

Incorporating more & increasing support for BC local and seasonal items into UBC Food

Service Residence Cafeterias

Will Arnup, Loretta Chiu, Meryl Herberts, Melissa LeBlanc, Tser-Dean Lin, Jasmine

Reeves, Heather Tretheway

University of British Columbia

AGSC 450

April 13, 2007

Disclaimer: "UBC SEEDS provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student project/report and is not an official document of UBC. Furthermore readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Coordinator about the current status of the subject matter of a project/report".

UBCFSP VI

Scenario 5b: Incorporating more & increasing support for BC local and seasonal items into UBC Food Service Residence Cafeterias



Group 05

**Will Arnup, Loretta Chiu, Meryl Herberts,
Melissa LeBlanc, Tser-Dean Lin
Jasmine Reeves, Heather Tretheway**

AGSC 450

April 13, 2007

The University of British Columbia

Table of contents

Abstract.....	1
1. Background.....	2
1.1 Introduction.....	2
1.2 Problem Definition.....	3
1.3 Reflections on the Vision Statement.....	5
2. Research and Results.....	6
2.1 Methodology.....	6
2.2 Our Role in Extending Previous UBCFSP Work on Residences.....	8
2.3 Our Subsystem: The Role of Place Vanier Dining Within UBC’s Food System..	9
2.4 Findings.....	10
2.41 Place Vanier Food Services: Current Capabilities and Interests.....	10
2.42 Demand for Local Soup.....	11
2.43 Supplying Local Ingredients.....	15
3. Discussion.....	18
4. Recommendations.....	20
5. Conclusion.....	23
6. References.....	24
7. Appendices [A-H].....	27

Abstract

The University of British Columbia Food System Project (UBCFSP) is an ongoing collaborative project with the goal of increasing food sustainability on campus. Scenario 5b of the UBCFSP for 2007 looks at the demand for and feasibility of introducing local food into Place Vanier Dining Room, a UBC Food Services Residence cafeteria. As a microcosm of the global food system, UBC is an ideal place to develop and implement ideas on reaching the goal of sustainability.

With this in mind, we assessed demand for local foods at Place Vanier. This was done with a preliminary survey of Place Vanier customers, followed by a soup taste test and interview. The soup test incorporated two soup recipes that we developed as a group, made with local ingredients. Next, we contacted two local produce growers to gain knowledge of seasonal food availability. Lastly, we provided a list of recommendations to the groups of this scenario for 2008, as well as to UBC Food Services and Place Vanier specifically.

1. Background

1.1 Introduction

The University of British Columbia Food System Project (UBCFSP) is an ongoing collaborative effort which aims to improve food system sustainability at the University of British Columbia (UBC). Key partners include the Faculty of Land and Food Systems, UBC Food Services, UBC Alma Mater Society Food and Beverage Department, UBC Waste Management, UBC Sage Bistro, Centre for Sustainable Food Systems at UBC Farm, SEEDS, Sustainability Office, UBC Campus and Community Planning and project collaborators such as the Sauder School of Business. The sustainability goals of the UBCFSP are to be achieved through the realization of a jointly agreed upon vision. This vision, through its guiding principles, sets the basis of a sustainable food system. It incorporates social, economic and environmental components spanning the entire food chain from production to waste management, including intermediary links. Such a project is especially important for UBC as “universities possess huge land assets that could, with imagination and leadership, revitalize the way we live in our cities” (M’Gonigle and Starke, 2006, p.136).

As of 2007, the UBCFSP is in its seventh year. Past efforts have involved Agricultural Science 450 student groups identifying and initiating projects in key areas for improving food sustainability at UBC. This year, student groups were presented with eight scenarios ranging from improving compost awareness on campus to expanding the UBC Farm Market. This paper summarizes the task assumed by group 5b: Incorporating more and increasing support for BC local and seasonal items within UBC Food Service Residence Dining Rooms.

In the first section, the problem description describes contemporary food systems, discusses some resulting implications to sustainability and puts our scenario into context with these implications. Following this is a vision statement. This section contains a discussion of the seven guiding principles of the UBCFSP, relates how our value judgments influenced our employment of these principles, and states our group's position regarding the UBCFSP vision. The next section describes the methodology used in developing this project. Previous UBCFSP work with the residences, our own group's goals, and a description of how Place Vanier dining room fits within UBC's food system are subsequently outlined. Finally, the results of our research into the demand and potential suppliers of local items are reviewed, followed by a discussion of these results, recommendations to future UBCFSP groups and conclusion.

1.2 Problem definition

British Columbians participate in the food system every day but pay little attention to the origin of their food. A food system is a cycle which includes growing, harvesting, transporting, receiving, processing, and sales. The cycle does not end here, however. Food waste can be composted and used as a "raw material or nutrient for another species or activity, or is returned into the cycles of nature" (Cortese and McDonough, 2001, p.1). The complex interconnections that exist in our food system are not always understood by most individuals, yet such understanding is a key step toward achieving sustainability. Sustainability implies that technology and economic activities "sustain rather than degrade the natural environment, enhance human health and well-being, and mimic and live within the limits of natural systems" (Cortese and McDonough, 2001 p.1).

Food systems can be identified as local and global; both can create positive as well as negative outcomes to our economy, our society, and the environment. The global food system

facilitates international trade which strengthens economic and cultural globalization. However, globally grown produce must be transported long distances before reaching the consumer which increases the use of energy and therefore does not support environmental sustainability. The global food chain may also marginalize farmers, as revenues generated through food sales must support all links in the food supply chain, countering aspects of social sustainability.

In contrast, local food systems can better support the environment, local farmers and local economies. Reducing the distance food travels before reaching consumers increases energy efficiency and reduces pollution. Also, with fewer food chain links than their global counterparts, local food chains increase the visibility of and support for local farmers. There are, however, some limitations to local food production. For example, it may not be feasible to grow certain ethnic food items locally due to climate differences in various geographical regions of the world.

