respond to individual student needs**

F&P Reading Results

- Comparing Fall 2019 to Fall 2020
- Context is Grade level equivalent scale
- Data is student level longitudinal
- We have Fall data for most students in grades 2-5
- Tests were administered in mixed settings: In person vs. at distance.
- One-on-one verbal test, some margin of error in the scoring due to differences between test administrators.



F&P Reading Level Results by Grade Level, Quintiles based on previous measures.

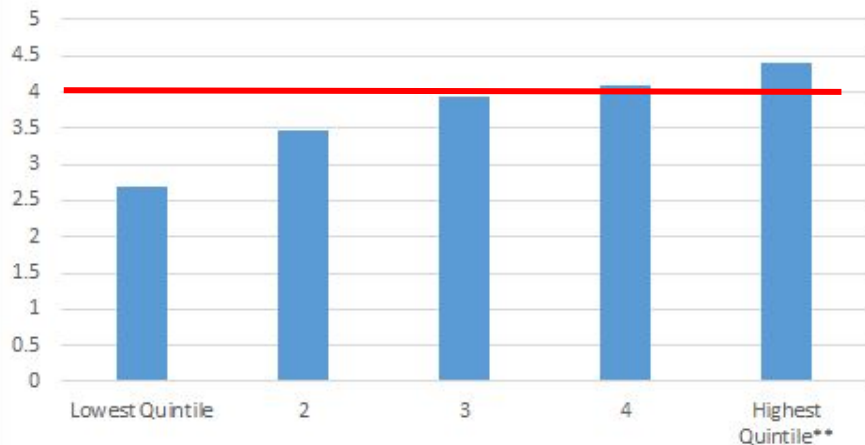


Note: Some ceiling effect as teachers only continue test to 1 grade level above current grade

