

Boulder County Farm to Early Care and Education Program Summary

What is Farm to Early Care and Education?

Farm to Early Care and Education (ECE) is a nutrition education program that aims to give children, ages 1 to 5, the opportunity to learn about healthy, local foods through gardening, cooking activities, taste tests, field trips, farmer visits, meals and snacks, and nutrition lessons.

Farm to ECE is different from other nutrition education curriculums because it teaches children where food comes from and how it is grown. When children help to grow or prepare fruits and vegetables, they're more willing to try them.

Farm to ECE is part of the national Farm to School movement, which promotes similar themes, but focuses on kindergarten through 12th grade. Boulder Valley School District (BVSD) has a Farm to School program, which selects several fruits or vegetables that will be in season in Colorado as each month's Harvest of the Month (HOTM). This year's Farm to ECE HOTM were aligned with BVSD's, although BVSD does not continue the program through the summer, so summer months were selected based on crop seasonality.

Minimum program requirements:

- 1) Students will participate in a gardening activity at least once per week during growing season (May-October).
- 2) Students will participate in a nutrition education activity at least once per week during growing season.
- 3) Families will be informed of program activities at least once per month.

In cases of inclement weather or other unforeseen circumstances, gardening activities may be substituted with an indoor gardening activity, such as planting seeds or a discussion about what plants need to grow.

Taste-testing and cooking activities incorporating produce harvested from each center's garden or locally-sourced seasonal produce are strongly encouraged as the weekly nutrition education activity. Since these may not always be an option, additional lesson options are provided on the calendar/website.

Family communication options are provided on the website with the lesson plans. Centers may use the option provided or create their own.

Calendar activities are not mandatory. Centers were asked to circle the activities they chose to implement and return the monthly calendar to Farm to ECE staff. They could also implement their own activities/curriculum and fill in Farm to ECE activities on a blank calendar and return these to Farm to ECE staff.

There are several centers that have been diligent about providing program updates. Others rarely communicate at all. Because Veggie Bucks (VB) were provided to participating centers this year to be spent at the Farmer's Market, this was used as motivation to request proof of program activities from participating centers. However, it might be reasonable to make monthly program updates optional, as the goal is to make centers self-sustaining and require less input and oversight from BCPH personnel. If VB or other monetary supports are available in future years, then proof of program activities is certainly reasonable. However, without something to motivate centers to provide updates it is likely most centers will opt not to do so, and less reason to continue to request it if BCPH is not working as directly with the center.

Centers can receive Colorado Shine Points for onsite gardens and nutrition education activities. Colorado Shines is "a quality rating and improvement system used to assess, improve and communicate the level of quality in early care and education programs. Colorado Shines assigns a quality rating to licensed early care and education programs, similar to rating systems for other service-related industries like hotels and restaurants."

Program Outcomes

1. Children try more fruits and vegetables in all environments.
2. Children are more open and willing to try new fruits and vegetables.
3. Children's knowledge of fruits and vegetables is increased (ie. where to find/how to grow healthy food options).

Possible Future Outcomes

1. Children try more *local* fruits and vegetables in all environments.
2. Children are able to identify healthy food options; name different fruits and vegetables; and/or make healthier food choices.
3. Families are engaged in children's learning activities and begin making healthier choices.
4. Staff role-model healthy eating habits.

Goals/Outcomes of other programs found during program research:

- Increased knowledge of fruits/veggies (Correctly ID, sort into fruit or veggie)
- Increased preference for fruits/veggies (including at home)
- Increased knowledge related to farm-fresh foods (ID farm produce as fresher)

Evaluation methods of other programs found during program research:

- Teacher checklists completed weekly to gauge extent of following curriculum
- Students given pre- mid- and post-surveys regarding fruit/veggie knowledge/perceptions, including healthy eating and food sourcing

- 'I like this'/'I don't like this yet' sheets for taste tests
- Parent nutrition surveys

Additional considerations for program evaluation, taken from a conversation with Megan and Talia:

- Do we want to link specific pre- and post-survey results, and if so, how? Or do we want to simplify our data collection and look at a general comparison of pre- and post-data? **We chose the second option for this year (2016).*
- Strongly suggested piloting our data collection tools (surveys, sticker charts, etc) and tweaking, as necessary.
 - Consider where the best place to do this would be. Possibilities: parents at BCPH, a childcare center that might be supportive of this process?
- Consider phrasing of 'healthy vs. unhealthy' type questions for children as 'Which fruit/vegetable is good for your eyes?' etc.
 - If assessing increased knowledge of healthy food choices, so as not to put a negative spin on what might be the child's only food option at home.
- Is our primary goal to increase curiosity? Awareness? Knowledge? Change behavior? Or all of the above? And if all, are we assessing all or focusing in on one or two to begin with and possibly expanding assessment in future years?
 - We chose to focus on increasing children's curiosity and willingness to try new fruits and vegetables (2016). However, this will vary from center to center, as food behaviors vary depending on environment.
- Suggested focusing on increasing fruit and vegetable consumption this year (2016) and increasing focus on local next year.
- Definition of local: only produce grown on-site?
 - We chose to focus on local as being grown on-site, as this is required at all participating centers and was within the scope of the program this year (2016).
- Instead of evaluating staff attitude/behavior change, perhaps we focus on establishing one staff person at each site who is a Farm to ECE 'Champion' to advocate for the program and facilitate communication and program implementation (a 'process indicator').
 - This was a goal in 2016 to support program sustainability, as this takes a lot of the responsibility off of the BCPH personnel and places it with the school, and also allows them to really make the program their own.
- Make sure we are separating our evaluation plan and analysis steps.
 - We never got this far.
- Delineate roles-clearly identify who is responsible for delivering and collecting surveys, providing responses, etc.