Our project goal was to assess and implement local (defined as locally produce within British Columbia) and seasonal foods at Place Vanier Dining Room. Place Vanier currently places food orders from large distributors, such as Sysco and Neptune, through UBC Food Services (see Appendix A). These distributors, which operate through the global food market, buy locally according to availability. Due to our northern climate, however, local products are not available all year round. A challenge we face in increasing sustainability at Place Vanier Dining Room is that it is difficult to support local growers when relying on large distributors for food sourcing. In addition, Place Vanier Dining Room only operates from September to April; this presents a further challenge as these months limit local produce availability. As a result, Place Vanier Dining Room will only incorporate local and seasonal foods into their menu if demand for such items is apparent. Our aim was to assess such demand, and find potential local suppliers to facilitate the inclusion of local ingredients at Place Vanier Dining Room.

1.3 Reflections on the Vision Statement

The primary goal of the UBCFSP is to achieve a sustainable food system at UBC. Since 2000, the UBC Food Systems Project has been guided by seven principles entitled the “Vision Statement for a Sustainable UBC Food System: *Plain Language Version*” (VSPLV) which are listed below:

1. Food is locally grown, produced and processed
2. Waste must be recycled or composted locally
3. Food is ethnically diverse, affordable, safe and nutritious
4. Providers and educators promote awareness among consumers about cultivation, processing, ingredients and nutrition
5. Food brings people together and enhances community
6. Is produced by socially, ecologically conscious producers
7. Providers and growers pay and receive fair prices

These guiding principles address the UBCFSP from a systems approach by taking into consideration the economical, environmental, ethical, social, and nutritional components of a sustainable food system. As our group is composed of students, we identify with the need for affordable food (principle 3). As Vancouverites, we also recognize that affordable food is crucial in a city that is in part characterized by an increased cost of living. In addition, since the majority of us are also Food, Nutrition and Health (FNH) majors, we are especially concerned with public access to nutritious food (principle 3). Finally, as we are all in the Faculty of Land and Food Systems, we appreciate the environmental and social positives of locally grown, processed, and produced foods (principles 1 and 5).

As highlighted in the recent book The Omnivore’s Dilemma “many people today seem perfectly content eating at the end of an industrial food chain, without a thought in the world” (Pollan, 2006, p. 11). Our group, therefore, feels that it is important to promote awareness

throughout the population. We believe that principle number 4 should target not only “consumers” but younger generations as well. ‘Younger generations’ may range from elementary school children to residence students, many of whom have never purchased or cooked their own food. We strongly believe that education about food system sustainability would be most effective if it were implemented at the elementary school level, and followed through in high school and university programs. With this in mind, principle 4 might read “Providers and educators promote awareness among consumers and future consumers about cultivation, processing, ingredients, and nutrition”.

Overall, although our group focused mainly on principles 1, 3, 4 and 5 we feel that the seven guiding principles provide a clear direction towards achieving sustainability at UBC.

2. Research and Results

2.1 Methodology

Our group’s main goal was to determine the demand of local ingredients at Place Vanier Dining Room, and subsequently locate and contact local producers that would be willing and able to provide produce to Place Vanier in the near future. We adhered to the following series of steps to achieve this goal:

1. Summarize prior UBCFSP research of Place Vanier/residence dining and construct our goals to be an extension of such work.
2. Identify the current role of Place Vanier dining within UBC’s food system.
3. Investigate the cooking, storage, and food-delivery systems of the Vanier dining hall, as well as the visions and attitudes of Vanier Food Services regarding local food.
4. Survey the amount of demand for local-food menu items amongst diners; important in ascertaining and justifying how much effort Vanier Food Services should invest into local food provision.
5. Compile a list of supplier(s) of local food for Vanier Food Services.
6. Potentially facilitate the meeting of/contract negotiation between such suppliers and Vanier Food Services to incorporate local food in the dining hall next year.

In order to realize our goal, our group focused on the above steps for a single menu item. We felt that picking one item would allow for thoroughness, especially given our short research period, and specificity, which would make contracts and menu changes more manageable and attractive for Place Vanier suppliers and food service stakeholders. We also felt that the item had to be easily incorporated into kitchen preparatory work and dining hall serving, to improve the incentive for its inclusion by Vanier Food Services. We also needed to minimize the item's menu price in order to maintain its appeal to cost-sensitive Place Vanier diners. Above all, the item had to coordinate with available seasonal and local ingredients.

Our group decided that the item best fitting the above criteria was soup! In order to determine demand and supply, as well as feasibility of incorporating local soups at Place Vanier Dining Room, we took the following steps. Firstly, we interviewed Ayrin Ferguson, manager of Vanier Dining Room, to obtain information about of the facilities and operations of Place Vanier, and to receive permission to perform a survey and a soup taste test to determine the demand for local soups. We then telephoned vendors advertised on the Winter Farmer's Market website to get an idea of the types of local produce (and quantity) available for the soups (Your Local Farmers Market Society, 2007). All of this information was used to decide upon two suitable recipes for 'local soup'.

Underlying each of our project steps were principles of community-based action research, which encourages "actions that attempt to resolve the problem being investigated" within research (Stringer, 1999, p. 5). For example, in order to identify Place Vanier's current role in the food system, not only were food service websites investigated, but interviews with the manager of Vanier Food Services, Ayrin Ferguson, were heavily relied upon. To determine the demand of Vanier diners for local food both a survey and a taste test were organized during

mealtimes. The only portion of our project that was not directly community-action based was the summarization of previous research and the use of website publications by UBC Food Services for general background information on residence dining.

The community-based action research approach lent itself well to achieving our project goals. We believed that this research method, exemplified by the preliminary survey and taste test, would enhance the interest and awareness of local foods in research participants.

Participants included resident diners and food service stakeholders alike.

2.2 Our Role in Extending Previous UBCFSP Work on Residences

Within the business structure of UBC Food Services, residence dining comprises 36% of their total \$19.4 million annual revenue (UBC Food Services [UBSFS], 2007a). It is a significant contributor to UBC's food system, and was therefore identified as a crucial component of improving campus food system sustainability in previous UBCFSP years. In 2006, student group 23 investigated the food systems of Vanier and Totem Residences (Charlambous, 2006). This group proposed ways in which local and seasonal produce could be incorporated into the cafeteria within these residences by examining the menus, and suggesting local and/or seasonal dishes that could be incorporated (Charlambous, 2006). They planned a dinner with guest speakers to promote awareness of local and/or seasonal produce, as well as the UBC Farm (Charlambous, 2006). Although ideas for local dishes were put forward, no local suppliers were contacted nor were any taste trials arranged: "we did not include costs [on the local awareness dinner menu] due to uncertainties about UBC Farm's produce availability and which other local suppliers will be used" (Charalambous et al., 2006, p. 16). Taste trials and cost considerations might be important to include in UBCFSP work, especially as previous research suggests that

undergraduate students are especially price-sensitive when it comes to food decisions (Aikins et al., 2004).

