Brown

Liam

ENSU 1000

March 15, 2022

Reflective Essay

I am from a little village called Kaleden, located in the southern interior of BC. Growing up, I spent a lot of my time exploring Twin Lakes, a rural area where my Nana and Papa lived. Most days, I would go on walks to a local pond with my Nana. We called it Turtle Pond because of all the painted turtles. At the time I was unaware, but we were checking water levels to make sure the local farmer wasn't draining the pond and killing the endangered turtles. Today the pond is owned and protected by Nature's Trust. Looking back, this was the beginning of my understanding of environmental sustainability. Before finding out about Turtle Pond I only really thought that humans destroyed habitats in movies. This experience changed how I looked at the delicate ecosystem and taught me that I could make a difference.

Around the age of twelve, my father, a general contractor, started bringing me to the site to do smaller jobs. As I became more comfortable around the work environment, he would get me to prep windows, doors and walls. Sealing openings was an essential part of making sure water doesn't get in and ensuring that airflow is kept to a minimum on hot and cold days. He taught me that if I took my time and focused on creating an air-tight building the house could be more energy efficient and not only save the homeowner money but also save the environment. Fascinated with building and designing, I decided I wanted to become an architect. In my search for schools, I found the ARET program at Thompson Rivers University.

Through the ARET program, I could apply my practical knowledge to theory. The ARET program expanded on different ways of configuring buildings and new technologies, assemblies and mechanisms to help create more sustainable, efficient buildings. They also gave me all the tools to represent and incorporate all this new information into my drawings.

I learned how to design a multi-story wood-frame commercial building in the Building Design course. Dale Parkes, our professor, pushed us to create with the environment in mind. We learned how to orientate buildings to allow for the sun in the winter and shade in the summer to reduce heating and cooling. In addition, he introduced us to new materials and building techniques to help create more sustainable buildings. These were all aspects that hadn't occurred to me in the past. The fact that you could make a more efficient building just by turning it fascinated me. This left me wondering why couldn't all buildings be designed with their environment in mind.

Another course in the ARET program that had an impact on me was the Building Services Theory course. It taught me how to take different assemblies and calculate the heat transfer using thermodynamics. In addition, this course helped me understand the quality of other materials and has given me the background knowledge to create more sustainable envelopes. After learning the theory behind building assemblies I learned how to appropriately size and design various heating and cooling systems. After taking these courses, I can adequately inform clients on which heating or cooling system will be appropriate for their needs and how to be more sustainable in their decisions.

After finishing my diploma through ARET, I decided to broaden my education and get my degree. Considering my interest in sustainability, I took Environment, Resources and Sustainability. I learned about the natural and human-modified environment from a geographical viewpoint in the class. This course taught me about the various climate change issues across the planet and their causes. In class, we discussed and debated solutions for these environmental issues. This course has helped me open my eyes to the problems we contribute to outside our towns. While taking Environment, Resources and Sustainability, I took a special topics course. During the semester I took the course, we focused on renewable energy technologies. We covered everything from old windmills to cutting-edge technologies such as energy vaults throughout this course. This course has taught me that there are many different ways to produce and store energy and that we should try to utilize as many various forms to create a well-rounded power grid.

As you can see, I have had many learning opportunities leading towards a sustainable career in design. Through the knowledge I've gained in the building design course, I will try to shape my building to the environment instead of shaping the environment to my buildings, leaving less impact on the natural environment. What I've learned from Building Service theory and HVAC design will be put towards creating energy-efficient buildings. I will use what I have learned through my geography classes to look at the long-term and big-picture impact on the environment. Thompson Rivers University has taught me that saving the environment isn't all about picking up garbage from past generations, it is also about creating new ways to do things and being innovative with the materials around us. Starting this spring, I will be working as an architectural technologist for a green Architecture firm, where I am excited to put my sustainable knowledge to practice.