

Environmental Sustainability Reflection Essay

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Environmental Sustainability: Views on Sustainable Environments

Throughout the entirety of my life, my father has urged the use of sustainable practices and how living environments and ecosystems have finite amounts of energy to offer. My father is a ticketed recreational vehicle technician and an avid hobby gardener which has aided my understanding of sustainable practices. Early on in life, my dad introduced me to the growing cycle of plants and the growing mediums used to produce vegetables. A decade ago, we had a large worm bin in which we composted and recycled all organic matter to create nutrient-rich soil to fertilize future gardens and increase garden yields. There was always an emphasis on creating living soil and we would collect rabbit droppings from our grandparents as he would say we need “activate the dirt.” It was clear to me at that time that the way we live has a direct impact on the earth as we relied on it so greatly.

As my father has grown tired, he no longer gardens but uses his energy to repair trailers with his sustainable practices. While I was in high school, I had the opportunity of working for my father on weekends and summers learning about sustainable practices in the industry as a recreational vehicle technician apprentice. It was at this time that I was able to learn how to use power tools which quickly led to planning and estimating different stages of projects. It was evident that more accuracy used when estimating could lead directly to more profit and less waste. I was convinced that the future of sustainable living was recreational vehicles as they can leave a minimal impact on the local environment and use solar power to moderate power usage. Living in trailers and that lifestyle opened my eyes to more affordable and environmentally sustainable living options. Furthermore, the less of an impact we as species make on the land, the greater outcome for the environment around us.

In high school, I began to experience increasing pressure regarding attending post-secondary education as well as choosing a career. In tenth grade, a group of students from my school came to TRU for an orientation day where Dale Parkes did a presentation on REVIT design software and wall details, which is when I realized there are even more sustainable living and design options. As I planned to go to university after high school, I was curious about architecture, and I spent a lot of time learning about sustainable construction and deconstruction practices from various summer jobs between educational periods. I waited patiently to arrive at the university where I again would have the pleasure to learn about sustainable practices from Dale Parkes in the ARET program. I frequently recollected Dale’s lecture as I had been so intrigued but also conflicted as I still wanted to believe trailers were the sustainable living choice of the future.

Regardless of attending university with my already sustainable disposition, it wasn’t until the end of the first year of attending the Architectural and Engineering Technology program that I started understanding how buildings can interact with natural environments. In Building Technology 1 with Dale, he introduced part 9 of the B.C.B.C as we applied sustainable building practices to our two-story building designs. There was a huge emphasis on designing for accessibility on the main floor while still downsizing on overall square footage and unused spaces. It was largely a learning opportunity and a struggle as the number of sustainable design options and choices can be overwhelming. I feel I was too focused on the smaller details of construction drawings to see that it is essential that many key environment and sustainable decisions are made not just one material or procedure that makes a building design more sustainable. There was also no doubt in my mind that sustainable design practices are going to guide sustainable building designs of the

future. Although I had thought trailers were the sustainable future, I had never felt challenged like in Dale's first building technology class to pursue sustainability.

In my final year of the Architecture and Engineering Technology program, I prepared a research report mentored by Dale Parkes which outlined affordability and accessibility in Kamloops and proposed a conceptual design of a green and living building inspired co-housing building for seniors on The Shore, Kamloops. It was around this time that Dale introduced concepts of the living building challenge and green building design which were truly inspirational. The living and green building concepts allow buildings to have a positive and long-lasting relationship with the environment rather than being designed for fifty years of use to then be demolished. Specific building systems and materials were introduced by Dale that can reduce the amount of carbon exchanged with the environment and the costs of living. Using sustainable systems like solar power, ground, and sewer heat source generation, and other architectural innovations have completely changed the dynamic buildings have in the natural environment.

Throughout my years of study, I am confident that I am on the right path as the ideologies of my father and Dale have guided me towards sustainability within active living environments. There was such a sense of familiarity between my father's lessons about living dirt and Dale's lesson about living buildings as they both shared a deep passion for their sustainable beliefs. It's invigorating to think that I can now apply these sustainable mechanical options to my future building projects. Now that I am about to graduate from the ARET program, I feel a great responsibility to use my knowledge in the architectural field. Moving forward I hope to find a place in the field as a mechanical or architectural technologist to increase my knowledge as well as teach others about important new systems that I have learned about. Precisely, I will use my knowledge of different sustainable mechanical systems and design practices to improve the functionality of building designs. I'm exuberant about sharing concepts that Dale emphasized like living buildings and green buildings because they are a great way to improve sustainable building design and continue to increase the relationship between all-natural and created environments. It is now clearer than ever that the way we live directly impacts the earth and with the use of sustainable design practices, buildings can have a positive and long-lasting relationship with the earth.