With the above-described awareness events for local food already proposed by previous UBCFSP work, our specific aim was to build connections between food services at the Place Vanier and local producers. This follows from the work of group 19 in 2006, looking at current and alternate suppliers for UBC Food Services (Wan et al., 2006). Setting up such local food delivery infrastructure could a) work in conjunction with the local food event nights put forward by Charalambous *et al.*, 2006 and b) meet any already existing or event-inspired demand for local produce by Vanier diners.

2.3 Our Subsystem: The Role of Place Vanier Dining Within UBC's Food System

Vanier is home to over 1400 students (UBCFS, 2007b), and Place Vanier Dining Room itself caters to a demand of approximately 3000 to 3500 resident and non-resident (walk-ins) meals per day (A. Ferguson, personal communication (p.c.), March 7, 2007; UBCFS, 2007b). It serves a variety of hot entrees, a salad bar, four daily soups, pasta, sandwiches, grill items such as fries and burgers, Chinese food and pizza, in addition to a selection of baked goods, raw fruit, hot and cold beverages, and traditional breakfast items such as cereal, yogurt and pancakes (UBCFS, 2007b). The majority of items are made on-site and are scheduled according to a 26 day cycle (A. Ferguson, p.c. March 7, 2007). According to Ayrin Ferguson (p.c., March 7, 2007), items off of the grill, soups/salads, beef, chicken and lamb are most popular amongst diners.

It is important to note that Place Vanier is able and willing to be involved in the food system of the greater community, as evidenced by recent events and publications. For example, Place Vanier has participated in the UBC Apple Festival, which draws from producers throughout BC to showcase apple varieties to the greater Vancouver public (A. Ferguson, p.c.,

March 7, 2007; UBC Botanical Garden and Centre for Plant Research, 2007). Also, in the recent UBCFS newsletter 'SPICE', residence dining rooms are promoted as food outlets where anyone, including non-residents, can "satisfy [their] cravings!" (McGowan & Ferguson, 2006, p.5).

Our group felt that the inclusion of local food on the menu could enhance the popularity of Place Vanier Dining Room within the non-resident UBC community. Local foods at Place Vanier could potentially provide a lieu where diners may interact, and fulfill community or environmental values. These characteristics of local food compliment Place Vanier Dining Room's overall goals of providing quality food, reasonable pricing and a value dining experience (A. Ferguson, p.c., March 7, 2007).

2.4 Findings

2.41 Place Vanier Food Services: Current Capabilities and Interests

Our inaugural meeting with Ayrin Ferguson was promising. Upon a tour of the Vanier's kitchen, it was evident that not only does Vanier Food Services possess the facilities to cook and prepare local, homemade soups but they also would be willing to get involved in such work.

Current facilities include storage, ovens, mixers, refrigeration, cooking utensils and preparation surfaces geared towards high-volume meal output. There is an on-site chef and about 20 staff members, plus five or six students working within the kitchen and dining room at a given time (A. Ferguson, p.c., March 7, 2007). Four types of soup are available daily, two vegetarian and two non-vegetarian, some of which are pre-made Campbell's varieties and others of which are homemade (A. Ferguson, p.c., March 7, 2007). The major concern stipulated by Ayrin was time; ingredient cost difference is not a major issue between their current homemade versus pre-made soups, but time and labour are. In addition, the majority of vegetables used in the homemade soups are delivered pre-cut (A. Ferguson, p.c., March 7, 2007). This presents an

operational constraint for including local ingredients which would not be delivered pre-cut. As a result, it would require more time to prepare soups from scratch.

For the taste test trial, our group was in fact required to prep the vegetables for our soup recipes. Another concern voiced by Ayrin was supply quantity, as he feels Place Vanier's demand cannot be met by a single local producer (A. Ferguson, p.c., March 7, 2007).

Even with the identification of two challenges for including homemade soup on the Vanier menu - preparation time and supply quantity – Ayrin was positive about trying new projects within the dining room. As already described, we feel that advertising a local soup on Vanier's menu could contribute to the goal of attracting non-resident diners. Overall, Ayrin suggested that our group demonstrate diner demand and willingness to buy local soup, and that if the demand for local soup were evident we could then approach him with interested local suppliers (A. Ferguson, p.c., March 7, 2007).

2.42 Demand for Local Soup

In order to determine whether our focus on soup at Place Vanier was appropriate for our project, we first had to establish that a demand existed for 'local soup', that is, soup made with locally grown ingredients. We conducted a preliminary written survey asking general questions about the preferences and eating habits of Place Vanier customers. This was followed by a taste-test and customer interviews to determine the feasibility of introducing local soup at Place Vanier.

The first survey (Appendix B) is composed of four questions which were asked at random to 100 customers at Place Vanier Dining Room at dinner time. The responses were gathered (with written consent of customers) and statistically analyzed using the Chi-squared test

at a 95% confidence interval. The first question asked the preferred types of soups based on four categories: meat & noodle, fresh puree, vegetable medley, and cream soups. It was observed that

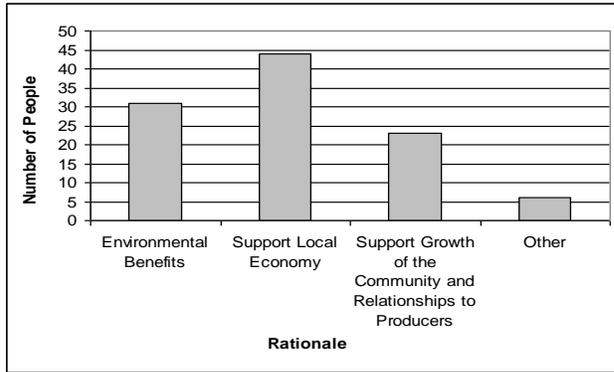


Figure 1. Rationale for Supporting Local Food Suppliers

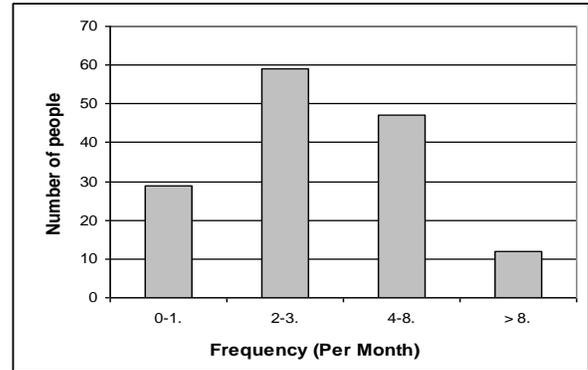


Figure 2. Frequency of soup consumption by Vanier customers.

