

Vancouver Coastal Health Photovoice Project

University of British Columbia

Group 21:

## **Executive Summary**

The photovoice project by Vancouver Coastal Health was conducted to explore the impact of school gardens and food literacy activities on the social and mental health of secondary school students, using photovoice methodology. The project aimed to capture the students' perspectives to provide an insight into the relationship between mental health and school gardens, and to answer the following questions: How do school gardens affect the mental well-being of secondary school students? What are students' perception on the photovoice research method? And what are students' thoughts on gardens and food?

Participants were selected by our community partner, Vancouver Coastal Health, and consisted of secondary school students throughout Metro Vancouver. Data was collected through the photovoice methodology, where students were interviewed on questions based on their experience with school gardens and the photographs that they took during the workshop. The interviews were recorded and transcribed for analysis.

Most of the 12 students that were interviewed, expressed enjoyment and satisfaction while participating in the school garden workshops. Our own analysis of the student interviews has shown that school gardens create social experiences and provide opportunities for students to form meaningful relationships with their peers. These findings imply that the implementation of school gardens has value beyond nutrition or science education and has the potential to be a place that can positively influence the mental health of students.

## **Introduction**

School gardens provide students with hands-on learning opportunities that aims to strengthen food literacy. With the increased popularity of school gardens, there has been an increase in academic interests in the effect these school gardens have on students that interact with them. When examining the impact of school gardens, there have been multiple perspectives in which researchers have attempted to focus on, which typically analyzes shifts in dietary behaviors and academic performance.

A study conducted by Evans et. al (2012) looked at the effects of various garden-based interventions, including school gardens, on fruit and vegetable consumption. The study found that students who took part in a variety of these garden-based activities consumed more fruit and vegetables while also displaying a lower preference for unhealthy food (2012). Another study conducted by Saunders et. al (2010), found that primary students displayed a greater willingness to consume vegetables and rated vegetable flavors higher when their nutrition education was enhanced through gardens (Saunders et. al 2010). Both Evans et. al (2012) and Saunders et. al (2010), despite having studied different age groups concluded that schools have the ability to influence dietary habits of students.

Four LFS 350 students from the University of British Columbia, teamed up with Vancouver Coastal Health to develop a photovoice project with youths. The aim of the Community-Based Experiential Learning (CBEL) project was to explore secondary school students' perceptions on school gardens, food literacy, photovoice methodology and their link to mental well-being.

Vancouver Coastal Health is a publicly funded regional health authority who provides health services to over a million BC residents living in the Greater Vancouver and Garibaldi area.

Some of the services they provide include primary care, community-based residential and home health care, mental health, addiction services, public health, hospital care and research. The Principal Investigator of the study is UBC's, Dr. Kerry Renwick from the Faculty of Education, and the Co-investigators are VCH dietitians Vanessa Lam and Kathy Romses. Our role in the project was to conduct and transcribe interviews prior to the photo sessions with the secondary school students, which would then be analyzed by our community partners.

This study will explore the significance of school gardens and its link with food security among youths. School gardens provide students with opportunities to learn about planting, growing and eating a variety of healthy food. These contribute directly to food utilization and accessibility, which are key components of food security. Utilization is a key significance because it helps us determine how the students are applying their knowledge from the school gardens and we can link it to food literacy and their mental well-being. Accessibility is significant to know what types of food and knowledge they have access to, such as school gardens. Increasing access to healthy foods is linked to mental-wellbeing as studies by Rye et. al (2012) and Graham et al (2005) have emphasized how school gardens enhance education. Although there have been many studies on healthy foods and mental well being, there are few with the use of photovoice methodology. Our collaboration with Vancouver Coastal Health is significant to having a better understanding of student's perception on school gardens, food and their mental wellbeing. By sharing their pictures, students can express their reflections on their experiences, which can be shared with policy makers- this can ensure the policy is addressing the public issues (Wang and Burris 1997).

The CBEL project consisted of the following objectives:

- Contribute to the process of developing a photovoice project.
- Learn how to conduct proper interviews to avoid inconsistencies
- Interview students prior to their photography sessions and transcribe them to be analyzed
- Make own interpretations based on qualitative observations during the interviews based on recurrent themes.

With these objectives, we aim to find answers to the following questions:

- How do school gardens affect the mental well-being of secondary school students?
- What are the students' perception on photovoice?
- What are the students' perspectives on food?

