2016 Worthy Women's Professional Studies Scholarship

By Melissa Day

I walked into my first computer science course having never before written a single line of code. In my first moments in my computer science class, I looked around at the males surrounding me, wondering if I belonged, as a woman in this field, and whether I could learn to code as well as them. When I completed my beginning coding assignments, many of my programs crashed at first. To me this was a summons to create error-free computer programs.

Before this, when I taught second and third grade for six years, I became enchanted with the power of technology and began to implement various classroom apps. Quite often, I became frustrated with the lack of effective software for teachers, and over time I realized my desire was to actually develop it myself. My goal is to impact educational software development in a way that is helpful for the next generation, with practically-designed software suitable for the daily demands of teaching. As a result, I have returned to school to pursue a Master's degree in Software Engineering.

A third grader (I'll call her Zoe) once remarked to me, "Ms. Day, at home I practice computer coding skills online. I've built websites, and now I'm learning how to make a video game!" The other students listened in awe when they realized the exciting things that coding can do, and especially the boys listened intently that a girl was learning to make video games! Zoe was a student in the math enrichment program I co-implemented. I sought to particularly encourage female students by demonstrating to them that math and technology are not only exciting, but are also fields in which girls excel. Zoe loves problem solving and math, so I hope she pursues software engineering when she grows up.

I now realize that being female has helped me to become an even better computer scientist because not only could I learn to code as well as the men in my classes, but now they often ask me for help fixing their code. I look forward to being an advocate for more women to pursue their dreams in this field with only 10% of

software engineers being women, as well as give voice to my own story of how I became a software engineer through involvement with STEM instruction aimed at girls. Not only will my graduate education in software engineering enable me to design software that will influence students through the higher quality of education they can obtain, but it will also empower me to impact the field of computer science for other women yet-to-come. If I had perceived my initial flawed computer programs as a failure, I would not be poised in this position of influence; instead, my initial “failure” was my empowerment to study computer science.