Arkansas Farm to Early Childhood Education 2021 Survey Results

Descriptive Summary
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Survey Distribution and General Information Questions</td>
<td>3</td>
</tr>
<tr>
<td>Farm to ECE General Questions</td>
<td>6</td>
</tr>
<tr>
<td>Farm to ECE Interest Chart</td>
<td>9</td>
</tr>
<tr>
<td>Farm to ECE Activity Questions</td>
<td>11</td>
</tr>
<tr>
<td>Barriers to Starting or Sustaining Farm to ECE Activities</td>
<td>13</td>
</tr>
<tr>
<td>Types of Farm to ECE Assistance</td>
<td>14</td>
</tr>
<tr>
<td>Food Skills Education Questions</td>
<td>15</td>
</tr>
<tr>
<td>COVID-19 Questions</td>
<td>16</td>
</tr>
<tr>
<td>Conclusion</td>
<td>19</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The Arkansas Farm to Early Childhood Education (ECE) Survey collected responses from February 17, 2021, until March 22, 2021, and received 202 responses from child care providers and individuals throughout the state who work with children aged 0-5 years. Of the 202 respondents, 142 were from child care centers, 50 came from licensed child care family homes, 4 were registered child care family homes, and 6 identified as Other representing a total licensed capacity of 25,431 children, across 53 of Arkansas’s 75 counties.

The majority (125; 61.9%) of respondents work with children ranging from birth to 72 months, while 44 of the 202 respondents only work with children aged 36-72 months, identified as Preschool Age. Additionally, almost half (49.6%) identified their settings/demographics as Rural, while Suburban and Urban accounted for a combined 42.0% of respondents’ self-identified settings/demographics.

The following bulleted list provides an overview of information reported by child care providers. For more information, please read the full Arkansas Farm to Early Childhood Education Survey Descriptive Summary that follows.

- 34.7% of the child care providers currently have a garden or grow fruits and vegetables onsite.

- 75.2% of the providers offer a food program, and they purchase food from grocery stores (73.0%) and wholesale distributors (51.9%).

- Measuring interest in farm to early childhood education activities, 62.9% indicated high interest in starting a garden and 59.9% showed interest in garden-based or nutrition-based education.

- Participation in farm to ECE within the last two years was limited to 39 respondents who used a school garden and/or educated students about food.

- Barriers for farm to ECE are lack of funding (46.5%) and lack of information on where to purchase locally grown food (43.1%).

- Challenges with school gardens are lack of funding (66.3%) and lack of materials (63.3%).

- Assistance needed for farm to ECE include supplies and materials (68.8%) and funding assistance (65.8%).

When asked about the effects of the COVID-19 pandemic, 160 (79%) respondents noted that they did not have to lay off or furlough any staff, while 47 (23.3%) respondents think the pandemic will have long-term impacts on the way they operate their child care programs.
INTRODUCTION

The Arkansas Farm to Early Childhood Education (ECE) Survey was a collaborative creation of the Arkansas Department of Agriculture’s Farm to School and Early Childhood Education Program alongside other state agencies, nonprofit organizations, and private-sector partners, which included representatives from child care facilities.

The goal of the survey was to engage with ECE providers from across the state to determine their levels of involvement and interest in a variety of farm to ECE activities (centering on the three focal points of school gardens, local procurement, and education). The survey was also designed to collect information regarding what barriers and challenges exist for ECE providers in starting or sustaining farm to ECE activities at their child care center or home. The data collected has the capacity to form a foundation for further work, including more targeted research and/or pilot program development, the creation of farm to ECE resources, materials, and professional development opportunities.

SURVEY DISTRIBUTION AND GENERAL INFORMATION QUESTIONS

The survey was shared widely across Arkansas utilizing social media, the Department of Agriculture (Department) email newsletters, partner assistance from the Arkansas Department of Health, Arkansas Department of Human Services, Arkansas Hunger Relief Alliance, Curricula Concepts, and direct emails to child care providers from a statewide contact list obtained via a 2020 Freedom of Information Act (FOIA) request. The survey was open from February 17, 2021, until March 22, 2021, and received 202 responses from child care providers and others throughout the state who work with children aged 0-5 years.

