INVESTIGATING STUDENT-RUN CO-OPERATIVES IN NORTH AMERICA

DALHOUSIE FOOD CO-OP INITIATIVE ENVS 3502 Project Report

Jonathan Briggins¹ Emily Eck² Spencer Fowlie³ Takuya Ozawa⁴ Ariel Richards⁵ Marc Thorup⁶

Environmental Programmes and International Development Studies

² Environmental Programmes and Department of Economics

³ Environmental Programmes and International Development Studies

⁴ Environmental Programmes

⁵ Environmental Programmes

⁶ Environmental Programmes and Department of Commerce

EXECUTIVE SUMMARY

The goal of the Dalhousie Student Food Co-op Initiative is to establish a student-run food cooperative on Dalhousie's Studley Campus. Currently, all food choices on Studley Campus are managed by corporate food service providers, and this system leaves little room for direct student involvement. A student food cooperative could be an ideal way to encourage participation while supplying students and the Dalhousie community with healthy, affordable, and sustainable food options.

In order to establish the most appropriate model for a food co-op, we surveyed existing student co-ops across North America. Our questionnaires determined their co-op structure, funding, expenses, membership, and insights into founding a student co-op. To obtain information regarding specific variables particular to Halifax and the Dalhousie community, we interviewed experts in the fields of food regulations, business management, finance, and campus systems.

From our questionnaires, we found that university co-ops were particularly successful when they established strong working relationships with the university administration and their campus food service provider. We also found that many of these co-ops are funded by student fee levies. Co-ops recommended that a new co-op focus on maintaining a strong base of active, volunteer members and incorporate the skills of students from a wide range of backgrounds and departments.

From the interviews we found that the Student Union Building (SUB) is not the most practical location for a student co-op; however, there are other possible locations available. Other obstacles to consider are Health Canada's food regulations and liability insurance policies. In addition, we found that to gain the support of the student union, we will first need conclusive backing from the student body and to create a definitive budget analysis.

The next tasks for the Dalhousie Food Co-op Initiative are therefore to become a ratified society under the Dalhousie Student Union (DSU) and apply for society funding. We will then be able to more effectively work in partnership with the DSU, facilities management, food service providers and students to achieve our goal.

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1 INTRODUCTION

1.1 STATEMENT OF THE PROBLEM

Our current, conventional food production and distribution systems are major contributors to the green house gas effect and could likely, in the very near future, affect our ability to produce food, as weather is one of the most important variables in agriculture. The food distribution system at Dalhousie is established and run by multinational corporations, and although these companies are attempting to meet student demands for locally and organically sourced food, students still have no direct influence on or involvement in the food operations on campus.

1.2 BACKGROUND INFORMATION

Many of the foods that are easily accessible at our supermarkets and restaurants are traveling an average of 2400 km by truck or plane to reach us. This is a serious environmental issue because all this transportation requires cheap fuel and creates major emissions. Conventional food systems involve enormous consumptions of energy and resources throughout the processes of production, storage, packaging and the general business operations. Many people are unaware of the significance that is placed on their choices in the kinds of foods that they choose to consume and the overall negative impact that their common choices have on the environment.

1.2.1 Food Security

Eating organic food from local sources significantly decreases our carbon footprint by diminishing the role of industrial agriculture and reducing food miles. Food security is increased when sources are local as a community focus increases the ability of that community to meet its own needs by protecting farms, local jobs and local shops. Buying locally grown food supports local farmers and our local economy, ensuring social stability.

1.2.2 Sustainability

Our proposed student-run food co-op has great potential to make Dalhousie campus more sustainable. One aspect of a co-op's effects on the Dalhousie University community would be increasing the awareness of sustainable food practices on campus. Food is something that involves everyone in his or her everyday lives, and so choice of food can have a significant impact on the environment.

1.2.3 The importance of local and organic food

It is important that the proposed food co-op use predominantly local and organic food. The environmental costs of non-local food include the release of carbon emissions into the atmosphere, depletion of wildlife habitat, loss of genetic diversity and soil, air and groundwater pollution (Richer, 2004, p.7). Social costs include the separation of residents from their local community, distancing of consumers from producers, and increasing dependence on foreign markets (Berry, 1996, p.416). There is a growing trend in North America towards supporting locally produced food. This is evident in the recent popularity of farmers' markets, in which people have direct market and personal relationships with farmers. In the United States alone, the number of farmers' markets has increased 6.8% from 2006 to 2008 to a total of 4,685 markets (USDA, 2008,n.p.).

Buying local foods supports local economies and reduces the distances foods travel, thereby reducing greenhouse gas emissions from transportation (Clugston & Calder, 2007, p.214).

Organic foods are produced without the use of inorganic fertilizers and synthetic chemicals (Hole et al., 2004, p.114). The Green Revolution, with its increase in fertilizer use and irrigation methods, brought a substantial increase in crop yields. However, the intensive farming practices have and will continue to damage soil and the surrounding ecosystems significantly. Organic farming preserves the health and stability of the soil and biodiversity in the long term (Clugston & Calder, p.212). Therefore, our food co-op will support local and organic farmers as much as possible to make Dalhousie University campus more sustainable.

Co-ops often employ a democratic grass roots structure in which the power is held directly by the members so that the organization may be as free as possible from hierarchy, instead involving a large number of people lightly, emphasizing horizontal connections. Food co-ops are a way of providing high quality foods at a low cost and in large quantities by eliminating markups and middlemen. Members of such organizations better understand the journey from field to plate, heightening their awareness of the connection between agriculture, productivity and environmental conservation. In operating as a flat structure, members involved in the organization are able to learn how to make their own food and inform their peers about the importance of using available local foods.

Consumers of fresh, local food are aware of the origin and source of their nourishment, and therefore feel less concerned that the meat and produce they are buying may be carrying poisons, chemicals, bacteria and diseases. They also feel a sense of pride and satisfaction in knowing that the food they are eating is contributing to a healthier world.

1.2.4 A Note on Meat

Most of the existing North American university food co-ops only provide vegan or vegetarian meals. The Dalhousie food co-op intends to include meat options as well as vegetarian dishes because both are important to our objective of providing sustainable food choices. There are not currently any sustainably produced meat sources available on-campus. Neither Aramark nor Sodexo are able to supply local meat products to students. For insurance reasons, all meat they provide must be nationally inspected. Most local farmers cannot afford this type of expense – instead their meat is provincially inspected – so all of Dalhousie's meat products comes from the large-scale industrial meat packers.

In the U.S. alone, approximately 9 billion livestock animals are consumed every year to meet the demand for animal protein products, which include dairy as well as meat (Pimental, 2003, p.661). The population of livestock in the U.S. is, in fact, 5 times higher, and consumes 7 times more grain, than the human population (ibid.). According to Sierra Club, a staggering 1.2 trillion kilograms of animal waste pollute 56,000 kilometers of rivers throughout the U.S. and has polluted the groundwater in 17 States (Sierra Club, 2007, n.p.).

A co-op, however, would be able to provide provincially inspected meat similar to restaurant standards. By providing and promoting local, small-scale meat production on campus, a student food co-op would provide both environmentally responsible meal choices and help to educate the university community regarding the environmental impact of the industrial meat production industry.

1.2.5 Current campus systems

Aramark is the main food service provider on the Dalhousie Campuses. This company was ranked number one in Fortune magazine's 2009 list of "World's Most Admired Companies," in its industry has approximately 260,000 employees serving clients in 22 countries. Aramark

claims that it is an advocate for environmental stewardship and states that they do all that is possible as a global corporate to reduce its environmental footprint. On the Studley campus, Aramark exclusively handles all food services in student residences and academic buildings with the exception of the Student Union Building (SUB).

Sodexo Inc. is the leading provider of integrated food and facilities management services in North America serving 10 million customers in 6,000 locations every day. This company claims to promote local, organic, and healthy ingredients grown through sustainable practices to keep our customers and our environment healthy and happy. Sodexo manages the franchises and food services in the SUB.

