

Exploration of Learning Goals and Learning Outcomes in Two Community Kitchens in Seattle

Sylvia Sennhauser

A thesis

submitted in partial fulfillment of the

requirements for the degree of

Master of Public Health

University of Washington

2017

Committee:

Donna Johnson

Daniela Gheleva

Program Authorized to Offer Degree:

Nutritional Sciences Program, School of Public Health

©Copyright 2017

Sylvia Sennhauser

University of Washington

**Abstract**

Exploration of Learning Goals and Learning Outcomes in Two Community Kitchens in Seattle

Sylvia Sennhauser

Chair of the Supervisory Committee:

Donna Johnson, Professor Emeritus

Health Services

**Background:** Community kitchens (CK) are associated with increases in nutrition knowledge, cooking skills, social support, self-efficacy, empowerment, and food security. While interconnected functions of CK have been explored, a distinct paucity of published studies remains, especially in the US, and little is known on CK in the context of job training. The aims of this study were to describe CK as settings for training, and specifically, the goals of the participants, and the degree of achievement of learning outcomes across four types of CK participants within their respective CK.

**Methods:** This descriptive study employed a mixed methods approach for a secondary data analysis. CK managers asked participants to complete surveys. Survey data were de-identified and provided to UW researchers. Data from four groups of CK participants within two CK located in Seattle were analyzed: (1) A Community Kitchen at Seattle Pacific University (SPU), connected to an undergraduate nutrition program at a university setting, engaged nutrition student volunteers in the management of a CK geared toward low-income neighborhood community participants; and (2) A Farm-to-Table Community Kitchen Training (F2T) used the CK format to conduct career development trainings for Early Childhood Education and Assistance Program (ECEAP) professionals and recently incarcerated, transitioning adults (Career Bridge).

**Results:** Data were included from 126 community participants and 34 students from SPU. F2T data included 46 participants from 3 groups of ECEAP professionals, and 53 male and female Career Bridge participants. Learning goals for community participants at SPU centered on cooking skills and new recipes. Learning outcomes for student volunteers were in line with the train-the-trainer model, which prepares trainees to open subsequent CK of their own. Both participant groups at SPU reported interdependent and positive experiences in terms of community, social support, and new recipes. At F2T perceived learning gains were higher for Career Bridge participants than for ECEAP participants. Nutrition knowledge, self-efficacy, and cooking skill learning outcomes varied by participant group, gender and amount of training sessions attended.

**Conclusion:** CK are a versatile and feasible way to meet a variety of social and learning goals across diverse settings.

## **Introduction**

Community Kitchens (CK) have been variously defined, depending on their specific focus.<sup>1-5</sup> CK are traditionally defined as “providing an opportunity for a small group of people to meet regularly in order to prepare a meal.”<sup>1,6</sup> CK were formed in Peru in the late 1970s as an act of activism by women living in urban low-income, food insecure neighborhoods. As women bonded together and pooled resources to feed their families and neighbors CK became an important place for community formation and power for the women running the CK.<sup>7,8</sup> The CK concept spread to other South American countries, eventually crossing to North America, Europe, and Australia.<sup>7,9-12</sup> Most of the research available is based in Canada, where CK enjoy widespread popularity and support.<sup>1-4,13-19</sup>

Over the years, the CK concept has been adopted more broadly to meet an array of needs. Fano et al. applied two distinctions to CK. “Community-based CK” refers to CK that are community-initiated and coordinated, whereas “agency-based CK” refers to CK that are initiated and coordinated by various combinations of government or non-government agencies, and engaging either volunteers or

employees.<sup>15</sup> In some instances CK have been used as a training modality for participants.<sup>9,20</sup> Regardless of their respective denominations, CK are associated with increases in food security, nutrition knowledge, cooking skills, self-efficacy, and social support.<sup>1,2</sup>

### Food security

The USDA defines high food security as “access by all people at all times to enough food for an active, healthy life.”<sup>21</sup> In Canada CK have been specifically used to battle food insecurity.<sup>2-4,16</sup> CK present opportunities to practice budgeting skills, for example, by focusing cooking sessions on affordable and nutrient-rich sources of foods.<sup>3</sup> Investigators such as Engler-Stringer, Tarasuk, Kirkpatrick and their teams highlight benefits like increased dignity and short-term food security but report distinct limitations to the ability of CK to reach and serve food-insecure populations long-term.<sup>3,4,16,17</sup>

### Nutrition knowledge, attitudes, and behavior

CK are successful health promotion intervention tools in regard to nutrition and nutrition knowledge, increasing positive attitudes and behaviors in populations studied. Creed-Kanashiro et al. report on a community-based intervention in Peru that uses existing CK to educate local women and adolescent girls on the effects of anemia and dietary sources of iron. The intervention group gained knowledge regarding iron-rich food sources and cooking techniques and experienced lower anemia prevalence compared to the control group.<sup>5</sup> In another study Fano et al. found that the proportion of participants who consumed at least five servings of fruit and vegetables a day rose from 29% to 47% following CK participation.<sup>15</sup>

### Cooking skills

An increase in cooking skills is frequently reported as an outcome for CK, due to the hands-on nature of CK.<sup>1,2,6,13,22</sup> Iavocou et al. reported that there are a range of measured cooking skill learning gains among CK, due in part to the variety of methods used by different investigators to measure cooking skills.<sup>1</sup> For example, Spence et al. report that “participants might not realise that they have the ability to learn certain skills because they might not recognise their newly acquired cooking ability as a

skill,”<sup>10</sup> meaning increases in cooking skills may remain undocumented due to communication barriers between investigators and community kitchen participants.

### Self-efficacy

Self-efficacy describes the “core belief that one has the power to produce desired changes by one’s actions.”<sup>23</sup> Increased self-efficacy is usually considered a central outcome for CK participants. Engler-Stringer et al. followed 21 Canadian CK groups and found that “participants felt that they had learned information about food and cooking that enabled them to make healthier choices.”<sup>13</sup> A study by Crawford et al. of low-income CK participants over two years (n=24) reported a 20% rise in the proportion of participants who perceived that a nutritious diet was affordable and a 57% drop in the proportion that thought that a nutritious diet took too much time—both of those attitudes are linked to a sense of increased self-efficacy.<sup>22</sup> A CK approach enabled participants in an urban Aboriginal community intervention in Canada to reconnect to ancestral food preparation and planting practices. According to Mundel et al. self-efficacy was increased because participants were able to “reconnect with tradition, with the land, and with each other with the ultimate goal of healing for individuals, communities and environment.”<sup>19</sup>

### Social support

Psychosocial outcomes like social interaction are associated with social support, especially in food-insecure populations.<sup>13,15,19</sup> Collaborative CK sessions that provide space for social support, reduce stress, and increase self-confidence and self-esteem.<sup>14</sup> In addition, social interaction is associated with participants or facilitators sharing information about local health and social service resources, thereby increasing participant knowledge of available resources.<sup>12</sup>

### Training

Lastly, CK have also been used as training strategies for participants, for example, by employing train-the-trainer models, which prepare trainees to open or maintain subsequent CK of their own.<sup>20,24</sup> Lee et al. reported on a train-the-trainer model which focused on recurrent trainings for facilitators

overseeing CK. Interview results (n=20) showed that the majority of CK facilitators (82%) had received training in at least half of the topics and felt generally well supported and confident in leading their CK. The authors found that ongoing trainings were a key component in the lasting success of these CK.<sup>9</sup>

While many interconnected functions of CK have been teased out and explored, there remains a distinct paucity of published studies, and few of these Kitchens have been studied in the US. Furthermore, there is little research on innovative CK to achieve goals and learning outcomes related to career development and job training.

### **Overall objectives and aims:**

The purpose of this study was to describe the goals and learning outcomes, as well as the learning and social experiences of four groups of CK participants within two CK located in Seattle (see table 1). One CK is connected to an undergraduate food & nutrition program in a university setting and engages nutrition students in the management of the CK; the other kitchen uses the CK format to conduct trainings for childcare professionals and life skill trainings for recently incarcerated adults.

