A. Co-op Work Assignment

I was kept useful with a variety of projects at WeRecycle. Some of the major projects I worked on included analyzing samples of the material coming off the product stream to determine how efficient the sorting process was and what the average composition of the product stream was. I was also tasked with a major financial project in which I had to perform cost analysis and calculate the ROI on a new variable the company was considering introducing into the process. In addition to this, I was also given some organizational assignments which included me writing standard operating procedures for a couple of WeRecycle’s facilities. All in all, the projects I was assigned required me to use and develop my critical thinking, personal interaction, and observation skills.

In regards to formal job training, I didn’t have an orientation or training manual. Any time I had questions about a project, my boss would give me the minimal information I needed and then tell me to go figure it out. This was not the mentoring style I expected, but I believe at the end of the day, it was the best one. I was not spoon fed any answers. I had to think and come up with a solution. If it was not the right solution my boss would not hesitate to tell me how wrong I was. He calls it his “non-abrasive, non-aggressive mentoring style”. Regardless of whether or not this is true, he has the right idea and has been a great mentor.

B. Assessment of Learning and Development

The work I am doing here is actually not what I expected to be doing when I became a mechanical engineering major. At the time, when I thought of mechanical engineering, I mainly thought of the design aspect of it. I didn’t realize that there was also an industrial and manufacturing aspect to it as well. However, that is not to say that I have not had a valuable learning experience. This experience has shown me that engineering has a hand in every aspect of a company. It has shown me that to be a successful engineer, you must balance the quiet life of office work with going into the field and getting your hands dirty.

C. Life Outside of Co-op

Looking for housing should be done as far in advance as possible. That way you have time to shop around and look for a convenient location at a decent price. WeRecycle is located just north of NYC in Mount Vernon, NY. However, I would personally recommend living in NYC and not in Mount Vernon. There is a greater social scene in NYC and public transportation (for those of you who do not have a car) runs 24/7. As far as the price of housing goes, in NYC, craigslist is probably the way to go. Renting from a non-contractor will save you a great deal of money because most leasing companies will have pretty expensive rentals.

D. Evaluation

One of the best features of this job was that I was included in a variety of projects and not kept doing one type of work or project for my entire work term. I was given projects that provided me with knowledge and experience from several fields, both engineering related and non-engineering related. It allowed me to see what effect the engineering aspect of the company has on the commercial aspects and organizational aspects and vice versa.

The worst feature of this job was probably when I had to perform tasks that were vital to the company’s operation, but very tedious and grueling. I am specifically speaking when I had to analyze samples of the material coming off the product lines to determine their average composition. It was a necessary task because the company needed to know at what price it could sell material for and so
that it could know how well the sorting process was separating material out. However, sorting through 10 pound samples is not exactly what I would call living the engineering high life.
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Summer Term

A. Co-op Work Assignment  
My second work term here at WeRecycle was similar to my first in that I was assigned a variety of projects that were related to both engineering and non-engineering fields. One of the major projects I worked on for the maintenance department included assisting in the implementation of a computer maintenance management system. I was tasked with adding the equipment and machinery used in the production process to this system as well as uploading the specifications of each piece of equipment and machinery to the system. Additionally, I also assisted in the creation of a maintenance inspection sheet and a preventive maintenance schedule for the machinery on the production floor. The next major project I was assigned was to create a Microsoft project timeline to plan out the demolition of and shipping of old equipment and the installation of new equipment. Through the use of production line schematics and company dates, I was able to create an accurate timeline as well as assist in the electrical disassembly of the old equipment. The last major project assigned to me was to gain an understanding of the Programmable Logic Controller (PLC) to be used in the new production line and be able to write basic machine programs with the help of the maintenance supervisor.

In regards to formal job training for this work term, I didn’t have an orientation or training manual. However, since it was my second work term, I don’t think I needed one. My supervisor and mentor was the same one I had during my last work term, which I was glad for since I have already enjoyed success under his “non-abrasive, non-aggressive” mentoring style in which I have to try to figure out things on my own. Just as in my last work term, my supervisor never hesitates to tell me how wrong I am when I haven’t quite figured something out, but I think it is all for the best and can honestly say it has been great working with him.

B. Assessment of Learning and Development  
The work I did this work term had more of an emphasis on maintenance and the machinery on the production floor than my last work term did. I was able to get some hands on experience with some of the machinery when I assisted in the electrical demolition of the old equipment and when I was gathering the specifications for each piece of equipment to upload into the CMMS. This hands on experience in conjunction with the clerical maintenance work has shown me that as always, to be a successful engineer, you must balance the office work with getting your hands dirty while working with the machines.

C. Life Outside of Co-op  
Looking for housing should be done as far in advance as possible. That way you have time to shop around and look for a convenient location at a decent price. WeRecycle is located just north of NYC in Mount Vernon, NY. However, I would personally recommend living in NYC and not in Mount Vernon. There is a greater social scene in NYC and public transportation (for those of you who do not have a car) runs 24/7. As far as the price of housing goes, in NYC, craigslist is probably the way to go. Renting from a non-contractor will save you a great deal of money because most leasing companies will have pretty expensive rentals.

D. Evaluation  
One of the best features of this job was that I was included in a variety of projects and not kept doing one type of work or project for my entire work term. I was given projects that provided me with knowledge and experience from several fields, both engineering related and non-engineering
related. Creating a timeline on the installation of the new production line especially allowed me to see what effect the engineering aspect of the company has on operations and production. I especially enjoyed the hands on experience that I gained when I assisted in the demolition of the old equipment.

The worst feature of this job was probably that I had to write Standard Operating Procedures (SOP's) again. This time I wrote them for the work stations here at the shredding facility. I understand that SOP's are vital to a company's operation, but that does not make them any less tedious.