

Elementary Math Strategic Plan Update

Board of Education Presentation

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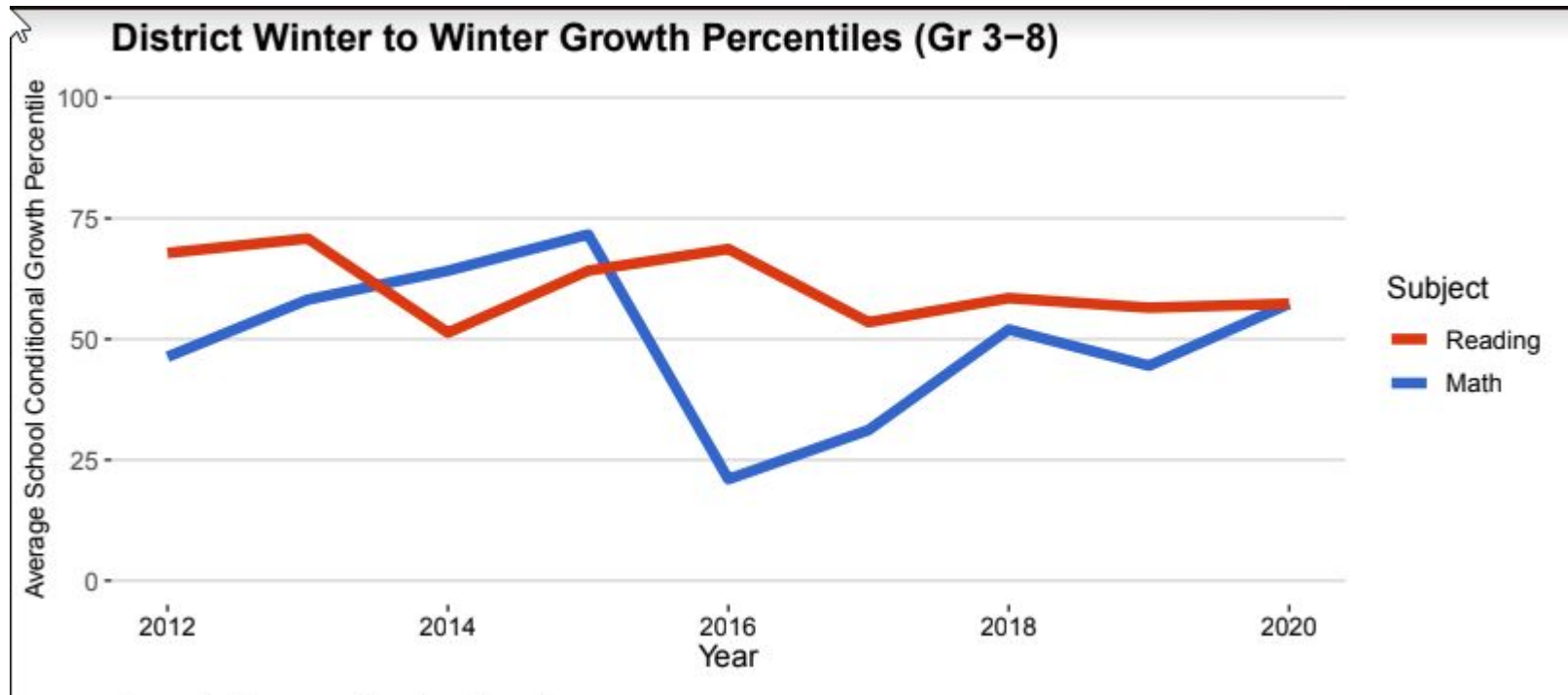
February 22, 2021



K-6 Mathematics Goal

- Analyze the effectiveness of elementary math curriculum, resources, and instruction.
- Implement one or more solutions identified to increase math achievement.
- Present the plan and report to the Board of Education on progress.

