Farm Field Trip Toolkit





Originally created by Willamette Farm and Food Coalition, 2016 with support from the Gray Family Foundation.

Updated and revised by Oregon Farm to School and School Garden Network, 2018 in partnership with Pineros y Campesinos Unidos del Noroeste with support from Gray Family Foundation.

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Overview

Taking a field trip to a local farm is a great way to help children understand where their food comes from, how it's grown and why a healthy local food system is important.

We've found that farm field trips are most successful when they include the following components:

<u>Helping task:</u> A chance for kids to actively help the farmer with some sort of seasonally appropriate farm task. Coordinate with the farmer in advance to find a task that will be helpful and that is age appropriate.

<u>Harvest opportunities</u>: Many kids have only seen fruits and vegetables in the grocery store. It's valuable for them to harvest fruits or vegetables directly from the plants they grow on.

<u>Tasting opportunities:</u> Tasting the produce that was harvested from the farm can take place during the farm tour, during the harvest opportunity, or back in the classroom after the farm visit.

<u>Education about farmworkers:</u> Help students understand the important role of farmworkers in our food system, by hearing directly from a farmworker who feels empowered and has volunteered to talk about his/her experience OR if that's not possibly then by learning about farmworkers' jobs on the farm, from someone who is familiar with that work.

Important Steps

1. Secure funding (if needed, 3-6 months before the trip)

- O You may need to fundraise to cover some of the costs for the field trip, such as bus transportation for students, field trip supplies, or compensating the farm for hosting students or providing food from the farm for snacks.
- There are a number of small grants available to teachers for field trips. See *Appendix 1* for a few funding resources.
- Apply in time to receive funding before your field trip, if possible. Because most of the funding sources in *Appendix 1* accept grant requests in the fall, they may provide funding for spring field trips.

2. Coordinate with the farm (2-4 months before the trip)

- o Find a host farm. The farm should be kid-friendly and safe, have restrooms and handwashing, a bus turnaround and should have general liability insurance and product liability insurance. See *Appendix 2* for a list of recommended farms in Oregon. Let the farmer know what kind of activities you are hoping for (see Overview) and how much time you'd like to spend at the farm. See *Appendix 3* for a sample schedule that works well for many farm field trips.
- o Every farm and farmer is unique. It is best to begin communicating with the farmer early about possible dates for field trips. The best dates for field trips in Oregon are from September to early November and then again from late April to June. Plan on contacting farms at least 2 months prior to your preferred field trip date. Find a time when the farmer will have a variety of crops available for students to see, harvest and taste.
- O Arrange with the farmer for any financial compensation for the trip. Some farmers may offer to host your class for free, but many will charge \$2-\$5/child, or you may want to offer that.

3. Coordinate lunches and buses (1-2 months before the trip)

Once the date and times for the field trip are set, order buses and sack lunches (if necessary) and send a note home to parents/guardians about the upcoming trip.

4. Recruit volunteers (2-3 weeks before the trip)

If you'd like extra support on the trip, request volunteers from your school community or elsewhere and request RSVPs for the trip. Provide a clear explanation of volunteer roles and expectations. As individuals sign up to volunteer, provide them with the district's volunteer background check form if required by your district, and a due date for returning the form (giving yourself time to submit forms to the district in advance).

5. Plan and deliver in-class lesson (1 week or a few days before the trip)

The field trip is a much richer experience when tied to the classroom curriculum. Put the field trip into context by spending some time before the trip talking about where food comes from and what your kids already know about farms. Use our Pre-trip Lesson on Where Food Comes From (*Appendix 4*) or create your own. To evaluate students' knowledge before activities use the Pre-assessment Survey (*Appendix 15*). State educational standards and optional extension activities and other concepts to explore are included in *Appendix 7 & 14*.

6. Create a schedule for the day with activities (1 week before the trip)

See *Appendix 3* for an example schedule that we've found to work well.

7. Confirm with the farmer and finalize plans (1 week before the trip)

When planning a trip to a farm, it's important to have clear communication with the farmer. Touch base with the farmer to be sure they remember you are coming and to determine or review the helping task, harvest opportunity, tasting opportunity, interaction with a farmworker, and the overall schedule for the day. Decide together, with the farm, whether your field trip is on, rain or shine or whether bad weather may mean cancelling. Determine who will decide, by when, and who else at the school, farm or bus service that could impact.

