

# District 97 Increased Access to Math Enrichment and Acceleration Placement for Qualifying Students

October 15, 2019

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- For Math GTD students compared to non GTD students
- By school size (overall and for Math GTD students)
- By student groups: Low Income Students, Students with IEPs, and African American Students



# **Background Information**

# History of "Step-Up" GTD Program



- The "step -up" programs were originally designed to provide content to students that went above what they were receiving in their classrooms (this service has historically been tied to mathematics)
- Students identified as "GTD" were removed from their classrooms to receive "step-up" services typically delivered by a GTD teacher (outside of their regular classroom)
- The processes used to identify and support students relied heavily on performance on standardized achievement measures

# History of "Step-Up" GTD Program



The current criteria are outlined below:

NWEA MAP Assessment: 95th percentile+ on 2 of the 3

most recent assessments

CogAT Standard Age Score: 130-150

Teacher Observation Checklist: Reviewed by GTD teachers

 Participants in these programs were not representative of the rich diversity of the district.

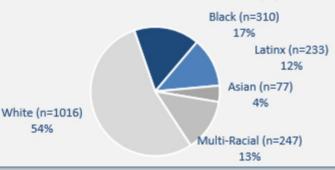
### But our GTD program serves few Black, Latinx and low income students even though we have a diverse student



6%

#### Black and Latinx make up 29% of students in GTD grades, but only 11% of GTD students





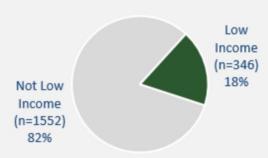


GTD Students in Grades 3, 4, and 5

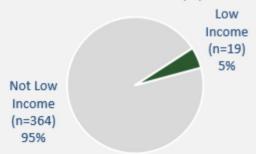
Asian (n=24) White (n=254) 66% Muti-racial (n=63)17%