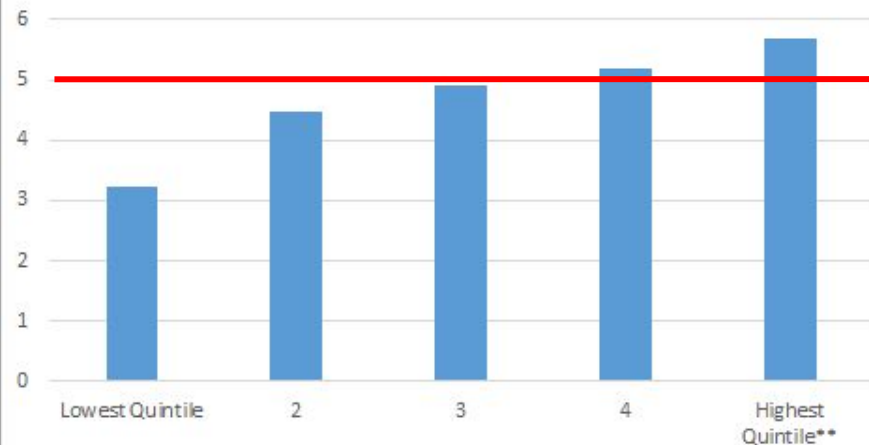
F&P Reading Level Results by Grade



Grade 4 n=467

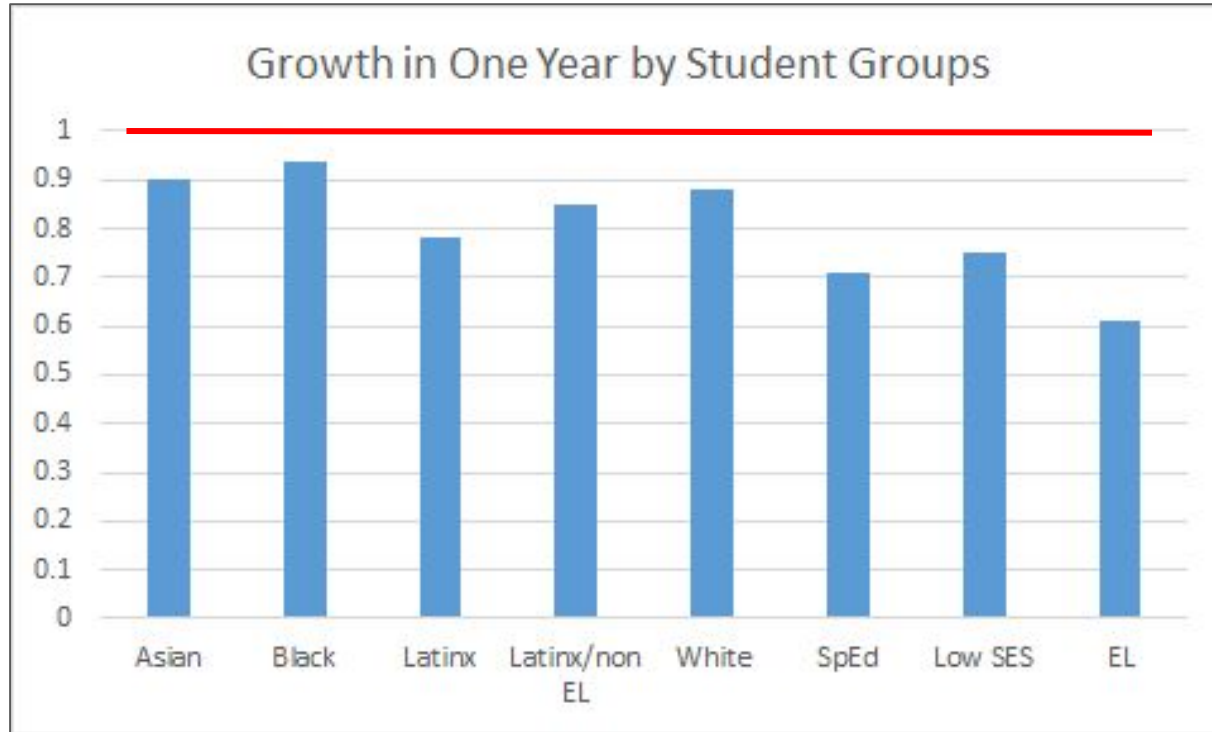


Grade 5 n=607



Note: Some ceiling effect as teachers only continue test to 1 grade level above current grade

F & P overview **growth** by Student Group



F&P Data Observations



- F&P results show that the top 60% of students are reading at grade level.
 - The bottom 40% are on the average half a year to a year and half behind grade level.
 - Students with disabilities, English Learners and Low SES students experienced less growth on the F&P.
-
- **MTSS strategic and intensive intervention programs should not exceed 15% of the student population. Since 40% of students are reading below grade level, Tier 1 instruction must be more responsive to the growth of struggling readers. Embed MTSS Tier 1-3 support strategies for differentiation and UDL in Tier 1 reading instruction. Research instructional programs and pedagogy for best balance of structured and balanced literacy to ensure more growth of bottom 40%**