Due to the immense size of these companies and confidentiality clauses that they invoke, it is very difficult to gain any quantitative statistics as to what they are actually doing to change their mainstream practices and enhance sustainability. It is also quite an arduous task to trace a path from the production point of their foods to the franchise purchasing point of a product, or to know what chemical fertilizers, pesticides, or ethical practices were involved in the products journey. The exclusivity contract with Sodexo limits the sale of food by independent organizations. As an umbrella organization, Sodexo rents spaces to food vendors. Largely these are international franchises including Starbucks and Tim Horton's. The specific terms of the contract are confidential and thereby unavailable for the purposes of this project. It is, however, public information that the contract is up for renewal in July of 2011.

Fresh is a locally sourced food business run by Terroir Catering in the basement of the Gradhouse on Studley campus. The lunch service provided included grilled paninis, soups and salads, and was open Monday to Thursday from 11-2 p.m. Unfortunately, after 2 years in business, an increase in rent by new management made it difficult for Fresh to continue service.

Tuppy Tuesdays is a student organization created under the auspices of SustainDal in fall of 2008 to promote use of reusable lunch containers. Every Tuesday morning, members of Tuppy Tuesday prepare soups and c hilis from locally and/or organically sourced donated by local businesses. This food is provided for free, or by donation to all tupperware-toting students on Studley campus.

1.3 OVERVIEW OF THE RESEARCH PROBLEM

Global food production will be required to continue expanding as the human population increases. Social and environmental responsibility is the way of the future and is essential for the sustainability of our resources and planet. The greening the campus movement allows Dalhousie to increase its sustainable practices and provide positive examples for the greater community. Reducing the food carbon footprint of our university by buying local and organic food more often will increase the sustainability of Studley campus and decrease the overall consumption of our earth's resources on a daily basis. There are a number of different obstacles that need to be overcome before a student run food co-op may be implemented on campus. This project intends to provide a background study of successful projects and information that is substantial enough to create a business plan that may be implemented for pilot next year.

2 OBJECTIVES

- To reduce the carbon footprint of Dalhousie University.
- To investigate the incentives, motivation, and obstacles involved in creating a food co-op on Studley campus.
- To determine the feasibility of implementing a student run food co-op on Studley campus as an alternative to conventional food options.
- To structure a business plan for a co-op suitable for Dalhousie that may be brought into reality in the near future.
- To ensure that the plan will successfully accommodate and involve a large proportion of students.

We as a group believe in the power of consumers to make important decisions about how our economy operates. We hope that by creating a sustainable food model and educating it's members on the importance of and paybacks in supporting the local organic food movement they in turn will make more environmentally friendly decisions in the buyer market. A model for a student run food co-operative appropriate to Dalhousie University's Studley campus will be compiled based on the methods successfully employed at other North American university co-ops and the knowledge of the limitations and amenities of the Dalhousie campus.

3 METHODS

3.1 PROJECT DESIGN

This study used a combination of exploratory, descriptive, and explanatory research. Exploratory research "aims to gain familiarity with or achieve new insights into a phenomenon, often in order to formulate a more precise research question or to develop a hypothesis" (Atchison & Palys, 2003, pp. 39). We used this type of research to gather information about the methods employed by student food co-ops that are already operating at a variety of universities across North America. Additionally, we used this type of research to gather information to gain situational knowledge regarding amenities provided and limitations imposed by existing campus systems at Dalhousie. We used descriptive research in order to ascertain the characteristics of student run food co-ops, and the processes involved in their operation. We conducted the exploratory and descriptive research through the use of questionnaires and interviews (pp.43). These questionnaires and interviews also generated relational data, and from this we attempted to establish useful correlations. From this data and correlations, we drew conclusions to establish an appropriate plan of action.

3.2 TARGETING THE SAMPLE POPULATION

Colleges and Universities in North America with established, student run food co-ops were the target population of the questionnaires. For the interviews, we targeted local individuals with experience relevant to establishing a business plan for a food co-op at Dalhousie University. We used non-probabilistic purposive sampling for both the questionnaires and interviews. The universities we surveyed where purposely chosen based on the existence of a food co-op program on campus. The individuals selected as candidates for interviews were purposely chosen as they were identified as persons who could provide us with the most information pertinent to creating a co-op model.

The non-probabilistic sampling allowed us to bypass neutral or uninterested parties and decrease irrelevant or non-successful data in our information gathering. Purposive sampling

allowed us to direct our questions more precisely towards necessary information for the creation of the business model (Palys & Atchison, 2008, pp.426).

We also used the snowball method in our sample. In the questionnaire, we included a request for any other sources of first-hand information in their social network. This allowed for our project to increase our sources of information.

3.3 RESEARCH TOOLS

Our research tools included literature review, interviews, and questionnaires. We conducted a literature review to gain more background information and familiarity with existing literature and research, as well as the theory behind, the establishment of student-run food co-ops supporting the use of local and organic food.

We emailed the questionnaires to contacts associated with food co-ops based on information we gathered from co-op websites and other internet sources and studies. The researchers were therefore not present when the questionnaires were administrated to the respondents; however, a personal introductory letter was tailored to each co-op recipient, explaining our interest in that co-op in particular, in consideration of the respondent's individual identity and in the hopes that a personal touch would increase response rate. A week after the questionnaire, we made follow-up phone calls to thank the participants, and clarify ambiguities in both the questionnaire and in their response.

We conducted the interviews with local experts in person, employing predominantly open-ended questions. This broadened the scope of the received responses, and while these were more difficult to analyse, the information ranged far beyond the proffered questions and so justified this more disorderly method of research.

3.4 SAMPLING PROCEDURE

We emailed the survey questionnaire (Appendix A) to relevant contacts at all Universities in North America with food co-operative programmes. These were Laval University, McGill University, Concordia University, Carleton University, Trent University, University of Toronto, McMaster University, Oberlin College, State University of New York (SUNY) Binghamton, Hampshire College, University of Massachusetts Amherst, University of Maryland, Warren Wilson College, University Minnesota Morris, University of British Colombia, Evergreen College, Portland State University, University of California Santa Cruz, and University of California San Diego. In order to obtain more results we made follow-up phone calls to the every school and gave them the option to answer the questionnaires over the phone if this was more convenient.

The questionnaire to co-ops requested information pertaining to length of operation, research prior to the development of the program, types of service, number of people served, staff, structure, expenditures, funding, and recommendations for similar programs.

The interviews attempted to ascertain limitations and considerations in establishing a campus co-op specific to Halifax and Dalhousie University (Appendix B). We purposively chose individuals who could provide information regarding, Dalhousie Student Union policy, Sodexo policy, Campus systems, Health Canada Regulations, local food local, and food business start-up. To this end we selected Matt Golding, Financial Vice President of the DSU; Cindy MacDonald, Sodexo student liaison, Charlene Lucas and Nicola Embleton-Lake, Dalhousie

Facilities Management, Planning Dept.; Steve Owen, Dalhousie Food Science; and Sean Gallagher, proprietor of Terroir/Local Source Catering.

3.5 RELIABILITY AND VALIDITY

Reliability is the ability of a study to be repeated with consistent results (Palys & Atchison, 2008, pp. 61). This means that if our project were to be repeated, the results would be expected to be the very similar. To ensure the greatest possible reliability, we clearly identified the universities to which we sent the questionnaires, and ensured through one of the questions in the questionnaire to what extent the respondents were genuinely involved in their co-op's function. Because the scope of our research is wide, descriptive and largely qualitative, should another group conduct exactly the same procedure, the responses inevitably would vary slightly; however, given the above precautions, we expect they would not vary significantly.

Validity is the ability of a research method to yield results pertinent to the study (Palys & Atchison, 2008, pp.62). Our questionnaire was carefully designed by our research team to ensure that the questions asked would yield direct and relevant responses. As well, the universities we contacted and the individuals we interviewed were chosen because they are specifically involved in food co-ops or individuals who would be helpful in starting a food co-op at Dalhousie, meaning that they were valid sources of information.

3.6 LIMITATIONS

One limitation to our project was time, as not all questionnaires sent out were completed in time for us to appropriately analyse the results. More time would perhaps have allowed for a more in depth analysis of the questionnaires and further interviews with relevant contacts in Halifax, especially those obtained by the snowballing procedure, allowing us to collect more information.

