



FARM TO SCHOOL

YOUTH LEADERSHIP CURRICULUM

11th & 12th Grades



INSTITUTE FOR
AGRICULTURE AND TRADE POLICY

Farm to School Youth Leadership Curriculum: 11th & 12 Grades

Authors:

Erin McKee VanSlooten, Institute for Agriculture and Trade Policy (IATP) and JoAnne Berkenkamp with Natasha Mortenson, Agriculture Education Instructor and FFA Advisor, Morris Area High School and Vanessa Herald, Great Lakes Region Farm to School Coordinator, University of Wisconsin – Madison’s Center for Integrated Agricultural Systems

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The Institute for Agriculture and Trade Policy works locally and globally at the intersection of policy and practice to ensure fair and sustainable food, farm and trade systems.

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TABLE OF CONTENTS

Acknowledgements

Introduction

Lesson 1: Getting to Know Farm to School

Instructor Guide, Lesson Summary, Activity List, Outcomes, Materials and Equipment, Additional Resources	L1- 4
Instructor Guide Activity Descriptions	L1- 7
Academic Standards Alignment Chart	L1- 10
Handout 1-1: Getting to Know Farm to School	L1- 12
Worksheet 1-1: Farm to School Introduction Video.....	L1- 14
Worksheet 1-2: A Farm to School Elevator Speech	L1- 15
Instructor Reference: Learning the lingo used in local food and Farm to School	L1- 16
Worksheet 1-3: Farm to School Lingo Scavenger Hunt.....	L1- 22
Worksheet 1-4: Brainstorming Your Farm to School Program	L1- 18
Instructor Reference: Farm to School Term Quizzes Answer Keys	L1- 30
Farm to School Food Production Terms Quiz	L1- 31
Farm to School Food Systems Terms Quiz.....	L1- 33
Farm to School Farm to School & Food Service Terms Quiz	L1- 35
Worksheet 1-5: Local Purchasing in Your Community (for optional additional activity)	L1- 37

Lesson 2: Getting to Know Your Local Food System

Instructor Guide, Lesson Summary, Activity List, Outcomes, Materials and Equipment, Additional Resources	L2- 4
Instructor Guide Activity Descriptions	L2- 7
Academic Standards Alignment Chart	L2- 11
Handout 2-1: Steps in the Food System.....	L2- 13
Instructor Reference: Handout 2-1 Answer Key	L2- 16
Worksheet 2-1: What's Local and When?.....	L2- 18
Worksheet 2-2: Hometown City Exercise.....	L2- 21
Instructor Reference: Worksheet 2-2 Answer Key	L2- 27
Worksheet 2-3: The Benefits and Challenges of Locally Grown Foods	L2- 30

Lesson 3: School Lunch: How Does It Really Work?

Instructor Guide, Lesson Summary, Activity List, Outcomes, Materials and Equipment, Additional Resources	L3- 4
Instructor Guide Activity Descriptions	L3- 7
Academic Standards Alignment Chart	L3- 12

Handout 3-1: The National School Lunch Program	L3- 13
Worksheet 3-1: What's On Your Tray?	L3- 15
Worksheet 3-2: An In-depth Look at School Lunch Origins	L3- 16
Worksheet 3-3: MyPlate Research	L3- 18
Worksheet 3-4: Farm to School Assessment	L3- 19

Lesson 4: Identify Opportunities and Make a Farm to School Plan

Instructor Guide, Lesson Summary, Activity List, Outcomes, Materials and Equipment, Additional Resources	L4- 4
Instructor Guide Activity Descriptions	L4- 7
Academic Standards Alignment Chart	L4- 10
Worksheet 4-1: Venn Diagram of Locally Grown Foods and School Meal Foods.....	L4- 12
Worksheet 4-2: Priority Local Food Item and Recipe Suggestions	L4- 13

Lesson 5: Communicating with Producers of Local Foods

Instructor Guide, Lesson Summary, Activity List, Outcomes, Materials and Equipment, Additional Resources	L5- 4
Instructor Guide Activity Descriptions	L5- 8
Academic Standards Alignment Chart	L5- 13
Worksheet 5-1: Finding Local Producers	L5- 15
Worksheet 5-2: Farm to School Producer Profile.....	L5- 17
Worksheet 5-3: What Information Will You Need from Potential Producers?	L5- 21
Worksheet 5-4: Producer Questionnaire	L5- 23
Worksheet 5-5: Farm to School E-mail Communications Template	L5- 27
Worksheet 5-6: Farm to School Phone Communications Template	L5- 29

Lesson 6: Increasing Student Awareness and Engagement in Farm to School

Instructor Guide, Lesson Summary, Activity List, Outcomes, Materials and Equipment, Additional Resources	L6- 4
Instructor Guide Activity Descriptions	L6- 7
Academic Standards Alignment Chart	L6- 12
Worksheet 6-1: Designing a Farm to School Logo and Slogan	L6- 13
Worksheet 6-2: Developing a Communications Plan: In Your School	L6- 15
Worksheet 6-3: Developing a Communications Plan: In Your Community	L6- 17
Worksheet 6-4: Taking Stock and Looking Forward	L6- 19
Handout 6-1: Ideas for In-school Communications.....	L6- 21
Handout 6-2: Ideas for External Community Engagement	L6- 23

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FARM TO SCHOOL YOUTH LEADERSHIP CURRICULUM

The high school level Farm to School Youth Leadership Curriculum is designed to empower youth, teach them about their local food system, engage them in meaningful, hands-on learning activities that also strengthen their school's Farm to School program and link them directly with farmers in their community. Implementation of the curriculum in a high school setting simultaneously gives students ownership and commitment to their school's Farm to School program, while reducing the amount of legwork and research required of teachers or food service staff to establish or expand a farm to school program.

The curriculum is comprised of 6 Lessons, each containing a lesson summary, a list of lesson activities, lesson outcomes, facilitator preparation notes, a materials and equipment list, additional resources, detailed facilitator descriptions of core activities, additional recommended activities, a chart of the lesson's alignment to national and Minnesota academic standards and worksheets and handouts for students. The lessons can be taught consecutively over a semester or facilitators can choose to use single lessons or activities as a complement to their classes. Activities are interdisciplinary, and may fit into classes focused on Agriculture, Family and Consumer Sciences, Social Studies, Economics, Health, Science or other subjects. The curriculum was developed with the 11th and 12th grade high school classroom setting in mind, but could also be used by educators teaching about Farm to School or local foods systems in other settings. Occasional connections with external farmers or food service professionals deeply enrich the lessons; when these connections are recommended, this is indicated in the introductory notes to give the facilitator time to prepare.

Farm to School programs link children to nearby small and mid-size farms and ranches that produce fresh, healthy and minimally processed foods that are served at their schools. Aimed at educating children about where and how their food is grown, strengthening local economies and supporting healthy eating habits, the Farm to School movement is rapidly growing.

Farm to School advances the following goals:

- Promote children's health by providing fresh, healthy and minimally processed foods in schools and supporting the development of healthy eating habits
- Enhance children's "food literacy" by familiarizing them with foods grown nearby, teaching them how and where their food is grown, building knowledge about how to prepare healthy foods, and educating them about the health, nutrition, social and environmental impacts of food choices
- Strengthen local economies by expanding markets for small and mid-size agricultural producers and food entrepreneurs whose products have typically been unavailable in school meal programs
- Build vibrant locally oriented food systems by fostering positive relationships and increase understanding of local food systems among children, farmers, parents, educators and school districts, healthcare professionals, and other community members
- Advance environmental stewardship, where practicable, by supporting more sustainable food production methods, reducing reliance on long distance transportation, and reducing food waste

We hope that this curriculum will be useful in engaging students to start or expand a Farm to School program, and we welcome feedback and stories of how it works for you!



Lesson 1

Getting to Know Farm to School



FARM TO SCHOOL

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LESSON SUMMARY

In this lesson students will be introduced to the concept of Farm to School as a foundation for the curriculum. Through vocabulary, reviewing different models of Farm to School and beginning to converse about food production and food systems, students will become comfortable with the basic concepts of Farm to School.

ACTIVITIES

1. An Introduction to Farm to School
2. Thinking on Your Feet: A Farm to School Elevator Speech
3. Learning the Lingo: Farm to School and Food System Vocabulary
4. Brainstorm Your Own Farm to School Program
Additional Activity: Local Purchasing Within Your Community
Additional Activity: Vocabulary Matching Cards

LESSON OUTCOMES

Students will be able to:

1. Define Farm to School
2. Summarize the benefits of Farm to School programs
3. Identify vocabulary related to Farm to School
4. Describe different models of Farm to School

MATERIALS AND EQUIPMENT

- Copies of Worksheets and Handouts for each student:
 - Worksheet 1-1: Farm to School Introduction Video
 - Worksheet 1-2: A Farm to School Elevator Speech
 - Worksheet 1-3: Farm to School Lingo Scavenger Hunt
 - Worksheet 1-4: Brainstorming Your Farm to School Program
 - Worksheet 1-5: Local Purchasing in Your Community (*optional additional activity*)
 - Handout 1-1: Getting to Know Farm to School
- Internet access or DVD version of one of the Farm to School informational videos
- Student journals. These can be bound notebooks or loose leaf paper held in folders or ring binders. Students will be collecting Worksheets and Handouts throughout this curriculum, and completing reflective writing tasks. A centralized

location to collect these items will help students

track the evolution of their project and will help instructors with evaluation.

ADDITIONAL RESOURCES

■ NATIONAL FARM TO SCHOOL NETWORK BROCHURE

- www.farmtoschool.org/files/publications_198.pdf

Summary brochure from the National Farm to School Network including participants, activities and benefits of Farm to School (pdf).

■ USDA FARM TO SCHOOL PAGE

- <http://www.fns.usda.gov/farmtoschool>

Links to fact sheets, Farm to School Census results, resources for schools, farmers, and communities, and more (website).

■ FARM TO SCHOOL BENEFITS: THE ARKANSAS GROW HEALTHY STUDY

- <http://cnn.k12.ar.us/programs/FarmToSchoolOrg/F2S-Benefits.aspx>
<http://growhealthy.uark.edu/Farm%20to%20School%20Benefits7-23-12.pdf>

A summary of National and Arkansas Farm to School benefits for food service, student wellness, and local producers (online and pdf).

■ AG IN THE CLASSROOM

- <http://www.agclassroom.org/>

Links to agriculture education resources, state by state agriculture fact sheets and information as well as a “Teen Scene” section aimed toward a youth audience (website).

■ NATIONAL AGRICULTURE LIBRARY GLOSSARY, UNITED STATE DEPARTMENT OF AGRICULTURE

- <http://agclass.nal.usda.gov/glossary.shtml>

This glossary is a collection of definitions of agricultural terms developed by the USDA (website).

■ GOOGLE SCHOLAR

- www.scholar.google.com

Provides a search of scholarly literature across many disciplines and sources, including theses, books, abstracts and articles (website).

■ FOODCORPS

- <https://foodcorps.org/about>

If there are FoodCorps programs in your state, they can be a great resource of information and support for gardens and other Farm to School activities.