The specific aims of the study were (1) to describe the goals of CK participants going into the CK sessions, (2) to describe the achievement of CK learning outcomes and other outcomes.

This descriptive study employed a mixed-methods approach for a secondary data analysis.

## Community Kitchen at Seattle Pacific University

### **Background:**

The Community Kitchen at Seattle Pacific University (SPU) was founded in 2011 by one of the researchers in this study, Daniela Geleva, PhD, RD, an Associate Professor of Food and Nutrition at SPU. According to the team member handbook, SPU aims “to serve individuals in need of affordable food, cooking and meal planning skills, food and nutrition knowledge, and a supportive community.” At the time of the study SPU was a member of the Community Kitchens Northwest (CKNW) coalition, which was part of the same larger organization overseeing the Farm-to-Table CK evaluated below.

SPU community participants were recruited through area food banks, affordable housing buildings, local churches, and partnerships with community organizations in the neighborhoods around SPU, and the SPU student, faculty, and staff community. The CK participation fee from 2011-2014 was \$10-\$15. During 2014-15 the participant fee increased to \$15-\$20. The fee included the meal that was to be consumed as a community at the CK that evening, as well as additional dishes to be taken home for later consumption.

CK sessions took place on campus in the food & nutrition program’s culinary lab. The day-to-day operations for each session were run entirely by students, led by a paid student Coordinator and under the guidance of a hired Practicum Instructor and Dr. Geleva. During the period between 2013 and 2015 students earned one academic credit per each quarter of involvement in the CK through enrollment in the “Community Kitchen Practicum.” In the first two years of the program, student team members were not offered academic credit.

### **Methods:**

Students asked community participants to fill out one of two surveys at a check-in station, prior to entering the CK (table 2). One survey (see appendix A) was conducted before participants entered their

first CK session, and a second (see appendix B) before their 4<sup>th</sup> CK session. Students collected the survey forms upon completion. Data on demographic or socioeconomic status were not collected.

In addition, student team members filled out a short qualitative survey (see appendix C) as part of a reflection at the end of their term of service. The survey consisted of three questions, the third one providing suggestions for improvement to the faculty director, thus it was not relevant to this research and was excluded. The survey was administered through Survey Monkey online survey software.<sup>25</sup>

Inclusion criteria consisted of completion of at least one survey form with at least half of the questions answered. Exclusion criteria consisted of illegible handwriting and more than half of the questions left unanswered. No surveys had to be excluded. Results are reported as relevant to this study with a focus on learning goals, learning outcomes, experiences, and barriers.

Data for SPU community participant surveys were coded, validated, and entered into spreadsheets by Dr. Geleva and Brittany Myer, an SPU graduate and former CK student team member before data were shared with the primary researcher. The primary researcher adapted data for analysis and calculated frequency distributions and central tendencies for quantitative data. To assess qualitative data from CK community participants, words and phrases were coded by descriptive overarching terms and the numbers in each category were counted.

Qualitative data from the student surveys were read through for a general understanding of content. The primary researcher developed a draft-coding guide to direct a thematic analysis. A second researcher validated the coding guide. Jointly, two researchers coded all documents a second time. Any discrepancies were resolved before the final codes were applied (see appendix D for coding guide). Quotations were examined for words or phrases matching coding guide descriptions with some phrases matching more than one code. Themes were developed based on overall number of times words or phrases matched the coding guide. Strength of conviction within language use was noted. However, all matched phrases were counted equally, regardless of participants' verbal abilities. Preparation and

analyses of qualitative and quantitative data were carried out with the use of Excel Microsoft Professional Plus 2013 and IBM SPSS 21.

All data were stored exclusively on the secure and backed-up project file storage for collaborative research and coursework (R:Drive) of the University of Washington Center for Studies in Demography and Ecology (CSDE). For analysis purposes CSDE provided all software required on the secure Windows Server 2012 R2.

## **Results:**

### SPU community participants:

One hundred twenty-six community participants attended the CK at SPU at least once between April 2011 and June 2015 and completed the survey in appendix A. Twenty-nine community participants attended the CK at SPU at least four times and completed the survey in appendix B.

### 1<sup>st</sup> survey:

Respondent data contained participant dietary preferences, allergies, and learning goals. Participants were asked to prioritize their three most important goals from a list of nine learning goals (see table 3). The most frequent goals selected were “trying new and different foods” and “learning cooking/baking skills” (see figure 1).

In response to an open-ended question about specific cooking and meal interests, participants noted ethnic or culturally specific foods 25 times, and wrote in examples of healthy foods 25 times. Six or fewer mentions were made of pastry and baking, soups and stews, easy to prepare foods, or inexpensive foods.

### 2<sup>nd</sup> Survey:

The second survey measured perceived achievement of one learning competency using a Likert-scale format question. All Likert-scale questions used a scale of one to five, one meaning “not at all” and five meaning “extremely.” Twenty-eight of 29 respondents answered the question “Have you gained

new cooking skills at SPU” with a mean response of 4.32. In response to two Likert-scale questions about satisfaction with SPU in general and the meal selection specifically, the mean response of 29 respondents was 4.72.

Twenty-eight participants responded to the prompt “Favorite things,” as measured in an open-ended question. Themes within the responses centered on skills that were learned and appreciation of the CK at SPU community (see table 4). Barriers to cooking and eating foods prepared at the CK were gauged in the end portion of the survey. Thirteen participants reported to have cooked recipes and specified between two to four dishes while 15 participants reported not having cooked recipes at home. The top two barriers for not having cooked any or few recipes at home were reported as “I have not had the opportunity but I am planning to in the future” by 16, and “I am not confident that I would be successful” by five participants. Out of 28 responses, nine participants reported having to throw food away that they had taken home while 19 did not have to throw food away. The top reason for having to throw away food was reported as “It spoiled before I got to eat it” by 4 participants. Out of 25 responses to the amount of money participants were willing to spend at SPU sessions in the future, 15 reported to be willing to spend more, while ten were not willing to spend more. In an open-ended question asking for a specific amount of money participants were willing to spend, nine specified an amount, which averaged to \$17. Reasons accompanying the amount included very low income, unemployment, and the CK at SPU being too expensive.

#### SPU Student team members:

Thirty-four students who were part of the SPU team for at least one quarter between 2011-2015 completed surveys. Students answered two questions through an online survey following their service period. Questions pertained to (1) students’ perceived personal benefits due to the work and (2) the effect of the work on students’ Christian vocation or personal calling.

Themes that emerged broadly fit into three categories: community, skills, and personal growth (see table 5). Answers in the category of community spoke to the enjoyment of social relationships and an

increased sense of community. Students described experiencing these sentiments both with their peers and with community participants, and due to shared religious belief and the sharing of food. One student wrote, “I was also impressed with how much of a friendship I made with the participants and classmates, and how excited I would get to see them and be able to cook with them again.”

Observations of skills learned included different aspects of the CK management process, including administrative, communication, nutrition and hands-on culinary skills. One student noted, “I have also gained experience with a huge array of skills involved in managing a business or kitchen of my own, including talking to producers, cost analysis, menu planning, etc.,” while another noted, “The CK has allowed me to not only practice principles that I am learning in the classroom, but also see the importance of what I am learning.”

Lastly, in the category of personal growth, students described religious fulfillment, realization of personal happiness, clarity about career inspirations, and increases in confidence due to their involvement with the CK program. Many students reported the CK as being their first exposure to people outside of the community they grew up with. One student wrote, “I learned a lot more from each participant I worked alongside than they probably learned from me.” Another student noted, “Before the CK, I knew I was interested in community nutrition, but this opportunity has solidified my desire to work professionally in this area.”

## Farm-to-Table CK Trainings

### **Background:**

Farm-to-Table (F2T) is a program offered by Community Kitchens Northwest (CKNW), itself part of Seattle Tilth, a non-profit organization devoted to preserving and building a local food system in the Pacific Northwest region. CKNW works to increase knowledge and practical experience related to food choices and cooking to strengthen the local food system. The F2T program teaches participants how to use fresh seasonal produce and whole foods as the basis for healthy cooking.