Return on Investments: LCAP 1.2.1.d, & 1.5.4.a-b



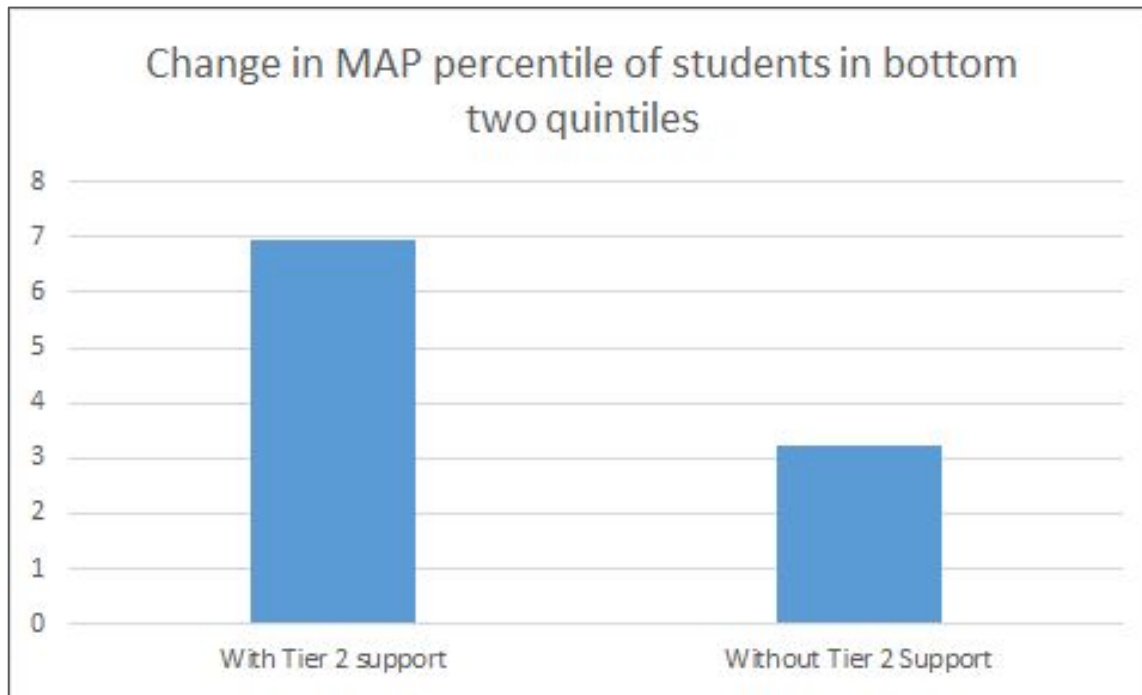
Reading: Return on Investment

Change in MAP by Tier 2 participation

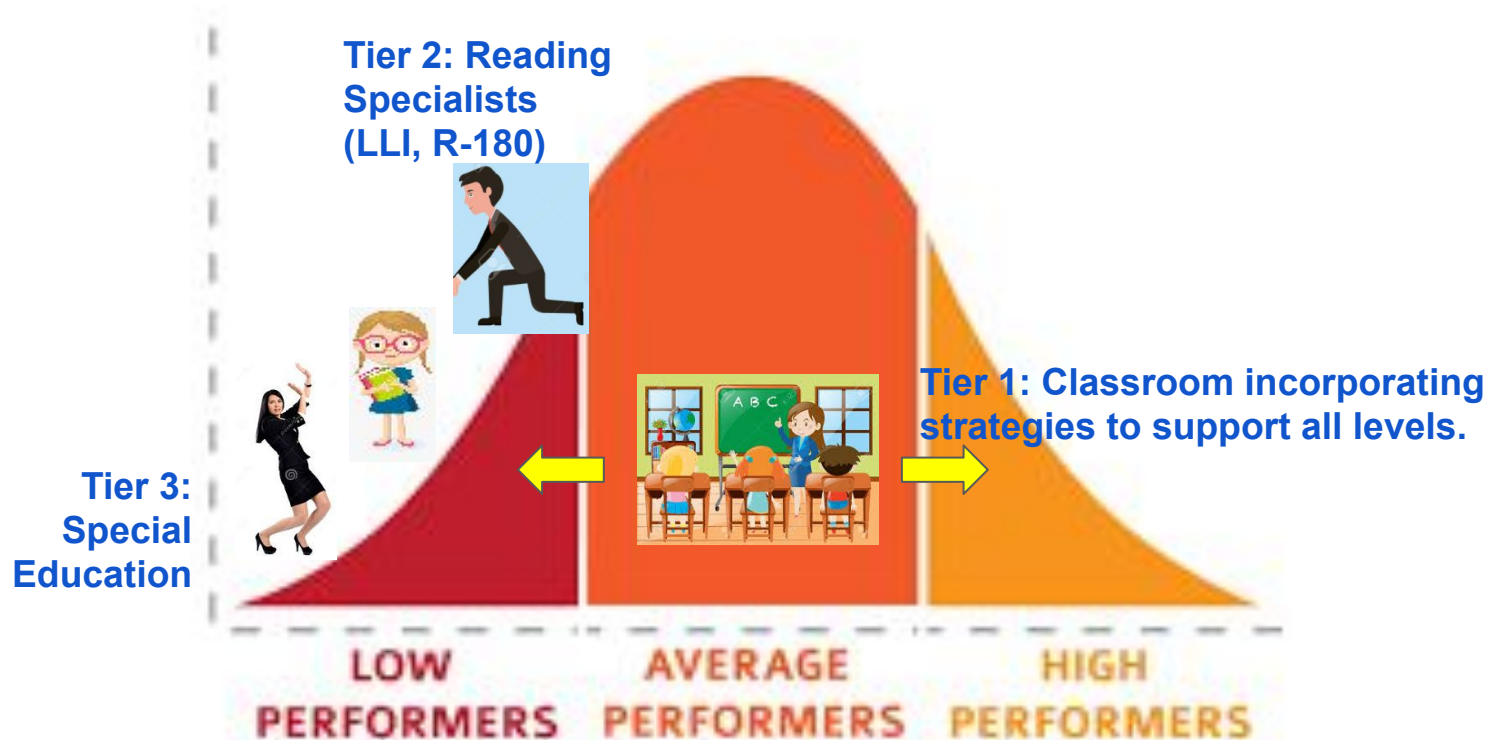
LCAP 1.2.1.d



**2.2 x as
much
growth
with Tier 2**



