

BIOAg Project Report

Report Type:

Final

Title:

At-School Youth Farmers Markets: Can Hands-on Experience Purchasing Fruit and Vegetables Grown on BIOAg Farms Influence Valuation of Local Farming and Family Shopping Habits?

Principal Investigator(s) and Cooperator(s):

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Abstract:

Biologically intensive agriculture (BIOAg) offers a pathway to a more sustainable food system, yet public understanding and access remain uneven. Early education may play a critical role in shaping knowledge and support for BIOAg practices. This Extension education project evaluated changes in children’s knowledge, attitudes, and procurement of BIOAg foods following participation in a structured youth farmers market intervention. Through a collaboration between SNAP-Ed and Agricultural Extension, we implemented a school-based farmers market at a racially diverse, low-income elementary school, providing students with tokens to purchase a variety of seasonal, locally produced fruits and vegetables. Learning outcomes were assessed for both students and their families, after which students received additional tokens to use at a local farmers market. Findings demonstrate the potential for school-based experiential interventions to enhance awareness of, and access to, BIOAg products among low-income, diverse households, thereby supporting broader adoption of biologically intensive agricultural systems.

Project Description:

BACKGROUND

Environmental factors play a major role in shaping a child’s long-term food preferences. By hosting a youth farmers market where students could shop independently, we hoped to encourage their interest in local food, local biologically intensive agriculture, and help build lifelong healthy habits.

This project was based on a conviction that the younger generation needs experiential lessons early in life to sensitize them to local farms, local food systems, and in particular wildly fresh and colorful locally grown produce. Our effort stemmed from available literature demonstrating the effectiveness of youth farmers’ markets and nutrition education generally at improving nutrition outcomes (Dannefer et al. 2016, Evans et al. 2012, Williams et al. 2014). And we were particularly inspired by research showing that nutrition programs that go beyond classroom lessons (and even beyond tasting) to add *social dimensions* are yet more effective (Dazeley et al. 2015). Based on this literature, we tested the hypotheses that a youth farmers market: 1) could influence youth family eating behavior, 2) increase youth willingness to try new fruit and vegetables, 3) create more equitable access to food from BIOAg production systems for low-income and diverse populations, and 4) would be particularly effective due to the high social “fun factor” among kids.

PROJECT OVERVIEW

For this project, we worked with 154 third, fourth, and fifth grade students at Garfield Elementary School. We began with a short in-class assessment asking whether students had ever shopped at a farmers market, whether they enjoyed going, and whether they or their families had ever purchased

produce at one. Notably, 27% of students had never been to a farmers market before. We then introduced students to the plan to hold a youth farmers market at their school, featuring local, in-season produce that they could choose themselves.

One week later, we hosted all 154 students in the Garfield Elementary School gymnasium. The produce was sourced from local farms through the Southwest Washington Food Hub, and students from The Evergreen State College helped “sell” the items. Evergreen students also led two cooking demonstrations, offering samples of sautéed delicata squash and a kale Caesar salad, both recipes featuring ingredients available at the market. The students liked the samples, and many took home the recipe along with the produce needed to make it.

Each classroom visited the market for 30 minutes. Every student received a youth farmers market branded tote bag, \$14 in tokens, and a Save-the-Date card for our upcoming Olympia Farmers Market Day on November 2nd. Most produce items were priced at \$2, with some specialty items costing \$4. Students navigated the market independently, tasting new foods, comparing options, and choosing what they wanted to take home.

The Youth Farmers Market proved to be an empowering and positive experience. Forty-seven percent of students reported trying new food at the event. Many discovered how appealing fresh, local produce can be; several students were so excited about their purchases that they ate raw carrots, bell peppers, and even onions right there in the gym. Their enthusiasm was unmistakable; students left the market beaming, tote bags full, and were excited to share their vegetables with their families.

One week after the Youth Farmers Market, we returned to the third-, fourth-, and fifth-grade classrooms to conduct a follow-up activity and an apple taste test. Prior to meeting with the students, we created a photo display in the school hallways featuring images from the Youth Farmers Market. This gallery was intended to reinforce the excitement of the event and remind students of the enjoyment associated with trying fresh produce. The apple taste test served both to highlight the appeal of local, seasonal foods and to help students recall their previous experience, ensuring that the data collected during the discussion would be as meaningful as possible.

During this second visit, students remained enthusiastic about the Youth Farmers Market, with 42% reporting that they had tried to eat more vegetables since participating in the event. Following the discussion and taste test, we encouraged all 154 students to join us at the Olympia Farmers Market on November 2 for a full farmers market experience. Each student who visited our booth would receive \$15 in tokens to spend at the market. When asked whether they planned to attend, 51% indicated that they intended to participate.