#### Low Income students make up 18% of students in GTD grades, but only 5% of GTD students

#### Oak Park Students in Grades 3, 4, and 5



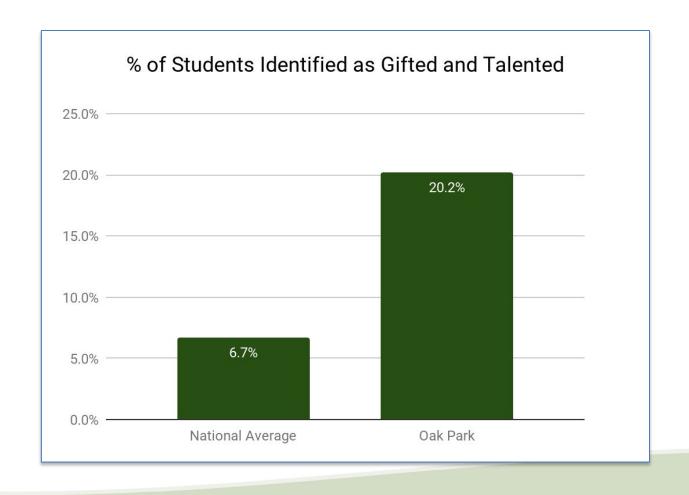
#### GTD Students in Grades 3, 4, and 5





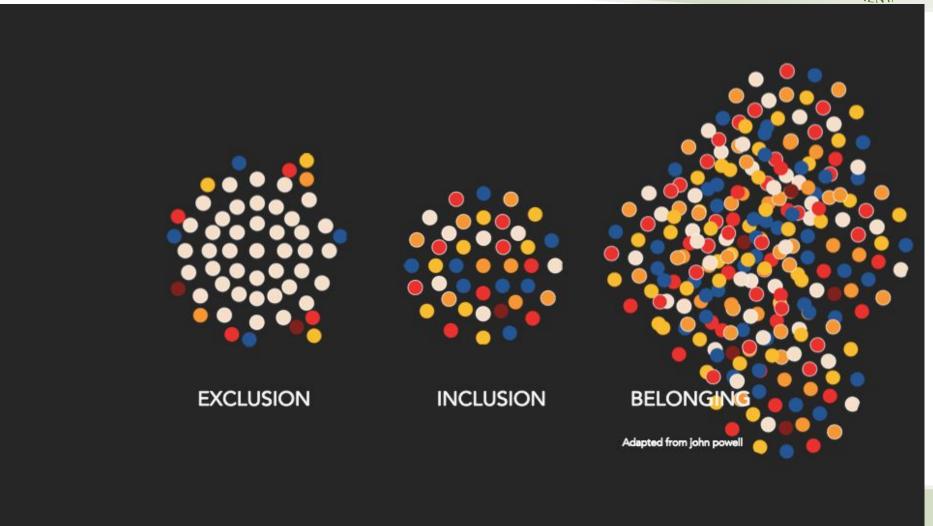
# Students in Oak Park are identified as GTD at a rate that is three times higher than the US average









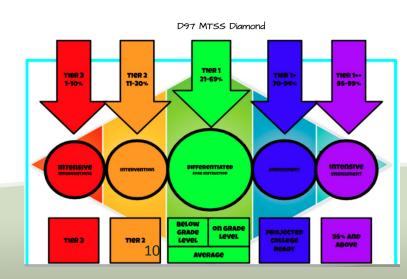




- Increasing access to opportunity to ALL is NOT about taking opportunity away from anyone.
- The goal is that EVERY child has access to engaging, stimulating, challenging teaching and learning in their mathematics classroom.
- And, instead of students having to go through the current "GTD" criteria for enrichment opportunities, we have reimagined that systemic structure so that more students have access (belonging).
- This improves the learning environment for everyone (students and teachers).



- In SY16, D97 introduced research-based math curricular materials at K-5 level (Eureka Mathematics has SEL overlay)
- Beginning in SY18, D97 implemented new structures, practices, and systems to provide enrichment to students in mathematics classrooms by:
  - Use of pre-assessments to all students, every unit
  - Students receive enrichment support if they demonstrate proficient level of content



### IL Accelerated Placement Act Takes Effect



Board Policy 6:135 provides guidance for implementation of the Accelerated Placement Act (which took effect July 1, 2018):

Policy found here: <a href="https://tinyurl.com/y52qqbu5">https://tinyurl.com/y52qqbu5</a>

Procedure found here: <a href="https://tinyurl.com/y3of8p8m">https://tinyurl.com/y3of8p8m</a>

- Early Admission
- Single Subject Acceleration (reading/math)
- Whole Grade Acceleration

# Early Admission/Single Subject and Whole Grade Acceleration: Implementation Timeline



- The district will continue to work to ensure that the IL Accelerated Placement Act is implemented with fidelity.
- The law requires, among other provisions, that schools ensure that participation in accelerated placement "is not limited to those children who have been identified as gifted and talented, but rather is open to all children who demonstrate high ability and who may benefit from accelerated placement."

# Early Admission/Single Subject and Whole Grade Acceleration: Implementation Timeline



- To this end new procedures will be created to ensure equitable access to acceleration opportunities
- New procedures will allow for multiple stakeholders to refer students for acceleration or early admission to kindergarten or first grade.
- Referral sources include the students themselves.

# Early Admission/Single Subject and Whole Grade Acceleration: Implementation Timeline



- Currently, the district is in the midst of a soft launch to codify practices and to determine the resources necessary in order to launch full implementation in SY21.
- In order to prepare for the SY21 launch, stakeholder communication is critical. The district will begin phased information sharing with all stakeholders as indicated below:

Principal Communication Preview: October 21, 2019 Teacher
Communication
Preview:
Late October/early
November 2019

Acceleration Site Launch: November 2019 Formal Acceleration Request Window opens on April 1, 2020 and closes on September 30, 2020



#### Enrichment

- Accessible to all learners
- Provided in the classroom learning space with same age peers
- Flexible entry

#### Acceleration

- Accessible to some learners
- Removal from same age peers
- Robust entry procedures



