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The Effects of Food Studies Programming on Food Participation and Dietary Choices

An Action Research Report
By Miriam Coates

The Effects of Food Studies Programming on Food Participation and
Dietary Choices

By Miriam Coates

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In fulfillment of final requirements for the MAED degree
Center for Contemporary Montessori
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Advisor _____

Date _____

Abstract

The intent of this action research project was to determine if food studies programming has an effect on children's participation levels in food preparation, procurement, and making dietary choices. The study was conducted during an eight week, grant-funded after-school pilot program focused on promoting active lifestyle choices and healthful eating habits. The study involved fourth and fifth grade children enrolled in a tuition free program sponsored by a local Park and Recreation department. Data was collected from both children enrolled in the program and their parents or guardians. Sources of data collection included surveys, participant artifacts, group discussions, and researcher observations. Results of the study showed that the children had a high interest in cooking and learning about where food comes from and various processing methods. The research also showed wide community support for food studies programming and an underlying concern about the health and diet of local youth. Based on the study's findings, the researcher will continue to develop and refine food studies curricula and course offerings for youth in the same community in which the initial study was conducted.

Public concern about childhood obesity has grown and the nutritional value of school lunches has been brought into debate in the media; I have long been concerned with school lunch and food policy. The White House has installed an organic garden and First Lady Michelle Obama has endorsed programming aimed at increasing childhood nutrition and fitness. School districts across the country have experimented and implemented farm to cafeteria, school gardens, locally grown procurement policies, and other strategies designed to bring healthy, minimally processed food to school trays.

As a parent, I was inspired by innovative, integrated, and progressive food programs and was frustrated that my local school district had not embraced the potential of creating such programming in our schools. Desiring to help improve school nutrition and food programming, I began to explore options that could be adopted in my area. I wanted to see if children enjoyed, and benefited from, programming in food studies. Would opportunities to tend, purchase, prepare, present, consume, and clean up food change behaviors?

As Americans, we have become disconnected from our food and our farmers. British chef Jamie Oliver (2010), on his television show *Food Revolution*, found classrooms of American elementary school children who could not identify common vegetables such as potatoes and tomatoes. The myriad of health concerns related to childhood nutrition, coupled with the opportunity to create a summer children's culinary club (sponsored by a local non profit that provides nutritious meals to food insecure children) spurred my interest in exploring the possible benefits of food studies programming. As

education coordinator for a local non-profit that provides meals for food insecure children on weekends and school holidays, I was presented with the opportunity to create curricula and community partnerships to offer elementary age children free food studies programming. The positive response, both from adult and youth participants, led me to a similar opportunity directing a pilot Park and Recreation Department program, funded by a grant to address childhood obesity.

In organizing the curricula for the program my goals were fairly simple; to give children hands-on kitchen opportunities with knives, stoves, ovens, and recipes; to bring in community partners to present the nutritional facts; and allow the children the chance to get into the field, yank a carrot, and experience the act of farming. To accomplish this and see how it had been done, I began to research food systems, nutrition and agriculture curriculums designed by various non-profits and land grant universities.

Many successful models have been created that integrate agriculture and culinary arts into core academic subjects. The Edible Schoolyard program, operated by the Berkeley Unified School District's School Lunch Initiative and founded by chef Alice Waters (2008), operates on the core principal that "food is an academic subject" (pg.43). This educational approach to eating might be progressive, but it is not new. In *The vertical integration of food for thought* (Duster & Waters, 2006) Losis Menand described how John Dewey worked to make food and dining an integral part of education, enhancing studies of math and sciences through the act of preparing and consuming a communal meal.

Bolstered by tales of lunch rooms being used as food labs and dining rooms, I was optimistic that programming might serve to make food preparation safer, as a study by McCarthur, Holber and Forsythe (2007) found college students to exhibit low levels of food safety compliance and a lack of knowledge of basic food safety concepts. In *Hot lunch: The History of the School Lunch Program*, Demas (2000) asserted that schools need to rethink school lunch programs, going beyond “school feeding” to adopt a “school dining mode” (pg.28). From past experience I had seen children respond positively to cooking classes; would programming aimed at increasing food knowledge and cooking skills increase participation?

The action research project took place in a rural island community in the Pacific Northwest in which the school district has one public elementary. District wide, over one quarter of the students participate in free or reduced price lunch. The participants were a self-selecting group of fourth and fifth grade co-ed students. The program was widely promoted and advertised as a Healthy Living after-school program, focused on diet and exercise. Flyers were posted in libraries, announcements were sent through local list serves, and the information went home in elementary school folders as part of Parks and Recreation material. The eight week session was offered free of charge. Participants were offered transportation to and from the programming.

