

Dear Rising 6th, 7th, and 8th grade Families,

I am writing to share information about our commitment to the math program and the approaches we are taking for grades 6-8 at SFS to expand our students' math education. As you may be aware, our <u>Strategic Plan</u> includes an initiative calling for *Empathy in the Age of Acceleration*. Our Plan asks us to provide human-centered, interdisciplinary and project-based opportunities in technology, coding, math, engineering, design, and science. This letter is to share with you how we are addressing this initiative in our math program for the 2018-2019 school year.

First, we are excited that Melissa Doezema (5th/6th math teacher this year) is returning and will resume her position as the 6th grade math and science teacher for the 2018-19 school year. For those who are not aware, Melissa previously held this position at SFS for nearly a decade. She brings her expertise in mathematics instruction and her training as a mechanical engineer to not only continue to delve into our math program based on Open Up Resources, but also to seek out ways to integrate math, science, and engineering.

Second, Jiazhen Zhang (current Middle School math coordinator) will continue with us next year, but her role will shift to be one of our 7th grade math teachers as well as our algebra program coordinator. She will refine our 7th grade math course in collaboration with our new Middle School math teacher and will be the point person for how we deepen opportunities for exposure to algebra for all of our students.

Third, we have hired our new Middle School math teacher, Anne Federwisch (see Anne's bio here), who will bring a wealth of experience in working with our students to both deepen their concept development and numerical literacy through 7th grade and further dive into algebra concepts in a meaningful way during their 8th grade year.

Fourth, we are evaluating our entire PS-8th grade math program to allow for more students to have greater exposure to algebra during their time at SFS. We want to expand our ability to differentiate learning in math classes and build students' confidence in how to be strong problem solvers through computational thinking. Middle School students, by definition, represent a wide-range of abilities in regards to abstract thinking. Our math program reflects this developmental reality of our students, and while some students will experience our program and move into geometry in high school, others will move into a high-school level algebra 1 course and they will soar because they will be ready for those more abstract concepts in ninth grade. Either way, their experience in SFS's math program will lay the groundwork for their success in math at the appropriate course level in high school.

Finally, these changes cannot happen overnight. For our rising 8th grade next year, Anne will assess the Open Resources program, retain critical elements, see where collaboration is possible with mathematics and science, and add more algebra content for all. For students who have demonstrated further algebra readiness through their current 7th grade math course, their MAP testing, and their own desire for greater math enrichment through a willingness to commit additional time and effort, we will offer online algebra resources under Anne and Jiazhen's guidance and support.

For our rising 7th grade, we will assess where they completed 6th grade content, determine the 7th grade content for focused skill development, and see what we can add from the 8th grade content. We will do this with additional math time in 7th grade as well as strategic program planning through the collaboration of Jiazhen and Anne. They will team design the course while each will teach their own 7th grade math section. For this class's 8th grade year in 2019-2020, we will assess their program content experience and then will either be able to have a year more fully focused on algebra for all, or we will again use online algebra resources under Anne and Jiazhen's guidance and support to supplement our program.

And, for the rising 6th graders, we will assess content completion and mastery from 5th grade and dive into the 6th grade Open Up Resources programming. Melissa will assess critical content elements and move towards the 7th grade content sooner. In other words, by the time the class of 2021 6th graders are in their third year of middle school, they will have a more algebra-focused program for 8th grade.

I hope that you can sense my enthusiasm for our expanding math program. Please know that in the early fall we will host grade level math evenings to help you better understand our program and our hopes for our students' trajectory through their middle-school years. In the meantime, if you have further questions, please do not hesitate to reach out to me.

In partnership,

Nancy Nagramada

Head of Upper School

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