8. Confirm with volunteers (1 week before the trip)

Send an email reminder to volunteers and include volunteer roles, expectations, and the schedule of the day's events. Be sure all volunteers have completed their volunteer background check forms, if required by your district, and are cleared to volunteer.

9. Field trip prep (1-2 days before the trip)

Remind students to dress appropriately, confirm buses are reserved and sack lunches will be ready. Divide the class into groups (if needed) for field trip activities and check to be sure you have everything you'll need for the trip. You can use the Field Trip Prep Checklist (*Appendix 8*) to keep all this information organized.

10. Field trip (day of the trip)

Remember to take lots of pictures, paying attention to photo restrictions provided by the school. Record good quotes, be safe and have lots of fun. Use the Field Trip Info Sheet (Appendix 9) to keep track of this busy day.

11. Follow-up (1-3 weeks after the trip)

Send any Thank You notes (consider saving copies of good ones) and payment to the farmer, if applicable. You may want to dive a little deeper by providing our Post Field Trip Lesson (*Appendix 11*), Food System Poster (*Appendix 12*) and Handouts (*Appendix 13*) a couple of days after the field trip. And if you'd like to evaluate the students learning from the lessons and field trip, you can use the Post-assessment Survey (*Appendix 15*).

12. Reporting & evaluation (1-3 months after the trip)

If you received special funding to cover the cost of the trip, your funder may want to hear how it went. Remember to take pictures and notes on the trip and to gather quotes from the kids, which you can record on the Field Trip Info Sheet (*Appendix 9*). This will make reporting back to funders easier.

Appendix 1: Funding Sources in Oregon

Target Field Trip Grants https://corporate.target.com/corporate-responsibility/grants/field-trip-grants

SELCO Mini-grants for Educators www.selco.org/community-giving/mini-grants

Your school district's foundation, if you have one.

Bauman Farms

Location: 12989 Howell Prairie Rd NE Gervais, Oregon, OR 97026-7707

Contact: 503.792.3524 <u>baumans@baumanfarms.com</u> https://baumanfarms.com/
This is traditional medium-sized farm with a great farm store, very kid-friendly with an established field trip program. They can adapt their traditional "pumpkin patch" field trip program to include opportunities for the kids to visit the farm store and see what's grown on the farm, go on a hayride and see corn growing in the fields, watch a cider press in action, taste cider and speak with Jose their field manager, a farmworker who has been with the farm since he was a youth. They can take up to 4 groups (50 max per group) for a total of 200 kids on one day. After the other field trip activities and before buses arrive, make time in your schedule to have the students go through the farm store, in groups, so they can see what comes from the farm.

J.D. Ranch

Location: Sauvie Island

Contact: Jeff Kuhn, 503-396-0972

This is a relatively large farm which grows a variety of vegetable crops including chipping potatoes that are used to create Tim's Cascade and Kettle Brand potato chip. The farm raises cattle as well. They have an established field trip program which provides students with an opportunity to tour the farm, see farm equipment and how the farm produces a variety of crops and livestock. They can also provide an opportunity for students to learn about the important role of farmworkers on the farm.

Sauvie Island Center

Location: 13901 NW Howell Park Rd Portland, OR 97231 on Sauvie Island Contact: http://www.sauvieislandcenter.org/educators/schedule-a-field-trip/

Sarah Philips, Education Program Manager at 503-341-8627 or sarah@sauvieislandcenter.org. The Sauvie Island Center offers elementary school students a guided exploration of the Sauvie Island Organics farm and the surrounding natural area of Howell Territorial Park. Their small group, hands-on activities include: Compost/Soil Investigation and Seed Planting and Seed to Harvest: Students plant, tend and harvest vegetables from their own field.

Zenger Farm

Location: 11741 SE Foster Road Portland, OR 97266

Contact: https://zengerfarm.org/farm-field-trips/ fieldtrips@zengerfarm.org or 503-282-4245

The "Farm Tour" is a great introductory trip to Zenger Farm. It is a hands-on tour of the farm and wetland that connects people to food, environmentally friendly farming practices, and the wild and domesticated animals that call Zenger Farm home. On "Nutrition" field trips, students rotate through field, classroom, and cooking stations to harvest and prepare a fresh meal, discover how eating a rainbow of fruits and veggies can help our bodies, and practice creating nutrient-rich balanced snacks and meals.