# The Teaching and Learning Department *supports teachers* in a number of different ways:

- Grades 3-5 Classroom teachers as well as GTD teachers participate in a professional learning series led by Dr. Yvette Jackson.
- The intent of the sessions surround the following key practices:
  - Identifying and activating student strengths
  - Building relationships
  - Eliciting high performance
  - Providing enrichment
  - Integrating prerequisites for academic learning
  - Situating learning in the lives of students
  - Amplifying student voice

- Grades 3-5 classroom teachers receive additional job embedded support from Lisa Westman.
- Direct support and professional learning topics include:
  - Planning for differentiated instruction specifically for math
  - Planning for differentiated instruction (non-content specific)
  - Managing a classroom with a wide-range of learners/needs
  - Using formative assessment to inform differentiation
  - Using research-based, high impact, instructional strategies
  - Ensuring interrater-reliability and collaborative scoring of assessments
  - Utilizing technology to support differentiation
  - Creating enrichment learning opportunities
  - Communicating with families on student progress



# **How Are The Students Doing?**



#### **Overall findings:**

We did not find consistent, significant correlations between changes to "GTD" students' growth that align with the years D97 transitioned from math step-up for GTD-only students to math enrichment for all students.



### In 3<sup>rd</sup> grade:

- Math GTD students did not grow as much as in the prior years, but this change was not statistically significant
- Non Math-GTD students grew more than in the prior year, and this change was statistically significant in 18-19
- African American, students with IEPs, and lower SES students all saw math RIT score growth increases in 18-19, the 2<sup>nd</sup> year of enrichment. However, these results were only statistically significant for African Americans.



### In 4<sup>rd</sup> grade

- In 2018-19, Math GTD students did not grow as much as in the prior years, and this change was statistically significant
- In 2018-19, Non Math-GTD students growth was similar to that in prior years (growth was lower than the prior year, but this was not statistically significant).

Changes in student growth were as likely to happen in the years prior to changes in GTD Math and in 5<sup>th</sup> grade, which is only now experiencing a transition in GTD math.



### Cautions in interpreting the results:

- Even when a result is statistically significant, a correlation between a changes in student growth and changes in the Math GTD program do not prove a causal relationship:
  - Other factors influence student growth, including but not limited to: the strength of individual teachers, entering achievement level, non-random student teacher assignments, etc.
  - For individual students, there is a high amount of variability in student growth on the Math RIT test. In several instances increases and decreases in student growth are not statistically significant.



# Next Steps/Recommendations

### Recommendations and Next Steps:



- "Gifted education" (at the elementary level) should be taught to all students; continue math enrichment
- Focus on areas that students have strengths in and build their confidence by providing enriching experiences to them
- Continue use of K-5 mathematics program so students self-belief takes hold, and they will take on more challenging content as they move onto middleand high-school

### Recommendations and Next Steps:



- By SY22, reallocate D97 resources to provide a "push-in" enrichment for all model (versus allocating resources to provide pull-out support for students who don't qualify for accelerated learning)
- Continue investments in staff's understanding and use of differentiation (via National Board, instructional coaching, push-in support staff, instructional technology)
- Strengthen supports to implement IL Acceleration Placement Act
- Speak with students, teachers, and families to determine how to improve offerings of program

#### Conclusion



"The challenge is that we are all the inheritors of previous systems of oppression that have shaped our current perceptions of reality. It is quite difficult to be fully aware of the current moment and our existing "limited-situations" without intentionality noting and reflecting in order to act in the world for our own liberation.



Paulo Freire

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# Thank you!



# Appendix: Framing and Background of Analysis

# Purpose of this external analysis



As part of the Oak Park D97's vision to create positive learning environments for all D97 students that is equitable, inclusive and focused on the whole child, the district has been increasing access to mathematics enrichment (of the core mathematics program) to all of its students.

