

UBC Social Ecological Economic Development Studies (SEEDS) Student Report

**Education Programs in the LFS Orchard Garden and Agora Café:
Creating a Survey for Think&EatGreen@School Summer Institute**

Candy Chang

Tannis Dobson

Dorothy Kwok

Jenn Perrin

Miranda Tse

University of British Columbia

LFS 450

April 8, 2011

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".

The University of British Columbia Food System Project
(UBCFSP)

**Scenario 4: Education Programs in the LFS Orchard Garden and
Agora Cafe**

Creating a Survey for Think&EatGreen@School Summer Institute



Group 5

Candy Chang

Tannis Dobson

Dorothy Kwok

Jenn Perrin

Miranda Tse

LFS 450

Instructor: Dr. Andrew Riseman

April 8th, 2011

1

Table of Contents

ABSTRACT.....	3
INTRODUCTION.....	4
METHODOLOGY.....	5
FINDINGS AND DISCUSSIONS.....	7
RECOMMENDATIONS.....	14
For Stakeholders.....	14
For Future LFS 450 students.....	15
For Next Year’s Teaching Team.....	16
PROJECT EVALUATION.....	16
CONCLUSION.....	17
ACKNOWLEDGEMENTS.....	17
REFERENCES.....	18
APPENDICES.....	19

ABSTRACT

The Think&EatGreen@School project is developing a Summer Institute, a three-day seminar that provides teachers with a professional development opportunity to learn how to strengthen the connections between components of the food system within their schools. The goal of this project was to design a survey that will determine what kind of workshops should be implemented into the Summer Institute that will help to provide teachers with ideas and resources for garden based professional development.

A literature review was first conducted by using *Designing Surveys: a guide to decisions and procedures* by Ronald Czaja and Johnny Blair. Information was then collected using various websites, including thinkeatgreen.ca as our primary source. While developing the survey, we were mindful to keep the questions succinct, to minimize the use of open-ended questions, negative connotations and leading questions, and to use universal language. The completion of the final survey came after extensive revising and countless editing. The online survey software SurveyMonkey was first used but because a subscription was required for surveys exceeding ten questions, we were advised by the LFS IT department to use the Google spreadsheet program instead. This turned out to be a good option as it automatically interprets and analyzes the survey questions. One limitation of using the Google survey is that we are unsure if the format complies with the ethics regulations compliance for distribution; therefore we recommend that our stakeholders deal with this issue accordingly. To future LFS students, we recommend following our methods for creating a survey as they were successful for this project.

Formatted: Default Paragraph Font,
Font: Cambria, 14 pt, Font color:
Custom Color(54,95,145)

INTRODUCTION

Think&EatGreen@School is a research project addresses the issues of food security, food system sustainability, and adaptations to climate change within the context of Vancouver schools. At UBC, the Faculty of Education has teamed up with the Faculty of Land and Food Systems in the implementation of the Summer Institute as an extension of Think&EatGreen@School. The Summer Institute is a three-day seminar that provides teachers with a professional development opportunity to learn how to strengthen the connections between components of the food system and their schools. Our goal was to create a survey to find out what teachers already know about school garden systems, and what workshops would be valuable for them to learn about. Upon completion of this project, the Summer Institute will be able to implement successful workshops in an outdoor classroom / teaching and learning garden, as an extension of the Land and Food Systems Orchard Garden (LFSOG) at UBC.

By providing this information to educators, with the expectation that they will implement it into their curriculum, generates an opportunity for children to see first-hand the workings of a local food system. This is important because in order to maximize production, our current globalized food system neglects stewardship of the land (Think&EatGreen@School, 2011). These practices are neither sustainable nor responsible and thus require a fresh outlook. The UBC food system is a good example of a food system which strives to create positive change, by improving the health of the both environment and people. They do this using their Values Statement: SPICE. SPICE stands for: Sustainable, People first, Innovative, Caring and Excellence (UBC Food Services, 2011). This system can be used as a base model for teachers when they participate in the Summer Institute.

The purpose of our project is to design a survey that will determine what kind of workshops should be implemented into the Summer Institute that will provide teachers with ideas and resources for garden based professional development. Prior to creating the survey, we conducted a literature review. The literature review helped us to become more comfortable with the idea of designing and implementing a survey due to our lack of experience in the field. It taught us the basic concepts and ideas that encompass the creation of surveys and allowed us to create a successful survey.

METHODOLOGY

In hopes of finding an appropriate journal to review, we began our research on Google Scholar on January 12th. We used phrases such as 'survey writing', 'survey processes', and 'survey guide', but found all of the literature to be too confusing and not very useful to us. We then decided to do further research in the UBC library where we found the perfect survey-writing book called *Designing Surveys: a guide to decisions and procedures* by ~~Ronald~~ Ronald Czaja and Johnny Blair on January 19th. This journal contains examples of successful and non-successful survey questions supported by flow charts and tables. In preparation for our literature review, we divided the journal into sections amongst our group members. Each group member analyzed and interpreted their section and on February 8th we combined our work to put together a PowerPoint presentation. On February 9th, we presented our literature review to our Teaching Assistant (TA) and fellow classmates. The review consisted of the following topics: factors in questionnaire development, understanding the data collection process, how to construct a survey, criteria for survey questions, and organizing the questions. Our presentation also included an interactive portion where we showed our classmates examples of bad survey questions and asked

them what kinds of revisions they would make. Through classmate interaction, we discovered areas and aspects of survey writing that may not have been noticed individually.