The Early Childhood Education and Assistance Program (ECEAP) is administered by Washington State Department of Early Learning to provide early childhood education and support to eligible children and families. ECEAP has a strong emphasis on professional staff development and training and has been working with CKNW since 2013 to conduct hands-on cooking and nutrition trainings. ECEAP professionals from the Associated Recreation Council (ARC), Community Day School Association (CDSA), and Causey's attended CK trainings as part of staff training. ARC and CDSA are large agencies with multiple childcare sites, and Causey's is an independent stand-alone childcare center.

Career Bridge is a program for recently incarcerated men and women of color in Seattle, organized by the Urban League of Metropolitan Seattle since 2012. This 6-week cohort-based program combines mentorship, social services, and workforce training to increase participants' personal and economic stability following incarceration. CKNW has been conducting the F2T training on nutrition for Career Bridge participants since 2015. The F2T session is typically held in the first week of the program, as part of the week's theme "self-care."

All F2T trainings included in this study took place at select community centers around Seattle between 2014 and 2015. Trainings were conducted by CKNW staff leaders and consisted of a PowerPoint presentation and learning session followed by a communal cooking session and meal.

**Methods:**

ARC and CDSA providers who participated were required to attend their F2T session as part of an annual professional development requirement, and on average had attended two yearly sessions between 2013-2016. At the time of study, Causey's providers attended for their first time in 2015. Career Bridge participants attended the program once in 2015. Participants whose survey results were used in this study voluntarily applied to and attended the Career Bridge program.

Two versions of the F2T survey (see appendix E and F) were used, each partially adapted to evaluate trainings specifically for ECEAP or Career Bridge participants (see appendix G for ECEAP-specific planned learning outcomes). F2T training surveys intended to measure potential increases in nutrition knowledge, attitudes, and behavior, food security, self-efficacy and cooking skills.

All F2T participants were initially approached by program leaders and voluntarily filled out survey forms. The surveys were administered in person following the CK meal. Program leaders briefly explained pre- and post- questions so that participants understood how to differentiate between their knowledge base before and after the CK session. Program leaders collected the survey forms after the CK session concluded.

Inclusion criteria consisted of completion of at least one evaluation form with at least half of the questions answered. Exclusion criteria consisted of illegible handwriting and more than half of the questions left unanswered. No surveys were excluded.

The one-page F2T survey consisted of three sections. The first section included stand-alone Likert-scale questions about the instructors and class experiences. The second section focused on learning outcomes by having participants fill in pre- and post- Likert-scale responses to six questions. Two of the six questions were adapted specifically to either the ECEAP or the Career Bridge group and therefore were directed only to each respective group. Lastly, there was a short open-ended section for personal comments (see appendix E and F).

Using SPSS, frequency distributions and central tendencies were determined for single Likert-scale questions. The average difference between mean post-scores and mean pre-scores were calculated for questions with pre- and post- scores. This allowed for determination of increases in perceived learning gain for each question. Finally, a paired sample t-test was performed for each pre- and post-score couplet to determine significance of learning gain increases. Likert scale options were as follows: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, 5 = Excellent. For qualitative survey data, the primary researcher counted words and phrases and assigned them to descriptive overarching themes.

Data were stored exclusively on the secure and backed-up project file storage for collaborative research and coursework (R:Drive) of the Center for Studies in Demography and Ecology (CSDE) servers, provided by UW-based CSDE computing services. Analysis was completed through the CSDE provided secure windows terminal servers. IBM SPSS 21 and Excel Microsoft Professional Plus 2013 were used to analyze quantitative and qualitative data, respectively.

### **Results:**

Survey results were collected from 99 participants; 46 from three groups of ECEAP providers, and 53 from male and female Career Bridge participants (see table 6).

In the first part of the survey instructor and organizational questions about the instructors and organization of the session measured participant experience. Likert-scale scores had a mean between four and five, meaning on average they perceived their experience to have been either “very good” or “excellent” (see tables 7-9). Within that four-to-five score range of responses, female Career Bridge and Causey’s participants recorded overall slightly higher score means than their peers.

The second part of the survey measured potential learning gains for participants (see tables 1-12). Questions were devised to capture nutrition knowledge, attitude, and behavior, self-efficacy, food security, and cooking skills (see table 13).

On average ECEAP providers gained one point on the Likert scale from a pre-mean at around 3.50 to a post-mean of 4.50 ( $p=0.001$  for all gains). Career Bridge participants gained on average between one and a half to two points, from a pre-mean at around 2.75 to a post-mean of 4.50 ( $p=0.001$  for all gains).

ECEAP participants' three highest changes were related to self-efficacy and food security (see table 14). The highest gain was documented for the prompt "Making kid-friendly recipes using fresh ingredients or from scratch" with a Likert point score gain of 1.08 points ( $p=0.001$ ). For Career Bridge participants, the three highest recorded gains were for questions on self-efficacy and nutrition knowledge (see table 14), with the highest gain measured for the prompt "Read food labels to make healthy choices" with an average of 1.88 points ( $p=0.001$ ).

The lowest gain for both groups was recorded for the prompt "Knife skills and cutting techniques" with a gain of 0.49 ( $p=0.001$ ) for ECEAP and 0.93 ( $p=0.001$ ) for Career Bridge, respectively.

Within the ECEAP participant groups Causey's participant gains were overall higher by approximately 0.2 Likert points than ARC and CDSA combined. Career Bridge females averaged the same overall gains as their male counterparts, but showed higher gains for most questions related to nutrition knowledge and self-efficacy. A notable exception to this trend was seen in the pre- and post-assessment of "Knife skills and cutting techniques," in which Career Bridge females showed half the increase as that of males with a 0.49-point gain ( $p=0.001$ ) versus 0.93-point gain ( $p=0.001$ ), respectively.

CK social support was not measured quantitatively in the F2T surveys. However, written comments of many participants indicated that they found or enjoyed social support with their peers and F2T leadership. For example, a Career Bridge participant commented, "I wasn't having too good of a day. When I was finished with the class I was uplifted. Thank you!"

## Discussion:

The two CK were designed for different purposes, which is reflected in the surveys administered and analyzed here. SPU community participant surveys measured mostly learning goals, experiences, and barriers. SPU student surveys measured achieved learning outcomes and experiences. F2T surveys measured primarily learning outcomes and some experiences of their participants. For SPU, the three survey results paint a picture of a CK that combined many benefits for community participants and the student team members who managed SPU. For F2T the results confirmed that participants achieved a variety of learning outcomes through participating in CK-style training sessions.

In keeping with Fano et al.'s terminology, F2T is an "agency-based" CK,<sup>15</sup> due to the CK training being initiated and funded by a combination of governmental and non-profit organizations. Within this CK the ECEAP participants returned yearly, whereas Career Bridge intended for each participant to experience only one session. SPU, by contrast, is a "community-based" CK,<sup>15</sup> initiated and run by members of the SPU community, located at the university's teaching kitchen (Food & Nutrition Laboratory), and serving the surrounding community. This Kitchen had a continuous (monthly) physical presence in the same space for every session, with quarterly or yearly rotations of students. The two CK distinctions—agency-based versus community-based—affected the experiences and the learning outcomes accomplished.

### Food security

Food security ranked high as a goal for SPU community participants, as measured in the 1<sup>st</sup> survey, but did not appear to be an important outcome for 2<sup>nd</sup> survey responders. Loopstra et al. measured barriers specific to food-insecure populations and CK attendance in Canada and found the top two issues to be accessibility and program fit.<sup>17</sup> Twenty-nine of 129 community participants attended enough CK sessions to participate in the 2<sup>nd</sup> survey. While it was impossible to gauge, these barriers may have played a role in preventing some of the 100 participants from the 1<sup>st</sup> survey from returning to SPU, at least for more than three times. For the returning group of community participants, as noted, food

security may have not been the primary focus, or the perceived benefits may have outweighed barriers, as discussed in the section on social support below.