For additional ideas, contact OFSSGN 541-344-4329 or info@oregonfarmtoschool.org

Appendix 3: Sample Schedule for a Farm Field Trip

8:30-9:00 Prep in classroom 9:00 Depart school for farm 9:30 or 9:45 Arrive at the farm

9:45-10:00 Welcome and ground rules with farmer

- watch where you step (stay on paths, not in the beds)
- don't harvest or taste food without permission
- don't touch equipment without permission

10:00-10:35 Split into two groups for first rotation

Group 1: Farm tour, taste food in the fields (arrange with farmer in advance) and plant parts scavenger hunt (*Appendix 10*)

Group 2: Helping task, talk with a farmworker, and harvest opportunity (arrange with farmer in advance)

10:35-11:15 Groups switch (pick a meeting spot) and second rotation

11:15-11:20 Groups meet near (pick a meeting spot)

11:20-11:30 Kids wash hands and prepare for lunch

11:30-12:00 Lunch at the farm

12:00-12:15 Reflection activity

12:15-12:30 Pack up and load bus

12:30 Leave farm and return to school

1:00 or 1:15 Arrive at school and go outside for a short recess

1:15-1:45 Write thank you notes to farm and have snack from the farm

Lesson: Where Food Comes From

- 1. Introduction: Tell class about the farm they will be visiting on their upcoming field trip.
- 2. Some food comes from gardens or is harvested from the wild:

Some food is harvested in the wild, such as fish or berries. Other food grows in gardens. Gardens are great; we can grow our own food and make yummy snacks out of it. Getting food from our garden is cheaper than buying produce and the food is much fresher! Talk about students' experience at their school garden or other gardens they've seen. Farms are like gardens but they are bigger and grow more food.

3. Almost everything else we eat comes from farms:

Can you think of something you eat that comes from a farm?

They might guess eggs. Yes, eggs come from chickens and chickens come from farms.

They might guess corn. Yes, corn grows on a farm.

What is something you eat that doesn't come from a farm?

For example, they might guess pizza. Actually, all the parts of pizza come from a farm. The crust is made from flour which is made from wheat which grows on a farm. The cheese is made from milk which comes from a cow, which comes from a farm. The tomato sauce comes from tomatoes, which grow on a farm. If there are other veggies on the pizza, they grew on a farm. If there is meat on the pizza, it came from an animal that lived on a farm.

They might guess chocolate:

Even chocolate comes from a farm. The cocoa pods grow on a tree that grows on a farm. Almost everything we eat comes from a farm!!

4. Let's talk about tropical foods!

*Tropical foods grow in the tropics and need warm weather all year long.*Show map of the world (*Appendix 5*) and point out the equator/tropical locations

What are some tropical foods? Foods that need warm weather all year?

For example: Pineapple (Costa Rica), Oranges (Florida), Bananas (Ecuador), Avocado (Mexico), mango, etc.

Is Oregon Tropical? Does it stay warm all year long?

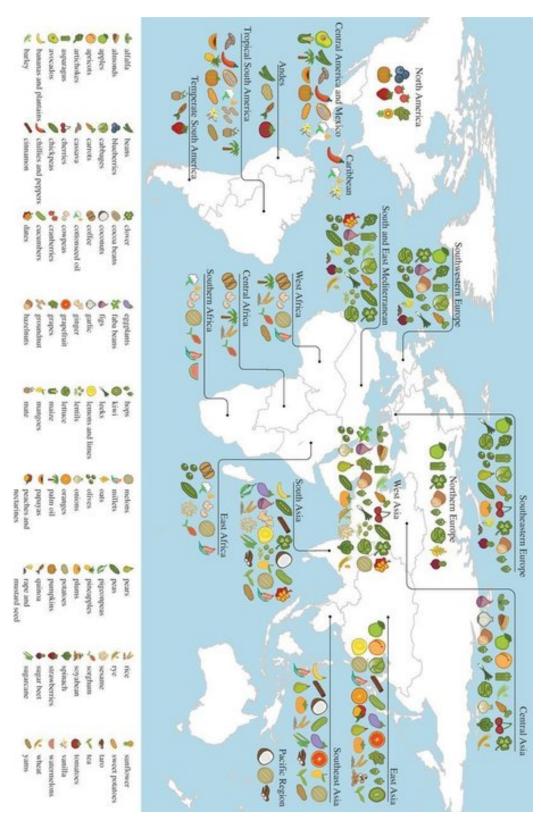
It does get warm here, but it doesn't stay warm all year long. Oregon has a temperate climate which means we can't grow tropical foods, but we can still grow a lot!