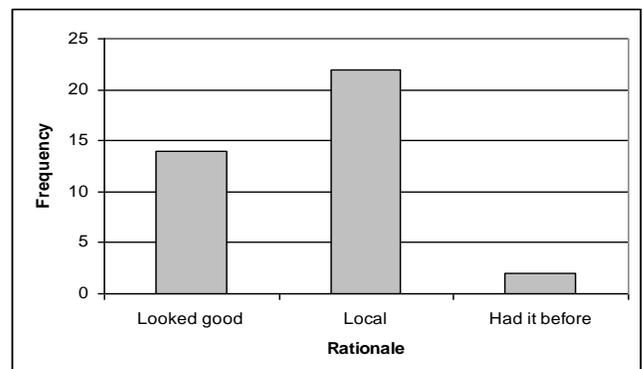
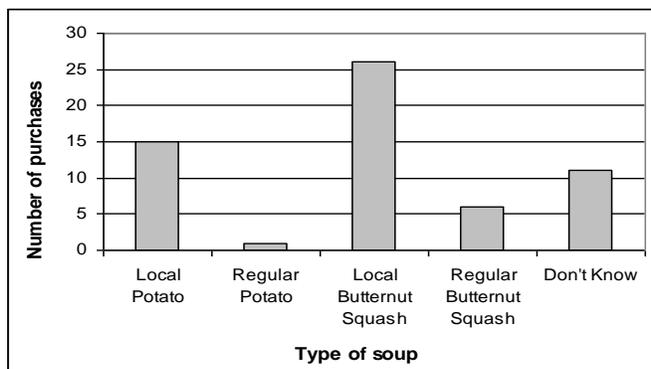
a relatively higher preference for meat & noodle and cream soups existed, however there were still substantial numbers for the other two types of soup.

The responses obtained helped to determine the type of soups we used in our taste trial, which is discussed later on in this section. Questions 2 and 4 pertained to the demand for local soups. From question 2, statistical analysis suggested that there may be an interest in supporting local food suppliers. The rationale behind the positive responses (those who said they are interested in supporting local food suppliers) was primarily to support the local economy, although there was a range of other reasons as described in Figure 1. Results from question 4 suggested that a significant number of patrons would purchase more soup if local soups were available. Finally, our data indicated that, on average, people eat soup between 2 to 3 times a week (Figure 2).

From this data we were able to make an educated decision on the soup recipes for our taste trial. As previously mentioned, our choices of soup recipes for this project were largely based on the availability of vegetables and herbs from local suppliers during the fall and winter

months (September to March), in addition to the preferences of Place Vanier diners for different types of soups, obtained from the first survey. Previous research has shown that obtaining local meats is not currently feasible, mostly due to the lack of processing facilities in B.C. (Group 6, 2005). Availability of local ingredients narrowed our choice to recipes based on ingredients such as squash, potato, leek, beet, carrot, onion, and mushrooms. It was also decided that the soups we chose should be similar to soups that are currently available at Place Vanier, so that a comparison study for customer preference of local versus non-local soups could be conducted. Since the first survey showed that there was a fair amount of demand for fresh puree soups, and we deemed these types of soups to be easiest to prepare, a butternut squash and a potato-leek soup were chosen for the project.

The day of the taste trial, four soups were set out in the Vanier dining room: a local and a non-local potato-leek soup, as well as a local and a non-local butternut squash soup. Customers chose and purchased soups at their own will with the aid of informative posters placed above the soups (Appendix C). One of our group members disguised themselves as an undercover shopper and took a tally of which soups were being selected. This was done instead of our group asking customers to taste both soups and then choose which one they prefer or would buy. We felt such an approach might place moral pressure to support the local community on the consumer when directly interacting with the surveyor during their decision-making. By leaving customers to make their own decision, the actual support or preference for local soups at Place Vanier is better



represented. Upon purchasing any of the soups, customers were asked (with permission) a series of questions about the rationale behind their choice (Appendix D). Figure 3 demonstrates the frequencies of purchase of the four soups. Some customers were unsure of which soup they purchased, we therefore added a column for this response. Out of those who picked local soups, the majority responded that it was because the soup was local (Figure 4). Our results also

Figure 3. Types and frequency of soups purchased

Figure 4. Rationale for soup choice by Vanier customers.

they would pay more, it appears as though a threshold of about \$0.50 more would be acceptable (Figure 5).

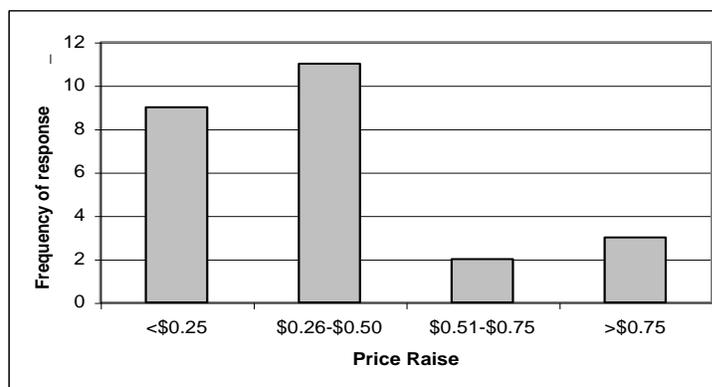


Figure 5. price for local soups, as reported by Vanier customers.

Acceptable increase in

It should be noted that upon further discussion with Ayrin, increasing prices for local soups may not be operationally feasible. Cashiers would either have to memorize the appearance of the local soups (which may pose difficulty), or they would have to rely on customers telling them it is a local soup (which is not reliable since many people may not remember or may not tell the truth to save money). This is something to take into consideration when sourcing local ingredients since increased supply prices are often difficult to carry over to the customer.

