My Process to Become a “World-Class” Engineering Student

by

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Introduction

Growing up I always felt the pressure to please everyone around me. Everything I did was based on how others would react. I never rebelled because I didn’t want to upset my mother, I always played games with my brother when he was lonely. I spent my entire life up until now pleasing others. Even if it wasn’t entirely apparent that my actions were always gauged towards living to everyone’s expectations of me, they were entirely based on that reasoning. I only did things that I knew would make people proud of me and up until I started applying for colleges I flip flopped on what I wanted to do with my life. I thought it was entirely insane for the status quo to expect a child to decide what they wanted to do for the rest of their life. All I wanted to do was to make people happy in some fashion. At first I wanted to be a doctor to heal people, then I wanted to be a lawyer to protect people, and now I want to be an engineer to provide for people. My father was my biggest influence for this final decision. In this report, I am going to show how I plan to follow the footsteps of my father, but also make a path for myself.

What Is An Engineer?

Engineering isn’t about what you’re labeled to do, it’s about what you can do. Our possibilities as engineers are endless. We can do whatever we put our minds to— the limit doesn’t exist. A degree in engineering not only allows you to practice what you love, but it’s such a versatile field that you aren’t limited to the problems that you can solve. We can do anything we set our minds to. Only can we be the creators or the destructors of our success. Being an engineer brings many opportunities to the table. There is so much enjoyment with everything that engineering could ever bring us.

Understanding how things work is very important. Most of my life I have spent my time questioning things and wanting to learn more. I’ve always been someone with a strong hunger for knowledge. I love to learn about everything. If I could take every college course, I would. If I could know everything in the world, I would.
Knowledge for me is an ultimate happiness. You cannot go wrong with being too intelligent, so I am constantly striving to know more. It’s a thirst I can never quench. The varied opportunities that accompany the engineering profession offer any engineer a range of jobs to choose from. There is engineering in just about anything. Because of this, we can help assist in any field, making ourselves more applicable to the real world. My next point is that of financial security. Because engineers have such a strong understanding and are very flexible in their line of work, we benefit greatly. Monetary compensation is one of the biggest reasons why a lot of people enter the field, but it’s truly those with a passion to become a civic servant and a innovator that succeed.

**Inspiration**

As I had stated earlier, I was never entirely sure what I wanted to be when I “grew up”. I have a tendency to change my mind a lot and quit things when they become too difficult. When I first learned that medical school was going to take 8-10 years, I copped out. Same with law school. I became discouraged very quickly in anything else I would try to do because there was always some out there that could do it better. I compared myself to others and I became depressed over it. The pressure of making a decision that would change my life became too much for me. I stopped researching and decided to just observe. Whenever I went to the hospital to visit my grandfather, I would watch the nurses and the doctors scramble around in such a panicked fashion. I knew that being a doctor would come with stress and pressure that I would never be able to handle. After I quit thinking of becoming a doctor, I looked into becoming a lawyer. I was captain of the varsity competitive speech and debate team at my school and I loved what I did. I love being able to formulate arguments and prove people wrong. There was nothing greater than being able to prove how articulate and sophisticated I was deep down. When I lost a round, I felt such defeat. I couldn’t fathom that I of all people was losing. When I noticed how I was doing in comparison to my friends, I felt even worse as I saw their success. As soon as most of them graduated and went off to law school, I lost their inspiration that drew me into the following the same path. I couldn’t think of what else I wanted to do with my life. I took the Henry David
Thoreau route and went out to my version of Walden Pond and thought about life. I went through a transcendentalist phase where most of my logic was based on existential reasoning. I found myself reading more than usual. I became lost in art. I started to make some of my own. I wrote poems. I took pictures. I made paintings. I designed a multitude of things and put them to practical use. It was then that I knew I needed a career path that would let me be creative and original. Of course, art was the first thing I could think of, but I couldn’t picture myself as an artist. There had to be a better way to be creative and still be a benefit to society. One day, I noticed my dad working with his computer. He was drawing and designing something for work. When I asked him what it was, he told me it was a draft for one of his projects. My dad is a world class engineer. He has his masters in information technologies and considers himself as an automation engineer. He does a lot of electrical and computer engineering work. He’s been my biggest role model when it comes to intelligence and drive. He’s a go-getter. He’s an innovator. He’s an inspiration. My dad, without a doubt, is my biggest inspiration towards becoming an engineer.