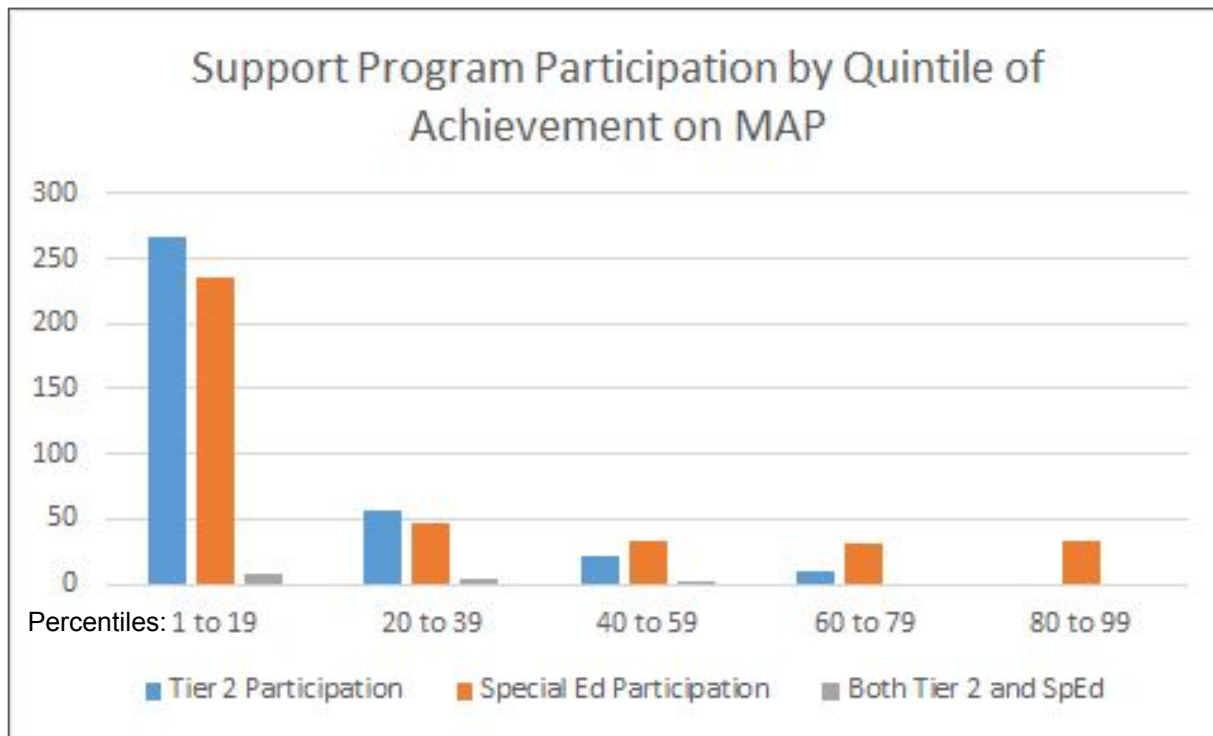
MTSS Tiered Program Concept



Tier 2 and 3 K-5 Program Participation by Quintiles

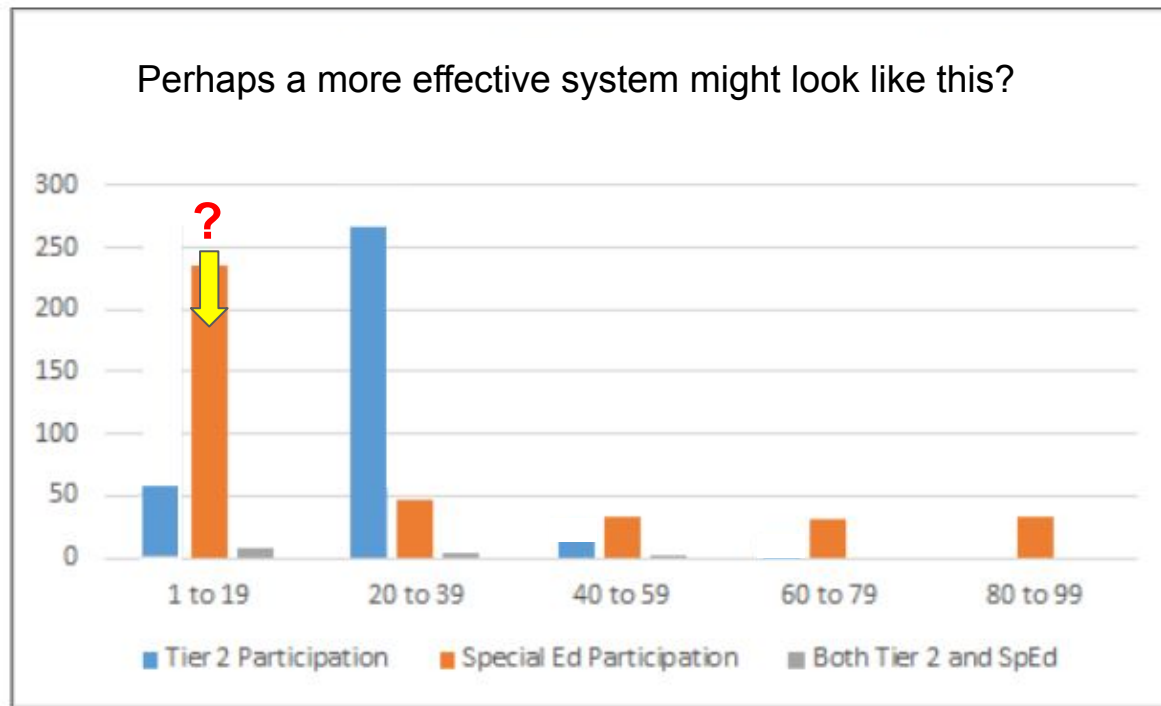


Numbers of
students
participating:



Between Special Ed and Tier 2, about 20% of K-5 students are receiving additional help.