After our literature review, we began our primary data collection by researching the Summer Institute through the project website www.thinkeatgreen.com on March 4th at 3:40pm. We then met with our project stakeholders to gain a full understanding of the Summer Institute and to determine our stakeholder's expectations for us and our survey. We started our project by creating a SurveyMonkey account at www.surveymonkey.com. This is an online database that aids in the development and preparation of surveys for distribution. We also created a ~~'Gmail'~~'gmail' account so that survey participants have a contact for further inquiries. We intend for this email to be used by future LFS 450 students who are working on this scenario.

Next, we began researching other sources and examples of surveys online in order to gather thoughts and ideas on what we would like to ask in our survey and on the kinds of questions we would like to use. On February 9th Google searches were conducted using phrases such as 'garden surveys', 'garden-based learning surveys', and 'teaching-garden surveys', in order to gain experience as to what type of questions should be used in our survey (Appendix 1).

On February 16th, we posted a tentative timeline on Vista, regarding the progress of our project (Appendix 2). We then worked as a group to create a pilot survey (please see Appendix 3) and executed a 'trial run' on our fellow LFS break-out room members who critically reviewed the rough draft on March 9th. Afterward, we compiled the feedback from our classmates and restructured our survey to incorporate their suggestions. Upon reaching agreement with regards to survey revisions, we submitted a copy to our TA and our stakeholders to be reviewed once again. After analyzing their feedback and incorporating their revisions into our survey, we emailed it back to them for a second overview. On March 17th, they replied through email and

requested further changes to be made. After revising and incorporating changes (Appendix 4- editing process), we finally developed a final copy of our survey which was entered into SurveyMonkey for our stakeholders meeting on March 30th. Due to a budget constraint for the SurveyMonkey account, we decided to talk to Duncan McHugh, the LFS Multimedia Developer and Morgan Reid, the Learning Technologies Specialist for advice on how to proceed. After further discussion, they suggested that we use a website called “Google Forms” found on www.spreadsheet.google.com/gforms where the final copy of our survey was posted and can be seen in Appendix 5.

After countless revisions, we emailed the finalized copy to our stakeholders so that they can distribute the survey to the participating teachers on our behalf. We anticipate that the surveys will be distributed in mid-late April, and should expect to receive responses within a week’s time. Due to time constraints, we will not be receiving responses back in time; therefore we were unable to compile and analyze the data. The Google form website, however, allows for the participants’ answers to be entered into an Excel spreadsheet for future analysis. Further instructions regarding analysis can be found at <http://docs.google.com/support/bin/answer.py?answer=139706>.

FINDINGS AND DISCUSSION

Overall, we found that developing and implementing a survey is much harder than we all expected. All of us came into this project as amateurs with little to no experience in working with or creating surveys, so we were surprised at how difficult and tedious the actual process was. After conducting a literature review using the book *Designing Surveys: a guide to decisions and procedures* by ~~Ronald~~ Ronald Czaja and Johnny Blair, we found that there are actually many

different steps and components that must be taken into consideration when designing a survey. One of the main objectives to survey development is to keep the survey questions short and concise while still ensuring that all relevant information is captured (Czaja & Blair, 1996, p.60). “As much as [survey questions should] sound natural, they are not simply forms of conversation. Ideally, survey questions are shorn of the vagueness, ambivalence, asides, and digressions of everyday speech” (Czaja & Blair, 1996: p.63). Another objective within survey development is to be able to “write questions that are unadorned and uncomplicated, as explicit and single minded as a lawyer’s interrogation. While we want self-administered survey questions to be read smoothly, it is important to recognize that a survey question is a very special construct with a clearly focused purpose” (Czaja & Blair, 1996, pp. 62-63). In other words, unlike everyday language, survey questions must be able to stand on their own without any supplementary explanation. Czaja and Blair suggest minimizing the use of open-ended questions, where respondents are not given explicit answer choices, and using closed-ended questions, where respondents are given explicit answer choices, as much as possible when creating a survey. This is because “data from open-ended questions are essentially narratives that must be interpreted and coded. After the survey is over, the researcher is still a step away from having results that can be analyzed quantitatively” (Czaja & Blair, 1996: p.63), which therefore increases the time the researcher spends on the analyzing process. The use of open-ended questions can also be dangerous if different researchers analyze the open-ended questions because these kinds of questions are often open to subjective interpretation which can cause misleading survey results. Because “the reliability of the data obtained through survey research [also] rests on the uniform interpretation by respondents” (Czaja & Blair, 1996, p.63), it is critical to avoid complex,

technical terms and to use universal language so that all respondents, of different ethnicity's, backgrounds, and professions, are able to understand the survey questions.