#### Nutrition knowledge, attitudes, and behavior

Individual learning goals were not collected for F2T participants. Instead, the survey recorded perceived increases in nutrition knowledge, positive attitude, and behavior, self-efficacy, and cooking skills. Higher learning gains of Career Bridge and Causey's participants versus those of ARC and CSDA participants may have been associated with first-time attendance. In addition, ARC and CSDA were part of larger agencies with established health promotion missions. Their organizations' stances on health may have contributed to participant knowledge base and skills, or may have added bias to their perceptions. Furthermore, Career Bridge participants might have had more motivation to learn, due to their deliberate and voluntary participation in the F2T training session, compared to ECEAP providers.

Ultimately, these findings may confirm what F2T leadership and a University of Washington-based grant evaluation team for CKNW had jointly concluded and shared verbally with the primary investigator of this study. According to the Transtheoretical model of behavior change<sup>26</sup>: First-time participants, like Career Bridge participants, were perceived as being in the "Action" stage, showcasing higher motivation to change, whereas repeat participants like those of ECEAP's ARC and CSDA, were perceived as being in the "Maintenance" stage, showing a lesser amount of, or perceived need for, change.

#### Cooking skills

SPU Participants entered their 1<sup>st</sup> CK session primarily interested in exposure to new foods and in increasing their cooking skills. They were interested in a variety of foods from diverse ethnic backgrounds and healthy dishes. Measured outcomes confirmed that SPU participants were very satisfied with their gains in these areas. In contrast, for F2T trainings all four F2T participant groups recorded smaller gains in cooking skill than for other measured outcomes. It is unclear whether curriculum or study design was a reason, or whether participants perceived themselves as more experienced in this area than in other areas covered in the survey. Spence et al. reported that

participants in their study may not have realized that acquired cooking ability is a skill.<sup>10</sup> If this were the case in for this population cognizance of cooking ability as a skill may have played a role.

### Self-Efficacy

At SPU, all community participants reported satisfaction with the new recipes during CK sessions. However, half of the community participants did not perceive that they had the opportunity to cook any of the recipes at home, and a smaller subset did not feel confident about a successful cooking experience. This discrepancy between self-efficacy in food preparation at the SPU culinary lab versus the home environment may point to an unmeasured set of cooking- and food-specific barriers for SPU community participants. For example, given that the SPU kitchen is a state-of-the-art cooking facility with a variety of cooking equipment and ingredients available, community participants may have felt more confident about their cooking skills there, and vice versa less confident in their home kitchens which they may have perceived as inferior.

Participation in the F2T training program may have raised self-efficacy also. A community kitchen and community garden-focused study by Mundel et al. measured outcomes of nutrition knowledge and cooking skills linked to self-efficacy.<sup>19</sup> Similar significant ( $p=0.001$ ) self-efficacy related learning outcomes were found in our study, adding weight to the usefulness of community kitchens as a health promotion tool.<sup>23</sup> As one participant noted, what he liked best was “Problem solving and patience,” adding “In life you need to learn to make the best with what you got.”

Together, the two Kitchens’ self-efficacy related learning outcomes add weight to the usefulness of CK as a hands-on formal education tool as well as a health promotion tool.

### Social support

SPU is a faith-based university. Therefore, personal growth and social outcomes were frequently tied to religious belief, particularly for student team members. Students added greatly to community participants’ social support and the social atmosphere in this particular CK and vice versa. Social

support was taken to a level in which not only was support given between peers but also between two typically non-overlapping groups.

As students and community participants experienced the CK, social support and social interaction were regarded as significant parts of the CK experience. This scenario overlaps well with findings from a study in which Engler-Stringer et al. report that “some participants explained that they became involved because of the food, but that over time the social experiences began to outweigh food in terms of importance.”<sup>14</sup>

### Training

Student team members were given the role of facilitators. Simultaneously they were considered participants, especially regarding their learning outcomes. Student volunteer comments indicated that the CK at SPU model had inspired them to want to start their own CK upon graduation, thereby suggesting that SPU has a built-in opportunity to train-the-trainer in addition to its potential as an experiential formal education tool. This concept has been shown to be successful in another CK in a study by Marquis et al., in which a train-the-trainer model was explored in the study of a program geared toward low-income community members of the Tillicum House Friendship Centre in Nanaimo, BC.<sup>18</sup>

### Limitations:

None of the surveys was designed with this study in mind; rather, they were designed as internal evaluation tools to collect participant feedback for program improvement. F2T focused more on learning outcomes, while SPU focused more on learning goals. It was therefore not possible to gain comparable answers to the proposed aims. Furthermore, in contrast to F2T, at SPU there was no ability to track individual changes over the two surveys. Common measurement tools that could, for example, be shared amongst all CK in the CKNW coalition would serve to increase the ability to compare

between participants' individual gains as well as across all CK in the coalition, thereby increasing statistical power of future studies.

This study consisted of a small number of participants in each participant group. Again, a shared assessment tool for the wider CK population could be helpful in increasing the power of future studies. Though p-values could be calculated for F2T data, the participant groups were unique—child care providers and recently incarcerated adults of color. The mission of this CK was equally specific—job development and re-entry to civil life. Assuming wider implications to general CK participant populations may not be advisable.

Lastly, the Likert-scale system is based on subjective interpretation of knowledge, skill or attitude. This means that substantial between-person variability in the responses may have been present.<sup>27</sup> A different set of measurement tools may be necessary to gain an understanding of actual rather than perceived learning outcomes.

### **Considerations for future Community Kitchen Planning**

#### **SPU:**

Student team members and community participants reported great experiences and learning outcomes. SPU leadership initially did not intend a deliberate link between student team members' formal education and their involvement in the CK operation. Over time one academic credit per quarter was introduced and a commitment was made to tie experiential learning to classroom learning. Making CK participation mandatory to all food & dietetics students at SPU could widen the reach of this beneficial experience. Some student team members also reported feeling inspired to open community kitchens of their own because of their involvement at SPU. This may present an opportunity to connect students with the wider CKNW coalition network, so that their inspiration may become reality within an established and supported network.

On the community participant side of planning, adding questions on demographic and socio-economic status to future SPU surveys could lead to more clarity on who attends, while additional measurement tools like focus groups could help shed light on participant barriers at SPU.

#### **F2T:**

Participants from ECEAP and Career Bridge both measured their highest learning gains for central learning goals—helping children eat healthier and gaining life skills to live healthier. Thus, the program should consider continuing the CK-based training methods currently employed.

First-time participants consistently felt that they gained higher learning outcomes and had slightly more positive experiences than participants who attended multiple F2T trainings. Fano et al. found that recurrent CK facilitator trainings provided facilitators in their study with the needed support to lead their kitchens, though they wanted more support specific to nutrition and budgeting.<sup>15</sup> Similar benefits for recurrent career development trainings could reasonably be expected, especially if sessions were developed to match participants' ongoing learning needs. Modified training curricula may thereby increase participant learning gains to the level of first-time attendees.

Perceived cooking skill gains were low across the board. While this may be due to the focus of the F2T CK, in the future it may be helpful to use additional measurement tools to assess cooking skills as a learning outcome.

Within the Career Bridge participant sample sex may have played a role in the overall experience and learning outcomes of the training, as females reported higher gains than males on most questions. However, the number of participating women was very small (n=12) compared to that of men (n=41). Sex-specific research is necessary to confirm the findings and increase understanding for potential implications for this observed difference.

**Conclusion:**

CK are a versatile and feasible way to meet a variety of social and learning goals across diverse settings. The current research demonstrated that CK could further career development or job training in both students and non-students.

