

UBC Social, Ecological Economic Development Studies (SEEDS) Student Reports

An Interactive Web-based Resource Proposal for Local Food in the UBC Vancouver Community

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LFS 450

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The University of British Columbia Food System Project

**An Interactive Web-based Resource Proposal for Local
Food in the UBC Vancouver Community**

Group 24

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ABSTRACT

In this fourth year level of the UBC Food Systems Project, we collaborated with the teaching team, stakeholders and the community to develop a web based resource with the goal of increasing awareness and promoting local foods within the UBC campus. As this is the first group working on this project, we wanted to gather science-based research that would validate the basis of doing the project and create a solid foundation for future years. To do this, we conducted interviews with restaurants on campus and distributed a two page survey. The results of our survey showed that 38% of our sample prefers local foods. Also, the survey showed that Facebook and Google Maps have high numbers of users. From our interviews, we learned that the restaurants also believe there is a demand for local products and would be interested in supporting the web-based application. We determined there is a large percentage of the target population that will be receptive to this technology. Using the results, we planned and started a Facebook Fan Page with Google Map which together would help promote menu items that incorporate local, UBC Farm foods. Though the web-based application is still in its early stage, the ultimate goal of the technology is to increase support for restaurants and producers in the local food community by increasing the target population's interest and awareness of local foods. With the broad spectrum of areas we covered in this project, we provided groundwork for the future projects to build-upon and suggested recommendations to improve our project.

TABLE OF CONTENTS

ABSTRACT.....	2
TABLE OF CONTENTS.....	3
INTRODUCTION	4
PROBLEM DEFINITION	4
VISION STATEMENT.....	5
GROUP VALUE ASSUMPTIONS	6
METHODS	6
GENERAL METHODOLOGY	6
SURVEY METHODOLOGY.....	7
INTERVIEW METHODOLOGY.....	8
FINDINGS	9
INTERVIEW WITH RALPH WELLS	9
SURVEY RESULTS	10
INTERVIEW RESULTS	13
DISCUSSION.....	16
DISCUSSION OF INTERVIEW	16
DISCUSSION OF SURVEY METHODOLOGY	18
DISCUSSION OF SURVEY RESULTS.....	19
THE APPLICATION.....	21
FACEBOOK RESEARCH	21
FACEBOOK METHODOLOGY	21
HOW IT WORKS (The Plan Itself).....	22
RECCOMENDATIONS.....	23
RECCOMENDATIONS TO THE COMMUNITY	23
RECCOMENDATIONS TO NEXT YEAR	24
CONCLUSION.....	26
REFERENCES	Error! Bookmark not defined.
APPENDIX.....	27

INTRODUCTION

Our paper is separated into six parts: abstract, methods, findings, discussions, recommendations and conclusion. First, we will describe the problem, introduce our scenario and acknowledge our group value assumptions. Then, we will describe the quantitative and qualitative methods we used to collect data and discuss the results. Finally, we will discuss recommendations for the community and for the students next year to implement, maintain and build-upon our project.

PROBLEM DEFINITION

The rapid growth of urban cities has created a concern about the stability of the ecosystem. Urban communities are driven by mass-consumption of clean water, energy and food, and therefore there is serious alarm about insecurity and vulnerability of the ecosystem (Flavin, 2007). Along with the trend of urbanization, the continual advancement of technology distances people from the natural world by allowing individuals to be immersed in virtual communities. There is a concern that people in a technology-dominated culture might be given fewer chances to connect with nature (UBCSFP scenario, 2010). Food choice is an example of this disconnection. The foods people consume today are based on their low level of awareness and understanding of nature, the ecological system and health. However, by utilizing the benefits of technology, it can act as a tool to improve the connection between humans and nature (UBCSFP scenario, 2010). Our group understands that the advancement of technology contributes to effective communication. For example, web-based applications and the technologies that facilitate these applications allow us to access information and resources timely and with ease. Also, these applications and technologies make it easy to network with others so that we can share information and resources.

Based on the problem, the main task for our group in this year's UBC Food System Project is to use technology and develop a tool for building a sustainable food system on the UBC campus. The technology in this context is a web-based resource that guides the UBC community towards sustainable food system initiatives (UBCSFP scenario, 2010).

VISION STATEMENT

The vision statement for a sustainable UBC Food System consists of seven intertwined elements, which are demonstrated in our project. Although our project identifies with the entire vision statement, it focuses on two elements that are clearly connected to our scenario.

The two elements we focused on are the first and fifth statement. The first statement explains food must be locally grown, produced, and processed. Our project focuses on promoting restaurants which serve foods that incorporate produce from UBC Farm, which is both local and organic. Our technology would also ideally increase awareness for and support locally grown produce. The fifth statement explains food acts to bring people together and enhance community. We feel that our project will be able to bring do this in many ways. For one, our group agreed that food itself has the capability to bring people together. On top of that, we feel that when armed with the right tools, like-minded people will be more likely to find one another through their food establishment choices. Also, our application will feature social networking capabilities, which can create an online community of people. Creating this community will be able to bring people together including people with opposing ideals that can be informed about the benefits of locally grown foods. We also feel that as demand grows with the technology, there will be a cascading effect on the production side, where more volunteers and active workers will get involved with the food community.

GROUP VALUE ASSUMPTIONS

Our group is made up of students in the Faculty of Land and Food Systems with a range of majors including Nutritional Sciences, Food Market Analysis and Integrated Studies. Our different backgrounds allow us to view the project from different angles and incorporate our own fields into a project that is grounded in the position of our faculty. Also, as students in this technological generation, we are equipped with knowledge involving popular technologies today.

METHODS

We based our project around Community Based Action Research (CBAR). CBAR is a participatory research in which researchers and stakeholders deal with real issue within communities (Rojas, Richer and Wanger, 2007). CBAR aims to identify and facilitate locally generated knowledge, which makes locally generated action within communities (Rojas, Richer and Wanger, 2007). We involved stakeholders and influential members of the community in many aspects of our project and these partners in turn contributed to improving our project.