Respondents were first asked to identify their location, what type of facility they represent (child care center, licensed child care family home, registered child care family home, or other), what type of care is offered (Full-Time, Part-Time, or Both), the ages served by the program (Infant/Toddler Birth-36 months, Preschool Age 36-72 months, or School Age 60+ months), their total licensed capacity, and the type of setting/demographics the program serves (Urban, Suburban, Rural, Migrant - non-native English-speaking communities, or I don’t know).
Question: What kind of group do you represent? N = 202

- Child care center (70.3%) 142
- Licensed child care family home (24.2%) 50
- Registered child care family home (2.0%) 4
- Other (3.0%) 6

Question: What type of care does your program offer?

- Full-time (131) 64.9%
- Part-time (12) 5.9%
- Both (59) 29.2%
For the question regarding ages served by the program, respondents were able to choose all that applied.

**Question: What ages does your facility serve?**

Of the respondents, 75 (37.1%) said their facility serves all three age brackets, while a small number serve just one of the three possible age brackets (5 respondents serve only the Infant/Toddler age, 44 serve only the Preschool Age, and 2 serve only School Age).

The total licensed capacity of the 202 respondents varied, from as few as 4 to as many as 1,800 (across multiple centers). Taken together, the total licensed capacity of all respondents amounts to 25,431 children. The average licensed capacity was calculated to be 125 children and the median was calculated at 62.

Respondents were also asked to define the settings/demographics of the area their program serves. The options were Rural, Suburban, Urban, Migrant (non-native English-speaking communities), and I don't know. Respondents could choose all they felt applied.
Survey responses came from 53 of Arkansas’s 75 counties, representing more than two-thirds (70.6%) of all counties in the state. The majority came from the northern half of the state, generally comprising the central, northwest, and northeast regions of Arkansas. Pulaski County in central Arkansas, home to the state capital Little Rock, returned the highest number of surveys overall (35 responses; 17.3% of the total), while the counties of Benton (20; 9.9%) and Washington (19; 9.4%) in northwest Arkansas were second and third in response rate, respectively. Craighead County (9; 4.5%) in northeast Arkansas was the top respondent from that region of the state, while Jefferson County (7; 3.5%) in the southeast region and Little River County (3; 1.5%) in the southwest, were the two leading counties in the southern part of the state.

After collecting basic information regarding the type, size, and location of the child care facilities/homes, the survey shifted into farm to early childhood education (ECE) specific lines of questioning.

**FARM TO ECE GENERAL QUESTIONS**

Child care providers were asked questions regarding whether they maintain a garden at their facility/home, if they have applied for any previous farm to ECE grant funding, if their facility offers a food program, and if so, do they receive meal reimbursements through the United States Department of Agriculture (USDA) Child and Adult Care Food Program (CACFP)?
The overwhelming majority of respondents (191; 95%) had not previously applied for any grant funding through the Arkansas Department of Agriculture, or any other entity. When it came to offering a food program nearly three out of four (152 respondents) provide one.

**Question: Does your program currently grow any fruits or vegetables or have a small garden in ground or in containers?**

- **YES (70)**: 34.7%
- **NO (132)**: 65.3%

**Question: Does your program offer a food program?**

- **YES (75.2%)**: 152
- **NO (24.3%)**: 49
- **No response (0.5%)**: 1

0 50 100 150 200
Of the 152 respondents who said their child care facility/home offers a food program, 79.6% (121 respondents) said they receive reimbursements for meal purchases through the Child and Adult Care Food Program (CACFP). 13.1% (20 respondents) do not receive reimbursements for meal purchases and 7.2% (11 respondents) did not know whether their facility/home participates in CACFP.

Digging further into the data on CACFP reimbursements, the survey asked if those 121 child care facilities/homes receiving reimbursements for meal purchases operated the CACFP contract themselves or if a sponsoring institution/organization oversees the CACFP contract.

The next section of questions asked where child care providers purchase the food for their programs. Respondents were given multiple options and could pick all that applied. After detailing where they purchased food, providers were asked how they prepared the food at their facility/home to serve the students.
Many child care programs purchased food from a combination of grocery stores, wholesale retailers, and/or wholesale distributors. Grocery Store was the most frequently listed method of procuring food for the child care program with nearly three out of four respondents of the 152 that had a food program listed it as a method of procurement (73.0%; 111 instances out of 152 survey respondents with a food program). Wholesale Distributor (for example: Sysco, Ben E. Keith, Chartwells, etc.) was noted on more than 50% of the 152 responses with a food program (51.9%; 79 instances).

