

Farm to Early Care and Education Continues to Foster Bright Futures for Children and Communities

PARTICIPATION AND PRACTICES | SEPTEMBER 2022

By National Farm to School Network and
Michigan State University Center for Regional Food Systems

Farm to early care and education (ECE) promotes child health and increases access to healthy foods through a collection of strategies that are centered in experiential learning and family and community engagement. Farm to ECE brings three core elements—gardening, food and agriculture education, and local food purchasing—into every type of ECE setting. These include family child care homes, child care centers, Head Start, and preschools in K-12 districts.

In its fourth iteration, intended to add to the knowledge of the previous three surveys, National Farm to School Network (NFSN) partnered with

Michigan State University Center for Regional Food Systems (CRFS) to implement the 2021 version of the National Farm to Early Care and Education Survey. The survey series completed by NFSN and CRFS in 2012¹, 2015², 2018³, and now 2021, is the only national farm to ECE-specific assessment of activity reach and participation. Information on the background and methodology of the 2021 National Farm to Early Care and Education Survey can be found in the “Background and Methods” 2021 survey brief⁴. This brief aims to explore the facilitators of farm to ECE participation and how respondents are participating in farm to ECE.

Key Findings

- The number of activities sites participated in ranged between zero and 15, with an average of three activities.
 - The most common curriculum used was one developed by the ECE site themselves (41%), followed by United States Department of Agriculture’s (USDA) “Grow It, Try It, Like It!” (14%) and curriculum developed by the respondent’s state (9%).
 - Most respondents participating in farm to ECE have not received external funding for their farm to ECE activities (82%). However, of the 11% who did receive external funding, 31% received funding from the state and 13% from federal sources.
 - Sites that either used a self-developed curriculum or a curriculum not listed in the survey, received funding from state sources, or have been engaged in Farm to ECE activities for 3 to 5 years, participated in approximately one more activity on average than other participants, holding all other variables constant.
 - The most frequent activity farm to ECE participants engaged in was educating children about locally grown food, how food grows, and/or where food comes from (71%). The next most common activities were planting a garden or working with children in an edible garden on-site (65%) and serving locally grown food in meals, snacks, or taste tests (65%).
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Practice and Policy Recommendations

- Develop support structures/systems and provide technical assistance to increase awareness of and assist in the adaptation of evidence-based curricula and resources.
- Prioritize improved access to funding with limited constraints. Technical assistance, policy efforts, and networking opportunities should emphasize improving pathways for securing funding and growing programs over time for sustainability.
- Leverage farm to ECE as a strategy to increase healthy food access, increase ECE quality, and support local farmers and the local economy. Uplift farm to ECE's alignment with these goals to increase access to diverse funding streams and improve collaboration across sectors.

Farm to ECE Participation

Duration and Frequency of Farm to ECE Activities

The 2021 survey indicated that 81% of ECE sites participated in at least one farm to ECE activity within the last year. Additionally, 14% of sites are planning to start activities in the future. One third (33%) of respondents have been participating in farm to ECE for more than 5 years while a quarter (25%) have been participating between one and three years, 18% have been participating for less than one year, and 11% between three and five years (Table 1).

The number of activities sites participated in ranged between zero and 15, with an average of three activities. Based on multiple regression analysis, researchers found that **sites that used a self-developed or a curriculum not listed in the survey, received funding from state sources, or have been engaged in farm to ECE activities for 3 to 5 years participated in approximately one more activity**, holding all other variables constant.

Table 1. Duration of Farm to ECE Activity Participation^a

Duration	Percent	Predicted Number of Activities More Than Those Not Participating in Farm to ECE
Less than 1 year	18%	2.1 more activities
Between 1 and 3 years	25%	3 more activities
Between 3 and 5 years	11%	3.4 more activities
More than 5 years	33%	3.5 more activities
Don't know	12%	1.8 more activities
Missing	1%	