Another limitation was the distance between us as researchers and the universities to which we sent the questionnaire. As the schools were distributed across North America, we could not conduct in person interviews with the contacts from the co-ops. In-person interviews would perhaps have generated a greater wealth of data and a higher response rate, which would have been useful given the small sampling population.

3.7 **DELIMITATIONS**

There were two main delimitations regarding our project procedure. Firstly, our questionnaire was directed exclusively to student-run food co-ops. Community food co-ops face many analogous hurdles to those faced by student co-ops and their inclusion in our sample population could have expanded both our data set and our knowledge base. We did not pursue this option due to time limitations. Secondly, the length of the questionnaire limited the scope of responses, especially the quantitative responses. We could have created a more extensive questionnaire and emphasized the importance of providing specific cost/benefit quantities.

4 RESULTS

4.1 DATA FROM STUDENT SURVEYS

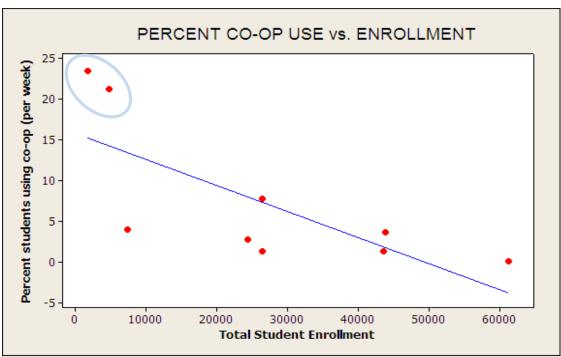


FIG 4.1.2: Co-op Use (percent student body per week) as a function of total enrolment

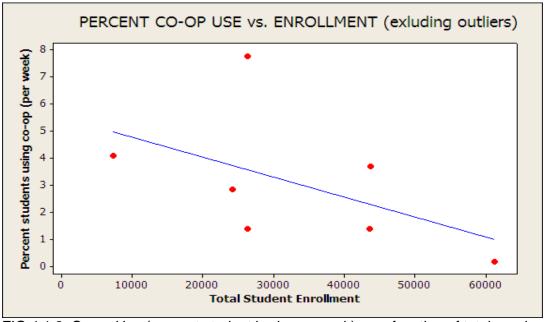


FIG 4.1.2: Co-op Use (percent student body per week) as a function of total enrolment excluding circled outliers

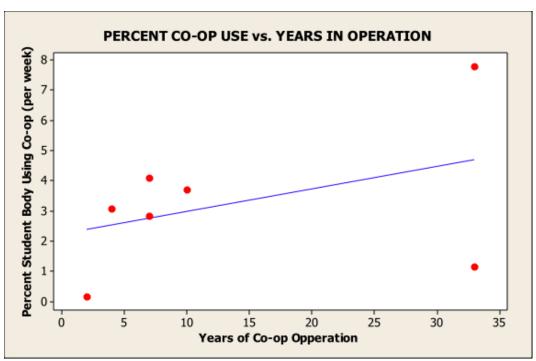


FIG 4.1.3: Co-op use by years in operation

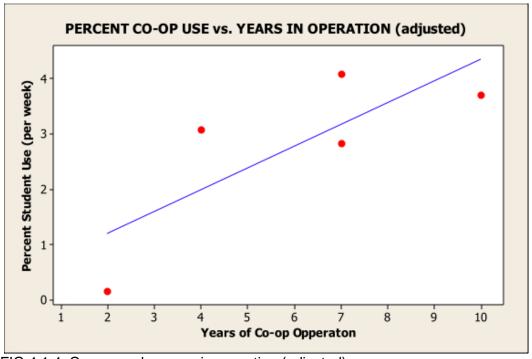


FIG 4.1.4: Co-op use by years in operation (adjusted)

Co-op type (#3)

Carleton: Community Kitchen, Vegan, Buffet **Concordia:** Soup Kitchen, Full meal service, Eat by

donation,

Evergreen: Sandwich/Deli, Full meal

Trent: Sandwich/deli

University of Toronto (U of T): Weekly lunch service

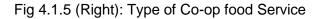
University of Massachusetts, Amherst (UMass): Vegetarian

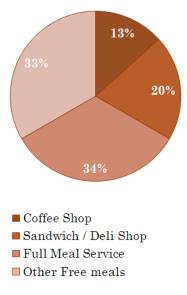
cafe

University of British Colombia (UBC): Coffee shop, free

lunch, bulk buying club, catering/education, soup

kitchen





Payment Type (#4)

Carleton: pay what you can, publicity promotion, volunteers **Concordia:** Student levy of .27 cents/credit (Levy is optional)

Evergreen: Cash

Trent: Cash, membership dues U of T: Cash (4\$), optional donation

UMass: Cash, discount when you bring your own plate,

discount on leftovers from day before

UBC: Cash for menu, donation for free lunch, grocery

Figure 4.1.6 (Right): Primary Type of Funding Received

Typical Menu (#6)

Carleton: Protein dish, Carb dish, Side dish, Dessert **Concordia:** All vegan, 4 course meal, grain, stew, salad,

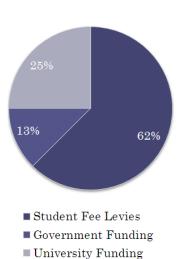
soup, i.e. Potato Carrot Soup, Quinoa, Garbanzo beans curry, and green salad.

Trent: 2 kinds of wraps, salad, 2 kinds of soup, baked

goods

U of T: Full meal (entree, 2 sides, dessert), tea UMass: Entrees, salads, soups, sandwiches

UBC: Soup, dessert, fair trade coffee, baked goods



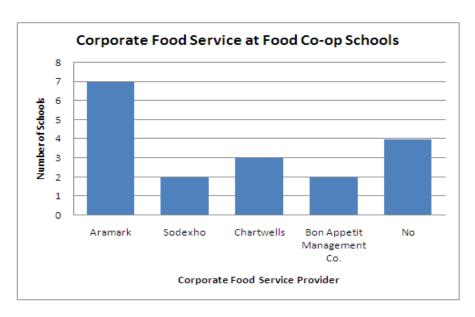


Fig 4.1.7: Campus-wide Food Service Providers

Basic Co-op Structure (#8)

Carleton: Non-hierarchical, collective, democratic vote, volunteer labour, donations, weekly

meetings, minutes (recorded)

Concordia: 10 paid collective members, 5 full time staff, non-hierarchical, collective, many

volunteers, board of directors, volunteer before become member

Evergreen: Shift workers and co-ordinators, Shift jobs (office, financial, vending, prep)

Co-ordinators make decisions (financial, communication)

Trent: Members, Volunteers, Manager, Co-ordinator, Board of directors, Community

outreach

U of T: Student group of volunteers, outreach co-ordinator for volunteers, treasurer

UMass: Coop in spirit, run by university business centre

UBC: Volunteer run (60 in total), executive board (President, Treasurer, Secretary,

Store, Co-ordinator, Kitchen co-ordinator, Project co-ordinators (workshops,

outreach, weekly meetings

The Responding Person's Role in the Co-op (#12, 13)

Carleton: Various, experienced (2 yrs, 7, mo.)

