

The GUCEL Program

First implemented in summer of 2013, by then intern Melissa Gallina, the GUCEL program has provided opportunity for 12 students to take part in interdisciplinary, student-led, community-based, and experiential learning about sustainability. A unique aspect of the GUCEL program is that it encourages academic collaboration between graduate and undergraduate students to work together to solve a real-world sustainability problem. Supported by the School of Graduate Studies and funded by SPICES*, the GUCEL program has been developed to enhance the student experience by contributing to an intellectual community and encouraging engaged scholarship.

This year's GUCEL team focused their effort to research and investigate the feasibility of incorporating more local ingredients into popular menu items of on-campus restaurant, TwelvEighty Bar & Grill. Graduate students in McMaster's MBA program taking a course on Sustainability and Corporate Social Responsibility include Cveta Manassieva, Rashmi Gautam, and Benjamin Gilles. The MBA group worked in collaboration with undergraduate student interns from the Faculty of Science, Katherine Marino and Joshua Patel. The MBA student group worked with the undergraduate students to conduct an initial investigation and cost benefit analysis of transitioning to local food at TwelvEighty, which took place between September and December 2014. Katherine and Joshua continued to develop the project through April 2015. The pages to follow provide an overview, list of objectives, reporting, and mention of the various collaborators who supported them with their respective projects.

*Student Proposals for Intellectual Community & Engaged Scholarship

Local Food at TwelvEighty

Rashmi Gautam, Benjamin Gilles & Cveta Manassieva

Overview

TwelveEighty is McMaster University's on-campus bar and grill. The restaurant is operated by the McMaster Students Union, and provides high quality food at a competitive price. This project aims to understand the current status of TwelvEighty's product sourcing, and evaluating the possibility of more sustainable alternatives – in particular, the use of locally-grown produce. Our team's definition of local is within Ontario only, and did not consider products having to be organic.

Objectives

- 1 Determine viable alternatives that improve sustainability through:
 - Identifying the location of produce items used to prepare the most highly-sold products on the menu
 - Identifying potential local suppliers for those items not already sourced locally
 - Conducting a cost-benefit analysis for implementing the proposed changes and sourcing more local items

- 2 Devise a green marketing strategy to promote TwelvEighty's commitment to sourcing products locally

Reporting

We were pleased to find that many items used by TwelvEighty were already sourced locally. However, among the most highly-used items, romaine lettuce, white and yellow onions, and tomatoes were imported. Through research and consultation with various suppliers, we were able to identify a farmer that could provide these items in line with our definition of local. We obtained product prices based on purchase volumes provided by from TwelvEighty, which would support our cost-benefit analysis in comparing the current costs incurred by TwelvEighty for non-local items. Based on our analysis, we recommend TwelvEighty to contact Otis Farms* and switch the procurement of romaine lettuce, yellow and white onions, and tomatoes. Since the iceberg lettuce supplied by Otis Farms is grown in the US and more expensive than the current supplier, we suggest that TwelvEighty continues to buy from its current supplier but consider altering the menu to substitute romaine for iceberg where feasible.

Sourcing these items locally is more sustainable from a social, environmental, and economic perspective as it would support local jobs, reduce vehicles miles traveled, and result in weekly savings of \$48 to TwelvEighty.

If TwelvEighty chooses to implement these suggested changes, the top five menu items would be nearly 100% local. This is worth advertising and promoting. This could turn out to be a real asset for TwelvEighty given the increasing awareness and sensitivity towards sustainability amongst its customers.

Collaborators: We would like to thank the management team at TwelvEighty for their support in providing information about their purchasing practices, and being encouraging of our project and our recommendations. We would also like to thank the many other local suppliers who have helped us in our investigative research. Our undergraduate student team members, Joshua Patel and Katherine Marino, helped to connect us with campus stakeholders and will be utilizing the results of our project to conduct a survey of consumer preferences based on our recommended changes.

*Otis Farms is an alias. The student authors were unable to obtain confirmation from the farm owner for approval to include their name publicly within this document.

Perspectives, Attitudes, and Values towards Local Food

Katherine Marino

Overview

The purpose of completing this study was to further educate the McMaster community on the environmental effects of non-local food* items and to bring more attention to the importance of this topic, so that we can contribute to the overall sustainability of McMaster and benefit the surrounding environment. To gather this information, I worked closely with the management team of on-campus restaurant, TwelvEighty and my student colleagues to obtain information about the current status of local sourcing at TwelvEighty, as well as alternatives available. This information, along with the current pricing model at the restaurant was used to create a survey of the McMaster community to learn about how this demographic views food sustainability and how knowledge of environmental impacts and price influence their decisions.