Q: What kinds of things grow in Oregon? What have you seen growing in a garden or on a farm? Blueberries, melons, strawberries, corn,...have them think of as many as they can. So many foods grow in Oregon!

Show the Grown in Oregon Map (*Appendix 6* and available at <u>www.oregonaitc.org</u>) and highlight crops that grow in your region

Optional: do a tasting of one or more foods from Oregon

Appendix 5: Map of Foods from Around the World



Appendix 6: Grown in Oregon Map



Common Core

5.SL.1 - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly. (Grade 5)

CCSS.MATH.CONTENT.5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step, real world problems.

LS2.A: Interdependent Relationships in Ecosystems

The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as "decomposers." Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. (5-LS2-1)

LS2.B: Cycles of Matter and Energy Transfer in Ecosystems - Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases, and water, from the environment, and release waste matter (gas, liquid, or solid) back.

5ESS2.D: Weather and Climate

Weather and climate are influenced by interactions involving sunlight, the ocean, the atmosphere, ice, landforms, and living things. These interactions vary with latitude, altitude, and local and regional geography, all of which can affect oceanic and atmospheric flow patterns. (MS-ESS2-6)

5ESS3.A: Natural Resources Humans depend on Earth's land, ocean, atmosphere, and biosphere for many different resources. Minerals, fresh water, and biosphere resources are limited, and many are not renewable or replaceable over human lifetimes. These resources are distributed unevenly around the planet as a result of past geologic processes. (MS-ESS3-1)

Next Generation Science Standards

Core Idea: ESS3.C: Human Impacts on Earth Systems

Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments. (5-ESS3-1)

Practice: 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment

Crosscutting Concept: Systems and System Models: A system can be described in terms of its components and their interactions. (5-ESS3-1)

LS1.A Structure and function: Organisms have both internal and external macroscopic structures that allow for growth, survival, behavior, and reproduction

Field Trip Prep Checklist

STUDENT FARM FIELD TRIP to: Date: Start time - end time:		
Packing List (what to bring):		
Teach	er/Field Trip Coordinator:	
	Name tags (for all adults and students) Field Trip Info Sheet(s) (Appendix 9) (enough for all adults) Printed copies or supplies for any educational activities	
	Camera	
	Trash bag (its respectful to take your garbage and recycling away) First aid kit with Epi pen	
	Directions to the farm Copies of Farm Scavenger Hunt (optional) (Appendix 10)	
	copies of Turn Seavenger Hunt (optional) (appendix 10)	
	Sturdy shoes or boots (no open toes) Rain coat Sun hat Additional layers Water bottle Bagged lunch (minimize waste) Journal/notepaper and pencil (for reflection activity, if planned)	
On the	day of the Farm to School field trip:	
	Students are assigned in different groups	
	Every student has a name tag	
	Every student has a lunch packed from home or from the cafeteria	
	Students are wearing farm-appropriate clothing (closed-toe shoes, raincoats, etc.)	
	Someone is assigned to take pictures	

Appendix 9: Field Trip Info Sheet

Field Trip Info Sheet

Farm:
Date/Time:
Address of the farm
Phone number for farm
Phone number for bus company
Number of kids on trip:
Names of any students with photo restrictions:
Allergies/health concerns:
Volunteers/Chaperones:
Activity schedule (with times for each activity):
Good quotes from the day:
Notes on day:

Appendix 10: Farm Scavenger Hunt

While we are walking around the farm today look for a...



FLOWER that we eat:

LEAF that we eat:

STEM that we eat:

ROOT that we eat:

FRUIT that we eat:

SEED that we eat:

While we are walking around the farm today look for a...



FLOWER that we eat:

LEAF that we eat:

STEM that we eat:

ROOT that we eat:

FRUIT that we eat:

SEED that we eat:

Appendix 11: Post-field Trip Lesson

Lesson: Food System

Introduce students to the food system, pointing to the images on the poster as you go. Let's talk about our food system (refer to Food System Poster (Appendix 12)) A food system is the process of how plants/animals on a farm become food on our plate; growing, processing, transporting, selling, and eating food.

