

MIDLAND PARK PUBLIC SCHOOLS

Action Plan for Improvement: Middle School Mathematics

Presented by:

*Nicholas Capuano, Dr. Marie Cirasella, Michael Gaccione
at the Midland Park Board of Education Meeting of September 3, 2019*

Alignment to Identified Goals

- The district continues to align goals to focus on student math achievement; here's one example from several years ago:
 - *Improve student math achievement results on district formative assessments, i.e., math unit assessments, APEX, Performance Series, student grade level cohort performance tests. Ensure classroom instruction is aligned to Student Growth Objectives and Student Performance Objectives, and is standards-based. Increase the use of open-ended response during classroom instruction. Increase the relevance/rigor of teacher SGOs and develop all SGOs on or before October 15th. (Emphasis will be placed on student cohort/content areas identified through analysis of state benchmark assessments and in-district formative assessment data.)*

Administrative Goals

Drilling Down the Data: Administration will continue its use of data to inform instruction and develop best practices:

- *Increase the number of observations and walkthroughs for identified math classes;*
- *Use of data to inform staffing realignment.*

When observing a math lesson, we focus on documenting:

- *Math Standards*
- *Sequence of Math Instruction*
- *Pacing*
- *Pedagogical Strategies*
- *Assessment*
- *Modeling different strategies*

Instructional Collaboration—Math Consultant

- The district will continue to partner with Conquer Math, a professional development provider. The consultant will focus on pacing strategies and support the overarching goal:
 - *Teachers will utilize professional activity periods, prep time, departmental and PLC meetings to collaborate on instructional design and the development of internal formative benchmark assessments, i.e., midterms and finals.*

A Team Approach

- Develop hands-on instruction, i.e., increasing the use of manipulatives, ensuring real-world connections, and aligning instructional strategies with standards-based mathematical practices.
- Collaborate on the development of rigorous, engaging learning experiences and the unpacking of state standards in mathematics.
- Ensure effective vertical articulation with sixth and seventh grade General Education and Resource Room teachers.
- Grade 6 to 7 and Grade 7 to 8 Resource Room instruction: review vertical articulation regarding units taught in 2018-19 as compared to previous years; identify the impact on the scope and sequence for the 2019-20 school year, including the calendar of concepts and assessments.
- Curriculum Mapping: Administration will work with teachers on debriefing discussions regarding the order, time allotments, and assessments of units taught PRIOR to PARCC testing.
- Ensure Student Growth Objectives (SGO) are data-rich, rigorous, and include pre and post assessment results.

Academic Support Labs

Fall/Winter/Spring Academic Support Labs

- *Midland Park teachers will continue to work with at risk students in the Academic Support Lab three days a week during the school year.*

Summer Academic Support Labs

- *Midland Park math teachers will continue to work with at risk students during the (summer) in Academic Support Lab.*

Summer Math “Boot Camp”, NJSLA Prep Class

- *MPHS will continue to offer free algebra enrichment classes during the summer for identified 10th grade at risk students. Boot Camp will run for six days, two hours per day, and followed by a two-day NJSLA Algebra I end-of-course assessment.*

Math Enrichment

Middle School Math Enrichment

- *MPHS will continue to offer math enrichment for identified at risk students for Math 7 during the lunch period (Period 4B.)*

High School Math Enrichment

- *MPHS will continue to offer math enrichment for identified at risk students for Algebra I during the lunch period (Period 5B.)*

