Final Community Project Report

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**Introduction**

With one in six B.C children living in a food-insecure household, the prevalence of children attending school without breakfast is increasing (Public Health Association of British Columbia, n.d). Breakfast Club of Canada, is a non-profit, nation-wide organization which is devoted to helping children access healthy morning meals. They have served almost 33 million breakfasts per year and had fed around 204,000 students per day in Canada (Breakfast Club of Canada, 2017). They believe “serving students a healthy, balanced breakfast helps them develop better social skills and makes them more inclined to learn” (Breakfast Club of Canada, 2017). According to the data from the Breakfast of Canada, one-fifth of the Canadian children start their day on an empty stomach due to lack of time and access to nutritious food (2017). It is even worse among aboriginal communities, where one in two kids don’t have breakfast before going to school (Breakfast Club of Canada, 2017). The risk of having nearly 1 million children getting nothing to eat before class is what we hope to decrease with our contributions to the recipe book.

Over this term we have been working with the Breakfast Club of Canada, to create a recipe book that will be available for elementary and high schools in British Columbia to use to provide healthy, and affordable breakfast meals.

The objectives of this project include:

● To develop a recipe book with 50 recipes containing 3-5 ingredients that are nutritious while staying within budget and tailored towards easy to prepare meals that can be made for large groups of students.

● To provide varieties of food recipes that apply to kids with dietary restrictions by creating several recipes that are free of the most common foods to promote participation by all students and partners within the program.

● To produce a recipe book that will be distributed among the Breakfast Club of Canada's partners to promote participation in the program

**Method**

**Data Collection Approach**

To achieve our objective and to start our recipe development we took three major steps. This included research on current recipes used, research on age appropriate recipes, and observation of schools using the program. For data collection we looked at recipes currently being used in a book that was formerly made by high school educators. We then took these recipes and did further research into what recipes were nutritious and appealing to school-aged children with guidance from our community partner. Our community partner provided us with data on ingredients that were readily available in the program and which were too expensive to be obtained.

Following our research, we had the opportunity to observe a school utilizing the program. Through this observation, we collected data on what foods were being used and which foods were most popular. We also noted whether the excess food was left and how it was utilized.

**Analysis of Data**

We analyzed our collected data by taking note of patterns within food consumption that we noticed during the school visits. By observing these patterns, we were able to tailor our recipes to the needs of the Breakfast Club and the wants of the children participating.

**Ethical Considerations**

As part of this course, every member was required to complete the TCPS-2 for Ethical Research. By doing so, we were able to take into consideration ethical practice during the school visits. Unfortunately, our group was not able to speak with the children participating as we did not receive any consent from guardians.

**Results**

As our project came to an end, we were able to develop 44 recipes sectioned into five different chapters: classics, quick fixes, allergy-friendly recipes, drinks, and one pan recipes. We focused on making the recipe book engaging to read to optimize program participation and help with solidating the Breakfast Club as a delicious and fun program to participate in. From our observed data we noted that older children preferred “to-go” meals, and we incorporated a chapter so that these students could participate in the program.

For our recipe development, we focused on nutrition to ensure the recipes followed the Breakfast Club of Canada's outline that they provided during our meeting:

* avoiding white flour, sugar, packaged foods, meat products
* including more eggs, whole wheat flour, and honey for sweetener
* including recipes that worked within a budget
* including more allergy-friendly foods that are delicious and cost wise

 Our results revealed that using a recipe book within a school breakfast program can help increase participation and satisfaction of the participants and program club, and may contribute to improved food insecurity. This was observed during the school visits as participants appeared satisfied when their favorite breakfast foods were available.

**Discussion**

During our two school visits, the staff working for the program all said that kids who are in the breakfast program mainly came from families with significant economic burdens and with the high risk of being food insecure. To help out these kids, the schools had other food programs in collaboration to try to alleviate their situation. According to what our partner said, this phenomenon had external validity and existed in most of the elementary schools that participate this program. Therefore, creating a nutritious and budget-limited recipe book for the breakfast food program is not just for better learning in school performance, however, in a broader concept, it is also to help the kids who are food insecure (Bartfeld & Ahn, 2011). According to the research done by Bartfeld and Ahn (2011), school breakfast programs helped alleviate the situation or the families that were in severe food insecurity. Bartfeld discussed that breakfast programs helped to improve the situation from three aspects. These included providing kids with breakfast who otherwise would have skipped the meal, reducing the uncertainty of access to sufficient food, and leveraging food resources to feed other family members.