- 1) Food is Grown and Harvested on the Farm (follow along on the diagram)
 - We know that almost everything we eat comes from a farm. On most farms one or two people can't do all of the work that needs to be done on the farm. They need help.
 - Farmworkers (sometimes called campesinos in Spanish) plant the seeds, which grow into plants.
 - Those plants are cared for by the farmworkers who work on the farm. The crops are watered and weeded and sometimes fertilized or sprayed with pesticides by the farmworkers. (Here, you can ask the students what they know about pesticides).
 - Then the crops are harvested by hand or with a machine.
- 2) Food is Processed and Packaged (follow along on the diagram)
 - The food may go to a food processor (where workers wash and cut and maybe cook or freeze the food)
- 3) Food is Distributed (follow along on the diagram)
 - Then to the distributor where it is sorted,
 - Then to a truck or train or boat where it travels to wherever it is going, sometimes far away.
 - *And then maybe another truck to the store,*
- 4) Food Gets to the Store and to the Shopper! (follow along on the diagram)
 - And then to the shopper and the eater.
- 5) OR food can go from the farmer to the eater directly.
 - Sometimes, people buy their food directly from local farmer's markets, local markets, or farm stands.

Then, review it with them and call on students to explain each part of the system.

The role of farmworkers and food processing workers

Be aware that there may be students in the room that have a personal connection to the experience of farmworkers and food processing workers, for example they may be children of farmworkers. Make sure that the discussion in the classroom is constructive and supportive and be mindful about how the conversation is going.

Let's learn more about the people who grow our food and prepare it for us.

Appendix 11: Post-field Trip Lesson (continued)

Most farmworkers in Oregon are Latino. Some farmworkers work in many different jobs over the year, including working in the fields, food processing plants, nurseries (these are places where all kinds of plants are grown, including flowers and trees), and planting trees.

A Day in the Life of a Farm Worker:

Provide the "A Day in the Life of a Farm Worker" handout (Appendix 13) and have students take turns reading aloud. Some students can read in English and others in Spanish and students who aren't reading can follow along in their language of choice.

Here's a story about someone who grows our food, a Latino farmworker:

Adrian works on a strawberry farm. He works for very low wages. He wakes up at 4am every morning to get ready to work on the farm. He gets dressed, brushes his teeth, and makes himself a lunch for the day – today, he is taking some leftover tamales. Soon, a friend of his named Erica who is also a farmworker arrives to pick him up and drive to the farm together. When they arrive, they see many other farmworkers who have also arrived to work. Adrian and Erica, along with all the other farmworkers, each choose a row of strawberry plants to begin picking. They each have to carry a large box tied around their waist and have to hunch over to pick the strawberries. Because its summer time, as the day goes on, it gets warmer. The farmworkers try to pick as many strawberries as they can, so they work all day from 5am until around 4pm or 5pm, or sometimes later. After a long day's work, Adrian and Erica are very tired, so they go home, take a shower, make some food for their families, and go to bed early so they are ready for work the next morning. While Adrian's job can be challenging he does enjoy working in the outdoors because it reminds him of his childhood when he lived in small farm.

A Day in the Life of a Food Processing Worker:

Here's a story about someone prepares food after it is harvested, a Latina Food Processing Worker:

Carina has been working at a food processing plant for five years. She works for very low wages. Right now, she is working during the afternoon shift, which is from 3pm until 11pm. During the morning, Carina spends her time doing anything she needs to do and spending some time with her family. At around 1pm, she makes herself some lunch and waits for her ride. She goes to work with a few other plant workers to save money on gas. Once they arrive at work, Carina and the other workers have to put on some hairnets, wash their hands, and put on some gloves to be safe. Then, they walk to a section of the processing plant to their work station. Carina works at the broccoli station. Her job is to grab big broccoli heads and drop them into a machine that chops them into smaller pieces. It is very hard work because she has to do this very quickly and she has to pick up the broccoli from a moving conveyer belt (maybe ask students if they know what this is) her hands begin to hurt after a while. Carina has to do this for eight hours and only gets two 15-minute breaks and a 30-minute lunch. When she's done with her shift she arrives home close to midnight. Carina's job is hard, but there are some parts of it she especially loves. She loves being with her co-workers. They come from the same background and have the same aspirations as her--to help their families succeed.

Appendix 11: Post-field Trip Lesson (continued)

Review after the sharing the stories:

- What is a farm worker? Who are they? What do they do? Where do they work?
- What do you think it is like to be a farmworker?
- Why is their job important? How would our food system work if there were no farmworkers or food processing workers?