GENERAL METHODOLOGY

This is the first year the LFS 450 classes are working with this scenario. We started the project looking at scenario resources, talking with Ralph Wells and discussing with the other group. From these initial steps, we chose to expand on local foods. We decided to focus specifically at restaurants on campus that served UBC Farm produce as a realistic scope for our project. The goal of our project is to increase support for restaurants that serve UBC Farm produce on campus and to increase awareness and knowledge about local foods through technology. We felt that to create a valuable technology, it needed to involve the stakeholders of the program which includes both consumers and suppliers of local foods. More importantly, since we are the first group undertaking this project, we wanted to gather science-based research

that would validate the basis of doing the project and create a solid foundation for future years. To fulfil these objectives, we distributed surveys to the consumers and interviewed food outlets that supply local, UBC Farm produce. Based on these results, we created a technology that would be effective in achieving our goal of increasing the support for local foods and restaurants that serve UBC Farm produce on UBC campus.

SUBSYSTEM

We defined the entire UBC community as the target population of this project. With more than 44000 students, 13000 staff, and 7000 residents, thousands of meals are served on UBC campus every day. UBC Food Services is the primary food provider in the UBC community and it is responsible for cafeterias, franchise operations, residence dining and full service and casual catering (UBC Food Services, 2010). In addition, AMS Food and Beverage Department also run food outlets that are fully own and operated by students (AMS, 2010). Each year, residence dining and cash operations (cafeterias and franchise operations) contribute to the highest proportion of the revenue (UBC Food Services, 2010).

SURVEY METHODOLOGY

After deciding to focus on restaurants that served local foods on campus, we knew that in order to justify recommending our application we needed to gauge the UBC community's interest for local foods. We also needed to determine which web-based platform is most widely used, so that our application could be the most accessible. To achieve this, we created a survey asking participants about the technologies or web-based applications they use and the restaurants on campus where they eat. We also collected demographic information about age and gender (see appendix for survey).

When administering the survey, we wanted to collect data from a representative sample. Since our subsystem includes everyone at UBC, we handed out surveys all around campus. The survey was reviewed and approved by William Valley, the teaching assistant, before being administered. We distributed the surveys near food outlets including Ike's café, Tim Horton's, Bean Around the World, Agora, and in the SUB. Surveys were also handed out in the classes of our group members as students and faculty are a major part of the UBC population. The University Neighbourhoods Association (UNA), a community of UBC's residential neighbourhoods, also makes up a percentage of the target population and we planned to include our survey in the UNA's newsletter. Due to time constraints, we were unable to do this and handed out surveys near the residences instead. We were available to answer or clarify questions while the surveys were being completed and had each respondent sign a written consent. We administered 175 surveys and because we asked people if they would help us fill out a survey in person, the response rate was 175 out of 175 (100%).

INTERVIEW METHODOLOGY

We also knew to create an effect application, we needed support and information from restaurants that supply UBC Farm produce on campus. The interview questions were designed to see if there is a demand or preference for UBC farm produce from the restaurant's perspective. We wanted to find out if the price of the produce is a factor and if the restaurants think it makes a difference to customers. We also wanted to see if restaurants benefit from selling local produce. For information that could be added to our technology, we wanted to see the different types of menu items that contains UBC Farm produce and compare them between establishments. We wanted to find the different produce sold at each restaurant and in different seasons. Finally, we wanted to see if there is support and demand for our application from the restaurant's point of

view and if the restaurants would be interested in supporting the technology. (See appendix for interview questions)

Restaurants that were chosen to be interviewed were ones that are located on the UBC Vancouver campus which had high demand of produce from the UBC Farm. Some restaurants from the UBC Alma Mater Society have previous history of collaborating with the UBC Farm, this include The Pendulum, Bernoulli's Bagels and Blue Chip Cookies. However, due to time constraints and schedule conflicts, we were unable to conduct interviews with all of the restaurants. The Bean Around the World, on campus was also interviewed because while we were distributing surveys, the manager was very interested in our project.

FINDINGS

INTERVIEW WITH RALPH WELLS

To start our project, we interviewed Ralph Wells, the sustainability manager of the UNA and a stakeholder in our project. Through this interview, we learned that the UNA community has a great interest in sustainability and local foods. Ralph explained, there are community gardens for individual family and kids and the community is always curious about markets and events where they can buy local foods. The community also has a compost program in collaboration with UBC that has worked well. Furthermore, in cooperation with UBC, there are many other undergoing projects which are focused on sustainable transportation, landscape and energy conservation. From the interview with Ralph we learned that this community is interested in sustainability and he explained that the project could be valuable to the UNA community (Ralph Wells, personal communication, March 15, 2010).

SURVEY RESULTS

A total of 175 of 175 surveys were filled out, of which 167 were complete and eligible for analysis (95%). Of the eight who were not eligible, two were incomplete responses and 6 were inaccurately completed. Part 1 of the survey collected demographic information and we tallied the responses. The results showed 78% of the survey participants were aged 18-24 and 18% were between ages 25-55. Also, 64% of respondents were female and 30% were living on campus.

Part 2 listed ten popular technologies or applications and asked respondents to check the ones they use. The number of subjects that checked each was totalled. Most people surveyed use some sort of technology, and 71% of participants use five or more of the ten choices. The technology with the most users was Computers/Laptops closely followed by Email, Facebook, and Google maps (Chart 1). Twitter, Ipod Touch, and Iphone had low number of users with 19%, 22%, and 23% of respondents using each respectively (Chart 1).