The following week, we sent a reminder home to families encouraging them to bring their children to the Olympia Farmers Market to receive the \$15 in tokens and to learn more about the various food access programs available. On November 2, with the support of students from The Evergreen State College, we staffed a booth at the market. Forty-five Garfield Elementary students attended, and each received \$15 in tokens to spend. We invited students to return to the booth on their way out to show us what they had purchased. Students had a blast choosing fresh produce, which included carrots, squash, onions, cabbage, peppers, apples, and pears. The students were proud of their selections and eagerly shared their purchases with us. We heard from farmers at the market that they really enjoyed interacting with the students, who asked meaningful questions, and enjoyed choosing what to buy.

In December, we conducted our final discussion with the students and sent a survey home to their parents to learn about any changes in family shopping behaviors and eating habits following the students' farmers market immersion experience.

Outputs:

METHODS

The first step in this project was to assemble a timeline and short explanation of the Youth Farmers Market concept, identifying the dates of our events, event details, and a list of those involved (Table 1). We began coordinating and arranging with the principal and teachers at Garfield Elementary School in spring prior to the end of the 2023/24 school year; the event would occur in fall 2024. SNAP-Ed has successfully worked with faculty and staff at Garfield Elementary School in the past, and WSU Extension agriculture program has collaborated with them on several grant-funded projects. This history was essential to get approval for our Youth Farmers Market plan at the school, which included several classroom visits and also use of their gymnasium for a day. Details we had to work out included timing of visits, finding a space at the school to hold the Youth Farmers' Market, and coordinating with fourth, fifth, and sixth grade teachers, the gym teacher, maintenance, and of course the principal.

Table 1. Entities participating in this project.

The principal and staff at Garfield Elementary School
Third, fourth, and fifth grade teachers at Garfield Elementary School
Two agriculture faculty members from The Evergreen State College (TESC)
Ag students from TESC
The Southwest Washington Food Hub
Three local farms
The Olympia Farmers Market
Volunteers

At the same time the project team coordinated with professors and agriculture students from The Evergreen State College (TESC), who have helped on several WSU Extension projects in the past at Garfield School, including buckwheat variety trails and taste-testing. We began talking to TESC faculty in June, to coordinate with their class schedules so that the maximum number of Ag students would be able to participate. In early September we helped all the students and faculty register as volunteers with the Olympia School District, along with our other volunteers.

To prepare for our first visit to Garfield Elementary School, we wrote up a pre-project classroom activity for the students, which sought to understand their baseline experiences and opinions about locally grown produce and farmers markets. In late fall our team visited all seven participating classrooms and spent 20 minutes in each classroom. We talked with the students about the upcoming Youth Farmers Market and asked them to suggest what they'd like to see at the market, which gave us a chance to talk about seasonal produce.

Our next event was the Youth Farmers Market at Garfield Elementary School, which was held in October. To prepare for the event, we worked with the Southwest Washington Food Hub to source colorful fruits and vegetables that would appeal to the students. We sourced and bought miniature honey bears from a local apiary. We created unique branding for our event, which we made into a sign, printed on tote bags, and on tokens for each child (Figure 1). Our logo was also printed on laminated Save-the-Date cards we made and distributed to the students. We coordinated with Garfield Elementary School



Figure 1. Youth Farmers Market branding.

staff who were also very helpful. They let us borrow their tables and helped us move boxes and set up the day of the event, along with the TESC Ag students.

The Youth Market featured \$4,600 of fresh local fruits and vegetables purchased from the Southwest Washington Food Hub, a cooperative owned by 35 biologically intensive small farms and value-added businesses that WSU Extension helped develop. Working closely with the manager of the Southwest Washington Food Hub and also directly with some of the farmers, we sourced a rainbow of colorful local vegetables, such as red, yellow, and orange bell peppers; sweet corn; Lacinato kale; pie pumpkins; delicata and butternut squash; purple sprouting broccoli; red and green mini bibb lettuces; cilantro; mini kiwi berries; grapes; three varieties of apples; and two kinds of pears.

We set up 12 large tables and covered them with matching black, crimson and SNAP-Ed branded tablecloths and handmade baskets (Figure 2). Working with TESC Ag students, we set up heaping displays of the produce and made colorful chalkboard signs that said the name of each item, the variety, the name of the farm that grew it, and how much it “cost.” We had enough tables, so we were able to stow the backstock produce for our market as it ran out. We taught the TESC students how to merchandise the produce and how and when to restock. We had three sessions, with two classrooms from each grade shopping at the same time. This was slightly chaotic but fun, and we had so many volunteers helping that it was manageable. The students were ushered into the gym, where we met them for a briefing about the seasonal local produce at the Youth Farmers Market, and the farmers who had grown it.