**Decisions**

When I first decided to attend BSU, I was seeking a degree in computer science. After about a month of actually attending classes, I decided that I didn’t want to be a computer scientist. I may have been good at it, but I didn’t think it was right for me. I struggled with what I wanted to do. There were thoughts in my head that wanted me to drop out and focus on my photography, but I knew that wasn’t going to make me happy in the end. I needed to be an engineer. I needed to design and create and build. I talked to my dad and asked him what I should do. I knew that electrical engineering wasn’t right for me. Mechanical seemed as if there were too many people studying it. Material science doesn’t even make sense to me. I thought about my art and what would let me be the most creative. Civil engineering is what I decided would be the biggest gateway into that design.
Learning

I understand the difference in the learning styles and I embrace the unique aspects of each and everyone, but I am not sure what kind of learner I am. I do not have an extreme in either direction. I fairly balanced/moderate in my learning. I am an adaptable kind of person. If I am given a problem I can solve it with the resources I have.

When I was younger, I wanted to play sports. My mom told me that the only way I was going to make the team was if I was coachable. What she meant by this was that I had to be willing to do whatever the coach needed me to do in terms of the play or practice. I knew that if I was going to make it in sports I had to be willing to learn. The same goes for schooling. I have to be willing to learn and willing to adapt to any situation that I’m thrown in. I think that is why I do not have an extreme in my learning styles, because I can adapt and cope in any situation that is thrown my way.

Stress

I am most definitely someone who does not respond well to stress. I think there were only a few things that I didn’t cross off on that list. For me, stress has always been an issue. When I was little my mom worried so much about my healthy, mentally and physically, because I would stress over the slightest thing. My freshman year of high school my anxiety and stress got so bad that I decided to do homeschooling instead. This didn’t help because I went from one extreme to another. I went from a 4.0 gpa to about a 2.5 because I simply decided to sleep instead of facing my problems. I would miss deadlines because of this and my gpa plummeted. I didn’t do so well on my SAT and ACT because I didn’t study. It was too much of a task to study and I knew it was going to stress me out so I avoided it entirely and I took the tests without having cracked open a single book that entire year. It didn’t work in my favor. Stress has always been an issue. I have yet to find an effective coping mechanism. I have changed my diet and lifestyle entirely. I refuse to let myself stay in bed all day like I used to
be able to. Being around so many people forces me to be awake and aware, this has helped a lot. However, I still get stressed, for example, I am stressed today. I completely forgot (a symptom of mental stress) about all the assignments I have due this week and I thought I had an extra day because it was Saturday, but turns out that today is Sunday and I have way more to do than I should have had. I’m still looking for ways to handle my stress and increase my productivity. I may not be a procrastinator, but I am not someone who is regularly productive. It comes in spells and at inconvenient times (like 2 am when I should be asleep). Some day I will master my stress, but for now, I’m trying to avoid stress at all possible costs. Keeping my course load minimum and my activities organized will help me get there.

Creativity and Motivation

As engineers, I don’t think we should ever find ourselves saying “If it ain’t broke, don’t fix it”. It’s not in our nature. Our purpose is to make this world a better place by constant improvement. We need to learn to innovate old methods and make them new wonders. If any engineer had the attitude in that quote, would they really be an engineer? I don’t believe they would. We must always have a positive attitude and most importantly a creative attitude.

I am a very creative person, or at least I like to think I am. My favorite form of art is typography. It’s the art of words and finding the most creative way to write them out. Whenever I feel like drawing something, I always look at other examples to see what different fonts I can use, then I base my art off of what I find. Sometimes I find a piece of art that is so amazing I couldn’t imagine ever being able to do that. I was looking back at some of the things I had drawn when I was first starting and I compared it to the things I did just the other day and I hadn’t realized how far I had come. I used to believe that I was the best at what I did and I just kept practicing. I had no intentions of getting better, I just became better with practice and time. Nothing was broken in my method, but it improved because I worked on it. I believe that someday I’ll be good enough to
design something amazing, but for now I’m working at my own pace and on my own things. When it comes to school, I realized that I need to have the same attitude. I read a quote the other day and it said “Don’t compare your Chapter 1 to someone else’s Chapter 20 because you haven’t gotten that far in your book yet”. This spoke to me on an emotional level. I always find myself comparing my skills and work to others that have had way more experience than I. For example— whenever I hear about everyone talk about chemistry homework it makes me feel inadequate but then I realize that it’s okay because I haven’t taken chemistry yet so it’s not expected of me to be at that level. I just have to focus on my own progress and how far I’m going to come when I get to the point they’re at.