Concordia: Ensures campus food security, alternative to food monopoly on campus, space

for public to gather (10 yrs)

Evergreen: Adjunct coordinator-started eggplant in 2008 (1 yr) **Trent:** Cafe manager (5 years member, 1 year manager)

U of T: Outreach/volunteer coordinator (1 yr)

UMass: Director of centre for student business (6 yrs)

UBC: President (1.5 yrs)

General Advice and Recommendations for a New Co-op (#14)

Carleton: (by phone)

Concordia: Get a fee levy, recruit volunteers, talk to local soup kitchens, donations from

Evergreen: Levy, student support

Trent: Create a space agreement with Aramark/ Dalhousie admin so you can

circumvent monopoly, create links with local farmers, on campus farming

U of T: Start with a committed core of organizers and grow from there, new volunteers

can be hard to wrangle so try a few methods until something works, people

(admin, volunteers, customers, etc) appreciate consistency and flexibility, look for

administration support

UMass: Get support from student government, being under the Student Affairs allows for

a co-curricular mandate of learning

UBC: Volunteer run means a lot of emphasis on volunteers who contribute, this

community should be inclusive and broad, volunteers need a sense of belonging

to stay

4.2 RESULTS FROM INTERVIEWS⁷

4.2.1 **Health Canada regulations**

Steve Owen (Dalhousie Food Science Dept. – Food regulations):

- All food prepared on a regular basis for non-personal consumption is subject to Health Canada regulations and inspection.
- At all times, at least one person in the kitchen must have taken the Health Canada food safety training course
- As a student co-op, we would classify as a restaurant under Food Canada regulations
- Food preparation standards would likely not change depending on whether we gave away food by donation or accepted payment for it.

Charlene Lucas & Nicola Embleton-Lake (Dalhousie Facilities Management):

- A co-op would need to go through Health Canada's guidelines for retail and production.
- Regarding Tuppy Tuesday: reparation at the Dalhousie Women's Centre is fine for now because societies and group "raising awareness" fall under the category of impromptu food sales. But if we are looking at a permanent spot, food regulations are stricter. For instance, correct food temperature is critical for food safety
- However Health Canada's regulations may not may a significant difference in how the co-op prepares its food. (Must be confirmed)

Sean Gallagher (Terroir/Local Source Catering):

- Health regulations are a lot less stringent than previously believed. Health Canada is more lax than they their official policies imply. We would require a double-basin sink but little other specialized equipment to make our kitchen up to Health Canada standards.
- Regulations for cooking on site vs. pre made food that is cooked offsite. Onsite food is called prep.
- Adhere to proper food temperature regulations.

4.2.2 Vending Space for a Co-op

⁷No information gathered from Marla MacLeod (Ecology Action Centre-Food Miles Coordinator)

Sean Gallagher:

- Not all buildings are under the contract of a food service provider.
- A co-op could continue to use the space in the FASS building in which 'Tuppy Tuesdays' currently operates (would eliminate, hopefully, the rent issue).
- The new Gradhouse may be hoping to charge rent from its tenant
- Should find out how many days per week a co-op could legally operate out of the FASS building.

Cindy MacDonald:

There is limited vending space in the SUB

Charlene Lucas & Nicola Embleton-Lake:

- Space is incredibly tight on campus.
- Food Science building has a kitchen and taste testing labs, food storage spaces

4.2.3 Storage Space (Dry Storage and Cold Storage)

Sean Gallagher:

- DSU Food Bank group could provide dry and cold storage in basement of SUB.
- The new grad house, to be open in the fall term 2009, could provide space.
- Perhaps storage space could be found of the first floor of the FASS building, adjacent to where Tuppy Tuesdays now operates.

Charlene Lucas & Nicola Embleton-Lake:

- Food Science building has a kitchen and taste testing labs, food storage spaces.
- Aramark and Sodexo facilities have cold storage.

4.2.4 Kitchen Space

Sean Gallagher:

- Make sure there is a convenient dishwasher or else have customers wash their own dishes
- Fridges and grills and simple cooking equipment will cost about \$3000.

Cindy MacDonald (Sodexo Food Representative):

- Kitchen space in the SUB is unavailable.
- All food providers in the SUB are required to carry a substantial liability insurance policy to cover food poisoning and other food-related accidents. A student initiative would not be able to afford this.

Charlene Lucas & Nicola Embleton-Lake:

- Consider that if the co-op is off campus, likely it would have to pay rent for the space, which could add a substantial cost.
- There is a kitchen in Bayer's lake where people can assemble ingredients for family meals for a set price, take them home and cook them.
- There is a big kitchen on Gottigen St.
- The old Gradhouse is coming down this summer and relocating at 1252 LeMarchant St.
 They do not yet have a food vender lined up.
- New grad house will not have "commercial level" kitchen. They do, however, have fridges, and some type of kitchen.

- St. Andrews Church has a kitchen. They prepare beans and brown bread.
- If the co-op is done as a thesis project, may be able to get the Food Science Department to loan out their kitchen for thesis "research"
- The Chaplains at 1321 Edward St. would be a great place to have a soup day, especially in the summer. They have a spacious outdoor area with picnic tables, and huge indoor space and a homey, nice kitchen.
- Shalom Centre on Oxford would be another possible kitchen space
- Newman Centre (?) on Coburg rd. has a kitchen (that has passed Health Canada Regulation, and has double sinks etc.).
- Gerald Hall has a huge kitchen.

4.2.5 Funding

Sean Gallagher:

 May be able to obtain any of government grants, society grants and sustainability office grants.

Matt Golding (DSU VP Finance):

- Must create and submit a budget proposal and business plan for Union approval and funding.
- Capital expenditures (budgets for new projects) are approved by the university in mid May.
- At the moment, DSU is open to accepting project proposals in the \$8,000-10,000 range

4.2.6 Co-op Structure

Sean Gallagher:

- Make sure the mandate for the co-op and its future is clear: decide whether the co-op will be a small-scale operation with minimal overhead or whether it will generate revenue with a view toward expanding operations
- Possibility of taking over the business name "Fresh".
- Terrior's "Fresh" cafe served on average 30-50 people per day when located in the basement of the current Gradhouse.
- Expanding the influence and benefit of the co-op by incorporating students from different departments by allocating degree-specific tasks (marketing, accounting, design etc).
- Consider a partnership with NSCC Culinary Arts.
- Must ensure there is a core group to pass information on from year to year (consider part time staff).

Charlene Lucas & Nicola Embleton-Lake:

- Student group in Paris has a grocery type store on campus one day a week. They go by organic vegetables at costs from the farmers, and they sell as farmer's market style on campus at cheaper than the market price for student needs.
- First step? (doesn't have to think about Health Canada Regulation, etc.... also can get some capital budget)
- Can use some atrium, lobby of McCain or Studley hockey rink in the summer (no ice on floor).
- After the each sale, can donate excess foods to food bank?
- Become a student society → given some money to start off

Matt Golding:

- If co-op is located in SUB, paid part time staff must be students.
- Consider staffing problems 'vis a vis' when students are available vs. times we need them. Must have consistent staffing throughout the time when the co-op is open and student schedules may not be compatible with cooking times, serving times, etc.

4.2.7 Administrative (Sodexo/Aramark/DSU) Relations

Charlene Lucas & Nicola Embleton-Lake:

- Selling foods at cost to Sodexo and/or Aramark might be possible: we would sell foods at small mark-up to them.
- Could also buy food from Sodexo and/or Aramark to take advantage of wholesale bulk prices.
- Currently Aramark is trying to acquire as much of its produce, meat and dairy as possible from local sources.

Matt Golding:

- Sodexo is yet to make money/profit/revenue from SUB location for them it is a long-term investment and so are eager to renew their food provider contract when it is up for renewal in July 2011.
- For the Union to advocate on behalf of a student-run co-op, the initiative must conclusively show proof that there is a significant student demand for the initiative (i.e. petition/survey).
- To get approval for new services must go through Board of Operations, Sodexo, and Facilities Management.

4.2.8 Further Contacts

Sean Gallagher:

- Ezra Edelstein conducted a student space assessment
- Ed Leach (Faculty of Management Business Administration) located at the Norman Newman Centre for Entrepreneurship at Dalhousie and may be useful for further help in starting a co-op as a small business

Charlene Lucas & Nicola Embleton-Lake:

- Dalhousie Association of Graduate Students (DAGS) Executive committee can give more information on the new Gradhouse renovation plans
- Sherry Brown contact information on and access to spaces in the SUB
- Bonnie Newman (Student VP of students services) oversees housing, conferences, food services
- Charles Crosby (Communication and Marketing) may be able to help with corporate sponsorship.