LESSON INITIATION (10 MINUTES)

Gather students for discussion in the classroom. Ask students to quietly reflect on what they ate for lunch, or what they plan to eat for lunch. Challenge the students to think through the following questions:

- Who prepared the meal?
- Was there a main course, side dishes, a beverage?
- Have the students ever thought about where those foods came from?
- Where were the ingredients grown?

- How were the ingredients used in the foods they ate?

Ask students if they would like to share their thoughts. Call on a few students to briefly share their responses. Note that student responses will vary depending if they bring a lunch, go off campus for lunch or eat in the school cafeteria. Be sure to validate all student meal experiences, and affirm that no one is better or worse than another. Some students may be sensitive about their lunch options. Encourage students to keep open minds and practice their detective/research skills moving forward.

LESSON AND CURRICULUM INTRODUCTION (20-40 MINUTES)

➔ Handout 1-1: Getting to Know Farm to School

STEP 1: Give an overview of the curriculum to students.

For the next X weeks we are going to learn about Farm to School and become leaders within our school. We will learn about sourcing local food and think about how to apply what we learn here at our own school. Ask students if they have any questions.

STEP 2: Introduce Farm to School

Pass out Handout 1-1 and ask students to read the definitions and benefits of Farm to School. Explain to students that the actual wording of definitions may vary between states, school districts or programs but that the concept of “Farm to School” is generally the same and typically includes

1. purchasing of locally grown fruits, vegetables, grains, meats and other foods for school meals,

2. hands on activities like school gardens,
3. food system and nutrition education, and/or
4. community engagement in Farm to School activities. Ask students if they can think of anything like this going on at their school right now.

STEP 3: Explain different ways to define Farm to School and create your own Farm to School program.

STEP 4: Introduce students to the Farm to School Journal.

Students will keep their Handouts, Worksheets, notes and reflective writing in this journal. Explain to students that the activities in this curriculum build upon each other, and that they will be referring back to work they have done as the lessons continue.

ACTIVITY 1: AN INTRODUCTION TO FARM TO SCHOOL (15-45 MINUTES)

- ➔ Internet access or DVDs of Farm to School videos
- ➔ Videos chosen from the options outlined below
- ➔ Worksheet 1-1: Farm to School Video Introduction

Present one or two of the following videos to students. Before watching the video(s), ask students to read the instructions and questions on Worksheet 1-1 and to take notes while watching the video(s). After watching the video(s), lead the class in a discussion of the questions they took notes on. (The instructor may also choose to offer extra credit to students who choose to watch additional videos for more background information.)

- “NATIONAL FARM TO SCHOOL NETWORK” VIDEO (3:11 MINUTES)
 - <http://www.youtube.com/watch?v=ayvdX9s1mxw&feature=related>
- “FARM TO SCHOOL: GROWING OUR FUTURE” DOCUMENTARY FROM THE UNIVERSITY OF MINNESOTA EXTENSION
 - <http://www.extension.umn.edu/farm-to-school/documentary/> (30 minutes)
 - <http://www.extension.umn.edu/farm-to-school/documentary/12-minute-video.html> (12:00-minute version)

- “FARM TO SCHOOL IN NORTH CAROLINA: BRINGING FARMS AND SCHOOLS TOGETHER” (8:34 MINUTES)
 - <http://video.farmtoschool.org/video/66/farm-to-school-in-nc-bringing->
- “FARMER IN THE CLASSROOM - SAN DIEGO CA” (4:00 MINUTES)
 - <http://video.farmtoschool.org/video/74/farmer-in-the-classroom-san-di>
- “VERMONT FEED (FOOD EDUCATION EVERY DAY): CAFETERIA” (6:00 MINUTES)
 - <http://video.farmtoschool.org/video/82/vermont-feed-food-education-ev>

ACTIVITY 2: THINKING ON YOUR FEET: A FARM TO SCHOOL ELEVATOR SPEECH (20-45 MINUTES)

- ➔ Worksheets 1-2: A Farm to School Elevator Speech

In this activity, students will prepare an elevator speech to succinctly convey the basics of Farm to School. Students will use Worksheet 1-2 to help organize their thoughts.

Divide the students into groups of four (or pairs if your class is small) and present the following scenario to your class:

You enter a building in your community and get into the elevator with a person. You both push the button for the top floor, so you have about 30 to 40 seconds of time in the elevator together. Your shirt says “Farm to School in my School.” The person in the elevator

asks you what the shirt is for. In the next 5 minutes, work together in your group to create an “elevator speech” explaining what Farm to School is and its benefits. It should be short, but insightful!

Have each group read its elevator speech to the class when the time is up. Have students vote on their favorite, or post all the groups’ speeches in the room so students can learn them. Encourage the students to use their elevator speeches to spread the word on Farm to School to their families and to other students in your school. The

instructor can choose to offer extra credit to students who share their speech with three people outside your class and report their reactions.

The following example is only for the instructor's use. (Do not provide this particular example to the students, as it often decreases their own brainstorming ideas. If you want to give an example to the students, provide an elevator speech about technology, a sporting team, a student organization, etc.)

Farm to School at our high school includes providing fresh, locally grown fruits and vegetables for lunch and muffins made with locally grown grains for breakfast to our students. These foods are rich in nutrients and are very fresh because they haven't travelled far from the farm to our students' trays. Some students also work in our school's garden. This program is great for students and great for farmers in our area.

ACTIVITY 3: LEARNING THE LINGO USED IN LOCAL FOOD AND FARM TO SCHOOL (30-45 MINUTES)

➔ Worksheet 1-3: Farm to School Lingo Scavenger Hunt

Ask students to form small groups. Hand out the *Lingo Scavenger Hunt Worksheet (1-3)* and assign a section of terms to each group in your classroom.

Give the students 15 minutes to conduct internet research to find and write down definitions to their assigned section of terms on Worksheet 1-3 in their own words. Circulate among the class as the groups are working and offer assistance if a group is struggling to define a certain term. When the time is up, have each group share the definitions they wrote down for their assigned terms with the rest of the class. As students listen to their classmates' definitions, have them fill out the other groups' sections of Worksheet 1-3 with the rest of the definitions.

Allow time for facilitated class discussion where students can ask questions of each other, clarify definitions and/or share examples of where they have heard of these concepts

before. For each term, make sure the definition the group reports to the class includes all the key concepts you find in the Instructor Reference list of definitions and tell the class (including the group that was assigned the terms initially) about any important points they should add to their official Worksheet. Once it is filled out, encourage the students to keep the Worksheets handy for the remainder of the Farm to School project so they can refer to them as needed. These vocabulary terms will be used throughout the Lessons.

The Worksheets can be scored as an evaluation tool. Discuss with the students that understanding the terminology used in Farm to School is important for them to be able to speak knowledgeably, especially later in the curriculum when they will interact with farmers and school food service staff.

ACTIVITY 4: WHAT FARM TO SCHOOL ACTIVITIES COULD YOUR SCHOOL CONSIDER DOING? (20-45 MINUTES)

➔ Worksheet 1-4: Brainstorm Your Own Farm to School Program

In this activity students will investigate different kinds of Farm to School activities, and brainstorm what activities they would like to see at their school, taking into account their interests and their school community.

- Divide students into small groups, and give each group the *Brainstorming Your Farm to School Program Worksheet (1-4)*.

- Explain that Farm to School programs vary greatly based on the resources and interests within a school community, but Farm to School activities in schools usually fall into three major groups:
 - 1.) purchasing locally grown food for school meal programs,
 - 2.) hands-on educational activities and
 - 3.) nutrition and food system education.

- Have students review Handout 1-1 to remind themselves of the definition and goals of Farm to School. Ask the students to use the questions listed on their Worksheets to discuss with their groups which Farm to School goals they would most like to achieve at their school, and to think about what activities would achieve the desired benefits they identify. Keeping those Farm to School goals in mind, what activities would be part of their ideal Farm to School Program? What activities do they think would be possible, based on the infrastructure and resources at your particular school? Encourage students to think up activities in all three categories and to take notes on what they come up with.

Depending on your experience with Farm to School and/or your classroom resources, point students to www.farmtoschool.org to research different Farm to School programs throughout the country by clicking on a state

and selecting “Existing Programs” from the menu in each state. Ask students to use the questions listed on their Worksheets to have a discussion about the details of how different activities would work. ut the details of how different activities would work.

Examples for instructor use only:

Local Purchasing	Hands-On Learning	Curriculum
<ul style="list-style-type: none"> ■ Locally Grown Salad Bar Fixings ■ Harvest of the Month ■ Taste Testing 	<ul style="list-style-type: none"> ■ School Garden ■ Farm Tours ■ Field trips to farmers’ market ■ Chef classroom visits ■ Farmer classroom visits ■ Iron Chef contest ■ Taste tests ■ School composting 	<ul style="list-style-type: none"> ■ What nutrients are in what foods? ■ Writing recipes ■ Researching heirloom and heritage plants and livestock

ADDITIONAL ACTIVITY:

1. Local Purchasing Within Your Community

Where are locally grown foods available in your community? Possibilities include: grocery stores, farmers markets, your home garden, community gardens, other schools that have gardens or buy locally, restaurants, colleges, hospitals, etc.? Brainstorm a list of other institutions in your community that might be purchasing locally grown food. Institutions are organizations, such as other schools, colleges, hospitals, municipal buildings, prisons or large businesses that have a cafeteria for employees. These organizations host a lot of people every day and purchase large quantities of food. Conduct online research or make phone calls to learn if these institutions purchase food grown locally and gather details about how they do it. Write down the information you learn in your Farm to School Journal. The *Food Purchasing in Your Community Worksheet (1-5)* can be used for this additional activity.

2. Vocabulary Matching Cards

Research Farm to School programs in schools in your state or in nearby states using the National Farm to School website or your state’s Farm to School website. Compare and contrast different approaches to Farm to School and how they play out in the cafeteria, classroom and community.

NATIONAL COMMON CORE STANDARDS FOR ENGLISH LANGUAGE ARTS

CCSS.ELA-LITERACY.RH.11-12.4 Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10).

CCSS.ELA-LITERACY.RH.11-12.10 By the end of grade 12, read and comprehend history/social studies texts in the grades 11–CCR text complexity band independently and proficiently.

CCSS.ELA-LITERACY.SL.11-12.1B Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

CCSS.ELA-LITERACY.SL.11-12.3 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

CCSS.ELA-LITERACY.SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

THE COMMON CORE MATH STANDARDS

None identified

THE MN MATH STANDARDS (2007)

None identified

THE COMMON CORE SCIENCE STANDARDS

None identified

THE MN SCIENCE STANDARDS (2009)

9.4.4.1.1 Describe the social, economic and ecological risks and benefits of biotechnology in agriculture and medicine.

9.4.4.1.2 Describe the social, economic and ecological risks and benefits of changing a natural ecosystem as a result of human activity.

THE MN SOCIAL STUDIES STANDARDS (2011)

9.2.4.5.2 Describe the role of markets in the movement of resources, goods and services, and money in an economy.

9.3.3.5.1 Describe the patterns of human population distribution in the United States and major regions of the world.

9.3.2.4.3 Explain how technological and managerial changes associated with the third agricultural revolution, pioneered by Norman Bourlaug, have impacted regional patterns of crop and livestock production.