The group met after school three times per week for two hours each time, for a total of six hours per week. The program had a lead teacher, one high school counselor, and several guest instructors. Guest instructors included

a chef, a master of nutrition candidate, a nutritionist, sustainability educator, fitness instructor, yoga instructors, community gardener, food producers and other health and nutrition related professionals. Coursework and activities were varied and included cooking, foraging, fitness activities, farm visits, and nutritional instruction. The goal of this study was to examine the following question: What effect does food studies programming have on food participation and dietary choices?

Description of Research Process

The pilot after-school program began in September 2010 and ran for eight weeks. The food studies and healthy living program offered available space for twenty-five 4th and 5th grade children to attend after school classes for eight weeks at no cost to families. The group met three times per week, Mondays, Wednesdays, and Fridays for two hours. By the fourth week of the program, participant level had risen to fifteen children, ranging in ages from nine to eleven. All of the sponsoring partners were aware that data gathered from this program would be used in an action research project and approved a data collection plan that began at sign-up and included a request for informed consent for the children's participation. The families were made aware that the data collection plan included observational and inquiry based data, parent and participant surveys, and assessment materials from after-school program

curricula sources, such as CATCH (Child and Adolescent Trial for Cardiovascular Health or Coordinated Approach to Child Health).

As part of the enrollment packet, parents were asked to complete a ten-question survey that addressed their perception of their child's after-school activities, dining patterns, and favorite foods. The survey asked parents to rate their child's level of involvement in making family food choices. As the families understood the pilot program to be centered on improving health, the survey contained a question addressing concerns regarding their child's diet, activity, weight, and overall health.

During the first week of the program, data (inquiry and observational) was collected assessing children's participation levels in choosing, procuring, and preparing foods through a group building line activity. The children began by standing shoulder to shoulder in a straight line. The leader then read out a list of food related statements (such as "I pack my own lunch", "My family grows some of it's own food", "I know a farmer" or "I ate fast food this week") and instructed the participants to take a step forward if they agreed. This activity was followed by an informal group discussion with the children about what types of foods and cooked dishes they were able to prepare independently, as well as the appliances and kitchen utensils they were allowed to use in their home kitchens with and without parental supervision.

As the local health department to address childhood obesity sponsored the pilot program, conditions of the grant funding required that the outline objectives of the CATCH curricula be covered. Additionally: this program was

required to administer the CATCH kids club after-school student questionnaire published by the University of Texas, Health Center at Houston. The CATCH after-school curriculum was designed for upper elementary students and addresses topics such as reducing media screen time, understanding food labels and nutritional facts, daily recommendations for diet and exercise, and analyzing advertising and pop culture media messages. The accompanying kid's club after-school student survey was administered to the participants twice, once during the second week of the course and then repeated again during the final week.

The CATCH survey contained 58 questions that were presented in a multiple-choice format that included pictures. The survey asked participants questions about the foods they consumed that day and tested levels of nutritional knowledge about the food groups and recommended dietary allowances. It also asked participants questions about the amount of time they spent daily using media, with separate questions to address various media formats (video games, texting, telephone, Internet searching, movies and the like). The survey's last section asked participants to rate their confidence level in their future ability to make positive choices in regard to maintaining a healthy diet and active lifestyle.

Although the CATCH survey was administered, and a good deal of data gleaned was used in this action research project, the CATCH curriculum was not the only food studies or nutritional curricula that was utilized or incorporated into the after-school program. As director of the pilot program, I was able to put

together a curriculum that contained lessons from a wide resource base in addition to writing some plans specifically tailored to be age appropriate and to meet the program's objectives.

To acquire observational data on the children's knowledge of safe food handling practices, the program's schedule included hands-on cooking activities and culinary lessons. During these activities (that were held at the local middle school's home economics room's fully stocked kitchens) the children's adherence to hand washing, hygiene, and knife and kitchen safety practices was observed and noted. Following these initial observations was a visit by a local guest chef who covered those topics; in addition to teaching basic knife skills. During this session, the instructor assisted the children in classic cutting techniques such as dice, mince, and julienne. The group then practiced these skills and worked together, doubling a recipe to make a Lebanese fattoush salad.

Subsequent cooking and guest chef lessons included hand-cranked pasta making, garnishing tricks, and etiquette and table setting. Observational data was collected throughout these activities, recording the participant's comments about unfamiliar foods and noting their willingness to try those foods (either alone or in a dish) that they assisted in preparing.