Steve Owen:

- Halifax regional health inspector
- Provided internet links to Health Canada regulations

5 DISCUSSION

5.1 CO-OP SURVEYS

The results of the food co-op surveys cover a range of quantitative and qualitative data. In general, representatives from the food co-ops were extraordinarily enthusiastic and very generous with offers to help the Dalhousie initiative. The limited number of university co-ops in North America made our sample size very limited. Therefore, any school that did not respond to our questionnaire had a large impact on our sample size. Had there been more time available to wait for the completed surveys to come back, a higher response rate might have been possible. To increase the response rate, we followed up the email questionnaire with a phone call to the co-op. We found that follow-up phone calls were very effective and generated a more reliable general response rate and better survey completion.

5.1.1 Co-op use and university enrolment

Using the per week estimate of co-op patrons and the 2008 school enrolment from each of the universities polled, we were able to estimate the percent of the student body that attended the co-op each week. We plotted these values against the total enrolment and applied regression analysis to generate the regression trend (shown in Figure 1, Results section). The plotted data showed two outlying points, circled in Fig. 1, which were eliminated in Fig. 2 so as to obtain a clearer picture of the trend. The correlation r- values for trends 1 and 2 were 58.7% and 43.0% respectively. Not all co-ops that received the questionnaire responded with estimates for weekly use; therefore this data set represents a very limited sample size.

These findings indicate that there is a moderate correlation between the two variables, and that smaller schools have greater proportional co-op use than larger ones do. If total student enrolment has any causal link to co-op use, the downward trend shows that as school size increases, the percentage of the student body using the co-op does not increase proportionally, in fact, the probability that any given student will use the co-op increases the smaller the school. Dalhousie, with a population of 15,197 students (www.dal.ca/registrar, 2008), is situated on the smaller end of the size range. This result favours our objective for high student involvement in a Dalhousie co-op, and indicates that a co-op at Dalhousie would be able to benefit a relatively large portion of the student body.

5.1.2 Co-op use and years of operation

Again using the data of percent co-op use, we plotted this data set against the number of years that co-op had been in operation and discovered a positive trend (with an r-squared value .166). Two of the polled co-ops have been in operation 33 years, one with a very high percent use and one with a moderately low percent use. The location of these points has a strong influence on the trend line in Fig. 3, so in Fig. 4, we eliminated them to obtain a clearer indication of the true data trend. The adjusted trend line also indicated a moderately positive, tight correlation between percent use and years in operation (r-squared value .619).

The moderately positive correlation between use and years, if causal, indicates that the more years a co-op has been in operation, the more members of the university community attend it. This result makes logical sense. However, it is encouraging that the trend is only moderately positive, indicating that although the use may increase over time, new co-ops are not drastically less successful than more established ones.

5.1.3 Types of Co-op Funding

The survey results indicated that 13% of the co-ops polled received government funding; 25%, university funding; and 62% received funding by student fee levies. This suggests that student fee levies are widely used among co-ops and also shows that university administrations are willing to raise levies to fund student co-ops. One common clause in the co-op levy is an optional refund. If a student decides that s/he does not make sufficient use of the co-op to merit the small fee, s/he can opt-out of the payment. The fee levy is generally under \$3 and can be either per term or per credit.

The questionnaire included a funding category for grants from private sources. No school marked this category as a source of funding.

5.1.4 Payment for Food

In addition to funding, co-ops generate revenue from food sales. Of the co-ops polled, only Concordia funded its co-op exclusively through the student levy. Concordia provides food by "pay what you can", but the rest all charge for their meals. However, even though these co-ops are paid per meal, their meals are provided at a far lower cost than they could if unsubsidized by outside funding. This indicates that, although at Dalhousie we may not be able to cover all our costs by grants and levies, we can subsidize the food we provide so that the final cost to students and members is competitive with other food options on campus.

5.1.5 Type of Food Service and Typical Menu

Figure 6 shows a rough categorization of food co-ops by type of food service; however, the survey results were in fact more varied. We also asked schools to provide a sample of a weekly menu, which, rather than roughly categorizing the type of food served, provided a more specific sample of the kind of menu the co-op provided. Generally, the co-ops tend to not be limited to small-scale coffee-and-muffin affairs, but offer a wide range of food including, but not limited to, coffee, snacks, sandwiches, full meals, dessert and bulk foods. A co-op at Dalhousie, therefore should be based on what students on that campus would like to see, and this will be expanded through other surveys of Dalhousie students.

5.1.6 Corporate Food Service at Co-op Schools

Most of the schools we polled operate co-ops alongside campus-wide food service providers like Sodexo and Aramark. Of the 17 that responded to this question, only 4 schools did not have a corporate campus-wide provider. Aramark was the campus-wide provider to 7 of the 13 schools. This statistic is important because Aramark is the campus provider at Dalhousie, and while there is likely no causal link between the number of schools and the presence of Aramark, it is important to note that the presence of Aramark does not appear to dissuade the presence of co-ops.

5.1.7 Co-op Operational Structure

The results generated by the co-op structure response, like the type of food service and typical menu, are more useful as individual examples than as indicators of a general trend. Due to the diverse nature of successful elements in the polled co-ops, we will choose the elements that are most appealing and viable to create our own model.

5.1.8 General Advice

The general advice the co-ops provided centred on two main themes: volunteer relations and administrative support. Under the category of volunteer relations, it was recommended that we expend significant effort in finding a successful method of recruiting volunteers from a wide

range of community members. It was also recommended that volunteers are treated well so that they are happy working in the co-op and their loyalty is retained. They also indicate that having a committed core of organizers helps keep the co-op running from year to year and promote student involvement.

Regarding administrative support, it is recommended that we work hard to cultivate a mutually beneficial relationship with the university administration, student government, and the food service providers. Becoming a society can help in this capacity, as do fee levies. Also, we should keep in mind that these bodies appreciate flexibility and consistency on the part of the co-op organizers.

Finally, it was recommended that we form associations with local soup kitchens, seek donations from local farmers, and grow food for the co-op on campus.

5.1.9 Responding Person's Role in the Co-op

We asked this question in order to ensure some kind of validity in our results, that is, we wanted to know that our respondents were heavily involved in the co-op's function. All of our respondents have been involved in their co-ops for at least a year and all of them have a critical role in the operation of their co-op. This indicates that, to the best of our limited ability, we have ensured that the results we gathered are as accurate as possible.

5.2 SIGNIFICANT FINDINGS FROM INTERVIEWS

5.2.1 Interview with Matt Golding (Dalhousie Student Union- Vice President of Finance): The DSU VPF has expressed a keen interest in responding to the demand of healthier choices on campus; however, there is currently not enough conclusive support from students for the Union to advocate for a food co-op. The Dalhousie Food Co-op Initiative would be required to create and submit a budget proposal and business plan for Union approval and funding if it were to set up in the DSU. If this is the case, then part time staff must be Dalhousie University students.

There are a variety of funding opportunities that exist for projects within the Union. Projects with a range \$8,000-10,000 are open to application by early May. Other grants are available from the DSU for societies, when ratified.

5.2.2 Steve Owen (Dalhousie Food Science Dept. – Food regulations):

Food safety is a top priority for any organization working in the kitchen. Health Canada has certain regulations necessary for all non-personal consumption of food that should be met. This includes having at least 1 staff member who has taken the Health Canada food safety course at all times. This person would have the necessary understanding of food safety, especially if a hot meal is being offered.

5.2.3 Charlene Lucas & Nicola Embleton-Lake (Dalhousie Facilities Management): Spacing in the DSU is very limited. It has therefore been recommended for a future co-op initiative at Dalhousie to consider using other space, both on and off campus, for food preparation and vending spaces. The most interesting location suggested was the new Grad house which is being renovated on LeMarchant street, next to the Office of Sustainability. This space would provide a unique opportunity for a student run, local food service on campus, provided that the Gradhouse will meet Health Canada kitchen requirements.

5.2.4 Cindy MacDonald (Sodexo Food Representative):

Sodexo, the food service manager of the Dalhousie SUB, expressed a similar concern with regards to food preparation and storage space. The SUB has virtually no kitchen space to support this project. Additionally, another key concern involves the requirement for all food providers in the SUB to carry a substantial liability insurance policy to cover food poisoning and other food-related accidents. Unfortunately, a student initiative would not be able to afford this.