# Purpose of this external analysis



As a result, Oak Park phased out a math step-up process for GTD students as follows:

- In 2017-18: Step-up math for GTD only students was phased out in 3<sup>rd</sup> grade, replaced with access to mathematics enrichment (in the core program) for all 3<sup>rd</sup> grade students
- In 2018-19: Step-up math for GTD only students was phased out in 4<sup>th</sup> grade, replaced with access to mathematics enrichment (in the core program) for all 4<sup>th</sup> grade students
- In 2019-20: Step-up math for GTD only students is being phased out in 5<sup>th</sup> grade, replaced with access to mathematics enrichment (in the core program) for all 5<sup>th</sup> grade students

# Purpose of this external analysis



- This analysis looks at whether the change from "GTD-only step-up" to "enrichment for all students" correlates with changes in student outcomes.
- Specifically, this analysis will focus on looking at three distinct groups of students:
  - o GTD students who were stepped-up in grades 3, 4 and 5
  - GTD students who were not stepped-up in grades 3 and 4 (the 2019-20 school year is the first year grade 5 students will not step up)
  - Other students in the same school/grade-bands

# Methodology



- To gain insight into the potential impact of changes in student outcomes, we looked at changes in math scores as measured by the <u>NWEA MAP Math RIT scores</u>:
  - MAP math test is taken 3x per year for students. For this analysis, we used the changes between the fall Math RIT scores and Spring Math RIT scores to measure student growth during the school year\*
  - RIT scores are designed to be compared over time in order to measure student growth

# Methodology



- As requested by the BOE, a key outcome of this analysis is to understand correlations between student growth and the changes made in providing additional access to all students in the core math program.
- Thus, this analysis will be focused on:
  - For 3<sup>rd</sup> grade student: Changes in growth between cohorts who experienced math step-up (SY15-16 and SY 16-17) and those that experienced enrichment (SY17-18 and SY 18-19)
  - For 4<sup>rd</sup> grade student: Changes in growth between cohorts who experienced math step-up (SY15-16 and SY 17-18) and those with enrichment (SY 18-19)

# Methodology

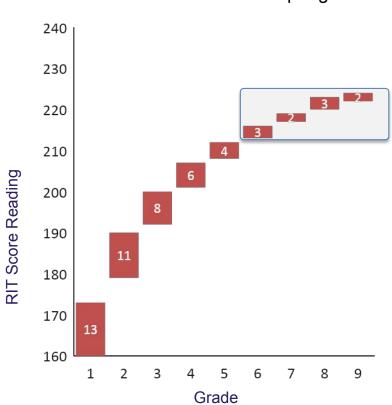


- Finally, the analysis looks to understand the potential impact on the following sub-groups groups of students:
  - Students identified as GTD for math vs. students not identified as GTD for math
  - Students who have the following characteristics: African American, have an IEP, or lower SES
  - Students who attend smaller vs. larger elementary schools

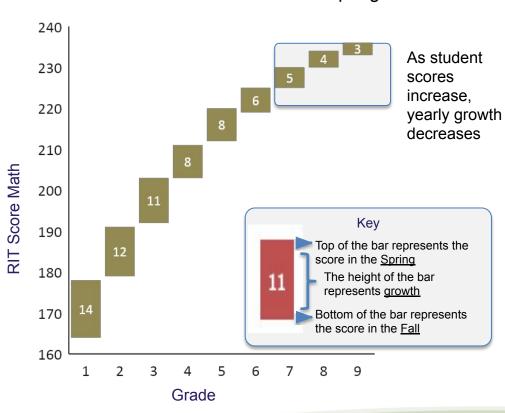
# Background: NWEA MAP RIT scores allow districts to see student growth and achievement over time