We also learned about types of questions we should avoid when constructing a survey. Czaja and Blair stressed that it is important to avoid using agree-disagree questions where respondents are given a statement and asked whether they agree or disagree with it. This is because, “research has shown that there is a tendency toward agreement, regardless of the question's content” (Czaja & Blair, 1996, p.73). We learned that we had to be careful to avoid the structurally flawed double-barrelled question which often “unintentionally has two parts, each of which the respondents may feel differently about.” A question that states: “Do you think your school garden and other school gardens throughout the lower mainland are doing an excellent, good, or poor job at educating children on healthy eating?” is an example of a double-barrelled question. A respondent, who thinks their school garden is doing an excellent job while other school gardens are doing a poor job, has no way to answer. We also discovered that we need to avoid using questions that contain negative connotations as well as leading questions. Questions with negative connotations contain misleading words or phrases that can automatically sway the participant’s response towards a certain answer that they may not have originally chosen. Leading questions may also persuade a respondent’s decision one way or another by ‘leading’ them towards a certain answer through the use of persuasive or positive words or phrases.

Although we ended up borrowing questions from other reliable surveys online such as those from the University of California (University of California Agriculture and Natural Resources, 2011), and from the California School Garden Network (California School Garden Network, 2010) to include into our survey, we modified the questions to ensure that they were appropriate based on Czaja and Blair’s suggestions. We decided to borrow rather than create our

own questions because an advantage of borrowing questions from previous studies is that we can, or may need to, compare results to previous findings. Such a comparison is much more problematic if our questions are different from those used previously. If our findings differ from the earlier study, we cannot say how much of the difference is due to the changed questions. In addition, questions from other surveys may have already undergone a great deal of testing, which may save us some effort (Czaja & Blair, 1996, p.60).

After we established the most important questions we wanted to include in our survey, we started to write an introduction that would complement and precede our final survey. Czaja and Blair state that an introduction is the place that should contain what the study is about, who is conducting it, who is the sponsor, why the study is important and what will be done with the study results (Czaja & Blair, 1996, p.34). The introduction should contain information to “convince potential respondents that the study is important enough for them to devote their personal resources of time and effort in to it” (Czaja & Blair, 1996, p.78). Therefore, this is why, in our introduction, we decided to provide information on what the Think&EatGreen program is about along with their website's link, details on the Summer Institute, and an incentive upon completion of the survey (i.e. a chance to win free enrolment to the Summer Institute). After the introduction was complete, we organized our chosen survey questions into sections and ordered the questions from general to more specific with the first question in the survey being the most general and easiest question to answer. This is important because “most refusals occur at the introduction or during the very first few questions in self administered surveys” (Czaja & Blair, 1996, p.83). The purpose of making the questions progressively harder and more in detail is to grasp the respondent's attention and motivate them to finish the survey. Making the survey easy for respondents is also crucial. It is recommended that it is best to offer possible answers to select

from, appropriate space for each answer, simple instructions, and overall, an appealing appearance where the size, spacing of words and survey length are all taken into consideration (Czaja & Blair, 1996 p.92).

Presenting our literature review as a PowerPoint to our classmates, allowed us to consolidate our knowledge and find out what they think should be included in our survey. During the interactive session of our presentation, where we presented poor examples of survey questions and asked our classmates how they would improve/fix the questions, we discovered that many of our classmates had difficulty with revising questions to make them more appropriate. We also found that receiving opinions and outlooks from so many different classmates who come from different backgrounds with different beliefs and outlooks was very beneficial. Aspects and areas of survey development that may have never been brought to our attention were brought up through classmate interaction. For example, a classmate pointed out that it is important to give proper definitions to uncommon words such as, vermiculture. Another classmate suggested incorporating a scale from one to five in our final survey. However, we explained that scales are not necessarily the best tool to use because, from our own personal experiences, we believe that respondents may often choose the neutral option in order to get the survey done faster. It was also reinforced how important spelling, grammar, and punctuation is as one classmate got confused with what we were actually asking in one of the survey questions due to poor punctuation. Avoiding ambiguous questions also came up as an important topic through classmate interaction which forced us to reanalyze a few of the questions to make them clearer.

During the first encounter with our stakeholders, we were informed of the Think&EatGreen website where we were able to find more information about the program and

the Summer Institute. This project is a “community university collaborative project on food security in Vancouver schools and institutional adaptations to climate change” (Think&EatGreen, 2011). At the time of the meeting, we were unsure as to whether we would be able to receive results back from our survey due to time constraints; hence our stakeholders told us that we should prepare a guide for analysis for future LFS 450 students as part of the project just in case we weren’t able to do the analyzing ourselves. We began developing an analysis guide on Excel, yet we later found that the Google spreadsheet program already provides users with an analysis guide. Therefore, we felt it was more appropriate to use the Google spreadsheet’s analysis guide as it is less prone to human errors. Our stakeholders also told us that we should stress the time factor of how the survey should only take five minutes as teachers often have very busy schedules. Furthermore, our Stakeholders loved the idea of including an incentive for completing the survey, such as a free enrolment to the Summer Institute, as they thought it would really increase the response rate.

