



# GROWING HEAD START SUCCESS WITH FARM TO EARLY CARE AND EDUCATION

Aligning Head Start Program Performance Standards and the  
Early Learning Outcomes Framework with Farm to Early Care and Education Opportunities



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## National Farm to School Network: Growing Stronger Together [www.farmtoschool.org](http://www.farmtoschool.org)

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The National Farm to School Network (NFSN) is an information, advocacy and networking hub for communities working to bring local food sourcing and food and agriculture education into schools and early care and education settings. Our network includes national Core Partner and Supporting Partner organizations in all 50 states, Washington, D.C., and U.S. Territories, thousands of farm to school supporters, a national advisory board and staff.

NFSN is a project of the Tides Center.

### Authors:

- Lacy Stephens, Farm to Early Care and Education Associate, National Farm to School Network
- Tiffany Turner, Senior Fellow, Jamie Kirk Hahn Foundation

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# Farm to Early Care and Education and Head Start, a Natural Alignment

Head Start offers vital, high quality early care and education (ECE) opportunities to low-income families across the country. High quality ECE opportunities – like those offered through Head Start and Early Head Start—can have long-term, lasting benefits for children, families and communities. High quality ECE settings support appropriate development and increase long term academic achievement along with improved physical and behavioral health.<sup>1</sup> ECE is increasingly considered to be an important community investment, demonstrating economic benefits through decreased grade repetition and special education spending, and increased productivity and tax revenue.<sup>2</sup>

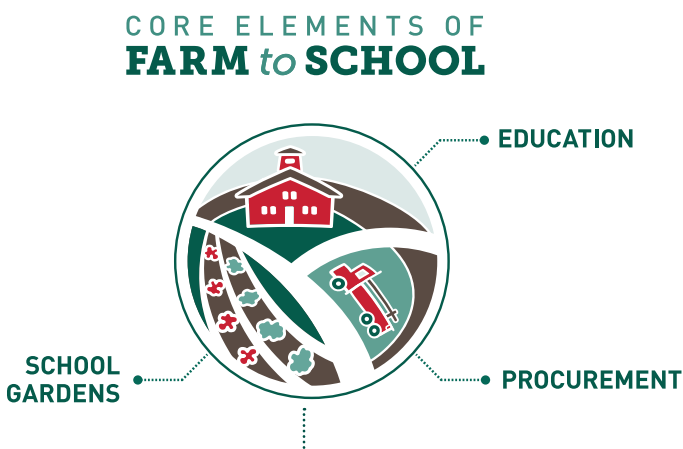
[Head Start Program Performance Standards](#)<sup>3</sup> reinforce Head Start’s prioritization of quality educational opportunities, addressing the needs of the whole child, and supporting and engaging families and communities. Establishing these standards secures Head Start’s position as a leader in providing quality early care and education experiences for children and families. However, Head Start practitioners may need additional support to achieve these standards.

This resource is intended for Head Start stakeholders and programs, including state level directors and collaboration office staff, directors, teaching staff, health coordinators, trainers and advocates, to understand how farm to ECE can support achievement of [Head Start Program Performance Standards](#)<sup>3</sup>

and how farm to ECE actively contributes to learning and development benchmarks as outlined in the [Head Start Early Learning Outcomes Framework](#).<sup>4</sup> Once stakeholders have an overall concept of this applicability, they are encouraged to utilize the many resources provided to develop a plan to begin implementation of farm to ECE or to expand and grow their farm to ECE initiatives. Stakeholders may also find this resource to be a valuable tool in demonstrating how they are meeting Head Start Program Performance Standards and Early Learning Outcomes goals through farm to ECE. This resource aims to highlight how farm to ECE elements, implemented individually or in combination, may address multiple domains and standards, and provide significant benefits for children, families and communities.

## How can farm to early care and education support Head Start programs?

Farm to ECE is a set of activities and strategies that include three core elements of farm to school (see Figure 1: Core Elements of Farm to School) – local food procurement, school gardens, and food and agriculture education – implemented with the goals of enhancing the quality of the educational experience in all types of ECE settings (e.g., preschools, child care centers, family child care homes, Head Start/Early Head Start, programs in K-12 school districts).



Farm to ECE offers benefits that support the goals and priorities of the early care and education community, with a particularly strong alignment with Head Start priority areas, including an emphasis on experiential learning opportunities, parent and community engagement, and life-long health and wellness for children, families and caregivers. Farm to ECE also expands healthy food access for children and families, provides additional market opportunities for farmers and supports thriving communities.

Figure 1: Core Elements of Farm to School

## Why farm to early care and education?

Farm to ECE is a critical strategy to enhance the ECE setting and to support the priorities of the Head Start community. The reasons below highlight how farm to ECE activities help providers meet their goals of providing the highest quality care and educational experience available to the children they serve and achieving specific Program Performance Standards and Early Learning Framework Outcomes.



### HEALTH

Child health and nutrition are reflected as a priority in the Head Start Program Performance Standards and Early Learning Outcomes Framework. The earliest years of life are formative years for developing taste preferences and healthy eating habits.<sup>5</sup> Farm to ECE activities like taste tests, cooking lessons and gardening offer repeated exposures to new, healthy foods, promoting lifelong healthy food preferences and eating patterns and decreasing the risk for obesity in childhood and beyond.<sup>6-11</sup>



### FAMILY AND COMMUNITY ENGAGEMENT

As directly addressed in the [Head Start Parent, Family, and Community Engagement Framework](#)<sup>12</sup> and reinforced in the Head Start Program Performance Standards,<sup>3</sup> Head Start has a strong focus on the importance of parent-child relationships and developing supportive community connections. Parental involvement tends to be strongest during the early childhood years. Gardening and food-related activities appeal to families and create more opportunities for meaningful family engagement in the Head Start setting. Young children take home the excitement of learning about new foods and act as a catalyst for change, influencing parent and family food choices.<sup>10,13</sup> Additionally, farm to ECE benefits the entire community. Purchasing local products creates market opportunities for family farmers and bolsters local and regional food systems, while food-based learning educates teachers and providers about healthy habits and their local food system.<sup>14,15</sup>



### EXPERIENTIAL EDUCATION

The experiential learning opportunities associated with farm to ECE enhance the learning environment and support achievement of goals across the spectrum of domains and sub-domains outlined in the Head Start Early Learning Outcomes Framework.<sup>4</sup> Experiential learning supports appropriate cognitive, emotional, social and physical development, which are important priorities for children, parents and providers.<sup>16</sup>



## Getting started

Many Head Start programs may already be implementing farm to ECE activities. Whether you are seeking to grow your initiative or are just getting started, a wide variety of resources are available to facilitate implementation of farm to ECE initiatives and activities. Follow these initial steps to move farm to ECE forward with success:

1.

Review this resource to gain both a general understanding of the alignment of farm to ECE with Head Start Program Performance Standards and the Head Start Early Learning Framework and to identify specific farm to ECE initiatives and activities that fit naturally into your current programming and curriculum. Utilize the extensive list of resources and references included in this document to identify new lesson plans and activities.