#### National Average Reading RIT scores: Growth from Fall to Spring



#### National Average Math RIT scores Growth from Fall to Spring



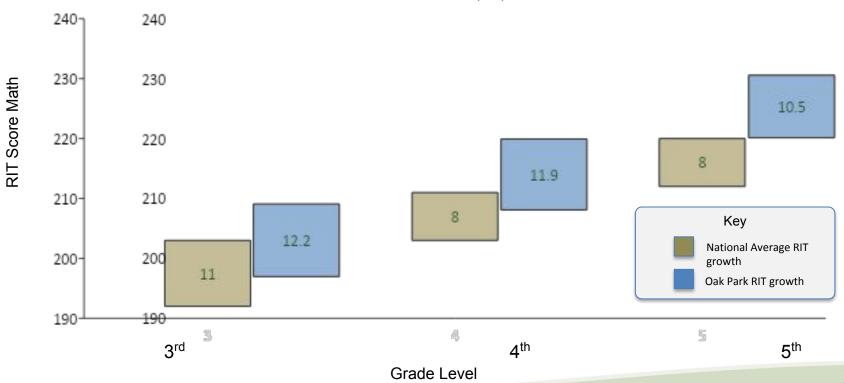
Source: US Average https://mkpcpta.webs.com/MAP-Scores-FAQ.pdf



# Background: D97 has both higher Math RIT scores and higher levels of Math RIT growth than the national average



Math RIT scores: National Average vs. Oak Park for Grades 3, 4, and 5

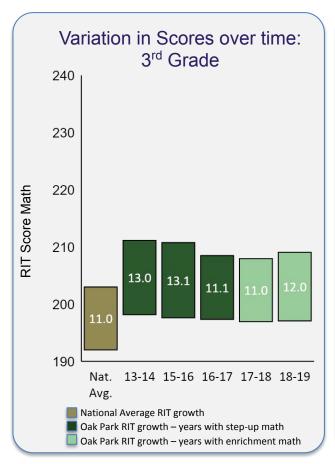


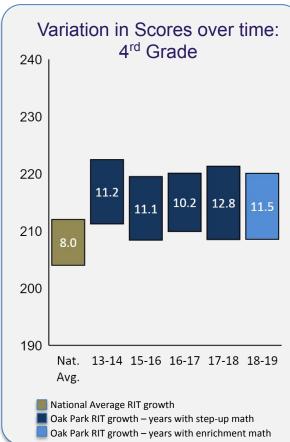
Source: Oak Park and National RIT data from 2018-19

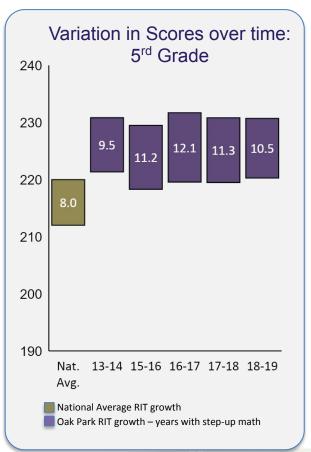


## Background: Oak Park Math RIT scores and RIT score growth fluctuate from year to year, but are consistently above the national average







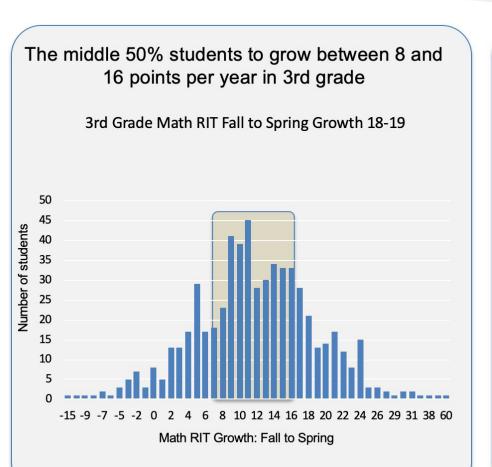




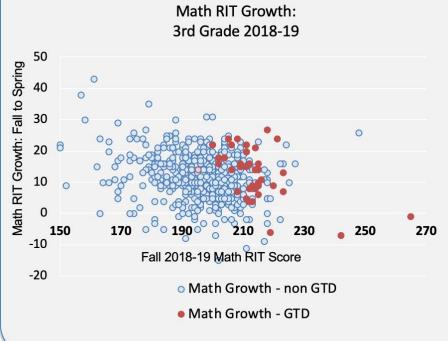


Background: For individual D97 students, there is a high degree of variation in how much growth on Math RIT scores is achieved during the year





