Farm to Early Care and Education in Utah: Connecting Young Children to Agricultural Education, Gardening, and Local Food

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Introduction/Need for Research

Farm to early care and education (farm to ECE) offers activities that expand access to healthy, affordable, and local foods; hands-on gardening; and food, nutrition, and agriculture education activities at early care and education sites (ECE; National Farm to School Network, n.d.). Farm to ECE applies three core elements to all types of ECE settings: preschools, child care centers, family child care homes, Head Start/Early Head programs, and preschool programs in K-12 school districts (National Farm to School Network, n.d.). Farm to ECE programs have the potential to benefit multiple stakeholders, including the providers, children, families, caregivers, and local farmers. Limited information exists on farm to ECE programs in specific states, including Utah, to support training, funding, and resource needs. Therefore, this study aimed to establish a baseline for farm to ECE, exploring the involvement in each programming element and the challenges and impacts of farm to ECE. The research objective for this manuscript is to describe ECE providers' participation in farm to ECE programming (education and farm to ECE activities, gardening, and local food procurement).

Conceptual/Theoretical Framework

The Farm to School Network modified the social ecological model to develop an evaluation framework for farm to school and ECE programming (Joshi et al., 2014). The hybrid model includes categories that explain how intrapersonal, interpersonal, organizational environments, community, and public policy factors interact with an individual's behavior related to farm to school and ECE programming. Organizational environments include business practices, philosophy, and factors such as regulations (Joshi et al., 2014). The influence of community within the model includes expectations and availability of resources (Joshi et al., 2014). Local food availability and use of certain food products within ECE sites, availability of farmers willing to sell products to ECE sites, and educational activities contribute to the community component of this model.

Methodology

This study used descriptive explanatory research. We administered an online survey through Qualtrics to gather characteristics of child care programs, incorporation of farm to ECE to curriculum and experiential learning, local food procurement, gardening, and training and resource needs. We developed the questionnaire with questions modeled after Farm to ECE programming studies by the Arkansas Department of Agriculture (2021), Shedd et al. (2018), and Enderton (2020). Of the questions included, one was open ended and 18 were multiple choice. A panel of five experts comprised of researchers and practitioners familiar with farm to ECE or survey design provided feedback to establish the face and content validity of the survey. To recruit participants, the State Board of Education's Community Programs Team emailed 143 Child and Adult Care Food Program (CACFP) and Summer Food Service Program sponsors (i.e., child care centers, family day care home sponsors, centers, and family day care homes), reaching 1,100 providers. We cleaned the data to remove any incomplete surveys and analyzed the data in IBM SPSS Statistics version 28.

Results/Findings

Of the surveys received, 372 were deemed usable, a 33.8% response rate. Usable surveys were from 28 of the 29 counties in Utah. Respondents described their settings as Head Start and Early Head Start centers (*n* = 83, 22.4%), child care centers (*n* = 82, 22.1%), family child care (*n* = 73, 19.7%), private preschools (*n* = 64, 17.3%), preschool through K-12 school districts (*n* = 38, 10.2%), state preschools (*n* = 29, 7.8%), and tribal child care (*n* = 2, 0.5%). The top three frequent program types, accounting for 65% of respondents, were Head Start/Early Head Start centers, childcare centers, and family childcare centers. Respondents indicated if they provide full-time, part-time, or both types of care, with 70% offering full-time care. The ages of children in each program ranged from infant to elementary school-aged, with almost half providing care for toddlers (*n* = 182, 48.9%) and preschoolers (*n* = 212, 57.0%). Regarding agricultural education, respondents incorporated education about eating healthy and nutrition (*n* = 135, 34.4%) and education about local farms, how food grows, and where food comes from in their classroom routines. Seventy-six percent of respondents (*n* = 298) indicated their program grows produce in an edible garden or containers. A total of 254 respondents (68.2%) have implemented at least one farm to ECE activity in the last three years. The most frequently reported activities included cooking activities using locally grown food (*n* = 126, 32.1%), engaging families in health and wellness (*n* = 118, 31.7%), conducting field trips to farms, gardens, farmers' markets, or farm stands (*n* = 115, 29.3%), holding taste tests or cooking demonstrations using locally produced foods (*n* = 89; 23.9%), facilitating children's families access to locally grown foods at home (*n* = 70, 17.9%), hosting a visit with a farmer or chef (*n* = 42, 10.7%), and participating in Utah's Apple Crunch Day (*n* = 24, 6.1%). Local vegetables (*n* = 202, 54.3%) and fruits (*n* = 181, 48.7%) were served most frequently as ingredients, snacks, taste tests, or meals. Respondents purchased local products from intermediaries, such as wholesale retailers (*n* = 169, 43.1%), distributors (*n* = 168, 42.9%), or food service management companies (*n* = 138, 35.2%). Direct sources were farmers or ranchers (*n* = 144, 38.7%), farmers' markets/farm stands (*n* = 135, 36.3%), or community supported agriculture programs (CSA; *n* = 88, 23.7%).

Conclusions/ Recommendations/Implications

Respondents revealed that ECE sites offer farm to ECE activities in all but one county in the state. Thus, young children in Utah are learning about agriculture, food, and nutrition; eating local foods; and participating in various activities. Participation rates are like those in Colorado, Wisconsin, and Arkansas (Arkansas Department of Agriculture, 2021; McCloskey et al., 2020; Rooted, 2020;). Respondents identified that some farmers' markets/farm stands, CSAs, and farmers/ranchers sold to nearby ECE sites. Yet, farm to ECE represents a market outlet for small and beginning farmers seeking scale-appropriate experience or sales of seasonal fruits, vegetables, and herbs when fewer K-12 schools serve meals. Future research should use a mixed-methods approach that explores the logistical considerations, challenges, impacts, and strategies for local procurement and classroom activities by interviewing providers and analyzing lesson plans and local food procurement records. Additional research needs to report the impacts of farm to ECE from the perspectives of the children and ECE practitioners. We are sharing these findings with government agencies, policymakers, farmers, ranchers, and the state's Extension programs to help grow awareness and support for farm to ECE programming. Future efforts should help ECE sites overcome challenges with local food procurement and facilitate partnerships with farmers or ranchers to address the challenges and opportunities for farm to ECE activities and local food.

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