Figure 2. *Vegetables on display, signage, and the overall layout of the Youth Farmers Market at Garfield Elementary School.*

Each student received \$14 in tokens and a reusable market tote bag, enabling them to make produce “purchases.” We arranged for TESC students to “run” the market, and they had a blast hawking their wares to the Garfield students, passing out SNAP-Ed recipes, and providing information about the produce (Figure 3). We had over 40 volunteers in total, which made it possible to encourage the children to try new things and to answer all their questions, and to help some of them shop.

We also had two taste test sites set up, which provided samples of kale Caesar salad and roasted Delicata squash. We outfitted each taste test site with the equipment and ingredients necessary for making the samples, such as an electric griddle, spatula, and tongs. We also had the recipe for the sample item available, which the kids could take home.



Figure 3. Student from The Evergreen State College helping youth “buy” apples at the youth market.

Photographs were taken of the kids participating at the Youth Farmers Market, in order to put up a display at the school to mirror back their market experience, which was surprisingly popular with the students. This was coordinated with school administrators to ensure youth privacy and only used at the school following policy. Not all students were allowed to be photographed, so we developed a system of stickers, which the kids who couldn't be photographed wore. Before we hung the photos, we double checked with the principal.

Enough produce was left over from our Youth Farmers Market display that the participating Garfield teachers and TESC Ag students also got to take home some produce. We wrote a short evaluation form for TESC students, which provided an opportunity for these mature students to reflect on the educational value of a farmers market experience especially for elementary school youth.

To prepare for our next event, which was an apple taste test, four unique varieties of apples were purchased from the Southwest Washington Food Hub. For support with the taste testing, we coordinated with Cathy Peters (a former lunch lady at Garfield Elementary School) and six volunteers from the TESC Ag program, who helped cut apples and manage the tasting.

All seven classrooms were visited in teams of two. Samples of the first variety of apples were passed around on plates. The children all tried it, and then gloves and tongs were used to pass out the second and third varieties. The students in most classrooms preferred NY428, which was described as crunchy and flavorful. When the kids visited the Olympia Farmers Market later in the project, several asked if they could buy NY428 apples there. As part of the discussion, kids shared their experiences of the Youth Farmers Market, as a way of preparing them to complete the post-market survey with their parents.

To support the post-market discussion, the project team put up enlarged and laminated photos of students participating in the Youth Farmers' Market, along with the Youth Farmers Market sign and laminated pictures of vegetables. All day long kids and even parents came to look at the photos and reminisce about the event.

Our final in-person event with Garfield elementary school students was held in November at the Olympia Farmers Market. To prepare for the event, we coordinated with Olympia Farmers Market staff,

to find out if it would be possible to have a table at the market so we could welcome Garfield Elementary students and give away tokens to be spent at the market. We hoped to be able to converse with the parents of the students, to find out their impressions of the Youth Farmers Market and to find out if they wanted any information about Market Match programs. We also requested that the Garfield Elementary School principal put the event on the school calendar and printed up another Save-the-Date card, which we brought to the school and had the teachers pass out to the kids a few days before the event. The Save-the-Date card had the Olympia Farmers Market hours of operation, address, and bus route info on it, as well as our branded Youth Farmers Market logo.

The Olympia Farmers Market staff put together little paper bags that contained \$15 each in tokens, which were redeemable at any stall at the market. We picked them up as needed from their office, where they kept track of our total. We gave out \$780 worth of tokens that day to the 45 kids from Garfield Elementary that attended. Other market shoppers wandered by and asked about our project, for which there was much enthusiasm. We took turns strolling around the market, answering questions from the kids, and pointing out cool varieties such as an all-pink apple, and a mushroom petting zoo that we thought they might like. We also encouraged the kids to show us what they bought.

RESULTS

Pre-Market Discussion and Informal Assessment

The initial pre-market classroom discussion focused on student attitudes towards farmers markets. Topics of interest included appeal of the farmers market, basic shopping habits, and frequency of attendance (Figure 4). This was completed to give us a sense of familiarity that youth have with farmers markets, and to “prime” them for the experience.

