Bill Jackson Parent Presentation on Mathematics Instruction
September 27 & 28
Q&A Follow Up

What will communication look like moving forward? Will there be other sessions offered?
We will work to continue to provide insight into the program by sending home newsletters that will share topics covered at the different grade levels, new methodologies, and ideas to practice at home. Curriculum Night will offer further insight as well. Look for upcoming news and other opportunities to learn more in *In the Loop.*

What resources do you recommend for using at home to support our child/ren?
Advice for Parents from Jo Boaler (YouCubed through Stanford University)
https://mathsnoproblem.com/ (Mastery tab)
https://mathodology.com/ (Video & Resources tab)
https://www.mathdemystified.com/ (Bill Jackson's site)

What are some examples of what not to do when helping our child/ren?
It's okay to show them how you learned a particular technique, even if it is different – just try to show them *why* it works. Remember not to associate math with speed, so avoid flashcards and speed drills. Do not share that you were bad at math or dislike it. Try to maintain positive associations with math when at home.

Will students cover the breadth of topics? How does this translate to MAP and other testing?
Singapore math programs do focus on fewer topics, avoiding the *mile wide, inch deep* concern in mathematics education in the United States. Our teaching through problem-solving approach will allow for more connected learning. Students will still cover all the content in the Common Core State Standards, but they will not be learning them in isolation, allowing for a more in-depth study of content. *Think! Mathematics* was designed as a U.S. version to ensure content coverage necessary for standardized tests.

MAP testing is an adaptive test aligned to the Common Core State Standards. Test questions adjust to find each student's unique level of knowledge. The use of anchor tasks, or open-ended problems, in class allows students the opportunity to push beyond the typical class content. Mathematical conversations in the classroom have become richer and more higher-level thinking is displayed. Students will be accustomed to problem-solving, therefore It is possible they would be able to access questions in MAP that they previously could not.

What data will we capture to provide insight into whether these methodologies are deepening students' conceptual understanding?
A longitudinal study of multiple data points will be looked at to assess and continue to improve our curricular and instructional choices. Lesson study, teacher observations, student engagement, authentic assessments, and standardized assessments will all be analyzed to affirm our mathematical practice.

What will we see coming home? Will we be able to have more insight into various methods being used?

Grade level teams are collaborating on how to communicate math instruction and practice. Each grade will be working on a hybrid approach to homework. While we do not want to change our homework philosophy, we recognize that materials sent home are the best way for parents to stay connected to the learning occurring in the classroom. As mentioned above, the newsletters will provide specific insight into what is being studied at that time and how to support your child.

Is this math a fad and would we find ourselves changing programs again?

Our math curriculum review has been part of a three-year process. We feel confident that we were able to articulate FXW's Philosophy of Mathematics Education and have found a flexible program that mirrors it. Teaching through problem-solving is an approach to math instruction that has been formalized since 1980. There are 30+ years of data to support its success.

How will the school/teacher support the process of understanding and multiple ways to problem solve rather than a correct final answer?

Part of adopting these new methodologies is teachers working on revising their approach to assessment to honor the process of the students' mathematical thinking. Teachers are working to make sure their rubrics, assignments, and assessment align to FXW's Philosophy of Mathematics Education. Classwork, projects, and assessment will be structured in a way that require multiple strategies, creative thinking, problem solving, and justification of answers.