Part 2 also listed ten restaurants on campus and respondents were asked to write down the number of times they went to each establishment per week. Restaurants A-E were food establishments that sell produce from UBC Farm and restaurants F-J were restaurants that do not. We selected restaurants A-E after listening to a presentation by Amy Frye, the UBC Farm Marketing Coordinator. She explained that in 2009, these restaurants purchased large portions of produce from UBC Farm (Amy Frye, personal communication, 2010). We decided on restaurants F-J because these are large, popular chain food outlets that we know for certain do not serve foods from the farm. For each survey participant, we compared the number of times they recorded eating at restaurants A-E each week against the number of times going to restaurants F-J. We wanted to compare places they actually go to more frequently instead of directly asking if they favour local foods to gauge preference for local foods. We felt that this

would give a more accurate representation of the interest because it would measure action instead of just intention.

Based on these results, we categorized the responses into three categories. Respondents who went to restaurants A-E more than F-J were classified as “favour restaurants serving local foods” (Group 1) and those who went to restaurants F-J more than A-E were classified as “do not favour restaurants serving local foods” (Group 2). Subjects who went to restaurants A-E equally as F-J were labelled “neither favouring nor do not favour restaurants that serve local foods” (Group 3). Restaurants A-E included Agora, Sprouts, Sage Bistro, Vanier, Totem, Bernoulli’s Bagels, Pie R², The Honour Roll and Ike’s Café. Though we cannot say for certain people who eat at these restaurants favour local foods, these restaurants have a mission statement more grounded in sustainability. Agora, Sprouts, and Sage Bistro are all known for promoting the farm and supporting the local/organic food production community. Bernoulli’s Bagels, Pie R², and The Honour Roll all feature local food choices on their menus. Also, those in Group 1 go to these restaurants more than restaurants F-J which includes Starbucks, McDonalds, Tim Hortons, and Subway. Since restaurants F-J are extremely convenient and affordable, the likelihood respondents eat at restaurants A-E more because they serve local food is higher. We further used results from Part 3 and Part 4 to verify the stratification into groups. Results from Part 2 showed 38% of the respondents favoured restaurants that serve local foods, 50% do not favour these restaurants and 12% neither favour nor do not favour restaurants that serve local foods.

In Part 3, we asked respondents how important six different decisional influences are when choosing where to eat. These included choosing restaurants based on: lowering carbon footprint, personal health, supporting the community, convenience, location and price. We measured the responses using a 4-point Likert scale with 1 = not important in deciding where to eat and 4 =

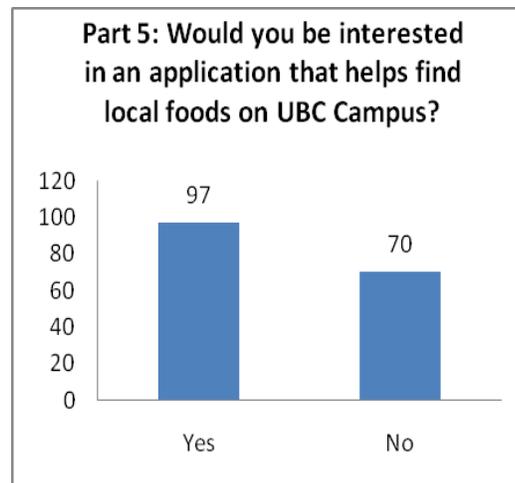
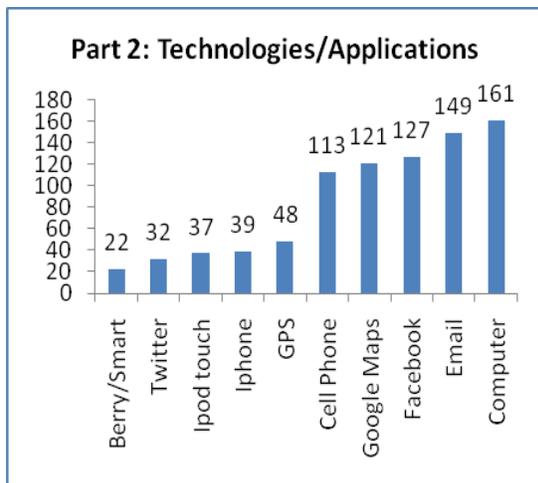
extremely important in choosing restaurants. In analyzing the data from Part 3, we collated the total sample responses for each question to gauge the trend of the total sample. The majority of respondents noted that price is important or extremely important in choosing restaurants. Overall, slightly more survey participants explained that choosing restaurants that serve local foods because local foods have a lower carbon foot print, is better for personal health, and supports the community is not important or somewhat important compared to being important or very important. This result corresponds with the lower number of people categorized as Group 1 than Group 2 seen in Part 2.

To verify the stratification in Part 2 of subjects into Group 1, Group 2 and Group 3, we compared the reasons for choosing restaurants of participants in each category. A much higher percentage of survey participants who were in Group 1 stated that choosing restaurants that serve local foods because local foods have a lower carbon foot print as important or extremely important than those who were in Group 2 and 3. Also, when asking respondents if they choose restaurants that serve local foods because they support the community, more respondents categorized as Group 1 thought it was important or extremely important compared to subjects that were classified as Group 2. These results confirm that those in Group 1 do favour local foods more than those in Group 2.

In Part 4, we measured the self-efficacy of the respondents in four different areas. One area was asking how confident the survey participant was that several meals they eat this week would contain local foods. Responses were measured on a 4-point Likert scale with 1=Not confident and 4=Very confident. 34% of the total sample was confident or very confident that they would have several local food meals this week. This number corresponds to the 38% of people in Group

1. Furthermore, when we compared Group 1 and Group 2, a greater percentage of subjects in the former were confident that they would be eating local food meals this week.

The survey concluded by asking if the respondent would be interested in using a web-based application that helps to find local foods on UBC campus. 58% of the survey participants said they would be interested in this web-based application and 42% said they would not. Many people who did not want an “app” explained they do not have an Iphone or smartphone as why they are not interested.