Farm to ECE Goals:

- Growing healthy children through increased access to nutritious food and experiential opportunities.

- Positively influencing the eating habits of young children while their food preferences are forming.

Boulder County CSU Extension Office's Master Gardeners Partnership

The partnership between the Boulder County CSU Extension Office's Master Gardeners (MGs) and Farm to Early Care and Education participants has involved connecting each participating center with a Master Gardener to provide gardening expertise, including what to plant, when to plant, where to plant, pest control, etc. Most of the individuals responsible for the school gardens are not expert gardeners. One center was already working with their own consultant when we contacted them, but the other 11 centers involved in the program this year have taken advantage of this resource. The partnerships have ranged from an initial advisory visit to make suggestions as to where/what to plant, to ongoing relationships that include MGs visiting the center regularly to carry out activities with children. One MG has also volunteered his construction/building experience to create planter benches, a farm stand, and a worm and root viewing station for a childcare center.

The only challenge the partnership has come across this year is communication. Childcare directors, who are typically the primary contact for these relationships, are incredibly busy, often having to work in the classroom in addition to all the responsibilities of being a director. This is particularly true of larger centers, which seemed to be the most difficult to reach this year. Some directors prefer contact via email, while others are almost impossible to reach without a phone call or even a visit to the center. This year the Farm to ECE intern facilitated these contacts and relationships by coordinating with the Extension Office's Kristen Anderson. In future years, Ms. Anderson's contact information will be available on the Farm to ECE website as part of the resource list, eliminating the need for additional coordination through BCPH (although current centers may still reach out to BCPH with questions, as this is what they are accustomed to doing). In the future, it would be helpful to ask each childcare center contact the best way to reach them and advise the Master Gardener partner of this at the start of the relationship. If there is a way to include this question in the initial contact between the center and the MG coordinator, that would be ideal. However, the partnerships continued to thrive in spite of this challenge, and there was no negative feedback from any of those involved.

Boulder County Farmer's Market Partnership

Boulder County Farmer's Market (BCFM) has sites in Longmont, Boulder, and Denver. The Boulder site has a Wednesday afternoon/evening market that several nearby centers visit frequently. BCPH has worked closely with the BCFM as it has developed this program. In the program's first year (2015), three of the four pilot centers were given \$150 in Veggie Bucks to be spent at the Farmer's Market. This year (2016) BCFM matched BCPH's \$1,000, for a total of \$2,000 in Veggie Bucks that was divided between 11 centers based on each center's desired capacity (this information was obtained from Boulder County Housing and Human Service's CCAP and Early Childhood Team). One center chose not to receive the VB. As many centers cannot take field trips or are too far from the Boulder FM for a field trip to

the Wednesday market, the VB can be used to purchase fruits, vegetables, plant starts, or seeds (to grow produce only) that must be used at the center for the target age groups. VB come in \$5 increments that are turned into cash if not spent entirely at one time. This cash is also meant to be spent on the same items at the Farmer's Market that will be used for the children at the center. Each center signed a receipt of the VB, which included instructions on how they can be spent. If they are not spent or not likely to be spent by September 1st, 2016, it was requested that they be returned to BCPH staff to be redistributed to another center. Each VB has a tracking number, so the FM can track where their promotional dollars are spent. These numbers were also recorded on the form each center signed. Centers have been asked to provide copies of receipts from FM purchases or manual tracking of spending to ensure VB are being spent appropriately. These should be returned to Tori Lee once VB have been spent or at the end of the season.

There was also a significant emphasis put on starting children's and family activities at the Wednesday FM in Boulder this year (2016). This did not come to fruition, in spite of multiple conversations with BCFM staff. The initial idea was to support BCFM staff by promoting FM activities at Farm to ECE sites; however, the primary contact at the BCFM was changed late in the season and the new contact was under the impression Farm to ECE staff would be hosting a booth at the FM and carrying out their own activities. By that time, this was not an option, though it is an option to consider in the future.

Suggestions for Future Years

Consider revising lesson plans. May and June calendars include activities that are not based on *Grow It, Try It, Like It!* curriculum because the curriculum does not include all the produce selected for Boulder County's HOTM. However, after becoming more familiar with the curriculum it would be reasonable to substitute different fruits or vegetables into the curriculum's activities so that all activities are based on a nationally-recognized curriculum.

-Also consider redoing calendar format...would it be easier to provide lesson plans only? BVSD HOTM change yearly; may want to consider adding/revising our HOTM to align with BVSD.

- Consider housing the Farm to ECE introductory and conclusion activities separate from the monthly lesson plans, as these should be completed by all centers to provide information regarding children's increase in knowledge due to program activities.

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Create a list of suggestions for indoor gardening activities, such as planting seeds or a discussion about what plants need to grow. These can replace outdoor gardening activities if weather does not permit this for a week or more at a time. This list should be added to the toolkit or provided on the website.

Add descriptions of 'when to harvest' to the toolkit. Harvesting timelines have been included, but these do not explain how to identify when each plant is truly ready to be harvested. For instance, beets are ready when their tops 'pop up' out of the ground, and appear dark in color. However, inexperienced gardeners will likely not know this, and harvesting timelines are not overly specific or concrete. Visual identifiers will provide this specificity.

Consider creating a training day for new/existing centers participating in the program to introduce the program and provide additional information. This might include gardening basics from a Master Gardener, health and safety information from BCPH staff, cooking tips from Cooking Matters personnel, or 'meet and greets' with local farmers, Farmer's Market staff, etc, to cultivate relationships for field trips and classroom visits.

Continue reaching out to local farms and farmers to cultivate relationships. More contacts for centers to visit on a field trip or invite to the classroom would further support program growth.

Review grant opportunities quarterly to ensure they are current. Add or remove as necessary.