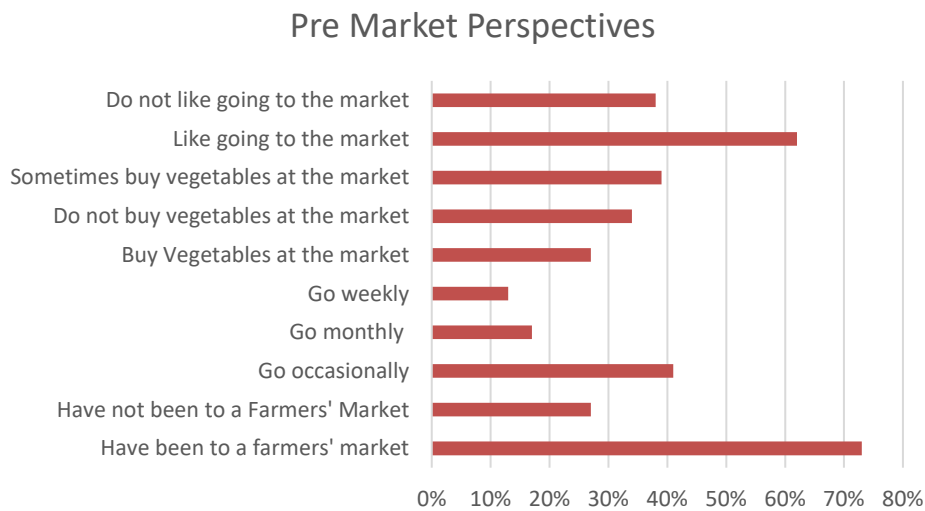


Figure 4. Pre-market perspectives of Garfield Elementary School third, fourth and fifth grade students.

Post-Market Discussion and Survey

After the Youth Farmers Market experience at Garfield Elementary, all seven classrooms were visited for an apple taste test. The taste test provided an opportunity for an informal discussion and at this time a take-home survey was distributed for youth to take home to complete with their parents. Of interest was how students used their produce once they took it home, and overall impression of the experience. From the take-home survey, it was found that majority of students reported using their produce at home, with many even eating raw in advance of getting home (Figures 5, 6).

How Students Used Their Fresh Produce

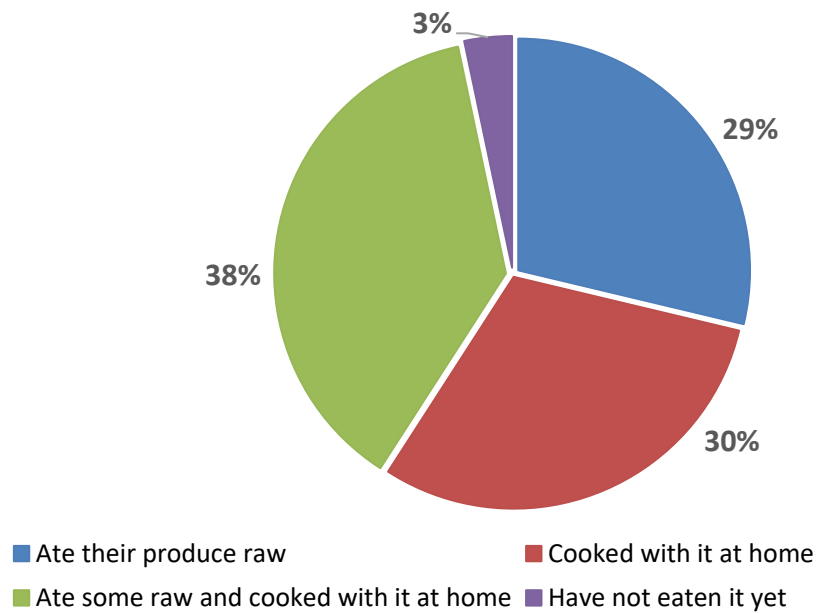


Figure 5. How youth used their produce



Figure 6. Students were eager to try their market purchases, with many immediately tucking into peppers, carrots, apples, pears, and even Romanesco.

Overall responses from youth and their family were overwhelmingly positive. The social aspect proved to be strikingly important to the overall youth market experience. Youth also expressed strong appeal for the ‘independence’ that the experience afforded them. Many commented on being able to shop for

whatever they wanted, to have their own money, and to spend time with friends. The experience appeared to tap into strongly held and apparently widely shared enjoyment of autonomy and ‘real-life’ experiences that were ‘their own’ so to speak (Tables 2 and 3). We believe this youth market experience demonstrates particularly great potential due to the association of strong memories with vivid events through emotions. An experience highlighting fun, social interaction, and autonomy are very likely to leave a lasting positive impression of healthy fruits and vegetables, local farming, and farmers markets.

Table 2. Student reactions to the Youth Farmers Market.