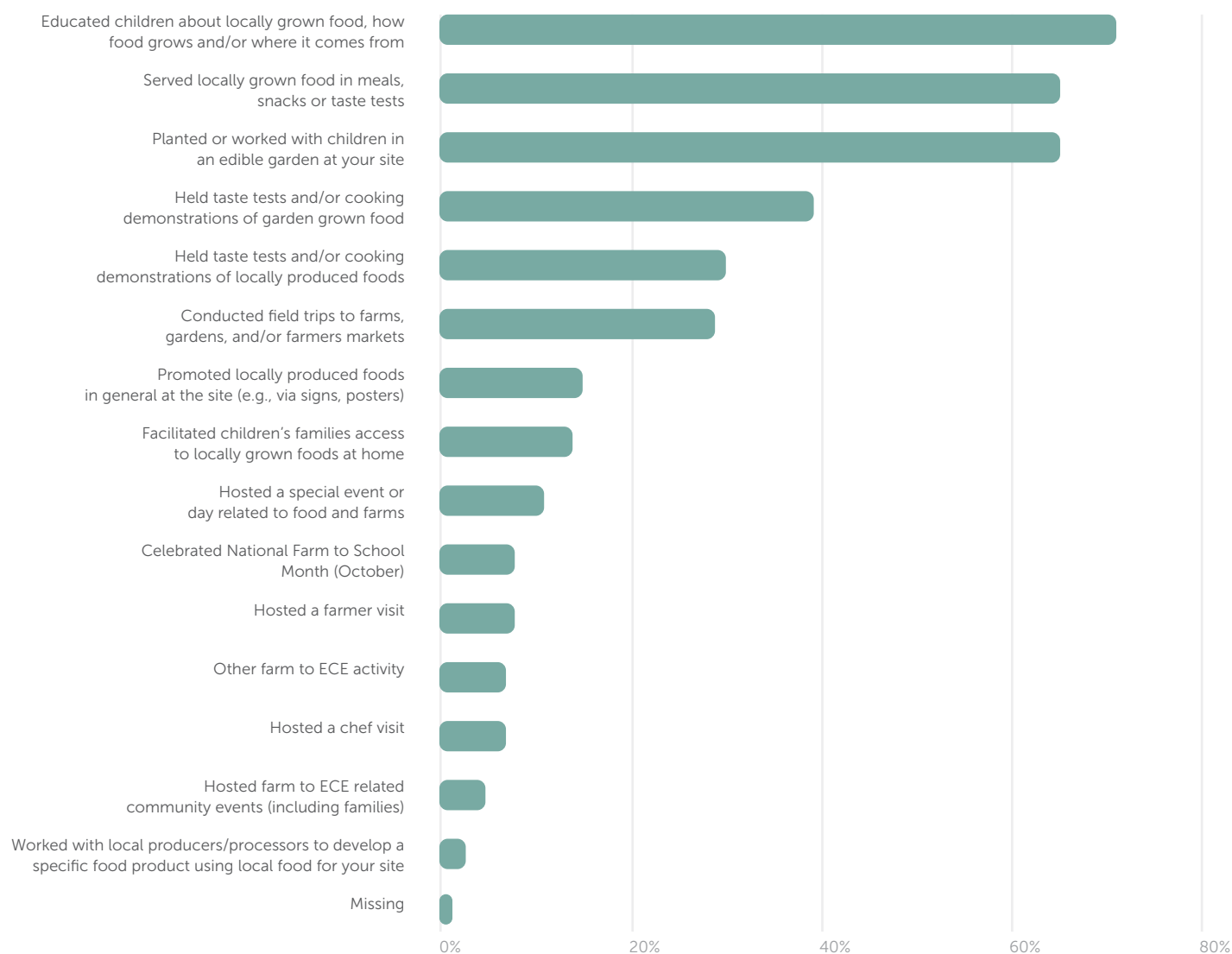
^a N=2397

Farm to ECE Activities

Respondents engaged in farm to ECE shared the types of farm to ECE activities in which they were engaged. The most frequently shared activities were educating children about locally grown food (71%) and how food grows and/or where food comes

from (71%). The next most common activities were planting a garden or working with children in an edible garden on-site (65%) and serving locally grown food in meals, snacks, or taste tests (65%).

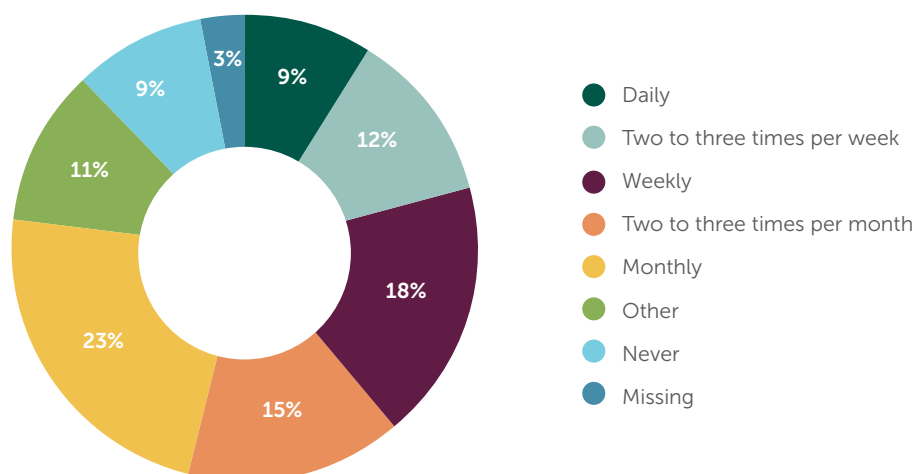
Figure 1. Farm to ECE Activities Conducted by Providers



Nutrition Education

A large majority of surveyed providers engaged in nutrition education activities at least monthly (77%), with 39% engaging in nutrition education at least weekly.