2.

Review additional resources to further farm to ECE knowledge and identify opportunities for implementation:

- [NFSN Farm to Early Care and Education Landing Page](#)
- NFSN's Fact Sheets:
  - [Getting Started with Farm to Early Care and Education](#) (also available in [Spanish](#))
  - [Local Procurement for Child Care Centers](#)
  - [Local Purchasing for Family Child Care Homes](#)
- [USDA Farm to Preschool Fact Sheet](#)
- [Farm to Early Childhood Programs: A Step-By-Step Guide](#), from MSU Center for Regional Food Systems
- Visit [NFSN's Resource Database](#) and search by "Preschool/Early Care" for wide variety of curricula, gardening guides, procurement information and other farm to ECE resources

3.

Connect with key partners who can support your initiatives:

- [NFSN Core and Supporting Partners](#)
- [NFSN Staff](#)
- [USDA Office of Community Food System Staff](#)





# Head Start Program Performance Standards and Farm to Early Care and Education<sup>17\*</sup>

As noted, farm to ECE offers a natural alignment with and opportunities for support of Head Start priority areas as identified in the Head Start Program Performance Standards. Food access and local food resources can and should be a strong component of community assessment, which creates a foundation for utilizing local food opportunities to support family engagement, family support services, and community partnership and coordination. The multi-faceted approaches and benefits of farm to ECE allow for adoption in a variety of Early Head Start and Head Start settings and offer enhancements of both the learning environment and child nutrition at the same time. These benefits also carry over to staff, as farm to ECE professional development opportunities are not only engaging and support important knowledge topics, like nutrition and food safety, but promote staff wellness and healthy habits. Farm to ECE can even support administrative standards including developing programmatic goals in partnership with various stakeholders and meeting the required non-federal match. The table below outlines specific opportunities to utilize farm to ECE activities and initiatives within each of the core elements of procurement, education and gardening, to support adherence to Head Start Program Performance Standards.

Performance Standard	Farm to ECE Initiatives and Activities
Part 1302. Program Operations	
Subpart A - Eligibility, Recruitment, Selection, Enrollment and Attendance	
1302.11 Determining community strengths, needs and resources	
(b) Community wide strategic planning and needs assessment (community assessment).	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Identify opportunities for local food access in communities, as well as key <a href="#">outlets for local food purchasing</a> for Head Start sites and families.<sup>18</sup></li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Identify opportunities to use food-based education to address family and child nutrition knowledge needs.</li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>Identify community organizations with resources to support onsite and community gardens as an approach to increasing healthy food access.</li> </ul>
Subpart B - Program Structure	
1302.20 Determining program structure	
(b) Comprehensive services.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li><a href="#">Purchase local foods</a> from a variety of sources to accommodate the procurement practices of different program structures. <a href="#">Center-based programs</a> may purchase local products from broadline distributors or food hubs, while <a href="#">family child care sites</a> may purchase from farmers markets, directly from small farmers or from grocery stores.<sup>19,20,21</sup></li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Adapt hands on food, nutrition and agriculture educational experiences (e.g., cooking, taste testing, sensory exploration) to multiple age groups and group sizes to meet the varying needs of program structure.</li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>Scale <a href="#">experiential gardening</a> to meet the needs of varying program structures from planting a seed in a cup with a child and parent on a home visit to container gardening in family child care homes participating in Early Head Start or to installing raised garden beds at Head Start centers<sup>22</sup></li> </ul>

\* The authors would like to acknowledge the Policy Equity Group for their work in identifying key Program Performance Standards and to the development of the content of this table.

Subpart C - Education and Child Development Program Services

1302.31 Teaching and the learning environment

<p>(a) Teaching and the learning environment. (b) Effective teaching practices.</p>	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>• Arrange <a href="#">field trips</a> to farms or local grocery stores that include local foods in their inventory.<sup>23</sup></li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• *See section IV for more on farm to ECE alignment with Head Start Early Learning Framework Goals.<sup>4</sup></li> <li>• Incorporate a food focus or lens to support learning and development in a variety of subjects including math, science, social studies and physical development to support age appropriate learning with the added benefit of healthy food exposure.</li> <li>• Guide children in sensory exploration of new foods (and other educational activities) to promote meaningful interactions between child and teacher and encourage appropriate language and cognitive development.</li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>• Integrate garden activities into the day to promote learning across the domains [e.g., social and emotional (cooperation and teamwork); language (new gardening vocabulary); cognition (plant life cycle); motor and physical development (digging, planting small seeds)].</li> </ul> <p><b>All Core Elements:</b></p> <ul style="list-style-type: none"> <li>• Utilize a variety of farm to ECE activities to achieve standards in the Early Childhood Environmental Rating Scale (ECERS) (See <a href="#">Reach for the Stars with Farm to Preschool</a>).<sup>24</sup></li> </ul>
<p>(c) Learning environments. (d) Materials and spaces for learning.</p>	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>• Offer cooking and tasting experiences with local foods to encourage exploration and sensory experiences.</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• Integrate a rotating variety of food and farm related props (e.g., kitchen utensils, food models, gardening tools), costumes (e.g., farmer, chef, animals), and sensory materials (e.g., seeds, fiber, soil) into a variety of learning stations and classroom interest areas to promote creative play and sensory exploration.</li> <li>• Highlight a single food in various ways to build familiarity and promote multiple food exposures, e.g., teacher directed <a href="#">sensory exploration/tasting</a> of squash, <a href="#">active song/pantomime</a> of how a squash plant grows, individual art time <a href="#">drawing a squash plant</a> and garden scene.<sup>25-27</sup></li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>• Utilize the <a href="#">garden area as an outdoor classroom</a>, integrating teacher directed activities (e.g., <a href="#">smell, touch and describe</a> what we see in the garden; planting seeds together; watering plants in small groups; singing a new garden song (see <a href="#">Appendix III: Garden Songs</a>) and child-initiated activities such as sitting in the garden to look at a book and observing the plants.<sup>28-30</sup></li> </ul>
<p>(e) Promoting learning through approaches to rest, meals, routines and physical activity.</p>	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>• Encourage and model table talk about where food comes from, how it grows and what it does for our body to make each meal time a learning opportunity.</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• Utilize <a href="#">songs, rhymes and activities</a> in rest, break or transition times that incorporate farm and healthy food related language.<sup>31</sup></li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>• Offer structured and unstructured time in the garden to support active outdoor play and exploration.</li> </ul>