**Tables and Graphs:**

**Table 1: Farm-to-Table and Community Kitchen at SPU participant populations survey measurement comparison**

Farm-to-Table CK		SPU	
ECEAP	Career Bridge	Community participant	Student team member
		Learning goals (survey 1)	
Learning outcomes	Learning outcomes		Learning outcomes
Some experience	Some experience	Experience (survey 2)	Experience
		Barriers (survey 2)	

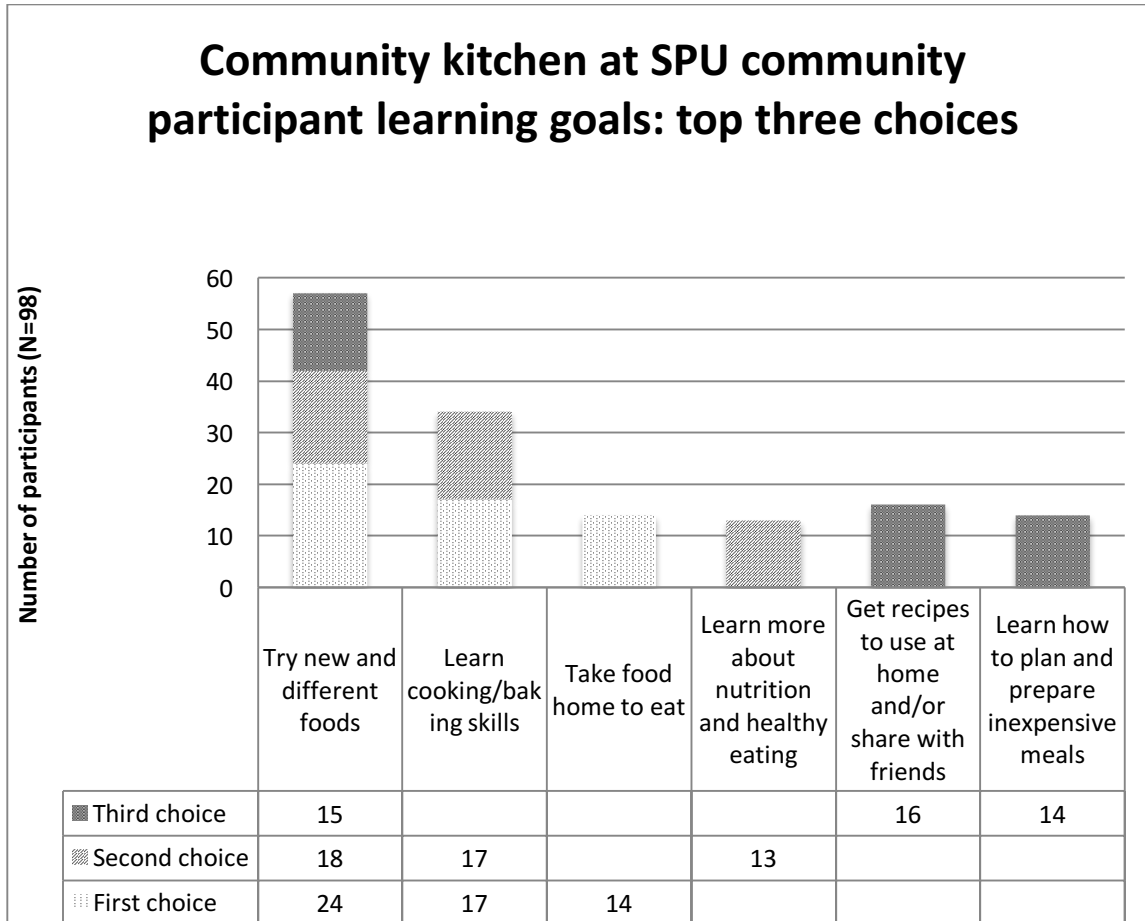
**Table 2: Community Kitchen at SPU sample description**

Type of participant	Total number of participants	Number of participants who responded to 2 <sup>nd</sup> survey
Student team members	34	NA
Community participants	126	29

**Table 3: Community Kitchen at SPU participant learning goals (N = 98):**

Learning goal	First Choice (%)	Second Choice (%)	Third Choice (%)
Try new and different foods	24 (25%)	18 (18%)	15 (15%)
Learn cooking/baking skills	17 (17%)	17 (17%)	12 (12%)
Take food home to eat	14 (14%)	7 (7%)	9 (9%)
Learn how to plan and prepare inexpensive meals	12 (12%)	12 (12%)	14 (14%)
Save money on food	10 (10%)	4 (4%)	6 (6%)
Make new friends or social connections	7 (7%)	10 (10%)	12 (12%)
Learn more about nutrition and healthy eating	6 (6%)	13 (13%)	9 (9%)
Share a meal with neighbors	5 (5%)	5 (5%)	7 (7%)
Get recipes to use at home and/or share with friends	3 (3%)	12 (12%)	16 (16%)

Figure 1: 1<sup>st</sup> Survey: Community Kitchen at SPU community participant top three learning goals (N = 98):



**Table 4: Community Kitchen at SPU community participant responses to the question on “favorite things about the Community Kitchen at SPU” (N=28)**

Number of community participants who mentioned	Details	Theme
16	Learning skills in general	Learning skills
12	Learning specific to new foods and recipes	
10	Learning connected to cooking skills	
5	Learning connected to nutrition knowledge	
12	Appreciation of students as part of the community	Community
4	Appreciation of cooking in community setting	
4	Appreciation of space to meet new people	
2	Appreciation of teachers as part of the community	
1	Appreciation of eating together	

**Table 5: Community Kitchen at SPU student responses to qualitative survey (N=34)**

Number of students who mentioned	Theme	Details
24	Gained a sense of community	<ul style="list-style-type: none"> <li>• Felt as part of a community united by communal food preparation and consumption</li> <li>• Felt as part of a community united by religious belief</li> <li>• Felt as part of a community united by religious belief and food preparation and consumption</li> </ul>
24	Achieved personal and religious fulfillment	<ul style="list-style-type: none"> <li>• Expressed passion for religious service through the opportunity to for work with food</li> <li>• Achieved personal fulfillment through trifecta of community, culinaria, and religion</li> </ul>
23	Developed social relationships	<ul style="list-style-type: none"> <li>• Built friendships with CK community participants who were perceived as belonging to a different social class</li> <li>• Perceived to have benefitted from becoming friends with CK community participants</li> <li>• Built friendships with peers from the undergraduate nutrition program</li> </ul>
21	Clarified career goals and future aspirations	<ul style="list-style-type: none"> <li>• Confirmed that community nutrition was a desired career choice</li> <li>• Inspired to want to conduct CK in other settings in the future</li> <li>• Appreciation of personal happiness and satisfaction</li> </ul>
21	Built culinary skills	<ul style="list-style-type: none"> <li>• Acquire hands-on experience to theoretical exposure in academic class setting</li> <li>• Achieved or practiced cooking techniques</li> <li>• Learned new recipes, including budgeting and scaling them for large-scale CK cooking needs</li> </ul>
19	Gained understanding toward food insecurity and other barriers for CK community participants	<ul style="list-style-type: none"> <li>• Received first or increased exposure to CK community participants experiencing food insecurity and other barriers to health</li> <li>• Practiced empathy toward CK community participants experiencing food insecurity and other barriers to health</li> <li>• Contributed to empowerment of CK community participants experiencing food insecurity and other barriers to health</li> </ul>

**Table 6: Farm-to-Table Community Kitchen sample description**

Type of participant	Organization	Number of participants	Totals
Childcare provider trainings (ECEAP)	Causey's	17	46
	CDSA	15	
	ARC	14	
Adult training (Career Bridge)	Career Bridge (male)	41	53
	Career Bridge (female)	12	
TOTALS		99	99

