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How would you use a \$2,000 grant to purchase technology for your classroom?

If I am awarded a \$2,000 grant, I will invest in two MOD-t 3D printers at \$399 each, filament at \$19.99, six mBot v1.1 robots at \$94.99 each, and six Ozobot Evo robots at \$99 each.

Students will learn about robotics and coding in addition to designing, collaborating, and creating amazing things with the 3-D printers they never thought possible. Students will also engage in the engineering design process through a series of challenges to create solutions as they continually re-engineer their coding solutions with the robots and creations with the 3-D printer. Finally, lesson plans will be developed to incorporate the technology using an interdisciplinary approach based on STEM-based instructional methods.

Why is technology important for you and your students?

Teaching with technology in elementary school will galvanize young students to develop new ways of mathematical computational thinking that foster problem-solving techniques using algorithms. Jobs in the 21st century will require our students to perform at the highest levels of thinking, and teaching in a 21st century classroom will provide students with these opportunities.

Additionally, various jobs are technologically driven such as web designers, software developers, and robotics engineers to name a few. Over the next 10 years, programming will be one of the fastest growing occupations, yet only 1 in 10 schools currently teach computer science. Additionally, 60% of math and science jobs are computing jobs, but only 2% of math and science are computer



science students. Exposing students to computer science will prepare them for bright futures in a world where technology is ubiquitous.

What is special or unique about your classroom and students?

At my school we have a great curriculum, but lack technology education. Computer programming is not a subject that is taught, and a majority of the students are not afforded the opportunity to attend technology camps such as robotics, engineering, computer, and other camps due to financial constraints.

My school is Title I and students love to learn. In addition to being a high-poverty school, we're the oldest school in the district. Although our building is old, leaks, and has mold, I initiated a STEM lab in our school beginning this 2016-2017 school year to demonstrate to our students that despite the physical conditions of our school, high-quality learning can and will take place regardless of a poor environment.

Photos from their classroom

