Lake Forest Elementary School District 67

To: District 67 Board of Education

From: Mr. Michael V. Simeck, District 67 Superintendent

Date: December 13, 2016

Re: Assessment Report

Introduction:

Within the Assessment Report, there are four key areas of study: Spring MAP, *MAP Matched Cohorts, PARCC Assessment Status, and Assessment Growth using the District's Local Growth Model.*

Spring MAP performance is included to see how our students compare nationally.

The Matched Cohort data examines how cohorts of students grew over time (2014-2016) on the MAP assessment. This is important because by looking at the same students over time, one can have better insight into the effect of district programming.

PARCC data includes state and peer group and year-to-year comparisons.

Lastly, the *Assessment Growth - Local* section highlights District 67's student growth as compared to the district's historical growth data. As a system, these data allow us to examine comprehensive growth on many measures for all students and disaggregate the data in many different ways. This local growth model assists our schools in drilling down on which groups of students, or individual students, are or are not growing as expected and begins to drive our discussions about how to increase growth for all.

Summary of Findings:

MAP and PARCC Assessment Status/Proficiency

When district performance is compared to national performance on 2016 Spring MAP, District 67 students continue to perform significantly above national distributions. The lowest quartile of students' in District 67 performs between the 55th-70th national percentile. Spring MAP data show our students in grades 2-8 in each quartile above the national average. The District's 25th percentile is above the national average and in the 8th grade at the state average while the 75th percentile students begin at the 82nd percentile and grow to the 96th percentile by the time they reach the spring of their 8th grade year.

For the matched cohorts, the trend generally is upward with a dip in 4th and 5th grade and growth through 8th grade again. Historically, the district has significantly outperformed the state average, and the margin by which the district outperforms the state has increased in recent years as the standard has become more rigorous.

The district performed nearly identically to peer districts when measured by ISAT, but the transition to PARCC highlights slight differences between district and peer districts' performance. D67 performance on PARCC mathematics increased slightly from 61% meeting or exceeding standards in 2015 to 62% in 2016. Peer districts increased in math from 65% to 68%. ELA/Reading performance shows a similar trend, as differences between the district and the peer group are apparent for PARCC. The percent of district students meeting standards for ELA/Reading proficiency dropped from 67% in 2015 to 60% in 2016. Peer districts also had fewer students meeting/exceeding standards in 2016, dropping from 71% to 69%.

In examining why our students are growing on historical measures of student achievement (MAP) and then considering why our students' PARCC scores vary from our peer average, it is very likely the case that the divergence is a result of specific choices districts are making in regard to their use of time and assigning priorities. For example, the difference between our number of math and ELA minutes compared to peer districts. Lake Forest devotes far fewer minutes to ELA and a similar number of minutes to math (comparing districts D65, D96, and D67) in grades 3-8. In some peer districts, 3rd graders spend roughly 15% more and 8th graders nearly double the time in ELA than in Lake Forest. This is time on task daily. Over time, that difference is bound to appear in a more rigorous assessment like the PARCC...and have been masked by a far less rigorous attainment assessment like the ISAT. If peer districts spend so much more time on tasks that our students do not, it would be surprising if it did not appear in the assessment data. Further, until this past school year, Lake Forest devoted more time to Band/Orchestra/Chorus than it did to math and ELA. This reflects a local value of the arts. Many peer districts offer band/orchestra/chorus only outside the school day.

There are other factors beyond time on task that may or may not play a role like:

- A generally positive climate related to MAP testing exists across District students and families. This is less true of PARCC given the politically charged climate around PARCC testing in our district over the past two years. The testing climate in our district differed markedly from many of our peers during PARCC testing.
- In addition to the adjustment in terms of allotted time (e.g. nearly double blocks of ELA time in 8th grade, for example), some peer districts made specific changes to their curriculum to which we are currently adjusting. Our district has made a number of curriculum changes over the past several years to increase the consistency of instruction and enhance rigor. PARCC places particular value on certain textual reading and expository skills. The close reading of texts and specific writing strategies are of significant value on that assessment. We need to ensure we spend time on those specifically assessed skills.
- Different assessments emphasize different things. A typical response to the achievement in District 67 has been to accelerate students. While this can be one way of advancing students, it can result in moving through content more quickly, or skipping pieces of instruction altogether. While this can prove fruitful on an assessment such as MAP, PARCC is a very different assessment. Due to MAP's computer adaptive nature, it provides a narrower look at student mastery of standards. It is easier to "race to the top". PARCC requires a depth of knowledge and extensive performance toward the standards. As we are working to align our curriculum to these standards, we have found that this depth is not always there.
- In preparation for the first year of PARCC testing in spring of 2015, all students experienced some level of assessment previewing and sampling. Our goal was to ensure

our students felt confident and comfortable approaching this new assessment. During the 2015-16 school year, there was far less emphasis on acclimating students to a different type of assessment.

District	Grade	ELA Minutes	Math Minutes
Kildeer District 96	3rd Grade	140 minutes	60 minutes
Lake Bluff District 65	3rd Grade	120 minutes	90 minutes
Lake Forest School District 67	3rd Grade	120 minutes	75 minutes
Kildeer District 96	6th Grade	85 minutes	42 minutes
Lake Bluff District 65	6th Grade	60 minutes	60 minutes
Lake Forest School District 67	6th Grade	53 minutes	53 minutes
Kildeer District 96	8th Grade	85 minutes	42 minutes
Lake Bluff District 65	8th Grade	60 minutes	60 minutes
Lake Forest School District 67	8th Grade	53 minutes	53minutes

Our peer comparison group is comprised of 18 peer districts including: Deerfield 109, Libertyville 70, Lincolnshire-Prairieview 103, Northbrook-Glenview 30, Wilmette 39, Winnetka 36, Hawthorn 73, Lake Bluff 65, North Shore 112, Oak Grove 68, Rondout 72, Aptakisic-Tripp 102, Avoca 37, Glencoe 35, Kenilworth 38, Kildeer Countryside 96, Northbrook 28, and Northbrook 27.

National Comparisons

Overall, the analysis reveals that although there is variation at some grade levels, student growth in mathematics is strong and exceeds that of national growth profiles, especially at the middle school grades 5-8. The middle school grades move the typical student from the 67th national percentile in 5th grade to the 88th national percentile in 8th grade. A similar finding exists for reading growth. Overall District 67 students' reading growth surpasses national growth profiles. It is worth noting that for MAP assessments, comparisons with our peer districts is not possible as districts do not release that data, so only national comparisons are possible.

Local Growth Model Assessment

In order to measure growth in the local growth model, a multitude of assessment data is gathered. (Please see table below.) This assists in looking at many different points in time to assess how students have grown over time. The data in this report provides evidence that individual student progress, both aggregated by school and by grade, is consistent with prior district performance.