5.2.5 Sean Gallagher (Proprietor/ Head Chef of Local Source Market and Terroir Local Catering):

Sean suggested that the Health regulations are a lot less stringent than previously believed expressed by other interviewees. We would require a double-basin sink but little other specialized equipment to make our kitchen up to Health Canada standards.

In terms of storage space in the DSU, it was recommended that we work in partnership with the DSU food bank to access dry and cold storage. A similar recommendation of working to expand services at the new grad house was offered. This would, hopefully, allow for a low cost start up or subsidized rent. To get around the issue of rent, Sean suggested looking at spaces that are outside the contract of food service providers. Apart from the Grad house, the McCain Building, the current operating centre of Tuppy Tuesdays, might be an option.

When it comes to maintaining a business, allocating different tasks to different groups of students would be a great way of getting more involvement from a diversity of people. This includes members in the commerce, design and food science departments.

5.3 EXISTING RESEARCH

5.3.1 To eat or not to eat: the problem of making more sustainable food practices at Dalhousie (2004)

The objective of this project report for the Environmental problem solving class in Winter 2004 was to conduct a feasibility study regarding the appropriateness of increasing the amount of sustainable food on campus. These researchers surveyed students and interviewed the campus food service representatives, local farmers, and food franchise operators on campus. They found from their student surveys that 60% of students were unsatisfied with their current food choices on campus; 85% would have purchased local and organic food if offered; 61% of students would have purchased local and organic food even if it were more expensive than current options. Using regression analysis, they determined that willingness to pay for local and organic food was correlated to familiarity with principles of sustainability. Additionally, from their interviews, the group determined that local farmers were both willing and able to supply Dalhousie campus and that the administration and food services generally support this cause. Campus food franchises were unable to change their food suppliers to accommodate local sourcing.

5.3.2 Supplying Studley Campus with local and organic food for a student co-op: A feasibility study (2009)

The objective of this project report for Environmental problem solving class in Winter 2009 was to determine whether supplying local and organic food to a student-run food co-op on Studley Campus of Dalhousie is feasible. They surveyed staff and students and interviewed food representatives and local farmers. They found that 80% of sampled participants would be willing

to pay a \$2 levy to support a student run food co-op. They also determined the various types of food that would be available to supply a co-op.

5.3.3 Washington Western University Co-op Study (2009)

Similar to what is currently happening at Dalhousie University, students at WWU are conducting a feasibility study, budget analysis, and business plan for a co-op of their own. They have compiled an exhaustive list of all student run co-ops in North America. They have also outlined all specific costs associated with their co-op, a plan for working with administration and a structure for their co-op. Additionally, they have conducted an extensive student survey to determine student support for a co-op at their university.

5.4 IMPLICATIONS FOR FUTURE PLANNING

It is clear that the next steps in creating a co-op must apply the analyzed data from our research toward instituting an actual initiative on Dalhousie's Studley Campus. The first step to this end must be a student survey to determine an estimate of student volunteer and financial participation. This survey will investigate current spending habits and preferences of students, as well as their willingness to volunteer as co-op members. Simultaneously, a comprehensive list of costs must be compiled to determine the anticipated net revenue from instituting and operating a co-op. In order to complete a cost analysis, we will have to assess potential locations. The cost will depend on whether a co-op would pay rent in that location, and additional necessary equipment. Once calculated, these figures must then be presented to the DSU and other bodies that could supply funding.

Firstly, from the above analysis, we have determined that although the DSU will play a key role in establishing a co-op, the Student Union Building will not be the most appropriate location for a student-run co-op. We may be able to use storage and other facilities available in the SUB, but due to insurance and other limitations, we will not be able to make or vend food in this location. Secondly, we have determined that there is no single universal model among co-ops. Therefore, we must take our observations generally and create, by trial and error, what will work best here at Dalhousie. We do know that co-ops tend to have a central, organizing core of members; however they vary in the number and specific role of these students. Because of this, it is important to start small, with a low-overhead pilot project, so that these details in co-op structure can be worked out and greater student support can be generated. Fortunately, the student group Tuppy Tuesdays will work well in this capacity. Therefore, it is important that in the next phase toward implementing a co-op we expand Tuppy Tuesdays in membership, quantity of food provided and budget. This will allow us to assess the potential pitfalls in establishing a co-op specific to Dalhousie campus without large investments of grant money and will provide University administrators with further concrete evidence as to the feasibility of our project.

6 CONCLUSION

Founding a student food co-op at Dalhousie University is possible. In the past decade, the number of successful campus co-op initiatives at North American learning institutions has increased dramatically. These food co-ops either work with food service contractors or on their own. This shows that our co-op is just as likely to be successful working with Sodexo. All co-ops have been shown to need student support to establish themselves. This is necessary to earn student levees and a status as a society within the University.

Our next steps will be to formulate a business plan and a budget to best demonstrate our capability and serious interest in the project. This will help our team and any actor groups to rationalize costs. The strongest physical need of a food co-op is space: we need to have a place for food preparation and/or food sales. To achieve this, we will negotiate space agreements with the DSU, Sodexo and/or any other location authorities (such as landlords or local churches) in the area.

It is possible to create this food co-op. Our affiliate group has found that student interest supports the cause to bring local food to campus. This knowledge and support is crucial. In combination with our present findings and a team effort to act out the next steps, we can establish a sustainable, local food co-op.

6.1 FURTHER RESEARCH

6.1.1 Comprehensive survey of Dalhousie students

Although in past years various other student surveys have been conducted regarding local food, organic food, and willingness to pay for local and organic food, our survey will focus on the current spending habits of students rather than their anticipated willingness to pay. We will probabilistically survey a large sample population of Dalhousie students. We will also take a non-probabilistic purposive sample of students from Environmental Programmes and the College of Sustainability. A previous analysis of student sustainable food preference on Dalhousie campus in 2004 found that student preferences for local and organic food options are positively correlated to familiarity with the principles of sustainability (McKenna et. al. p.19). Therefore, by purposively polling these students we will formulate a control group of those students most likely to be involved, on some level, in the co-op.

Our survey will cover students' current expenditure on food, where it is purchased, the type of food, how often and at what time of day. We will also ask questions related to their views on local and organic food, whether they would have a preference for it, and whether they would support a fee levy in order to obtain it. We will correlate these factors to their actual buying habits to obtain an accurate and precise estimate of how many student will purchase food from the co-op, at what price, and if a fee levy would be supported. We may also ask if students would be willing to volunteer at such a co-op. (See Appendix D)

6.1.2 Intensive budget formulation and cost analysis

In order to apply for funding, we need to have a definitive list of costs and expenses involved in starting up a co-op. The first step must be to determine possible locations for the operation and which of these locations will incur rent costs. Additionally, we must determine a list of necessary equipment and supplies and their estimated costs. There will be other costs involved in establishing this venture. We must determine how these costs will be incurred and how much they will be, and from there, factor them in according. This budget-cost analysis will then used to justify funding from the DSU, student levies, etc.

6.1.3 Expanding Tuppy Tuesdays

To start a co-op, we need to take our research to the next level. We need the practical knowledge that comes from our campus community, and an effective method of obtaining expertise is through this existing program. Expanding Tuppy Tuesdays will provide an intermediate step between a small initiative and a fully operating food co-op. It both generates and demonstrates the necessary student support to get funding. Accordingly, the following steps

for expansion include becoming a ratified student society, applying for relevant society grants and expanding our volunteer base.

REFERENCES

Aramark Corporation (2007). *Aramark*. Retrieved April 8, 2009 from http://www.aramark.com/MainLanding.aspx?PostingID=336&ChannelID=187

Berry, W., Mender, J., Goldsmith, E. (1996). The Case Against the Global Economy; and for a Turn Towards the Local. Conserving Communities, San Francisco Sierra Club Books. 407-417

Calder, W., Clugston, R. (2007). Food and Higher Education for Sustainable Development. Journal of Education for Sustainable Development, 1, 209. Doi: 10.1177/097340820700100211

Carleton University. (2009). About Carleton: Quick Facts. Retrieved March 25, 2009 from: http://www2.carleton.ca/about/quick-facts.php

Concordia University. (2009). Fast Facts. Retrieved March 25, 2009 from: http://www.concordia.ca/about/whoweare/fast_facts/

Dalhousie University. (2009). About Dal. Retrieved March 25, 2009 from: https://discover.dal.ca/dal/welcome/about.ezc

David Suzuki Foundation (2009). *Food and Climate Change*. Retrieved April 8, 2009 from http://www.davidsuzuki.org/Climate_Change/What_You_Can_Do/Food_and_Climate_Change.a sp.