After conducting the pilot survey with our classmates, we found that many revisions still had to be made. Many commented that the option “If yes, please specify” was confusing for question number two in the pilot survey which stated: “Is the school garden used for academic instruction?” For the list of workshop types, many found that the options were too broad, or the terminology used needed further clarification. Our classmates informed us that we should allow participants more than one option to respond to a particular survey question. Therefore, in question fourteen of our final survey, we allowed participants to select their top three choices of which types of workshops they would like to attend, instead of constraining them to only one choice. This enabled us to acknowledge that many participants may have more than one reason for attending the Summer Institute. We found that changes had to be made for the list of subjects

in question three. We needed to widen the spectrum of subjects as to cover the curriculum of both elementary and secondary school. As the list of workshops choices became longer than before due to suggestions from classmates and stakeholders, we found that grouping workshops under a similar heading would be adequate. For example, we divided the workshop questions into two sections, one of which targeted on garden-management while the other garden-based education. Question six which asked participants what they were least interested in doing during the Summer Institute was eliminated from the pilot survey -because we found that the question added no significance to the survey.

We discovered that communicating with each other and with others though email was much more effective than face-to-face communication. We found emailing to be very efficient as it allows for timely responses and the ability to send emails to multiple recipients. Using email also helps with organization by keeping track of our communication logs in word format for future references if necessary. Meetings in person were often very difficult to arrange with the stakeholders and with each other due to busy and opposing schedules. Although we only got to meet with our stakeholders one time to discuss our project, it was a very effective meeting where they gave us a multitude of information and recommendations. Despite our group's hectic schedules, we managed to find plenty of quality time outside of class to meet with each other and work on the project as a group. A couple of aspects to note during group meetings were language barriers between group members. Because most of us have different backgrounds and ethnicities, we sometimes had a hard time understanding each other which thus caused temporary confusion and a little frustration. However, we all felt that having this diversity within our group helped our project in the long run because we all lent different opinions, beliefs, and outlooks to our finished project.

RECOMMENDATIONS

For Stakeholders:

While designing this survey, we learned from our literature review that demographic questions should be placed at the end of a survey instead of the beginning where our stakeholders had suggested us to put them. For our finalized survey, we have placed the demographic questions at the beginning of the survey to meet the suggestions of the stakeholders. It is recommended that a final decision should be made by the stakeholders, Julia Ostertag and Chessa Adsit-Morris, on the placement of these demographic questions. In addition to the results that were gained from the pilot survey reviewed by our classmates and the many revisions done to the survey by us, we still recommend that a thorough overview of the survey should be done to clarify any changes that our stakeholders see fit. This overview is recommended for both the stakeholders and the Teaching Assistant for this project.

Following the completion of the final survey, special attention should be made towards ensuring that the use of Google Form to distribute the survey complies with the ethics, rules and regulations of the UBC Research Ethics Board. This review can be done immediately while the survey is being prepared for distribution and ideally should be done by Julia and Chessa to guarantee that the survey will not present errors to the overall research project.

For future survey design projects, we recommend that the stakeholders should provide a list of specific criteria that should be met for the design of the survey. This should ideally be done before the start of the term for future students as this list will allow students to have a better idea to what the stakeholders want and need. This will also allow the students to be in the same mindset as the stakeholders at the beginning of the term.

For Future LFS 450 Students:

At the beginning of the term, we suggest that future LFS 450 students start off with conducting a literature review on survey writing due to the time and understanding required to learn the techniques for proper survey writing. Planning out a timeline for the group is also highly recommended. This timeline will help to keep everyone in the group on track of the whole project.

Because survey design can be a tough and often tedious process we think that some motivation may be needed: it may help students to see the results of our completed survey before starting their project. Due to time constraints, we did not have a full analysis done for our survey; however, the convenience of Google spreadsheets should make this process very easy. If analysis is not already completed by Summer Institute members it might be a good idea to have future LFS 450 do the survey analysis. All ~~the~~ information and instructions needed to compute the data is available on the Google Forms website found at, <http://docs.google.com/support/bin/answer.py?answer=139706>.

Formatted: Font color: Black

The usage of Google Form is recommended to continue as the program is easy to use and easily accessible to anyone who has an internet connection. Another recommendation is to use and maintain the Gmail account that was created this year for any questions and concerns that a teacher may have towards the survey. The maintenance of this email account can be overseen by future LFS students and by the stakeholders when the term is over for the students.

Many papers have suggested that garden programs should start at an early stage of life, thus our survey is designed mainly for Elementary and High-school teachers. We do, however, think that University teachers should be considered as well because it is never too late to get involved.

For Next Year's Teaching Team:

Our group felt that this year's survey project was very successful and we have no future recommendations for next year's teaching team. So long as the TA's continue to provide informative feedback, future groups should not have difficulties.

PROJECT EVALUATION

Our project was to design a survey to help determine which workshops teachers are interested in attending at the three-day Summer Institute. Looking for the sources in designing a survey was not that hard comparing to the actual process of designing a survey. Even though we understood the basics of designing a survey, because most of us had little to no experience writing surveys, we never thought that designing a good survey required so much time and background knowledge.