1302.32 Curricula	
(a) Curricula.	<p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Utilize farm to ECE curricula that is based on scientifically valid research, such as <a href="#">Sowing the Seeds of Wonder</a> and <a href="#">Harvest for Healthy Kids</a>.<sup>27,32</sup></li> <li>Seamlessly integrate farm to ECE activities into current curriculum (see <a href="#">A Guide to Using The Creative Curriculum® for Preschool to Support Farm-to-ECE Models</a>).<sup>33</sup></li> <li>Identify farm to ECE focused curricular enhancements that align with Head Start Early Learning Outcomes Framework (see section IV for specific examples) or state early learning and development standards.</li> </ul>
1302.34 Parent and family engagement in education and child development services	
(b) Engaging parents and family members.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Establish the Head Start center as an access point for families to purchase and learn about healthy, local foods by establishing on-site farmers markets or Community Supported Agriculture (CSA)/food box pick-up sites.</li> <li>Offer taste tests, cooking demonstrations and recipe cards highlighting local food focused menu items during pick-up and drop-off times.</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Invite parents and family members to be guest speakers and share their experience and expertise in farming, gardening, cooking, and other food and agriculture related activities.</li> <li>Use <a href="#">family newsletters</a> to share news from the garden, recipes and information on new foods children are trying and exploring in the classroom.</li> <li>Invite parents and family members to attend <a href="#">field trips</a> to local farms, orchards, ranches or farmers markets.<sup>23,29</sup></li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>Host family garden work days to engage families in caring for and maintaining on-site gardens.</li> <li>Offer family gardening workshops to encourage families to try growing edible plants at home.</li> <li>Utilize garden and outdoor spaces to host family picnics featuring garden grown produce and locally procured foods.</li> </ul>
1302.36 Tribal Language Preservation and Revitalization	
Tribal Language Preservation and Revitalization.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Include <a href="#">traditional foods and foodways</a> in meals, snacks and taste tests in programs that serve American Indian and Alaska Native children.<sup>34</sup></li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>Utilize Head Start gardens to <a href="#">grow traditional foods</a> to support connection to and preservation of tribal language, culture and community.<sup>35</sup></li> </ul>



Subpart D - Health Program Services	
1302.44 Child Nutrition	
(a) Nutrition service requirements.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Integrate culturally relevant and <a href="#">traditional foods</a> and recipes into meals and snacks.<sup>36</sup></li> <li>Utilize local and seasonal products, including fresh and minimally processed fruits, vegetables, grains, proteins and dairy products in meals and snacks to increase nutritional value while controlling for fat, sugar and salt as required in <a href="#">CACFP nutrition standards</a>.<sup>37</sup></li> <li>Meet <a href="#">Child and Adult Care Food Program Best Practice Recommendations</a><sup>38</sup> by incorporating seasonal and locally produced foods into meals and snacks.</li> <li>Offer local fruits and vegetables to increase the variety of foods used, aiming to include dark green vegetables, red and orange vegetables, beans and peas (legumes), starchy vegetables and other vegetables.</li> <li>Apply <a href="#">geographic preference</a> options when procuring locally raised or produced foods for CACFP meals and snacks.<sup>39</sup></li> <li>Review the <a href="#">Local Foods in the Child and Adult Care Food Program Memo</a><sup>40</sup> to better understand how and why, "Program administrators and partners are therefore encouraged to use local food as a means to enhance CACFP operations."</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Promote nutrition education and food exposure through tastings, cooking activities and experiential learning activities to encourage acceptance of the diversity of foods offered at meals and snacks, including whole grains, lean proteins, and a variety of fruits and vegetables.</li> </ul>
(b) Payment sources.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Review the many ways that CACFP participating programs can find and purchase local foods in the <a href="#">USDA Procuring Local Foods for Child Nutrition Programs Guide</a>.<sup>39</sup></li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>Utilize CACFP funds for <a href="#">allowable costs</a> associated with growing food that will be used in the program, either as part of the meal service or for activities related to nutrition education to food service staff.<sup>40</sup></li> </ul>
1302.46 Family support services for health, nutrition and mental health	
(b) Opportunities.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Share information about community resources available to find and purchase healthy, local foods, and include a list of <a href="#">farmers markets</a><sup>18</sup> that accept <a href="#">SNAP or offer SNAP incentives</a>.<sup>41</sup></li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Connect with community partners to offer <a href="#">interactive cooking classes</a> that highlight seasonal and affordable local foods.<sup>42</sup></li> </ul> <p><b>Gardening:</b></p> <ul style="list-style-type: none"> <li>Provide resources, including fact sheets and contact information for <a href="#">Extension agencies</a>, for parents interested in planting their own gardens to grow food for their family.<sup>43</sup></li> <li>Provide a space for families to garden together to enhance their well-being.</li> </ul>
1302.47 Safety Practices	
(b)(6)(ii) Safe food preparation.	<p><b>All core elements:</b></p> <ul style="list-style-type: none"> <li>Integrate <a href="#">food safety education</a><sup>44</sup> into staff training and professional development opportunities focused on scratch cooking and local foods preparation, and <a href="#">safe growing, harvesting and storage</a><sup>45</sup> practices.</li> </ul>

Subpart E - Family and Community Engagement Program Services	
1302.50 Family engagement	
(b) Family engagement approach.	See Subpart C – Education and Child Development Program Services 1302.34(b) Engaging parents and family members.
1302.53 Community partnerships and coordination with other early childhood and education programs	
(a) Community partnerships.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Build connections with food systems and food access organizations to increase knowledge of and access to community based resources.</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Invite local farmers to the Head Start program to share their stories and help children and families better understand the local growing community.</li> </ul>
(b) Coordination with other programs and systems.	<p><b>Other:</b></p> <ul style="list-style-type: none"> <li>Engage in <a href="#">state level farm to school and farm to ECE</a><sup>46</sup> networks, coalitions and groups to build and sustain coordinated statewide efforts to improve ECE quality through farm to ECE and learn about local and state level resources and opportunities.</li> </ul>
Subpart I - Human Resources Management	
1302.92 Training and professional development	
Training and professional development.	<p><b>Education:</b></p> <ul style="list-style-type: none"> <li>Use hands-on food and nutrition based educational opportunities to create engaging and impactful professional development and staff training opportunities.</li> <li>Identify accredited training opportunities (such as <a href="#">Better Kid Care</a>, <a href="#">Penn State Extension</a><sup>47</sup>) that include training on utilizing healthy, local foods, food and nutrition education and garden-based learning.</li> </ul>
1302.93 Staff health and wellness	
Staff health and wellness.	<p><b>All core elements:</b></p> <ul style="list-style-type: none"> <li>Offer hands-on, interactive workshops and opportunities for staff to learn about healthy eating, cooking and lifestyles through local foods, nutrition and gardening education.</li> </ul>
Subpart J – Program Management and Quality Improvement	
1302.102 Achieving program goals	
a) (2) Goals for the provision of education, health, nutrition, and family and community engagement program services.	<p><b>All core elements:</b></p> <ul style="list-style-type: none"> <li>Work in conjunction with the governing body and policy council to develop policies and protocols that promote the use of farm to ECE initiatives to support appropriate development and school readiness of children.</li> </ul>
1303.4 Federal financial assistance, non-federal match and waiver requirements	
Federal financial assistance, non-federal match and waiver requirements.	<p><b>Procurement:</b></p> <ul style="list-style-type: none"> <li>Coordinate with local producers, distributors or food aggregators to identify opportunities for grant matching or local foods donations that may be counted toward the non-federal match.</li> </ul> <p><b>Education/Garden:</b></p> <ul style="list-style-type: none"> <li>Work with community organizations and local companies to solicit in-kind donations for education and gardening resources (e.g., garden tools, soil, raised bed materials).</li> <li>Quantify volunteer hours provided for food and nutrition education and garden building, maintenance or education that may be counted toward the non-federal match.</li> </ul>



## Program Performance Standards in Action: Farm to Early Care and Education and Head Start

### STEP, Inc.

STEP, Inc.<sup>48</sup> of Williamsport, Pennsylvania has implemented farm to ECE activities in their Head Start program for 50 years, and began to formalize their initiatives over the last three. STEP's farm to ECE initiatives focus on cultivating and fostering conversation between children and their families about healthy, local and sustainably-made foods to promote life-long healthy attitudes and habits. Not only are farm to ECE activities integrated in the classroom to address Program Performance Standards related to teaching and the learning environment, farm to ECE is also used to increase parent engagement and family partnership.