Figure 2. Frequency of Nutrition Education Activities



Respondents used a variety of curricula for their farm to ECE activities. The most common curriculum used was one developed by the ECE site themselves (41%), followed by published curricula such as United States Department of Agriculture's (USDA) "Grow It, Try It, Like It!" (14%), curricula developed by the respondent's state (9%), and Urban and

Environmental Policy Institute's Farm to Preschool Harvest of the Month (2%). Nearly one-third of respondents did not use any curriculum (30%).

Based on a multiple regression analysis, the curriculum used statistically significantly predicted the number of activities a site participated in, as shown in Table 2.

Table 2. Four Most Commonly Used Farm to ECE Curricula^a

Curriculum	Frequency	Percent	Predicted Number of Activities More Than Those Not Participating in Farm to ECE
Curriculum/materials developed ourselves	989	41%	.8 more activities
Grow It, Try It, Like It! - USDA	343	14%	.7 more activities
Curricula/materials developed by our state	215	9%	.9 more activities
Farm to Preschool Harvest of the Month - Urban and Environmental Policy Institute	44	2%	1.5 more activities

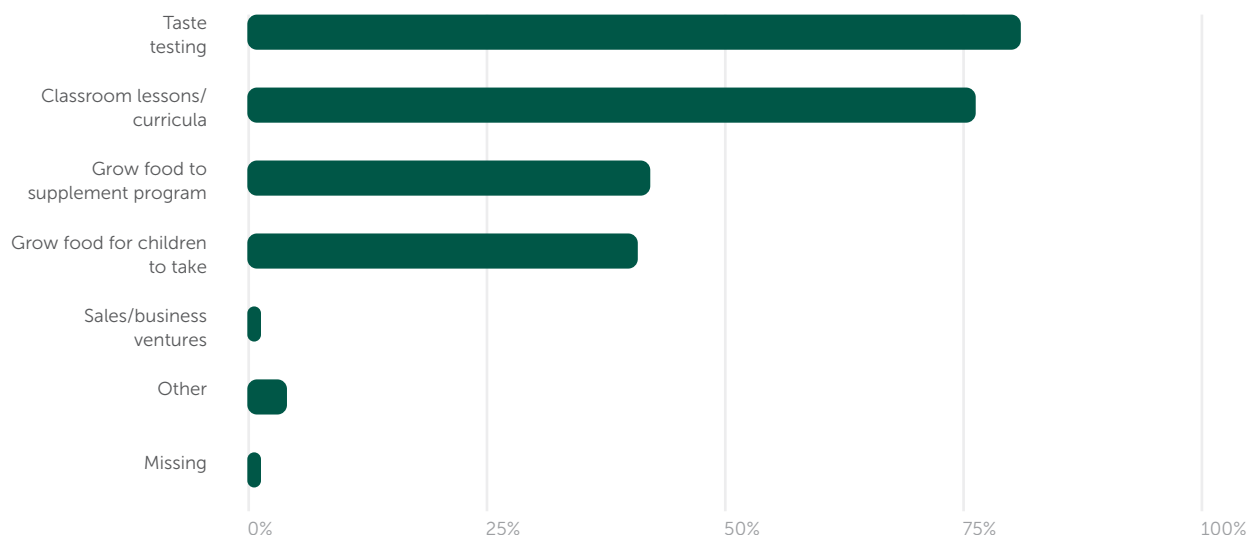
^a N=1591

Gardening

Of farm to ECE participating sites, 50% reported that they currently had an on-site edible garden (1204) and 19% respondents (456) reported that they previously had one. More than a quarter (633 or 27%) had never had an on-site garden, with 22%

(522) of those respondents indicating that they were interested in starting one and 5% (111) not interested in starting one at the time. The top use for gardens was taste testing (81%), followed by classroom lessons/curricula (76%), as shown in figure 3.

Figure 3. Garden Uses



Farm to ECE Funding

Most respondents participating in farm to ECE have not received external funding for their farm to ECE activities (82%). Of the 11% who did receive external funding, 31% received funding from the state and in the form of in-kind donations, 30% from private sources, and 27% from local sources.

Respondents received an average of \$2,917 in external funding specifically for farm to ECE, with a median of \$300. Funding amounts ranged from \$0 to \$100,000.

Using multiple regression analysis, funding sources statistically significantly predicted the number of activities a site participated in, as shown in Table 3.