2.43 Supplying Local Ingredients

The first local supplier that our group contacted was Mary Forstbauer of Forstbauer Natural Farms. Situated in Chilliwack, Forstbauer Farms grows kale, chard, potatoes, and squash throughout the winter season (M. Forstbauer, p.c., March 16, 2007). Mary felt that it would not be a problem to meet the large-scale operation demands of Place Vanier for a specific menu item such as soup. She apparently has “six tonnes of big sweet meat squash” stored in her garage currently which she could not sell this year through retail, even though according to her, it is the best squash for soup-making (M. Forstbauer, p.c., March 16, 2007). In addition, she is willing to plant her crops according to her customer’s volume needs. In terms of pricing, Forstbauer Natural Farms is more expensive than produce currently shipped to Vanier due to its organic certification. However, Mary explained that if a consistent, long-term (about eight months) contract were drawn up between herself and Place Vanier, she would be willing to reduce her prices. Her only concern with a future contract with Place Vanier is transporting the produce in a timely enough fashion to retain freshness.

Another significant attribute of Mary Forstbauer is her enthusiastic attitude and motivation; she is very excited about potentially being involved in an eat-local campaign within the university. She provided contact information for a variety of other local producers and distributors who might be also be interested in promoting local food at Place Vanier [Appendix E]. She even suggested that her son, a UBC student, could help transport produce from Chilliwack to Place Vanier on a bi-weekly basis (M. Forstbauer, p.c., March 16, 2007). Therefore, her participation in this project might not only provide local food ingredients,

but could also facilitate the expansion of a local supplier and distribution network for Place Vanier's menu.

Our group also discussed the possibility of incorporating local herbs in the menu items of Place Vanier. This was based on a suggestion from Ayrin Ferguson, which was to focus on a single ingredient. Inclusive of all their meals, Place Vanier requires 18 bunches of parsley, 8 bunches of cilantro, and 1 pound of basil per week. We interviewed Boni Townsend of Lowland Herb Farms, retrieving this supplier's contact information from Your Local Farmers Market Society (2007). Given that this farm is also located in Chilliwack, and able to provide many different fresh herbs throughout the year, we thought that it might be an ideal supplier to pair up with Forstbauer Natural Farms. Perhaps the two suppliers could coordinate produce transport to UBC, thereby reducing transportation costs for each farm, and hence price for Place Vanier. Boni also stated that she prefers not to dry the herbs; securing frequent and fast delivery would be valuable to this effect (B. Townsend, p.c., March 22, 2006). Lowland Herb Farms cannot match these volume needs, nor do they produce basil over the winter, however the farm could supply enough rosemary required for the local Potato Leek soup recipe (B. Townsend, p.c., March 22, 2006). Finally, Boni is willing to supply to Vanier Food Services, especially since she is growing due to success at the Winter Farmers' Markets (B. Townsend, p.c., March 22, 2006).

At the recommendation of Mary Forstbauer, our group also contacted Jaclyn Laic of the Eat BC! Campaign. Eat BC!, developed by Jaclyn of the BC Restaurant and Foodservice Association, is a two-week long campaign in September (J. Laic, p.c., March 17, 2007). Funded by the Ministry of Agriculture and Lands, the goal of EatBC! is to increase awareness about BC foods around the province by educating both chefs and diners about available BC foods (J. Laic, p.c., March 17, 2007). In its inaugural year, 2006, it was a very successful project which will be

repeated this year and is planned to continue in subsequent years (J. Laic, p.c., March 17, 2007). Over 50 participating restaurants in 2006 developed an “Eat BC! Signature dish”, of either an appetizer, main course, and/or dessert, which was then promoted by participating media groups (J. Laic, p.c., March 17, 2007). Other participants included two distributors already used by UBC Food Services: Sysco and Neptune (J. Laic, p.c., March 17, 2007; A. Parr, p.c., March 7, 2007). Neptune developed extra labels for local goods supplied during the 2006 Eat BC! campaign, and Sysco developed a basket that could be ordered which contained only BC goods as defined by Eat BC! (J. Laic, p.c., March 17, 2007). The campaign included an online contest for diners to enter, with the grand prize being “2 for 1” coupons to the participating restaurants across BC (J. Laic, p.c., March 17, 2007).

Provided that UBC Food Services is currently not on the list of participants of EatBC!, Jaclyn would like to see UBC involved in upcoming seasons (J. Laic, p.c., March 17, 2007). From this information, our group felt it was not only appropriate for UBC Food Services to register for this year’s campaign, but it is also very feasible seeing as the interest from EatBC! to involve UBC is already in place. The EatBC! campaign runs September 16-30 and this is when everyone is settling back in to school, and therefore may be a prime time to promote Vanier as a “destination eatery” on campus by developing and promoting an Eat BC! Signature dish. This could be a way to help raise awareness that Vanier is open to the public, as per Place Vanier’s goal of creating a dining room that caters to the larger UBC community. The signature dish offered could be our Butternut Squash soup (determined as more popular than Potato Leek by our Soup Taste Test) or another of Vanier’s choice. Suppliers would ideally be local providers such as Lowland Herb Farms and Mary Forstbauer, but could be the regular UBC Food Service distributors that were involved with the EatBC! campaign last year such as Sysco (Appendix F).

3. Discussion

The results of the first survey indicated a high support (nearly 90% of surveyed students) of local foods and specifically local soups within Place Vanier Dining Room. The soup taste test showed that the local soups offered were significantly more popular than the Vanier equivalents, with the local butternut squash being the most popular. In addition, many customers who purchased the local soups seemed to have noticed a taste difference immediately; a specific customer was overheard saying, “I would pay more simply for the taste alone”. Overall the taste test taken at Place Vanier suggested that not only a substantial number of students would prefer local soups for ethical reasons but also for flavour.

The survey, taste test, as well as our interactions with the residence students suggested that customers of Place Vanier have varying degrees of awareness towards eating locally. The results from both the survey and taste test indicated that the majority of those surveyed have some level of concern towards local sustainability. The taste test results showed that one of the main reasons people chose local soups was to in fact to support local food. A specific group of customers who took part in the survey were even taking actions of their own, participating in a “100 mile diet” dinner based on the writings of James & Smith (2005-2006). On the other hand, some individuals seemed unsupportive of local foods, which may be due to a lack of education on this topic. Several of the unconcerned consumers who were surveyed believed that local foods produced on small farms would be cheaper than products from the industrial food system.