Since the goal of this project was to increase knowledge about children's level of involvement with food and food preparation, I decided to write a simple questionnaire that could be administered on the bus while on route to an activity. The questionnaire contained ten multiple-choice questions and was

administered by the program's lead counselor. The questionnaire asked participants about their families' grocery shopping/ food procuring patterns, their influence on menu selections and item purchases, and the frequency of at home family meals. In addition, the survey asked the children to rate their participation in school lunch, home kitchen cooking and cleaning chores, and how often their family brings in prepared foods or consumes fast food items for mealtimes.

Course participants were given lined journals and binders to collect handouts and worksheets used in the classes. The researcher reviewed the worksheets that were returned as homework or completed in class, as well as the students' journals. Select materials from this data collection process were included in this action research project as artifact data. Additionally, a guest art instructor conducted two sessions with the children exploring media and advertising awareness and the works created during these sessions was included as collected data.

Much of the credit for the success of this action research project goes to the community partners that provided their gardening, cooking, yoga, foraging, water aerobic, foraging, interval training, art, and nutritional and dietary services and expertise to the program. To gain a wider range of perspectives in data collection, community partners comments and information gleaned from personal conversations was considered in evaluating the programs curricula and systemic functionality.

Analysis of Data

Data of various forms was collected throughout the program; some required by grant funding conditions and taken from various after-school nutrition based curricula and some gathered or designed by the researcher. The participants took part in activities in which artifacts and observations were recorded, as well as short surveys. Parents were also asked to support this action research project by allowing their responses and survey data to be collected and utilized during the course of the program. Part of the enrollment form required for the after school program was a section containing a parental survey. The results of the survey were similar to the recent findings in *An evaluation of the school lunch initiative* by Rauzon, Wang, Studer and Crawford (2010), a report commissioned by The Chez Panisse Foundation in finding that families are eating together, but few children are involved in the process of growing, buying, procuring, preparing, cooking, serving, or composting food.

This disconnect with food, at all stages of growth and decomposition, denies children not only the opportunity to take great joy in epicurean delights but also the chance to learn academic subjects in an applicable, experiential fashion. Fractions, economics, social studies, horticulture, botany, ecology, and etiquette are all subjects that can be taught through food studies.

Fourteen enrollment forms, containing the multiple-choice survey, were collected for use in this action research project from fourteen individual families. Most of the children that enrolled in the program attended the local public school with a few that attended a nearby private religious school. Half of the

participants took part in the school lunch program, eating meals (either breakfast or lunch or both) at school, at least on occasion.

The family meal may be evolving, but contrary to reports, is not dead. Few children in my study were found to be eating on the go; over half of the children responded that they “never” eat breakfast in the car or on the bus, with another third doing so “rarely”. I also found that most of the participant’s meals were eaten at home with only 11% of children reporting dining out or bringing in fast or prepared food more than three times during a weekly period.

More than one third of families enrolling in the after school program responded that they ate dinner together on a daily basis; interestingly the same percentage that reported taking their children with them on food buying/procuring expeditions. While less than 40% percent of parents reported taking their children along on trips to the grocery store, the majority of parents, 64%, rated that “child’s level of involvement in food choices for family meals” to as happening on a “regular” basis, of five on a 1-10 scale.

The children, however, did not see their influence over family food options to be as great as the results of the parental enrollment survey suggested. The children agreed that their families were making the time to dine together, with participants all responding positively as to whether they had eaten at least one meal the previous day with a family member. But dining together is not the same as planning and preparing a meal together, and in this respect, the children’s responses showed a discrepancy between their parent’s perceptions and their ideas about their impact on food selections.

When asked to rate their involvement, the majority of the children did not opt to describe themselves as being actively involved in deciding what types of foods were available and served in the home. The children agreed that they went along to the market (44% responding going grocery shopping once or twice a month, with another 11% picking up edible ingredients on a daily basis), but were less convinced of their influence over what made it into the cart or onto the kitchen table.

In a survey conducted during the second week of the course contained the question “How often do you choose family foods (pick menus or grocery items)?” The responses from participants showed that one third of fourth and fifth grade children considered themselves as having been “sometimes” involved in making choices for the family in regard to menu planning or food product selections. Another third rated their participation as “rare”. Three multiple-choice options received tied results at 11%; those were “never”, “frequently” and “always”.