When it comes to how child care facilities/homes prepare the food they serve to students, the two most frequently listed answers were Cook from Scratch (76.9%; 117 total instances) and Heat and Serve (60.5%; 92 total instances). Serve Cold (28.2%; 43 instances) and Catering (6.6%; 10 instances) were the next most listed responses.

FARM TO ECE INTEREST CHART

In order to gauge the levels of interest in farm to ECE activities survey respondents were presented with a chart listing nine different farm to ECE activities, and a scale of five levels of interest (Very interested, Interested, Mildly Interested, Not Very Interested, or Not at all Interested). There were no constraints to the answers, a respondent could list Very Interested on all nine activities if they felt it was an accurate representation of their feelings. However, respondents could only choose one response per activity. The following graphs show each farm to ECE activity and the corresponding interest levels noted on the surveys.
Question: How interested are you in ...?

- Serving Arkansas Grown Fruits and Vegetables:
  - Very Interested: 50%
  - Interested: 25%
  - Mildly Interested: 10%
  - Not Very Interested: 10%
  - Not at all Interested: 5%

- Planting a Small Garden:
  - Very Interested: 50%
  - Interested: 25%
  - Mildly Interested: 10%
  - Not Very Interested: 10%
  - Not at all Interested: 5%

- Serving Produce Grown Onsite to Children in Your Program:
  - Very Interested: 50%
  - Interested: 25%
  - Mildly Interested: 10%
  - Not Very Interested: 10%
  - Not at all Interested: 5%

Question: How interested are you in ...?

- Conducting a Field Trip to a Farm, Farmers Market, or Garden:
  - Very Interested: 50%
  - Interested: 25%
  - Mildly Interested: 10%
  - Not Very Interested: 10%
  - Not at all Interested: 5%

- Using Garden-Based and/or Nutrition Education Materials with Students:
  - Very Interested: 50%
  - Interested: 25%
  - Mildly Interested: 10%
  - Not Very Interested: 10%
  - Not at all Interested: 5%

- Linking Farm to ECE Activities with Child Development and Early Learning Standards:
  - Very Interested: 50%
  - Interested: 25%
  - Mildly Interested: 10%
  - Not Very Interested: 10%
  - Not at all Interested: 5%
Overall, there is noticeably high interest in many farm to ECE activities. Responses indicate a desire among child care providers to utilize farm to ECE to diversify their program, offer creative methods of instruction, and provide nutritious meals to their students.

The results reinforce the idea that farm to ECE activities are quickly gaining interest among child care providers looking for ways to aid the growth and development of their students. For each of the nine activities the Very Interested and Interested choices ranked as the top two responses, with Planting a Small Garden (62.9%) and Using Garden-Based and/or Nutrition Education Materials with Children (59.9%) garnering the two highest percentages in the Very Interested category. Conversely, Conducting a Field Trip to a Farm, Garden, or Farmers Market ranked as the activity with least interest, accumulating 15.3% in the Not at all Interested category.¹

**FARM TO ECE ACTIVITY QUESTIONS**

After gauging interest levels, survey respondents were asked whether they had participated in farm to ECE activities in the last two years. Of the 202 survey respondents, only 39 (19.3%) indicated they had participated in farm to ECE activities during the last two years. 67.3% (136 respondents) had not participated in farm to ECE activities during the last two years and 27

¹ The interest chart did not have survey respondents compare or rank each of the different activities against each other. For future research, creating a chart where respondents must rank each activity by their level of interest (for example: respondents sort activities on a chart numbered 1-9 with the top spot corresponding to the activity they are most interested in) might yield more specific results.
(13.4%) did not know if their child care facility/home had participated in farm to ECE activities in the last two years.²

Question: Which farm to ECE activities have you done in the past 2 Years? (N = 39)

² A discrepancy appears when looking at the number of respondents who said that they currently grow fruits or vegetables or have a small garden in the ground or in containers (70 total; 34.7%) at the start of the survey. Of those 70 responses, 35 also said that they had not done farm to ECE activities in the last two years.
BARRIERS TO STARTING OR SUSTAINING FARM TO ECE ACTIVITIES

Survey respondents were asked to select up to three of their primary barriers to either starting or sustaining farm to ECE activities in their program from a list of 11 options. There was also a category to write in their own answer. Of note, none of the choices received more than 50%, with Lack of Funding to Expand Activities/Curriculum garnering 46.5% (94 total responses) as the most frequently noted barrier.

