



# MATH RESOURCES: K-4/7-8

Presented to MSD Education Committee  
March 14, 2016



# ESTABLISHING A NEED FOR NEW RESOURCES

- Data from 2015 PSSA
- Current resources not core-aligned
- K-4 parents' need for supporting resources

# PROCESS: K-4

- Reviewed districts in and around Montgomery County to identify resources used by those above MSD 2015 PSSA percentages
  - Findings:
    - *EM4* (or *EDM3*)
    - *Math in Focus*
- Initial teacher review of *EM4* and *Math in Focus* produced the following results:
  - Content of lessons (10% more favorable *MIF*)
  - Student materials (3% more favorable *MIF*)
  - Teacher materials (3% more favorable *MIF*)
  - Assessment materials (9% more favorable *MIF*)
  - Program overall (12% more favorable *MIF*)

# PROCESS CONTINUED

- Parent survey conducted in February
  - Collected information on parents' needs for supporting children in math
  - 232 respondents
- Product representatives provided information to representative teacher group onsite
  - Explained technology components & parent support
  - Provided samples
    - Teachers debriefed and provided additional feedback
    - Feedback identified stronger preference for *Math in Focus*

# RESULTS OF K-4 FEEDBACK

- Following product representative presentations
  - Of 28 teachers representing each grade level & school:
    - 2 still preferred *EM4*
    - 3 preferred either resource
    - 23 preferred *MIF* (14 teachers' original impressions changed to this)
- Results of the Parent Survey revealed three top priorities:
  - “Helping my child enjoy learning/feeling successful with math” (58.3%)
  - “Challenging my child to think & reason with math” (53%)
  - “Understanding the current district elementary math program philosophy & lesson components” (45.2%)

# PROPOSED RESOURCE: *MATH IN FOCUS*

## Key Features:

- Teaches to mastery
- Includes resources for differentiation
- Parent resources, including short videos
- Provides pre-tests to guide instruction
- Lessons structured for 45 minute block, allowing additional time for differentiating & supporting
- Establishes firm number sense development
- Focuses instruction on standard algorithms
- Emphasizes application with higher-order thinking skills

# IMPLEMENTATION

- Implement *MIF* for all K-4 in 2016-2017 to allow all teachers and students access to this core-aligned resource
  - Organize professional development for teachers and administrators over the next two school years
    - Begin PD before the end of 2015-2016 school year
    - Provide parent information before the end of 2015-2016 school year
  - Work with vendor to schedule workshops for parents in 2016-2017
  - Continue to review other districts' transitional processes
  - Investigate the possibility of district visits before end of year
  - Provide ongoing support for teachers by keeping in place our K-4 math support teacher
    - Will continue planning work throughout the summer
    - Necessary resource for K-4 teachers throughout the transitional process

# PROCESS: 7-8

- Multiple communications since September to address need for core-aligned resources & to review data results
  - Purchased Sadlier's *Common Core Progress* as core-aligned supplement to pre-algebra textbook
  - Teachers followed by examining resources with subject area coordinators
  - 5-9 Math Support Teacher continued to examine data and investigate detail on resources
- Resource recommendations were made

# PROPOSED RESOURCES: GLENCOE & SADLIER

- 7<sup>th</sup> grade Pre-algebra:
  - Glencoe *Pre-algebra Math Accelerated* & Sadlier's *Common Core Progress*
  - Glencoe *Course 2* (co-taught & special education)
    - Focuses on 7<sup>th</sup> grade skills at an appropriate pace
    - Natural progression from grade 6 Glencoe *Course 1*
- 8th grade Bridges:
  - Glencoe *Course 3* (including special education)
    - Continues from skills presented in 7<sup>th</sup> grade
    - Prepares students for Algebra I in grade 9

# IMPLEMENTATION

- Plan necessary professional development for 7<sup>th</sup> & 8<sup>th</sup> grade math teachers on new core-aligned resources
- Review scope and sequence of courses/update as necessary
- Plan for parent workshops
- Provide ongoing support for teachers by keeping in place our 5-9 math support teacher
  - Necessary resource for 7-8 teachers to lead scope and sequence review and implement new resources
  - Support 2<sup>nd</sup> year of implementation and data review at 5-6
  - Will work on planning during the summer

# RESOURCES AVAILABLE FOR PUBLIC REVIEW FROM 3/22-4/25

- K-4 and 7-8 Math Resources
- Textbook for AP European History
- Textbooks for ILEARN Classroom & ILEARN Certification courses
  - Members of the community may review any of these resources at Farina Education Center during this time period
  - Feedback sheets will be available for those who wish to provide comments