INTERVIEW RESULTS

The following is our findings from the interviews with several food vendors on campus. (More information in appendix)

Place Vanier Dining Room

We learned people do prefer menu items consisting of UBC Farm produce over regular items. However, only about half of the customers are seen reading signs that explain that menu items include UBC Farm produce. The prices for menu items that make use of local organic ingredients depend on the cost of individual ingredients. If the price is only slightly higher, the vendor will absorb the extra costs. But if prices are much higher, a price premium will be

charged. Price parity is not predicted to significantly increase the acceptance of local organic ingredients because most of the customers are students with meal cards paid for by their parents. The seasonal nature of local produce does limit menu items with local produce offered because thousands of meals are served a day at Place Vanier. However, UBC Farm is not the only source of local organic produce at Place Vanier so other local produce is incorporated into the menu items year-round. Furthermore, this food outlet believes availability of local organic produce has brought in additional customers.

The Pendulum

There is a lot of interest in specials that incorporate UBC Farm produce, especially because many of these items are vegan. It is a policy not to charge a price premium for menu items that use of local organic produce. The seasonal nature of local produce does not limit the amount of menu dishes offered because the Pendulum does not depend on UBC Farm's produce. It is not known if the availability of local organic produce has brought in additional customers to the restaurant, but people are generally more interested in these menu items.

Sprouts

All of the menu items are made from local organic produce and so, there is no difference in demand that can be measured. Nevertheless, people come specifically for food utilizing UBC Farm produce. There is no price premium charged for menu items that make use of local organic ingredients. The seasonal nature of local produce does limit the amount of menu dishes offered, especially in the beginning of the term and particularly during cold weather. Potatoes and apples are available year-round. There are always some local ingredients available but at times, supplies are very limited. Also, it is hard to see if providing local organic produce has brought in additional customers because the establishment is non-profit and there is no direct competition.

Bean Around the World

In general, customers prefer local organic produce, especially the population around the UBC campus. There have been requests for vegan choices. Also, a price premium is charged for menu items that use local organic ingredients, such as in sandwiches with organic bread and in organic salads. Price parity would increase the acceptance of local organic produce, but they feel it is difficult and unrealistic to accomplish. Currently, the restaurant does not make use of UBC Farm produce, but they have been approached by the farm and are interested. The seasonal nature of local produce increases the amount of menu dishes offered in the summer.

AMS Food Outlets – Nancy Toogood

It is not known if people prefer menu items with UBC Farm produce over regular items because the difference is not measurable at AMS Food Outlets. The restaurants have not specifically set out to gather quantifiable data. When there is a special item that contains UBC Farm's produce, it is well received but it is not known if the popularity comes from the item itself, or the fact that it contains local organic produce. There is no price premium charged for menu items that contain local organic ingredients at the AMS food outlets. Certain outlets that promote more of a sustainable menu, will make less profit compared to its counterpart AMS food outlets because of higher costs of produce. However, other AMS food outlets compensate for these. Produce from the UBC Farm can cost twice the amount as produce from other providers, but they want to support the UBC Farm because it is a small business and the food is organic. The seasonal nature of local produce does limit the amount of menu dishes the AMS food outlets are able to offer. Also, many people have high expectations and not enough knowledge. For example, people tend to expect fresh, ripe tomatoes year-round. It would be ideal for people to appreciate the local produce that is in season at a particular time and not rely on one type of fruit or vegetable year-round. There are times when local ingredients are not available,

but it has not affected business because the idea of providing local organic produce year-round in the restaurants has not been pursued. When a local ingredient is not available, the same ingredient would be imported from elsewhere. Also, Nancy believes availability of local organic produce has brought in additional customers to the AMS Food Outlets and has given restaurants a competitive edge.

All of the food establishments we interviewed agreed that they would support a project using technology to help find establishments that use of local, UBC Farm produce. It would be a good resource for customers and help promote their products. It would also support local foods because if the demand is there, more local foods would be purchased. They all would be interested in an “app” that would not cost much (if anything) for food establishments to become involved. Overall, it would provide people with useful information in a medium that is identifiable with today's culture and technology.

DISCUSSION

DISCUSSION OF INTERVIEW

The restaurants we interviewed that utilize UBC Farm produce stated that they do not charge a price premium for their menu items that contain local and organic produce. They also explained there is a demand for local produce in UBC food establishments and the suppliers are aware of it. In an interview with Nancy Toogood, she explained that because the Pendulum is more focused on serving sustainable menu items, their profits are lower than other AMS food outlets. To compensate for the lower profits, AMS depends on other restaurants to make more profit to absorb the deficit. From this, we can see that if there is a demand, it is feasible for restaurants to serve local, organic produce without charging additional costs to the customer. More importantly, the lack of a price premium enables people to easily try a new menu item with

local produce because they are not restricted by the cost. People may be more likely to frequent the restaurants that offer UBC Farm produce as they become more knowledgeable. In other words, as explained by Nancy, local produce can give restaurants a competitive edge. Although local organic produce is more expensive for the restaurants, it can serve as a marketing tool that attracts more customers.

Because all the harvested fruits and vegetables from the UBC Farm are divided among different food services, restaurants, and for its own UBC Farm Market, the 24-hectare farm is not big enough to sustain thousands of meals served each day. Some restaurants that use UBC Farm's produce regularly, such as Sprouts and Place Vanier, are limited in the amount of dishes they can offer. In contrast, The Pendulum is not limited by UBC Farm's production because they often switch to other, non-local suppliers. Frequently, customers of a certain restaurant may expect consistency in choice and quality. However, UBC Farm can only produce certain fruits and vegetables in a specific season. For some restaurants it becomes difficult to incorporate local produce in a dish that is available all year round and the produce is often put on the "specials" menu instead of the regular menu.