For the last four months, we had overcome many challenges ranging from the normal group work to the actual project itself. Since we are all taking more than one course and thus have different schedules, not all of us could always attend meetings outside of class. Another problem we had was communication. Getting the right words and phrases across the table and coming to an agreement can sometimes be a hard thing to do. However, these challenges did not stop us from getting the work done well. Some other challenges are actually from the project itself. Choice of words and phrases can really be difficult sometimes because they are all different. Some may have negative connotations, while some positive. Others may turn a question into a leading question, and sometimes a certain word or phrase did not fit, even though it seemed as though it should be included. Our project evaluation we done throughout the whole term because for every survey that we revised and edited, we were required to evaluate.

After all the editing, revising, meeting with our stakeholders, and talking to our LFS 450 TA, our finalized survey has become polished, smooth, excellent and professional. We evaluated our project through our patience, our commitment, our time, and our endless efforts.

CONCLUSION

Even though we might think that we know how to write and design a good survey, designing a survey is actually a long process and it cannot be done overnight. A lot of background knowledge is needed to make the process of survey writing flow easily. The survey must be tested and revised again and again to make it appropriate.

Upon completion of this project, we conclude that survey writing is intensive and tedious as it is hard to find a voice that fits a wide audience and is not ambiguous. Another challenge to survey writing was to create questions where responses can be analyzed in an appropriate manner. We found that the key component to a successful survey for the stakeholders, survey writers and workshop designers was a collaborative effort, so all relevant information was included.

ACKNOWLEDGEMENTS

We extend our gratitude to LFS 450, Will Valley and our stakeholders [Julia Juila](#) and Chessa in giving us helpful advice, guidance, support and commitment, which has made this project successful.

~~In conclusion, we believe we have created an appropriate survey that meets the needs of our stakeholders and our goal in LFS 450 scenario 4. This is our greatest success in LFS 450 and we did well.~~

REFERENCES

- California School Garden Network. (2010) California School Garden Education Survey. Retrieved from: http://www.lifelab.org/wp-content/uploads/CA_School_Garden_Survey_2011.pdf
- Czaja, R. & Blair, J. (1996). *Designing Surveys: a guide to decisions and procedures*. Thousand Oaks, California: Pine Forge Press.
- Kentucky School Garden Network. (2011) Kentucky School Garden Network. Retrieved from: <http://surveymonkey.com/s/schoolgardens>
- Sustainable SMU-Learning Garden Survey. (2011) Sustainable SMU-Learning Garden. Retrieved from: <http://www.surveymonkey.com/s/RZKH66G>
- Think&EatGreen@School. (2011). *Summary of Proposed Research*. Retrieved from: <http://www.thinkeatgreen.ca/summary-of-proposed-research>
- UBC Food Services. (2011) *Values Statement*. Retrieved from: <http://www.food.ubc.ca/about-us/values>
- University of California Agriculture and Natural Resources. (2011) Garden Based Learning Workgroup Planning Survey. Retrieved from: <http://ucce.ucdavis.edu/survey/survey.cfm?surveynumber=464&back=none>

APPENDICES

Appendix 1: ULRs for survey design

<http://aggie-horticulture.tamu.edu/kindergarden/survey/survey.htm>
<http://ucce.ucdavis.edu/survey/survey.cfm?surveynumber=464&back=none>,
<http://www.surveymonkey.com/s/RZKH66G>, <http://www.surveymonkey.com/s/schoolgardens>,
http://www.lifelab.org/wp-content/uploads/CA_School_Garden_Survey_2011.pdf,
<http://blogs.cornell.edu/garden/grow-your-program/evaluation-toolkit/surveys/>
<http://www.grownyc.org/blog/?p=63>

Appendix 2: Timeline

Feb 16	Timeline and Qs for stakeholders uploaded onto Vista
Feb 23	Meeting with stakeholders // Develop Questions
Mar 2	Develop Questions
Mar 9	Finalize Questions // Test run of survey in class
Mar 16	Paper Outline Due
Mar 23	Work on paper
Mar 30	Work on presentation
Apr 6	Final Presentation in Class
Apr 8	Final Paper Due

Appendix 3: Pilot Survey

At UBC the Faculty of Education has teamed up with the Faculty of Land and Food Systems in the implementation of the Think&EatGreen@School project. This research project addresses the issues of food security, food system sustainability, and adaptations to climate change within the context of Vancouver schools. Our goal is to implement an outdoor classroom/teaching and learning garden as an extension of the Land and Food Systems Orchard Garden (LFSOG) at

Formatted: Heading 1, Centered, Line spacing: 1.5 lines

Formatted: Font: Calibri, 11 pt

Formatted: Line spacing: Multiple 1.15 li

Formatted: Book Title, Font color: Custom Color(RGB(54,95,145)), Not Small caps, Not Expanded by / Condensed by

UBC. The Think & Eat Green @ Project is developing the Summer Institute, which is a week long seminar that provides teachers with a space and resources for garden-based professional development. Further information about the Think & Eat Green @ School Project can be found at <http://thinkeatgreen.ca>

This survey is designed to determine what garden-based workshops Vancouver school teachers are interested in learning about at the Summer Institute.

This survey is very short and should only take about 5 minutes of your time. Upon completion of the survey prior to March ___, 2011, you will be entered to win a free entrance ticket to the Summer Institute.

If you have any questions regarding the survey, please feel free to contact us at ubc.garden.survey@gmail.com.