STEP has worked to make farm to ECE activities easier for teachers to implement through their Farm to Head Start Harvest of the Month Curriculum<sup>49</sup> and increased access to garden space at the local community center. STEP's Harvest of the Month curriculum provides children the opportunity to learn where their food comes from, how it is grown, the nutritional value of produce, as well as different and fun ways to prepare and eat fruits and vegetables, and while increasing connectivity between children and families in the process. The Harvest of the Month curriculum highlights seasonal produce and provides activities and lesson plans for teachers to introduce new foods through the lens of the Head Start Early Learning Outcomes Framework domains, including literacy, cognition, and social and emotional development.



*Students at STEP, Inc. have many different farm to ECE experiences throughout the day, including learning about farm animals during circle time.*

#### STEP's Tips for Success:

- Develop a team of staff who can be stewards of the initiative and to engage with local partners, such as farmers market managers who can connect ECE programs with local farmers.
- Smart small and experiment with different types of farm to ECE activities to find what works for your community and grow from those successes.



# Inspire Development Centers



In the past year alone, [Inspire Development Centers](#)<sup>50</sup> of Washington have worked with local organizations and families to establish gardens across nine counties, reaching about 3,000 children within their Head Start and Migrant and Seasonal Head Start programs. Inspire serves an agricultural-based community and works closely with parents who are dedicated to ensuring the sustainability of farm to ECE projects by donating plants, soil, tools and time. Teachers, staff, the policy council group, grantors and children have all been actively engaged in growing farm to ECE initiatives.

Through a starter grant from a local community organization, commitment of parents and the support of a local university, Inspire began work on a “dream garden” in 2014 and has

continued to grow and expand their farm to ECE efforts since that time. Through garden activities and indoor and outdoor curriculum, Inspire teachers bring to life classroom lessons, using garden experiences to demonstrate science concepts and experiential learning to engage children and encourage them to explore. The life cycle of a ladybug, the sensory experience of new types of crops, and the pride that comes with growing food are all lessons learned in the Inspire garden. Farm to ECE initiatives help meet programmatic goals around family and community partnerships and engagement, child nutrition, and improving the learning environment through sensory experiences such as counting seeds in a cucumber, exploring different colors of lettuce or conducting tasting parties. Inspire focuses on growing fresh produce including peppers and tomatoes that can be used in culturally appropriate recipes like salsa while also teaching families and expectant mothers how to grow food at home and even providing the materials to get started.



*Gardens at Inspire Development Centers offer children the opportunity to work together to plant, tend and harvest new foods.*

## Inspire's Tips for Success:

- Explore community partnerships, like the local [Master Gardeners](#)<sup>43</sup> or health foundations, to build capacity for getting started and identify potential volunteer and grant resources.
- Focus on building community buy-in and support from many different stakeholders, from the teachers, staff and parents in the Head Start program, to local schools or businesses who can provide promotion and support.



# Community Action Partnership of Ramsey and Washington Counties



The [Community Action Partnership of Ramsey and Washington Counties](#)<sup>51</sup> (CAPRW) in St Paul, Minnesota began implementing farm to ECE activities in 2014. CAPRW was at first unsure about the feasibility of the project, but soon realized that with the flexibility of farm to ECE, the initiative could be modified and changed to fit the needs of their programs. CAPRW's willingness to try new approaches, as well capitalizing on key partnerships with their caterer, the Hmong American Farmers Association, and the Institute for Trade and Agriculture Policy (IATP), allowed them to introduce nutritious and appealing foods into menus and food and nutrition education activities into the classroom.

In the first year of their curriculum, CAPRW focused on cultural relevancy of foods with a specific lens towards Hmong culture, as the community they served included a large Hmong population. By sharing traditional Hmong recipes, introducing Hmong farmers to the children, and including culturally relevant and diverse foods, such as long beans, Thai pepper and bitter melon, they encouraged children to experiment with new foods and also to appreciate the Hmong culture. Additionally, this farm to ECE initiative created a mutually beneficial partnership that brought healthy, local foods to Head Start and opened new markets to families for Hmong farmers. As the farm to ECE initiative progressed, CAPRW increased focus on family engagement by inviting Hmong farmers and Head Start families to a community night to cook and eat together and also promoted local foods purchasing to the families through opportunities to purchase Community Supported Agriculture

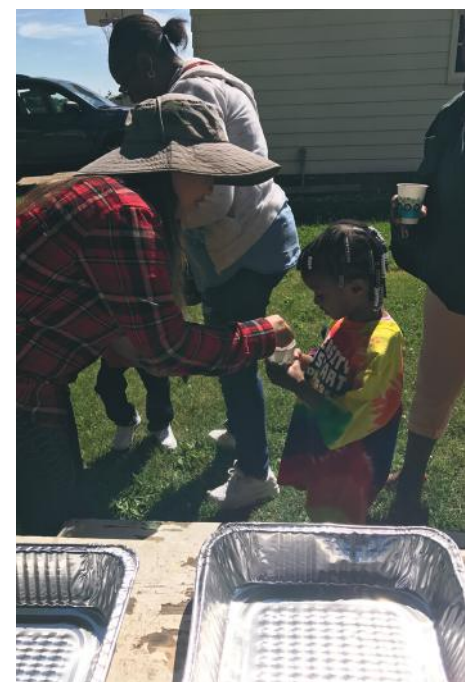
(CSA) shares. They continued engagement by implementing Family Fun events, which brought children and families together to explore and enjoy new foods through educational activities, cooking, and eating as a family and community.



*CAPRW students learn about growing food and Hmong culture from members of the Hmong American Farmers Association.*

## CAPRW's Tips for Success:

- Begin planning early when implementing farm to ECE initiatives, but also maintain flexibility for changes or unexpected events, like bad weather or crop failure.
- Connect with and visit other Head Start programs integrating farm to ECE to better understand opportunities and best practices in implementation.