Objectives

- 1 Understand the current status of local food sourcing on campus
- 2 Identify areas for improvement with respect to local food sourcing
- 3 Understand current perspectives, attitudes, and values towards local food
- 4 Share research findings with on-campus stakeholders

Reporting

Working in collaboration with my student colleagues, we were able to identify the source location of the ingredients in some of TwelvEighty's of the most popular menu items, the current prices, and local alternatives. With this information, I was able to develop a survey that would capture the current perspectives, attitudes, and values of students towards locally-sourced food, based on a number of factors, including the price they are willing to pay. The survey received 215 student responses within a two-week period. The results showed the majority of students are in support of incorporating local food into TwelvEighty's menu. When asked about their willingness to pay more for current menu items that include local ingredients, a slight majority prefer to have no change in price, while nearly as many would be willing to pay 10-20% more. For example, 30% preferred no change in price for the \$8.99 chicken wrap, but 28% were willing to pay 10% more, and 14% would pay 20% more. Survey participants were also provided with information showing that the increased price would also come with a large reduction in vehicle miles traveled. This was shown to impact the price students were willing to pay. For example 26% of students would pay 10% more for a vegetable stir-fry that had a reduction of 13,000 miles traveled.

As one of the main objectives of this project was to share my research findings, I worked with my project partner Joshua Patel to produce an informational YouTube video. This video will be used by the TwelvEighty management team to communicate this initiative to staff members, as well as by faculty members in the instruction of sustainability-related courses.

Collaborators: I would like to thank the various individuals who helped make this project possible: GUCEL project colleagues including 4th-year Science Student, Joshua Patel, as well as MBA students Cveta Manassieva, Rashmi Gautam, and Benjamin Gilles. A special thanks goes to Rick Haja and the members of the TwelvEighty management team for providing information, and support along the way, as well as to Dr. Karen Szala-Meneok and Michael Wilson from the McMaster Research Ethics Board for all their assistance with the creation of the student Survey. Collaborators also include our non-academic advisor Kate Whalen and academic advisor Dr. Luc Bernier.

*Local food in this report is considered as sourced within a 100 mile radius

Finding Alternatives & Increasing Awareness

Joshua Patel

Overview

The decisions we make as students in our daily lives can have a big impact on how we shape the future of our planet. The local food movement has gained more traction than ever before through increased awareness, and because governments are encouraging citizens to choose more local food¹. Educating members of the community about the benefits of buying local and how the food items make it to their tables have been very important in helping raise awareness². Working with on-campus restaurant, TwelvEighty Bar & Grill, this project aims to employ these findings to increase the amount of local food options available, as well as the number of local menu items purchased.

Objectives

- 1 Identify the source and miles traveled of ingredients in popular menu items
- 2 Identifying alternative local suppliers
- 3 Raise awareness on the topic of local food
- 4 Present findings and recommendations to TwelvEighty's management team

Reporting

Working closely with TwelvEighty's kitchen manager, the ingredient lists of the top five menu items (based on volume sold) was analysed to determine the location of which they were sourced. This analysis supported the creation of a carbon footprint, based on total vehicle miles traveled, for each of the top menu items. The analysis showed that TwelvEighty was already doing a very good job at sourcing local food, but there was still opportunity for improvement. A number of local suppliers were then contacted to determine their pricing, delivery options, and seasonality of ingredients. Initial findings suggest that transitioning nine of TwelvEighty's most used ingredients to local alternatives is a viable option, from both a financial and logistics perspective. To support the proposed shift to more local ingredients, a green marketing campaign was created specifically for TwelvEighty, which includes the use of educational infographics, social media tags, and engaging posters. The goals of the green marking campaign were to: 1) educate about the importance of supporting local food, 2) highlight existing local food operations at TwelvEighty, and 3) support the transition to new, local options by showcasing the reduction in vehicle miles travelled from previous to new menu items. These findings were presented to the assistant kitchen manager who provided the opportunity to present this information to the entire TwelvEighty team. A YouTube video was then created with project partner, Katherine Marino, to summarize findings as well as increase awareness on how a local food movement can be started at McMaster University through TwelvEighty. Academic supervisor, Luc Bernier, also requested that the video made available to him for use during his environmental issues course. With the creation and dissemination of the YouTube video, I was able to expand the reach of my education material to a much wider audience, therefore having an even large impact. It is hoped that through providing both education about local food along with a greater list of local options, members of the McMaster community will be better equipped to make informed decisions about their food choices.

Collaborators: I would to thank the following individuals who helped make this project possible: TwelvEighty Bar & Grill Management, Jen Christine, Richard Haja, and Alena Lukich; Academic Supervisor, Dr. Luc Bernier, Professor; MBA Student Group, Cveta Manassieva, Benjamin Gilles, and Rashmi Gautam; Graphic Designer at MSU Underground Media & Design, Rebecca Arboly & Student Designers, Kishan Patel and Sarah Conrad; Undergraduate student and project collaborator, Katherine Marino; Co-Founders at 100KM Foods Inc., Paul Sawtell and Grace Mandarano; and Non-academic supervisor, Kate Whalen, Senior Manager, Academic Sustainability Programs.

¹Source: <http://www.theglobeandmail.com/news/national/local-food-movement-goes-national/article585262/>

²Source: <http://news.ontario.ca/omafra/en/2015/01/ontario-establishes-goals-to-increase-awareness-of-local-food.html>

Project Summary

The information from this project has been utilized by TwelvEighty to transition towards a greater number of local menu options that are in line with student values. Starting in September 2015, customers will be able to choose from five of the restaurant's most popular menu items made with 100% locally-sourced ingredients. Educational material will be made available to customers with incentives and promotions in place to encourage engagement and information sharing.



Local Matters Infographics.
Image Credits: Rebecca Arboly, Kishan Patel, and Sarah Conrad