	Mathematics	Reading	Writing
K	Spring MNM		
1	Spring MNM	Spring RCBM	
2	Spring MAP, Spring MCOMP	Spring RCBM, Spring MAP	
3	Spring MAP, Spring PARCC, Spring MCOMP	Spring RCBM, Spring PARCC, Spring MAP	Spring PARCC
4	Spring MAP, Spring PARCC, Spring MCOMP	Spring RCBM, Spring PARCC, Spring MAP	Spring PARCC
5	Spring MAP, Spring PARCC	Spring PARCC, Spring MAP	Spring PARCC
6	Spring MAP, Spring PARCC	Spring PARCC, Spring MAP	Spring PARCC
7	Spring MAP, Spring PARCC	Spring PARCC, Spring MAP	Spring PARCC
8	Spring PARCC, Spring MAP	Spring PARCC, Spring MAP	Spring PARCC

Final Takeaways:

Students year-to-year MAP gains reflect desirable levels of growth in most grades. In all grades and in all buildings students demonstrate expected local growth rates. Year-over-year matched cohort growth is also consistent. While MAP scores have increased in nearly all grades as expected, PARCC scores demonstrate low growth year-to-year in math and a decline year-to-year in reading as well as differing from some peer districts.

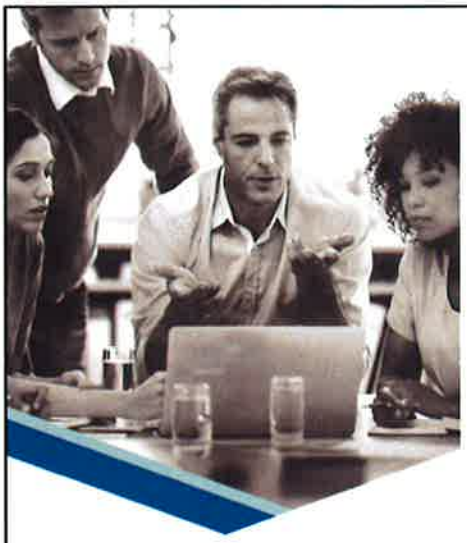
Future Work:

In the coming months, we plan to continue our work towards growth and achievement in many ways.

- We will continue to disaggregate the data to uncover possible areas of success to learn from, as well as areas in which we want to further target instruction and development.
- We will determine whether peers saw similar rates of MAP growth to ours, how that compares to their PARCC scores, and what types of changes were made prior to the new assessment.
- From our disaggregated assessment of our own and peer data, we may well need to make a value judgment about where we should spend our instructional time. Specifically, if our students are significantly above the state and national average on MAP and close to double the state average on PARCC, do we want to double down on academics to secure possible marginal gains (on average 8 points in the current year in

ELA) on that test at the expense of our current well-rounded offerings to students which include band, orchestra, and chorus?

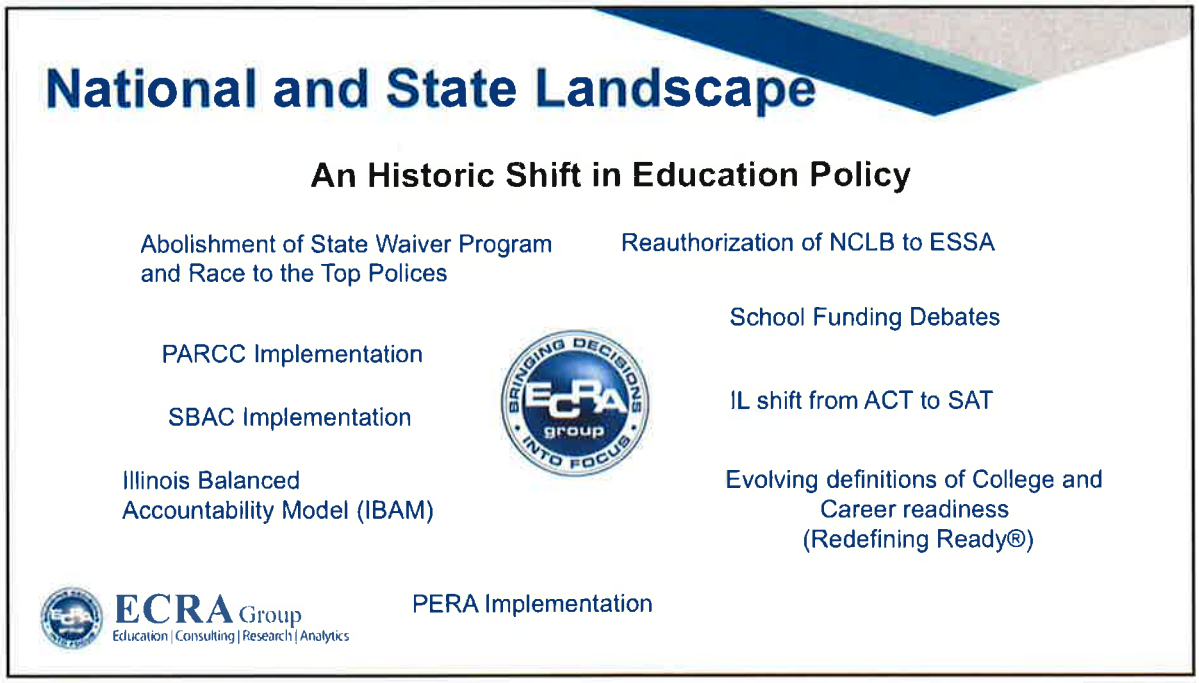
- We will continue to provide our teachers will time and deep learning opportunities to ensure they understand the new curriculum and continually improving instructional practices.
- At the building level, we will continue to use the local growth data to analyze how our students are growing so that we can maximize growth for ALL students.