Hole, G. et al. (2004). Does organic farming benefit biodiversity? Biological Conservation, 122(1), 113.

Mcgill University. (2009). Students. Retrieved March 25, 2009 from: http://www.mcgill.ca/about/quickfacts/students

McKenna, M., Murray, L., Robinson, J., Briggs, L., Climenhaga, R., *To Eat or not to Eat: The problem of unsustainable food practices at Dalhousie University*. April, 2004. Retrieved February 18, 2009 from:

http://environmental.science.dal.ca/Files/Environmental%20Programs/Food.pdf

n.a. (2009) *David Suzuki's Nature Challenge* Retrieved April 8, 2009 from http://www.davidsuzuki.org/NatureChallenge/What_is_it/Food/Food_facts.asp

Oberlin College. (2009). About Oberlin. Retrieved March 25, 2009 from: http://www.oberlin.edu/newserv/facts.html

People's Potato. (n.d.) People's Potato: Concordia's Vegetarian Soup Kitchen. Retrieved March 23, 2009 from: http://peoplespotato.blogspot.com/

Pimentel, D., Pimentel, M. (2003). Sustainability of meat-based and plant-based diets and the environment. The American Journal of Clinical Nutrition, 78(3), 660S.

Portland State University. (2009). Profile: Snapshot of Portland State. Retrieved March 25, 2009 from: http://www.pdx.edu/profile/Snapshot-of-Portland-State

Reijnders, L., Soret, S. (2003). Quantification of the environmental impact of different dietary protein choices. The American Journal of Clinical Nutrition, 78(3 Suppl), 664.

Richer, L. (2004). Path Towards a Just, Sustainable and Food Sure UBC Food System. Retrieved February 9, 2009, from http://www.ediblestrategies.com/fsd/2004 UBC%20sustainability.pdf

Sierra Club. (n.d.) Clean Water & Factory Farms. Retrieved March 24, 2009 from: http://www.sierraclub.org/factoryfarms/

Sodexo Canada (2009) *Sodexo Canada*. Retrieved April 8, 2009 from http://www.sodexo.ca/caen/roles/foodservices/foodservices.asp.

The Evergreen State College. (2009). About Evergreen. Retrieved March 25, 2009 from: http://www.evergreen.edu/about/home.htm

The-Garden Spot. (n.d.) The Garden Spot Wiki. Retrieved March 25,2009 from:

http://www.opirg-carleton.org/gspot/pmwiki/pmwiki.php/TheScoop/SiteInfo

Trent University. (2009). Trent Facts. Retrieved March 24, 2009 from: http://www.trentu.ca/about/

United States Department of Agriculture. (2008). Program Announcement. Retrieved February 9, 2009, from http://www.usda.gov/wps/portal/usdahome

University of British Columbia. (2009). UBC Facts and Figures. Retrieved March 25, 2009 from: http://www.publicaffairs.ubc.ca/ubcfacts/index.html

University of California Santa Cruz. (2009). About UC Santa Cruz. Retrieved March 25, 2009 from: http://www.ucsc.edu/about/

University of Maryland. (2009). Quick Facts. Retrieved March 25,2009 from: http://www.newsdesk.umd.edu/facts/quickfacts.cfm

University of Massachusetts Amherst. (2009). About UMass Amherst. Retrieved March 25, 2009 from: http://www.umass.edu/umhome/about/

University of Minnesota. (2009). About the U. Retrieved March 24, 2009 from: http://www1.umn.edu/twincities/about.php

University of Toronto. (2009). Quick Facts. Retrieved March 25, 2009 from: http://www.utoronto.ca/about-uoft/quickfacts.htm

Watson, K. (n.d.). Counter Culture. Retrieved February 10, 2009, from: http://www.yorku.ca/cculture/new%20website/C-Culture/website/aboutus.htm

Warren Wilson College. (2009). About Us Fast Facts. Retrieved March 25, 2009 from: http://www.warren-wilson.edu/admission/facts.php

APPENDICES

APPENDIX A: FOOD CO-OP QUESTIONNAIRE

___ Membership Dues

create Throug and wo	a studen gh our res e would li udent go	rc Thorup and I am a member of a group of students at Dalhousie University working to trun food cooperative on our campus. search, we have found that your co-op program at <u>university</u> has been successful, ke to ask you a few questions about it, so that we can formulate a model to present to our vernment. We would like to know basic information about your program's history, its udent involvement. Anything you can tell us would be a great help.
any int	formation thered inf	e to provide information about your co-op program, we will use it in our project. If there is that you would prefer we did not use, please leave that question blank. We will not use formation for purposes outside the project, and any information you provide will be kept is and confidential.
-		ne correct person to consult about your food co-op program, please let us know if there is ntact. Thank you.
Со-ор	progran	n questionnaire:
1.	In what	year did the food co-op program at your university come into existence?
2.	Were an	by research projects or feasibility assessments conducted prior to the development of the op?
	b.	Yes No Don't Know
If Yes,	Please L	ist
Which	category	best describes your co-op's food service?
	e. f	Coffee Shop Sandwich / Deli Shop Full Meal Service Other, please specify:
3.	What d	o you receive in exchange for your food services?
		Cash Payment
		Optional Donation

	Other, please specify:
4.	On average, how many people do you serve per week?
5.	If possible, please provide an example, in brief, of a typical weekly menu, including prices if applicable
6.	What type(s) of workers staff your co-op? (Check all that apply)
	Paid
	Work-For-Food
	Volunteer
	Other, please specify:
7.	Please describe the structure of your co-op, including the roles of members, non-members and
8.	managers as applicable. What types of expenditures are incurred from your program? If possible, please provide specific amounts. (Check all that apply)
	Rent
	Wages
	Utilities (electricity, gas, etc)
	Disposal Services
	Equipment Startup
	Equipment Maintenance
	Other, please specify:
9.	What types of funding do you receive? (Check all that apply)
	Student Fee Levies
	Government Funding
	University Funding
	Private Monetary Donations (not in exchange for food)
10.	Does your university contract out the management of campus food services to a private company (i.e Chartwells, Sodexho, etc.)
	a. Yes

b. No

If Yes, please list:

- 11. How would you describe your own role in the food co-op program?
- 12. How long have you been involved with your food co-op program? ______
- 13. Do you have any recommendations for creating a similar program at other universities?
- 14. If you are aware of anyone, either at your own, or another organization or university, that would be interested in responding to this questionnaire, or participating in a phone interview, please let us know:

We will contact you in the next week to answer any questions you may have regarding our survey or our project. The information and support you provide will enormously help our efforts to build a greener, more sustainable student community at Dalhousie.

Again, thank you for your help and advice!

APPENDIX B: INTERVIEW QUESTIONS

Marla MacCleod - Food Miles Coordinator, EAC

Are you familiar with any food co-operatives in the Halifax area?

- What is their membership structure?
- Based on your knowledge of co-operatives, what could be an appropriate membership structure for our proposed program?

Considering cost against environmental impact, for our co-op, what would be an appropriate definition for 'local' food?

What challenges do you foresee to supplying a seasonal business with local food?

What challenges do you foresee to supplying a seasonal business with organic food?

Do you have any general advice for our project?

Who else can you recommend we talk to that could provide further information or advice?

Sean Gallagher - Owner/Manager, Terrior

How do you define local food?

For Terroir, how much of the food you supply is either local or organic?

- What is the relative proportion of local food to organic food?

What are some of the challenges to supplying your business with local food?

What are some of the challenges to supplying your business with organic food?

What is the price difference between local food and non-local food?

What happened to Fresh?

