

Creative Cooking with Preschoolers: A Service Learning Experience for FCS Students

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Service learning projects have been identified as teaching tools that may be used to enhance student learning experiences among university students. The aim of the service learning project, "Creative Cooking with Preschoolers," was to give Family and Consumer Sciences students the opportunity to learn course material, synthesize the information, and develop age-appropriate lesson plans, demonstrations, and supplemental materials for preschool children and their families. The positive outcomes of the project were many, and were measured by student, child and parent feedback, formal student evaluations, and faculty observations. Based on the success of the project, Creative Cooking with Preschoolers may be considered a "Promising Practice."

The field of Family and Consumer Sciences (FCS) encompasses a broad range of areas that are all aimed at improving the lives of individuals and their families. As undergraduate FCS students gain knowledge through traditional classroom learning, they become eager to apply what they have learned through working with others. Service learning is one avenue educators and students may take in efforts to apply classroom-based knowledge in a "real-world" setting.

Principles of Service Learning

According to Bringle and Hatcher (1996) effective service learning is based on three principles. First, students learn course content, and they learn it well. Kuh's 2008 report on *High-Impact Educational Practices* found that "service-learning correlated strongly with deep learning and personal development for both first-year and senior-level undergraduates." Astin, Vogelgesang, Ikeda, and Yee (2000) analyzed data from over 22,000 undergraduate students from across the United States. They found that the students who participated in service learning had significantly higher rates of academic achievement than students who participated in community service and those who did not participate in either service learning or community service activities.

Second, students provide a service to their community. Students take the knowledge they have learned in the classroom, and use it to educate others. Wold, Connor, Downes, Howett, and Layne (2010) reported on the success of an on-going service learning program that partners universities students with immigrant farmers and their families. Students from community health, dental hygiene, physical therapy, pharmacy, public health, and psychology all work together to develop, implement, and assess a comprehensive health program. The authors report that over 1000 families have been educated about healthy living practices and this has helped to improve the quality of life for those families. Keino, Torrie, Hausafus, and Trost (2010) reported that their family and consumer sciences students developed a project whereas they made school

supplies (such as book bags and uniforms) for more than 200 children in Rwanda. Students reported that the project was “an exciting, meaningful, and personally rewarding experience.”

Third, students reflect on their experiences. This reflection challenges students to think about the service learning process as a whole. They are encouraged to ask themselves many questions such as how well they learned and understood the course content. Were they able to successfully apply what they had learned? Did the project yield the intended outcomes? How might the project been implemented differently to increase its effectiveness? Because the service learning experience has been associated with improved content retention, increased demand for critical thinking, and higher course satisfaction by students (Markus, Howard, & King, 1993; Sax & Austin, 1997; and Strage, 2004) educators in FCS may consider this application of service learning as a Promising Practice.

Service Learning Project-Creative Cooking with Preschoolers

Introduction

This service learning project, “Creative Cooking with Preschoolers,” was developed in partnership between FCS students focusing on nutrition and food service, and our campus Head Start program. Because childhood obesity continues to be an issue in our community, with nearly one-third of children overweight or obese, (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010), it was important to develop a project in which FCS students could apply their knowledge of child nutrition, and food and kitchen safety with our youngest campus members.

Preparation

Throughout the semester, FCS students learned about child nutrition principles, child-friendly food preparation techniques, and how to talk with the children about kitchen and food safety. As they gathered information, the students created lesson plans that were developmentally appropriate for preschool children. The lesson plans all focused on addressing the guidelines set forth by the American Dietetic Association [ADA] that encourages children to eat a variety of fruits, vegetables, low-fat dairy, and whole grains throughout their day. The ADA also suggests that in order to pique children’s interests in eating a variety of healthy foods, children should be introduced to the foods at an early age, and the environment in which taste-testing occurs should be fun and stress-free (ADA, 2006).