D67 Lake Forest

Assessing Educational Quality

ECRA Group
Education | Consulting | Research | Analytics

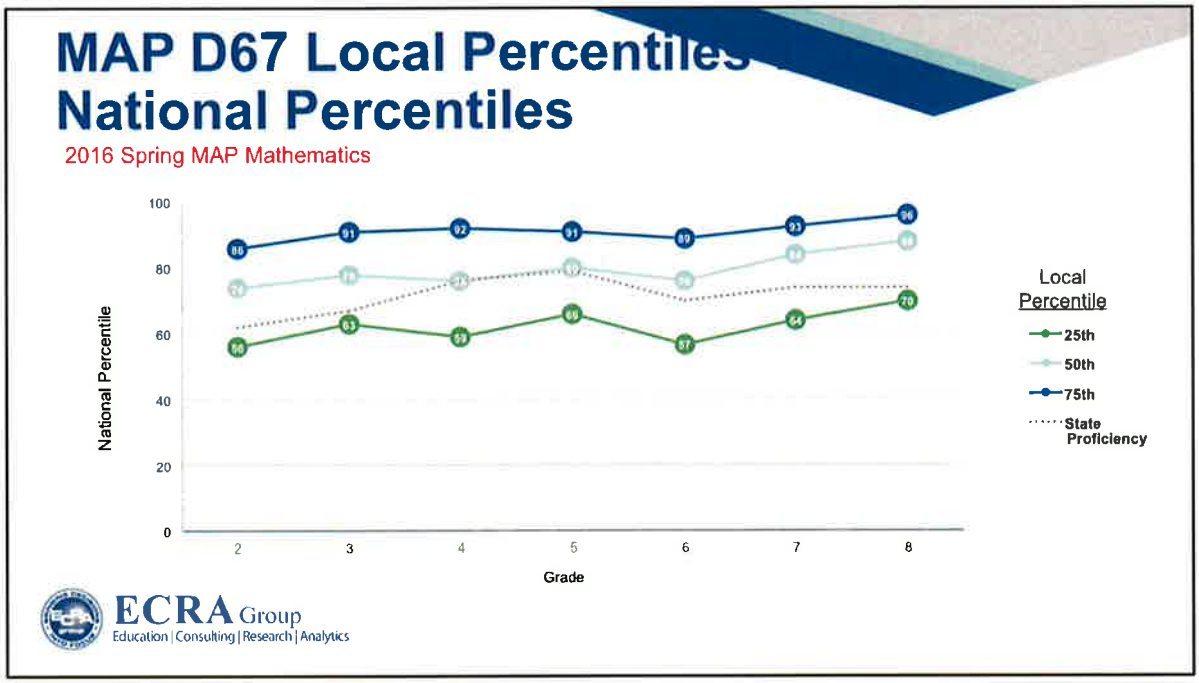


The Every Student Succeeds Act (ESSA), Illinois Balanced Accountability Model (IBAM), adoption of the SAT, and new college and career readiness indicators will have significant implications for Illinois school districts. The federal education policy landscape represents an unprecedented shift toward broader definitions of student success and far more state and local autonomy to define education quality and implement accountability systems. This presentation updates district performance against definitions of quality that have evolved from the No Child Left Behind (NCLB) era, and provides a roadmap for the future assessment of educational quality in Illinois.

Specifically, this presentation will cover:

- Assessment Status
- Assessment Growth
- Multi-dimensional student success

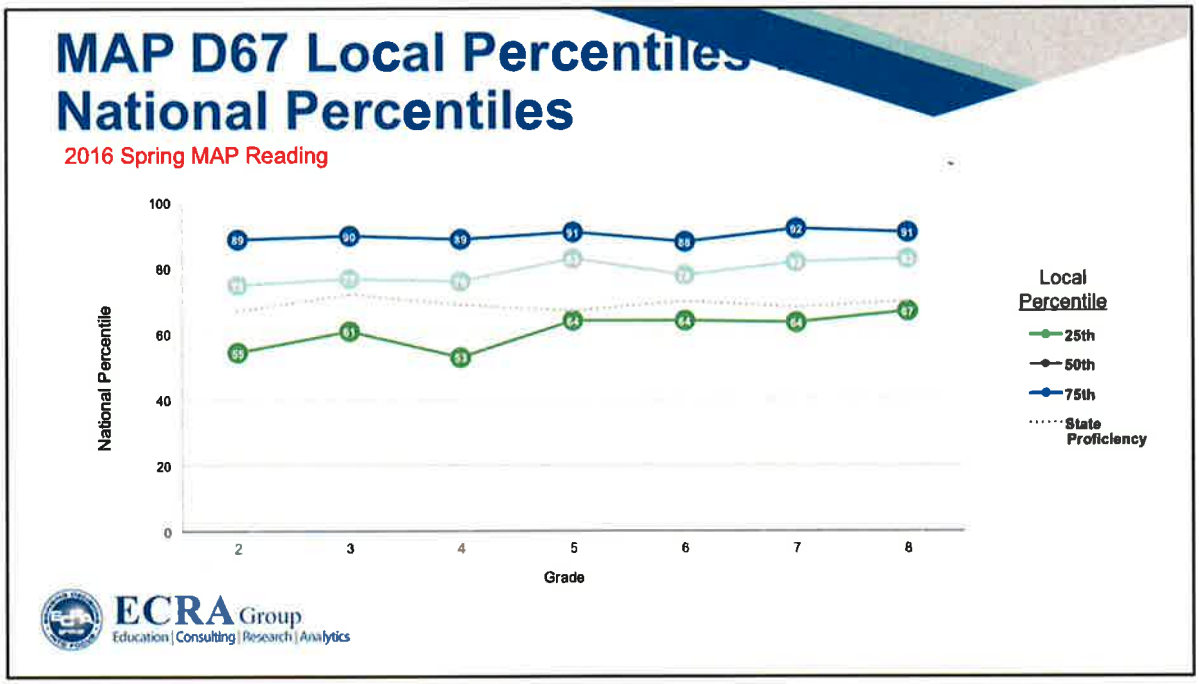
Assessment status, often referred to as student proficiency, measures how students perform at a single point in time on outcomes measured by standardized assessments. Measurement of assessment status is often focused to English Language Arts (ELA) and Math, which is the focus of this presentation.