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of funding to expand activities/curriculum (46.5%)</td>
<td>94</td>
</tr>
<tr>
<td>Lack of knowledge of local farmers and/or where to purchase local fruits and vegetables (43.0%)</td>
<td>87</td>
</tr>
<tr>
<td>Unfamiliarity with Farm to ECE activities in general (40.0%)</td>
<td>81</td>
</tr>
<tr>
<td>Overall cost of locally grown and/or organic foods (36.6%)</td>
<td>74</td>
</tr>
<tr>
<td>Lack of materials and resources for curriculum integration (34.1%)</td>
<td>69</td>
</tr>
<tr>
<td>Lack of training on curriculum integration (26.7%)</td>
<td>54</td>
</tr>
<tr>
<td>Lack of staff and/or volunteers to assist in all we want to do (26.7%)</td>
<td>52</td>
</tr>
<tr>
<td>Lack of parental involvement (17.3%)</td>
<td>35</td>
</tr>
<tr>
<td>Lack of kitchen space and/or equipment to prepare foods (17.3%)</td>
<td>35</td>
</tr>
<tr>
<td>Lack of training on food procurement and food preparation (11.3%)</td>
<td>23</td>
</tr>
<tr>
<td>Not enough prep time for cooking (10.8%)</td>
<td>22</td>
</tr>
<tr>
<td>Other (2.9%)</td>
<td>6</td>
</tr>
</tbody>
</table>

Question: What are the biggest challenges to either starting or sustaining farm to ECE activities in your program? (N = 202)
Additionally, the survey asked a similar question specifically regarding the challenges of starting or sustaining a garden at the child care facility/home. Using the previous question as a guide, respondents were asked to select up to three barriers.

**Question: What challenges are there to starting or sustaining a garden? (N = 202)**

- **Lack of funding for planting and upkeep (buying seeds, soil, compost, etc.) (66.3%)**: 134 responses
- **Lack of materials (gardening tools, building materials, etc.) (63.3%)**: 128 responses
- **Lack of staff time to dedicate toward garden maintenance (49.5%)**: 100 responses
- **Lack of general gardening knowledge (37.6%)**: 76 responses
- **Lack of suitable planting space (no area suitable for planting, not enough light, etc.) (26.2%)**: 53 responses
- **No challenges with the garden (8.4%)**: 17 responses
- **Other (0.9%)**: 2 responses

**TYPES OF FARM TO ECE ASSISTANCE**

After assessing the barriers and challenges facing farm to ECE activities, the survey allowed child care providers to select different types of assistance that would be beneficial for achieving farm to ECE goals within their respective programs. As with the other questions, respondents were asked to select up to three answers. Two answers Supplies and Materials for Farm to ECE Activities and Grant Funding/Financial Assistance registered as the most frequent responses with each being listed on at least two of every three survey responses.
FOOD SKILLS EDUCATION QUESTIONS

The next category of questions was developed in collaboration with the Arkansas Hunger Relief Alliance and the Cooking Matters program and focused on assessing food skills education programming, engagement, and barriers.

Of the 202 survey respondents, only 43 (21.2%) indicated they had provided food skills education programming for parents or caregivers in the past. 132 respondents (65.3%) had not provided food skills education programming in the past; while 28 (13.8%) did not know if their child care facility/home had provided food skills education programming.
From the 43 respondents who had provided food skills education programming for parents or caregivers, more than half (24 overall; 55.8%) had provided a One-Time Lesson while the second most frequent response was We Have Had an Outside Group or Person Facilitate Food Skills Education Programming with 21 responses (48.8%).

By far, the two most frequently noted barriers to providing food skills education programming are Time and Money as each choice registered on nearly two-thirds of all survey responses (62.8%). However, food skills education programming is an interest to child care providers, as 113 (55.9%) said they would like to offer food skills education programming for parents and caregivers in the future, while a further 72 (35.6%) were unsure, likely due to various barriers.