# IV. Head Start Early Learning Outcomes Framework and Farm to Early Care and Education

Each of the three core elements of farm to ECE provide intersecting opportunities to address multiple domains within the Head Start Early Learning Outcomes Framework for both infant/toddler and preschool age groups. The following table demonstrates how specific activities within each of the core elements support goals within each of the domains and sub-domains. Many of these activities may already be implemented in the Head Start classroom and in reviewing these activities, Head Start stakeholders may identify opportunities to integrate farm to ECE into the existing classroom structure and learning day. For instance, adding food and farm themed manipulatives or reading farm and garden themed books supports achievement of goals in numerous domains, from Approaches to Learning to Perception, Motor, and Physical Development. Many of the activities link directly to resources and curriculum that provide additional details and information on implementing new and innovative farm to ECE activities and integrating farm to ECE into the Head Start program.

<b>Domain Key</b>	<b>Approaches to Learning</b>
	<b>Social and Emotional Development</b>
	<b>Language and Communication</b>
	<b>Cognition</b>
	<b>Perceptual, Motor, and Physical Development</b>



## Gardening: Hands-on, experiential learning opportunities to facilitate understanding and connection to how food grows

Gardening: Infant/Toddler	
Goal	Farm to ECE Activity
<b>Sub-Domain: Cognitive Self-Regulation (Executive Functioning)</b>	
Goal IT-ATL 3. Child maintains focus and sustains attention with support.	Children actively participate in adult led multi-step <a href="#">seed planting activities</a> <sup>28</sup> from digging a hole in the dirt to planting seeds, covering seeds and watering.
<b>Sub-Domain: Creativity</b>	
Goal: Goal IT-ATL 9. Child shows imagination in play and interactions with others.	Children use blocks and manipulatives to “build” gardens and mimic plant growth.
<b>Sub-Domain: Relationships with Other Children</b>	
Goal IT-SE 5. Child imitates and engages in play with other children.	Children work together in the garden to achieve a common goal such as planting a seedling or watering the plants.

Gardening: Infant/Toddler (continued)	
Goal	Farm to ECE Activity
<b>Sub-Domain: Vocabulary</b>	
Goal IT-LC 7. Child understands an increasing number of words used in communication with others.	Children follow directions and respond using vocabulary words specific to cooking (e.g., stir, bake, cut, measure), gardening (e.g., plant, soil, grow, leaf, water) or other food-based activities.
<b>Sub-Domain: Emergent Literature</b>	
Goal IT-LC 12. Child comprehends meaning from pictures and stories.	Children connect the stories and events in a story with other activities and experiences. "We read about all kinds of fruits and vegetables in 'Eating the Alphabet.' <sup>52</sup> Which of these foods do we grow in our garden?" (see <a href="#">Exploring Fruits and Vegetables from A to Z</a> , p. 6). <sup>25</sup>
<b>Sub-Domain: Exploration and Discovery</b>	
Goal IT-C 1. Child actively explores people and objects to understand self, others and objects.	Children experiment with different gardening tools (e.g., small shovels, hand rakes) at the water and sand exploration table or in the unplanted garden to better understand how water, sand or soil move and can be manipulated with the tools.
<b>Sub-Domain: Memory</b>	
Goal IT-C 5. Child uses memories as a foundation for more complex actions and thoughts.	Children prepare for gardening time by gathering gardening supplies and lining up to go outside. Teachers provide guidance statements around <a href="#">garden expectations</a> . <sup>29</sup> For example, "Please stand off the garden beds," "It's your turn next to water the plants," and "Thank you for helping to put the garden tools away."
<b>Sub-Domain: Emergent Mathematical Thinking</b>	
Goal IT-C 10. Child uses matching and sorting of objects or people to understand similar and different characteristics	Harvest produce from the garden (e.g., greens, tomatoes, cucumbers, carrots). Teachers can model sorting and encourage discussion about similarities and differences amongst the different foods. Older children can sort the produce into different bowls according to type of food or order food by size.
<b>Sub-Domain: Perception</b>	
Goal IT-PMP 1. Child uses perceptual information to understand objects, experiences, and interactions.	<p>Have children harvest from the garden, encouraging observations of sights, sounds and smells of the garden and harvested plant. Have children observe the process of washing and preparing produce. Allow children to taste harvested produce and ask them to reflect on the process of growing, harvesting, washing and tasting.</p> <p>Use harvesting time in the garden to practice different interactions with plants and plant parts such as using a firm grip and two hands to pluck pea pods, pinching lettuce leaves from the plant or gently grasping a cherry tomato.</p>
<b>Sub-Domain: Gross Motor</b>	
Goal IT-PMP 4. Child demonstrates effective and efficient use of large muscles to explore the environment.	Have children help carry gardening tools into the garden space, navigating different surfaces and moving around garden beds.



Gardening: Preschool	
Goal	Farm to ECE Activity
<b>Sub-Domain: Cognitive Self-Regulation (Executive Functioning)</b>	
Goal P-ATL 8. Child holds information in mind and manipulates it to perform tasks.	Children use words and gestures to tell a family member about the process of planting a seed in the garden.
<b>Sub-Domain: Relationships Adults</b>	
Goal P-SE 1. Child engages in and maintains positive relationships and interactions with adults.	Adult volunteers work alongside children in the garden. During the experience, adults and children take turns discussing their experience in the garden.
<b>Sub-Domain: Sense of Identity and Belonging</b>	
Goal P-SE 11. Child has sense of belonging to family, community and other groups.	Children plant fruits and vegetables in the garden that celebrate culturally appropriate and <u>traditional foods</u> <sup>35</sup> and the cultural diversity of staff and families. For example, blue corn or peppers.
<b>Sub-Domain: Vocabulary</b>	
Goal P-LC 7. Child shows understanding of word categories and relationships among words.	Have children look closely at different seed packets. Discuss the information (including words and pictures) on the seed packets. What does the information tell us? How is the information the same or different for different plants?
<b>Sub-Domain: Phonological Awareness</b>	
Goal P-LIT 1. Child demonstrates that spoken language is composed of small segments of sound.	Have children identify the first letter in the fruit or vegetable of the week or of each food they see in the garden and discuss other foods and words that start with the same letter. For example, "What letter does 'beet' start with? What other foods begin with 'B'?"
<b>Sub-Domain: Print and Alphabet Knowledge</b>	
Goal P-LIT 2. Child demonstrates an understanding of how print is used (functions of print) and the rules that govern how print works (conventions of print).	Read children a <u>garden related book</u> <sup>28</sup> including topics ranging from planting or harvesting in the garden to insects that live in the garden to cooking with garden food (See Appendix I). Make a list of the characters, plants or insects in the book. Discuss how a storybook differs from notes or lists.

