District 90 K-5 *Investigations in Number, Data, and Space 3* Implementation Plan 2017-18

Implementation of Instructional Materials

- Utilize the units in the order they are presented in the materials
 - Units have been intentionally structured to build on one another. Subsequent units reference previously learned concepts and will provide reinforcement of previous concepts through homework embedded in the unit.
- Implement the units as written with fidelity
 - Observing students engaging with the materials will inform the next level of revisions.
 - Utilizing the materials as written will allow grade levels to come to agreement about supplementation.
 - Grade level teams can collaboratively engage in the math in each units in order to anticipate how students might respond in advance of instruction.

• Flexible grouping of students

- Students will be flexibly grouped within their classrooms and will not be separated across classrooms. Instruction will be differentiated within each classroom.
- Suggestions for differentiation and how students may respond to concepts and applications are built into the materials. This will also help define what supplements we will need.
- MTSS, EL can continue to be flexible with how they support students by either pushing in or pulling students out, based on the needs/goals of each child.

• Ten Minute Math

- Ten-minute math does not need to be taught during your math block. It can be done during a morning meeting or some other time during your day as a daily routine.
- Ten Minute math is sometimes viewed as something that can be skipped. Please resist this impulse. It is an important element in building wellrounded math learners and key to becoming a flexible and fluent math thinker.
- Homework
 - o Please utilize the homework as presented.
 - Homework is not always assigned nightly.
 - Homework is also not always reflective of the day's lesson, but instead is intended as "maintenance" of previous skills.

Supplementation Process

- End-of-unit review
 - Grade levels will share notes and come to agreements regarding supplementation of assessments and differentiated activities as a group.
 - The Math Leadership Team will develop unit frameworks with a section of supplemental materials teachers can utilize for each unit.
- Fluency supplementation

- *Investigations* approaches fluency differently than traditional programs and may not resemble what you are used to. Spring 2018, the Math Leadership Team (and interested teachers) will look at fluency programs that are iPad based and tailored to the individual level of students. Possible programs to pilot are *Motion Math* or *ST Math*.
- Research around timed tests points to the development of math anxiety in children, especially girls. The fluency program is intended to replace timed tests with regular fluency opportunities that are self-paced through math centers and home practice.

Professional Collaboration Tasks

- Unit planning
 - Engaging in math problems in the unit.
 - Review of differentiation and professional development section of teacher materials.
 - Determining the essential questions and core ideas of each unit.
- End-of-unit review to incorporate feedback for supplementation and differentiation
 - Feedback will be shared across grade levels for shared decision-making about next steps.
 - Shared decisions will be built into the learning plan framework.
- Selection of additional assessment tasks
 - When identified, additional assessments can be selected. Ideally, several tasks will be selected so teachers can choose from a series of tasks that are aligned to unit goals.
- Pilot supplemental fluency program (see above)

Professional Development

- Weekly grade level or Thursday grade level/department meetings
- Trimester Grade Level 1/2 Day Release
 - o October
 - o January
 - o April
- University of Illinois at Chicago Metro Chicago Math Initiative
 - Professional development sessions are offered throughout the year.
 - Curriculum Office will share menu of sessions with all math teachers.

• D90 Math Leadership Team

- o Development of supporting documents
- o Share protocols and process to collaboratively look at student work
- o Facilitation of fluency pilot program
- o Continuing discussion of and engagement with best practices instruction