Overall, our group felt that local ingredient supply for soup at Place Vanier is available. It seems feasible to supply local ingredients for soups if they are to be served only once a week

or during a particular season, due to the smaller amounts of produce available from small-scale local suppliers compared to distributors like Sysco. Once established, local ingredients could slowly be introduced into the rest of the menu as demand increases. With an increase in demand, suppliers could be induced to provide higher quantities and thus solidify their relationship with Vanier. Currently, two of the local suppliers we talked to have indicated their willingness to change or increase current production if purchase of that produce was guaranteed. As the growing season is beginning, now is the ideal time to discuss the role of small-scale local suppliers in providing Vanier with certain foods throughout the 2007/2008 school year. Even if growing the quantities of some items are out of reach for the small-scale growers we contacted, the amount required by Vanier could be supplemented with orders through their regular distributors. This would support the local small-scale growers whilst ensuring a dependable supply. The main barrier to providing local foods from small-scale growers is that Vanier currently obtains most of their produce prepared, which would not be available through the small-scale growers we talked to.

Our research showed two main concerns: that of transportation timing and the cost of extra preparation time incurred by a kitchen which usually receives pre-prepared and processed produce. Transportation is of concern in terms of maintaining produce freshness, but could be addressed through coordination of producers (for example, using herbs and squash suppliers from a single area like Chilliwack). In terms of processing, according to Ayrin Ferguson, the retail price of local soup would be significantly higher than the currently provided non-local soup due to increased washing, peeling and cutting time. He estimated the cost increase to be \$3 per bowl, which is well over the \$0.50 that most students said that they would be willing to pay.

To overcome this issue, we need to find a local grower that could provide prepared vegetables. Alternatively, a volunteer system could be developed with Vanier Residence students to prepare these foods in exchange for discounted meals, for example. Other people could be encouraged to volunteer in the food system, as volunteer experience is beneficial when applying for future endeavors such as work or graduate studies. In addition to simply gaining experience, awareness would be increased amongst participating students. This may not be feasible due to Union regulations for food service employees, according to Janet Ferraro (p.c. March 30, 2007), a Human Resources Associate at UBC.

In addition to our findings, our group also discussed the idea that increasing the awareness of local foods could start by incorporating education in the Personal Wellness Program that is provided to Vanier residents (UBCFS, 2007b). Monthly presentations by the Residence Dietitian can include the nutritional benefits of eating locally to educate those who are otherwise uninformed on the current issue. These presentations should focus on teaching people that healthy foods come from sustainable food systems, while revealing the hidden costs and damages caused by the industrial food systems. For individuals who are further interested in educating themselves and taking actions towards sustainability, pamphlets and individual counselling should be provided.

4. Recommendations

Although there are many difficulties in further developing local food chains through which Place Vanier Dining Room can operate, our group has some short-term as well as long-term recommendations that we feel could be implemented in subsequent years.

Our research suggests that there is a demand for local foods at Vanier Residence. We feel that a growth in this demand is essential for the development of a local food system at Vanier. .

In our soup taste test, soups advertised as being local sold more than the regular varieties, with the “local” aspect being cited as the most dominant reason for this demand. Therefore, a short-term recommendation is to increase the advertisement of local foods and dishes within the dining room at Place Vanier. This would in turn result in increased awareness as well as demand among Place Vanier’s customers. In addition, an awareness campaign could be a productive way of developing this demand. Such a campaign could include local food dinner events, pamphlets, and web-resources on the Place Vanier internet site.

To further improve the research our group did into the demand for local food at Place Vanier, next year’s groups might re-work the soup taste test to include factors such as price and nutrition. Local soup could be coupled with increased prices, or alternatively produced and advertised as ‘healthy’ to investigate whether consumer demand would change in conjunction with these factors [see Appendix G].

From our research, there is reason to believe that an increase in demand for local foods from consumers and hence purchasers, can influence large food distributors. Despite having its corporate headquarters in Houston, Texas, Sysco (of which Allied Foods is a subsidiary) invested in the Eat BC! campaign in 2006. Vanier conducts a large amount of business with Allied Foods, and in doing so, is in a position to further influence the sourcing of the produce provided by Allied Foods. Since comparatively large amounts of labour were needed to prepare the soup for our project, sourcing local pre-prepped ingredients through Allied Foods might increase the willingness of Vanier Food Services to incorporate local items into the menu.

Ideally, a long-term recommendation of the UBCFSP would be the organization a local network of suppliers (such as Forstbauer Natural Farms) for Place Vanier. However our group feels that in order for a local food chain to genuinely succeed at Place Vanier, it needs to

incorporate more local processing and distribution. Despite interest amongst local producers to market produce directly to Place Vanier, the scale of Place Vanier's operations generally limits its ability to utilize unprocessed foods. From our interview with Ayrin Ferguson, we discovered that Allied Foods is the only processing and distribution company in Vancouver that can serve the needs of Vanier residence. While this is a local facility, located in Vancouver's downtown area, it is owned by Sysco, and as such, is still indeed a part of the global food chain. Local producers are able to market their produce to Allied Foods, however, despite Sysco's involvement in the Eat BC! Campaign, they are still competing with other non-local producers. Finally, further development of local food systems could be greatly enhanced through collaboration with such non-profit agencies as Local Flavour Plus (University of Toronto (2007)), which attempts to connect local producers and processors with local institutions.

On-campus residence dining may provide a vector for local food awareness campaigns and incorporation of local ingredients into university food systems. For example, the University of Victoria organizes a "Local Food Dinner" in their cafeteria as part of a campus sustainability initiative (Verkerk, 2007). Last fall, graduate students of the University of California Davis put together a local food week, using the cafeteria to promote food system awareness (Criddle, 2006). Also, campus food services at the University of Toronto recently formed a partnership with Local Flavour Plus, which certifies local farmers and processors and links them with purchasers (University of Toronto, 2007). Residence dining halls appear optimal for local food awareness endeavours due to their predictable and captive-market client base - students.