Below is a link to our systems diagram of the CBEL project:

[http://prezi.com/ubh\\_n4wc\\_dz7/?utm\\_campaign=share&utm\\_medium=copy](http://prezi.com/ubh_n4wc_dz7/?utm_campaign=share&utm_medium=copy)

## **Methods**

Photovoice is a method to identify participants' thoughts and life experiences via photographs taken by them (Wang and Burris, 1997). Vancouver secondary school students will be selected as study participants by our community partners. The schools chosen were ones where students had access to school gardens or where they had the opportunity to join clubs that dealt with issues of food security. VCH created advertisements as a way to recruit the students. A workshop to improve interviewing skills and to reduce inconsistencies with the results was held with the UBC students. Four photography sessions will be held from February to March, 2016, and interviews were conducted before the photography sessions to gather basic background information about youth experiences around gardens, photography and their level of food literacy. The interviews are recorded using smart phones and transcribed. The findings of

the research will be shared through an art exhibition and a report. The exhibition will consist of participants' photographs and the report will discuss the effect of students' experiences with school gardens, food literacy and mental well-being. For the purpose of our CBEL project, we conducted a separate qualitative analysis based on themes to describe the students' perspectives and experiences with the gardens and photography.

For ethical considerations, no identifying information was revealed without informed consent. Names were not included in any reports, paper documents were kept in a locked cabinet, and digital documents were password-protected. During the interviews participants were notified that they were being recorded and were reminded that of their ability to leave the study at any time, for any reason.

## **Results**

From the VCH project, we have conducted interviews with most of the participants, in order to gather basic background information about youth experiences around school gardens, food literacy and photography. We recorded and transcribed the interviews and shared it with our community partner.

By sharing their experiences, all of the students expressed their satisfaction and contentment participating in school gardening programs. Through the interviews the students demonstrated that they were aware of how food is produced and where their food comes from. Themes of positive social experiences, being able to connect with their peers, and in some cases re-experiencing culture through garden spaces were also present in the interviews. The students were also appreciative of having the opportunity to learn aspects of photography and writing through their participation in the study's photovoice methodology.

One of the participants grew up in a broken family and has faced many challenges in his life at a young age, such as quitting high school and taking drugs. He suffered from Post-Traumatic Stress Disorder after the series of unfortunate events. He could not sleep well at night, and this greatly affected his temper on the next day. Surprisingly, he started feeling better after attending a workshop about school gardening. He found out that gardening could relieve him from his emotional burden. He was amazed by the process of plant growing and reckoned what he was doing was something that protect the earth.

Another participant talked about a great change in her life that occurred after joining the school gardening program. She was inspired by the process of growing food and felt that the level of food security was low – countries of the third world are extremely difficult to get access to sufficient, safe, nutritious food to maintain a healthy and active life food all times. As a result, taking part in the school gardening program made her interested in working on food policies in third world countries.

## **Discussion**

From our interviews we found that students were able to demonstrate an awareness about where food comes, how it's produced, and knowledge about the varieties of fruits and vegetables that exist outside of the supermarket. A few students also mentioned that they were making a more conscious effort to lead healthier lifestyles and make healthier food choices as a result of their experiences in the garden. Interestingly enough we found that all of the students expressed that there was value in garden spaces beyond just food literacy education. From the students' perspectives, the garden served as a space to destress from school life, create meaningful relationships, and in some cases it was an opportunity for them to reconnect with their culture. The positive stories and experiences that they shared with us throughout the interviews indicate

that there is a relationship that exists between good mental health and engagement with garden spaces.

This is significant because it contrasts the perspectives and approaches to gardens by Rye et. al (2012) and Graham et. al (2005) who's research seems to emphasize these spaces as a tool for increasing the accessibility of science and food-based education. Both of these studies chose to not directly include student voices in their conversations of school gardens and instead employed the use of teaching staff and parents as proxies for student voices. Students in our interviews seem to place value on the positive social experiences and the new relationships that they have been able to make through gardening and this demonstrates the importance of including students in conversations about gardens or even food. Young students have a lot of valuable perspectives and experiences to share and it's important that this is acknowledged in food systems discourse. Rye et. al (2012) and Graham et. al (2005)'s studies also seem to frame gardens as spaces that only belong to the school community. This includes teachers, students, and their parents, but they do not look beyond the boundaries of the school to consider its value to other community stakeholders. As a project that was a collaboration between UBC, Vancouver Coastal Health, and multiple secondary schools, we have illustrated the importance of youth perspectives and the potential for school gardens to become a community hub for conversations around food.