Part of the adage “you are what you eat” contains the implication of the ability to make dietary choices. In this respect, it seemed to me that children’s participation levels, in both procuring and preparing foods would have an effect on their relationship and identification with food. For a journaling assignment, children were read autobiographical poems related to foods and asked to create their own. Only two children wished to share their poems, but the results hinted at that participation might have been related to access. From a ten-year-old boy

“I am from hamburger, ketchup, mustard and a lake of Dr. Pepper with boats of hot dogs and grassy fields of French fries”

The children reported that their families obtained food from a wide variety of sources with an equal amount (22%) of children noting the food bank and farmers market as a resource. Over ten percent of the children reported having recently purchased groceries at a gas station or convenience store.

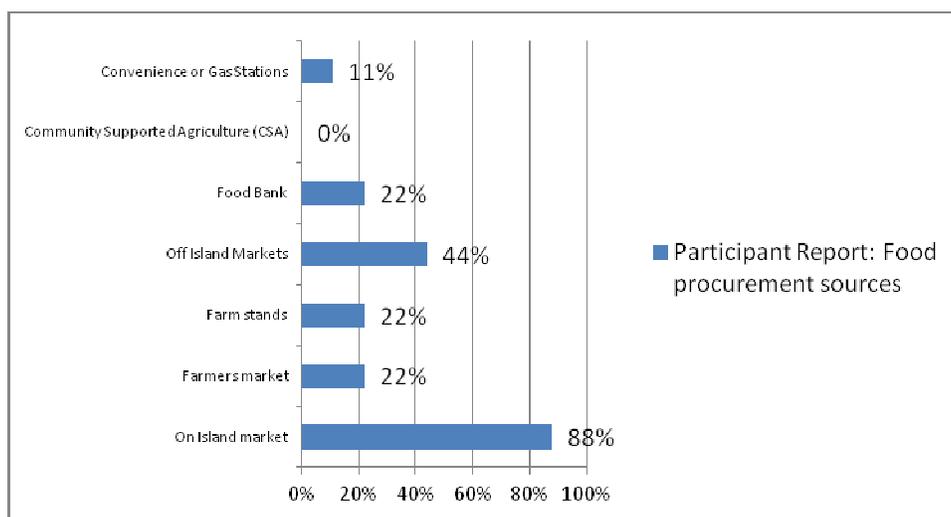


Fig.1

Observations of the line activity showed that over half of the children considered costs to be a significant factor in deciding which foods their family selected to purchase or make. Encouragingly, over forty percent of the children in this research project reported having grown some of their own food. Listed crops included green beans, carrots, tomatoes, blueberries, raspberries, blackberries, cherries, corn and lettuce.

This question prompted a group discussion where all the children commented and agreed that homegrown fruits and vegetable have a superior taste. Those children that tended gardens expressed pride in raising their own

edible crops. During the group building line activity, it was noted that while some children had a home garden, very few of the children stepped forward as having visited a commercial farm or having had known a professional farmer.

During group and personal conversations throughout the class, the general consensus of the children was that the outlets for participation around food were those chores that their parents wanted help with, not chores the children were very interested or eager in doing. A nine-year-old girl lamented, “I hate emptying the dishwasher” and soon found a chorus of supporters.

Numerous children voiced their belief that the food related tasks they were most commonly offered to assist with were primarily centered on cleaning, not cooking. “I never get to do the good stuff”, one participant commented. When asked about what constituted “good stuff”, she replied “cooking, you know, putting it in the pan at the stove”. In the line activity, the children unanimously stepped forward indicating that they were interested in taking part in cooking classes. Not too many answered that they enjoyed clearing the table.

The children, not surprisingly, wished for opportunities to cook more than they wanted to clean. And they did have chores, on this both the children and the parents agreed. According to the enrollment survey results, more than half of the children completed household chores after school with over a quarter of parents having checked cleaning as an activity. The results of my survey agreed and showed children being more heavily involved in maintaining cleanliness than making culinary creations.