Another study showed that elementary school kids who did not consume breakfast in school food program usually chose low-nutritional-quality breakfast especially among the kids within low-income families (Dykstra et al., 2016). Based on the definition of food security, which is “having physical and economic access to sufficient, safe and nutritious food to meet dietary needs are the times” (Pinstrup-Andersen, 2009), only providing kids with access to food is not enough, we also want to address the quality and the nutritional value of these meals. Since we are part of the Land and Food Systems faculty, we hope that the nutrient-dense recipes will improve children’s food security from the aspect of better food quality.

**Limitations**

 Although our group was able to visit schools participating in the school breakfast program, we were still able to collect a lot of observational data. Due to the time constraints, we were not able to conduct a survey by interviewing kids involved in this program. Asking for their food preferences and the potential barriers that hinder their participation would have greatly benefited our project. Since we only had two school visits, the feedback we received and the observations we made may not be very representative of the general population of all kids involved in this program across Vancouver. We found out that food waste did exist in this program; however, we were not able to effectively address this issue by merely altering the size of the foods served as we did not have precise data indicating how much food was wasted. Since kids’ food preferences might also be a driving cause of food waste, we may fail to avoid using certain unfavorable ingredients when developing the recipe book due to lacking data suggesting the least popular foods. Looking forward, interviewing children in this program and having more school visits may be a better way to understand kids’ food preferences. Observation of food waste in this program needs to be made, so we could come up with better solutions to address portion sizes.

**Conclusion**

Our CBEL project was designed to help address childhood food insecurity by having nutritious breakfasts available in the school breakfast program. From this project, we produced a recipe book that included 44 nutritious, simple and delicious recipes with operational procedures. We divided the recipe book into five chapters to make sure it can meet children’s different needs. By visiting the school, we found that there are some food waste implications, which need to be addressed in recipe portion sizes. Moreover, the Club only offers Western-oriented breakfast in the school that fails to be mindful of children who come from other cultures. Moving forward, we hope the club can contribute different cultures to their breakfast menus to match different children’s preferences. By doing this community project, we also hope to influence more people to pay attention to children’s health and mitigate children food insecurity.

**Critical Reflections**

Student 1: I am genuinely grateful that we are given this community based experiential learning project because this is such an excellent opportunity for me to apply what I have learned so far in this course to a real-life situation, and form professional relationships with our community partner. When I just started this project, I didn’t know where to start, and where it would end. However, throughout working with my group members during the flexible learning sessions and taking my time reading researched articles, I started to understand more about the project. One of my most favorite parts is getting feedback from tutorial sessions. It was scary but at the same time keeping us on track of what we are going to do as well as giving us opportunities to reflect on what we have done through online blogs and what could have changed. During the interaction with our community partner and the elementary school we visited, it helped me with the understanding that achieving sustainable food system and food justice is not just about personal skills, it’s also about working together with our group members as well as the community partners. However, in terms of our group project, I think that we could have done much better if there were no other deadlines held us back from dedicating more time to the recipe book. I am looking forward to seeing how our recipe will be utilized and making what kind of impacts!

Student 2: I enjoyed working with the Breakfast Club of Canada on developing a recipe book that will hopefully be used in programs to supplement the curriculum. Starting the project I was excited that we had the opportunity to actually visit a school with the program in progress. However, due to course conflicts, I was unable to attend a school, but hearing from my group the visits went well. Throughout the development of the project, I learned a lot about all the considerations that come into play when developing a recipe book. The most challenging part was formatting the recipes so that they were consistent with ingredient measurements and directions. As the entire group contributed recipes, it was difficult at first to coordinate all together to make sure we were compatible. Starting the program, I thought recipe development would be difficult; however, we were able to find multiple resources to help with the development of our recipes. At first, it was difficult communicating with our community partner as responses were so spread out. This was frustrating when trying to coordinate dates to attend schools for a visit. However, as time went on communication improved and we were able to organize dates and receive valuable feedback from our community partner. Going forward I am hopefully, that the recipe book will be a useful tool to schools utilizing the Breakfast Club of Canada Program.

