Rachel E. Yorke Philosophy of Education

Throughout my experiences as both a student and teacher of mathematics, I have uncovered three tenets about the subject, thus making my philosophy threefold. Math is versatile, math is relevant, and math is engaging. As a teacher, I make it a priority to model these beliefs and awaken the same passion that I hold for mathematics in my own students.

Math is versatile. We do a great disservice to the entirety of mathematics when we dictate a single order, notation, or method for using it. The beauty of the subject lies within its ease of manipulation and the choice it provides to each individual, which is why the math classroom is an optimal place to offer autonomy. At the very core of my philosophy is the belief that choice should be encouraged to every extent possible. Offering a single process for the application of a concept is counterintuitive to the nature of mathematics. Math is about asking questions and discovering how each topic connects to a larger idea and understanding this characteristic is critical to truly understanding how math works in the concrete and the abstract. When students are given choice in their education, they take responsibility for their learning, ask more questions, and seek initiative to build upon their interests.

Math is relevant. In the pursuit of inspiring intelligent, compassionate individuals, the frame through which I teach mathematics provides a comprehensive look at how the subject fits into the real world. By integrating issues of economic, environmental, and social justice into the math classroom, students are given a relevant and important context for their education. It empowers them to examine issues through multiple frames and use their expanding skills to initiate change in their communities. In creating a classroom and school-wide community that celebrates difference and promotes equity, it is important to model active leadership in the betterment of humanity and the challenge of systemic inequality.

Math is engaging. It is too often that the exciting, creative, and complex facets of math are limited to menial, routine problems. Mathematics is deserving of reflective and critical thinking, writing, and discussion. More than that, students deserve to experience it in this way. Developing lessons that strike a balance between use of discussion, inquiry, hands-on activities, and technology is critical to ensuring student interest and motivation. In my experiences, I have found that engagement is the primary difference between a student who learns, and one who does not, making it central to my philosophy.

In fostering an inclusive, safe, and productive classroom, establishing positive student relationships is essential. Students should always be treated with the utmost compassion and consideration. These values encourage open lines of communication, creating an atmosphere that is receptive and responsive to the learners' needs. The best way to encourage risk taking and question asking is to ensure that students are comfortable doing so. By building upon my students' experiences, interests, and understandings, they feel more excited about the material and more motivated to uncover their learning. To put it simply, if you put your students first, the rest will follow.

The purpose of education extends well beyond the gift of intellect. School is a place where independent, lifelong learners are inspired. It is a place to learn about respect, humility, and empathy. It is an opportunity to practice responsibility and exhibit resilience in the face of adversity. These are the the most noble aims of education and I take pride in the overarching responsibility of educators to model these values and behaviors.