Possible further discussion questions

- What do various farm workers wear to work? Explain that this varies by job and time of the year. Food processing jobs require different clothing than field work. Field work wear also varies by the time of the year, but generally farmworkers wear a lot of layers to protect themselves from pesticides and other objects that might be dangerous.
- Do you know anyone who has worked as a farmworker?
- What is the difference between a farmer and farmworker? One owns the farm, the other just works it. What about what they have in common? They both work the land.
- What do you have in common with these farm workers?
- How does this compare with your parents jobs?

Consider reading these books with your class:

Before We Eat: From Farm to Table Author: Pat Brisson, 2014.

Available for loan for free from Oregon Agriculture in the Classroom <u>oregonaitc.org</u> click on Free Loan Library

Esperanza Rising Author: Pam Muñoz Ryan, 2000

Appendix 11: Post-field Trip Lesson (continued)

Review the food system diagram again, looking at the other parts of the food system (distribution, trucks, store, etc.)

As we said earlier, food can either go on a long journey from the farm to the processor, to the distributor to the store, or food can go right from the farm to the eater.

Why eat local?

For kids who've had some exposure to these ideas already:

"Does anyone have any ideas about why it's good for our bodies, the environment and farmers to eat foods from farms nearby?" (Get reasons from kids and affirm good ideas.)
Buying food from local farms can be better for:

- 1. The environment
- 2. Our health
- 3. The farmers

Environment:

When food comes from far away it affects the environment.

Using a map show where some tropical foods come from. Point out how far these foods had to travel. When food travels that far it uses lots of fuel which can cause pollution and climate change.

Now let's think about how far food has to travel if we get it from Oregon. What are some foods that grow in Oregon? Using the same map show the short distance these foods had to travel. When food travels a shorter distance it uses less fuel, which is better for the environment.

Health:

As we just saw, food can come from very far away and take a long time to get to us or they can come from farms and gardens very close to us and get to us quickly.

Fruits and veggies taste better when they are ripe and picked and eaten right away. And they have more nutrients in them, when they are fresh, too, which is good for our bodies.

Farmers/Community:

Buying local foods can also help the farmers.

If we buy food that has travelled very far, some money goes to the distributors and truck drivers who brought it here, and some goes to the store where it will be sold. When we buy food from farms in our community, the money goes straight to the farm, where the food is grown! You can show food system diagram again here. A kid (on the poster) buys an apple at the store and it costs one dollar. 10 cents might go to packaging company where the apples are sorted and boxed, 10 cents to the warehouse company where the apples are stored, 10 cents to the people who figure out where the apples have to go, 10 cents to the trucking company that delivers them, and 10 cents to the store that sells them (show these steps on the food system poster). The farm is left with only 50 cents! If the kid buys an apple directly from the farm, then the whole \$1 goes to the farm, where the food is grown. Many farmers love their work. They work hard but feel connected to the land and their community.

Appendix 12: Food System Poster (for Post-Field Trip Lesson)



Appendix 13: Handout (for Post-Field Trip Lesson) front side in English

Adrian works on a strawberry farm. He works for very low wages. He wakes up at 4am every morning to get ready to work on the farm. He gets dressed, brushes his teeth, and makes himself a lunch for the day – today, he is taking some leftover tamales. Soon, a friend of his named Erica who is also a farmworker arrives to pick him up and drive to the farm together. When they arrive, they see many other farmworkers who have also arrived to work. Adrian and Erica, along with all the other farmworkers, each choose a row of strawberry plants to begin picking. They each have to carry a large box tied around their waist and have to hunch over to pick the strawberries. Because its summer time, as the day goes on, it



gets warmer. The farmworkers try to pick as many strawberries as they can, so they work all day from 5am until around 4pm or 5pm, or sometimes later. After a long day's work, Adrian and Erica are very tired, so they go home, take a shower, make some food for their families, and go to bed early so they are ready for work the next morning. While Adrian's job can be challenging he does enjoy working in the outdoors because it reminds him of his childhood when he lived in small farm.

