

13 February 2014

To Whom it May Concern:

Hello my name is Eli Sutherland. I am currently a senior attending Senior High School. Besides the core classes like English, math, and science, I am also heavily involved in the Project Lead The Way engineering program offered at the Billings Career Center. During my junior year, I took Introduction to Engineering Design, and this year I am taking Digital Electronics and Principles of Engineering. For me, my engineering classes are not just more classes in the day for me to get through before I can go home. Instead, my engineering classes are the highlight of my day, because being an engineer is my dream job.

I have been interested in engineering for as long as I remember. I believe it started when I was a young child. While I still watched tv and played video games, I spent a majority of my time building structures with Legos or assembling Bionicles. Ever since then I have enjoyed building and designing things. I always thought about inventions that I wanted to make. Most of them were just the silly fantasies of a seven year old, but they still inspired creativity and ingenuity which are so important in an engineer's life. My family has the habit of saying things like "You know what would be nice? A way to easily use solar power to supply your house," and other things that started me thinking about things I could design. It wasn't until I was in 7th grade, that I've wanted to go into engineering. Having the experience of being a student in Project Lead the Way has confirmed my choice. I am now confident that it is the path I will take in college. However, I know other students that just took the intro class to see what it was all about. This gave them the opportunity to see if engineering was a good fit for them.

Throughout my high school career, I have been strong in math. Being good at math has been extremely helpful in my engineering classes at the Billings Career Center, and also encourages me to stay in the engineering courses. The reason I am so interested in math, science, and engineering is because of the challenges they present. They are always getting more difficult, which teaches me new things. I feel rewarded every time I finish a difficult calculus problem or design a complex object in CAD, the program we use in engineering.

Another reason I am interested in STEM is because I think they will help me reach my full potential. I believe I can make a big difference in the world if I stay in these programs. I want to be an engineer, but I don't just want to design a new computer mouse or a new coffee cup. I want to change the world, and make it a better place. I truly believe that if I stay involved in STEM classes I will be able to do this.

One thing I really enjoy about the Project Lead The Way courses that I am currently taking at the Billings Career Center is that they allow me to learn what it would be like to be an engineer without having to pay for it, like many people pay for college. There are a lot of people who go to college to be engineers, then realize that engineering is not the right fit for them. While they are able to switch their majors, they have still wasted time and money, just to figure out that they do not like engineering.

Another thing I like about the engineering courses is the range of things we study. We do not just focus on one type of engineering. Instead we explore multiple fields of engineering, to show the

students all the options that they have. One week we are using simple machines to maximize force, which is mainly mechanical. The next we are learning about static equilibrium, which is used by civil engineers. The range of studying that we do really lets the students learn about all the types of engineering, and then after that it is easier for them to decide what type of engineering, if any, they would like to go in to.

Sincerely,

A handwritten signature in blue ink that reads "Eli Sutherland". The signature is written in a cursive style with a large initial "E".

Eli Sutherland