Survey Questions:

1. Does your school have a school garden? If yes, please answer the following questions. If no, please skip to question #3.

- A. Yes
- B. No

2. Is the school garden used for academic instruction?

- A. Yes
- B. No

If yes, please specify how it is used for academic instruction:

3. Which of the following subjects do you think should be incorporated into the Summer Institute? Select all that apply

- A. Business
- B. Computers
- C. Science
~~(Physics/Chemistry/Biology)(Physics/Chemistry/Biology)~~

- D. English
- E. Creative Arts (drama, music, graphic arts, film, visual arts)
- F. Environmental studies
- G. Career and Personal Planning (CAPP)
- H. History or Social Studies
- I. Home economics
- J. Languages
- K. Mathematics
- L. Nutritional Health
- M. Physical education
- N. Leadership (Service Learning/Community Service)
- O. Other (please specify)

**4. What types of workshops would you be interested in taking in the Summer institute?
Select all that apply.**

- A. Understanding the local ecosystem
- B. Garden Design
- C. Incorporating annual plants (a plant that germinates, flowers, and dies in a year or season)
- D. Incorporating perennial plants (a plant that lives for more than 2 years)
- E. Soil Building
- F. Composting Techniques (Vermiculture- a process where waste is eaten and converted by worms)
- G. Seed Starting/ Seed Saving
- H. Nutrient Cycling
- I. Pollination (the role of pollinators in pollination)
- J. Integrated Pest management
- K. Season Extension (including greenhouse growing)
- L. Water Management
- M. Weed Management
- N. Harvesting
- O. Nutrition and human health
- P. Cooking
- Q. Preserves
- R. Other (please specify)

5. What would you be MOST interested in doing at the Summer Institute? Check THREE options of MOST interest to you.

- A. Discussing policies and issues relevant for community and school gardens
- B. Finding out about resources, support, and available tools that support school and community gardening
- C. Learning through sharing ideas and best practices
- D. Learning from presentations of other community and school garden project and their experience
- E. Learning technical information on how to start and manage a garden
- F. Networking, making connections, and building relationships
- G. None of these options are of interest to me
- H. Other (please specify)

7. School Name

8. What grade(s) do you teach?

***9. Your Name**

***10. Email Address**

***Optional- only used to notify prize winner**

Appendix 4: Survey Draft #3 with comments and suggestions from stakeholders

At UBC, the Faculty of Education has teamed up with the Faculty of Land and Food Systems in the implementation of the Think & Eat Green @ School project. This research project addresses the issues of food security, food system sustainability, and adaptations to climate change within the context of Vancouver schools. Our goal is to implement an outdoor classroom/teaching and learning garden as an extension of the Land and Food Systems Orchard Garden (LFSOG) at UBC. The Think & Eat Green @ School project is developing ~~the~~ a Summer Institute, which is a week-long 3-day seminar that provides teachers with a professional development opportunity to learn how to strengthen the connections between components of the food cycle within their schools, spaces and resources for garden-based professional development. Further information about the Think & Eat Green @ School project can be found at http://thinkategreen.ca

This survey is designed to determine which garden-based workshops Vancouver school teachers are interested in learning about at the Summer Institute. Participation in this survey is voluntary and your personal information will remain anonymous.

This survey is very short and should only take about 5-10 minutes of your time. Upon completion of the survey prior to Tuesday, March 22, 2011, you will be entered to win a free entrance to the Summer Institute.

If you have any questions regarding the survey, please feel free to contact us at ubc.garden.survey@gmail.com.

Survey Questions:

*1. Name

*2. Email Address

*Optional- only used to notify prize winner

3. School Name

4. What grade(s) do you teach?

5. Does your school have a school garden? If yes, please answer the following questions. If no, please skip to question #9.

A. Yes
B. No

6. Are you involved in your school garden? If yes, please indicate the approximate hour(s)

A. Yes: hr(s)/week

B. No

7. Please describe how your time in the garden is spent. 5-all of your time, 1-none of your time.

A. Manual Labour	5	4	3	2	1
B. Teaching/learning	5	4	3	2	1
C. Relaxation/play	5	4	3	2	1

8. Is the school garden used for academic instruction?

A. Yes
B. No

If yes, please specify how it is used for academic instruction:

9. Does your school include food security/food systems education into their current curriculum? (Food security- food that is available, affordable, accessible, appropriate, safe and sustainable. Food system- a collaborative network that integrates sustainable food production, processing, distribution, consumption and waste management in order to enhance the environmental, economic and social health of a particular place.)

Formatted: Font: (Default) Times New Roman, 12 pt, Font color: Auto

Formatted: Font: (Default) Times New Roman, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Comment (JU 1): Something about how participation is voluntary, identities will remain anonymous, etc.

Formatted: Font: (Default) Times New Roman

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman

Formatted: Font: (Default) Times New Roman, Not Bold, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, Not Bold

Formatted: Font: (Default) Times New Roman, Not Bold, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, Not Bold, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, Not Bold

- A. Yes
- B. No

10. Have you attended previous professional development activities related to food systems, school gardens and teaching? If no, please skip to question #7.

- A. Yes
- B. No

If yes, please specify:

11. Why have you not attended previous professional development activities related to food systems, school gardens and teaching?