Carina has been working at a food processing plant for five years. She works for very low wages. Right now, she is working during the afternoon shift, which is from 3pm until 11pm. During the morning, Carina spends her time doing anything she needs to do and spending some time with her family. At around 1pm, she makes herself some lunch and waits for her ride. She goes to work with a few other plant workers to save money on gas. Once they arrive at work, Carina and the other workers have to put on some hairnets, wash their hands, and put on some gloves to be safe. Then, they walk to a section of the processing plant to their work station. Carina works at the broccoli station. Her job is to grab big broccoli heads and drop them into a machine that chops them into smaller pieces. It is very hard work because she has to do this very quickly and she has to pick up the broccoli from a moving conveyer belt (maybe ask students if they know what this is) her hands begin to hurt after a while. Carina has to do this for eight hours and only gets two 15-minute breaks and a 30-minute lunch. When she's done with her shift she arrives home close to



midnight. Carina's job is hard, but there are some parts of it she especially loves. She loves being with her co-workers. They come from the same background and have the same aspirations as her--to help their families succeed.

Appendix 13: Handout (for Post-Field Trip Lesson) reserve side of handout in Spanish

Adrián trabaja en una finca de fresas. Gana muy poco por su trabajo. Se levanta a las 4am todas las mañanas a prepararse a ir trabajar en la finca. Se viste, se lava los dientes, y se prepara su comida para su día. Hoy lleva unos tamales que le sobraron del día anterior. Pronto, una amiga llamada Érica quien también es una campesina, llega a pasar por él y manejan juntos a la finca. Cuando llegan, miran muchos otros trabajadores quien también están ahí para trabajar. Adrian y Erica, junto con los demás campesinos, ahora escogen un surco de plantas de fresas para comenzar a piscar. Cada uno tiene que cargar una caja grande amarrada a su cintura y agacharse constantemente para piscar las fresas. Porque es



tiempo de verano, los días son largos y calurosos. Los trabajadores tratan de piscar lo más posible, entonces trabajan todo el día de 5am hasta como a las 4pm, o a veces más tarde. Después de un día largo de trabajo, Adrián y Erica están muy cansados. Se van a sus casas, se bañan, hacen de cenar para la familia, y se duermen temprano para estar listos de nuevo el próximo día. Aunque el trabajo de Adrian es dificil, le gusta mucho trabajar al aire libre porque le recuerda de su infancia cuando vivia en un pequeño rancho. f

Corina ha estado trabajando en una caneria por 5 años. Gana muy poco por su trabajo. Ahora está trabajando durante el turno de la tarde que corre de 3pm-11am. Durante la mañana, Corina hace todos sus quehaceres y trata de pasar un poco de tiempo con su familia. Como a la 1pm, prepare su comida y espera a su raite para ir a trabajar. Se va trabajar con otras compañeras para ahorrar dinero. Cuando llega a trabajar, Corina y sus compañeras tienen que lavarse las manos, ponerse su casco, guantes, y redecilla para estar seguras. Al terminar caminan a su área de trabajo. Corina trabaja en la estación que procesa el brócoli. Su trabajo consiste de agarrar las cabezas de brócoli y ponerlas en una máquina que las hace pedazos. Es un trabajo difícil porque tiene que hacerlo rápidamente mientras el brócoli corre por la banda. Sus manos le duelen a través del tiempo. Corina tiene que hacer este mismo paso por 8 horas y solamente recibí dos descansos de 15 minutos y 30 minutos para comer. Cuando termina su turno de trabajar, llega a su casa cercas de medianoche. El trabajo de Carina es dificil,



pero hay partes que si le gustan mucho. Le encanta estar en compañía de sus compañeras de trabajo. Vienen de lugares similares y tienen las mismas aspiraciones que ella--de sacar adelante a sus familias.

Appendix 14: Extension Activities and Other Concepts to Explore

Ouestions to answer:

- What math, science, reading and writing skills do farmers use?
- How did the farmers decide what to plant where?
- How do they know how much space the plants need?
- Can they plant the same things in the same place every year? If not, why not?
- How do the farmers know how much money to charge for their crops?
- What do plants need? How do nutrients get to plants? What does the air provide the plants, if air & water provide more nutrients than the soil?
- What does the farmer do with unsellable crop material?
- What is the influence of local climate on plants, ecosystems?