As seen by the 2018-19 D97 3<sup>rd</sup> grade results, there is a high amount of variation between how much individual students grow during the year



Source: Oak Park data from 2018-19



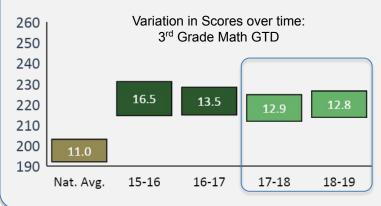


### **Changes in Math RIT Scores**

# In 2017-18, Oak Park replaced step-up math with enrichment in 3<sup>rd</sup> grade: Math GTD students' growth was lower than the prior year, but the difference was *not statistically significant*

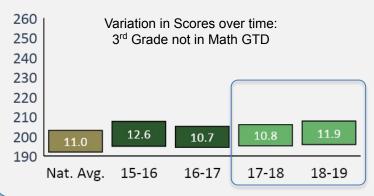


Results for Math GTD students when step-up math was replaced with enrichment in 2017-18:



- Math GTD student RIT score growth dropped compared the prior year
  - The drop in growth from 2016-17 to 2017-18 (the year when the change in the GTD step-up happened) was not statistically significant\*
  - The drop in growth from 2015-16 to 2016-17 was statistically significant\*
- Overall GTD Math performance levels were similar to prior years
- Math GTD students' Math RIT scores grew faster than other students in all years

Results for <u>non Math GTD students</u> when step-up math was replaced with enrichment in 2017-18:



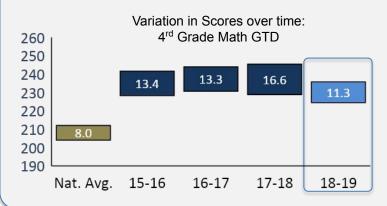
- Students not in the math GTD program saw similar levels of growth compared to prior years
- From 2017-18 to 2018-19 there has been an upward trend in student growth – the improvement from 17-18 to 18-19 was statistically significant\*



### In 2018-19, Oak Park ended step-up math in 4<sup>rd</sup> grade: Math GTD students grew less than in the prior year

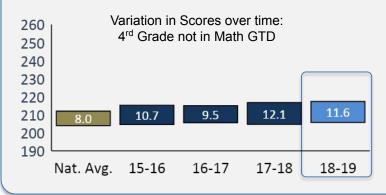


Results for Math GTD students when step-up math was replaced with enrichment in 2018-19



- Math GTD student RIT score growth dropped compared the prior years
  - This drop was statistically significant
  - However, the increase in scores from 2016-17 to 17-18 was also statistically significant
- Math GTD students' scores growth in 2018-19 was similar to D97 students not in the GTD program but higher than the national average

Results for non Math GTD students when step-up math was replaced with enrichment in 2018-19



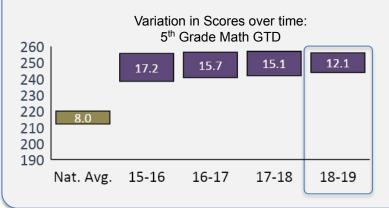
- Students not in the Math GTD program saw similar levels of growth compared to prior years
- Math non-GTD students' scores growth was similar amount to the students in the GTD program and higher than the national average



# No changes were made to the 5<sup>th</sup> grade GTD program in 2018-19: Math GTD students growth-levels dropped while non-GTD math growth was consistent with prior years

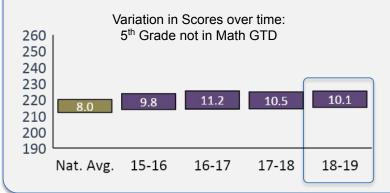


Results for Math GTD students when step-up math was replaced with enrichment in 2018-19



- Math GTD student RIT score growth dropped compared the prior years
- Math GTD students' overall spring math RIT is similar to scores in prior years
- Math GTD students' overall growth was similar amount to the students not in the GTD program but 1.5x higher than the national average