For restaurants that have incorporated local food in their regular menu, they do not depend on UBC Farm. Place Vanier, for example, acquires additional local organic produce from other sources in order to meet the demand every day. It shows that other food campuses on UBC campus can incorporate local food into their menu without placing dependency on the supplies of UBC Farm's produce. We believe that the technology can promote and motivate people to eat more locally, which would increase the demand of local food in the long run. This will put pressure to restaurants that only use UBC Farm produce when available to purchase more products from other local food producers. In the mean time, it is important to educate people that

not all local produce can be available all seasons, as Nancy has addressed that consumers should appreciate produce from different seasons rather than expecting a certain local produce that would be available all year round.

DISCUSSION OF SURVEY METHODOLOGY

When creating the survey, we limited the demographic information collected. We originally planned to include the survey in the UNA Newsletter without a consent form and so, we restricted the demographic information to age, gender, and whether or not the respondent lives on campus to ensure confidentiality. Including more demographic information such as the relationship of the respondent to the university could have helped us see if the sample we collected was representative of the population at UBC. Also, the target population of our survey is so large including all students, faculty, staff and residence of the university, our small sample size may not be representative of the whole population. However, we think the sample size can be increased and our survey and results can be built-upon in future years of LFS 450.

While discussing the survey and results, we realized several areas where our survey may be biased. Firstly, some of our group members handed out surveys to classmates and professors in their lectures. Though this is a good way to ensure students and faculty are represented in the results, the respondents in each class have similar characteristics and can skew the data. As students in the faculty of Land and Food Systems, our peers are more aware of the benefits of local foods and are more likely to favour restaurants that serve food from the UBC Farm. However, this was only one of many ways we collected surveys and we do not see it as necessarily biasing our data. Also, we know there is always bias when it comes to administering face-to-face interviews in terms of who interviewer chooses to ask and who responds. We tried to decrease this slant by asking everyone at the locations where surveys were administered.

In administering the survey, we received responses that were inaccurately completed partially due to the participant not reading or understanding the question and partially due to the layout of our survey. In Part 2, we had two tables and in the first one, we asked respondents to check the technologies or applications they use (see appendix). In the second table, placed next to the first, we asked participants to write out the number of times they went to different restaurants on campus. All six erroneous results were people who checked the second table instead of writing down a number. As soon as we realized this, we verbally explained this question to respondents and prevented more invalid results.

DISCUSSION OF SURVEY RESULTS

From our results, we found that 38% of the sample favours eating at restaurants that serve local foods from UBC Farm. Though this number is not the majority, it is a large percentage. As explained previous, our target population of the entire UBC community is massive. Even accounting for the margin of error from our small sample size, 38% extrapolated onto the UBC population is a lot of people. This result indicates there is a large portion of the UBC population interested in local foods and would be receptive to an “app” that would help find local foods.

Our findings show that though there is a large percentage of the sample population favouring local foods, the majority of respondents do not. In Part 2, we can see that only 38% of the sample prefers eating at restaurants that serve local foods from the UBC farm while 50% go to other restaurants more frequently. In Part 3, we see that only 43% of the participants thought it was either important or very important to choose restaurants that serve local foods because it lowers the carbon foot print and is better for the environment. The remaining 57% thought it was not important or somewhat important, the lower two options on the 4-point Likert scale. Similar ratios and results were shown when asking if it was important to choose restaurants that served local foods because local foods are better for personal health or because it supports the

community. Furthermore, in Part 4, only 34% of the sample recorded being confident or very confident that several meals they eat this week would contain local foods. Therefore, in the last question asking if the subject would be interested in an Iphone, smartphone or computer “app” that would help find local foods on UBC campus, we expected a similar ratio. Interestingly, 58% stated they would be interested in an “app” that would help find local foods. There are many reasons that could explain why the majority of respondents would want an “app” about local foods even though all other results show otherwise. One possible reason is maybe the respondents do not know where to get local foods even though they want to and therefore eats more frequently at restaurants F-J. These results can also even be because people just like “apps” and want as many as they can get. This is an area of our project that would have been interesting to pursue but did not fit our time constraints. However, these conflicting results do indicate that this technology would be an effective tool to increase awareness and knowledge about local foods and the UBC Farm. In addition to people who are already favouring local foods, participants who are not favouring local foods also want the technology to help them find these local food outlets. By creating and implementing this technology, we can promote purchasing high quality, local foods to people who are not yet supporting the local food production community.

From our findings, we see most people in our sample use technology. Therefore, a technology based tool would be a good way to target large numbers of people. We also see that computer, email, and Facebook have the highest number of users in our sample. Our group decided to target the application with a greater reach instead of one with more features. We thought that appropriate information should be available and accessible to everyone. Almost all respondents use and have access to computers (96%) while only 23% have an Iphone. Also, already 76% of

the participants are using Facebook while only 19% use Twitter. People who cannot afford or do not have an iPhone do have access to these “apps”. Anyone with a computer or access to one however, can start a Facebook account. Based on this, our group decided not to tackle creating an iPhone or iPod “app” but instead focus on making a Facebook Fan Page.

THE APPLICATION

FACEBOOK RESEARCH

Since 2008, Social Networking has swept the globe in a worldwide consumer phenomenon. ‘Member Communities’ such as social network and blogging sites are the fourth most popular activities on the internet beating out email (fifth), as shown in a study by The Nielsen Company (NielsenWire, 2010). By monthly visits, the top three social networks are Facebook, MySpace and Twitter. MySpace visitors have remained relatively stagnant for the past year whereas Facebook continues to grow past the 100 million visitor mark¹ According to compete.com for the months of Jan09-Jun09.

FACEBOOK METHODOLOGY

From the survey results, we found Facebook and Google Maps have high numbers of users. From this, we decided to create a proof-of-concept Facebook Fan Page. We recognize that the ability to effectively promote it to the UBC population would be outside the scope of our capabilities. We created a Facebook fan page that is readily accessible by all registered Facebook users that links to our customized Google Map.