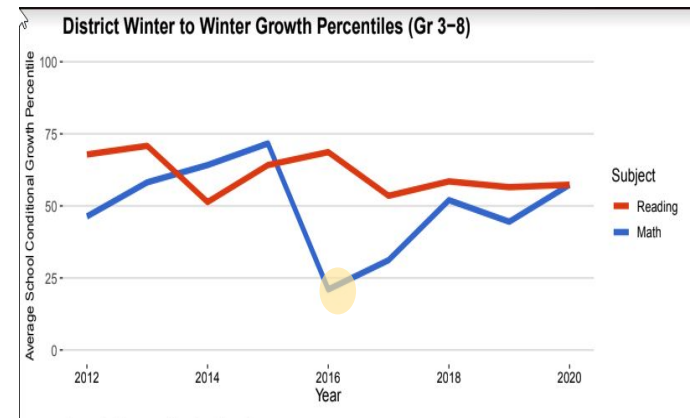
Data



2015-2016 - Year 1

Challenges

- Pedagogical Shift for Teachers
 - New models
 - Understanding over procedure
- Pacing
 - Multiple days on one lesson



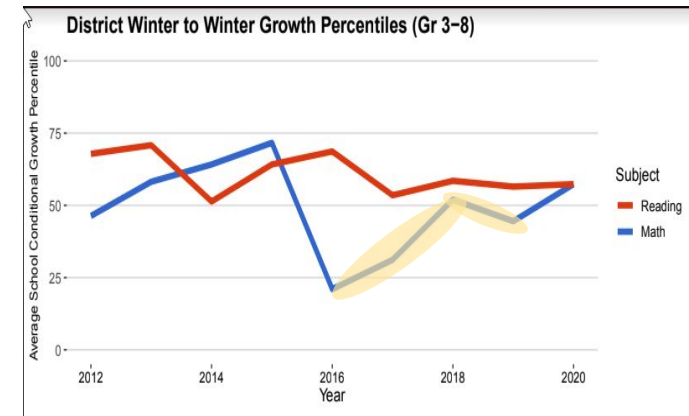
Lessons Learned

- Need for additional teacher professional development

2016-2018 - Years 2-3

Focus

- Teacher Professional Development
 - Grade Band Sessions
 - Focus on Fluency
 - Tape Diagrams and Word Problems



Challenges

- Less fidelitous implementation of Eureka in 2018-2019

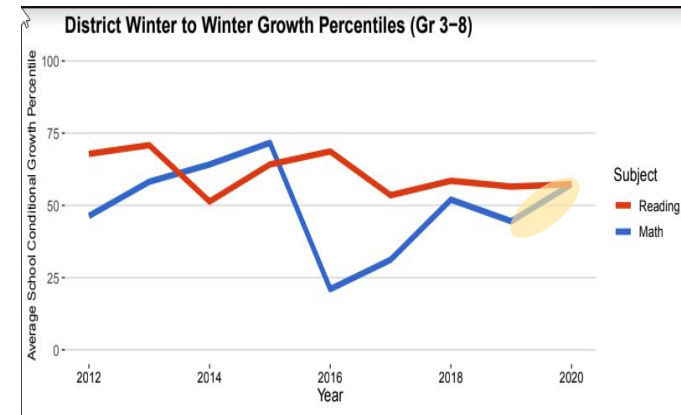
Lessons Learned

- Need for additional administrator support and professional development

2018-2020 - Years 4-5

Focus

- Administrator professional development
 - Monthly sessions to build knowledge and capacity around Eureka Math
 - Common Assessment Data
 - Classroom visits
 - Principals support teachers at sites