Although there is still much work ahead to be done, our short-term and long-term recommendations for future Agricultural Science 450 students can serve as small steps toward achieving sustainability at Place Vanier Dining Room on UBC campus.

5. Conclusion

Our group has determined that demand for local foods currently exists, and that diners at Place Vanier Dining Room are willing to pay up to \$0.50 extra for dishes made from local foods. The biggest obstacle to filling this demand is the limitations of obtaining local foods from current Vanier food distributors, as they operate on a global level to source foods. There is enthusiasm from both the management and customers at Place Vanier and local suppliers to develop a food-supply relationship, however this may not be feasible at present due to the large quantities of pre-processed produce required by Vanier. Also, many students interviewed during our research were not aware of the implications of buying local. Therefore a more short-term goal for the UBCFSP might be an awareness campaign at Place Vanier, possibly through the Eat BC! Program, to further establish demand for local food inclusion into the Vanier menu. With support from consumers to increase local foods at Vanier, UBC Food Services may be in a better position to subsequently pressure their suppliers to provide more local foods.

References

- Charalambous A.K., Gillespie T., Lai A., Ng I., Shinozaki D., Wasswa-Kintu S. & Wierzbicki J. (2006). *To Grow, to Cook, to Eat in (U)BC*. Group 23. Retrieved April 7, 2007, from <http://www.elearning.ubc.ca>
- Criddle, G. (2006, October 19) Student interest led to creation of this week's events. *The California Aggie*. Retrieved April 7, 2007, from <http://media.www.californiaaggie.com/media/storage/paper981/news/2006/10/19/CampusNews/Local.Food.Week.Event.going.Local.At.Ucd.Sheds.Light.On.Campus.Food.System-2377014.shtml?norewrite200611281347&sourcedomain=www.californiaaggie.com>
- Cortese A.D. & McDonough W. (2001). Education for Sustainability: Accelerating the Transition to Sustainability through Higher Education. Environmental Grantmakers Association News & Updates. Retrieved April 7, 2007, from <http://www.secondnature.org/pdf/snwritings/articles/AccTheTrans.pdf>
- Group 6 (2005). Retrieved April 7, 2007, from <http://www.elearning.ubc.ca>
- Lang, T. & Heaseman, M. (2004). *Food Wars: The Global Battle for Mouths, Minds and Markets*. London, England: Earthscan.
- M'Gonigle, M., & Starke, J. (2006). *Planet U Sustaining the World, Reinventing the University*. New Society Publishers, Gabriola Island, Canada.
- MacKinnon, J.B. & Smith, A. (2005-2006). 100 Mile Diet Series. The Tye. Retrieved April 7, 2007, from <http://thetye.ca/Series/2005/06/28/100Mile/>
- McGowan, L. & Ferguson A. (2006). *Residence Dining: Have you tried it yet?* Retrieved April 7, 2007, from <http://www.food.ubc.ca/pdf/newsletters/Spice-Aug06.pdf>
- Pollan, M. 2006. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin Press.
- Aikins, L., Kwong, S., Park, S., Wong, I. & Wong, P. 2004. *Homegrown: Marketing Local Foods at UBC*. Sauder School of Business Group. Retrieved April 9, 2007, from <http://www.elearning.ubc.ca>
- Stringer E.T. (1999). *Action Research*. London, England: Sage Publications

University of British Columbia Botanical Garden and Centre for Plant Research (2007). UBC Apple Festival. Retrieved April 7, 2007, from <http://www.ubcbotanicalgarden.org/events/applefest.php>

University of British Columbia Food Services Department, The [UBCFCS] (2007a). *About UBC Food Services*. Retrieved April 7, 2007, from <http://www.food.ubc.ca/about/index.html>

UBCFCS (2007b). *Place Vanier*. Residence Dining. Retrieved April 7, 2007, from <http://www.food.ubc.ca/residencedining/vanier.html>

University of Toronto (2007). University of Toronto News @ U of T. Retrieved April 5, 2007 from: <http://www.news.utoronto.ca/bin6/060919-2573.asp>

Verkerk, M. (2007). Programs in Residence. Retrieved April 7, 2007, from the University of Victoria's Housing website <http://housing.uvic.ca/winter/programs.php>

Wan, A., Joshi, G., Sawicz, B., Montgomery, A., Chan, J., Fynn, M. & Soto, M. (2006). *The Apple Shouldn't Fall Far From the Tree: Extending Local Food Purchasing*. Group 19. Retrieved April 7, 2007, from <http://www.elearning.ubc.ca>

Your Local Farmers Market Society (2007). The Winter Farmers Market. Retrieved April 7, 2007, from <http://www.eatlocal.org/wfm.htm>

7. Appendices

Appendix A: Major Suppliers of Place Vanier Food Services and Their Respective Products (provided by A. Ferguson, p.c., March 7, 2007)

Supplier	Product
Allied	Produce (fruits, vegetables)
Neptune	Frozen products
Saputo	Dairy products
Centennial	Meat products
Cisco	Processed products
Yick Sun	Ethnic products (i.e. Chinese food ingredients)

Appendix B: Preliminary Soup Survey

SURVEY: RATE YOUR SOUP!

1) Which of the following types of soups do you find MOST appetizing and would buy from the "caf":

- a) Meat and Noodle soups (broth base)
- b) Fresh puree soups (e.g. squash or potato & leek)
- c) "Vegetable medly" soups (broth base)
- d) Cream soups (cream of tomato or broccoli)

2) Are you interested in supporting your local food suppliers (e.g. bc grown foods)

YES or NO

2b) If yes, what is your main reason for wanting to do so?

- a) environmental benefits
- b) support local economy
- c) support growth of the community & relationships to producers
- d) other _____

3) How often do you purchase soup from the caf?

- a) 0-1 time a month
- b) 2-3 times a month

c) 4-8 times a month

d) more than 8 times a month

4) If homemade soups or soups made with local ingredients were available, would you purchase soup more often?

YES or NO

Thank you for your time!

Appendix C: Response Sheet for Second Survey.

1) Which soup did you pick?

Local Potato-Leek	Regular Potato-Leek	Local Butternut Squash	Regular Butternut Squash	Don't know

2) Why did you choose it?

Looked good	Local	Had it before	Other

3) Given that local ingredients are more difficult to purchase in the winter months, would you be willing to pay more for soup made from local ingredients?

