

LFS 350 Project Proposal Draft - Group 18

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Introduction

Purpose: The purpose of this project is to assist the City of Vancouver and CityStudio to evaluate the effectiveness of their newly designed waste station decals in improving the accuracy of waste diversion.

Background and Context

The City of Vancouver and CityStudio are continuing their on-going project “Put Waste in its Place” in an effort to decrease food waste and improve waste-diversion accuracy in Metro Vancouver. The goal of this project is to contribute to the reduction of solid waste going to the landfill by 50% from 2008 levels by 2020, in hopes of achieving zero waste by 2040 (City of Vancouver (COV), 2016). Our project will focus on improving accuracy of waste diversion in Killarney Community Centre (KCC).

As of 2014, the City of Vancouver has successfully reached a 23% decrease in waste due to their campaign efforts (COV, 2016), including initiatives taken on by student partner groups similar to ours. Initiatives such as banning organic waste in the garbage, expanding range of recyclable materials and starting compost programs have contributed to the decrease in solid waste going to landfill.

The terms zero-waste and waste diversion can be complicated to understand, but they are crucial to our project. According to City of Vancouver (2016), zero waste is “both a philosophy and a goal, zero waste aims to reduce and ultimately eliminate garbage”. Waste diversion constitutes improving our waste sorting and reducing the amount of waste ending in landfill by “diverting” it to recycling and compost instead. The City of Vancouver aims to understand the current challenges in achieving zero waste and maximizing waste diversion. Our project will focus on evaluating the effectiveness of waste management strategies at KCC. This centre is located near Rupert and East 29th, and offers various recreational facilities including a fitness centre, pool, and rink (COV, 2016).

Significance

This project is not only significant to Vancouver’s waste-management methods, but addresses the current global food waste crisis as well. “Waste disposed at landfills and incinerators creates greenhouse gas (GHG) emissions with harmful climate-altering impacts” (COV, 2016). In a more broad, national context, landfill gas emissions are the greatest source of solid waste emissions in Canada (Mohareb et al. 2008). Mohareb et al. (2008) stress that “diverting solid waste, particularly organic wastes, from ultimate disposal in landfills will result in significant GHG emission reductions”; a chance for

Canada, one of the largest per capita emitters of greenhouse gas, to do its part in global waste management.

Various studies have explored the effectiveness of public waste-management strategies. An Ontario study on recycling policy options found that “attributes of convenience are more important to encourage recycling than those that penalize disposal...” (William, 2013). Similarly, our initiative is utilizing this principle by adding new decals to make recycling *easier* instead of reprimanding disposal policy offences. We will be using an Asset-Based Community Development approach in an attempt to encourage patrons to sort their waste correctly (Mathie and Cunningham, 2003).

Our research will provide valuable data to CityStudio and the City of Vancouver on effective community centre waste-management techniques. This will help to create a municipal recycling system that is both cost-effective and environmentally beneficial to reach their 2020 goal. Our study will also fill the gap in academic research on community centre waste management programs, specifically at KCC. This will allow our group to determine the effect of newly designed waste-management decals on patrons’ waste diversion behaviours. In doing this, we are facilitating movement towards a greener, waste-free Vancouver, which in turn, will have exponentially positive impacts on a global scale.

Objective

The objective of this project is to observe and analyse whether the additional signage will improve the accuracy of waste diversion at KCC.

Research Question

Will the additional signage be effective at improving the accuracy of waste diversion in KCC?

Research Methods

➤ Data Collection

On our initial visit, we will make naturalistic observations on the patrons’ sorting behaviour with the existing signage on the top of the waste bins. A few weeks later, we will apply new signage on to the body of the waste bins and observe any behavioural changes. Finally, we will visit after the signage has been present for 2 weeks to observe whether behaviours have been affected. Data collection will occur for 1 hour from 5-6pm on three separate Fridays. During the hour, we will observe how people (kids, teens or adults) sort their waste, recording whether people look at the signage, and if they sort their waste correctly, partially correctly, or not at all. In addition, we will conduct informal interviews after people have sorted their waste to collect immediate feedback on the waste-management stations. We will also take note of the bin location and specific type of waste being sorted incorrectly. Following our three data collections, we will

compare the behaviours observed on each visit and form our results on the effectiveness of the new signage. We will then convey our results to our community partners and make further recommendations if applicable.

➤ **Data Analysis**

Qualitatively, we will analyse and compare the behaviours of the patrons before and after the decals were added. This qualitative data will be obtained from our observations and interviews at KCC. We will also quantitatively compare data on the number of people noticing new signage, separating their waste, and accurately sorting their waste. Through these quantitative and qualitative methods, we will be able to conclude if the new signage successfully improves accuracy of waste diversion rates at KCC.

➤ **Ethical Consideration**

Each member of our group has obtained a TCPS-2 certificate for Ethical Research before conducting our data collection at KCC. A consent form will be given to every participant before the informal interview starts. The above ethical considerations will enable us to construct a thoughtful and appropriate model, keeping ethics standards and participant well being in mind.

Appendix

Concluding Remarks

Our initiative will collect and interpret data on the effectiveness of the newly added decals provided by the City of Vancouver, in hopes of finding that these decals will increase the accuracy of the waste diversion rates in KCC. This project will provide a reference for the City of Vancouver to adjust and implement new waste management policies in specific regions of Metro Vancouver in the future. In the long run, we aim to help the City of Vancouver and CityStudio to achieve their “Zero Waste” goal (COV, 2016) and promote environmental sustainability by increasing the accuracy of the waste diversion rates at a local level.

References

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