Completing tasks isn’t entirely an issue for me. What does discourage me is the temptation to ignore everything that’s due. I don’t necessarily blow things off completely, but I do lean towards a selective attention span when it comes to studying and working hard. Hard tasks tend to be too daunting and I ignore them and move on to something easier. This has always been my biggest fault. My parents used to always get upset with me when I was little because of this. If they asked me to clean my extremely messy room, I would simply move the mess to a corner and cover it with a blanket. I would never take the time to hang up my clothes or put my books back on the shelf. It seemed too time consuming and boring to me and so I took the easier route. It wasn’t until this past spring did I finally change my mindset about things.

I’ve always admired my dad and how hard he works. No matter where we are, he’s working. He gets maybe 4 hours of sleep a night. He’s been doing this for over 20 years and only twice have I seen him become exhausted, and that’s only if he has nothing to do so his concentration slows down and he is left with nothing to do except take a nap. My dad is a go getter. I’ve said it many times that he’s my role model. When he first started to work over in Sweden it baffled to me that he was constantly motivated to do what he does. He may
not enjoy the -30 degree weather, but he does enjoy the satisfaction of completing a project. That’s how I knew that I could be just like him. All I had to do was focus my time and energy in getting things done.

Whenever I’m faced with a daunting task I force myself to do it. Even in increments, but I get it done. There’s no better feeling that completing something at 100% and having ultimate success on it. There’s nothing worse than being completely stressed and worried about something. Why spend your time worrying when you could spend you time being productive? When we went to the seminar on learning and the student the speaker said something that caught my attention he said “Why do we do difficult things? It’s not necessarily so that we can learn that task or skill, but because we need to learn how to do difficult things.” Never before has something motivated me so much. Whenever I can’t figure my math problems out and I just feel so awful because I’m not the best at math I think to myself — I need to learn how to do hard tasks so that they can become easier.

My solution for lack of productivity is to imagine how better things will be once you have it done. If it seems difficult, just keep going. Go as slow or as fast as you want, but make sure you give it your all. Keep on improving yourself and your skills. Never give up, just keep going. Nobody was born a professional.

Pathway

As I focus on my future, I think about the wonderful life I am going to have laid out for me. I know that civil engineering is going to pave that path for me (quite literally). Another thought popped into my head as I did some research on civil engineering: why do I have to stop here? Why can’t I continue? There are people in some of my classes that are the same age as my grandparents. Why does my education need to stop here? I believe that I am entitled to make my own path, since after all, this is my life. I may pursue a masters degree in either structural engineering or professional degree in architecture after I finish my time here at Boise State. There is no limits to my possibilities.
Finishing my Undergraduate

Graduating with a BSE is a very important degree to have. Anymore, it’s just as important as being a lawyer or a doctor. People in this field are always needed. For me, the goal isn’t as attainable as I think it is for everyone else. In order to make it more important for me, I need to think about things in the long run. Four years isn’t anything in comparison to the rest of my life. Whenever I think about giving up, I think about how my life will be 10 years down the road. I think about the financial stability and how much easier my life will be than if I didn’t get a degree. I need to think about my long term goals, not my short term goals. However, my short term goals are very important, still. My path of school is going to be quite different than a lot of my engineering friends. I plan to go to community college during the summer and take courses that will transfer to Boise State again in the fall. This way I can knock out almost all of my disciplinary lens courses and I can focus on my engineering studies while I am in school. I haven’t entirely formulated a plan, however, I have my next semester and the following summer mapped out.

Summary

I believe it is appropriate to express how excited I am to be an engineer. It’s going to be tough, but I am going to get there. I refuse to let myself be a quitter, I am going to persevere and push through any obstacle I may face. I will not let anything get me down. This is my life, these are my aspirations and I am only competing against myself. I believe in the person I want to become.

“For what it's worth: it's never too late or, in my case, too early to be whoever you want to be. There's no time limit, stop whenever you want. You can change or stay the same, there are no rules to this thing. We can make the best or the worst of it. I hope you make the best of it. And I hope you see things that startle you. I hope you feel things you never felt before. I hope you meet people with a different point of view. I hope you live a life you're proud of. If you find that you're not, I hope you have the strength to start all over again.”

- The Curious Case of Benjamin Button (2008)
References