Yes	No

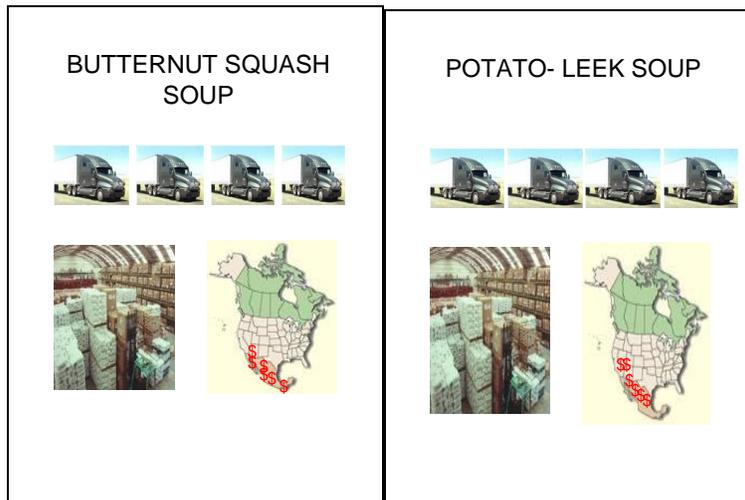
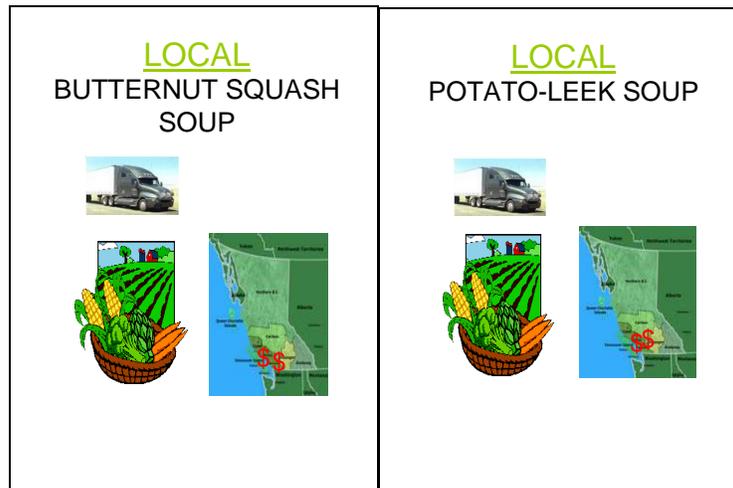
4) If yes, how much more?

≤\$0.25	\$0.26 - \$0.50	\$0.51 - \$0.75	≥\$0.75	Other

5) How often do you eat soup?

3-4 times/week	1-2 times/week	1-2 times/month	Less than once/month	Other

Appendix D. Soup Posters



Appendix E. Contacts Provided by Mary Forstbauer of Forstbauer Natural Farms

Contact	Provision	
Anna-Marie Forstbauer	Lunch-box size organic Okanagan apples	
Kim Frederickson	Vancouver organic produce	

	distributor [Biova]	
Jaclyn Lac	EatBC Program	
	Pro-organics	

Appendix F. Local BC produce supplied by Sysco in last year’s EatBC! Campaign.

- Diced carrots
- Vegetable soup stock
- Diced onion
- Fresh rosemary
- Minced garlic
- Peeled (but not diced) potatoes
- No butternut squash, apples or leeks.

Appendix G. Possible Improvements to Soup Taste Test Methodology

- Incorporate a raised price for the local ingredients; record purchasing frequencies as compared to non-local, ‘normal’-priced soup
- Add nutrition information to the signs, to see if this has impact on purchasing decisions
- Group similar flavours of local/non-local soups [i.e. have non-local butternut squash soup next to local butternut squash soup to make a clear distinction to consumers that there are two of the same soup-type for sale that day, differing only by local/non-local ingredients]
- Incorporate questions on taste differences between local and non-local [does this influence purchasing decisions?]
- Perform over multiple days [factors such as the weather may affect the day’s soup demand]
- Ask people who buy soup to complete the questionnaire immediately after they exit the purchase line, to avoid ‘losing’ subjects as they leave the dining area
- Prepare and test other types of soups [i.e. one thin and one creamy soup]

Appendix H. Soup recipes

Butternut Squash Soup

of servings: 12

INGREDIENTS

- 2 tablespoons butter
- 1 small onion, chopped
- 1 stalk celery, chopped
- 1 medium carrot, chopped
- 2 medium potatoes, cubed
- ½ apple, chopped
- 1 medium butternut squash - peeled, seeded, and cubed
- 4 cups vegetable stock

salt and freshly ground black pepper to taste

DIRECTIONS

1. Melt the butter in a large pot,
2. Add the onion, celery, carrot, potatoes, apple and squash and cook 5 minutes, or until lightly browned.
3. Pour in enough of the chicken stock to cover vegetables. Bring to a boil. Reduce heat to low, cover pot, and simmer 40 minutes, or until all vegetables are tender.
4. Transfer the soup to a blender, and blend until smooth.
5. Return to pot, and mix in any remaining stock to attain desired consistency. Season with salt and pepper.

Potato-Leek Soup

of servings: 10

INGREDIENTS

- 1 tablespoon extra-virgin olive oil
- 2 leeks, washed and sliced into 1/4-inch slices
- 2 cups chopped yellow onion
- 1/2 teaspoon salt
- 3 cloves garlic, minced
- 1 pound Yukon Gold potatoes, cut into 1/2-inch cubes
- 4 cups vegetable stock
- 2-3 teaspoons fresh rosemary leaves

DIRECTIONS

1. Heat a 4-quart soup pot over medium heat and add the oil.
2. Add the leeks, onion, and salt and saute for about 5 minutes, stirring often, until the onion begins to turn translucent.
3. Add the garlic and stir well. Cook for 1 minute more.
4. Add the potatoes and vegetable stock, cover, and bring to a boil. Reduce heat to simmer. Cook 20 minutes.
5. Remove the soup from the heat and use an immersion/stick blender to blend the soup in the pot or ladle the soup into a blender, 1 cup at a time. Blend the soup with the fresh rosemary leaves until smooth and free of chunks.
6. Transfer the blended soup back to the original soup pot and warm over low heat until heated through. Serve hot.