Table 3. External Funding for Farm to ECE Used by Providers^{a,b}

Funding Source	Frequency	Percent	Predicted Number of Activities More Than Those Not Participating in Farm to ECE
State sources	80	31%	.8 more activities
In-kind donations	80	31%	.7 more activities
Private sources	77	30%	.8 more activities
Local sources	68	27%	.4 more activities
Federal sources	32	13%	.8 less activities
Other	48	19%	.4 less activities
Missing	4	2%	

^a N=255

^b Percentages total more than 100 and counts total more than the number of responses because more than one choice could be selected

Practice and Policy Recommendations

With a third of farm to ECE participants engaging in farm to ECE for more than five years and 43% participating for less than three years, farm to ECE is not only gaining popularity but is proving sustainable for many providers. Additionally, the longer providers engage in farm to ECE, the larger the predicted number of activities. This means farm to ECE programs can become more comprehensive with time. Half of participants reported that they had an on-site edible garden. Those with gardens used them to introduce and increase access to high-quality foods for children and families. Farm to ECE focused technical assistance and policy opportunities can leverage farm to ECE as a strategy to increase healthy food access, increase ECE quality, and support local farmers and the local economy. Uplifting farm to ECE's alignment with these goals can increase access to diverse funding streams and improve collaboration across sectors. Emphasis should be on practices that facilitate higher engagement, such as starting slow and building over time for sustainability, using a curriculum, and securing donations and funding.

A variety of curricula and educational activities exist to support providers in using gardening and food-related education to reach early learning standards. However, a large percentage (41%) of those engaging in farm to ECE built their own curriculum. Communication with providers is needed to understand why they are using their own curricula and what barriers are inhibiting use of pre-made curricula, which may include limited knowledge of available curricula or curricula's misalignment with providers' pedagogical approaches, motivations, and available resources. Stronger supports are needed to assist providers in reaching existing resources and reducing potential capacity or knowledge-related barriers to beginning or expanding farm to ECE participation. Promoting

and providing technical assistance around the use and adaptation of evidence-based curricula to align with their sites' resources and cultural makeup is a priority, as curricula can highlight farm to ECE alignment with standards and with provider motivations. Culturally adapting curricula can also be a strategy to advance equity within farm to ECE, as outlined in the "Farm to ECE Reach" brief⁵. Additionally, pre-made curricula can increase provider capacity, reducing barriers to participation. This recommendation is supported by the finding that providers using a curriculum engaged in a greater number of farm to ECE activities.

The need for stronger support and infrastructure is furthered by the finding that most respondents participating in farm to ECE have not received external funding for their farm to ECE activities (82%). However, of the 11% who did receive external funding, 31% received funding from the state and 13% from federal sources, showing the encouraging rise in farm to ECE prioritization. Those receiving funding from federal sources participated in .8 less farm to ECE activities than those who did not receive funding. One possible reason for this finding is the constraints on funding requirements. With ECEs already working within limited capacity, it is important to address possible barriers that can make utilizing funding not only time consuming but inequitable. Access to funding is imperative to the equitable growth of farm to ECE, but if accessing funding requires technical skills and equipment or large reporting requirements, it runs the risk of both inhibiting the work the funding intends to assist with and reducing accessibility to those without the necessary resources and skills required. "This need is further suggested by the finding that child care centers and preschool or child care through a K-12 school district are predictors of Farm to ECE participation, found within the '2021 National Farm to Early Care and Education Survey: Farm to ECE Reach' brief⁵. One reason for this may be because centers and child care through K-12 districts can

have more staff, capacity, and/or infrastructure than family child care or private preschools. This can make seeking funding for and facilitating farm to ECE activities more realistic. Addressing barriers to funding can help smaller and lower capacity child care programs better access opportunities to initiate and expand farm to ECE programming”.

Providers who received state, in-kind, and private source donations increased the predicted number of farm to ECE activities, allowing for more comprehensive and possibly more impactful programming. Additionally, sites who received funding from state sources or have been engaged in Farm to ECE activities for three to five years participated in approximately one more activity. State supports such as resource development and promotion, training and technical assistance, financial support, and policy can help sites initiate and sustain their farm to ECE practices. Motivations for farm to ECE and farm to ECE facilitators found in the “2021 National Farm to Early Care and Education Survey: Why Farm to ECE” brief⁶ can inform technical assistance and training development. As awareness of and interest in farm to ECE increases, so does the need for these supports.

State and national networks such as NFSN are also key to increasing access to resources, technical assistance and financial supports. Networks can create platforms for shared learning among providers and create avenues for connection to stakeholders such as local organizations who may be able to support sites’ efforts. Providing the level of support needed to institutionalize farm to ECE will necessitate systems level strategy, state level networks, cross-sector coalitions and other collaborative platforms.

Explore more farm to ECE resources, learn how to get involved, and connect with partners in your state by exploring the National Farm to School Network site at www.farmtoschool.org/ECE. Visit www.foodsystems.msu.edu to find resources and

research on regional food systems from Michigan State University Center for Regional Food Systems.

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