Kiwi berries those were really good.	The food because I like carrots and pumpkin.
Getting to buy food it was fun!!	Using the tokens to buy stuff.
Kids can enjoy new foods even if they can't afford it.	The grapes and the food for the family.
The most important thing was trying new thing.	I would like it if you did it at Marshall Middle School. Taste testing
Yes because it helped a lot at home.	That you let kids get free fruits and vegetables.
Surprising my dad with it.	It was learning money.
Getting fresh food.	The fact that me got to do everything!
The most important part to me was that there were food and I got to choose the food I wanted.	The most important thing is that we get more fruits and veggies.
My family saying thank you for all the food.	It was fun! Add more variety!
To be able to get fresh food for free.	Getting corn for my dad.
To be able to eat new foods. Thank you so much.	I think it was very fun and good.
The vegetable for my family and me.	The fund and stuff. And it feeling your older
Cuz I got to shop with me friends and got good food.	Food (especially the kale salad).
The most important thing to me about the youth farmers market is that it helps teach only buying what you need.	All the different options for food.
There was really good samples.	I loved the salad and it was fun to act like a grownup.
That you can enjoy shopping with friends	I had fun, but most of all is the carrots. I never tried it, but I love it.
I think this was a really nice opportunity. I am also really trying to eat healthier.	The potatoes because I love potatoes.
That it helps kids be healthy	Learning how to spend money.
I really like kale food at the farmers market.	Like the diff choices. Fun spending money by yourself.
The most important thing was shopping without my mom.	I loved trying romanesco for the first time!!
Fun spending own money and shopping.	

In terms of the market experience, trying a new fruit or vegetable was common, and in fact the word new was used more than any other descriptor in the summary data set in Tables 2 and 3. A specific example is that many of the students had never had delicata squash or kale Caesar salad before, and they really liked it. What is more, the positive experience appeared to create lasting preferences, with one parent commenting that their child had been asking for kale Caesar salad ever since they tried it at the Youth Farmers Market and that they had made it at home several times. Another child was thrilled with how delicious the delicata squash was and named it “sweet squash” and happily purchased three of them.

Table 3. Feedback on what youth and their families used the produce for

My mom made her very, very delicious everybody soup with all the vegetables.	We ate it all, we ate it raw – carrots.
My dad made a potato thing. It was fritters.	My mom made kale chips and salad.
I made some fried rice and potatoes in the air fryer.	I was not here for the YFM. “Well that’s sad,” said another kid.
I made for my whole entire family, spicy chicken sandwiches with kale.	We made a soup with the carrots.
My mom used the cilantro to make tacos.	We made a leek thing, leeks with cauliflower, cheese and cream.
I made pumpkin pie and it tasted good.	We were being funny and saying, “There’s a leek in the house.”
I made carrot cake.	My sister made soup.
My mom made a fruit salad with the fruit.	My grandma made carrot soup.
Pumpkin pie – we roasted it and ate the seeds too.	I ate all the food before the day was over.
I just ate it because we couldn’t do anything with it because we don’t have running water.	We ate the romanesco and then we bought more.
We cooked tons of meals: soup, onion volcano.	

Survey results showed that the Youth Farmers Market experience increased youth consumption of fruit and vegetables (Figure 7), and that parents found their children notably more open to trying new and different types of produce (Figure 8).

Percentage of Families that Ate More Fruits or Vegetable Since the Youth Farmers Market

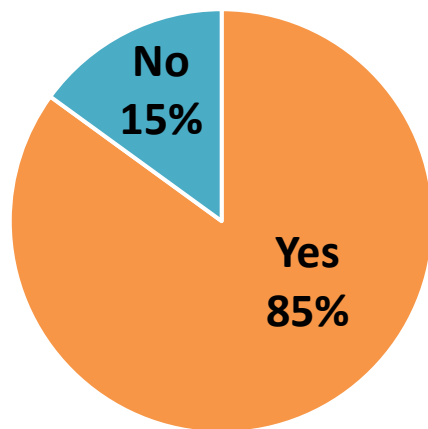


Figure 7. Rates of families reporting increased consumption of fruit and vegetables following the Youth Farmers Market experience.

**Percentage of Kids Who Increased Willingness
to Try New Fruit and Veg Since the Youth Market**

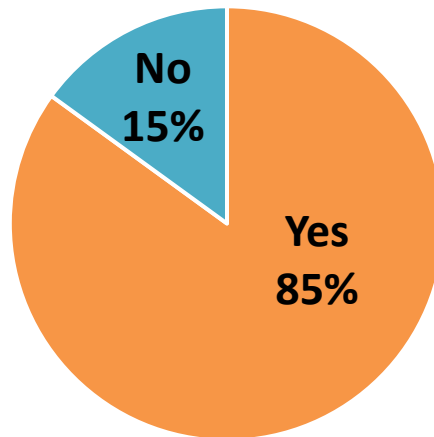


Figure 8. Parent response to the question of whether their kids are more willing to try new fruit and vegetables following the Youth Farmers Market experience.

Student Responses from Volunteers Ag Students from The Evergreen State College

Evergreen student responses provided interesting insight into their perception of the market and its value to Garfield Elementary School kids (Table 4).