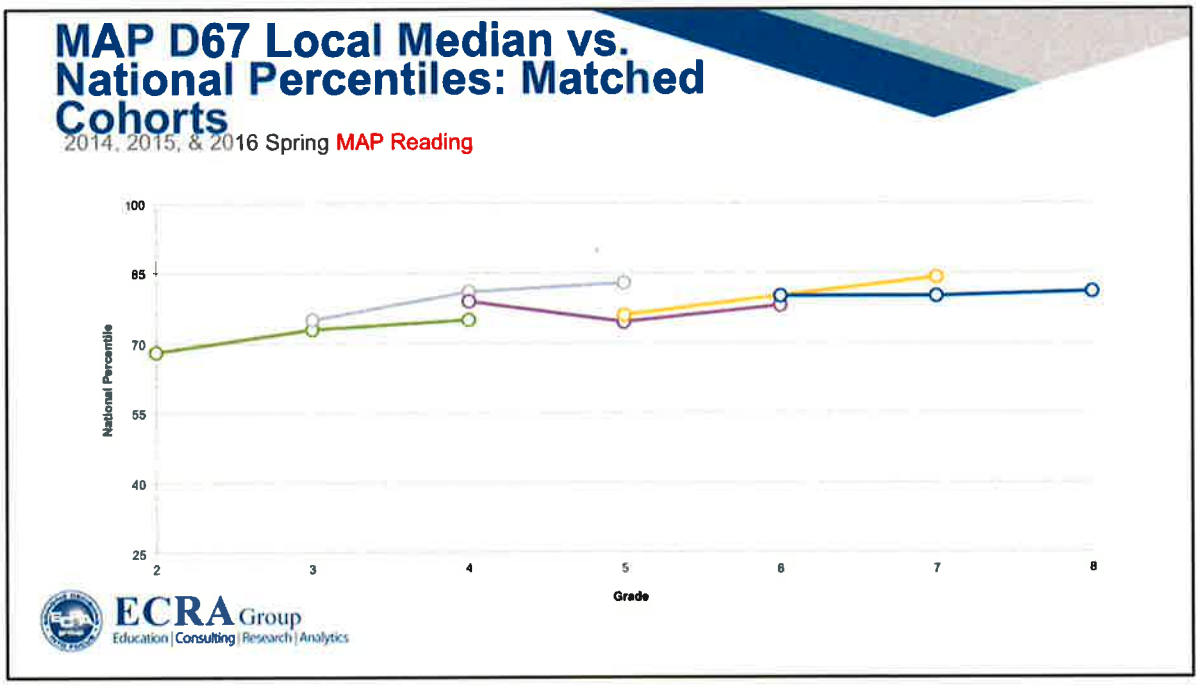
This chart compares district performance to national performance on the 2016 Spring MAP Mathematics assessment. The analysis captures the relationship between district local distributions and national distributions. The lines represent the 25th, 50th, and 75th local percentile. The Y-axis and numbers are the percentage of students nationally that each local percentile scored equal to or greater than.

The dotted line represents the equated national percentile associated with meeting State of Illinois PARCC proficiency thresholds for each grade.

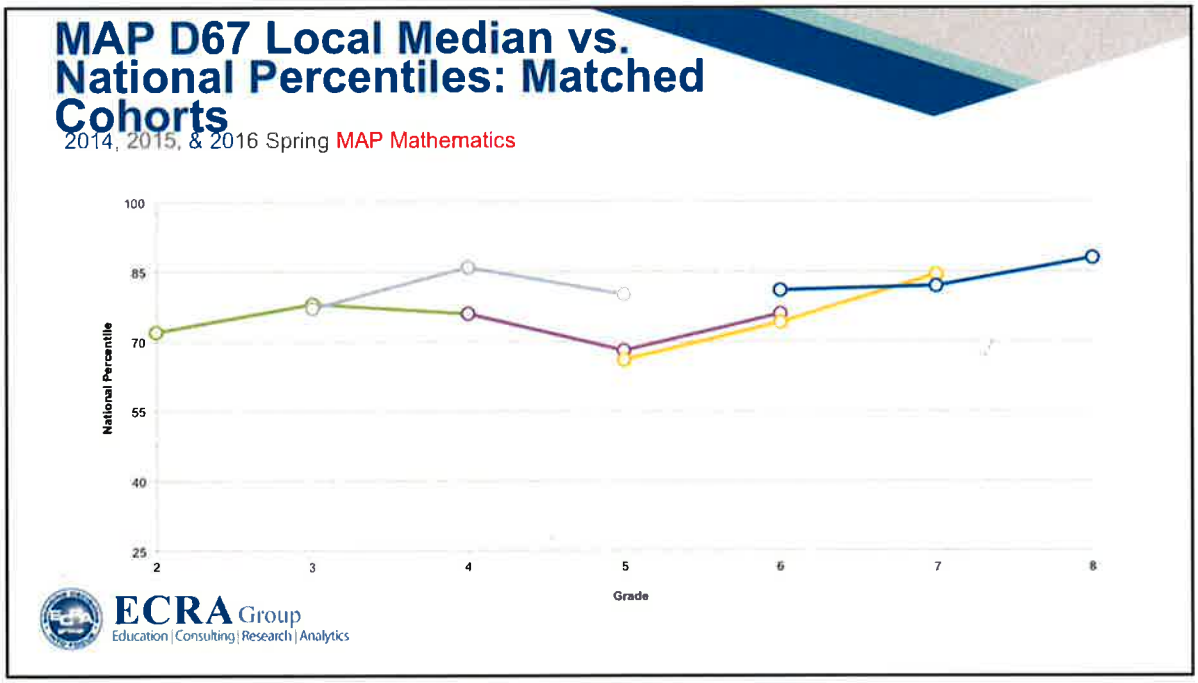
Overall, district distributions are significantly above national distributions. For example, looking at 2nd grade MAP mathematics, a student performing at the median level of the district outperformed 74% of students nationally. Overall, national percentiles increase from grade 2 to grade 8 for all levels of the distribution, suggesting the district impact on mathematics achievement outperforms the nation.



Similar to mathematics, district students significantly outperform the nation in reading. Students at the local 25th percentile are above the national median at all grade levels. The typical District 67 student is at or above the 75th national percentile at all grade levels. Percentiles generally increase from grade 2 to grade 8, suggesting the impact of the district's reading program is outperforming the nation.

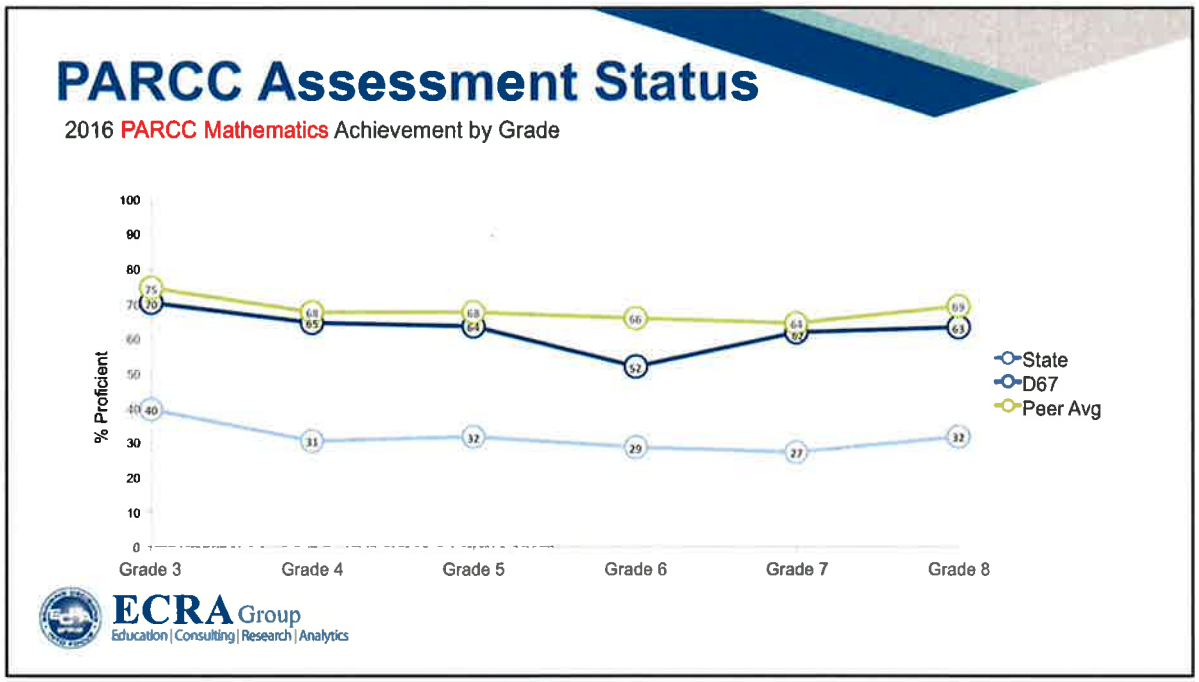


A similar finding exists for reading growth. Overall reading growth surpasses national growth profiles.