9.3.4.9.1 Analyze the interconnectedness of the environment and human activities (including the use of technology), and the impact of one upon the other.

FARM TO SCHOOL DEFINITION AND GOALS

The wording of the definition of “Farm to School” may vary between states, school districts or programs but the general concept remains the same. The National Farm to School Network defines Farm to School broadly as

“a program that connects schools (K-12) and local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing agriculture, health and nutrition education opportunities, and supporting local and regional farmers.”

The Institute for Agriculture and Trade Policy (IATP) specifies that Farm to School initiatives should link children to nearby **small and midsize farms and ranches that produce fresh, healthy and minimally processed foods.**

GOALS OF FARM TO SCHOOL

1. Promote students’ health by providing fresh, healthy and minimally processed foods in schools and supporting the development of healthy eating habits
2. Enhance students’ “food literacy” by familiarizing them with foods grown nearby, teaching them how and where their food is grown, building knowledge about how to prepare healthy foods, and educating them about the health, nutrition, social and environmental impacts of food choices
3. Strengthen local economies by expanding markets for small- and mid-sized agricultural producers and food entrepreneurs whose products have typically been unavailable in school meal programs
4. Build vibrant locally oriented food systems by fostering positive relationships and increased understanding of local food systems among students, farmers, parents, schools and other community members
5. Advance environmental stewardship by supporting environmentally sustainable food production methods, which include reducing reliance on long-distance transportation, reducing energy use for food processing and packaging, and reducing food waste

NOTE: Schools can use their own definition of “Farm to School,” but most Farm to School programs emphasize:

- Foods that come from nearby (How nearby depends on each school’s unique community and region, so each school must decide where “Farm to School foods” can come from—from within a certain number of miles? From within the school’s county? From within the state?)
- Whole foods or minimally processed foods that don’t include extra ingredients like preservatives or additives
- Environmentally sustainable foods where possible (see Goal #5 above for definition)

BENEFITS OF FARM TO SCHOOL

The National Farm to School Network (<http://www.farmentoschool.org/aboutus.php>) identifies the following benefits of Farm to School:

1. Strengthen children’s and communities’ knowledge about, and attitudes toward, agriculture, food, nutrition and the environment
2. Increase children’s participation in the school meals program and consumption of fruits and vegetables, thereby improving childhood nutrition, reducing hunger, and preventing obesity and obesity-related diseases
3. Benefit school food budgets, after start-up, if planning and menu choices are made consistent with seasonal availability of fresh and minimally processed whole foods
4. Support economic development across numerous sectors and promote job creation
5. Increase market opportunities for farmers, fishers, ranchers, food processors and food manufacturers
6. Decrease the distance between producers and consumers, thus promoting food security while reducing emissions of greenhouse gases and reliance on oil

NAME:

Instructions:

While watching the Farm to School videos, think about the following ideas and take notes. After watching the video, the class will discuss Farm to School concepts together.

What are the benefits of Farm to School?

Are there any Farm to School activities taking place at our school?

Are there Farm to School activities that you think our school could start or expand doing?

What would be the challenging aspects of Farm to School at our school? What barriers would we face?

NAME:

Instructions:

Imagine you enter a building in your community and get into the elevator with a person. You both push the button for the top floor, so you have about 30–40 seconds of time in the elevator together. Your shirt says “Farm to School in my School.” The person in the elevator asks you what the shirt is for.

In the next 5 minutes, create an “elevator speech” explaining what Farm to School is and its benefits. It should be short, but insightful!

Tips for preparing your elevator speech:

- 100 words long. Aim for a one minute or less presentation
- Questions to get you started:
 - What is Farm to School?
 - What are the benefits for the students, farmers and the local economy?
 - Why should people care?

Write notes about your elevator speech here, and then practice it when you are ready. Students will have a chance to share their speech with the class.

The vocabulary terms listed here include definitions for instructor use. Use this reference sheet to check the definitions that student groups share with the class, and make sure to update the class with any key information they have missed in their own research.

If your class does not have access to the internet, these definitions can be cut out and given to student groups to present to the class.

There is a quiz of these terms with an instructor answer key included in this curriculum. The instructor can choose to give one quiz covering all the terms, or can divide the terms into three parts for smaller quizzes.

The following terms are adapted from:

- *Local and Regional Food Systems: An index of initiatives and resources related to local and regional food systems*
 - <http://guides.library.cornell.edu/content.php?pid=84833&sid=645798>
Cornell University Library Guide
- *Farm to School in the Northeast Toolkit Glossary*
 - <http://farmtoschool.cce.cornell.edu/toolkits.html>
Cornell University, Farm to School Extension and Research Program
- *USDA National Agriculture Library: Glossary of Agricultural Terms*
 - <http://agclass.nal.usda.gov/glossary.shtml>
United State Department of Agriculture
- *USDA Farm to School Website*
 - <http://www.fns.usda.gov/cnd/f2s/default.htm>
United State Department of Agriculture
Farm to School Program

The following terms are adapted from:

- *Local and Regional Food Systems: An index of initiatives and resources related to local and regional food systems*
 - <http://guides.library.cornell.edu/content.php?pid=84833&sid=645798>
Cornell University Library Guide
- *Farm to School in the Northeast Toolkit Glossary*
 - <http://farmtoschool.cce.cornell.edu/toolkits.html>
Cornell University, Farm to School Extension and Research Program
- *USDA National Agriculture Library: Glossary of Agricultural Terms*
 - <http://agclass.nal.usda.gov/glossary.shtml>
United State Department of Agriculture
- *USDA Farm to School Website*
 - <http://www.fns.usda.gov/cnd/f2s/default.htm>
United State Department of Agriculture Farm to School Program

FOOD PRODUCTION DEFINITIONS

Food Production Term	Definition
Agriculture	The science, art, or practice of cultivating the soil, producing crops, and raising livestock, including the preparation and marketing of the resulting products.
Certified Organic	“Certified Organic” is an official, regulated United States Department of Agriculture designation that must be earned through an application and inspection process. It describes an agricultural production system, which avoids or largely excludes the use of synthetic fertilizers, pesticides, genetically engineered seeds, growth regulators, and livestock feed additives. Organically grown foods are often raised with agroecological methods such as crop rotation and the use of composted animal manure.
Food Safety Plan	A written guide created by a farmer outlining food safety practices on his or her farm, and serving as a guideline for employees of the farm. A Food Safety plan can help buyers understand the steps a farmer is taking to keep food safe.
Good Agricultural Practices (GAP)	Guidelines and methods for farmers, growers and food producers to produce the basic environmental and operational conditions necessary for the production of safe, wholesome food products. They involve practices like hand washing, clean spaces for handling produce and a plan to make sure all farm employees follow good practices.
Heirloom/Heritage	Heirloom crop varieties have been developed by farmers through years of cultivation, selection, and seed saving, and then passed down through generations. Generally speaking, <i>heirloom</i> refers to varieties of plants that have been in existence for a minimum of fifty years. <i>Heritage</i> refers to livestock breeds that have been traditionally raised in the past and passed through generations.
High Tunnels & Hoop Houses	High tunnels are temporary outdoor structures often built from metal piping and covered by materials like translucent plastic. In hoop houses, crops can be grown beyond the normal outdoor growing season due to the cover provided. Hoop houses protect crops from the weather (rain, wind, cool or warm temperatures) and, in some cases reduce pest pressures.
Integrated Pest Management (IPM)	Integrated Pest Management uses a systematic approach in which pest populations (insect and weed) are closely monitored to determine if and when action is required to control the pests. IPM uses biological, chemical, physical, environmental and/or genetic control methods in order to minimize synthetic pesticide use, reduce production costs, and protect the environment.
Pasture-based farming	Grass-based production relies on pasture or rangeland to supply the protein and energy requirements of livestock. Livestock graze on pasture grasses and other plants in the summer, and on dry forage, like hay, in the winter if they cannot be outside. The producer focuses on pasture plant and soil management, proper stocking density and rotational grazing. This diet is closer to animals’ natural diets. Animals raised this way are labeled “grass fed.”

Food Production Term	Definition
Sustainable Agriculture	Sustainable agriculture uses farming practices to produce food and fiber which enhance environmental quality and the natural resources on which farming depend. Sustainable agriculture supports sustained economic profitability, sustained quality and well-being of the environment, efficient use of natural resources, and the overall quality and availability of food and fiber. There is no official certification for sustainable agriculture, and it uses many different practices such as rotating crops, diversifying crop production and minimizing synthetic fertilizers and pesticides.
Vine-Ripened/ Tree-Ripened	Fruit that has been allowed to ripen on the vine or tree. Many fruits that are shipped long distances are picked while still unripe and firm, and later treated with ethylene gas at the point of distribution to “ripen” and soften them.
Wild Foods	Items gathered growing wild in fields, woods or other non-agricultural settings. These include ramps (wild leeks), dandelion greens, morel mushrooms, fiddlehead fern heads, wild asparagus, wild berries, and a variety of nuts, among others.

FOOD SYSTEMS DEFINITIONS

Food System Terms	Definition
Aggregation	The act of collecting agricultural products from multiple farmers at one, central location. Delivery to customers from an aggregation hub can be more efficient than point-to-point distribution from farms to customers.
Community Food Assessment (CFA)	A collaborative and participatory process that investigates a broad range of food issues and assets within a defined community. A CFA is undertaken in order to change the current systems to create a more food secure community.
Community Supported Agriculture (CSA)	Community supported agriculture is a mutually beneficial form of agriculture where growers and consumers provide mutual support and share the risks and benefits of food production. Members pledge in advance to cover the anticipated costs of the farm operation and farmer salary. In return, members receive ‘shares’ in the farm’s bounty throughout the growing season. In this model, the farmer is provided with seed money before the season begins, and is guaranteed a market for their product. Members receive fresh product throughout the season and build a relationship with their farmer.
Direct-to-Consumer Marketing	Methods used by growers to market and sell products directly to consumers, enabling them to compete outside of wholesale market channels. This includes farmers’ markets, farm stands, roadside stands, community-supported agriculture, pick-your-own farms, internet marketing and Farm to School.
Food Security	Food security is defined by the United States Department of Agriculture as, “Access by all people, at all times to sufficient food for an active and healthy life. Food security includes at a minimum: the ready availability of nutritionally adequate and safe foods, and an assured ability to acquire acceptable foods in socially acceptable ways.”