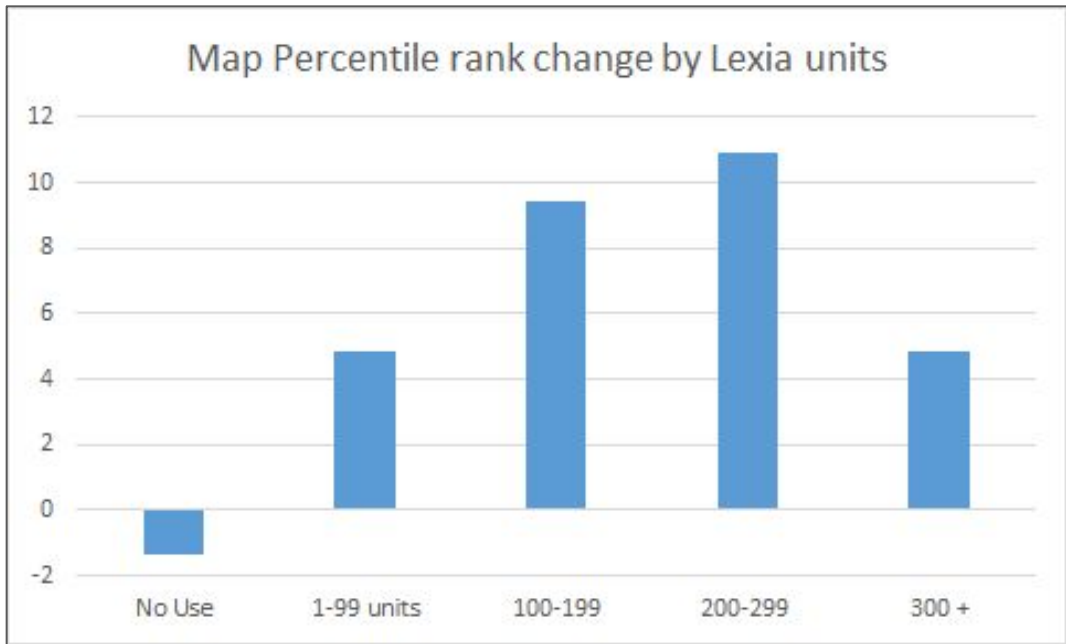
MTSS: Refining our identification and monitoring protocols is an areas of focus



Could more effective Tier 2 targeting produce a downward stress on the need for Special Education Referrals?

Reading: Return on Investment: Change in MAP by Lexia participation (units completed)

