Gardening for Grades Workshops in Duval County

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Due to the number of requests to help start school gardens, Duval County Extension in cooperation with Ag in the Classroom, Nutrients for Life Foundation, and Duval County Farm Bureau offered Gardening for Grades workshops to area teachers and school volunteers. Two 6-h workshops were attended by 71 individuals. Instructors led participants in activities that connected science, math, and literature with the garden using workbooks along with hands-on learning activities. Teachers left with workbooks and plants to start a small school garden. Exit evaluations indicated participants were more familiar with ways school garden activities meet the Next Generation Sunshine State Standards and were more confident planning a school garden. Based on follow-up surveys, total garden area added was 12,214 sq ft and 2,292 students benefited from the gardens. Twenty-three indicated that students ate the vegetables and fruit from the garden. Of those, 92.9% of the students were exposed to some of the foods for the first time, 64.3% think the gardening program improved the students’ eating habits, and 64.3% indicated it increased the students’ physical activity; 100% (n=29) stated the books were helpful in implementing the gardening program.

Program Objectives

Duval County is a large urban county consisting of 183 public schools with 125,000 students and 124 private schools with 29,467 students. There are frequent requests throughout the year to provide assistance to set up school gardens. Most teachers have very little knowledge about growing vegetables, so it is very time consuming to provide the level of assistance needed to enable teachers to create a successful garden. The objective of the Gardening for Grades workshop was to give teachers the curriculum and basic vegetable gardening training to ensure success.

Materials and Methods

Extension contacted the Executive Director for Florida Ag in the Classroom to coordinate training dates and worked with them to develop an agenda to train teachers how to grow vegetables and incorporate this hands-on science learning tool into their curriculum. Extension contacted the Duval County School Board and forwarded the registration form that was sent out to the principals at all of the public schools. Extension sent registration forms to all teachers who contacted the office requesting gardening assistance during the calendar year. Duval County Farm Bureau agreed to partner with Extension, providing financial assistance to help keep the costs to $10 per participant. Participants registered online or through the mail and the class was limited to 40 participants.

Discussion

Two 6-h workshops were offered, the first in Jan. 2012 and the second in Jan. 2013 with a total attendance of 71. The first workshop was offered on a Friday, a teacher workday, but many interested teachers had mandatory training that precluded them from attending. The second workshop was held on a Saturday and there were fewer conflicts with attendance. The Saturday workshop reached the class maximum and had a waitlist of 10 teachers. Upon arrival, teachers received Gardening for Grades books, Nutrients for Life book, posters, quiz cards, and other training material. Teachers were introduced to the benefits of school gardening and how to use the Gardening for Grades book, plus how this tied into the Sunshine State Standards.

Several lessons demonstrated how to connect the garden to classroom instruction. One incorporating math involved the teachers working as teams using the Vegetable Gardening Guide, rulers, and posterboard to develop garden plans showing proper spacing in a defined area. The teachers then presented their garden plans to the class. Teachers analyzed soils looking at soil texture, drainage, and chemistry. Math was also demonstrated using the soil triangle to determine soil type based on the percentage of clay, silt, and sand.

Extension provided information on how to make a rain barrel for irrigation, various growing options from raised beds to container gardens, planting seeds vs. transplants activity, techniques to fertilize the garden, how to use a raised bed to create a square foot garden, and a hands-on seed tray planting activity. Each teacher left with a planted seed tray, additional seed for direct seeding, and a bag of fertilizer to plant a 3 ft x 8 ft spring garden.

A sharing session was included so that teachers could tell about their experiences: successes and failures. Teachers were provided information regarding funding sources. Possible grants from Ag in the Classroom, retail outlets, and Farm to School Program were examples. Teachers provided additional options for potential funding.

At the close of the training session, teachers completed an exit evaluation and were provided a certificate of completion for the Florida Agriculture in the Classroom training. A follow-up...
survey was also sent 3 to 6 months following the program and 31 out of 71 participants responded (44%).

Results

Exit surveys indicate that 51% of attendees do not currently have a school fruit/vegetable garden vs. 49% already have one at their school. Of the 51% without gardens, all but one teacher plans to put in a new garden. All teachers indicated that as a result of the training, they were more familiar with ways school garden activities meet the Next Generation Sunshine State Standards and that the training helped them gain confidence for planning a school garden.

A follow-up survey indicated that 100% (31) of responders gained information that helped them start a school garden. Of those responding, two started an in-ground vegetable garden, twelve built raised beds, eight in containers, and five made a rain barrel to help with irrigation. An estimated 12,214 sq ft of garden space was added and 2,292 students were involved in the gardening program. Twelve planted both spring and fall gardens and five planted summer gardens. Fifteen attendees estimated 2,292 students benefited from the gardens. Twenty-three indicated that students ate the vegetables/fruit from the garden. Of those 92.9% (n=27) of the students were exposed to some of the foods for the first time, 64.3% think the gardening program improved the students’ eating habits, and 64.3% indicated it increased the students’ physical activity; 100% (n=29) stated the books were helpful in implementing the gardening program. When asked for additional comments, all were favorable, such as great class, with the exception of one participant who was totally new to gardening. Because of the lack of any gardening knowledge, the class was too fast paced and at a high technical level, making it difficult to follow the information. Others suggested that we include multiple days of training and include a mentor connection to help them with their gardening questions.

Conclusion

Based on the positive feedback from the follow-up surveys, the Gardening for Grades workshops were successful at helping teachers implement a gardening program at their school. Our biggest challenge is getting the workshop registration into the hands of the teachers who are interested. Because there is a range in gardening knowledge among the participants, it is difficult to gear this class to the beginner, considering that 49% currently have school gardens. Although the workshops provided the basics for starting a garden, most teachers wanted additional follow-up through site visits or some type of mentoring program.