Local Food System	A local food system is a collaborative effort that integrates food production, processing, marketing, distribution and consumption within a given geographical area or community. Local food systems may be characterized by certain distribution channels such as farmer’s markets; community supported agriculture (CSA); farm-to-institution programs; community and home gardening; and gleaning programs. Often the goal of local food systems is to preserve local farmland, support local farmers, build community economic vitality, increase food security and offer the consumer the freshest food.
Farmers’ Market	A common facility or area where several farmers or growers gather on a regular, recurring basis to sell a variety of fresh fruits, vegetables and other locally-grown farm products directly to consumers.
Food Desert	Geographic areas that lack convenient and affordable access to a range of healthy foods, including fruits, vegetables, whole grains, and high quality sources of protein.
Food Forager	A person hired by a food service operation in a K-12 school district, or more commonly by a college dining service, whose responsibility it is to find and keep in regular communication with local farmers. This person may also keep records of available local products, consult with the food service director on the district’s weekly menu needs and facilitate the ordering and delivery process. Alternately, outside of the farm to school model, a forager is also someone who finds and harvests wild foods.
Food Miles	The total distance a food item travels from where it is grown or raised to where it is ultimately purchased by the consumer or end-user.
Food System	A food system includes all of the interdependent processes that work together to provide food. This includes the growing, harvesting, storing, transporting, processing, packaging, marketing, retailing, and consuming of food products. The term may also include “waste management” activities like composting or landfilling food scraps. Some or all of the steps in the food system may take place near the consumer, or they may be part of the global or regional system instead.
Local Food/Locally Grown Food	Food and other agricultural products that are produced, processed, and sold within a certain region, whether defined by distance, state border, or cultural boundaries. There is no official definition of ‘local’ when it comes to food, and many institutions have created their own. For example, a rural school that is surrounded by a lot of different farms in the same county may define ‘local’ as product grown within their county. However, a very urban school that is not near any farms may define “local” more broadly. In general, food defined as local is usually grown within a specific, pre-defined geographic area such as a county, a state a region or specific mile radius of a the eating community.
Supply Chain	The network of farms, processors, distributors and others that produce agricultural products and deliver them to the marketplace. This includes the farmers that produce raw food materials, the processors who wash and pack it, the distributors who deliver it and the retailers that offer finished products to consumers. Economic value is added through each stage of the chain.
Surplus	Extra agricultural product that remains unsold.
Value-Added Product	A raw agricultural product that has been modified or enhanced to add value. Examples include fruits made into pies or jams, meats made into jerky, and tomatoes and peppers made into salsa.

FARM TO SCHOOL & FOOD SERVICE DEFINITIONS

Farm to School and Food Service Terms	Definition
Bids or Bidding Process	Purchase of food by schools involves a bidding process where a food service director will request quotes from several suppliers or farmers. Food service directors must purchase the product that meets their requirements at the lowest price, and must make sure that enough vendors and farmers can submit a bid if they want to.
Distributor/Distribution	A distributor is a business or individual that purchases products from multiple farmers, collects it in one place, markets and sells the product and then delivers it to multiple customers. A distributor is often a private business, but it can also be a cooperative or food hub. Distribution is the act of aggregating and delivering food products to multiple purchasers.
Farm to School	The term Farm to School is generally understood to include efforts that connect schools with local or regional farmers in order to serve local or regionally produced foods in school cafeterias. USDA considers farm to school to be inclusive of many types of producers, such as farmers, ranchers, and fishermen, as well as many types of food businesses, including food processors, manufacturers, distributors and other value-added operations. In addition to procurement activities, food, agriculture and nutrition-based educational efforts that span a host of hands-on experiential activities, such as school gardens, field trips to local farms, and cooking classes, are also included in the concept of farm to school. Standards-based curriculum centered on food, agriculture, and/or nutrition is often integrated as well.
Food Processing	The stage in the food system where food is altered from its original state by processes such as cutting, freezing, boiling, canning, etc. For example, a processing plant may receive apples to process into applesauce or apple juice. A minimally processed product will have much of its inherent nature, such as nutrients or fiber, remaining at the end of the process.
Food Service Director	Food Service Directors (FSD) are responsible for the daily operations of school nutrition programs, like school lunches and school breakfasts. A FSD usually has many responsibilities including overseeing all kitchen staff, purchasing food, maintaining budgets and making sure schools comply with the requirements of the National School Lunch Program.
Food Service Management Company	A Food Service Management Company (FSMC) is an outside business or nonprofit organization that is contracted by a school to manage any aspect of the school food service.
National School Lunch Program	The National School Lunch Program (NSLP) is a federally managed meal program operating in public and nonprofit private schools and residential child care institutions. It provides nutritionally balanced, low-cost or free lunches to children each school day. The program was established under the National School Lunch Act, signed by President Harry Truman in 1946. In 1998, Congress expanded the National School Lunch Program to include reimbursement for snacks served to children in after school educational and enrichment programs to include children through 18 years of age. The Food and Nutrition Services of the United State Department of Agriculture administers the program at the Federal level. At the state level, the program is administered by state agencies, in agreements with school food authorities.

Prime Vendor	A prime vendor is a distributor that a school uses to provide many of the products needed to operate a school cafeteria. This includes food items like meats and canned fruits, but also non-food supplies like paper towels or trays for serving meals on the lunch line.
Procurement	Procurement refers to the acquisition of food that will be served in the school cafeteria at the best possible cost; in the right quantity and quality; and in the right time and place. Procurement of food by schools often involves a bidding process where a food service director will request quotes from several suppliers or farmers.
Produce Distributor	A distributor, usually local or regional, who focuses only on distributing fresh fruits and vegetables. These products are different than other products because they have a shorter shelf life.
Transportation	Transportation is the important step of moving products through the food system. Transportation can occur by truck, train, barge or airplane and carries food between the farm, storage facility, processing facility and the marketplace.

NAME:

Working in a small group or a pair, conduct internet research and then define the following terms in your own words. Use pencil so you will be able make changes once the class goes over the definitions together. Keep this completed worksheet for reference during the rest of your work on Farm to School.

FARM TO SCHOOL FOOD PRODUCTION TERMS

Food Production Term	Definition
Agriculture	
Certified Organic	
Food Safety Plan	
Good Agricultural Practices (GAP)	

Food Production Term

Definition

Heirloom/Heritage

High Tunnels & Hoop Houses

Integrated Pest Management

Pasture-based Farming

Sustainable Agriculture

Vine Ripened/Tree Ripened

Wild Foods

FARM TO SCHOOL FOOD SYSTEMS TERMS

Food System Terms	Definition
Aggregation	
Community Food Assessment (CFA)	
Community Supported Agriculture (CSA)	
Direct Marketing	
Food Security	
Local Food System	
Farmers Market	

Food System Terms

Definition

Food Desert

Food Forager

Food System

Local Food/Locally Grown

Supply Chain

Surplus

Value-Added Product

FARM TO SCHOOL FOOD SERVICE TERMS

Farm to School Food Service Terms	Definition
Bids or Bidding Process	
Distributor/Distribution	
Farm to School	
Food Processing	
Food Service Director	
Food Service Management Company	

**Farm to School Food
Service Terms**

Definition

National School Lunch
Program

Prime Vendor

Procurement

Produce Distributor

Transportation

NAME:

Instructions:

In this activity you will learn about different kinds of Farm to School activities. First, use the discussion questions below to identify your Farm to School goals. Then brainstorm with your group to identify different Farm to School activities you would like to establish within your school and take notes on your ideas for each category of activity.

GROUP DISCUSSION:

Review Handout 1-1 to remind yourself of the definition and goals of Farm to School. Discuss with your group:

- Which Farm to School goals would you most like to achieve at your school? What activities would achieve the benefits you want to see?

- Keeping those Farm to School goals in mind, what types of activities would be part of your ideal Farm to School Program?
- What activities do you think would be possible, based on the infrastructure and resources at your particular school?

LIST POTENTIAL ACTIVITIES:

Farm to School activities in schools usually fall into three major groups:

1. Cafeteria: purchasing locally grown food for school meal programs
2. Classroom: hands-on educational activities
3. Community: nutrition and food system education

Farm to School programs vary greatly based on the resources and interests within a school community.

Use what you learned in your group discussion to make a list of potential Farm to School activities you would like to see at your school. Try to think up activities to write in all three categories on the other side of this worksheet.*

For each activity you list, talk about the following questions with your group and take notes on important details:

- Why do we think it would be good for our school?
- Who would be involved in making this activity happen?
- When would this activity take place?
- How would we make this activity happen?
- What barriers or challenges could stand in the way?
- What other information would we need to design this type of Farm to School activity?

- Who else would we need to talk to (school food service, facilities managers, students, teachers, parents etc.)?

*If you have time and internet access, you may want to conduct online research about different Farm to School Activities for examples. Visit www.farmtoschool.org and research different Farm to School programs throughout the country by clicking on a state and selecting “Existing Programs” from the menu in each state. Look through the variety of programs and activities listed and write down the ones you like best and that may fit best at your school.

Local Purchasing	Hands-On Learning	Curriculum
<p><i>Example: Local fruit or vegetable salad bar</i></p>	<p><i>Example: School Garden Farm Tours</i></p>	<p><i>Example: What nutrients are in what foods?</i></p>

FARM TO SCHOOL FOOD PRODUCTION TERMS QUIZ

1. I. Sustainable Agriculture
2. D. Good Agricultural Practices (GAP)
3. A. Agriculture
4. E. Heirloom/Heritage
5. K. Wild Foods
6. F. High Tunnels & Hoop Houses
7. J. Vine-Ripened/Tree-Ripened
8. H. Pasture-based farming
9. C. Food Safety Plan
10. B. Certified Organic
11. G. Integrated Pest Management (IPM)

FARM TO SCHOOL FOOD SYSTEMS TERMS QUIZ

1. C. Community Supported Agriculture (CSA)
2. F. Food Desert
3. O. Value-Added Product
4. G. Food Forager
5. D. Direct-to-Consumer Marketing
6. I. Food Security
7. K. Local Food / Locally Grown Food
8. M. Supply Chain
9. E. Farmers' Market.
10. A. Aggregation
11. H. Food Miles
12. N. Surplus
13. B. Community Food Assessment (CFA)
14. L. Local Food System
15. J. Food System

FARM TO SCHOOL FARM TO SCHOOL & FOOD SERVICE TERMS QUIZ

1. H. Prime Vendor
2. B. Distributor / Distribution
3. E. Food Service Director
4. G. National School Lunch Program
5. J. Produce Distributor
6. D. Food Processing
7. K. Transportation
8. F. Food Service Management Company
9. C. Farm to School
10. I. Procurement
11. A. Bids or Bidding Process

NAME:

Instructions: Match the following terms to the definition description by putting the corresponding letter in the blanks provided.

- A. Agriculture
- B. Certified Organic
- C. Food Safety Plan
- D. Good Agricultural Practices (GAP)
- E. Heirloom/Heritage
- F. High Tunnels & Hoop Houses
- G. Integrated Pest Management (IPM)
- H. Pasture-based farming
- I. Sustainable Agriculture
- J. Vine-Ripened/Tree-Ripened
- K. Wild Foods

- _____ 1. Uses farming practices to produce food and fiber which enhance environmental quality and the natural resources on which farming depend. Supports sustained economic profitability, sustained quality and well-being of the environment, efficient use of natural resources, and the overall quality and availability of food and fiber. There is no official certification, and it uses many different practices such as rotating crops, diversifying crop production and minimizing synthetic fertilizers and pesticides.
- _____ 2. Guidelines and methods for farmers, growers and food producers to produce the basic environmental and operational conditions necessary for the production of safe, wholesome food products. They involve practices like hand washing, clean spaces for handling produce and a plan to make sure all farm employees follow good practices.
- _____ 3. The science, art, or practice of cultivating the soil, producing crops, and raising livestock, including the preparation and marketing of the resulting products.
- _____ 4. These crop varieties have been developed by farmers through years of cultivation, selection, and seed saving, and then passed down through generations. Refers to varieties of plants that have been in existence for a minimum of fifty years or livestock breeds that have been traditionally raised in the past and passed through generations.
- _____ 5. Items gathered growing wild in fields, woods or other non-agricultural settings. These include ramps (wild leeks), dandelion greens, morel mushrooms, fiddlehead fern heads, wild asparagus, wild berries, and a variety of nuts, among others.
- _____ 6. Temporary outdoor structures often built from metal piping and covered by materials like translucent plastic. Using them, crops can be grown beyond the

normal outdoor growing season due to the cover provided. They protect crops from the weather (rain, wind, cool or warm temperatures) and, in some cases reduce pest pressures.