**COVID-19 QUESTIONS**

Given all the disruptions and adjustments to life during the COVID-19 pandemic, the survey asked several questions regarding the impacts of the pandemic on child care providers.

When asked about the extent of modifications the pandemic forced child care facilities to make, the vast majority listed We Modified Rules and Safety Measures and Continued to Operate during the pandemic. The following list details all the responses. Respondents could select all answers that applied. The numbers listed correspond to the total number of times a particular response was selected.

<table>
<thead>
<tr>
<th>Question: To what extent has the COVID-19 pandemic affected your operations?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modified rules and safety measures and continued to operate (88.6%)</strong></td>
</tr>
<tr>
<td><strong>Operating at an adjusted capacity (37.6%)</strong></td>
</tr>
<tr>
<td><strong>Enrolled students dropped due to required restrictions (30.6%)</strong></td>
</tr>
<tr>
<td><strong>Enrolled number dropped regardless of restrictions (22.2%)</strong></td>
</tr>
<tr>
<td><strong>Made no modifications and are operating as usual (3.5%)</strong></td>
</tr>
<tr>
<td><strong>Other (3.5%)</strong></td>
</tr>
<tr>
<td><strong>We are completely closed (0%)</strong></td>
</tr>
</tbody>
</table>
Of the Other responses some noted a transition to virtual, some had to close at different periods of time, or deal with staffing shortages due to COVID-19 cases, and one noted that the costs of doing business have skyrocketed with the facility losing money 10 of the last 12 months.

Additionally, the survey asked if child care centers had to lay off or furlough any staff during the pandemic and if it negatively impacted their ability to purchase and serve fresh, nutritious food to the students. Of the 202 respondents, 42 (20.8%) indicated they had to lay off or furlough staff due to the COVID-19 pandemic, while 160 (79.2%) indicated they had not.

**Question: Did the COVID-19 pandemic negatively affect your ability to purchase and serve fresh, nutritious food?**

- Yes (37) 18.3%
- No (165) 81.7%

The 37 respondents who said that the pandemic negatively affected their ability to purchase and serve fresh, nutritious foods were then prompted to write an explanation as to how they were affected. Many explained that at times during the pandemic it was difficult to find items at local stores, or that they could not purchase the volumes they needed due to quantity limits at some stores. Others noted that due to required restrictions, they had to alter their food program in such a way that it limited any ability to serve fresh foods. In addition to the periodic lack of food availability, some noted the increased costs of various products, which put too much strain on their budgets.

Many K-12 school districts around the state were able to institute various Grab-and-Go food service models to keep students fed while schools went virtual during the pandemic. Of the 202 survey respondents, only 32 (15.8%) said that they were able to initiate a similar type of model. Additionally, just six (2.9%) were able to provide some farm to ECE activities to keep students engaged while at home during the pandemic closures.
The final two COVID-19 related questions asked respondents if restrictions barred outsiders from visiting the child care facility to provide technical assistance, support services, or other services, and whether child care providers expect long-term impacts from the pandemic.

**Question:** Did required COVID-19 restrictions bar outsiders from entering the facility to provide training, technical assistance, intervention support or other services?

- **NO** (96) 47.5%
- **YES** (106) 52.5%
Most of the anticipated long-term effects respondents mentioned were concerns about lower enrollment and smaller capacities in facilities (and in turn financial difficulties), limited or no access for parents/other visitors into facilities, and sanitation issues limiting the extent children are able to participate in food related activities.

CONCLUSION

When considering the information gathered in the Arkansas Farm to Early Childhood Education Survey, it is evident there exists a robust interest in farm to ECE activities. The information and data collected in this survey is meant to serve as a basis for further, more specific, work in early childhood education. The research should also serve to aid the development of resources, materials, and increased access (financial and otherwise) to benefit all child care providers looking to start and sustain farm to ECE activities. The challenges and barriers identified from the survey illustrate how to better support child care providers who want to implement farm to ECE activities.

Farm to school and farm to early childhood education is still a relatively new and growing term and initiative in Arkansas. This survey provides valuable information which can point state agencies, nonprofit partners, and others in the right direction when assessing the farm to ECE needs and desires of child care providers throughout the state.