Data collection: Have students collect data while at the farm and then return to school and utilize for research reports and mathematics (area, graphing, number plots, word problems, money) Data they could collect includes:

- A map of farm with dimensions, including vegetable beds or fields
- Measuring activities: dimensions of plots; circumference of huge pumpkin, etc.
- List the different types of crops, amount of each the farm grows in pounds and dollars

Other concepts to explore

Vocabulary: supply & demand, agriculture, distributor, consumer, food processor, farm labor, temperate vs. tropical, climate, soil & water pH, acidic/basic, organic (general and government label guidelines), ecosystem, landforms, specific farm equipment names (beyond the obvious), crop rotation, winter vs summer crops, etc.

Activity: Plant Parts with Taste Testing

- a. Review 6 plant parts: roots, stems, leaves, flowers, fruits and seeds. Use labeled diagram of plant to identify and define each plant part and its function
- b. Play "Edible Plant Part Showdown"
- i. Group is divided in 2 and a volunteer is selected from each group to be blind folded.
- ii. An edible plant part is put on each plate and students are to taste and identify what is on their plate. I point is given to the student who can name what they are eating and another point is given to the student who can identify what part of the plant it is. All students receive taste test of the plant in question.
- iii. Blindfold and plate are moved down the line so each student has a chance to try a different plant

Activity: Interview a farmer or farmworker:

At the farm or in the classroom, interview a local farmer or farmworker and write a paragraph about a day in their life.

Appendix 15: Pre/Post Assessment Survey			
Name:	Date		
	Pre-test/Post-test		
1. Where does food come from?			
2. Circle the parts of pizza that come from a far	m.		
Vegetables on top			
Pepperoni on top			
Crust			
Cheese			
Sauce			
3. List as many foods as you can that grow in Ore	gon.		
4. Draw or write about who grows our food and h	ow it gets to us.		
5. Name some of the jobs that farmworkers do o	n farms.		

Appendix 15 (continued): Answer Key for Pre/Post Assessment Survey

1. Where does food come from? (a total of 2 possible points)

0 points

Everywhere/lots of places

The store/factory

Don't know

The world

1 point

your backyard

trees/leaves

the ground/seeds

the farmers market

2 points

farms (factory or organic)

gardens

rivers/the ocean

forests

2. Circle the parts of pizza that come from a farm

1 point for each circled topping and total number

Vegetables on top

Pepperoni on top

Crust

Cheese

Sauce

3. List as many foods as you can that grow in Oregon.

Give 1 point for each correct answer indicated here and total number

FRUITS VEGETABLES Spinach Artichoke Apple Squash Cantaloupe Sweet Potato **Asparagus** Cherry Beans Tomato Cranberry Beet Turnip Fig Broccoli FISH/MEATS Grape **Brussels Sprouts** Chicken Kiwi Cabbage Beef Melon Carrot Turkey Peach Cauliflower Deer/elk Pear Celery Wild birds Persimmon Chard Tuna Plum Corn Cod Watermelon Cucumber Trout Eggplant Crab Garlic Berries: Salmon Kale Blackberry Kohlrabi Blueberry Gooseberry Leek OTHER Huckleberry Milk/cheese Lettuce Loganberry Mushroom Buckwheat Marionberry Onion Barley Raspberry Pea Lentils

Parsnip Quinoa
NUTS Pepper Rye
Walnut Potato Wheat

Parsley

Strawberry

Filbert/Hazelnut Pumpkin Sunflower seed

Radish Basil

Rhubarb Rosemary
Rutabaga Peppermint

Oats

Appendix 15 (continued): Answer Key for Pre/Post Assessment Survey

4. Draw or write about who grows our food and how it gets to us.

Give one point for each answer below and total the number of points.

Farmworkers Food processing

Farmers/ Farm Ship/ Send

Gardeners Distribute/ Transport
Us! We do! My family Trucks/ Airplane/ Boat

Planting Warehouse

Watering Farmers Markets
Growing Grocery stores

Harvested/ Pick Food goes to schools
Packed in boxes Buy/ Sell/ Deliver

5. Name some of the jobs that farmworkers do on farms.

Give one point for each answer below and total the number of points.

Planting Packaging/ boxing
Growing Hoe ground/ soil

Weeding Collect
Pulling/ picking Compost

Digging Feed animals
Watering Milk animals
Harvesting/ cosechar (in Spanish) Gather hay

Processing Ride trucks/tractors

Canning Shear animals

Chopping/ cutting Let cows/ animals out

Carrying Tend to animals

Sorting/ organize/ stack Take care of plants

Clean/ wash (equipment/food)

Apply pesticides/ fertilizer

Stand/ work in the sun

Check food to see if ready

Thinning plants