Our Google Map consists of data found from our research and includes the food establishments that currently making use of produce provided by the UBC Farm. The map is interactive, and can currently be accessed by users on laptops, blackberries, and other web-enabled devices. The layers system that has been updated into Google Maps allows the user with

a GPS-enabled phone to view our customized map, with pin-point accuracy and real-time localization. This is still a new technology and not all phones support it. The iPhone, for example does not support layers and this technological limitation is one we can not currently get around.

We also explored the possibility of using an existing “app” for our purposes on the iPhone. An application called Juniao, suggested by Andrew Reisman, would allow users to customize points of interest to share with others. Through this program, users of the iPhone can find customized points of interest to find establishments that serve local foods from the UBC Farm. However, because our survey indicated not many people use the iPhone, we decided not to invest too much time into this as we felt this was not the ideal way to promote our cause and that this platform would restrict accessibility to everyone. Ultimately, we think Facebook is a good place to start and create a following. Using Google Maps and Facebook allows this program to be adaptable to many different locations. It can therefore, in the future be applicable to many other locations and have a far greater reach than the UBC Campus.

A Brief SWOT Analysis of Facebook

<i>Strengths</i>	<i>Weaknesses</i>
<ul style="list-style-type: none"> - Little explicit cost - Easy to set-up and maintain - High number of users already 	<ul style="list-style-type: none"> - Requires weekly if not daily maintenance (suggested 1 hour/day) - Limited expertise in social media
<ul style="list-style-type: none"> - Great potential for growth – to increase awareness, knowledge towards local foods. - Integration of all communication strategies (phones and other portable devices can access Facebook) 	<ul style="list-style-type: none"> - No guaranteed results – i.e. an unreceptive audience - Facebook may be a fad and becomes quickly replaced by a more prominent competitor social media application.
<i>Opportunities</i>	<i>Threats</i>

HOW IT WORKS (The Plan Itself)

Set up a Facebook Fan Page: **Eat Local + Organic UBC!**

Message: Promote restaurants and food outlets that serve local, UBC Farm Produce.

Target Audience: Students, faculty, staff and residence of UBC

Intent: Increase awareness of local foods, increase consumer engagement and purchasing of foods from local restaurants. Build a following or audience that can later be targeted for a more developed technology.

Maintenance: Heavy maintenance, around an hour every two days.

Campaigns/Ideas to Engage Customers:

1. Incorporate Google Maps

Rationale: High percentage of our sample use Google Maps. Using Google Maps can help people find new and nearby restaurants that serve local foods. Also, phones with GPS capabilities can use layers to pinpoint their location and find nearby stores featured on our Google Map

2. Coupons

Rationale: Most people cited cost as an important factor in choosing restaurants, by incorporating coupons, we can attract users and increase the number of people purchasing foods from restaurants that serve local foods. Increasing the number of people purchasing local foods can also encourage restaurants to purchase more

3. Feature Special Menu Items with UBC Farm Foods

Rationale: The interviews showed that local foods are often “specials” because of seasonality of the produce. By advertising the menu item with local foods and adding it to the Google Map, it will increase the

RECCOMENDATIONS

RECCOMENDATIONS TO THE COMMUNITY

Our group defined the community as any influential party on campus. For example, the University Neighbourhood Association (UNA), AMS and UBCFSP. We believed these parties should take part in the creation of this web application because they will be able to reach to more people within campus.

According to the surveys, most people living or studying on campus is confident in using high tech items. Based on the four categories taken from the survey data, we determined that quite a number of them have the technology but are not as interested in buying and eating local foods. The results did not support the idea that the creation of the web application is a must, but having

the web application would enhance the knowledge of local food and the accessibility of local food to those who live and work on campus. We believed that having the web application would be an advantage to the community. As a result, we would like to ask the community to promote the idea of local foods and to encourage more people to use the technology. Advertisements such as coupons can be made through the web application to increase its usage. Workshops can also be given increase the level of technological ability of people within the campus to encourage increases in the usage of the web application.

We are currently using Facebook to host the application. We inserted a Google Map on a Facebook fan page. However, functions of this application are restricted. This can be avoided if they are able to create their own version of the application and modify it as they like. They will be able to add new functions and additional categories to it as well. Thus, we recommend the community to create their own application from scratch if necessary technical support is available.

Detailed analysis was conducted to gain a better understanding of people's views on local food within the campus. The application created is still at its first stage, so feedback from the community will be required for future improvements and function developments of the web application. According to interviews conducted, many restaurants contain seasonal items on their menus. Therefore, daily specials of each food outlets and other specific information about the restaurants should be added along with periodic update of the information and continual technical support.

RECCOMENDATIONS TO NEXT YEAR

There are many recommendations in terms of distribution of surveys for a larger and a more representative sample size. It would be advantageous to implement a stratified sampling, in

which to survey subgroups within a population, such as dividing the population into first year, second year, third year and fourth year students and faculty staffs. Alternately, we can divide the subgroups into students in different faculties. Difference education, experiences and lifestyle in each subgroup of students and faculty staffs can result in a better representative sample. In addition, online surveys should be taken into consideration in the following years. This is a convenient way to increase the sampling size, but we do recommend this to be done in the beginning of the project to collect the surveys overtime.

Another recommendation for the future students is to approach more UBC Food System Project partners such as Alma Mater Society Food and Beverage Department and UBC Farm and UBC Food Services for interviews to get a larger perspective of serving local food from the suppliers. Since there are no quantifiable data of whether people prefer UBC Farm produce over regular items, collaborating with UBCFSP partners to initiate such data would be helpful for future students in implementing more local food in the UBC food system. Finally, we suggest that future students should incorporate restaurants outside of UBC that use UBC Farm produce; this allows students to see a larger perspective of local food interest in the community. In the mean time, this can also reflect interest of local food from the commercial aspects.