Did you learn anything from your time running Fresh that could help or influence a start-up food coop? Where did you prepare food when you operated Fresh?

As far as food safety standards go, we will operate as a restaurant. What kinds of standards will our kitchen have to meet?

Do you have any general advice for our project?

Who else can you recommend we talk to that could provide further information or advice?

Matt Golding - Finance and Operations VP, DSU

When precisely does the Student Union contract with Sodexo expire?

What can you tell us about the terms of the contract?

What is the process for a student group, such as ours, to be incorporated into the new contract? For a project to gain the support of the Dalhousie Student Union, what kinds of data, research, and support would the executive need to see?

How much, in your estimation, is Sodexo willing to work with student special-interest groups? Who should we contact from Sodexo regarding our proposal?

Sodexo representative, Sodexo

What is your role regarding the student body?

- How much influence do student requests have on the operations of Sodexo on the Dalhousie campus?

When precisely does the Student Union contract with Sodexo expire?

What can you tell us about the terms of the contract?

What is the process for a student group, such as ours, to be incorporated into the new contract? For a project to gain the support of the Sodexo, what kind of data, research and support would the management need to see?

How much, in your estimation, how feasible is the creation of a student food co-op in the Student Union Building?

Consultant on business model formulation, Dalhousie School of Business Administration

What are the components of a business model?

What are the most important components of a business model?

What are the steps to creating a business model?

What techniques can we employ when creating the business model that will make our report and model convincing and attractive?

Do you have any general advice for our business model or overall proposal?

Is there anyone else you recommend we talk to that could provide further information or advice?

By phone:

Representatives of student run food co-ops at other universities:

Are we speaking to the same person who responded to the questionnaire? Do you have any questions or concerns regarding our questionnaire?

(Further questions will vary depending on questionnaire responses)

APPENDIX C: SAMPLE FUTURE STUDENT QUESTIONNAIRE

Student Questionnaire

Meal Halls

Elsewhere on campus

- Approximately how many times per week do you purchase a meal or a snack on campus? (0-3/4-5/6-7+)
 On average, how much do you pay for a meal/snack on campus? \$_____
 In which time period(s) would you be most likely to purchase a meal? (circle ALL that apply)

 8am-10am
 12pm-2pm
 4pm-6pm

 Unam-12pm
 2pm-4pm
 6pm-8pm
 Where do you primarily purchase food? (Check one)

 Student Union Building (SUB)
- 5. On approximately how many days per week do you consume local food? Please circle one: (0-1 / 2-3 / 4-5 / 6-7)
- 6. Eating local food (produced in the Maritimes) is a priority for me: (Strongly agree/ agree/ disagree/ strongly disagree).
- 7. Having more locally food options on campus is important to me: (Strongly agree/ agree/ disagree/ strongly disagree)
- 8. Having tasty vegan food options on campus is important to me. (Strongly agree/ agree/ disagree/ strongly disagree).
- 9. Having tasty vegetarian food options on campus is important to me. (Strongly agree/ agree/ disagree/ strongly disagree).
- 10. Having cheap food options on campus is important to me. (Strongly agree/ agree/ disagree/ strongly disagree).
- 11. The Student Union should take an active role in promoting local food on campus. (Strongly agree/ agree/ disagree/ strongly disagree).
- 12. Are there specific kinds of meals or snacks you would like to have made available on campus? (yes/no) If yes, please list:
- 13. Are there any other campus food issues that you would like to see addressed by the Student Union? If yes, please list:

APPENDIX D: DATA TABLES

Table 1: Student Co-op Attendance by School Size

Carleton	550	825	24263	687.50)	0.0283	335	2.8335		
Concordia	1500	1750	43806	1625.0	00		0.0370)95	3.7095	
Evergreen	1000	1000	4696	1000.0	00		0.2129	947	21.294	7
Trent	300	300	7348	300.00)	0.0408	327	4.0827		
Toronto	100	100	61210	100.00)	0.0016	634	0.1634		
UMass	1600	2500	26360	2050.0	00	0	.07776	69	7	0.7769
*	*	*	*	*	*					
Dalhousie			15197							

Table 2: Student Co-op Attendance by Years in Operation

years	% Attending	Total pop
7	2.83353	24263
10	3.70954	43806
7	4.08274	7348
2	0.16337	61210
4	3.07692	19500
33	7.77693	26360
33	1.13809	26360

Table 3: Table of Qualitative Questionnaire Results

SCHOOL	(2) - Asessment types	(3) - Co-op type	(4) 1, 2, 3, 4	(6)	(8)	(11)	(12)	(13)	(14)	(15)
CARLE- TON	Supplies needed	Community Kitchen	pay what you can	Protein dish	non-hierarch	Aramar k	Various, experienced	2yrs, 7, mo	(by phone)	by phone
	Supplies cost	Vegan	publicity promotion	Carb dish	collective					
	Kitchen cost	Buffett	volunteers	Side dish	democratic vote					
	Serving space location			Dessert	volunteer labour					
	Serving space cost Communit y poll				donations weekly meetings minutes (recorded)					
CONCOR- DIA	N/a	Soup Kitchen	Student levy of 27 cents per credit	All vegan	10 paid collective members	Chart- wells	Ensures campus food security	10 yrs	Get a fee levy	
		Full meal service	Levy is optional	4 course meal	5 fulltime staff		Alternative to food monopoly on campus		Recruit volunteers	
		Eat by donation		grain, stew, salad, soup	non-hierarch		Space for public to gather		talk to local soup kitchens	
				i.e. Potato Carrot Soup, Quinoa, Garbanzo beans curry, and green salad.	Collective many volunteers board of directors volunteer before become member				donations from farmers	the frigo vert
EVER- GREEN	survey of students - satisfactio n with food choices	Sandwich/ Deli	cash		Shift workers and coordinators	Aramar k	Adjunct coordinator- started eggplant in 2008	1 year	Levy	
	survey of cost/what items they want and quantity	Full meal			Shift jobs (office, financial, vending.prep) Coordinators make decisions (financial.communicat ion)				student support	

SCHOOL	(2) - Asessment types	(3) - Co-op type	(4) 1, 2, 3, 4	(6)	(8)	(11)	(12)	(13)	(14)	(15)
TRENT	Business Plan	Sandwich/ deli	Cash	2 kinds of wraps	Members	Aramar k	Cafe manager	5 years memb er, 1 year manag er	Create a space agreement with aramark/ trent admin so you can circumvent monopol	
	Survey of Student		Member- ship dues	salad	Volunteers				create links with local farmers	
				2 kinds of soup	Manager				on campus farming	
				baked goods	Coordinator Community outreach Board of directors					
TORONT	n/a	weekly lunch service	cash (4\$)	full meal (entree, 2 sides, dessert)	student group of volunteers	Aramar k	outreach/volunteer coordinator	1 year	-Start with a committed core of oranizers and grow from there	
			optional donation	tea	outreach coordinator for volunteers				New volunteers can be hard to wrangle so try a few methods until something works	
					treasurer				People (admin, volunteers, customers, etc) appreciate consistency and flexibility	
									look for administration support	
UMASS	n/a	vegetarian cafe	discount when you bring your own plate	entrees Salads Soups Sandwiches	Coop in spirit run by university business centre	No	direct of centre for student business	6 years	Get support from student government	
			discount on leftovers from day before						Being under the Student Affairs allows for a co- curricular mandate of learning a	
SCHOOL	(2) - Asessment	(3) - Co-op type	(4) 1, 2, 3, 4	(6)	(8)	(11)	(12)	(13)	(14)	(15)
UBC	types n/a	Coffee shop	cash for menu		volunteer run (60 in total)	No	president	1.5 years	Volunteer run means a lot of emphasis on volunteers who contribute	
		free lunch bulk buying club catering/ed ucation	donation for free lunch	soup	excutive board (president, Treasurer, Secretary, Store Coordinator, Kitchen coord				this community should be inclusive and broad	agora. eats@ gmail. com
			grocery	Dessert fair trade coffee	project coordinators (workshops,outreach, weekly meetings				volunteers need a sense of belonging to stay	