**Table 7: Farm-to-Table Community Kitchen instructor and class related objectives: ECEAP & Career Bridge**

Question in survey	ECEAP Mean (N)	Career Bridge (N)
Session Overall	4.76 (45)	4.78 (51)
Thoroughness of presentation	4.78 (46)	4.74 (53)
Usefulness of PowerPoint presentation	4.52 (46)	4.62 (52)
Did the instructor answer your questions?	4.83 (46)	4.92 (53)
How did the recipes taste?	4.78 (46)	4.63 (52)
How prepared do you feel to make these recipes again?	4.63 (46)	N/A
How prepared do you feel to cook a balanced meal?	N/A	4.57 (53)
Would you recommend this training to others?	4.78 (46)	4.81 (53)

**Note: The learning outcomes were assessed in the form of Likert scale response choices. Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, 5 = Excellent**

**Table 8: Farm-to-Table Community Kitchen instructor and class related objectives: ECEAP Causey's & ECEAP ARC+CDSA**

Question in survey	ECEAP Causey's Mean (N)	ECEAP ARC+CDSA Mean (N)
Session Overall	5.00 (16)	4.62 (29)
Thoroughness of presentation	5.00 (17)	4.66 (29)
Usefulness of PowerPoint presentation	4.82 (17)	4.34 (29)
Did the instructor answer your questions?	5.00 (17)	4.72 (29)
How did the recipes taste?	4.94 (17)	4.69 (29)
How prepared do you feel to make these recipes again?	4.94 (17)	4.45 (29)
Would you recommend this training to others?	5.00 (17)	4.66 (29)

**Note: The learning outcomes were assessed in the form of Likert scale response choices. Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, 5 = Excellent**

**Table 9: Farm-to-Table Community Kitchen instructor and class related objectives: Career Bridge males & Career Bridge females**

Question in survey	CB Males Mean (N)	CB Females Mean (N)
Session Overall	4.74 (39)	4.92 (12)
Thoroughness of presentation	4.73 (41)	4.75 (12)
Usefulness of PowerPoint presentation	4.58 (40)	4.75 (12)
Did the instructor answer your questions?	4.90 (41)	5.00 (12)
How did the recipes taste?	4.58 (40)	4.83 (12)
How prepared do you feel to cook a balanced meal?	4.46 (41)	4.92 (12)
Would you recommend this training to others?	4.76 (41)	5.00 (12)

**Note: The learning outcomes were assessed in the form of Likert scale response choices. Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, 5 = Excellent**

**Table 10: Farm-to-table Survey Questions T-test results: ECEAP & Career Bridge**

Question in survey	ECEAP				Career Bridge			
	Pre-Training Mean	Post-Training Mean	Mean difference (N)	95% CI of the difference (P-value)	Pre-Training Mean	Post-Training Mean	Mean difference (N)	95% CI of the difference (P-value)
The connection between diet and health	3.75	4.47	0.72 (26)	0.45-1.00 (p=0.001)	3.07	4.60	1.52 (42)	1.14-1.91 (p=0.001)
Issue of food disparity in regard to food access and health	3.57	4.46	<b>0.89 (35)</b>	0.61-1.16 (p=0.001)	2.60	4.31	1.71 (42)	1.34-2.09 (p=0.001)
Role of food culture in our daily eating habits and health	3.58	4.42	0.83 (36)	0.48-1.19 (p=0.001)	2.69	4.55	<b>1.86 (42)</b>	1.48-2.24 (p=0.001)
Communicate the message of healthy eating to kids and families	3.19	4.22	<b>1.03 (36)</b>	0.73-1.33 (p=0.001)				
Read food labels to make healthy choices					2.76	4.64	<b>1.88 (42)</b>	1.46-2.30 (p=0.001)
Making kid friendly recipes using fresh ingredients or from scratch	3.24	4.32	<b>1.08 (37)</b>	0.82-1.35 (p=0.001)				
Make informed choices regarding value and food budgeting					2.88	4.64	<b>1.76 (42)</b>	1.37-2.15 (p=0.001)
Knife skills and cutting techniques	3.91	4.40	0.49 (35)	0.22-0.75 (p=0.001)	3.33	4.26	0.93 (43)	0.55-1.31 (p=0.001)

**Table 11: Farm-to-table Survey Questions T-test results: ECEAP Causey's & ECEAP ARC+CDSA**

Question in survey	ECEAP Causey's				ECEAP ARC+CDSA			
	Pre-Training Mean	Post-Training Mean	Mean difference (N)	95% CI of the difference (P-value)	Pre-Training Mean	Post-Training Mean	Mean difference (N)	95% CI of the difference (P-value)
The connection between diet and health	4.09	5.00	0.91 (11)	0.21-1.61 p=0.016	3.60	4.24	0.64 (25)	0.35-0.93 p=0.001
Issue of food disparity in regard to food access and health	3.90	4.90	1.00 (10)	0.25-1.75 p=0.015	3.44	4.28	0.84 (25)	0.56-1.12 p=0.001
Role of food culture in our daily eating habits and health	4.00	4.42	0.42 (12)	-0.50-1.33 p=0.339	3.38	4.42	1.04 (24)	0.73-1.36 p=0.001
Communicate the message of healthy eating to kids and families	3.45	4.64	1.18 (11)	0.46-1.91 p=0.005	3.08	4.04	0.96 (25)	0.63-1.29 p=0.001
Making kid friendly recipes using fresh ingredients or from scratch	3.08	4.67	1.58 (12)	1.01-2.16 p=0.001	3.32	4.16	0.84 (25)	0.58-1.10 p=0.001
Knife skills and cutting techniques	4.25	4.92	0.67 (12)	-0.02-1.35 p=0.054	3.74	4.13	0.39 (23)	0.64-3.22 p=0.004

**Note:** The learning outcomes were assessed in the form of Likert scale response choices. Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, 5 = Excellent

**Table 12: Farm-to-table Survey Questions T-test results: Career Bridge males + Career Bridge females**

Question in survey	Career Bridge Males				Career Bridge Females			
	Pre-Training Mean	Post-Training Mean	Mean difference (N)	95% CI of the difference (P-value)	Pre-Training Mean	Post-Training Mean	Mean difference (N)	95% CI of the difference (P-value)
The connection between diet and health	2.94	4.56	1.63 (32)	1.15-2.10 (p=0.001)	3.50	4.70	1.20 (10)	0.54-1.86 (p=0.003)
Issue of food disparity in regard to food access and health	2.56	4.25	1.69 (32)	1.24-2.13 (p=0.001)	2.70	4.50	1.80 (10)	0.99-2.61 (p=0.001)
Role of food culture in our daily eating habits and health	2.69	4.50	1.81 (32)	1.36-2.27 (p=0.001)	2.70	4.70	2.00 (10)	1.17-2.83 (p=0.001)
Read food labels to make healthy choices	2.84	4.63	1.78 (32)	1.29-2.27 (p=0.001)	2.50	4.70	2.20 (10)	1.26-3.14 (p=0.001)
Make informed choices regarding value and food budgeting	3.00	4.69	1.69 (32)	1.24-2.14 (p=0.001)	2.50	4.50	2.00 (10)	1.01-2.89 (p=0.001)
Knife skills and cutting techniques	3.45	4.52	1.06 (33)	0.59-1.53 (p=0.001)	2.90	3.40	0.50 (10)	-1.08-1.86 (p=0.096)

**Note:** The learning outcomes were assessed in the form of Likert scale response choices. Scale: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, 5 = Excellent

**Table 13: Farm-to-Table learning outcomes determination by survey question**

<b>Learning Outcome</b>	<b>Question</b>	<b>Participant group</b>
Nutrition knowledge, attitude, and behavior	The connection between diet and health	Both
	Role of food culture in our daily eating habits and health	both
Self-efficacy	Communicate the message of healthy eating to kids and families	ECEAP only
	Making kid friendly recipes using fresh ingredients or from scratch	ECEAP only
	Read food labels to make healthy choices	Career Bridge only
	Make informed choices regarding value and food budgeting	Career Bridge only
Food security	Issue of food disparity in regard to food access and health	Both
Cooking skills	Knife skills and cutting techniques	both