LCAP 1.5.4 b



The Local View: MAP Math Results





MAP Math Results

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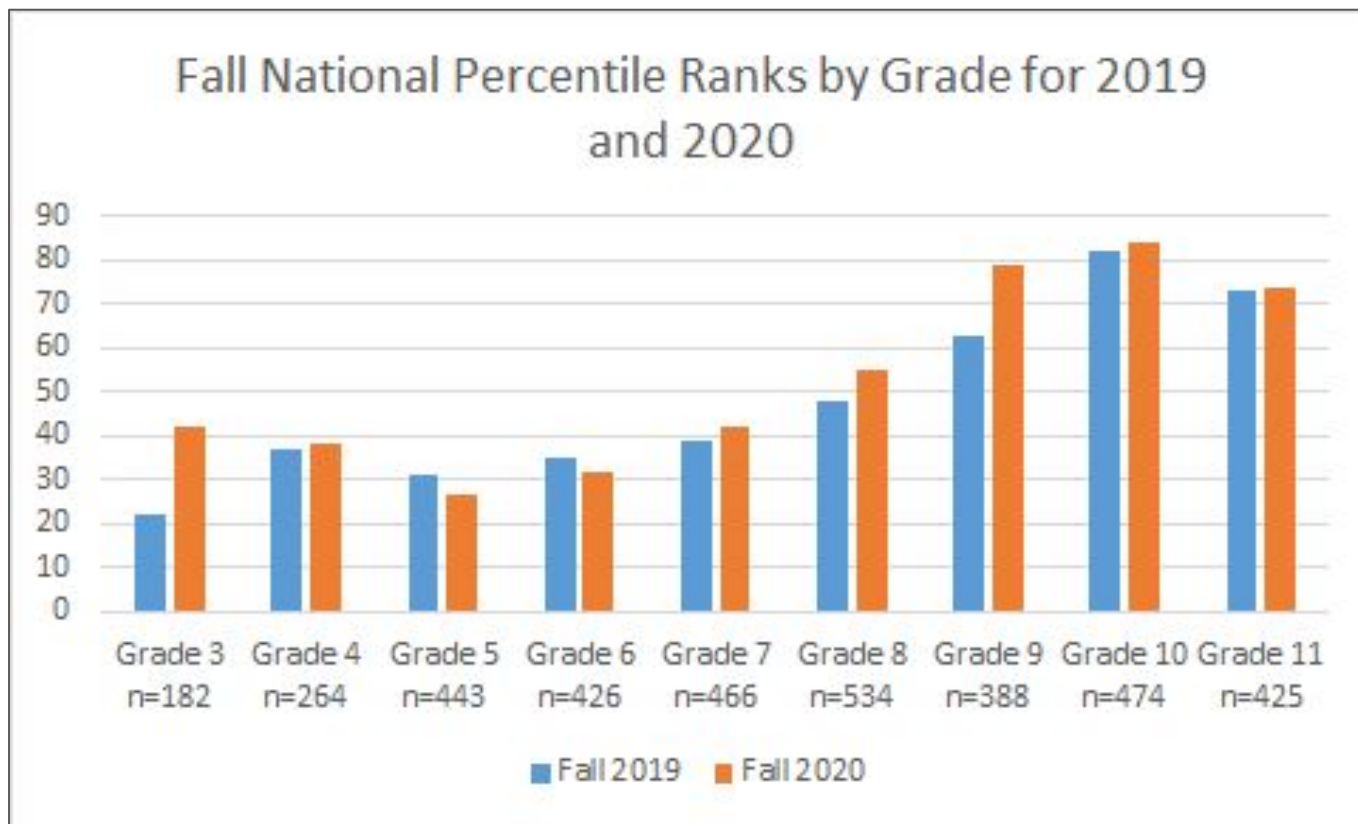
MAP Math: District Summary



