

I want to thank the board for this opportunity to speak. My name is Dr. Thomas McKenzie. I am an Associate Professor of mathematics at Gonzaga University. I am an active research mathematician, but I am also interested in elementary and high school math education. I have three children in Spokane public schools. Last year, I constructed mathematics level tests for the Coeur d'Alene Tribal School.

I offer a you perspective on those college-bound students who want to major in the hard sciences. Gonzaga students who want to become engineers, physicists, chemists, or biologists must pass calculus. To pass calculus, they must speak the language of algebra fluently. We do not allow students to use calculators in our calculus courses.

I am here to urge the Board to abandon reformed mathematics texts and revert to a more traditional approach. The problem with Core Plus math is that it is simply not rigorous enough for students who wish to study science. An inordinate amount of time is spent on simple topics like mean, median, mode, and reading bar charts like the ones on the front page of the USA Today. Not enough time is spent on algebra. The critics of traditional math suggest it is a mile wide and an inch deep. I suggest that Core Plus math is an inch wide and an inch deep.

The supporters of reformed math point to studies that suggest it is effective. I have looked at those studies, and I do not find them convincing. I do find the following bit of common sense convincing. Our students will compete against students across the world. If it were self-evident that reformed math is effective, China, India, and Singapore would be adopting it. These countries are not. They have kept their traditional programs. I am so concerned about the lack of basics in my childrens' math programs, that every night, I study a page of Singapore math with them.

The concepts and algorithms of traditional math are some of the greatest inventions of the human mind. They are treasures that we pass on to our children. They are the best possible algorithms, and thus, they are perfect starting points for theoretical discussions. Traditional math is not old math that has been replaced by the shinier model of reformed math. Traditional math is a rock upon which the foundations of modern physics, biology, and economics are being built.

I urge the Board to consider forming a committee of leading scientists, engineers, and business people in the technology sector in Spokane to study this issue. If anyone on the Board would like to speak further about this, I can be reached at the Math Department at Gonzaga. Thank you.