- A. These subjects are not included in our school's curriculum
- B. No professional development workshops on these subjects have been offered
- C. Attending these workshops has not been a consideration
- D. Interested but time is a limiting factor
- E. Not interested

If yes, please specify how it is used for academic instruction:

→ A few more questions describing the teachers (OK, I see that these are at the end. Sometimes these demographic kinds of questions are conventionally placed at the top. Your decision): Name of school, What grades do they teach (Ask them to select), what subject areas (ask them to select), are they currently involved in a school garden (for how long)?

Describe your contributions to your school garden...? Do they include food security, food systems education into their current curriculum? Have they attended previous professional development activities related to food systems, school gardens & teaching? How many years have they been a teacher?

→ if you ask them to select their grades/subject areas, then you can filter out answers using survey monkey...

12. Which of the following subjects do you think should be incorporated into the Summer Institute? Select all that apply

- A. Business
- B. Career and Personal Planning (CAPP)
- C. Computers
- D. Creative Arts (drama, music, graphic arts, film, visual arts)
- E. English
- F. Environmental studies
- G. History or Social Studies
- H. Home economics
- I. Languages
- J. Leadership (Service Learning/Community Service)
- K. Mathematics
- L. Nutritional Health
- M. Physical Education
- N. Science (Physics/Chemistry/Biology)
- O. Other (please specify)

13. What types of garden-management based workshops would you be interested in taking at the Summer Institute? Select all that apply.

- A. Composting techniques (including Vermiculture—a process where waste is eaten and converted to compost by worms)
- B. Harvesting
- C. Incorporating annual plants (a plant that germinates, flowers, and dies in a year or seasons) into a garden
- D. Incorporating perennial plants (a plant that lives for more than 2 years) into a garden
- E. Integrated Pest management
- F. Nutrient cycling
- G. Participatory garden design
- H. Pollination and the role of pollinators in production, agriculture

Formatted: Font: (Default) Times New Roman, Not Bold, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, Not Bold, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, Not Bold

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto, Not Highlight

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Numbered+Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 0.63 cm + Indent at: 1.27 cm

Formatted: Numbered+Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 0.63 cm + Indent at: 1.27 cm

Formatted: Numbered+Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 0.63 cm + Indent at: 1.27 cm

Formatted: Numbered+Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 0.63 cm + Indent at: 1.27 cm

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto, Highlight

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto, Highlight

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto, Highlight

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, 11 pt, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, 11 pt, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, 11 pt, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, 11 pt, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, 11 pt, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, 11 pt, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

Formatted: Font: (Default) Times New Roman, No underline, Font color: Auto

15. Are you planning on attending the summer institute from Aug ., 2011 to Aug ., 2011. If no, please explain.

A. Yes

A.

B. No:

Are you planning on attending the summer institute? (Check with Will but need to list exact dates here and in the intro to the survey)

Yes/No (please explain why not)

Can we contact you regarding your participation in future research projects?

Can we contact you regarding future feed systems/garden based education/professional development opportunities?

67. School Name

78. What grade(s) do you teach?

89. Your Name

910. Email Address

Optional - only used to notify prize winner

16. Can we contact you regarding your participation in future research projects and future professional development opportunities?

A. Yes

B. No

If yes, please ensure question #1 and #2 are filled out.

Formatted: Numbered + Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 0.08 cm + Indent at: 0.71 cm, Tab stops: Not at 4.1 cm

Formatted: Numbered + Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 0.08 cm + Indent at: 0.71 cm, Tab stops: Not at 4.1 cm

Formatted: Tab stops: Not at 4.1 cm

Formatted: Tab stops: 4.1 cm, Left

Formatted: Numbered + Level: 1 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 1.27 cm + Indent at: 1.9 cm, Tab stops: 2.06 cm, Left + Not at 4.1 cm

Thank you for completing the survey. Your feedback is important to us and will be considered in planning the Summer Institute workshops.

Often leave a general comment box for people to write any additional suggestions at the end of the survey.

I just put in some tentative questions and wording. Please conduct a pilot with your classmates once you have transferred the questions to survey monkey. Once you have another version polished on survey monkey, send me the link. I'm not sure if you'll be the ones to send it out to teachers or if we will. I'll let you know but I suspect that it'll be us...

Appendix 5: Finalized Survey



Summer Institute Survey

At UBC, the Faculty of Education has teamed up with the Faculty of Land and Food Systems in the implementation of the Think&EatGreen@School project. This research project addresses the issues of food security, food system sustainability, and adaptations to climate change within the context of Vancouver schools. Our goal is to implement an outdoor classroom / teaching and learning garden as an extension of the Land and Food Systems Orchard Garden (LFSOG) at UBC. The Think&EatGreen@School project is developing a Summer Institute, which is a 3-day seminar that provides teachers with a professional development opportunity to learn how to strengthen the connections between components of the food cycle within their schools. Further information about the Think&EatGreen@School project can be found at <http://thinkeatgreen.ca>

This survey is designed to determine which garden-based workshops Vancouver school teachers are interested in learning about at the Summer Institute. Participation in this survey is voluntary and your personal information will remain anonymous.