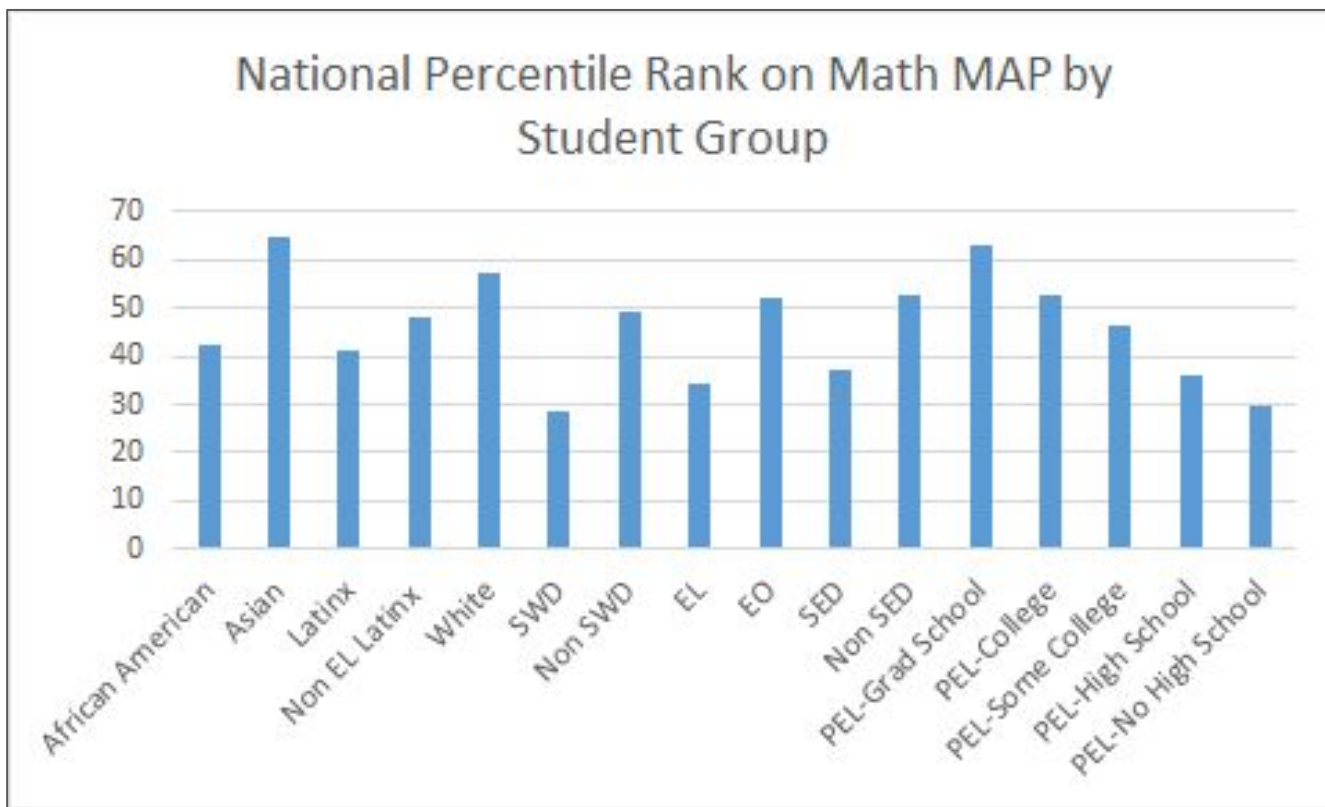
Math: Math K-12

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4	264	187.1	12.6	37	197.5	13.6	38
5	443	196.6	14.0	31	204.7	16.1	27
6	426	206.6	16.5	35	211.2	15.3	32
7	466	212.8	14.4	39	218.5	16.1	42
8	534	220.0	16.3	48	226.1	19.1	55
9	388	228.3	17.8	63	234.3	20.6	79
10	474	235.7	18.7	82	239.4	20.0	84
11	425	235.4	18.4	73	238.3	20.7	74
12	117	228.7	20.1	38	231.6	20.7	45