- _____ 7. Fruit that has been allowed to ripen on the vine or tree. Many fruits that are shipped long distances are picked while still unripe and firm, and later treated with ethylene gas at the point of distribution to “ripen” and soften them.
- _____ 8. Relies on pasture or rangeland to supply the protein and energy requirements of livestock. Livestock graze on pasture grasses and other plants in the summer, and on dry forage, like hay, in the winter if they cannot be outside. The producer focuses on pasture plant and soil management, proper stocking density and rotational grazing. This diet is closer to animals’ natural diets. Animals raised this way are labeled “grass fed.”
- _____ 9. A written guide created by a farmer outlining food safety practices on his or her farm, and serving as a guideline for employees of the farm. These can help buyers understand the steps a farmer is taking to keep food safe.

- _____ 10. An official, regulated United States Department of Agriculture designation that must be earned through an application and inspection process. It describes an agricultural production system, which avoids or largely excludes the use of synthetic fertilizers, pesticides, genetically engineered seeds, growth regulators, and livestock feed additives. These foods are often raised with agroecological methods such as crop rotation and the use of composted animal manure.
- _____ 11. A systematic approach in which pest populations (insect and weed) are closely monitored to determine if and when action is required to control the pests. Uses biological, chemical, physical, environmental and/or genetic control methods in order to minimize synthetic pesticide use, reduce production costs, and protect the environment.

NAME: _____

Instructions: Match the following terms to the definition description by putting the corresponding letter in the blanks provided.

- | | |
|--|------------------------------------|
| A. Aggregation | I. Food Security |
| B. Community Food Assessment (CFA) | J. Food System |
| C. Community Supported Agriculture (CSA) | K. Local Food / Locally Grown Food |
| D. Direct-to-Consumer Marketing | L. Local Food System |
| E. Farmers' Market | M. Supply Chain |
| F. Food Desert | N. Surplus |
| G. Food Forager | O. Value-Added Product |
| H. Food Miles | |

- _____ 1. A mutually beneficial form of agriculture where growers and consumers provide mutual support and share the risks and benefits of food production. Members pledge in advance to cover the anticipated costs of the farm operation and farmer salary. In return, members receive 'shares' in the farm's bounty throughout the growing season. In this model, the farmer is provided with seed money before the season begins, and is guaranteed a market for their product. Members receive fresh product throughout the season and build a relationship with their farmer.
- _____ 2. Geographic areas that lack convenient and affordable access to a range of healthy foods, including fruits, vegetables, whole grains, and high quality sources of protein.

- _____ 3. A raw agricultural product that has been modified or enhanced to add value. Examples include fruits made into pies or jams, meats made into jerky, and tomatoes and peppers made into salsa.
- _____ 4. A person hired by a food service operation in a K-12 school district, or more commonly by a college dining service, whose responsibility it is to find and keep in regular communication with local farmers. This person may also keep records of available local products, consult with the food service director on the district's weekly menu needs and facilitates the ordering and delivery process. Alternately, outside of the farm to school model, also someone who finds and harvests wild foods.

- _____ 5. Methods used by growers to market and sell products directly to consumers, enabling them to compete outside of wholesale market channels. This includes farmers' markets, farm stands, roadside stands, community-supported agriculture, pick-your-own farms, internet marketing and Farm to School.
- _____ 6. Defined by the United States Department of Agriculture as, "Access by all people, at all times to sufficient food for an active and healthy life. Includes at a minimum: the ready availability of nutritionally adequate and safe foods, and an assured ability to acquire acceptable foods in socially acceptable ways."
- _____ 7. Food and other agricultural products that are produced, processed, and sold within a certain region, whether defined by distance, state border, or cultural boundaries. In general, food defined this way is usually grown within a specific, pre-defined geographic area such as a county, a state a region or specific mile radius of a the eating community.
- _____ 8. The network of farms, processors, distributors and others that produces agricultural products and delivers them to the marketplace. This includes the farmers that produce raw materials, the processors who wash and pack it, the distributors who deliver it and the retailers that offer finished products to consumers. Economic value is added through each stage of the chain.
- _____ 9. A common facility or area where several farmers or growers gather on a regular, recurring basis to sell a variety of fresh fruits, vegetables and other locally-grown farm products directly to consumers.
- _____ 10. The act of collecting agricultural products from multiple farmers at one, central location. Delivery to customers from a hub where this takes place can be more efficient than point-to-point distribution from farms to customers.
- _____ 11. The total distance a food item travels from where it is grown or raised to where it is ultimately purchased by the consumer or end-user.
- _____ 12. Extra agricultural product that remains unsold.
- _____ 13. A collaborative and participatory process that investigates a broad range of food issues and assets within a defined community. Undertaken in order to change the current systems to create a more food secure community.
- _____ 14. A collaborative effort that integrates food production, processing, marketing, distribution and consumption within a given geographical area or community. May be characterized by certain distribution channels such as farmer's markets; community supported agriculture (CSA); farm-to-institution programs; community and home gardening; and gleaning programs. Often the goal is to preserve local farmland, support local farmers, build community economic vitality, increase food security and offer the consumer the freshest food.
- _____ 15. Includes all of the interdependent processes that work together to provide food. This includes the growing, harvesting, storing, transporting, processing, packaging, marketing, retailing, and consuming of food products. The term may also include "waste management" activities like composting or landfilling food scraps. Some or all of these steps may take place near the consumer, or they may be part of the global or regional system instead.

NAME:

Instructions: Match the following terms to the definition description by putting the corresponding letter in the blanks provided.

- | | |
|------------------------------------|----------------------------------|
| A. Bids or Bidding Process | G. National School Lunch Program |
| B. Distributor / Distribution | H. Prime Vendor |
| C. Farm to School | I. Procurement |
| D. Food Processing | J. Produce Distributor |
| E. Food Service Director | K. Transportation |
| F. Food Service Management Company | |

- | | |
|--|---|
| _____ 1. A distributor that a school uses to provide many of the products needed to operate a school cafeteria. This includes food items like meats and canned fruits, but also non-food supplies like paper towels or trays for serving meals on the lunch line. | _____ 4. A federally managed meal program operating in public and nonprofit private schools and residential child care institutions. It provides nutritionally balanced, low-cost or free lunches to children each school day. The program was established in 1946. In 1998, Congress expanded the program to include reimbursement for snacks served to children in after school educational and enrichment programs to include children through 18 years of age. The Food and Nutrition Services of the United State Department of Agriculture administers the program at the Federal level. At the state level, the program is administered by state education agencies, in agreements with school food authorities. |
| _____ 2. A business or individual who purchases products from multiple farmers, collects it in one place, markets and sells the product and then delivers it to multiple customers. Often a private business, but it can also be a cooperative or food hub. The act of aggregating and delivering food products to multiple purchasers. | _____ 5. Usually local or regional, who focuses only on fresh fruits and vegetables. These products are different than other products because they have a shorter shelf life. |
| _____ 3. These people are responsible for the daily operations of school nutrition programs, like school lunches and school breakfasts, and have many responsibilities including overseeing all kitchen staff, purchasing food, maintaining budgets and making sure schools comply with the requirements of the National School Lunch Program. | |

- _____ 6. The stage in the food system where food is altered from its original state by processes such as cutting, freezing, boiling, canning, etc. For example, a plant may receive apples to make into applesauce or apple juice. A minimally altered product will have much of its inherent nature, such as nutrients or fiber, left afterwards.
- _____ 7. The important step of moving products through the food system. Can occur by truck, train, barge or airplane and carries food between the farm, storage facility, processing facility and the marketplace.
- _____ 8. An outside business or nonprofit organization that is contracted by a school to manage any aspect of the school food service.
- _____ 9. Generally understood to include efforts that connect schools with local or regional farmers in order to serve local or regionally produced foods in school cafeterias. USDA considers this to be inclusive of many types of producers, such as farmers, ranchers, and fishermen, as well as many types of food businesses, including food processors, manufacturers, distributors and other value-added operations. In addition to procurement activities, food, agriculture and nutrition-based educational efforts that span a host of hands-on experiential activities, such as school gardens, field trips to local farms, and cooking classes, are also included in this concept. Standards-based curriculum centered on food, agriculture, and/or nutrition is often integrated as well.
- _____ 10. Refers to the acquisition of food that will be served in the school cafeteria at the best possible cost; in the right quantity and quality; and in the right time and place. Often involves a process where a food service director will request quotes from several suppliers or farmers.
- _____ 11. Purchase of food by schools involves a process where a food service director will request quotes from several suppliers or farmers. Food service directors must purchase the product that meets their requirements at the lowest price, and must make sure that enough vendors and farmers can submit if they want to.

ADDITIONAL ACTIVITY

Brainstorm a list of local institutions that may be purchasing locally grown food. Institutions are large organizations, such as other schools, colleges, hospitals, municipal buildings or prisons that host a lot of people every day and purchase large quantities of food.

Research information online or conduct phone interviews to find out more about these programs. Interview questions:

How do you define “local” food?

Do you buy products from specific farms? If so, which ones?

Why do you purchase (or not purchase) locally grown food?

What items do you purchase locally?

How much locally grown food do you purchase?

What did you learn from your research that has implications for your school's Farm to School efforts?



Lesson 2

Getting to Know Your Local Food System



FARM TO SCHOOL

YOUTH LEADERSHIP CURRICULUM

Lesson 2
Farm to School Youth Leadership Curriculum: 11th & 12 Grades

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The Institute for Agriculture and Trade Policy works locally and globally at the intersection of policy and practice to ensure fair and sustainable food, farm and trade systems.

More at iatp.org

FARM TO SCHOOL YOUTH LEADERSHIP CURRICULUM

The high school level Farm to School Youth Leadership Curriculum is designed to empower youth, teach them about their local food system, engage them in meaningful, hands-on learning activities that also strengthen their school's Farm to School program and link them directly with farmers in their community. Implementation of the curriculum in a high school setting simultaneously gives students ownership and commitment to their school's Farm to School program, while reducing the amount of legwork and research required of teachers or food service staff to establish or expand a farm to school program.