**Table 14: Top three highest Likert scale mean differences and learning outcomes**

Learning outcome	Question	Top three mean difference (P-value)
<b>ECEAP</b>		
Self-efficacy	Making kid friendly recipes using fresh ingredients or from scratch	1.08 (p=0.001)
Self-efficacy	Communicate the message of healthy eating to kids and families	1.03 (p=0.001)
Food security	Issue of food disparity in regard to food access and health	0.89 (p=0.001)
<b>Career Bridge</b>		
Self-efficacy	Read food labels to make healthy choices	1.88 (p=0.001)
Nutrition attitude	Role of food culture in our daily eating habits and health	1.86 (p=0.001)
Self-efficacy	Make informed choices regarding value and food budgeting	1.76 (p=0.001)

## References:

- 1 Iacovou, M., Pattieson, D. C., Truby, H. & Palermo, C. Social health and nutrition impacts of community kitchens: a systematic review. *Public Health Nutr* **16**, 535-543, doi:10.1017/s1368980012002753 (2013).
- 2 Engler-Stringer, R. & Berenbaum, S. Collective kitchens in Canada: a review of the literature. *Can J Diet Pract Res* **66**, 246-251, doi:10.3148/66.4.2005.246 (2005).
- 3 Engler-Stringer, R. & Berenbaum, S. Exploring food security with collective kitchens participants in three Canadian cities. *Qual Health Res* **17**, 75-84, doi:10.1177/1049732306296451 (2007).
- 4 Tarasuk, V. & Reynolds, R. A Qualitative Study of Community Kitchens as a Response to Income-Related Food Insecurity. *Can J Diet Pract Res* **60**, 11-16 (1999).
- 5 Creed-Kanashiro, H. M. *et al.* Improving dietary intake to prevent anemia in adolescent girls through community kitchens in a periurban population of Lima, Peru. *J Nutr* **130**, 459s-461s (2000).
- 6 Engler-Stringer, R. Food, cooking skills, and health: a literature review. *Can J Diet Pract Res* **71**, 141-145, doi:10.3148/71.3.2010.141 (2010).
- 7 Immink, M. D. People's Community Kitchens in Peru: Women's Activism Pro Urban Food Security. *Ecology of Food and Nutrition* **40**, 699-705 (2001).
- 8 Schroeder, K. A Feminist Examination of Community Kitchens in Peru and Bolivia. *Gender, Place and Culture* **13**, 663-668 (2006).
- 9 Lee, J. H., Palermo, C., Bryce, A. & McCarten, J. Process evaluation of community kitchens: Results from two Victorian local government areas. *Health Promot J Austr* **21**, 183-188 (2010).
- 10 Spence, F. & van Teijlingen, E. R. A qualitative evaluation of community-based cooking classes in Northeast Scotland. *International Journal of Health Promotion and Education* **43** (2005).
- 11 Bidwell, S. (ed Canterbury District Health Board) (2009).
- 12 Furber, S., Quine, S., Jackson, J., Laws, R. & Kirkwood, D. The role of a community kitchen for clients in a socio-economically disadvantaged neighbourhood. *Health Promot J Austr* **21**, 143-145 (2010).
- 13 Engler-Stringer, R. & Berenbaum, S. Food and nutrition-related learning in collective kitchens in three Canadian cities. *Can J Diet Pract Res* **67**, 178-183, doi:10.3148/67.4.2006.178 (2006).
- 14 Engler-Stringer, R. & Berenbaum, S. Exploring Social Support through Collective Kitchen Participatio in Three Canadian Cities. *Canadian Journal of Community Mental Health* **26** (2007).
- 15 Fano, T. J., Tyminski, S. M. & Flynn, M. A. Evaluation of a collective kitchens program: using the Population Health Promotion Model. *Can J Diet Pract Res* **65**, 72-80, doi:10.3148/65.2.2004.72 (2004).
- 16 Kirkpatrick, S. I. & Tarasuk, V. Food insecurity and participation in community food programs among low-income Toronto families. *Can J Public Health* **100**, 135-139 (2009).
- 17 Loopstra, R. & Tarasuk, V. Perspectives on community gardens, community kitchens and the Good Food Box program in a community-based sample of low-income families. *Can J Public Health* **104**, e55-59 (2013).
- 18 Marquis, S., Thomson, C. & Murray, A. Assisting people with a low income to start and maintain their own community kitchens. *Can J Diet Pract Res* **62**, 130-132 (2001).
- 19 Mundel, E. & Chapman, G. E. A decolonizing approach to health promotion in Canada: the case of the Urban Aboriginal Community Kitchen Garden Project. *Health Promot Int* **25**, 166-173, doi:10.1093/heapro/daq016 (2010).
- 20 Yarber, L. *et al.* Evaluating a train-the-trainer approach for improving capacity for evidence-based decision making in public health. *BMC Health Serv Res* **15**, 547, doi:10.1186/s12913-015-1224-2 (2015).
- 21 *Food Security in the U.S.: Definitions of Food Security*, 2006).

- 22 Crawford, S. & Kalina, L. Building food security through health promotion: community  
kitchens. *Journal of the Canadian Dietetic Association* **58** (1997).
- 23 Bandura, A. Health promotion by social cognitive means. *Health Educ Behav* **31**, 143-  
164, doi:10.1177/1090198104263660 (2004).
- 24 Orfaly, R. A. *et al.* Train-the-trainer as an educational model in public health  
preparedness. *J Public Health Manag Pract Suppl*, S123-127 (2005).
- 25 SurveyMonkey, I. [www.surveymonkey.com](http://www.surveymonkey.com).
- 26 Prochaska, J. O. & Felicer, W. F. **The Transtheoretical Model of Health Behavior  
Change**. *American Journal of Health Promotion* **12**, 38-48 (1997).
- 27 Willett, W. *Nutritional Epidemiology*. 3rd edition edn, (Oxford University Press, 2013).

**Appendix:**

**A. Community Kitchen at SPU survey 1 for community participants at 1<sup>st</sup> session**

Community Kitchen at SPU

*Frist-time Participant Informational Questionnaire*

**Welcome to our Kitchen!**

Could you take a moment to respond to the following questions? This will help us plan better for future Community Kitchen sessions. Thank you!

---

1. Do you have any food allergies? *Circle one.* YES NO  
*If yes, please explain:*

2. Do you have any foods that you really dislike and would rather we not cook with? *List them here:*

3. *Please rank the top 3 things you hope to get out of participating in this community kitchen. Place a "1" next to your top/first choice, "2" next to your second choice, and "3" next to your third choice.*

- \_\_\_ Save money on food
- \_\_\_ Take food home to eat
- \_\_\_ Share a meal with neighbors
- \_\_\_ Make new friends or social connections
- \_\_\_ Try new and different foods
- \_\_\_ Learn cooking/baking skills
- \_\_\_ Learn how to plan and prepare inexpensive meals
- \_\_\_ Learn more about nutrition and healthy eating
- \_\_\_ Get recipes to use at home and/or share with friends

4. Do you like sharing a meal after we cook? *Circle one.* YES NO  
*If not, would you share your reason?*

5. What kinds of meals would you like us to prepare in future Community Kitchen gathering? *List as many things as you would like.*

B. Community Kitchen at SPU survey 2 for community participants at 4<sup>th</sup> session

## Participant Survey (at 4<sup>th</sup> Kitchen)

### Community Kitchen at SPU

**We greatly appreciate your taking 5 minutes to fill out this survey. It will help us make the Community Kitchen at SPU even better! Thank you!**

*Please rate the following on a scale from 1 to 5 (1= not at all and 5=extremely)*

1. How **satisfied overall** are you with the Community Kitchen at SPU program?

1      2      3      4      5

2. How happy are you with the **meal selection**?

1      2      3      4      5

3. Have you **gained new cooking skills** at the Community Kitchen at SPU?

1      2      3      4      5

4. **How important are the specific dishes** to be cooked in deciding whether to attend a Community Kitchen session or not (*Check one*):

Not important; I like a variety of foods & I enjoy cooking in community no matter what

Somewhat important; I am more excited if most dishes we will cook are dishes I would eat and make at home

Very important; I am unlikely to come if I dislike more than one dish.