Results for non Math GTD students when step-up math was replaced with enrichment in 2018-19



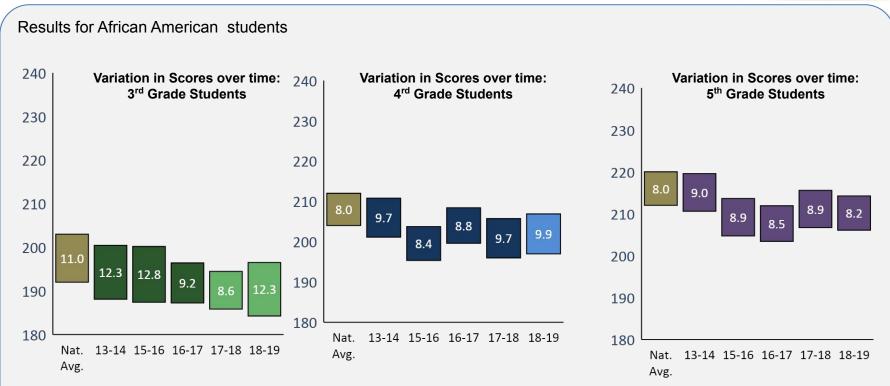
- Students not in the math GTD program saw similar levels of growth compared to prior years
- Math non-GTD students' scores growth was higher than the national average



#### African American Students: Math RIT growth increased in 2018-19

#### – in 3<sup>rd</sup> grade these changes were statistically significance



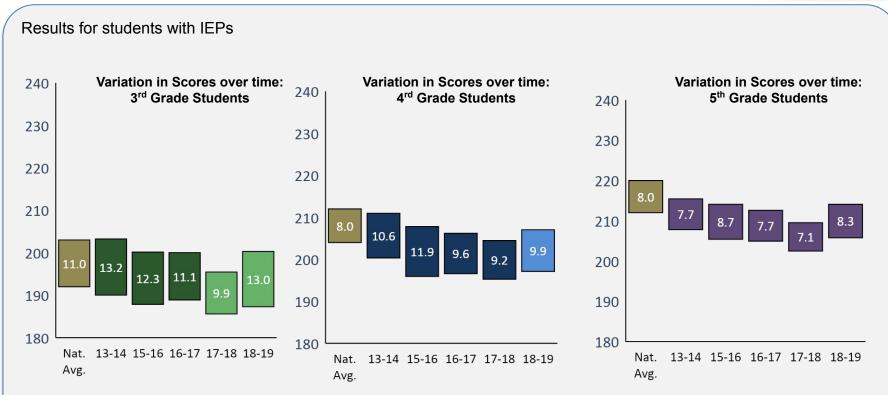


- African American grew more in 3<sup>rd</sup> grade in 2018-19 than in prior years, and this growth was statistically significant
- African American in 4<sup>th</sup> grade in 2018-19 grew slightly more than in the prior year, but this growth was not statistically significant



## Students with IEPs: Math RIT growth increased in 2018-19, but these changes did not meet the significance threshold



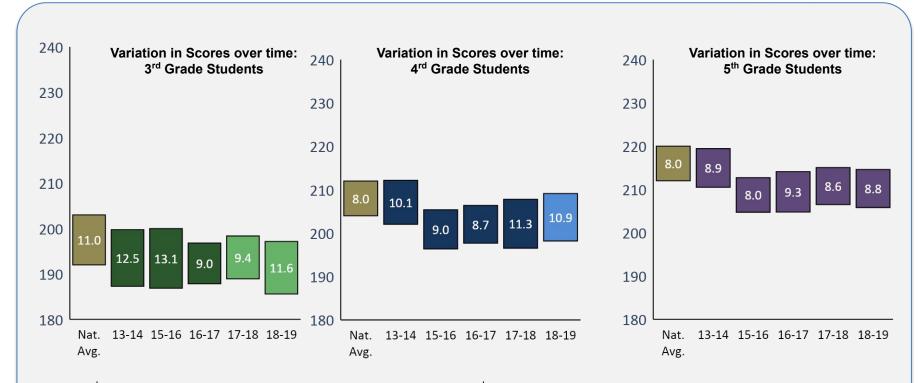


- Students with IEPs did grow more in 3<sup>rd</sup> grade in 2018-19 than in prior years, but this growth was not statistically significant
- Students with IEPs in 4<sup>th</sup> grade in 2018-19 grew slightly more than in the prior year, but this growth was not statistically significant