The curriculum is comprised of 6 Lessons, each containing a lesson summary, a list of lesson activities, lesson outcomes, facilitator preparation notes, a materials and equipment list, additional resources, detailed facilitator descriptions of core activities, additional recommended activities, a chart of the lesson's alignment to national and Minnesota academic standards and worksheets and handouts for students. The lessons can be taught consecutively over a semester or facilitators can choose to use single lessons or activities as a complement to their classes. Activities are interdisciplinary, and may fit into classes focused on Agriculture, Family and Consumer Sciences, Social Studies, Economics, Health, Science or other subjects. The curriculum was developed with the 11th and 12th grade high school classroom setting in mind, but could also be used by educators teaching about Farm to School or local foods systems in other settings. Occasional connections with external farmers or food service professionals deeply enrich the lessons; when these connections are recommended, this is indicated in the introductory notes to give the facilitator time to prepare.

Farm to School programs link children to nearby small and mid-size farms and ranches that produce fresh, healthy and minimally processed foods that are served at their schools. Aimed at educating children about where and how their food is grown, strengthening local economies and supporting healthy eating habits, the Farm to School movement is rapidly growing.

Farm to School advances the following goals:

- Promote children's health by providing fresh, healthy and minimally processed foods in schools and supporting the development of healthy eating habits
- Enhance children's "food literacy" by familiarizing them with foods grown nearby, teaching them how and where their food is grown, building knowledge about how to prepare healthy foods, and educating them about the health, nutrition, social and environmental impacts of food choices
- Strengthen local economies by expanding markets for small and mid-size agricultural producers and food entrepreneurs whose products have typically been unavailable in school meal programs
- Build vibrant locally oriented food systems by fostering positive relationships and increase understanding of local food systems among children, farmers, parents, educators and school districts, healthcare professionals, and other community members
- Advance environmental stewardship, where practicable, by supporting more sustainable food production methods, reducing reliance on long distance transportation, and reducing food waste

We hope that this curriculum will be useful in engaging students to start or expand a Farm to School program, and we welcome feedback and stories of how it works for you!

LESSON SUMMARY

In this lesson, students will learn the concept of a food system, and learn more about what their own local food system produces throughout the year. This understanding of the food system, local agricultural products and seasonality will help students identify opportunities to start or expand Farm to School activities at their school and to engage directly with food producers in future lessons.

ACTIVITIES

1. What is a Food System?
2. Finding What Foods are Grown or Raised Near Us
3. Economic Benefits of Locally Grown Foods
4. Benefits and Challenges of Locally Grown Foods

Additional Activity: Class Visit: Interview a Produce Manager at a Local Co-op or Grocery Store

Additional Activity: Class Visit: Produce Distributor Who Serves Your School

Additional Activity: Finding Locally Grown Foods in Your Community

Additional Activity: Visit to Farm or Farmers Market

Additional Activity: Put Students' Critical Thinking Skills to Work

LESSON OUTCOMES:

Students will be able to:

1. Identify and explain the major components of their local food system
2. Explain the concept of seasonality and identify food produced locally in different seasons
3. Analyze the benefits and challenges of buying and eating locally grown food items
4. Begin to take a leadership role in designing or expanding Farm to School activities at their school

MATERIALS AND EQUIPMENT

- Copies of Worksheets and Handouts for each student:
 - Worksheet 2-1: What's Local and When?
 - Worksheet 2-2: Hometown City Exercise
 - Worksheet 2-3: The Benefits and Challenges of Locally Grown Foods
 - Handout 2-1: Steps in the Food System (one set for each small group of students)

- Tape, pins, magnets, velcro or staples that students can use to adhere printouts to a classroom surface

- Chalk, markers or yarn for students to make connections between each step of the food system
- Copies of articles on benefits of locally grown foods

ADDITIONAL RESOURCES

- **LOCAL FOOD SYSTEMS: CONCEPTS, IMPACTS AND ISSUES (PG 1–4), USDA ECONOMIC RESEARCH SERVICES**

- www.ers.usda.gov/media/122868/err97_1_.pdf

The introduction to a 2010 report on local foods by the USDA (pdf)

- **NATIONAL FARMERS UNION “GROWING GOOD TASTE” 2011 CURRICULUM**

- <http://www.nfu.org/education/education-materials>

This curriculum’s goal is making sure consumers know their food really comes from America’s farm and ranch families. The lesson plans also look at how producers receive very little from each food dollar spent by consumers.

- **LOCAL FOOD SEASONALITY CHART EXAMPLES**

Visual charts showing what products are available during the seasons in specific areas. For example:

- Minnesota: <http://www.mda.state.mn.us/~media/Files/food/minnesotagrown/producecalendar.ashx>
- New York: <http://www.agriculture.ny.gov/fzs/documents/HarvestChart.pdf>
- Nebraska: <http://toolkit.centerfornutrition.org/category/list-of-resources/> (pdf and website)

- **“LOCAL AND REGIONAL FOOD SYSTEMS”**

- <http://www.gracelinks.org/254/local-regional-food-systems>

A summary document of the major issues in community based food systems. (website)

- **USDA “KNOW YOUR FARMER KNOW YOUR FOOD”**

USDA website focused on strengthening local and regional food systems with a Tools and Resources section rich in regional information with several mapping tools (website).

- ***FRENCH FRIES AND THE FOOD SYSTEM: A YEAR ROUND CURRICULUM CONNECTING YOUTH WITH FARMING AND FOOD***

An agriculture and food system curriculum guide connecting high school students with the land and environment around them. (curriculum)

- ***FRESH***

A film that explores the farmers, thinkers, and business people across America who are re-inventing our food system. The film is 72-minutes long and appropriate for high school audiences. (film)

- ***OUT TO PASTURE: THE FUTURE OF FARMING?***

- <http://www.jhsph.edu/research/centers-and-institutes/teaching-the-food-system/curriculum/film.html>

A short film (34 minutes) from The Johns Hopkins Center for a Livable Future that contrasts raising food animals on pasture with the prevailing industrial approach. Several pasture-based farmers are profiled; they discuss how they got started in farming (three transitioned from confinement operations), what’s important about their farming methods, how their conventional-farm neighbors view them, how to keep young people on the farm, the future of the food system and other topics. (film)

■ “BUYING LOCAL FOOD FOR FOOD SERVICE IN MINNESOTA,” MINNESOTA PROJECT:

➤ <http://www.mnproject.org/pdf/Guide%20to%20Buying%20Local.pdf> (article)

■ The National Sustainable Agriculture Coalition (NSAC)

An alliance of grassroots organizations that advocates for federal policy reform to advance the sustainability of agriculture, food systems, natural resources, and rural communities (website).

■ FARM AID

➤ <http://www.farmaid.org>

Willie Nelson, Neil Young and John Mellencamp organized the first Farm Aid concert in 1985 to raise awareness about the loss of family farms and to raise funds to keep farm families on their land. Dave Matthews joined the Farm Aid Board of Directors in 2001. Farm Aid is a nonprofit organization whose mission is to keep family farmers on their land. (website).

LESSON INITIATION

Where do you purchase food?

Ask students to brainstorm all of the different places they or their families purchase food. Where else might individuals or groups purchase food? Remind students to consider fresh product as well as prepared food items. Write the answers on the board, and ask students to think about how the food gets from where it is grown to its final destination and how it is processed in between.

LESSON INTRODUCTION

After the lesson initiation, pose this question to the class: “Where does our food come from?” Write highlights down on the board, and ask further prompts including the *Who, What, Why, Where, When and How* questions about everything that brings our food from the soil to the plate, especially the school lunch plate. Explain to students that in this lesson, we will learn about the food system, including

the steps our food takes from field to plate. Students will learn more about what items are grown locally and during which seasons. Students will also have the chance to learn more about the benefits and challenges of eating locally grown food. This activity can be used as an assessment for the instructor to get a baseline understanding of what students currently know, allowing adaption of the lesson as needed.

ACTIVITY 1: WHAT IS A FOOD SYSTEM? (30-45 MINUTES)

► Handout 2-1: Steps in the Food System

Enlarge/photocopy steps in Handout 2-1 and prepare tape, pins, magnets, velcro or staples that students can use to adhere them to a classroom surface. Provide chalk, markers or yarn for students to make connections between each step of the food system.

For this lesson, students will identify pieces of the food system, sequence them, and make connections between different parts of the system as they trace four food items from field to plate.

To start this lesson, have the students break up into small groups to come up with their own definitions of a food system. Their answers will give a good assessment of their current knowledge.

Next, ask the students to close their eyes while the instructor reads the definition of “food system” below. Read the definition slowly and ask the students to visualize each step in the process. Re-read the definition to the students, and compare to the definitions their small groups came up with. Ask students if they have any questions about the definition of “food system.” Allow students to refer to the Farm to School lingo sheet if needed.

“A food system is a set of interdependent processes that together provide food to a community. This includes the growing, harvesting, storing, transporting, processing, packaging, marketing, retailing and consuming of the product. Some or all of these steps in the food system may be within the community but they also may be part of the global or regional system instead.”

In the hands-on component of this activity, students can be divided into small groups, or work together as a whole classroom. Give students a printed out set of the steps representing the food system for a particular food item. If you have extra time, you can ask each group to design or search online for images representing each step in their set. Ask each group to arrange the steps in the proper order “from field to plate,” representing the trip the food item makes through the various parts of the food system. Students should use the chalk, markers or yarn to draw arrows or make connections between each step of the food system in order. When the groups are finished, go over each food item’s journey with the class, letting the students explain its trip from field to plate to the rest of the class.

Explain to students that the food system is a cycle, and doesn’t have a beginning or end. Ask students what the next steps of the system would be if we continued to follow the food after it is served. Food scraps that are not eaten can be composted to make rich soil to grow more crops.

This activity allows students to consider all the steps and participants in the food system and engages students to see the relationship between steps of the food system. The five food types represented in the food system are fruits (apples), vegetables (radishes), grains (wheat), meat (chicken) and dairy (milk).

ACTIVITY 2: SEASONAL FOODS IN YOUR REGION (30 MINUTES)

► Worksheet 2-1: What’s Local and When?

In this activity, students will identify foods that are produced locally and will research when they are in season. Students will investigate a broad range of items, such as produce, grains and meats. Have student take notes on Worksheet 2-1 about items that are grown close to their community. Students can work online to do their research

or from print resources provided by the instructor. If your students will not have access to the internet during the lesson, be prepared to print out multiple copies of a seasonality chart appropriate to your area for students

to use in class. Instructors may need to research ahead of time to find appropriate state and local sources that list local and seasonal foods.

Resources to Find Seasonal Foods in Your Region:

Most states, and sometimes regions within a state, have a guide to seasonal products produced in the state. Examples from different regions across the country are listed below. Search your Department of Agriculture website or your Cooperative Extension resources for such a guide to your area. For instance:

- Minnesota Grown: A Seasonal Look at Fresh Produce:
<http://www.mda.state.mn.us/~media/Files/food/minnesotagrown/producecalendar.ashx>
- Nebraska: Seasonality of Foods in Nebraska
<http://toolkit.centerfornutrition.org/wp-content/uploads/2012/04/Seasonality-Chart.pdf>

- North Carolina: Make it Local for All Seasons (English and Spanish)
<http://www.ncsu.edu/project/nc10percent/seasonality.php>
- New York: Pride from A(pples) to Z(ucchini)
<http://www.agriculture.ny.gov/fzs/documents/HarvestChart.pdf>
- Oregon: What Local Products Are in Season?
<http://oregonfresh.net/local-products/whats-in-season/>

Other nonprofits, educational services and businesses provide lists of seasonal foods available by state or region. One example is below, but many others may be available too.