This survey is very short and should only take about 5-10 minutes of your time. Upon completion of the survey prior to Tuesday, March ??, 2011, you will be entered to win a free entrance to the Summer Institute.

If you have any questions regarding the survey, please feel free to contact us at ulc.garden.survey@gmail.com.

1. Name

2. Email Address

3. School Name

4. What grade(s) do you teach?

Powered by [Google Docs](#)

[Report Abuse](#) - [Terms of Service](#) - [Additional Terms](#)



Summer Institute Survey

5. Does your school have a school garden? If yes, please answer the following questions. If no, please skip to question #8.

- Yes
- No

6. Are you involved in your school garden? If yes, please indicate in 'other' the approximate hour(s) spent in the garden per week. If no, please skip to question #8.

- Yes
- No
- Other: _____

7. Please describe how your time in the garden is spent (approximately).

	Manual Labour	Teaching/ learning	Relaxation/ play	Other
none of the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1/4 of the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
half the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3/4 of the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
all of the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Is the school garden used for academic instruction? If yes, please specify in 'other'

- Yes
- No
- Other: _____

9. Does your school include food security/food systems education into their current curriculum? (Food security - food that is available, affordable, accessible, appropriate, safe and sustainable. Food system - a collaborative network that integrates sustainable food production, processing, distribution, consumption and waste management in order to enhance the environmental, economic and social health of a particular place.)

- Yes
- No

10. Have you attended previous professional development activities related to food systems, school gardens and teaching? If yes, please specify in 'other'. If no, please skip to question #12.

- Yes
- No
- Other: _____

11. Why have you not attended previous professional development activities related to food systems, school gardens and teaching?

- These subjects are not included in our school's curriculum
- No professional development workshops on these subjects have been offered
- Attending these workshops has not been a possibility
- Interested but time is a limiting factor
- Not interested

12. Which of the following academic subjects do you think should be incorporated into the Summer Institute? Select all that apply.

- Business
- Career and Personal Planning (CAPP)
- Computers and information technology
- Creative Arts (drama, music, graphic arts, film, visual arts)
- English
- Environmental studies
- History or Social Studies
- Home economics
- Languages and Literacy
- Leadership (Service Learning/Community Service)
- Mathematics
- Nutritional Health
- Physical Education
- Science (Physics/Chemistry/Biology)
- Other:

13. What types of garden-management based workshops would you be interested in taking at the Summer Institute? Select all that apply.

- Composting techniques (including Vermiculture - a process where waste is converted to compost by worms)
- Harvesting
- Incorporating annual plants (a plant that germinates, flowers, and dies in a year or season) into a garden
- Incorporating perennial plants (a plant that lives for more than 2 years) into a garden
- Integrated pest management
- Nutrient cycling
- Participatory garden design (maybe in next section???)
- Pollination and the role of pollinators in agriculture
- Season extension (including greenhouse growing)
- Seed saving
- Seed starting
- Soil building
- Understanding the local ecosystem
- Water Management
- Weed Management
- Other:

14. What types of additional garden education based workshops would you be interested in taking at the Summer Institute? Select all that apply.

- Benefits (health, academic, economic and ecological) of garden-based education and outdoor learning
- Connecting gardens with curriculum
- Connecting gardens with your school's food system
- Connecting with your Parent Advisory Committee (PAC)
- Container gardens
- Cross-cultural gardening techniques
- Determining Costs and Benefits (how does this relate with Q 1 above?)
- Experiential learning in gardens
- First Nations relationships with the land
- History of school gardens
- Intergenerational gardening
- Native plant gardens
- Overcoming barriers (ex. Lack of experience, time, breaking routine, weather etc.)
- Place-based education in gardens
- Plants and their functions (ex. Edible and medicinal plants, etc.)??
- Relationship building
- Safety in the garden
- Summer garden management strategies
- Social Justice and gardens/food systems
- Working with children outdoors
- Working with school administrators, maintenance staff, and other teachers
- Other:

[Back](#) [Continue](#)

Powered by Google Docs

[Report Abuse](#) - [Terms of Service](#) - [Additional Terms](#)



Summer Institute Survey

15. What would you be MOST interested in doing at the Summer Institute? Check THREE options of MOST interest to you.

- Discussing policies and issues (issues is a bit vague?) relevant for community and school gardens
- Finding out about resources, support, and available tools that support school and community gardening
- Learning through sharing ideas and best practices
- Learning from presentations of other community and school garden projects and their experiences
- Learning technical information on how to start and manage a garden
- Networking, making connections, and building relationships
- Participating in the research aspect of this project
- None of these options are of interest to me
- Hands-on learning in community and school garden projects
- Other:

16. Are you planning on attending the summer institute from July 4-6, 2011? If no, please explain in 'other'

- Yes
- No
- Other:

17. Can we contact you regarding your participation in future research projects and future professional development opportunities? If yes, please ensure that questions #1 and #2 are filled out

- Yes
- No

Please let us know if you have any additional questions or comments

Thank you for completing the survey. Your feedback is important to us and will be considered in planning the Summer Institute workshops.

Powered by Google Docs

[Report Abuse](#) [Terms of Service](#) [Additional Terms](#)