Table 4. The Evergreen State College Ag Student Reflections on the Youth Farmers Market

I really liked the idea of working with kids & helping them with choosing food. It was super fun watching them run around & enjoying themselves.
I was struck by the fact that the next generation has more access to fresh produce than I did in my childhood. It made me feel very good and uplifted given the circumstances.
The visceral pleasure of all ages of students --and Garfield staff/faculty--in seeing and handling produce! The sharing and swapping that happened. The movement of boys to the largest of pumpkins that then broke their bags. The hesitancy of many young students to taste anything that was unfamiliar. The joy of Evergreen students as they figured out a range of ways to "engage" and be of service. Youth Farmers Markets needs to be a political movement based on a new government dept for "eating as an agricultural act."
What impacted me the most is seeing the kids reactions to being able to see where there food comes from and being able to buy it for them and their families. I noticed that when I was working the delicata squash cooking demo many kids made the assumption that they had to pay for it but it's just a sample. What I took away from this event is how big of an impact local food can have on these young kids.
The way the children were thankful for being able to get things for free and it was their choice which made them feel big
I loved being involved in educating the kids on how a farmers market works, and all the fresh produce we had available. The kids were incredibly kind and grateful, it was so nice to see all of them so excited over carrots and squash and all sorts of vegetables.

I noticed that the kids chose produce based on what they thought it should look like and what they see on tv. they ran to line up for the big orange bugs bunny carrots, but were unsure of the purple ones. almost every kid chose green pears over red pears despite them being the same variety, even after being encouraged to try the red. they were more likely to come back and try the “weird” things after seeing everything and getting the things they wanted most. I was struck by how generous they were as a whole- a lot of kids used their own coins to get things for friends who’d already spent theirs, and would talk each other into trying new things. they were also clearly excited to get the chance to pick their own produce and were very polite, even the extra loud enthusiastic individuals.

Publications, Handouts, Other Text & Web Products:

- A branded logo with fun matching images was developed and used on all our communication to make the entire experience recognizable and cohesive. Example attached.
- A tangible youth survey was created for our initial survey of the students on October 8th. Example attached.
- A Save-the-Date invitation was created to promote our final event at the Olympia Farmers Market on November 2nd. It was passed out to all students at the Youth Farmers Market on October 17th and handed out again to all students in October. Example attached.
- On October 24th two large photo gallery displays of the Youth Farmers Market were created in the hallways at Garfield Elementary. Photos of the gallery below.
- Recipes (kale Caesar, roasted squash) and vegetable info sheets ([Apple](#), [Kale](#), [Winter Squash](#)) were passed out to students at the Youth Farmers Market on October 17th and at the Olympia Farmers Market on November 2nd.

Outreach & Education Activities:

- An initial discussion in October 2024. Students shared perspectives on farmers markets. In this initial talk, 94/154 of the enrolled third, fourth and fifth graders participated. Of those, 73% of the students had been to a farmers market while 27% of the students had not.
- The Youth Farmers Market event held on October 17th reached all third, fourth and fifth grade students at Garfield Elementary.
- We went back into the classrooms in late October for an apple taste test and follow up classroom discussion with the students involved in the Youth Farmers Market. On this day we met with 140 students. Of those, 94% said they want to go to another farmers market again soon. In advance of this discussion, we created two large youth farmers market photo displays in the hallway at Garfield Elementary to remind students of the wonderful experience.
- On November 2nd, WSU Extension Thurston County SNAP-Ed/Ag team had a booth at the Olympia Farmers Market. We invited the 154 third, fourth and fifth graders from Garfield Elementary to join us at the market and they would receive \$15 in tokens to spend at the market. Forty-five families showed up to the market, which resulted in \$780 being spent by children at the market that day.

Impacts:

Short-Term:

- 154 children from Garfield Elementary School participated in the Youth Farmers Market. Each child “purchased” \$14 worth of seasonal local produce, and received a honey bear, and a reusable market tote bag to take home.

- Almost all the Garfield students that participated said that the produce they brought home was eaten raw or incorporated into their families' meals.
- The Garfield students were really excited about being able to shop for their own produce. When asked why they chose what they did, they all had answers, such as my mom really likes squash, or we needed vegetables for my lunch.
- Many of the Garfield students felt a sense of ownership about the produce that they bought. One girl kept asking her mother if "her" vegetables were included in what they were having for dinner that night.
- At the Youth Farmers Market, many of the children tried new vegetables, as we provided kale salad samples and roasted delicata squash samples. Several kids said that they "bought" squash after tasting the sample and liking it.
- 154 children from Garfield Elementary School learned about seasonal eating and the types of local produce available in our region from a pre-market classroom interaction, participating in the Youth Farmers Market, and an apple taste test.
- 45 Garfield Elementary students and their families paid a visit to the Olympia Farmers Market, where they each received \$15 in tokens that they got to spend at the market.
- The Youth Farmers Market and the Garfield Elementary School field day at the Olympia Farmers Market put nearly \$6,000 into the local ag economy.
- Seeing the beautiful rainbow of high-quality food produced by local farms was meaningful to the Garfield students, the Evergreen State College Ag students, the Garfield teachers, administrators and principal.
- After they had "shopped," the Garfield Elementary students sat together excitedly looking through their bags of vegetables like they were Halloween candy; showing off what they bought and eating the produce raw.