- The Local Food Wheel (available for the Upper Midwest, Bay Area California, New York)
<http://www.localfoodswheel.com/>

After students complete the worksheet, discuss the answers among the class.

ACTIVITY 3: HOMETOWN CITY EXERCISE (45 MINUTES)

➔ Worksheet 2-2: Hometown City Exercise

Reprinted with permission from Kentucky Department of Agriculture Farm to School Program and UK Cooperative Extension Nutrition Education Program.

The multiplier effect describes how an increase in some economic activity starts a chain reaction that generates more activity than the original increase wherein an increase in spending produces an increase in national income and consumption greater than the initial amount spent. For example, if a corporation builds a factory, it will employ construction workers and their suppliers as well as those who work in the factory. Indirectly, the new factory will stimulate employment in laundries, restaurants and service industries in the factory's vicinity. *Definition taken from The American Heritage® New Dictionary of Cultural Literacy, Third Edition.*

Assign students the roles of community organizations or individuals in a town, and have them complete the transactions in Parts 1 and 2 of Worksheet 2-2, keeping track of their progress on the provided chart.

Lead the class in the following discussion questions after completing the exercise:

1. Did you have more money at the end of part 2 than you did at the end of part 1? If yes, how much?

(18 of the 31 organizations or individuals had more money at the end of part 2, when food was purchased from local farmers.)

2. Why did the community gain money when people purchased food locally?

- The community retained money that used to be spent in companies in other communities.
- Profits within the community stimulated additional business within the community (i.e., the purchase of additional gas, building supplies and services).

Caution students that this is a simple and extreme demonstration.

3. Are there other reasons to purchase food locally?

- Potentially improved quality and freshness
- Potentially improved nutrition
- Greater stability of the food supply
- Maintaining cultural heritage
- Others?

ACTIVITY 4: BENEFITS AND CHALLENGES OF LOCALLY GROWN FOOD (20-30 MINUTES)

➔ Worksheet 2-3: Benefits and Challenges of Locally Grown Food

Resources Needed

Print copies of each of the following articles for students to read. Students will be divided into small groups, and each group will read and discuss one article.

- “Is local Hamilton food better for you?” CBC News
<http://www.cbc.ca/hamilton/news/story/2012/05/09/hamilton-food-test.html?cmp=rss>
- Local Foods – Are they more Nutritious?” Jennifer Wilkins, Cornell University
http://m.poststar.com/lifestyles/health-med-fit/article_2bd2839e-bb61-11df-b6a3-001cc4c03286.html
- “Is local more nutritious?” Harvard University School of Public Health
<http://chge.med.harvard.edu/resource/local-more-nutritious>
- “An Interview with Economist Michael Shuman” on Community Food Enterprises, Wendy Wasserman, Civil Eats
<http://civileats.com/2009/12/09/an-interview-with-economist-michael-shuman/>
- “Buying Local Helps to Boost the Economy” Bernadette Logozar, Cornell University Cooperative Extension

<http://www.ccenny.com/wp-content/uploads/2011/07/Buying-Local-Helps-Boost-Local-Economy.pdf>

- “L.A. Unified’s local food push is healthy for area economy too” Teresa Watanabe, Los Angeles Times
<http://articles.latimes.com/2013/nov/24/local/la-me-laUSD-food-20131124>

In this lesson students will use analytical skills to determine the benefits and challenges of buying and eating food grown locally. Students will learn the benefits of locally grown foods, and will also use critical thinking skills to examine commonly held beliefs about locally grown foods. Students will work in small groups and read and discuss one of the three articles listed below. As a group they will answer questions on Worksheet 2-3. After all small groups have discussed their articles the class will reconvene to share what each group has learned.

Bring the class back together and discuss the benefits of starting a Farm to School program that would get locally grown foods into your school meals. Ask students to share the benefits and challenges they discussed with their groups and list them on the board. Explain to students that they can help to kickstart Farm to School activities at your school through their work in this class, emphasizing their ability to serve as leaders through the process.

ADDITIONAL ACTIVITIES

Class Visit: Interview a Produce Manager at a Local Co-op or Grocery Store

The instructor can set up a time for this person to visit the class. As an important intermediary in the process of getting locally grown foods from farm to plate, a produce manager, local butcher or other community member with a similar position can provide a great perspective on the insides of the food system.

Class Visit: Produce Distributor Who Serves Your School

Similar to the above, invite the food distributor who works with your school district to come and talk to the class about how they purchase their fruits and vegetables from local, national and international sources. Why and how do they purchase what they do?

Finding Locally Grown Foods in Your Community

Where are locally grown foods available in your community? Grocery stores, farmers markets, your home garden, community gardens, other schools that have gardens or buy locally, restaurants, colleges, hospitals, etc.? Brainstorm a list of other institutions in your community. Institutions are organizations, such as other schools, colleges, hospitals, municipal buildings, prisons or large businesses that have a cafeteria for employees. These organizations serve many people every day and purchase large quantities of food. Have students conduct online research or make phone calls to learn if these institutions purchase food locally, and more details about how they do it. Students should write down the information they learn in your Farm to School Journal.

Visit to Farm or Farmers Market

Encourage students to get out into the community and visit a farm or farmers market, either through a group visit with the class or on their own. While there, students can talk with farmers about what they have been studying.

Put Students' Critical Thinking Skills to Work

Now that students have learned some of the benefits of local food, and have thought critically about its challenges, send them to the internet to do local food research, asking them to highlight things they find that may be misconceptions about local food. The Sustainable Table website is a good place to start researching; it has lots of information about the benefits of local food, including citations. <http://www.gracelinks.org/254/local-regional-food-systems>

Another good resource is Michigan State University's Center for Regional Food Systems website: <http://foodsystems.msu.edu/>

NATIONAL COMMON CORE STANDARDS FOR ENGLISH LANGUAGE ARTS

CCSS.ELA-LITERACY.RH.11-12.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

CCSS.ELA-LITERACY.RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CCSS.ELA-LITERACY.RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

CCSS.ELA-LITERACY.W.11-12.1B Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.

CCSS.ELA-LITERACY.W.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

THE COMMON CORE MATH STANDARDS

CCSS.MATH.CONTENT.HSN-VM.C.6 (+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network.

CCSS.MATH.CONTENT.HSN-VM.C.7 (+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled.

CCSS.MATH.CONTENT.HSN-VM.C.8 (+) Add, subtract, and multiply matrices of appropriate dimensions.

THE MN MATH STANDARDS (2007)

9.2.2.5 Recognize and solve problems that can be modeled using finite geometric sequences and series, such as home mortgage and other compound interest examples. Know how to use spreadsheets and calculators to explore geometric sequences and series in various contexts.

THE COMMON CORE SCIENCE STANDARDS

None identified

THE MN SCIENCE STANDARDS (2009)

None identified

THE MN SOCIAL STUDIES STANDARDS (2011)

9.2.4.5.2 Describe the role of markets in the movement of resources, goods and services, and money in an economy.

9.2.4.6.2 Explain the impact of various market structures on long-run profit, price, production, and efficiency in the market.

9.3.2.4.4 Describe patterns of production and consumption of agricultural commodities that are traded among nations.

9.3.2.4.3 Explain how technological and managerial changes associated with the third agricultural revolution, pioneered by Norman Bourlaug, have impacted regional patterns of crop and livestock production.

9.3.4.9.1 Analyze the interconnectedness of the environment and human activities (including the use of technology), and the impact of one upon the other.

INSTRUCTIONS:

Cut out the cards and arrange the steps of each food type in the proper order "from field to plate," representing the trip the food item makes through the various parts of the food system.

Bottling Plant Milk	Grocery store/ school Milk	Tanker truck Milk	Milking cow Milk
Truck Milk	Milk stored in bulk tank in milk house on farm Milk	Distributor warehouse Milk	Cow in pasture Milk
Distributor truck Milk	Transported to packing house Apple	Made into applesauce Apple	Put into boxes Apple
Growing on trees Apple	Put on a truck Apple	Put on a truck Apple	Packed into boxes in packing house Apple

Delivered to grocery store Apple	Transported to processing facility Apple	Harvested by hand into bin Apple	Delivered to a distributor Apple
Put into jars Apple	Transported to processing center by truck Radish	Sorted by machine and hand into different sizes Radish	Put on a truck Radish
Harvested by hand or by specialized tractor Radish	Delivered to a distributor Radish	Bunched by hand and placed in bins Radish	Packaged into bags Radish
Delivered to grocery store/school Radish	Greens removed by machine Radish	Bags put into boxes for transport Radish	Growing in the field Radish
Transported by truck Radish	Washed by machine Radish	Milled to flour at mill Grain (wheat)	Made into bread Grain (wheat)

Wheat harvested by tractor and fed into bin on tractor Grain (wheat)	Wheat in field Grain (wheat)	Delivered to bakery Grain (wheat)	Harvested wheat trucked to mill Grain (wheat)
Put on truck Grain (wheat)	Bagged at mill Grain (wheat)	Chicken frozen Chicken	Boxes delivered to school Chicken
Chicken processed Chicken	Chicken on farm Chicken	Boxes on truck Chicken	Chickens on truck to processing facility Chicken
Delivered to school Chicken	Chicken packed into boxes Chicken		

MILK ORDER:

- Cow in pasture
- Milking cow
- Milk stored in bulk tank in milk house on farm
- Tanker truck
- Bottling plant
- Truck
- Distributor warehouse
- Distributor truck
- Grocery store/school

APPLE ORDER:

- Growing on tree
- Harvested by hand into bin
- Transported to packing house
- Packed into boxes in packing house
- Transported to processing facility
- Made into applesauce
- Put into jars
- Put into boxes
- Put on a truck
- Delivered to a distributor
- Put on a truck
- Delivered to grocery store

RADISH ORDER:

- Growing in the field
- Harvested by hand or by specialized tractor
- Bunched by hand and placed in bins
- Transported to processing center by truck
- Greens removed by machine
- Washed by machine
- Sorted by machine and hand into different sizes
- Packaged into bags
- Bags put into boxes for transport
- Transported by truck
- Delivered to a distributor
- Put on a truck
- Delivered to grocery store

GRAIN (WHEAT) ORDER:

- Wheat in field
- Wheat harvested by tractor and fed into bin on tractor
- Harvested wheat trucked to mill
- Milled to flour at mill
- Bagged at mill
- Put on truck
- Delivered to bakery
- Made into bread

CHICKEN ORDER:

- Chicken on farm
- Chickens on truck to processing facility
- Chicken processed
- Chicken frozen
- Chicken packed into boxes
- Boxes on truck
- Boxes delivered to school

NAME:

Instructions:

For this activity, students will use their detective skills to find out which food products are grown nearby. You can define “nearby” however your class decides: within your county, state, region or a definition that better suits your community. Use printed guides provided by the instructor or search online for a seasonal food guide to complete this worksheet.