Sub-Domain: Preschool (continued)	
Goal	Farm to ECE Activity
<b>Sub-Domain: Counting and Cardinality</b>	
Goal P-MATH 1. Child understands the relationships between numbers and quantities.	Ask children "How many?" questions in the garden, such as "How many tomato plants are in this bed?" or "How many petals are on this flower?"
<b>Sub-Domain: Measurement</b>	
Goal P-MATH 8. Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.	Provide children with a variety of materials (e.g., scales, measuring tapes) to explore and measure vegetables (see <a href="#">Tomato Discovery Lab</a> , p. 12) <sup>25</sup> harvested from the garden. Ask children to count the number of objects that are picked from the garden, then make comparison charts that relate the different items in terms of height, weights and time it takes to grow.
<b>Sub-Domain: Reasoning and Problem-Solving</b>	
Goal P-SCI 4. Child asks a question, gathers information and makes prediction.	<p>Ask questions regarding how plants and flowers grow. Demonstrate the process by adding food coloring to the water of a cut white carnation. Allow the child to predict what will happen.</p> <p>Allow children to predict what will happen if a plant does not get water or does not get sunlight. Use small seedlings to conduct an experiment to find out if children's predictions are correct.</p>
<b>Sub-Domain: Gross Motor</b>	
Goal P-PMP 1. Child demonstrates control, strength and coordination of large muscles.	Children use motor skills to weed, dig or wheelbarrow in the garden on a variety of surfaces ranging from dirt to concrete, while also discussing the importance of maintaining a garden.
<b>Sub-Domain: Fine Motor</b>	
Goal P-PMP 3. Child demonstrates increasing control, strength and coordination of small muscles.	Children create art that displays their experiences in the garden (using scissors, glue and other materials) and includes an actual photograph of them engaging with the garden, which is then displayed in the classroom.



# Education: Classroom and community experiences that connect curricula and learning to food, nutrition, and agriculture

Education: Infant/Toddler	
Goal	Farm to ECE Activity
<b>Sub-Domain: Cognitive Self-Regulation (Executive Functioning)</b>	
Goal IT-ATL 3. Child maintains focus and sustains attention with support.	Children engage in self-initiated <a href="#">sensory table play</a> <sup>29</sup> with a variety of kitchen tools (e.g., measuring cups and spoons, colanders, sifters) and plant and earth materials (e.g., seeds, dirt, sand, water).
<b>Sub-Domain: Initiative and Curiosity</b>	
Goal IT-ATL 7. Child shows interest in and curiosity about objects, materials or events.	Children and teacher discuss the weather (see <a href="#">Weather and Seasons</a> , p. 107) <sup>53</sup> each day and use simple pictures and graphics (e.g., sun, cloud, rain drops, snow) to chart the weather. Teacher guides discussion on how weather and season relate to our garden. What weather helps our plants grow? In what season do we plant our garden?
<b>Sub-Domain: Relationships with Other Children</b>	
Goal IT-SE 5. Child imitates and engages in play with other children.	One child begins making animal noises and other children join in by mimicking the noise or adding new animal noises.  Children work together to “cook” and share a pretend meal.
<b>Sub-Domain: Sense of Identity and Belonging</b>	
Goal: Goal IT-SE 10. Child shows awareness about self and how to connect with others.	Teachers share pictures and stories of other babies and children enjoying new foods, such as “Eating the Rainbow,” <sup>54</sup> and ask children to talk about what the children in the pictures are thinking or feeling.



Education: Infant/Toddler (continued)	
<b>Goal</b>	<b>Farm to ECE Activity</b>
<b>Sub-Domain: Attending and Understanding</b>	
Goal IT-LC 2. Child learns from communication and language experiences with others.	<p>Children point out food models or flash cards with prompting and support of teachers as they learn about new foods, e.g., "Which picture is the red apple?"</p> <p>Children join along in acting out and signing food and farm songs and rhymes such as "Old MacDonald had a Farm."<sup>26</sup></p>
<b>Sub-Domain: Vocabulary</b>	
Goal IT-LC 7. Child understands an increasing number of words used in communication with others.	<p>Children follow directions and respond using vocabulary words specific to cooking (e.g., stir, bake, cut, measure), gardening (e.g., plant, soil, grow, leaf, water) or other food related activities.</p> <p>Children <u>act out directional and positional words</u><sup>29</sup> through songs and stories such as "Up, Down and Around" by Katherine Ayres, a rhyming story describing how vegetables grow.<sup>55</sup></p>
<b>Sub-Domain: Emergent Literacy</b>	
Goal IT-LC 12. Child comprehends meaning from pictures and stories.	<p>Children react and respond to pictures in a book, such as making animal noises to go along with animal pictures in a farm book such as "My Farm Friends."<sup>56</sup></p> <p>Children connect the stories and events in a story with other activities and experiences. For example, "The Very Hungry Caterpillar"<sup>57</sup> ate many different foods, what food do you like to eat to help you grow healthy?" or "We read about all kinds of fruits and vegetables in 'Eating the Alphabet.'<sup>52</sup> Which of these foods do we grow in our garden?"</p>
<b>Sub-Domain: Exploration and Discovery</b>	
Goal IT-C 1. Child actively explores people and objects to understand self, others and objects.	Children experiment with different gardening tools (e.g., small shovels, hand rakes) at the water and sand exploration table or in the unplanted garden to better understand how water, sand or soil move and can be manipulated with the tools.
<b>Sub-Domain: Memory</b>	
Goal IT-C 5. Child uses memories as a foundation for more complex actions and thoughts.	Model conversation about favorite family foods and family meal routines after reading cooking related stories like "Growing Vegetable Soup" <sup>58</sup> and encourage children to contribute to conversation.
<b>Sub-Domain: Emergent Mathematical Thinking</b>	
Goal IT-C 10. Child uses matching and sorting of objects or people to understand similar and different characteristics.	Offer children a bowl of mixed leafy greens (see <a href="#">Mixed Greens</a> , p. 29) <sup>49</sup> (e.g., kale, lettuce, arugula, beet greens, spinach) to touch and explore the leaves as teacher offers descriptive words to compare shapes, sizes and color. Older toddlers can start to sort the leaves by different characteristics (e.g., shape, size, color). Allow opportunity for tasting different greens or use greens for snack.

Education: Infant/Toddler (continued)	
Goal	Farm to ECE Activity
<b>Sub-Domain: Gross Motor</b>	
Goal IT-PMP 4. Child demonstrates effective and efficient use of large muscles to explore the environment.	Ask children to use pantomime to act out the movements (see <a href="#">Creative Movement</a> , p. 13, 26, 49, 63) <sup>25</sup> of different farm animals or to demonstrate how different plants grow. For example, squash plants have vines that spread across the ground, but pepper plants grow up straight and tall.
<b>Sub-Domain: Fine Motor</b>	
Goal IT-PMP 7. Child uses hands for exploration, play and daily routines.	Use seeds and grains of various sizes to scoop, pour, sort and move between different containers.