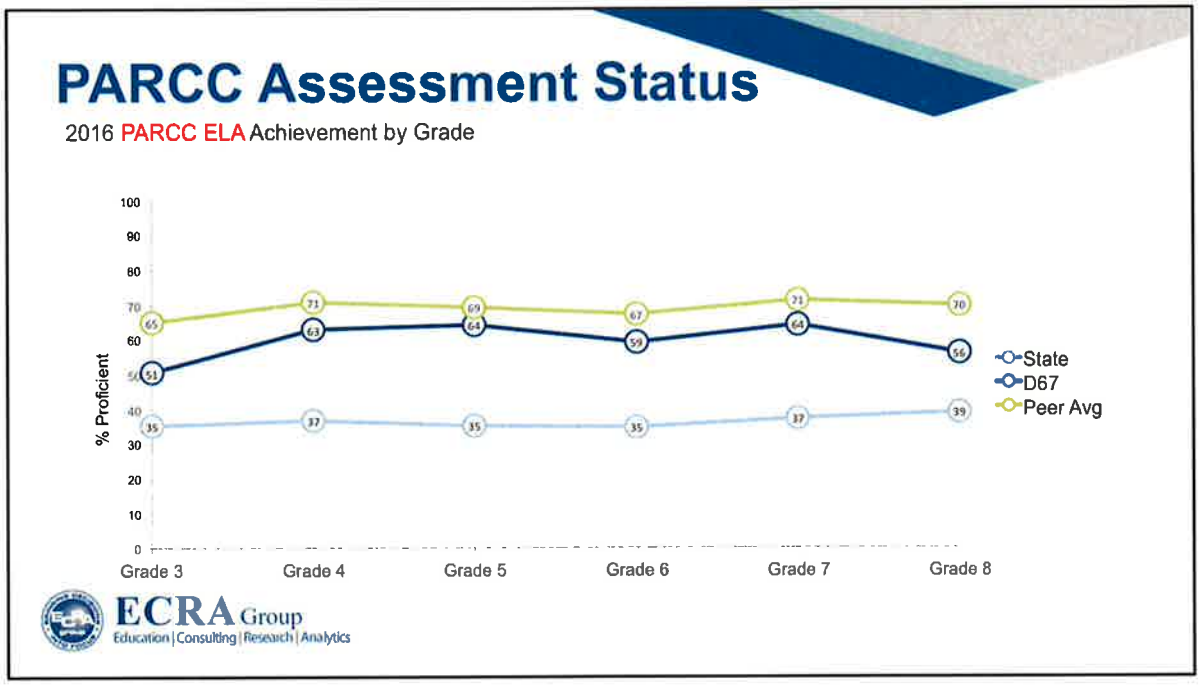


This chart shows national percentile changes for matched cohorts of students performing at the district median level across the 2013-2014, 2014-2015, and 2015-2016 academic years. Each cohort is represented in a different color.

Students without 3 years of data (e.g. students that migrate in or out of the district) were excluded from the analysis. The 3-year cohorts provide an overlap at each grade level so growth can be examined on two cohorts.



This chart presents a cross-sectional analysis of the percent of students meeting or exceeding mathematics standards in 2016 for each grade. District performance was well above state averages but slightly below peer districts for all grades. The largest gap between the district and peer districts was observed at grade 6, where the district had 52% of students meet or exceed state standards versus 66% for peer districts.



Similar to 2016 PARCC performance in mathematics, student performance for ELA was well above state averages but below peer districts at all grades.

District	Grade	ELA Minutes per Day	Math Minutes per Day
Kildeer District 96	3rd Grade	140 minutes	60 minutes
Lake Bluff District 65	3rd Grade	120 minutes	90 minutes
Lake Forest School District 67	3rd Grade	120 minutes	75 minutes
Kildeer District 96	6th Grade	85 minutes	42 minutes
Lake Bluff District 65	6th Grade	60 minutes	60 minutes
Lake Forest School District 67	6th Grade	53 minutes	53 minutes
Kildeer District 96	8th Grade	85 minutes	42 minutes
Lake Bluff District 65	8th Grade	60 minutes	60 minutes
Lake Forest School District 67	8th Grade	53 minutes	53 minutes

ELA Minutes Difference

The preceding chart translates to:

- 435 days or 2.47 years of ELA instruction more instruction in Kildeer over an 8 year elementary experience*
- 69 days more ELA instruction in LB over an eight year elementary experience**

* 20 minutes difference per day * 176 days grades 1-4 and 32 minutes in grades 6-8 * 176 days
** 7 minutes difference per day * 176 days grades 6-8

Math Minutes Difference

The preceding chart translates to:

- 249 days or 1.4 years more math instruction in Lake Forest than Kildeer over an 8 year elementary experience*
- 209 days or 1.2 years less math instruction in Lake Forest than in Lake Bluff over an 8 year elementary experience**

* 15 minutes difference per day * 176 days grades 1-4 and 11 minutes per day in grades 6-8 * 176 days
** 15 minutes difference per day *176 days grades 1-4 and 7 minutes per day in grades 6-8 * 176 days