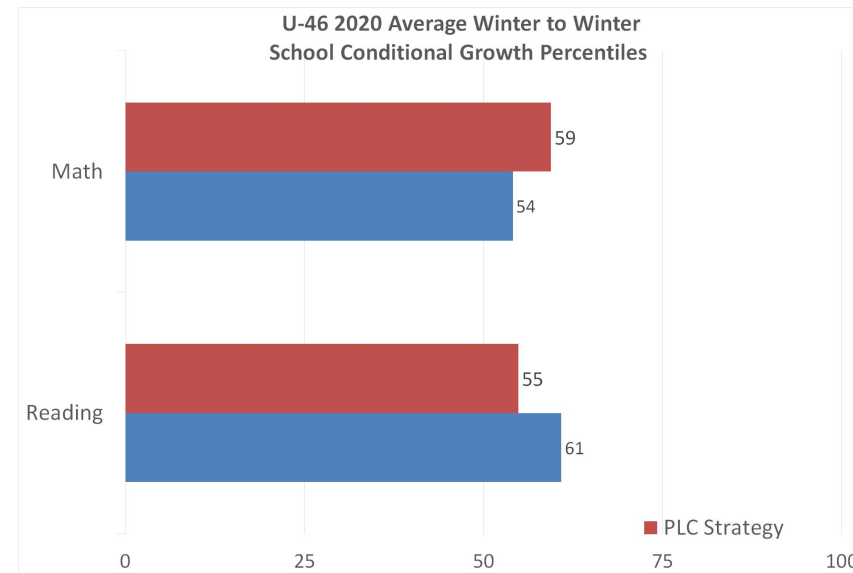
Lessons Learned

- Administrator support had a positive impact on implementation

2018-2020 - Years 4-5 Continued

Pilot

- Site-based instructional coach
- Started with 4 sites in 2018
- Expanded to 11 Sites
 - Weekly PLC meeting
 - Focus on math instruction



Lessons Learned

- Sites with instructional coach had greater student growth in mathematics

2019-2020 - Eureka Math Analysis

- Hanover Research survey with U-46 teachers
- Survey additional districts who are using Eureka



2019 Hanover Research Survey

- Eureka Math Staff Survey
 - Understand perceptions about Eureka Math
 - Learn about staff experiences
 - Determine where to target professional development efforts
- Eureka Math Focus Groups
 - Understand experiences with the use of Eureka Math
 - Determine beliefs regarding the impact of Eureka Math



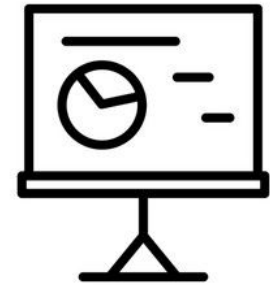
2019 Hanover Survey Results

- 318 respondents (about 29% participation)
- The majority of teachers responded that
 - Eureka Math has a somewhat or very positive influence on math skills
 - Teaching of models is a strength of the resource
- Teachers commonly supplement Eureka with other resources
 - 57% supplement other worksheets
 - 56% supplement online computer programs
- Teachers are satisfied with the professional development
 - Prioritized where they wanted additional training and support



2019 Hanover Survey Results

- **Action Item 1:** Provide training and resources for differentiation
 - Reteaching strategies
 - Supporting English Language Learners
 - Supporting struggling students
 - Supporting high achieving students
- **Action Item 2:** Provide time and support with planning and pacing
- **Action Item 3:** Provide mandatory professional development opportunities for staff who have not received specific sessions



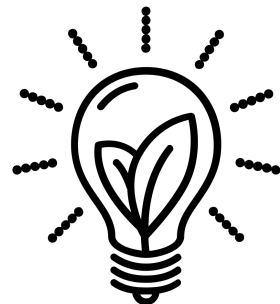
Research From Other Districts

Districts similar in size and demographics:

- Successful implementation of Eureka Math
- Seeing significant gains in student achievement

What they attribute their success to:

- Eureka Math resource is their curriculum
 - Teachers do not supplement
 - Implement as written
- Site-based coaching model
- Base level of professional development for teachers
- Extensive professional development for coaches and administration



Next Steps Toward Improvement 2020-2021

- Provide professional development about pedagogy and differentiation for teachers
 - Using Exit Tickets to guide instruction
 - Hone the Concept Development
 - Lesson Customization



Next Steps Toward Improvement 2021-2022

- Continued planning and research for a site-based support model including Professional Learning Communities and an Instructional Coaching Model
- Support and professional development for monitoring common assessment data to drive instructional design and improve student outcomes
- Support and professional development for administrators and teachers related to identified priority standards