The applications on computers and mobile phones may be different in months or years from now. It would be interesting to incorporate more functions on our existing Facebook page, for example, providing online coupons and social networking functions, to increase the exposure of the application. Our key recommendation for the future students is to keep identifying new mediums as technologies are ever-changing, which may lead to new strategies to promote local food.

CONCLUSION

The explosive rate of urbanization has had a detrimental affect on the connection between users and the natural world. However, we can utilize this technology to re-arm consumers with knowledge and insight into issues such as local food production systems.

Our project focused on establishing the demand and acceptance of a web-based application that would feature knowledge on local food establishments in and around the UBC Campus. We've conducted surveys with consumers from varying demographic areas and interviews with multiple food providers. Responses have been positive overall, with much enthusiasm from both sides on the subject of local food.

This project lays down groundwork for future groups to build-upon. We've identified the need, and we've also explored the technological hurdles of reigning in a virtual community. One of the most positive findings from this project is that there is a way to effectively use the same technology that distances communities from their natural environment to mend those gaps.

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APPENDIX

SURVEYS

Part 1

Age: 18 - 25 24-55 >55

Gender: M F

Do you live on campus? YES NO

Do you eat meals on campus? YES NO

If YES, how many per week? _____

Part 2

Check the following technologies or applications that you use

Technology/Application	<input checked="" type="checkbox"/>
A. Computer/Laptop/Netbook	<input type="checkbox"/>
B. Iphone	<input type="checkbox"/>
C. Blackberry/Other Smart Phones	<input type="checkbox"/>
D. Cell Phone	<input type="checkbox"/>
E. Ipod Touch	<input type="checkbox"/>
F. Email	<input type="checkbox"/>
G. GPS	<input type="checkbox"/>
H. Google Maps	<input type="checkbox"/>
I. Facebook	<input type="checkbox"/>
J. Twitter	<input type="checkbox"/>

How many times do you eat at these restaurants per week?

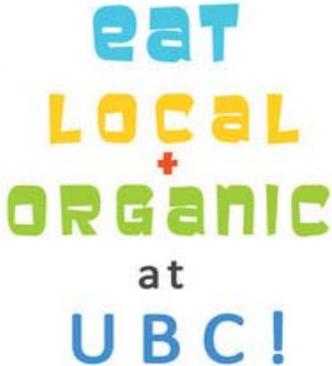
Restaurant	#
A. Agora or Sprouts	<input type="text"/>
B. Sage Bistro	<input type="text"/>
C. Vanier or Totem	<input type="text"/>
D. Bernoulli's Bagels, Honor Roll, Pendulum, Pie R Squared	<input type="text"/>
E. Ike's Café	<input type="text"/>
F. Starbucks or Blenz (On Campus)	<input type="text"/>
G. McDonalds (On Campus)	<input type="text"/>
H. Tim Hortons (On Campus)	<input type="text"/>
I. A&W or Subway (On Campus)	<input type="text"/>
J. White Spot (On Campus)	<input type="text"/>

What other restaurants or food outlets on campus do you eat at often?

UBC Farm produce used at Sprouts				
Potatoes	Squash	Apples	Onions	
UBC Farm produce used at AMS Food Outlets				
Bernoulli's	Butternut Squash			
The Pendulum	Beets	Squash	Fresh Herbs	Carrots
Honour Roll	Kabocha Squash			
Pie R ²	Squash	Beets		

FACEBOOK PAGE The Facebook Fan Page We Created: Eat Local + Organic at UBC

facebook



A LFS 450 Pilot Project

[Edit Page](#)

[Promote with an Ad](#)

[Suggest to Friends](#)

Write something about Eating Local and Organic at UBC!

Insights See All

0 ★★★★★
Post Quality

0 Interactions
This Week

Insights are visible to page admins only.

Eating Local and Organic at UBC!

Wall
Info
Photos
Discussions
Links
+

Attach:
Everyone ▼
Share

[Web](#) [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more ▼](#)



Eating Local and Organic at UBC!

maps.google.com

Find local businesses

📅 April 9 at 2:23pm

Eat Local and Organic at UBC!

Hungry on Campus?
Need a restaurant suggestion?
Want to find establishments that serve local and/or organic foods on campus?

This map tells you where you can find all of the above!
13 views - Public
Created on Apr 9 - Updated 6 days ago
By Jackson
[Rate this map](#) - [Write a comment](#)