A limitation that our findings face is that our research was conducted with a small sample size of 12 students. This means that the themes of positive social experiences found within our results cannot be generalized to all students who interact with garden spaces. Since youth participation was also voluntary our methods were biased towards garnering positive responses due to the low possibility of youth with negative experiences being willing to dedicate more time

to gardening in our study. Also while our study did find that students in our study displayed a positive mental health, since our methods did not include any pre or post testing of mental health our results are not indicative of improved mental health as a results of garden experience. Lastly this was the first time that anyone in our group members have conducted interviews and we may not have been able to get the perspectives, experiences, and knowledge from the students that a more experienced interviewer would have.

## **Conclusion**

School gardens have the potential to be utilized as an inclusive community space where people can develop relationships with one another, interact with unique perspectives, and begin discourse on food systems issues. Organizations, teachers, or students who plan on facilitating a school garden should aspire to create a space that the whole community values, which will enable more people to navigate through their relationship with food and local food system issues. This can be achieved through a community-based approach that integrates educational institutions, community organizations, and stakeholders into the framework of its approach.

Our experience with the VCH Photovoice project, a collaboration between UBC, VCH, and multiple high school students, represents one way that a partnership between researchers and the community can be more than just an extractive academic practice. Even though our goal was to learn about the relationship between food, youth, and mental health, the implementation of a photovoice methodology enabled the youth receive a positive learning experience with photography from a professional photographer. Through our interactions with the youth we came to learn that their experiences with food held value beyond the scope of education or health. Connecting with culture, creating meaningful relationships, and exploring what food means to them and their community are what the youth valued the most from their gardening experiences,

but this is not seen in many academic approaches to food. In order for educational institutions to properly evaluate the potential of gardens as a community space, research needs to acknowledge the wealth of knowledge within diverse communities and recognize the invaluable insight they have to offer on discourse around food.

### **Critical Reflection**

“A”

Participating in this project allows me to re-think the effects of school gardens. Before this project, I could only think of some abstract effects of it; for example, enhancing the food literacy of the public that students can get to know more about where food comes from and how they grow. These influences are a little bit intangible because they are based on LFS 250, the prerequisite of this class learning about food, land and community. Having participated in this project, I can observe the measurable and observable outcomes of school gardens in the public. Students' trauma could be relieved by the planting and their career goals could be influenced by the garden. I revel in this kind of hands-on experience like focusing on what is going on in society. This project expanded my exposure to CBEL project and thus it helped me find where my interest is.

“B”

This project was really helpful on developing skills in research interviews. Having no prior experiences on being the interviewer, I was afraid that I could not get enough information from the participants and contribute to the project. From this project, I can observe how interviewees behave, especially the shy ones, and learn how to help them feel comfortable from the environment. The interviews were not always informative, but I learned how to make use of the scarce information from the participants and try to

analyze their words. On the other hand, this project helped me to understand the function of a school garden. I do not have any experiences with school gardens and farming so I did not know what to expect from the youth's perspective. After the interviews, we found that gardens mostly positively impacted the youths and implementation of school gardens might be very helpful on improving student's mental health. Despite failing to develop a connection between mental health and school gardens from our project, it seems that students and schools can always benefit from school gardens. More research is definitely required in this area and it would be helpful if researchers can draw a clear connection between school garden, or even food literacy, to student's mental well-being.

“C”

This CBEL project and the LFS 350 class has taught me that things really never do go as planned, however, it has also taught me that there is more than one solution to every problem. I think that was the main thing that I learned from this project. I was also grateful to be able to observe and hear students' perceptions on school gardens and food literacy. I was impressed by how much they knew and the kind of connections they felt through the school gardens. However, to me, the project itself was a bit of a disappointment. I had expected to be more involved with the process of the entire project, rather than just doing the interviews and transcribing them. And due to the fact that it had only been approved in the beginning of the year, I felt that had we more time, it could have been better organized and properly educated. Nevertheless, I learned that you have to take the bad with the good. Overall, I did gain some new perspectives on school garden programs and was impressed with some of the answers the students were giving.

“D”

The CBEL project was an opportunity for me to apply what we have been learning in class about a community asset based approaches into a real life situation. Being able to go through the experience of struggling with our project objectives, negotiating our own perspectives with our community partners', and collaborating with other students is different from my experiences in a traditional lecture hall setting.

As people who are used to work in an academic settings sometimes we are too focused on what we individually want to achieve that we forget to broaden the scope of our efforts and understand how our work influences the communities that we work in and align our goals with strengthening those local assets. What I enjoyed most about my CBEL experience was being able to engage different community stakeholders in conversations around food and learn about their perspectives on food. Learning about food's value as a way to create social experiences, reconnect with culture, and be a source of self-healing has informed my own beliefs around food and is an experience that I hope to carry with me throughout my future work in local food systems.

## **Literature Cited**

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