Resource Center Course

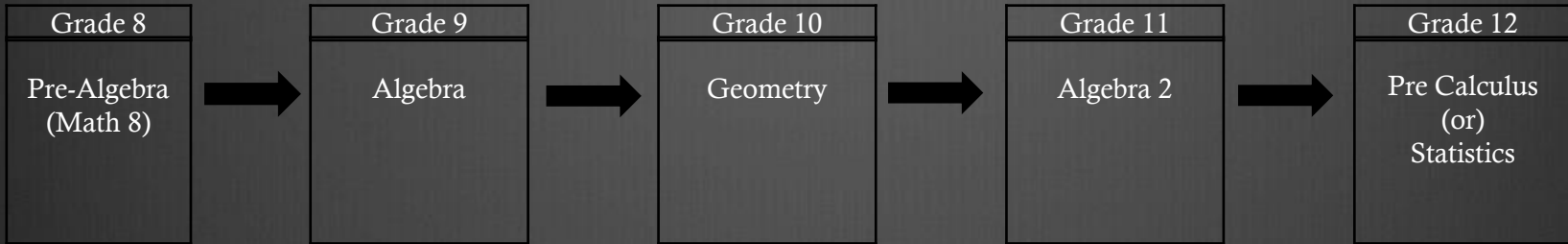
Re-structuring: Math 7 and Math 8

- The 2018-2019 the 7th and 8th grade resource classes were split into two classes with two separate curriculums.
- The 2018-2019 was the first year that the 7th grade had a parallel curriculum.
- The 2019-2020 will be the first year the 8th grade will have a parallel curriculum. This curriculum focuses more on geometry, begins the introduction of algebraic concepts like inequalities and will be introduced to informal slope.
- This past May & June 2019 was the first time there was vertical articulation for the RC math between grade 6 and grade 7.

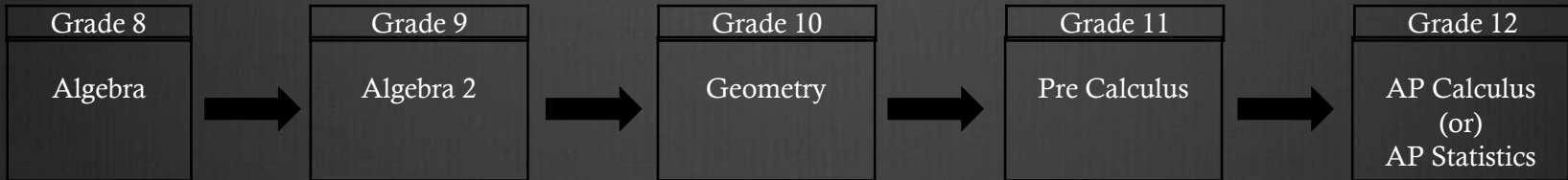
Re-alignment of the High School Resource Room Math Curriculum

- Resource Room curriculum implementation schedule is as follows:
 - *Algebra 1 (Grade 9) begins September 2019*
 - *Geometry (Grade 10 only) will begin September 2020*
 - *Integrated Algebra (Grade 11) will begin September 2021*

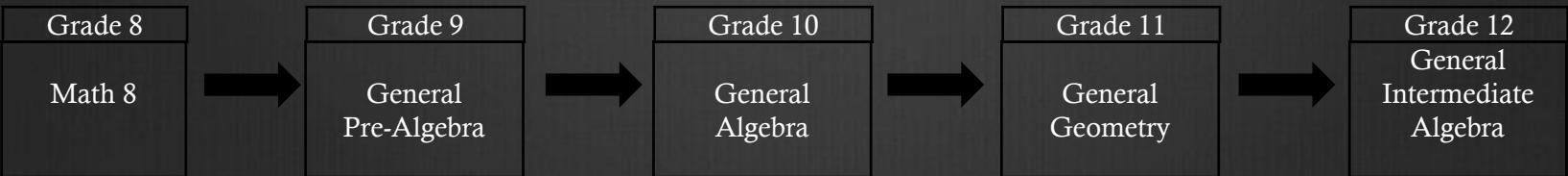
Math Course Sequence



College Prep course sequence.



Honors/AP course sequence.



Resource Room course sequence.

Those at the top of the mountain didn't fall there.

The journey to the top doesn't always have a visible end line, just like mountain climbers can't always see the top of the mountain they are climbing up. You have to see the bigger picture and visualize the end line in your mind so you stay committed to achieving your outcome. You will often have to work or walk a long way to see your target...don't let that phase you, just keep going and don't give up.