Intermediate-Term:

- Increased awareness, access, and desire to visit farmers markets from a new and underserved population after participating in our Youth Farmers Market and being incentivized to visit the Olympia Farmers Market.
- Kids continued to like seeing themselves reflected in the photos we hung up at Garfield Elementary School of their participation in the Youth Farmers Market.
- Kids at Garfield seemed more open to us and our message after participating in the Youth Farmers Market.
- When asked, 55 Garfield Elementary students said that they or their families cooked with the produce they took home.
- When asked, 52 Garfield Elementary students said that they or their families ate the produce they took home raw.
- Teachers seemed more enthusiastic about our curriculum and collaboration with us after the Youth Farmers Market.
- When asked, TESC Ag students said they felt really good about participating in such a joyful community event and had fun interacting with children at the local school.

- A farmer from the Olympia Farmers Market reached out to let us know that they really enjoyed seeing the Garfield students shopping, and that the students did a surprisingly great job figuring out what to buy.
- A farmer who provided food for the Youth Farmers Market said that she and her husband were really glad to have Thurston County Extension and SNAP-Ed provide produce for kids at a Title I school.

Long-Term:

- Garfield Elementary School wants to make the Youth Farmers Market an annual event; we held a second Youth Farmers Market there in the fall of 2025 with funding from an USDA Organic Research and Extension Initiative grant. The Olympia School District Superintendent asked about offering the event annually.
- While running the booth at the Olympia Farmers Market, we met representatives from two other school districts, who were interested in holding a youth farmers market at their schools.
- A board member from the Olympia Farmers Market said that they might be interested in sponsoring a youth farmers market.
- There is an outpouring of interest in the project; it seems highly possible that local funds or grant money could be raised to replicate the Youth Farmers Market in other regions.
- As part of our work on this BIOAg education grant, we will create a “how-to document” and a list of supplies needed, so that this project can be more easily replicated.
- We will identify the important elements needed to successfully undertake research on the topic of youth farmers markets.
- Many Garfield students and their parents expressed an increased appreciation for shopping at a farmers market and eating locally grown in-season food.
- Evergreen State College Ag students that participated in the Youth Farmers Market were so inspired by how much fun the kids had, that they are continuing to be involved in programming at Garfield Elementary School, and one was hired by SNAP-Ed as an assistant.
- Due to our hands-on work with Evergreen State College Ag students at the Youth Farmers Market, we were able to help one of the students secure a job at a local farm.
- The Olympia School District Superintendent was interested in expanding the youth market to other schools, while social media posts drew the attention of friends and parents from other school districts requesting a youth farmers market at their schools.

Additional funding applied for/secured:

WSU Thurston County has secured funding from an USDA OREI Grant, which will provide funds to hold one or more youth farmers market, at which buckwheat pancake mix developed by a team from WSU will be featured. Because there was such a positive reaction to the project, and an outpouring of interest, WSU plans to replicate the event in the future.

Graduate students funded:

N/A

Recommendations for future research:

For future research, it would be ideal to have more collaboration with teachers and teaching assistants before the initial discussions. If students were learning about currency, local food, or budgeting, this would be a great segway into the Youth Farmers Market. Having teachers discuss the project and get students excited for it ahead of time would increase overall morale and likely provide even more reliable data.

It would also be wise to have a research and analytical plan for the information once it's collected. Because our feedback was captured on paper, it was important to have a plan for it immediately.

References:

Dannefer, R., E. Bryan, A. Osborne, and R. Sacks. 2016. Evaluation of the farmers' markets for Kids programme. *Public Health Nutrition* 19(18): 3397-3405.

Dazeley, P. and C. Houston-Price. 2015. Exposure to foods' non-taste sensory properties. A nursery intervention to increase children's willingness to try fruit and vegetables. *Appetite* 84:1-6.

Evans, A. E., R. Jennings, A. W. Smiley, J. L. Medina, S. V. Sharma, R. Rutledge, M. H. Stigler, and D. M. Hoelscher. 2012. Introduction of farmstands in low-income communities increases fruit and vegetable consumption among community residents. *Health and Place* 18:1137-1143.

