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< Back to Regular Story Page

We need to inspire more students to love math, science

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I am a junior at Tacoma School of the Arts (SOTA) and proud second-year member of my school robotics team.

I never imagined that I'd be hooked on the science and engineering of robotics, but school has made me a believer.

FIRST (for inspiration and recognition of science and technology) Robotics, and my experiences with the Washington State Board of Education have made me very passionate about science, technology, engineering and math (STEM).

Great things are going on in our schools, but we can do better. If more students shared my experiences in robotics, more students would relish the math and sciences like I do.

With the support of FIRST Robotics, the assistance and guidance of our coaches and mentors, and the cooperation of my 25 teammates, I have designed, built, fund-raised, programmed and wired together everything it takes to make a functioning, game-playing robot.

In March, my team was one of three to win the championship at the three-day Microsoft Regional Robotics Competition in Seattle at Key Arena. Sixty-four high school teams from Washington, Oregon, Canada and Turkey participated.

The excitement of more than 2,000 people in an arena was almost overwhelming. I screamed so much I could hardly speak for days. Our win sent us in April to the Georgia Dome in Atlanta for the FIRST National Championships to compete with hundreds of teams from all over the world (we placed 22nd in our division).

During these events, students hear all about opportunities in science and $12 million in FIRST college scholarships. Boys and girls alike walk away pumped and ready to pursue engineering degrees.

FIRST challenges groups of students with a time constraint of six weeks to design a robot within specifications to play a particular game. Success requires teamwork and creates a combination of the enthusiasm of a sport with the rigor of science and technology.

As one of two student members of the Washington State Board of Education, I am sharing these positive experiences and urging a further investment in science and math education for students across the state.

I'm concerned about our math and science assessment scores. I'm concerned about our college remediation rates. I think we can do better, and we must.

China and India produce more than 1 million engineers a year, while the United States produces about 55,000. As is often said, knowledge is power. Will the United States have the necessary strength and fortitude to compete in a global economy long into the future?

STEM education in Washington state is important toward that goal.

Sometimes it's hard to see how important sciences and math are to our everyday lives. You do not need to understand programming to use your e-mail, and you do not need to understand satellites to use your cell phone. But we have to inspire our students to ask questions, dig deeper and seek information beyond the obvious.

For all of our sakes, we need students to be inquisitive, thorough and well-grounded in the scientific method. It is more important than ever to spark the minds of our youth to pursue careers in the sciences.

Robotics is certainly not the only way to pull students to STEM, but it certainly worked for me. I think we owe it to our students to find something that draws more and more of our young people to the sciences.

I've experienced the excitement of the sciences firsthand. Now we just have to find a way to replicate that excitement across the state.

Anna Laura Kastama, daughter of state Sen. Jim Kastama, D-Puyallup, is a member of the Washington State Board of Education and a student at the Tacoma School of the Arts.