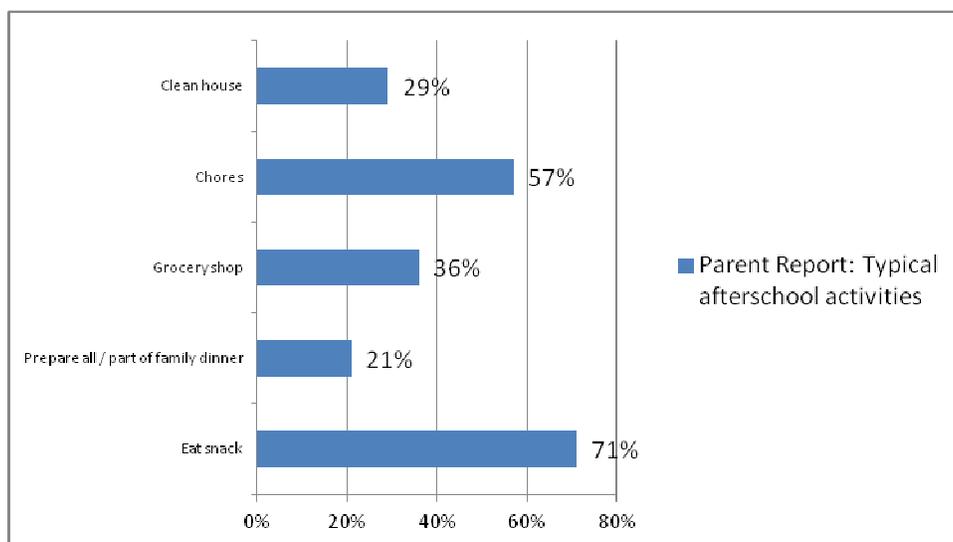
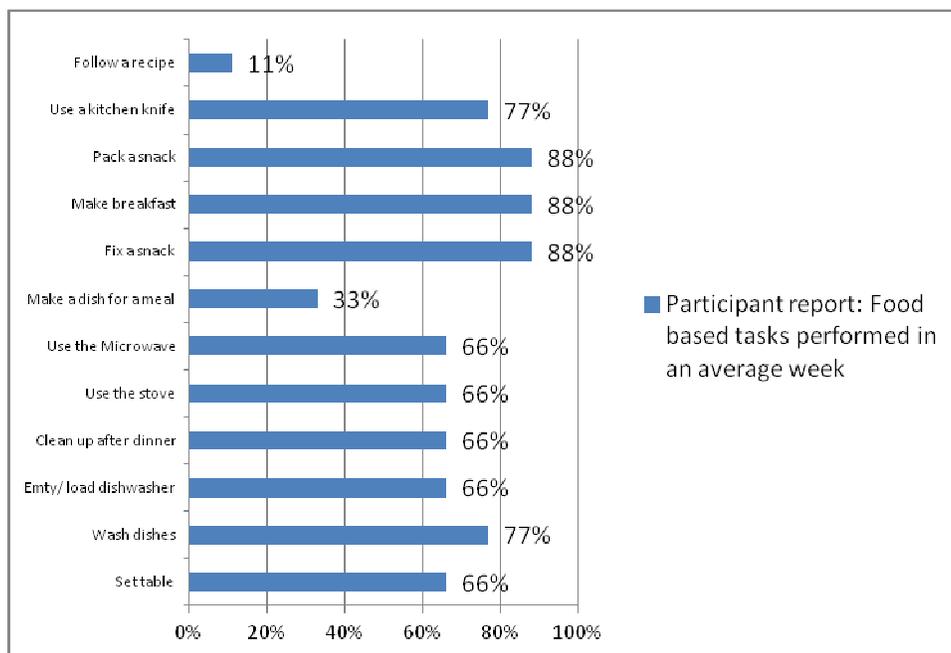


Fig. 2

Over three quarters of the children answered that they were charged with washing dishes and an equal amount (66%) were known to help out with table setting, loading and unloading the dishwasher, and cleaning up after dinner. Although the majority of the children chipped in to set, clear or clean the table, few did anything directly related to making a dish. The parental survey results showed that less than one quarter of the children helped prepare or cook food for dinner. This showed that the children were not peeling, chopping, grilling, or cooking to make a dish, alone or with parental assistance.

And it isn't as if the children do not have, at least some, of the necessary skills to make a valuable contribution in family food preparations. Results of my survey on food participation levels found that 88% of the children were making their own after school snacks or packing lunches. Over half of the children were in charge of fixing their own breakfasts. In conversations, I asked the children if they ate breakfast "family style" with shared dishes. Most answered no, stating that their parents woke earlier and usually ate something else. One child

commented that she served food for her younger sibling but did not prepare breakfast for the whole family. Through direct and observed conversations with the children, it was apparent that those that did prepare food items had a sense of pride about their ability to “make” things and preferred those cooking experiences to easy access to ready made items.



Many parents worry about having children working around sharp objects and ovens. The kitchen can be a dangerous place, filled with knives, boiling liquids, and hot metal. Reasonable parents would not wish for their children to be burdened with the full responsibility of preparing household meals, but by not engaging children in even the most basic aspects of the cooking process few children are learning the joy of bringing a dish to the family table.