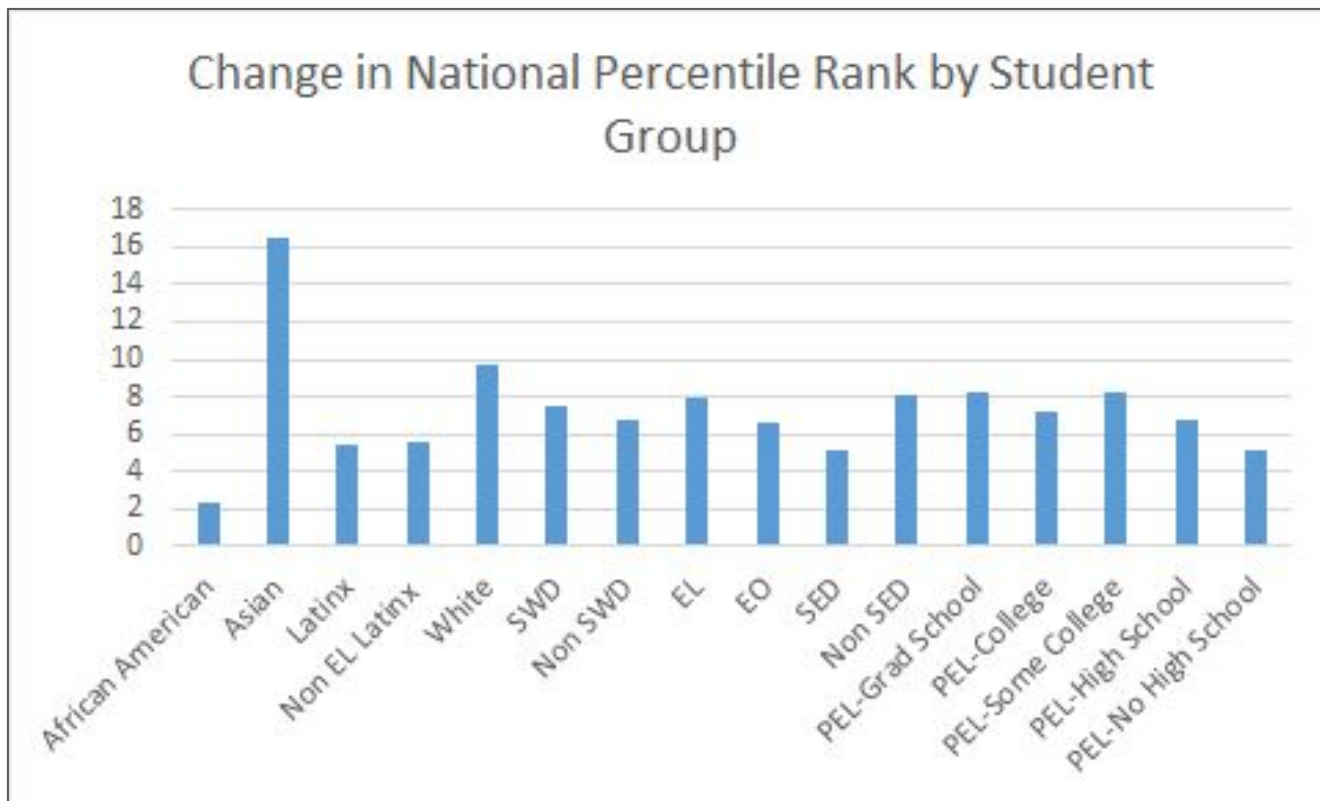
MAP Math: District Summary



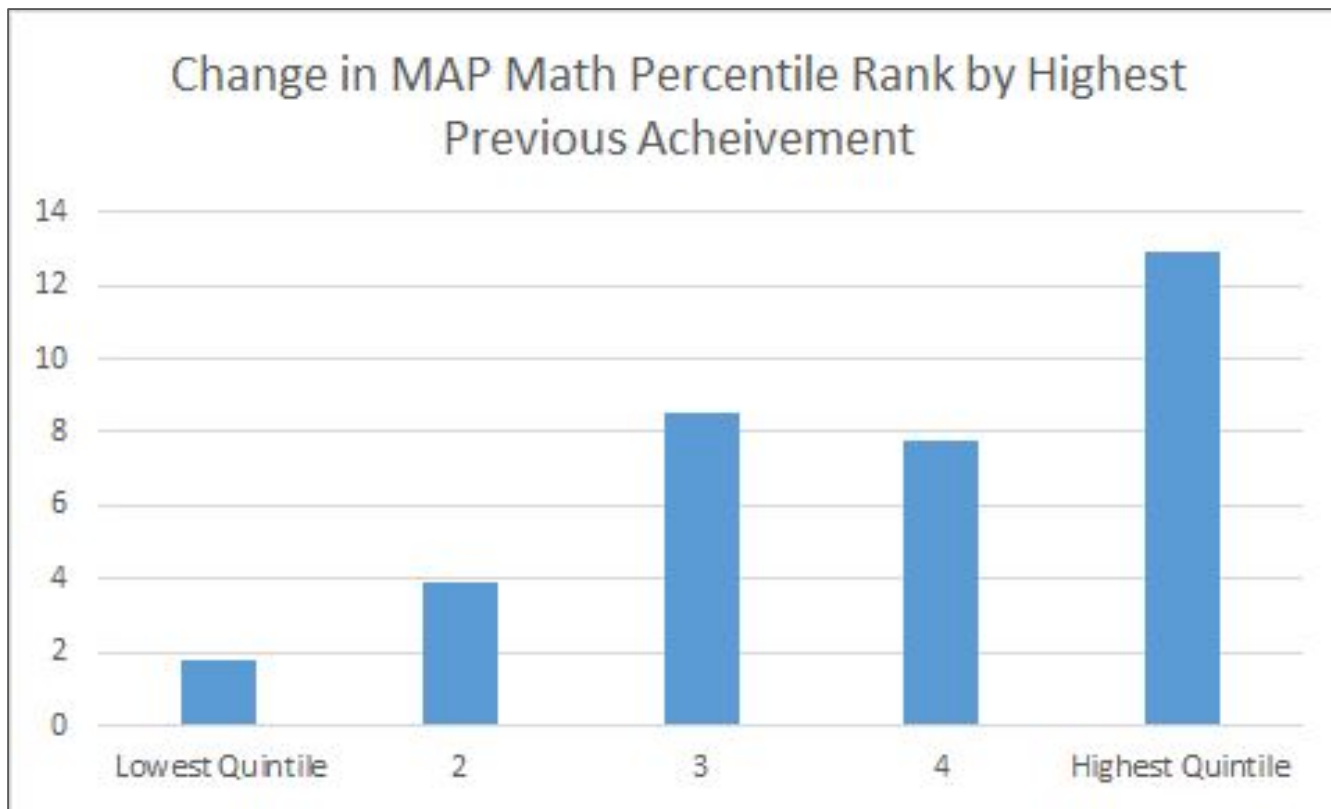
MAP Math: NPR by Student Group



MAP Math: NPR change by Student Group



MAP Math: NPR change by Quintile



MAP Math Data Observations



- Math results have more similar student group historical patterns than reading.
- All student groups had positive percentile rank standing growth in a year when National scores have fallen 5 to 10 percentiles against the NPR scale.
- Students at all achievement levels improved NPR standing; however, that growth was greatest for students with high prior knowledge and with parents with a high educational level. Student group achievement gaps for math are persistent and widening during distance learning
- Parent Education level, socioeconomic disadvantage, English learner, and students with disabilities continue to have value for subgroup program planning; however, individual student level MTSS response will help to address widening distribution of scores.
- Targeted math support for the remainder of distance learning highly recommended