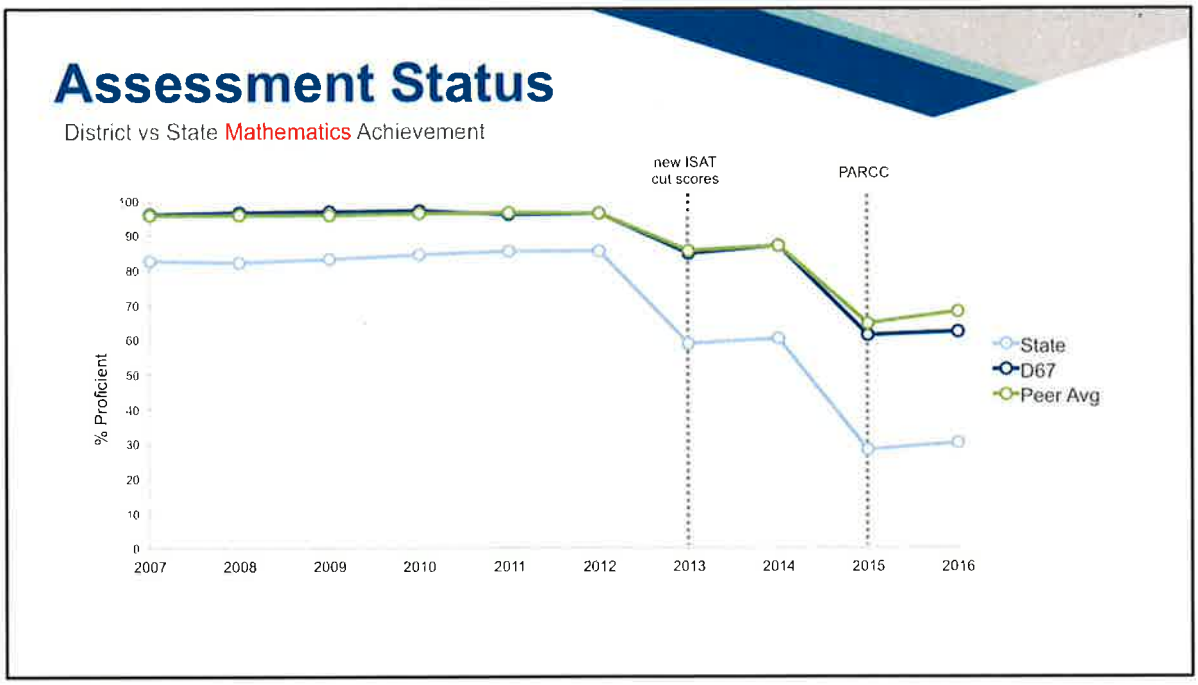
District Percentile Comparisons of 2015 and 2016 PARCC

	2016 PARCC Percentile	2015 PARCC Percentile
Reading/ELA	85.1	91.5
Mathematics	92.7	94.2
ELA & Mathematics Combined	90.5	93.9

ECRA Group
Education | Consulting | Research | Analytics

The district percentile analysis compares the percentage of students who met or exceeded state standards on PARCC in Lake Forest SD 67 with the percentage of students who met or exceeded state standards in other districts across Illinois. The district was compared to other public elementary districts across the state. By comparing Lake Forest SD 67 students' average PARCC meets/exceeds percentage to districts across Illinois, a district percentile was calculated.

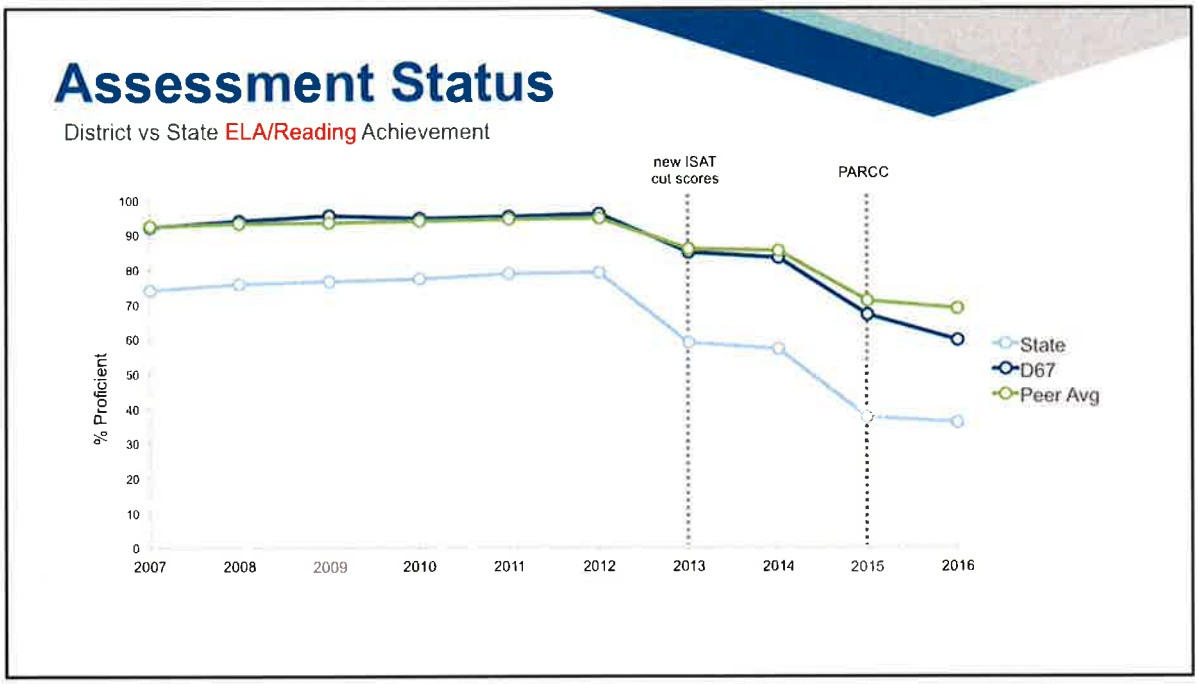
In 2015, the district outperformed 93.9 percent of elementary districts across the state on PARCC. That number dropped slightly to 90.5 percent in 2016.