Education: Preschool	
Goal	Farm to ECE Activity
<b>Sub-Domain: Cognitive Self-Regulation (Executive Functioning)</b>	
Goal P-ATL 8. Child holds information in mind and manipulates it to perform tasks.	Children create a "visual recipe" by drawing the steps of a cooking activity completed in class.
<b>Sub-Domain: Initiative and Curiosity</b>	
Goal P-ATL 10. Child demonstrates initiative and independence.	<p>Children are shown different images of foods and select the foods they would want to eat for a meal, while communicating why they made their particular food choices Teacher facilitates discussion about why some foods are better to eat more often (see <a href="#">Nutrition Education Guide</a>, p. 9),<sup>26</sup> where each of the foods come from, etc.</p> <p>Children select a medium that they would like to use to create art depicting their fieldtrip to a local farm or orchard and gather needed materials to complete the project (e.g., paints, crayons, magazines for collage).</p>
<b>Sub-Domain: Creativity</b>	
Goal P-ATL 13. Child uses imagination in play and interactions with others.	<p>Children use plant based materials and garden items (e.g., leaves, seeds, fiber, petals, pebbles, soil) to make <a href="#">collage art</a>.<sup>59</sup></p> <p>Children use farm scene pictures and props (see <a href="#">Farm Barnyard</a>)<sup>60</sup> to create a story about a day at the farm and then tells this story to a teacher or other children.</p>

Education: Preschool (continued)	
Goal	Farm to ECE Activity
<b>Sub-Domain: Relationships with Other Children</b>	
Goal P-SE 4. Child engages in cooperative play with other children.	<p>Children dress up and role play based on different jobs in food systems (e.g., farmers, grocers, truck drivers, chefs) and discuss their play experience with adults afterwards.</p> <p>Children take turns playing farm themed charades using actions and sounds (see <a href="#">Dress up a Cow</a>, p. 118).<sup>60</sup></p> <p>Children take turns playing picture <a href="#">matching games</a>, including matching seeds with the plants they grow into, or <a href="#">matching pictures</a><sup>26</sup> of whole foods with the corresponding prepared foods (e.g., head of lettuce with a salad).</p>
<b>Sub-Domain: Sense of Identity and Belonging</b>	
Goal P-SE 11. Child has sense of belonging to family, community and other groups.	<p>Children and families share their family food traditions and favorite recipes to create a class cookbook.</p> <p>Read a book (see <a href="#">Linda's Book Pics</a>, p. 50)<sup>60</sup> that incorporates images of people of varying genders, cultures and ages in food systems related roles (e.g., farmer, chef, grocer, truck driver).</p>
<b>Sub-Domain: Vocabulary</b>	
Goal P-LC 7. Child shows understanding of word categories and relationships among words.	<p>Children are given a deck of cards (see <a href="#">Seed Card Matching Game</a>, p. 13)<sup>25</sup> or sorting manipulatives that represent different types of farm animals or vegetables/fruits. They are then asked to group the cards or manipulatives that have similar characteristics. The children are asked why they grouped them in this particular way and discuss what other characteristics are shared or differ amongst the images.</p> <p>Have children dress up (see <a href="#">Dress Up a Bean Plant</a>, p. 78)<sup>60</sup> as various fruits or vegetables (e.g., try making hats with fruit pictures). Ask children to sort themselves on different sides of the room based on a characteristic that a teacher calls out such as type, color, shape or how they grow.</p>
<b>Sub-Domain: Phonological Awareness</b>	
Goal P-LIT 1. Child demonstrates that spoken language is composed of small segments of sound.	<p>Teach <a href="#">farm and garden related songs or rhymes</a><sup>61</sup> that utilize rhyming words. For example, "Wow, Mom! I saw a Cow, Mom and it went Moo, Mom and I said Wow, Mom"; Little Boy Blue; Little Bo Peep; or I Hop on My Horse.</p> <p>Read a poem, such as "<a href="#">Eat the Rainbow</a>"<sup>62</sup> with children and discuss rhyming words in the poem. Brainstorm other food words that rhyme with words in the poem.</p>
<b>Sub-Domain: Comprehension and Text Structure</b>	
Goal P-LIT 4. Child demonstrates an understanding of narrative structure through storytelling/re-telling.	<p>Read "Little Red Hen"<sup>63</sup> and then engage in <a href="#">sensory play and re-telling</a> of the story using actual seeds, flour and wheat.<sup>64</sup> Use the local grains to make "<a href="#">bread in a bag</a>."<sup>65</sup></p> <p>Read "The Enormous Turnip"<sup>66</sup> to children and have children identify the sequences of who pulls the turnip in the book (see <a href="#">Turnips</a>, p. 14).<sup>49</sup> Have children place pictures of the characters from the story on the board in the correct sequence of events.</p>

Education: Preschool (continued)	
Goal	Farm to ECE Activity
<b>Sub-Domain: Counting and Cardinality</b>	
Goal P-MATH 1. Child understands the relationships between numbers and quantities.	Have children count out vegetables (real or model) up to at least 10, but striving for 20. Ask them to pair the numerals and number words with the number of vegetables counted.
<b>Sub-Domain: Scientific Inquiry</b>	
Goal P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, events).	Children identify an animal or plant that they may encounter on a farm field trip or in the garden. Ask children to <u>write a poem</u> <sup>67</sup> about their sensory experiences with that plant or animal using the template below and draw a picture of their animal or plant. I am a [type of farm animal, fruit, or vegetable]. I can [movement]. I can [sound]. I feel [texture]. I smell [scent]. I am [emotion]. I am [color]. I am a [repeat first line].
<b>Sub-Domain: Reasoning and Problem-Solving</b>	
Goal P-SCI 4. Child asks a question, gathers information and makes prediction.	Ask questions regarding how seeds grow. Demonstrate by germinating seeds in a plastic bag (see <a href="#">See-Through Germination</a> , p.155). <sup>60</sup>
<b>Sub-Domain: Gross Motor</b>	
Goal P-PMP 1. Child demonstrates control, strength and coordination of large muscles	Children dance to and act out movements in farm, garden and nutrition themed songs. <sup>44</sup>
<b>Sub-Domain: Health, Safety, and Nutrition</b>	
Goal P-PMP 5. Child develops knowledge and skills that help promote nutritious food choices and eating habits.	Children create a <u>food collage</u> <sup>68</sup> based on the <u>MyPlate</u> <sup>69</sup> framework using pictures that they find and cut out of magazines. Use the opportunity to talk about how foods from the different food groups grow or are raised.