Just because they may not have been cooking casseroles or chopping salads, does not mean that the children in this action research project were

uninterested in lending a hand in the kitchen. Numerous times throughout the program, in individual and group discussions, participants informed me that they liked to cook. When I asked what food items they could cook independently, the children's answers included eggs, quesadillas, and grilled cheese sandwiches. "I can make eggs scrambled. I can also make them fried and hard boiled; I can make most kinds except poached", a boy stated confidently.

Results from my survey showed that most items made by children were either simple or made from memory, as only 11% of the children answered that they had followed a recipe during the past week. This was interesting to me, as during cooking projects I observed the children to read, and reread, recipes given and to have had no difficulty following them or doubling quantities. I also observed that they seemed to enjoy flipping through cookbooks and food magazines; as they took turns pointing and calling out what items they would have liked to make or eat.

After each class led by a guest chef, the children expressed an eagerness to use the kitchen skills or techniques shown during the class at home. Cooking projects were also conducted with the lead teacher and counselors, but the allure of an experienced chef really drew the children's attention. When fast cutting demonstrations were shown, several children were overheard commenting, "wow!" in response to the speed and uniformity at which the chef diced an onion. As I considered the popularity of cooking shows and celebrity chefs, it seemed obvious that children, too, would be interested in the same topic.

The results of my survey showed that more than three quarters of the children reported that they were allowed to use a cooking knife at home, with fewer (66%) being entrusted to cook items requiring the use of the stove. Stoves and ovens can be hazardous if handled improperly (as can food items), highlighting the importance of understanding food safety procedures.

As elementary aged students, I did not expect the children in this study to be experts at knife and appliance safety or to have a deep or complete understanding of common safe food handling recommendations. These subjects were introduced to the students during class time and during cooking lessons with guest instructors. The children in the after school program needed frequent reminders to wash their hands and to avoid potential causes of cross contaminations.

Having organized other food studies activities and programs, I have observed many groups of adults and children and have determined that there is a difference between knowing and practicing safe food handling. In this course, the children's independent adherence to safe handling practices increased throughout the program. Many food-handling recommendations were found to relate to meat and poultry handling. As meat and meat products were not used during the after school program, the recommendations for safe meat handling and storage were included in the lesson, but handling practices were not observed.

After a few sessions with food, the incidents of hand washing increased, as did conversations between the children reminding or inquiring about cleanliness practices.

In the report *College Students and Awareness of Food Safety*, Researchers McCarthur, Holbert and Forsythe (2007) conducted a study that measured college students' levels of knowledge regarding food safety practices. As part of the same study, McCarthur, Holbert and Forsythe (2007) also conducted measurements of the student's rates of compliance in accordance to the recommended safety guidelines. This approach, of measurement followed by observations, appeared to be a suitable model to follow.

During the first cooking course in the after school program, the instructor covered a portion of the State's food handler's permit requirement materials. The majority of the children answered questions correctly about when hands should be washed, but very few stopped and washed their hands mid-project despite doing things recognized in conversation as requiring hand washing. Around one quarter of the class knew the recommended amount of lathering time. The children in the group may have given responses that suggested that they understood the importance of hygiene and hand washing but observations noted a low level of recommendation compliance. A ten year old boy was observed washing a chef knife carefully only to dry it by running it under his arm to dry.

Researchers McCarthur, Holbert and Forsythe (2007) found that the majority of their study participants expressed an interest in having classroom presentations focused on food safety skill acquisition. My findings echoed this sentiment, as children in the after school program were very interested in presentations related to kitchen safety, food storage and preserving, and hygiene.

In our area there has been a growth in the local food movement, with more and more families showing an interest in deepening connections between the farm and table. There have been many discussions on farm to school programs at school district meetings, but at the time of this action research project, the local school district utilized a national food service management company. The pilot program in which this action research project took place was sponsored by the health department and was funded to combat childhood obesity.

The program was catalyzed by concerns from school nurses whom were seeing an increase in health problems related to lifestyle choices. In the program's enrollment survey parents indicated that the after school program was chosen because of the Healthy Living theme. In personal conversations, many parent's expressed support for the program noting that they recognized that their children were are risk of health problems related to diet and exercise. Over twenty percent of the parents responded that they had concerns about one of more aspects of their child's lifestyle; diet, overall health, and activity level. 14% of the parents noted weight as an issue of concern.

The children, too, indicated that they understood the need for a Healthy Living program. Results of the CATCH survey showed that less than 30% of participants considered their diet to be healthy, with 57% rating their diet “sometimes” healthy and 14% rating their diet “not at all healthy”. Over half responded that they understood diet to be a contributing factor in the incidence of heart disease and cancers.