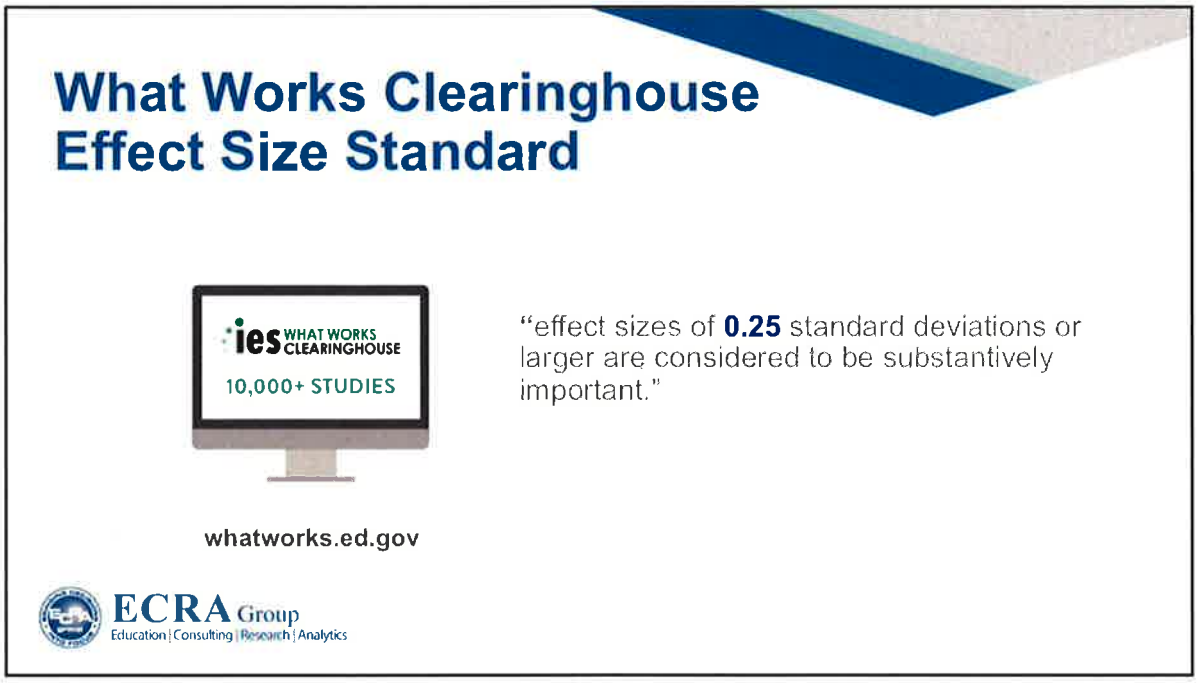
This chart shows the percent of students that met or exceeded mathematics standards over time, with comparisons to peer district average (indicated in green) and the state average (indicated in blue).

Historically, the district has significantly outperformed the state, and the margin by which the district outperforms the state has increased in recent years as the standard has become more rigorous. The district performed nearly identical to peer districts when measured by ISAT, but the transition to PARCC highlights slight differences between district and peer district performance. D67 performance on PARCC mathematics increased slightly from 61% meeting or exceeding standards in 2015 to 62% in 2016. Peer districts increased from 65% to 68% whereas the state increased from 28% to 30%.

The 18 peer districts included in this analysis were: Deerfield 109, Libertyville 70, Lincolnshire-Prairieview 103, Northbrook-Glenview 30, Wilmette 39, Winnetka 36, Hawthorn 73, Lake Bluff 65, North Shore 112, Oak Grove 68, Rondout 72, Aptakistic-Tripp 102, Avoca 37, Glencoe 35, Kenilworth 38, Kildeer Countryside 96, Northbrook 28, and Northbrook 27.



ELA/Reading performance shows a similar trend, as differences between the district and the peer group are apparent for PARCC. The percent of district students meeting standards for ELA/Reading proficiency dropped from 67% in 2015 to 60% in 2016. Peer districts also had fewer students meeting/exceeding standards in 2016, dropping from 71% to 69%. There is roughly a 9% ELA achievement gap in PARCC 2016 scores between the district and the peer group.



Research on educational effect size is focused on the magnitude of how large deviations in assessment scores need to be in order to determine there has been an educationally relevant effect. Effect sizes capture how much of a standard deviation shift exists compared to what is typical. Therefore, an effect size of zero represents the typical effect that one would expect.

Research on effects within the educational context suggests effect sizes less than 0.3 may not be meaningful (Hattie, 2013; Nye, Konstantopoulos, & Hedges, 2004). Other academic authorities have similar guidance. Therefore, ECRA uses ±0.3 as its default threshold for which deviations from expected performance is evaluated. Any deviations within the ±0.3 standard deviations are considered typical.

Calculation of effect sizes requires that one adopt a definition for the typical effect. ECRA uses the district's own historical data to estimate the typical district effect. All deviations are then compared to what one would expect given the history of the individual student and what is typical throughout the district. Localizing expectations for growth is important as it allows for more sensitive examination for how district programming is impacting student outcomes.

Local Growth Model

	Mathematics	Reading	Writing
K	Spring MNM		
01	Spring MNM	Spring RCBM	
02	Spring MAP, Spring MCOMP	Spring RCBM, Spring MAP	
03	Spring MAP, Spring PARCC, Spring MCOMP	Spring RCBM, Spring PARCC, Spring MAP	Spring PARCC
04	Spring MAP, Spring PARCC, Spring MCOMP	Spring RCBM, Spring PARCC, Spring MAP	Spring PARCC
05	Spring MAP, Spring PARCC	Spring PARCC, Spring MAP	Spring PARCC
06	Spring MAP, Spring PARCC	Spring PARCC, Spring MAP	Spring PARCC
07	Spring MAP, Spring PARCC	Spring PARCC, Spring MAP	Spring PARCC
08	Spring PARCC, Spring MAP	Spring PARCC, Spring MAP	Spring PARCC

ECRA Group
Education | Consulting | Research | Analytics

Local Growth Model

Mathematics Growth 2015-2016

School	Effective Sample Size^	% High Growth	% Expected Growth	% Low Growth	Growth (Effect Size)
CHEROKEE ELEM SCHOOL	294	21%	67%	11%	+ 0.22
DEER PATH MIDDLE SCH EAST	408	17%	67%	16%	+ 0.01
DEER PATH MIDDLE SCH WEST	460	17%	67%	15%	+ 0.01
EVERETT ELEMENTARY SCHOOL	272	12%	71%	17%	- 0.05
SHERIDAN ELEM SCHOOL	217	16%	69%	15%	+ 0.04
ALL		17%	68%	15%	+ 0.04
EXPECTED		16%	68%	16%	0.00

* Dot color is green for all growth scores that are not statistically significant
^ Effective sample size only includes students with at least 2 predictors