# Procurement: Purchase and serve local foods for meals, snacks, taste tests and learning activities

Procurement: Infant/Toddler	
Goal	Farm to ECE Activity
<b>Sub-Domain: Initiative and Curiosity</b>	
Goal IT-ATL 7. Child shows interest in and curiosity about objects, materials or events.	Children participate in a teacher-led <a href="#">cooking activity highlighting local and seasonal foods</a> . <sup>27</sup> Children contribute with age appropriate skills (e.g., stirring, pouring, measuring, adding ingredients) (see <a href="#">Cooking with Preschool Children</a> , p. 39) <sup>29</sup> and respond to and ask questions about ingredients, tools and utensils used and the cooking process (e.g., What is this fruit/vegetable? How does it change after we bake it in the oven?).
<b>Sub-Domain: Sense of Identity and Belonging</b>	
Goal IT-SE 10. Child shows awareness about self and how to connect with others.	During meal time, teachers talk about the foods on their plate (see <a href="#">Table Talk in each Activity Plan</a> ), <sup>27</sup> including where the food came from, how it grew and their food preferences. Teachers encourage children to contribute to the conversation as developmentally appropriate and share what foods they like to eat.
<b>Sub-Domain: Attending and Understanding</b>	
Goal IT-LC 2. Child learns from communication and language experiences with others.	Teachers model meal time discussion (see <a href="#">Table Talk in each Activity Plan</a> ) <sup>27</sup> in describing how food tastes, feels and smells. Children share their own sensory experiences with new foods at meal or snack time.
<b>Sub-Domain: Exploration and Discovery</b>	
Goal IT-C 1. Child actively explores people and objects to understand self, others and objects.	Encourage children to <a href="#">use all of their senses</a> <sup>29</sup> to explore a new and unfamiliar food. As age appropriate, prompt descriptive responses (e.g., “What does the beet smell like? How does the spinach feel between your fingers? What does the carrot sound like when you chew it?”).
<b>Sub-Domain: Emergent Mathematical Thinking</b>	
Goal IT-C 10. Child uses matching and sorting of objects or people to understand similar and different characteristics.	Offer children a bowl of mixed leafy greens (see <a href="#">Mixed Greens</a> , p. 29) <sup>49</sup> (e.g., kale, lettuce, arugula, beet greens, spinach) to touch and explore the leaves as teacher offers descriptive words to compare shapes, sizes, color, etc. Older toddlers can start to sort the leaves by different characteristics (e.g., shape, size, color). Allow opportunity for tasting different greens and use greens as part of a snack.



Procurement: Infant/Toddler (continued)	
Sub-Domain: Fine Motor	
Goal IT-PMP 7. Child uses hands for exploration, play and daily routines.	Have children use fingers or utensils to pick up small pieces of local foods (e.g., fruit, vegetable, grains, cheese) for tasting.
Sub-Domain: Health, Safety, and Nutrition	
Goal IT-PMP 11. Child demonstrates increasing interest in engaging in healthy eating habits and making nutritious food choices.	As age appropriate, children have the opportunity to express preference (tried it, liked it or loved it) after tasting of featured fruit or vegetable (see <a href="#">"Taste Tests: Try it, You'll Like it"</a> , p. 64). <sup>60</sup>  Teacher facilitates meal time discussion about what foods each child prefers, where foods come from, and how each food helps children grow and stay healthy. (see <a href="#">Nutrition Education Guide</a> , p. 9). <sup>26</sup>

Procurement: Preschool	
Goal	Farm to ECE Activity
Sub-Domain: Relationships with Adults	
Goal P-SE 1. Child engages in and maintains positive relationships and interactions with adults.	Children <a href="#">create a meal or snack</a> <sup>27</sup> each month around a seasonal fruit or vegetable with assistance from the teacher. The children then take home the recipe and materials to make the snack at home with their family, demonstrating how they learned to create the snack in the classroom and asking for assistance from adults in the home when needed.
Sub-Domain: Sense of Identity and Belonging	
Goal P-SE 11. Child has sense of belonging to family, community and other groups.	Introduce children to and purchase foods from farmers and growers of diverse cultures, ethnicities, genders and ages.
Sub-Domain: Print and Alphabet Knowledge	
Goal: Goal P-LIT 2. Child demonstrates an understanding of how print is used (functions of print) and the rules that govern how print works (conventions of print).	Show children a picture of a completed food item, such as a <a href="#">cucumber sandwich</a> , <sup>29</sup> made with local foods. Then, show children pictures of the different components of this recipe. Have children identify what goes into the recipe while creating a written grocery list. Discuss how print for a list is different than that of a storybook or a recipe.
Sub-Domain: Comprehension and Text Structure	
Goal P-LIT 4. Child demonstrates an understanding of narrative structure through storytelling/re-telling.	Read "Little Red Hen" <sup>40</sup> and then engage in <a href="#">sensory play and re-telling</a> <sup>64</sup> of the story using local wheat berries, flour and wheat stalks. <sup>41</sup> Use the local grains to make <a href="#">"bread in a bag."</a> <sup>65</sup>

Procurement: Preschool (continued)	
Goal	Farm to ECE Activity
<b>Sub-Domain: Counting and Cardinality</b>	
Goal P-MATH 1. Child understands the relationships between numbers and quantities.	Cut open a <a href="#">winter squash or pumpkin</a> <sup>29</sup> and ask children to count the number of seeds inside. Roast seeds for a snack.
<b>Sub-Domain: Measurement</b>	
Goal P-MATH 8. Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.	Gather different varieties of one kind of food (e.g., <a href="#">tomatoes</a> (cherry, Roma, heirloom)); <sup>29</sup> turnips (white, purple, green - see <a href="#">Turnips</a> , p. 13); <sup>49</sup> winter squash (butternut, spaghetti, pumpkin - see <a href="#">Discovering Pumpkin and Winter Squash</a> , p. 32). <sup>25</sup> Ask children to compare the different foods. How are they the same? How are they different? Which is the biggest, heaviest, etc.?
<b>Sub-Domain: Scientific Inquiry</b>	
Goal P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, events).	Prepare a tasting of local food (see <a href="#">Growing Great Tasters</a> , p. 17) <sup>26</sup> and engage children in using descriptive words to talk about their tasting experience (e.g., "What words describe how the broccoli looks, feels, smells, tastes?").
<b>Sub-Domain: Reasoning and Problem-Solving</b>	
Goal P-SCI 4. Child asks a question, gathers information and makes prediction.	During meal and snack time, ask children to recall information about where food comes from and how it grows. Encourage them to use this information to predict where the various foods on their plate came from (e.g., What is the bread made out of? How was it made? How did these strawberries grow? How did they get to our plate?).
<b>Sub-Domain: Fine Motor</b>	
Goal P-PMP 3. Child demonstrates increasing control, strength and coordination of small muscles.	Children participate in a cooking project by using a plastic knife to cut small pieces of soft foods, spreading dips on bread, measuring and pouring with spoons and cups, and stirring and mixing.
<b>Sub-Domain: Health, Safety, and Nutrition</b>	
Goal P-PMP 5. Child develops knowledge and skills that help promote nutritious food choices and eating habits.	<a href="#">Serve local foods</a> <sup>19</sup> during family style meals and discuss <a href="#">where the food comes from</a> , <sup>53</sup> how it grows, who grew it and how it got to our plate. Discuss why we eat a variety of foods and what the foods do for our body (see <a href="#">Nutrition Education Guide</a> , p. 9). <sup>26</sup>

# V.

## Appendix I: Farm to ECE Book Lists

- **Food and Nutrition Fun for Preschoolers, Food and Nutrition Information Center, July 2008**<sup>26</sup>
  - [https://www.fns.usda.gov/sites/default/files/growit\\_fun.pdf](https://www.fns.usda.gov/sites/default/files/growit_fun.pdf)
- **50 Garden-themed Books, How's it Growing – Children's Country Day School**<sup>29</sup>
  - <https://howsitgrowingpreschool.wordpress.com/chapter-9-garden-themed-books-additional-resources/>
- **Children's Literature Archive, Growing Minds Farm to School, Appalachian Sustainable Agriculture Project**<sup>70</sup>
  - <http://growing-minds.org/childrens-literature/>

# VI.

## Appendix II: Resources and References

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