Student 3: Right from the very beginning with the confirmation that I got my first choice in the CBEL project, I was excited. I am content to say that the opportunity and experience to work with my group and with the Breakfast Club of Canada has been very confident and fabulous. Throughout the term, we aimed high to pave a significant path for the program, and we all genuinely worked hard to finalizing our project with the recipe book. After meeting with our community partner and later visiting the school and seeing the children eating food from previous recipes, we know that we have significant responsibilities. We understand clearly that our recipe book indeed creates an impact on the society and through the experience, I have personally learned and grown. Namely, this is the first time for me trying to put together a recipe book and indeed the process for more difficult than expected. Working with group members every week also helped me with better planning and proper communication. I want to note in this reflection that through many hours of thoughts on the project, we are content to say that our project is successful.

Student 4: Working with the Breakfast Club of Canada for our CEBL project is a fascinating and meaningful experience. From that, I enjoyed in studying and working on children’s food and health because I am willing to use my interests and knowledge to help children’s healthy growth. This project not only teaches me many things I will never learn in class but also gives me an excellent opportunity to make a difference in the real world. Throughout the development of the project, I learned that without proper communication, our work cannot be finished successfully. Receiving feedbacks from community partner made us reflect and improve a lot. For example, they asked us to consider a problem in all its aspects. By doing so, we modified a lot of our recipe to meet children’s needs and comfortable for school staffs to prepare the breakfasts. Also, part of what made this project success was how well our group members work together, supporting and urging each other. I have genuinely cherished the experience and the friendship I gain from the CBEL project. Even though it is the end of this project, it is not the end of our academic career. I will continue to study in seeking better ways to contribute to promoting children’s health one day.

Student 5: Working with the Breakfast Club of Canada on creating a breakfast recipe book for kids was such a valuable learning experience. Starting from the beginning of this project, I had no idea how this project is going to be carried out and what potential challenges that could cause trouble for our project. However, I learned to tolerate and deal with uncertainty throughout this whole project. We tightly worked with our community partner to identify the objectives and to figure out plans and solutions to carry on with our project. Receiving feedback from our TA and our community partner was sometimes frustrating, especially when we spent a lot of time working on the project and we tried our best to come up with the best plan that we could think of. I then realized that there was no right or wrong answer when we were dealing with real-life problems, and there was always room for improvements. Specifically looking at our project, I think we could have developed better recipes that fit kids’ and our community partner’s needs if we had fewer time constraints of this project. I appreciate having this opportunity to get involved in this program. Even though I had learned children food insecurity was a severe public health problem when I assessed school food environment at Admiral Seymour Elementary through LFS 250; I had no idea how this issue is being addressed regarding implementing school food programs. Working with Breakfast Club of Canada gives me insight into the complexity of addressing food insecurity and gets me to think of how we as university students can help with decreasing hunger among kids.

Student 6: I really appreciate that LFS 350 provided me a chance to engage in such a wonderful project. I transferred from the business school after I realized I had more passion for food than numbers. I also enjoy cooking and love spending time with kids. Our project, working with Breakfast Club of Canada and creating a recipe book, just combines all my favorites together. The project also gives me a chance to put into practice about what we learned in the lectures. For example, in the very first lecture we learned what is an asset-based community development compared with a deficit-based community development. I got the ideas of how to cooperate with our partners and how to truly help them in a sustainable and efficient way. At the first lesson, professor threw a very concept of “food justice”, which costed a whole term to be explicit. I used to believe that food justice is too far from me to be considered, but I was surprised when I know that food justice is involved in everyday of my life because it is such a broad term that is related to the income, race, and even the gender of an individual. There is still a long journey for the world to achieve food justice. Despite the knowledge I learned from the course, I also mastered in a great presentation tool that is the infographic. I believe it would be very useful for my further learning.

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