ECRA Group
Education | Consulting | Research | Analytics

Higher than Expected Growth
Growth is +0.30 or above

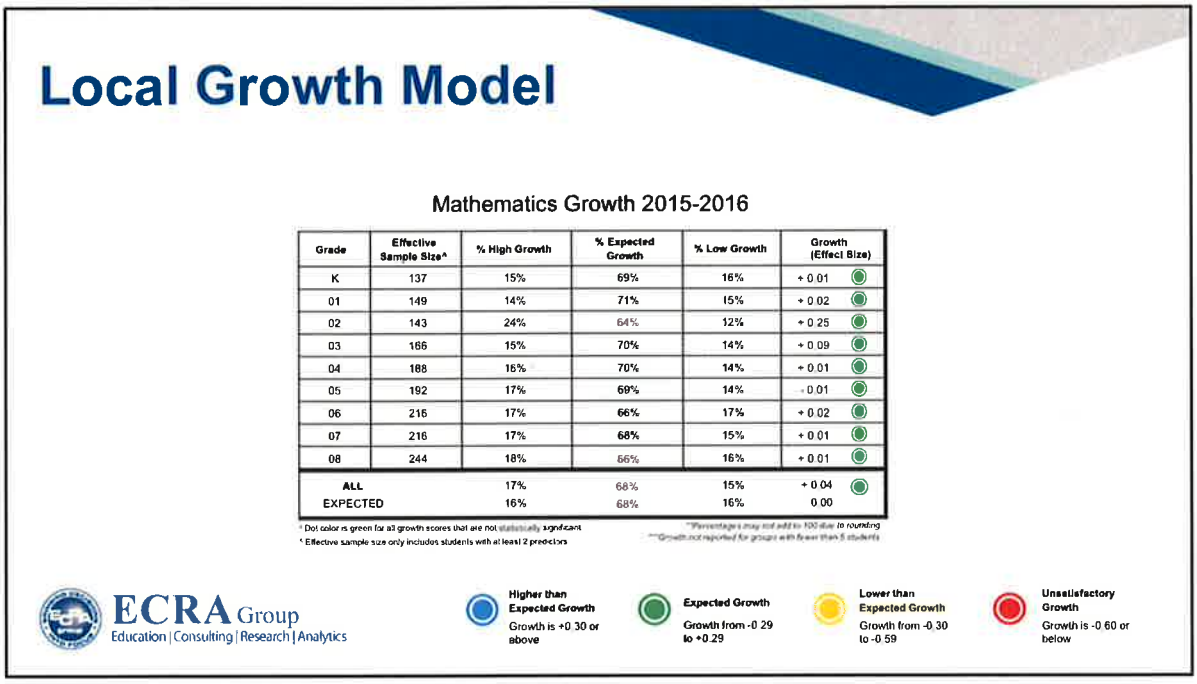
Expected Growth
Growth from -0.29 to +0.29

Lower than Expected Growth
Growth from -0.30 to -0.59

Unsatisfactory Growth
Growth is -0.60 or below

This table summarizes mathematics growth on spring MAP and PARCC scores by school. All schools showed expected growth and are within the effect size threshold. This is strong evidence that individual student progress for the 2015-2016 school year was consistent with prior district performance. Furthermore, it reflects that all schools within the district are growing students at consistent rates, providing an equitable instructional program by building.

It is important to note that a mean growth score of zero indicates that students in the group met expected district growth. It does not imply "no growth." Similarly, a negative mean implies that the group may have shown growth, but that growth is not as high as expected.



Similarly, mathematics growth by grade was consistent and within expected thresholds.

Through the ECRA portal, administrators can further disaggregate data and generate effect sizes for a single student or any group of students that meet a specified criteria. This allows for rigorous analysis of district programming and its effect on students.

Local Growth Model

Reading Growth 2015-2016

School	Effective Sample Size*	% High Growth	% Expected Growth	% Low Growth	Growth (Effect Size)
CHEROKEE ELEM SCHOOL	233	22%	64%	14%	+ 0.13
DEER PATH MIDDLE SCH EAST	407	16%	68%	16%	- 0.02
DEER PATH MIDDLE SCH WEST	461	16%	67%	16%	- 0.01
EVERETT ELEMENTARY SCHOOL	216	16%	70%	14%	+ 0.01
SHERIDAN ELEM SCHOOL	177	16%	65%	19%	- 0.03
ALL		17%	67%	16%	+ 0.01
EXPECTED		16%	68%	16%	0.00

* Dot color is given for all growth scores that are not statistically significant
* Effective sample size only includes students with at least 2 predictors

**Percentages may not add to 100 due to rounding
***Growth not reported for groups with fewer than 5 students

ECRA Group
Education | Consulting | Research | Analytics

Higher than Expected Growth Growth is +0.30 or above

Expected Growth Growth from -0.29 to +0.29

Lower than Expected Growth Growth from -0.30 to -0.59

Unsatisfactory Growth Growth is -0.60 or below

Similar to mathematics growth by school, district reading growth on spring MAP and PARCC for the 2015-2016 school year was consistent across schools.

Local Growth Model

Reading Growth 2015-2016

Grade	Effective Sample Size^	% High Growth	% Expected Growth	% Low Growth	Growth (Effect Size)
01	128	21%	59%	20%	0.00
02	144	21%	67%	12%	+ 0.22
03	166	16%	68%	16%	+ 0.03
04	188	16%	68%	16%	+ 0.01
05	191	15%	69%	17%	- 0.03
06	216	17%	67%	16%	+ 0.01
07	216	16%	67%	16%	+ 0.02
08	245	16%	68%	17%	- 0.01
ALL		17%	67%	16%	+ 0.01
EXPECTED		16%	68%	16%	0.00

* Dot color is green for all growth scores that are not statistically significant
^ Effective sample size only includes students with at least 2 predictors

**Percentages may not add to 100 due to rounding
***Growth not reported for groups with fewer than 5 students

ECRA Group
Education | Consulting | Research | Analytics

Higher than Expected Growth Growth is +0.30 or above

Expected Growth Growth from -0.29 to +0.29

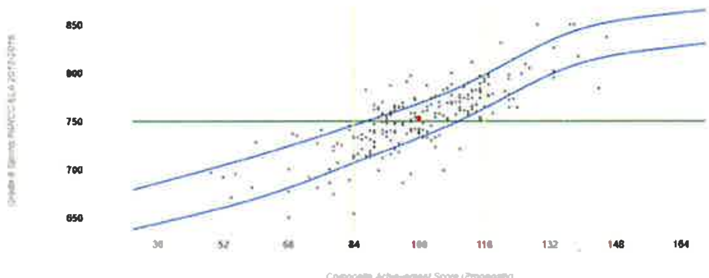
Lower than Expected Growth Growth from -0.30 to -0.59

Unsatisfactory Growth Growth is -0.60 or below

All grades demonstrated expected Reading growth for the 2015-2016 school year.

Local Growth Model

Grade 8 Spring PARCC ELA 2015-2016 Growth Chart



Summary Statistics

Count	Benchmark	Growth Score	Growth Distribution	Averages
229 students	**56%** met or exceeded the state MEETS cut-score	**0.03**		● Criterion = 753 Propensity = 100 — Status benchmark (value = 750)

ECRA Group
Education | Consulting | Research | Analytics

Final Take-Aways

- MAP growth shows steady trend upward
- We have further investigation to do regarding the differences in MAP scores and PARCC results as well as the differences in PARCC ELA scores with our peer schools
- Students across all grades are growing at expected and desirable rates

ECRA Group
Education | Consulting | Research | Analytics

Future Work

- Continue to disaggregate data to find areas of targeted improvement.
- Continue work that has begun at the building level to use the local growth model in order to enhance growth for ALL students.
- Continue professional development opportunities

ECRA Group
Education | Consulting | Research | Analytics

Additional Questions?

ECRA Group
Education | Consulting | Research | Analytics