

Growing My Plate Survey Results

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This report shares the findings of the Growing My Plate courses delivered by Full Circle FarmCorps members in the summer of 2021.

Background



Full Circle FarmCorps (FCFC) is an AmeriCorps program under the leadership of the Arkansas Resource Conservation and Development Council and supported in part by EngageAR. AmeriCorps is the federal agency for volunteering, service, and civic engagement, and EngageAR manages AmeriCorps State subgrants. The mission of Full Circle FarmCorps is to confront food insecurity and strengthen communities through farming, outreach, and teaching. The Arkansas Department of Agriculture (Department) joined the FCFC Leadership Team in 2020 and, through its Farm to School and Early Childhood Education Program, facilitates FCFC activities that fall under the “Teach” pillar. To learn more about Full Circle FarmCorps review the [website here](#).

The FCFC program placed members at nine partnering service sites in Central and Western Arkansas, and courses were conducted through these service sites. Growing My Plate is a collaboration between Apple Seeds, the Arkansas Hunger Relief Alliance, and the Access to Healthy Foods Research Group (as part of the Arkansas Children’s Research Institute). The program empowers students with cooking skills, nutrition knowledge, and a desire to prepare healthy foods. Each week, students harvest produce from gardens and prepare a simple and nutritious garden-based recipe. Studies show that when children receive hands-on gardening education, along with nutrition education, they are more likely to eat fresh fruits and vegetables, and have a greater willingness to try new foods.¹

Growing My Plate includes a pre- and post-survey component, administered to students in grades 3-12. FCFC uses the results of the surveys — both knowledge and behavior change — as part of its reporting requirements to AmeriCorps. Included in this report are program-wide findings and recommendations for improvement.

¹ <https://appleseedsnwa.org/growingmyplate>

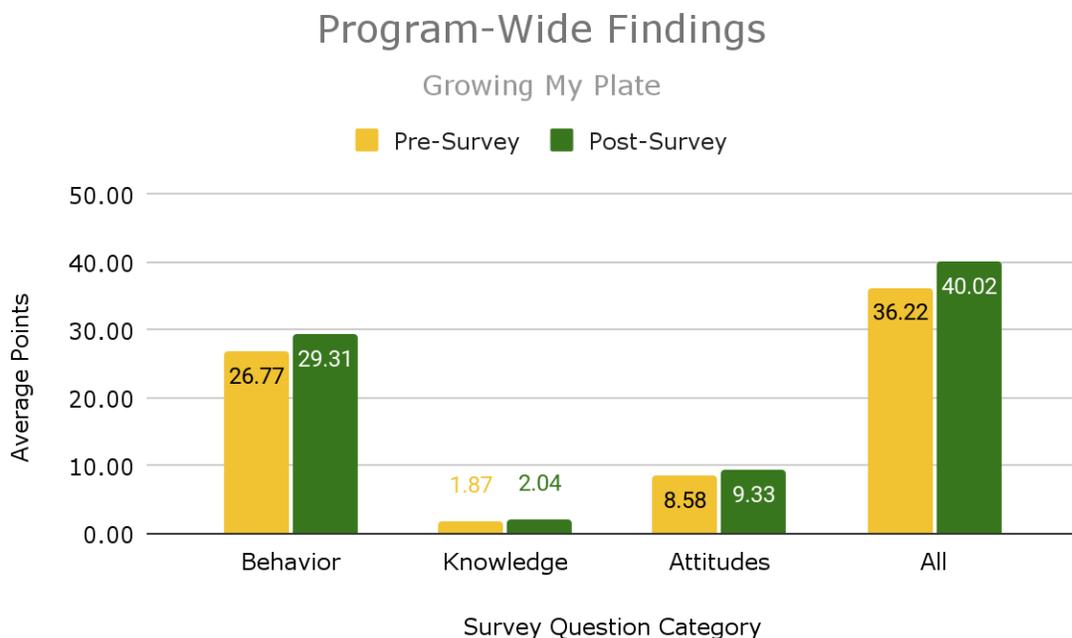
Program-Wide Findings

The course was taught to a total of 107 students. AmeriCorps members serving with Full Circle FarmCorps administered and collected a total of 171 surveys. The pre-survey was administered at the first of six lessons, and the post-survey was given at the completion of the course. All courses had six lessons in total, but each course was facilitated differently. Some courses included one-hour lessons, others had longer lessons, and some courses were completed within three weeks, while other courses took as long as eight weeks to complete. The average course attendance of participants was four lessons.

As reflected in average attendance, not all students completed their full course. The lack of completion resulted in a total of 57 matching unduplicated pre- and post-surveys. The following data is based on these 57 completed courses with matching surveys. Of the 14 health-related questions, one question tested knowledge, 10 assessed behavior, and three measured attitude (more specifically, confidence).