In practices, the results showed that the children’s diets were less than ideal. Most notably, less than half of the children responded that they had eaten a serving of fruit the day before, with only 14% eating the recommended daily allowance for fruits. With vegetables the results were better, over seventy percent of participants answered that they consumed three or more servings per day. The majority of children responded favorably that they enjoyed trying new foods, which was encouraging.

The results of this study showed that not only were children interested in learning about and taking part in food procurement and preparation, there was also wide and generous community support of programming that addressed such topics. I was able to create partnerships with the local food bank, community gardens, a non-profit dedicated to providing meals when school is not in session, and with local educators and food producers to provide instructors, venues for classes, and resources. All of the community participants showed support for the program’s objectives of giving children skills to improve their diet and activity level. The majority of partners expressed concerns over

childhood obesity and associated health risks, the prevalence of processed foods, or the general disconnect from field to plate.

So with willing pupils, and willing instructors, I was left wondering why integrated food studies curricula was not being utilized in the local school district; despite the widespread attention recently paid to the quality of school lunches and the increase in the number of children identified to be at risk due to dietary and lifestyle factors. One positive impact of this action research project was to identify interested stakeholders and other resources that may be of value in the future to support the case for adopting an integrated food studies program into the local schools or in efforts to improve school food service.

The study was successful in creating partnerships and meeting grant-funding requirements for local non-profits and community service agencies and in accumulating data that could be used as a baseline and guide in the development of potential future programs. Hiring local guest instructors and other service providers helped funnel some money into the local economy as well as provide mentorship and job training opportunities for staff. Another impact of the pilot program has been the identification of policies and procedures that I recommended be crafted and implemented to improve best practices within the sponsoring agency. This identification (all related to reducing liability and increasing safety) is expected to prove helpful to me when planning in the future. By the end of the eight-week program I had a much better grasp on which types of curricula and activities the children were receptive too and the resources available within the community to refine future

programming. Most importantly, the action resource project brought attention to the possibilities and benefits of offering food studies programming to local children and garnered the support of community members.

Action Plan

As the pilot healthy living after-school program was winding to a close, parents and community partners were interested in hearing if the program would be continuing in some form. When asked by the gardening instructor if they wished to return in the spring to turn the vegetable beds and plant seeds, all the children answered affirmatively. One week before the program ended, a mother informed program staff that her daughter would miss the final week due to travel. Her daughter so enjoyed the program that her mother voiced her support for continuing the program, offering to pay fees if necessary.

The results of this action research project showed that children enjoyed food studies programming and had an interest in learning about nutrition, farming practices, and procuring and preparing food items. The fourth and fifth grade students that participated in this study were eager to be more involved with food and commented that they wanted to spend more time cooking and baking than setting tables and other household chores.

Families have expressed support and interest in food studies and cooking programs for children, the questions now are: Are there any plans for new or continuing food studies programming, and if so, what lessons have been learned from action research that require program modifications or further

study? Another question for me, professionally, will be in deciding how to vary food studies and other healthy living type program curricula, instructors, and programming so that the work of the parks department is not in conflict or competition with a local non-profit that works in the child feeding arena.

One of the first lessons learned in this research project is that quality counts. High quality ingredients and local produce, a well-stocked kitchen lab; all proved to be essential to doing things correctly. Children appreciate expertise, and having access to a wide variety of skilled guest instructors is highly beneficial. The teacher and counselors did an admirable job leading the children in cooking and baking projects, but having a skilled chef made all the difference. The same was found to be true across the curriculum. Visits and lessons led by dietitians, gardeners, and food producers, environmental educators and other professionals were all well received, illustrating the importance of qualified instructors.

In food studies education (as in everything) quality has costs. The success of any future programming hinges heavily on leadership in creating and maintaining community partnerships with stipend funds available to secure skilled instruction and direction. At the close of the eight-week session, funding had not been secured to continue programming, although throughout the pilot session it became evident that offering the program free of charge might not be the best option. Several children drifted in and out of the session, mainly arriving only on field trips or other notable classes. Not charging fees may have contributed to parents (both those that choose to enroll their child/ children and

those that did not) having a lower perceived value of the program than if tuition fees were assessed. For this reason, programming staff has decided that future programming should have a set tuition amount with scholarships readily available. Again, community support is expected, and much appreciated, in making scholarships a viable option for many families that might not otherwise be able to participate.

Enrollment fees alone will not cover the cost of future programming, making grant funding and community partnerships necessary. As is the nature of grant support, it is understood that potential funding awards may come with curriculum or objective requirements, making detailed planning hypothetical. . Through my non-profit work, I have undertaken grant-writing duties and expect to continue learning the process of finding and seeking funding to continue exploring food studies programming.

