

Reflective Essay

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Growing up on the North Shore of Vancouver, I was surrounded by greenery and provincial parks. I was fortunate to have the ability to travel into the woods and lay under the moonlit sky without seeing the blinding light that comes from a major city such as Vancouver. Being exposed to a protected and beautiful environment made it more apparent when I saw the harm done to our environment.

The first time I started seeing problems was when I was working my first summer job. I worked for a construction company. The viewpoints between the older generation of workers and the younger individuals were vastly different. Simple things that you would think the older generation would do but don't, such as putting cardboard and metal in the correct bins or disposing of toxic materials properly rather than throwing them into the garbage bin. Or alternatively, not taking reusable materials from one project and utilizing them on another site. The materials would be thrown away, most of which could be recycled. They would then have to order new materials that would have to be manufactured, shipped and delivered. The manufacturing of new materials uses many resources to recreate steel or wood members. The manufacturing process emits massive greenhouse gasses into the atmosphere, which is preventable. Seeing that the older generation had given up on the vision to improve what our environment is and to promote a more sustainable lifestyle is one of the pet peeves I had while I worked for the company. You learn from the past generation to be successful in the field. However, when the older generation is not changing, it is hard to be successful. Seeing all the flaws in the construction industry is why I chose to go into a sustainable oriented program so that I would have the ability to put forth aspects of change.

When planning my education, I searched for a program that covered all aspects of construction to understand the building process and further my knowledge to incorporate sustainability within the industry. I found that in TRU's Architectural and Engineering Technology (ARET) program. Before joining the ARET program, I thought I had vast knowledge about construction-related environmental sustainability, but I was so far from it. The program has led me to pursue future environmental

education around construction, such as applying myself to learn about net-zero homes, passive houses and different accreditations relating to building energy ratings.

Visually seeing environmentally sustainable buildings, such as the Industrial Trades and Technology building, which is LEED accredited, and the Tournament Capital Aquatics Centre retrofit. The idea that you can have massive buildings produce low amounts of emissions is just the first step to a sustainable environment. These buildings use massive amounts of energy to run efficiently yet have a small environmental footprint by using solar panels, heat pumps, heat exchangers, and high-efficiency mechanical systems to offset. The fact that cities and developers are making these upgrades proves that change is happening in the industry to be more sustainable.

The knowledge gained examining these buildings was useful during my summer Co-op experience. The lead designer was a young, intelligent person who wanted to create homes that had little to no impact on its surrounding environment but blend the building into it. I was allowed to work on multiple residential home design projects that had to be net-zero ready. Designing houses this way gave the owners the option to have no environmental footprint in the future.

Seeing the Project Lead's mindset in designing buildings with a reduced impact to the environments' surrounds is a welcome shift from the older generation of "I do not care" to individuals working to help the industry transition to conscious sustainable environmental change.

Now that I am graduating from the ARET program and entering the workforce as a technologist, the view I bring in will undoubtedly cause some disruptions. However, since I want to be part of an industry that promotes the protection of the environment, I am willing to fight for it. Going into a job with a fresh and environmentally sustainable mindset, I want to influence large scale jobs to be net-zero or get the LEED accreditation so that I can find specific areas for improvement on a given project. This is paramount to civilization, but it is crucial to our environment to have natural parks and landscapes for

years to come. I'm passionate about using my education and developing my skills to protect our environment as I want to have natural parks and landscapes for future generations to enjoy and thrive in.