Statistically, we found a significant difference, ($t(56) = 3.68, p = .0005$) between the overall means of pre- ($M = 36.22$) and post- scores ($M = 40.02$) through a matched sample t-test analysis of the 57 matched participants across nine service sites.²

Question Category	Pre-Survey	Post-Survey
Behavior	26.77	29.31
Knowledge	1.87	2.04
Attitudes	8.58	9.33
All	36.22	40.02



² Many audiences are curious to understand the survey results in terms of individual student outcomes or site-specific findings, but this would involve sample sizes too small to be generalizable. The primary measure to analytically consider is the mean (average) score changes across the entire sample, from pre- to post-survey. For more information about the GMP data analysis, please contact Ronnie Kinoshita at VJKinoshita@gmail.com.

When analyzing the surveys on an individual level, 34 students (60%) showed an increase in total points when the pre-survey to post-survey total points were compared and of that 60%, 22 students (39%) met a 10% increase threshold. All respondents who had complete matched pre- and post-surveys were analyzed in data collection. The chart above and the graph below show the average total scores from the pre-survey and post-survey for the following survey question categories: behavior, knowledge, attitudes, all 14 questions combined.

Recommendations for Improvement

Full Circle FarmCorps members experienced a handful of challenges when administering the survey which included the following:

- 1) Securing a class of students when the service site was not a school service site;
- 2) COVID-19 impacting student attendance;
- 3) COVID-19 disrupting scheduled classes;
- 4) Survey instrument completion; and
- 5) Survey instrument inaccessible for target audience, i.e. too high of reading level.

Because of the above challenges, our findings suggest that Full Circle FarmCorps develop a program-specific survey that is set at a more accessible level, and can also be used with other curricula like Cooking Matters, FoodCorps lessons, and USDA learning resources. Members will therefore be able to tailor their teaching to community needs at their sites. Future members will be required to teach at least 10 individuals for 5-10 hours using a combination of garden-, nutrition-, and cooking-based lessons which will be assessed through the program-specific survey. Further, the program will rely on the curriculum partners for training members on the use of their specific educational components, while FCFC can use internal resources to develop member training for topics such as outreach, lesson planning, and classroom management.

In conclusion, the Arkansas Department of Agriculture is pleased to present the progress and learning opportunities contained in this report. The Department looks forward to continuing partnering with organizations who further garden-based nutrition and cooking education in the state of Arkansas.



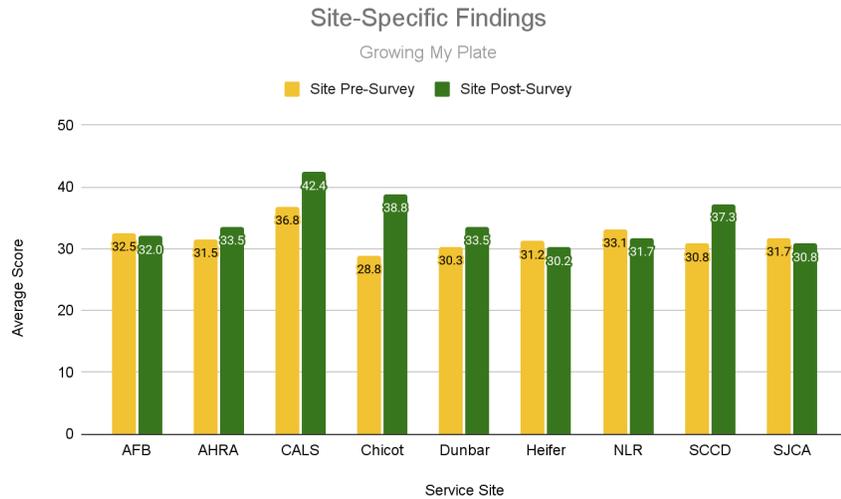
Figure 1. Left to right: Children enjoy testing recipes, plants, and painting a sign.

Appendix A. Site-Specific Findings

We encourage partners to communicate about the outcomes of their Growing My Plate course by sharing the [Program-Wide survey results](#) and describe the role they played as a part of this program.

For example: “A survey of over 100 students statewide who completed a Growing My Plate course, like the one facilitated by our Full Circle FarmCorps members, XXXX, showed that...”

The chart below shows the site-specific findings.



Service Site	AmeriCorps Member(s)	Number of Pre & Post Matches	Class Average Pre-	Class Average Post-	Total Difference in Class Average Pre- & Post-	Increased Individual Student (Higher Post-Than Pre-)	Percent of Students Improved Per Class Matches
Arkansas Foodbank	Jessica	4	32.5	32	-0.5	1	25.0%
Arkansas Hunger Relief Alliance	Robyn	2	31.5	33.5	2	2	100.0%
Central Arkansas Library System - Hillary Clinton Children's Library	Katie	9	36.8	42.4	5.6	7	77.8%
Little Rock School District - Chicot Elementary	Rae and Sarah	6	28.8	38.8	10	6	100.0%
Dunbar Community Garden	Jane and Kendra	8	30.3	33.5	3.2	7	87.5%
Heifer International Urban Farm	Mark and Stephen	6	31.2	30.2	-1	3	50.0%
North Little Rock Fit2Live Program	Arjo and Starr	10	33.1	31.7	-1.4	3	30.0%
Sebastian County Conservation District	Crystal and Andy	4	30.8	37.25	6.45	4	100.0%
St. Joseph Center of Arkansas	Bri and Hannah	12	31.7	30.8	-0.9	4	33.3%