*Now, write in your response to the next few questions.*

5. What are your **top two or three favorite things** about the SPU Community Kitchen program?

6. What are a **couple of things** about the Community Kitchen that **you wish were different**?

7. Which is **more important** to you? (*Check one*)

Having a lot of food to take home with me

Having a meal with everyone at the Kitchen

Both are equally important to me

8. Have you **cooked with any of the recipes** at home? *(Check one.)*

- Yes
- No

9. **How many and which** recipes have you cooked with?

10. If you **have not cooked with any of the recipes**, or you have only cooked with a few, what are the **main reasons?** *(Check all that apply)*

- They contain ingredients I do not like
- My family would not enjoy them
- The ingredients are too expensive
- They are not easy to prepare
- I do not have the skills to replicate the recipes at home
- I am not confident that I would be successful
- I have not had the opportunity but I am planning to in the future

11. Have you had to **throw away any of the food** we made that you took home?

- Yes
- No

12. What was/were the **reason(s)?** *(Check all that apply)*

- I did not like the food
- It spoiled before I got to eat it
- It was too much food and I got tired of it
- It was too much food and I have no one to share it with
- I was concerned about the safety of eating the food
- The food made me sick

*Please rate the following on a scale from 1 to 5 (1= not at all and 5=extremely)*

13. How likely are you to **participate regularly** in the future?

1      2      3      4      5

14. If you are **not likely to participate** in the Community Kitchen at SPU regularly (monthly) in the future, what is/are the **main reason(s)?** *(Skip question if you circled 4 or 5 above.)*

- It is too expensive
- I do not like the food we cook
- I do not enjoy the other participants
- I do not enjoy the SPU volunteers
- I do not have a reliable way to get here
- Wednesday nights are not a good day for me
- It is too long
- Other; write in your own reason:

15. In the future, are you able to **pay more than what you pay now** to cover the cost of the food we cook with?

- Yes; if yes, please note below how much you would be able/willing to pay
- No

### C. Community Kitchen at SPU survey questions for student volunteer

1) In what ways have you benefited from your volunteer involvement in the Community Kitchen at SPU?

2) In what ways has the Community Kitchen at SPU allowed you to explore, understand, and/or practice Christian vocation in general, or your personal calling, in particular?

### D. Community Kitchen at SPU coding guide for student volunteer qualitative data

- Community - C
  - Social relationships with peers - CP
  - Social relationships with CK participants - CC
  - Sense of community through sharing food/cooking together – CF
  - Sense of community through god - CG
- Skills - S
  - Nutrition Knowledge/Skills - SN
  - Culinary skills - SU
    - Cooking technique – SUC
    - Theory to practice - SUP
    - Other (food budgeting, recipe scaling, learn new recipes) - SUO
  - Administrative skills - SA
    - Time management - SAT
    - Producer/event organizing skills - SAP
  - Communication skills - SO
    - With peers/teamwork - SOP
    - With CK participants - SOC
      - Teaching them - SOCT
      - Listening/Learning from them - SOCL
- Personal Growth - P
  - Confidence - PC
  - Realization of personal happiness/satisfaction/passion - PH
    - Career influence - PHC
  - Religious fulfillment - PR
  - Empathy - PE
    - Contribute to empowerment of CK participants - PEE
    - Increase exposure/understanding of food insecurity and other barriers for CK participants - PEB

E. Farm-to-Table survey adapted for ECEAP

## Farm to Table Training Training Evaluation 2014



Date: \_\_\_\_\_ Name of Instructor: \_\_\_\_\_

Location: \_\_\_\_\_ Organization \_\_\_\_\_

Please evaluate the training session by circling the appropriate number on the scale.

**Scale: 1 = Poor      2 = Fair      3 = Good      4 = Very Good      5 = Excellent**

<b>Session overall</b>	1	2	3	4	5
<b>Thoroughness of presentation</b>	1	2	3	4	5
<b>Usefulness of powerpoint</b>	1	2	3	4	5
<b>Did the instructor answer your questions?</b>	1	2	3	4	5
<b>How did the recipes taste?</b>	1	2	3	4	5
<b>How prepared do you feel to make these recipes again</b>	1	2	3	4	5
<b>Would you recommend this training to others?</b>	1	2	3	4	5

For the following questions, please think about what knowledge or skill you had before the training and now after the training.

**Scale: 1 = Poor      2 = Fair      3 = Good      4 = Very Good      5 = Excellent**

<b>Before Training</b>					<b>My knowledge or skill around:</b>	<b>After Training</b>				
1	2	3	4	5	<b>The connection between diet and health</b>	1	2	3	4	5
1	2	3	4	5	<b>Issue of food disparity in regards to food access and health</b>	1	2	3	4	5
1	2	3	4	5	<b>Role of food culture in our daily eating habits and health</b>	1	2	3	4	5
1	2	3	4	5	<b>How to communicate about healthy eating to kids/families</b>	1	2	3	4	5
1	2	3	4	5	<b>Making kid friendly recipes from scratch budgeting</b>	1	2	3	4	5
1	2	3	4	5	<b>Knife skills and cutting techniques</b>	1	2	3	4	5

Which part of the training did you find most useful and why?

Do you have any comments or suggestions on how to make this training more effective?

Thank You!



F. Farm-to-Table survey adapted for Career Bridge

**Farm to Table Training**  
Training Evaluation 2015



Date: \_\_\_\_\_ Name of Instructor: \_\_\_\_\_

Location: \_\_\_\_\_ Organization: \_\_\_\_\_

Please evaluate the training session by circling the appropriate number on the scale.

**Scale: 1 = Poor 2 = Fair 3 = Good 4 = Very Good 5 = Excellent**

<b>Session overall</b>	1	2	3	4	5
<b>Thoroughness of presentation</b>	1	2	3	4	5
<b>Usefulness of Powerpoint presentation</b>	1	2	3	4	5
<b>Did the instructor answer your questions?</b>	1	2	3	4	5
<b>How did the recipes taste?</b>	1	2	3	4	5
<b>How prepared do you feel to cook a balanced meal?</b>	1	2	3	4	5
<b>Would you recommend this training to others?</b>	1	2	3	4	5

For the following questions, please think about what knowledge or skill you had before the training and now after the training.

**Scale: 1 = Poor 2 = Fair 3 = Good 4 = Very Good 5 = Excellent**

<b>Before Training</b>					<b>My knowledge or skill around:</b>	<b>After Training</b>				
1	2	3	4	5	<b>The connection between diet and health</b>	1	2	3	4	5
1	2	3	4	5	<b>Issue of food disparity in regards to food access and health</b>	1	2	3	4	5
1	2	3	4	5	<b>Role of food culture in our daily eating habits and health</b>	1	2	3	4	5
1	2	3	4	5	<b>Read food labels to make healthy choices</b>	1	2	3	4	5
1	2	3	4	5	<b>Make informed choices regarding value and food budgeting</b>	1	2	3	4	5
1	2	3	4	5	<b>Knife skills and cutting techniques</b>	1	2	3	4	5

Which part of the training did you find most useful and why?

Do you have any comments or suggestions on how to make this training more effective?

Thank You!



G. Farm-to-Table survey ECEAP-specific planned learning outcomes

## |Childcare Farm to Table Training



### **Learning Objectives**

**At the end of the workshop participants will be able to:**

- Begin to understand the connection between food choices and our health.
- Identify key issues that influence food equity and health outcomes based on disparity.
- Understand the value of food culture and how it ties into our choices
- Communicate the message of healthy eating to kids and families.
- Prepare kid friendly recipes using fresh ingredients.
- Demonstrate basic knife skills and cutting techniques.

**Agenda:**

8:00am – introductions, framing the need for change

8:30am – Understanding the current situation

9:00am - Practical steps towards healthy eating

10:00am – community kitchen – putting healthy eating into action

11:00am – eating and reflecting on experience

11:45am- clean up, closing comments, survey