Williams, P. A., S. C. Cates, J. L. Blitsetin, J. Hersey, V. Gavor, M. Ball, K. Kosa, H. Wilson, S. Olson, A. Singh. 2014. Nutrition-Education Program Improves Preschoolers' At-Home Diet: A Group Randomized Trial. *Journal of the Academy of Nutrition and Dietetics*. 114(7):1001-1008.

Participant No. _____

Date _____

Pre-test Post-test



3rd to 5th Grade Food & Nutrition Survey

1 Have you ever been to a farmers' market?

- Yes
- No

2 How often do you go to the farmers' market?

- Weekly
- Monthly
- Occasionally
- Never

3 Do you buy fruits and vegetables at the farmers' market?

- Yes
- No
- Sometimes

4 Do you like going to the farmers' market?

- Yes (explain below)

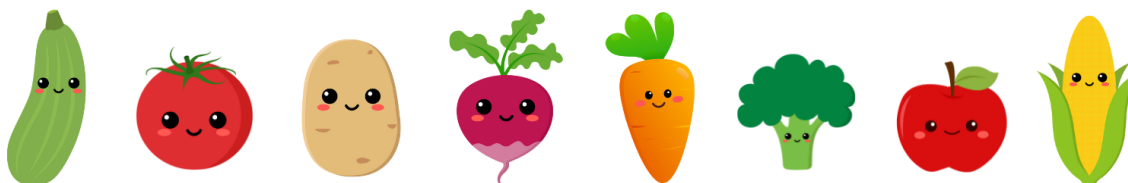
- No, the reason we don't attend the farmers market is (choose all that apply)

- Too expensive
- Too far away
- Doesn't sell food we want to buy
- Other

5 Where have you gone grocery shopping with your family?

Choose all that apply:

- Local farm
- Farmers' market
- Farm stand
- CSA (community support agriculture subscription)
- Food Coop
- Organic section of a grocery store



Survey that gauges the students' initial familiarity with farmers markets and local produce.

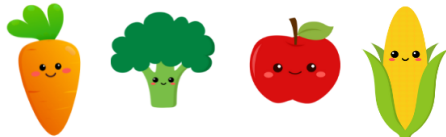


A Youth Farmers Market poster we made, which displays our branding.

YOU'RE INVITED

THIS Saturday, November 2nd
@ The Olympia Farmers Market

Garfield Students will receive \$15 in tokens to spend at the Olympia Farmers Market when they visit our booth (WSU Extension SNAP-Ed) on Saturday, November 2nd from 10am - 3pm



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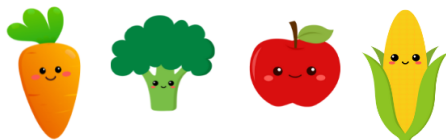
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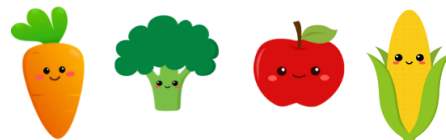
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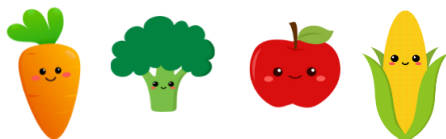
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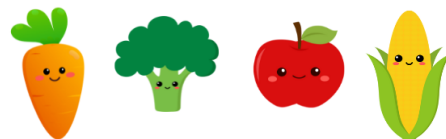
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Save-the-Date cards we made that display our branding.

Name:

Date:



3rd to 5th Grade Food & Nutrition Survey

1 Have you tried eating more fruits and vegetables since the youth farmers market at Garfield Elementary?

- Yes
 No

2 Did you try something new at the Youth Farmers Market?

- Yes
 No

3 Did your family use the produce from the Youth Farmers Market to cook a meal at home?

- Yes
 No

4 Did you enjoy participating in the Youth Farmers Market?

- Yes
 No

5 Have you been eating more vegetables since the Youth Farmer's Market?

- Yes
 No

6 We want to bring the Youth Farmers Market to other schools and kids. What was the most important thing about it to you?

I really like kale and food.

7 Write your favorite thing about the Youth Farmers Market:

The kale because it was yummy my dad made bacon with it.

Draw your favorite vegetable or fruit:



Food and Nutrition Survey about the Youth Farmers Market filled out by a student.

Food I wish for next time: Very Lar^g Bowls for Kale Salad. FOR FREE



A picture done by a 5th grader about her very enthusiastic support of kale salad.



Photos of the students at the Youth Farmers Market that we hung in the hallway at Garfield School. Photo by Amanda Leoni



Enjoying the bounty of the Youth Farmers Market. Photo by Annie Salafsky



Shopping at the Youth Farmers Market. Photo by Stephen Bramwell



Eating a red pepper like an apple at the Youth Farmers Market. Photo by Stephen Bramwell