

Karl Franz Flasch Hendrickson
Personal Statement

How do things work? This is a question I have consistently asked myself throughout the course of my life. When I was younger, I would ride my bike around the neighborhood to garage sales and, inevitably, I would find an old camera for sale. In a drawer of my desk, I had more than a handful of old cameras of every shape and size, along with a number in the basement in my dad's workshop. The difference between the ones in my room and the ones in the workshop was that the ones in the workshop were in pieces – and the ones in my room just hadn't made it there yet. I wanted to know how, why – to take things apart and put them back together.

Intellectually, this curiosity manifested itself in an interest in mathematics and science through middle school and high school. My junior year of high school, I took a course that opened my mind to a whole new world of understanding that surpassed that of cameras or go-karts. It was fundamental and fascinating; it was physics.

Shortly thereafter, a friend of mine spoke a prophetic word into my mind, "Karl, you're going to end up a high school physics teacher, you know that?" I doubted it, but it stayed in my mind. During my brief foray into engineering, I realized I did not want to do the work of an engineer. I rediscovered, however, my love for physics, and found within me a desire to communicate that love to others. So many students find physics confusing and incomprehensible, and I want to remove that stigma. I want others to see the beauty in the concepts and the connections.

To be a physics teacher, I have two options: I can be a teacher who knows physics, or I can be a physicist who knows how to teach. I choose the latter. My undergraduate physics degree will give me the complete background I need to teach physics to my students – more so than simply an undergraduate education degree would. However, in order to teach, I also need to learn to teach, for this reason, I am planning to earn a Master's degree in education after my undergraduate studies. I will know physics, and supplement my desires to teach with the training to do so effectively.

This past fall, I had a couple wonderful experiences that I hope are only the beginning of a lifetime of such experiences. Working as a tutor with our chapter of the Society of Physics Students, I have had the opportunity to practice my teaching skills. I have also been contacted outside of scheduled tutoring hours to help friends and other students. One day I received an email from a friend in which she said, "Karl, I need help! I SUCK at physics." We got together a couple times to work on concepts and problems, and the following week, when I saw her she exclaimed, "I got 20 out of 20 on my quiz Friday!" I was happy to know that she not only no longer despaired about the class, but also was doing well.

Perhaps she will not fall in love with physics, or necessarily recommend it to her friends, but I hope that she has discovered that it is not incomprehensible, and has been able to see beyond equations and formulae to the underlying beauty and order of our world, so she too can wonder at how things work.