Implementation

During the latter part of the semester, the preschool children were brought to the FCS Foods Laboratory. The first time the children came into the lab, they were introduced to their FCS partners, were taught about their work stations (for example, where measuring cups and utensils were located) and how to be safe while in the lab. The FCS students explained the rules of the lab, and demonstrated to the children how certain pieces of equipment worked. On subsequent visits to the lab, the FCS students would spend some time talking with their partner about the how certain foods grow, why they are healthy choices, and how to prepare them for meals or snacks. The students would then prepare a snack or meal item. During the process, the students would talk with the preschool children about making healthy choices. The preschool children were able to participate in the preparation of the snack or meal item to the best of their abilities. Developmentally appropriate tasks included: washing, spreading, stirring, opening, measuring, pouring, arranging, and of course, tasting.

Each session included time for questions and answers, and the FCS students also prepared a small packet of information for the children to share with their parents. The information contained recipes, descriptions of the meal item or snack, how to care for vegetation (should the family want to add the food to a garden), the nutrition benefits of the food, and tips to help the families make healthy choices. Examples of tips given to parents included ideas for what to pack in school lunches, how to make better choices at vending machines, how to create a healthier “kids” meal at a restaurant, and how to help children drink more water.

Evaluation and Outcomes

The success of the project was measured informally by asking the students, preschool children and their parents, and other FCS faculty members about their experience with the project. The principle investigators asked students open-ended questions such as how did you feel about the project idea at the beginning of the semester? How did planning and implementing the project impact your learning experience in the course? Would you elect to complete a service learning project in the future, why or why not? The student responses were overwhelmingly positive. Many students reported being surprised that the children actually ate healthy foods such as fruits and vegetables when they were able to help in the preparation. The students also shared that the preschool children were very curious about how to prepare the foods in creative or different ways. When planning and implementing the lesson plans, the students shared that because of the preschoolers’ curiosity and their need to understand every detail, they were challenged to think more critically about how to present the information, as they knew the preschoolers were going to ask them a lot of questions! The FCS students also came to understand that they had a unique opportunity to make a positive impact on the eating habits of the preschool children. Therefore, the FCS students unanimously reported that they invested more time, and placed more effort into this project because of the potential impact they could make on the preschool children’s choices.

The principle investigators also asked the parents of the preschool children informal questions about the project. Parents were asked how much they thought their child benefitted from participating in the project. Did they use any of the information provided to them by the FCS students? Would they recommend students doing the project again in another semester? Many parents shared stories of how the project benefitted their child and family. They reported using the information sheets the FCS students prepared which included recipes, tips on choosing healthier foods, and how to grow certain vegetables in their own backyards. One parent said she changed the way she viewed options in the vending machines at her workplace, and wrote a note to the office manager to add healthier choices to the vending machine. A father said that he used the information to help add variety to his older daughter’s lunches. The FCS students enjoyed the positive feedback and used it as motivation to continue doing great work.

Informal feedback was also shared by other faculty members whose students participated in the project. Compared with students who completed the same course, but without the service-learning component, they felt that these students were more engaged in learning the course material, most likely because they were going to apply it while working with preschool children, they asked more questions both during class and in office-hours, wrote more critically on their other course assignments, and appeared to have a more positive attitude toward their learning experience. Based on the positive feedback from the students, parents, and faculty members, it is very likely that the project will be run again in future semesters.

Summary

Creative Cooking with Preschoolers was a service learning project that brought together FCS students and children attending preschool on the University's campus. The FCS students had the opportunity to synthesize course content and use the information to develop lesson plans, demonstrations, and supplemental materials for the children and their families. The positive outcomes of the service learning project were many and supported previous research that showed service learning opportunities enhance the learning experience.

Future research with the project should include a more formal method of assessment. Data could then be used to apply for additional funding and encourage more participation. Additional information regarding the long-term effects of the project on the FCS students, the preschool children, and their parents would be beneficial to include in future assessments. The information could be used to develop stronger projects with greater impact. Both the FCS faculty and the preschool director would like to have the project continue, and with an increase in faculty resources and funding, the project has the potential to continue to be a great service learning experience for the students and the community.

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Citation

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