Another critical component of the action research action plan will be conducting an evaluation process designed to gain information from parents and community partners. In the coming weeks, parents will be sent, via email, an invitation to take part in a ten item questionnaire hosted on a survey website. The survey shall include questions asking parents to rate their satisfaction with the activities offered, the quality of staffing, community partners, and success of the program's objectives in improving diet and exercise patterns. Parents will also be asked to rate the likelihood of re-enrolling their child/children in the program if it is found to be sustainable. As for the children, an informal hand-raising poll showed that all would sign up again. When asked a following

question about their view on the community partners that provided a variety of lessons, one eleven year old girl flashed the double thumbs-up sign.

The community partners and guest instructors have also been sent thank you letters for their participation in the pilot program and have been requested to take part in a short exit survey. The exit survey is designed to gauge feedback regarding the ease of participating in the program, support for the healthy living program objectives, and the likelihood of extending the partnership agreement if the program can be offered again. Once all of the exit surveys have been received and reviewed, the next step will be holding a meeting for the sponsoring agencies and community partners to discuss the successes, challenges, and possibilities for future programming. At this meeting, community partners will be shown a slide show of pictures taken throughout the program and will be informed of the results gleaned from the surveys as well as anecdotal data. The results from this meeting will possibly be used in the preparation of grant seeking materials if it is determined that the after-school program should continue in its current form.

There is also the possibility that food studies programming might continue in the community through a summer kid's club program offered by a local non-profit group that has previously hosted such classes last summer. There are numerous possibilities for sponsorship and curriculum development, all of which are dependent (on some level) on the ability of organizations and agencies to gain financial support for food studies programming. For this to happen, families need to voice their support and insist that children need and

deserve programming designed to give them the tools to make healthy, responsible decisions in regards to diet and exercise.

One great discovery made during the action research project is the number of community members that voiced support and offered their services towards the program. Gardeners, food producers, an athletic club, and the school district all offered use of their faculties. I was also pleasantly surprised by the number of commercial kitchen facilities available for inexpensive rental within the community, which was helpful to learn as finding suitable venues proved to be a logistical challenge and will certainly be a factor in future programming.

The local public elementary school does not offer food studies programming, although there are individual teachers within the system that are known to offer progressive curricula that includes food systems and sustainability topics. For the most part, there are few resources or programs within the community designed to help children develop a greater connection to food sources and learn about nutrition and dietary and lifestyle habits that contribute to overall health and well being. A lack of connection should not be the only concern, as kitchen safety and safe food handling practices proved to be an issue, as many participants were observed to not follow basic recommendations.

Despite this lack of curricula in the schools, this project showed a wealth of community members in the food industry (farmers, producers, chefs, nutritionists, dietitians, etc.) that, even if not able to participate in the program,

were still willing to answer questions and act as a resource in programming development.

This study also showed that the community had concerns about the disconnect families have with the foods on their table and the increased prevalence in lifestyle related health problems becoming evident amongst our youth. From my experiences in conducting this study, it is clear to me that children are aware of the importance of maintaining good health and are eager to learn the practical life skills that will allow them to make a greater contribution in food procurement and preparation. With many parents too busy to prepare home cooked meals from scratch during the week, it seems important to me to find ways to get children more involved in meal preparation as an alternative to spending time with electronic media.

As the discussion about childhood obesity and lack of physical activity continues, I would like to assert that what children at risk of obesity need is not less contact with food, but more. Packing up the tortellini he made to take home (along with the recipe and cooking instructions) during a chef led class, a ten-year-old boy confided, “ -I have a pasta machine at home. I could make these after school. Everyday; ravioli, tortellini, spaghetti...” This boy would be far better served standing in the kitchen for an hour every afternoon preparing handmade pasta than playing video games for the same amount of time before a dinner of processed foods.

It is time for our community to weight the costs of developing youth food studies programming against the real costs associated with not providing

children with the education to properly feed themselves. Participants in this study reported being aware of deficiencies in diets or “bad eating” and noted being informed of the impact of their dietary and exercise choices. All of the participants acknowledged that physical health and appearance were related to physical activity levels and dietary intakes.

Cooking can be greatly pleasurable; diet is known to have an affect on overall health; and children need to eat. With all the benefits associated with learning about food, it seems that perhaps it might be time to switch around some chores and have the parents set the table while the children prepare a meal. What better opportunity can there be for children to show their understanding of a well-balanced meal and cooking basics? Food studies programming will help give children the tools to make sure that they can do so safely; allowing them to not just sit, but to contribute and participate in bringing food to the family table.

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