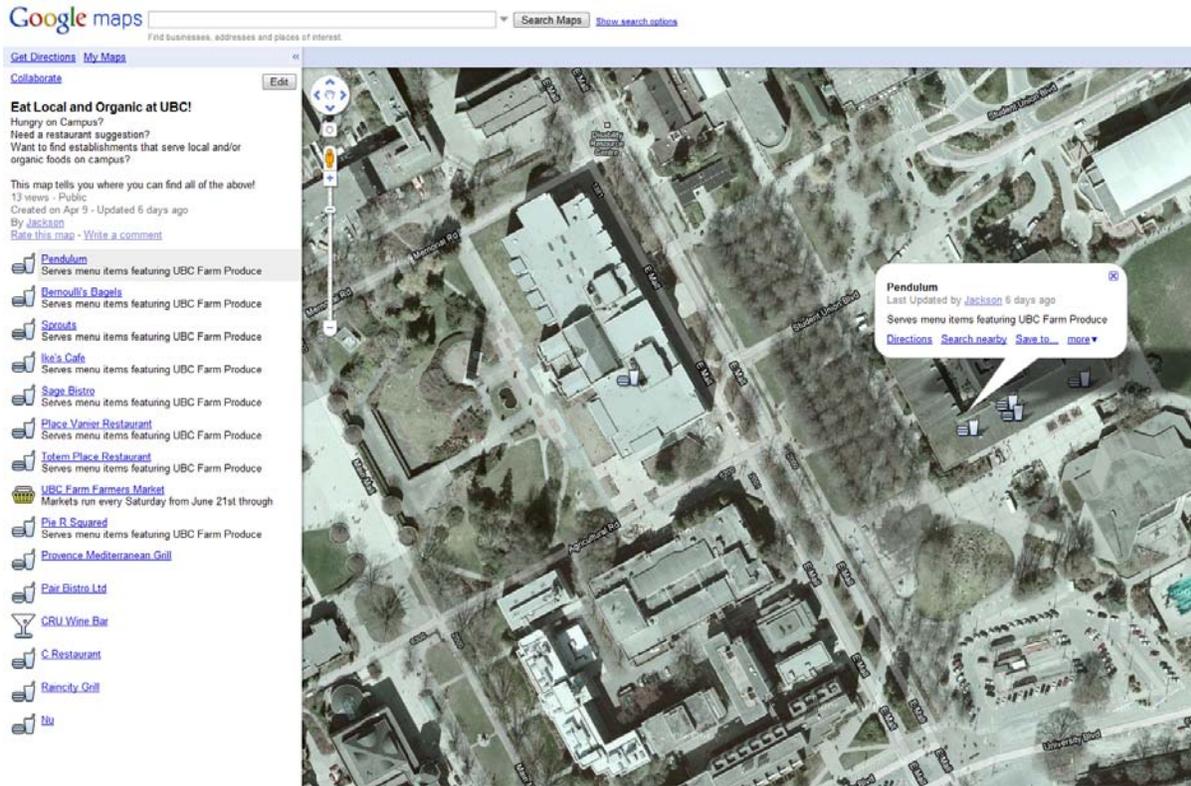
RECENT ACTIVITY

- Eating Local and O
- Eating Local and O

- [Pendulum](#)
Serves menu items featuring UBC Farm Produce
- [Bernoulli's Bagels](#)
Serves menu items featuring UBC Farm Produce
- [Sprouts](#)
Serves menu items featuring UBC Farm Produce
- [Ica's Cafe](#)
Serves menu items featuring UBC Farm Produce
- [Sage Bistro](#)
Serves menu items featuring UBC Farm Produce
- [Place Vanier Restaurant](#)
Serves menu items featuring UBC Farm Produce
- [Totem Place Restaurant](#)
Serves menu items featuring UBC Farm Produce
- [UBC Farm Farmers Market](#)
Markets run every Saturday from June 21st through
- [Pie R Squared](#)

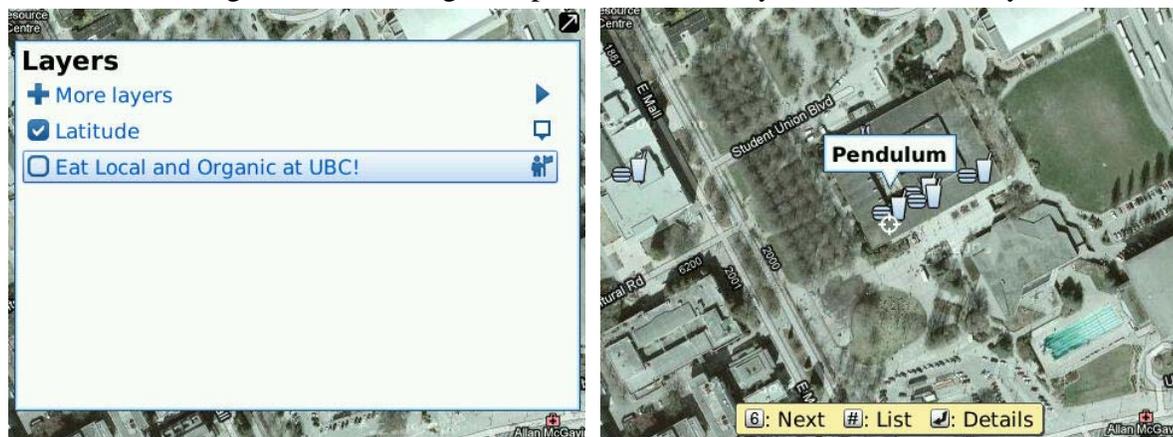


GOOGLE MAPS Eat Local and Organic at UBC! Google Map



GOOGLE MAPS

Eat Local and Organic UBC! Google Map as seen from Layers on a Blackberry Smart Phone



INTERVIEW/SURVEY SIGNED CONSCENT

Albert, Alice Wong, Alisa Serecal, Amanda Lenhardt, Angela Pettit, Anne Guo, Arisa Thamsuaidee, Ben Chu, Ben Zhao, Bernard Watts, MD, Bob Chen, Brian, Brian J. Gross, Brittany Renshaw, Carlos P., Carmelo Ramirez, Carol, Celine Kwan, Chan Choi, Charles Chang, Charles Lee, Claudia Sepulveda, Colin Olsen, Crystal, Derek, Dieson Jovanovic, E. Pavey, Ellen Hulken, Elsie Nguyen, Eunjin Seo, Farnaz Changizi, Fred Kim, Gary Kwan, Hillary Topps, J.N., Janice, Jasmine, Jenni Lee, Jennifer Leong, Jenny Kuan, Jenny Sun, Jessica Dawson, Jessica Rose, Joey Wong, Jules, Julia Chan, Kailee, Kaiser Eesquillo, Kaley Crawford-Flett, Karen Li, Katie Berezan, Katie Gibson, Katie Schitzer, Kaitlin Cwein, Kim Dawson, Kim Generoso, Kristine, Lisa Keng, M.D., Mai Liao, Mandy Chan, Melissa Boizol-Roche, Michelle, Michelle C., Nahanni Kay, Nancy Toogood, Natalie Ryan, Nathan Khan, Ned Li, Nega, Peter, Kingston, Rain, Ravneet, Ronald Lam, Ryan Daw, S. Huang, Sandy Lin, Shawn, Siryun Lee, Stephen Peplow, Steve Gobb, Tegan Adams, Victoria Wilson, Yoonson Park, Yvonne Dang