# Low Income Students: Student Growth was similar in 2018-19 to in prior years





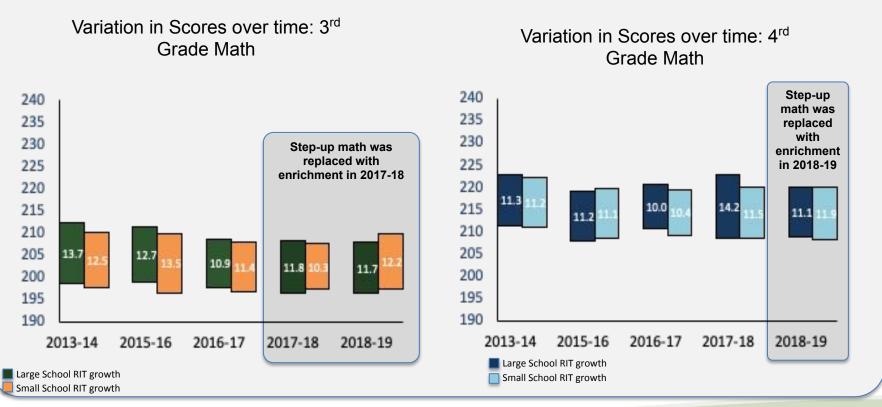
- In 3<sup>rd</sup> grade: Students with Low Income did grow more in 3<sup>rd</sup> grade in both 2017-18 and 2018-19 than in the prior year, but this growth was not statistically significant
- In 4<sup>th</sup> grade: Low Income student growth declined slightly in 2018-19, but this change was not statistically significant



### As Oak Park transitioned from step-up math to enrichment, school size was not correlated with different rates of student growth



Overall, students who attended larger elementary schools saw similar levels of growth as students who attended smaller schools



47 47

Source: Oak Park Data

\*Note: School size was determined by total enrollment, with schools of over 500 students being considered "large" and less than 500 being considered small. Holmes, Lincoln, Longfellow are considered large while Beye, Hatch, Horace Mann, Irving, and Whittier are considered small. Size data is from the IL State Report Card.

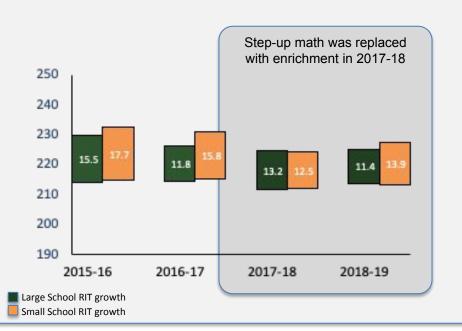


# However, <u>GTD math students in smaller schools</u> experienced more growth than GTD students in larger schools in 2018-19

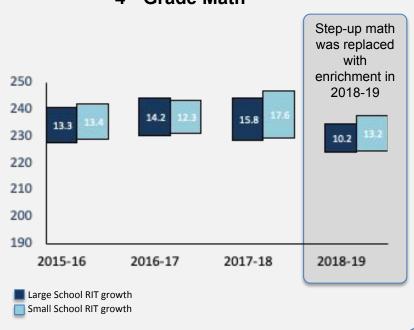


In 2018-19, Math GTD students who attended smaller elementary schools saw more growth than students who attended larger schools, but this was only statistically significant in 4<sup>th</sup> grade

#### Variation in Scores over time: 3<sup>rd</sup> Grade Math



#### Variation in Scores over time: 4<sup>rd</sup> Grade Math



Source:; Oak Park Data 48





### Next Steps/Recommendations



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