Resources for Finding Locally Grown Foods

Your state likely has a guide to food products grown or raised in your area. Some examples of local food charts are listed below. Search your Department of Agriculture website or your Cooperative Extension resources for a guide to your area. You can also conduct a web search using a combination of the following search terms: “Your State Name” or “The name of your region within a state”

AND “Food or Agricultural Seasonality Chart” or “Local food seasonality chart”

Examples of Seasonal Guides:

- Minnesota Grown: A Seasonal Look at Fresh Produce
<http://www.mda.state.mn.us/~media/Files/food/minnesotagrown/producecalendar.ashx>
- Nebraska: Seasonality of Foods in Nebraska
<http://toolkit.centerfornutrition.org/wp-content/uploads/2012/04/Seasonality-Chart.pdf>

- North Carolina: Make it Local for All Seasons (English and Spanish)
<http://www.ncsu.edu/project/nc10percent/seasonality.php>
- New York: Pride from A(pples) to Z(ucchini)
<http://www.agriculture.ny.gov/fzs/documents/HarvestChart.pdf>
- Oregon: What Local Products Are in Season?
<http://oregonfresh.net/local-products/whats-in-season/>

Sometimes these charts only include information about local fruits and vegetables, but do not include local meat, dairy products or beans and grains. Some charts only show information about when products are harvested and do not include information about products can be stored and thus remain available far beyond their harvest time (for example: potatoes, beets, other root vegetables, apples or winter squash). To get a fuller picture of your local foods scene, search for a local foods directory for your area and look at the websites of your local farmers markets, which often have information about what products are available when.

When you find helpful resources, answer the following questions:

Which products are included in the seasonality chart? Are fruits, vegetables, meat, dairy and grains included?

During which month are most products harvested locally?

What is your favorite food grown during each season (summer, fall, winter, spring)?

List one food that is grown or available during the winter.

List at least one food from each group that is grown locally:

Fruit:

Vegetable:

Meat:

Grain:

Dairy:

Is there a food you love that is not grown locally according to the resources you found? If so, can you identify an alternative to your favorite food that is local?

Are there any foods on the chart that you have never eaten?

Is there anything about the chart that surprises you?

List some foods grown in your region that you would like to see on your school lunch or breakfast menu:

NAME:

PART 1:

The instructor will assign students to act as the following community members and business entities with funds as specified:

Reprinted with permission from Kentucky Department of Agriculture Farm to School Program and UK Cooperative Extension Nutrition Education Program.

School board	\$100,000	Teacher	\$2,000
Grocery store	\$50,000	Grocery store worker	\$900
Restaurant, sit down	\$10,000	Waitress	\$500
Restaurant, fast food	\$12,000	Shoe store clerk	\$1,000
Caterer	\$2,000	Book store clerk	\$1,000
Shoe store	\$25,000	Pharmacist	\$3,000
Book store	\$25,000	Medical doctor	\$4,000
Drug store	\$40,000	Dentist	\$3,500
Movie theatre	\$30,000	Gas station attendant	\$500
Clothing store	\$30,000	Factory worker	\$1,000
Hotel	\$50,000	Bank	\$100,000
City government	\$100,000	TOTAL:	\$822,400
Hardware/appliance store	\$40,000		
Church	\$35,000		
Roller skating rink	\$35,000		
Factory	\$90,000		
Gas station/convenience store	\$25,000		
Dairy farmer	\$2,000		
Beef cattle farmer	\$2,000		
Vegetable farmer	\$2,000		

Complete the following transactions in order, balancing the checkbook as you go. Record of Transactions may be used to track payments and deposits.

Transaction 1:

The city government collects \$13,748 in taxes: 2 percent from everyone except from the church and themselves (city government).

Transaction 2:

The school food service (school board) orders food for the following week:

- \$2,000 meat from distributors in another city
- \$1,000 milk from a national dairy chain
- \$2,000 fruits and vegetables from a national food distributor
- \$1,000 bread from a national distributor

Transaction 3:

The dairy farmer, vegetable farmer, beef farmer, teacher, grocery store worker, waitress, shoe store clerk, book store clerk, pharmacist, doctor, dentist, gas station attendant, and factory worker pay \$10 to the school board for their kids' lunches.

Transaction 4:

The grocery store orders \$40,000 food from out-of-state distributors.

Transaction 5:

The dairy farmer, vegetable farmer, beef farmer, teacher, grocery store worker, waitress, shoe store clerk, book store clerk, pharmacist, doctor, dentist, gas station attendant and factory worker spend \$120 each on food for the week at the grocery store.

Transaction 6:

The hotel is the site of a dental association conference.

- A. They order \$5,000 in food from out-of-town distributors.
- B. The hotel earns \$16,000 in room rental.

Transaction 7:

The dentist wants a new pair of shoes for the conference. He purchases a \$120 pair of shoes from the shoe store.

Transaction 8:

The dentist has friends coming to town for the conference. He plans a small party at his home and pays the caterer \$500 to cater it.

Transaction 9:

The caterer spends \$200 at the grocery store on food for the party.

Transaction 10:

Professionals attending the conference spend \$400 on gas at the gas station, \$60 at the movie theatre, \$300 at the clothing store, \$70 at the book store, \$120 at the sit-down restaurant, \$80 at the fast food restaurant and \$25 at the drug store

Transaction 11:

The church collects \$85 in offering. (\$15 each from the dairy farmer, the beef cattle farmer, and the teacher, \$10 from the factory worker, the shoe store clerk, and the pharmacist, and \$5 from the waiter/waitress and the gas station attendant.)

PART 2

Continue to act as community members and business entities with funds as specified at the beginning of part 1. Then complete the new transactions, balancing the checkbooks as you go:

Transaction 1:

The city government collects \$13,748 in taxes: 2 percent from everyone except the church and themselves.

Transaction 2:

The school food service (school board) orders food for the following week:

- \$1,000 beef from the local beef farmer and \$1,000 meat from distributors in another city
- \$1,000 milk from the local dairy farmer
- \$1,500 fruits and vegetables from the local vegetable farmer and \$500 from a national distributor
- \$1,000 bread from a national distributor

Transaction 3:

The dairy farmer, vegetable farmer, beef farmer, teacher, grocery store worker, waitress, shoe store clerk, book store clerk, pharmacist, doctor, dentist, gas station attendant and factory worker pay \$10 to the school board for their kids' lunches.

Transaction 4:

The grocery store orders \$7,000 beef from the local beef farmer, \$8,000 milk from the local dairy farmer, \$10,000 fruits and vegetables from the local vegetable farmer and \$15,000 food from out-of-state distributors.

Transaction 5:

The dairy farmer, vegetable farmer, beef farmer, teacher, grocery store worker, waitress, shoe store clerk, book store clerk, pharmacist, doctor, dentist, gas station attendant, and factory worker spend \$120 each on food for the week at the grocery store.

Transaction 6:

- A. The dairy farmer decides to expand his farming operations. He borrows \$70,000 from the bank.
- B. He pays an interest rate of 4%, and the bank sells his loan to another investor for \$71,000.

Transaction 7:

The dairy farmer pays the gas station attendant \$5,000 to provide part of the labor for framing up the expansion on his barn. The farmer also spends \$11,000 at the hardware store on supplies and lumber.

Transaction 8:

The hotel is the site of a dental association conference. They order \$1,500 worth of beef, \$2,000 worth of vegetables and fruits and \$500 milk from the local farmers and \$1,000 food from out-of-town distributors and make \$16,000 in room rental.

Transaction 9:

The dentist wants a new pair of shoes for the conference. He purchases a \$120 pair of shoes from the shoe store.

Transaction 10:

Business is good, so the shoe store clerk is given a raise of \$0.50 per hour. This is about \$80 per month.

Transaction 11:

The dentist has friends coming to town for the conference. He plans a big party at his home and pays the caterer \$2,000 to cater it. The caterer spends \$550 on food and supplies at the grocery store and pays the waitress \$200 to help serve.

Transaction 12:

The caterer buys an \$80 pair of shoes from the shoe store. The teacher, the doctor and the pharmacist are all invited to the party and pay \$135 each for new clothes.

Transaction 13:

The vegetable farmer's daughter celebrates her 11th birthday with a party at the skating rink. The party costs \$240. Guests spend \$25 at the bookstore, \$45 at the clothing store, \$15 at the drug store and \$15 at the movie theater on gifts.

Transaction 14:

Increased trucking from farms to institutions increases the demand for gasoline. The vegetable farmer spends \$120 on gasoline, while the beef farmer spends \$105 and the dairy farmer spends \$70.

Transaction 15:

Professionals attending the conference spend \$400 on gas at the gas station, \$60 at the movie theatre, \$300 at the clothing store, \$70 at the book store, \$120 at the sit-down restaurant, \$80 at the fast-food restaurant and \$25 at the drug store.

Transaction 16:

The shoe store clerk takes his girlfriend, the grocery store worker, out to celebrate his raise. They spend \$35 at the sit-down restaurant.

Transaction 17:

The church collects \$125 in offering. (\$20 each from the dairy farmer, the beef cattle farmer and the teacher, \$15 from the factory worker, the shoe store clerk and the pharmacist, and \$10 from the waitress and the gas station attendant.)

PART 1

Report the amount of money the organization or individual has at the end of the part 1 transactions:

School board	\$92,130	Gas station/convenience store	\$24,900
Grocery store	\$10,760	Dairy farmer	\$1,815
Restaurant, sit down	\$9,920	Beef cattle farmer	\$1,815
Restaurant, fast food	\$11,840	Vegetable farmer	\$1,830
Caterer	\$2,260	Teacher	\$1,815
Shoe store	\$24,620	Grocery store worker	\$752
Book store	\$24,570	Waitress	\$355
Drug store	\$39,225	Shoe store clerk	\$840
Movie theatre	\$29,460	Book store clerk	\$850
Clothing store	\$29,700	Pharmacist	\$2,800
Hotel	\$60,000	Medical doctor	\$3,790
City government	\$113,748	Dentist	\$2,680
Hardware/appliance store	\$39,200	Gas station attendant	\$355
Church	\$35,085	Factory worker	\$840
Roller skating rink	\$34,300	Bank	\$98,000
Factory	\$88,200	TOTAL:	\$788,455

PART 2

Students should report the amount of money the organization or individual has at the end of the part 2 transactions:

School board	\$92,130	Gas station/convenience store	\$25,195
Grocery store	\$11,110	Dairy farmer	\$62,440
Restaurant, sit down	\$9,955	Beef cattle farmer	\$11,205
Restaurant, fast food	\$11,840	Vegetable farmer	\$14,970
Caterer	\$3,130	Teacher	\$1,675
Shoe store	\$24,620	Grocery store worker	\$752
Book store	\$24,595	Waitress	\$550
Drug store	\$39,240	Shoe store clerk	\$880
Movie theatre	\$29,475	Book store clerk	\$850
Clothing store	\$30,150	Pharmacist	\$2,660
Hotel	\$60,000	Medical doctor	\$3,655
City government	\$113,748	Dentist	\$1,180
Hardware/appliance store	\$50,200	Gas station attendant	\$5,350
Church	\$35,125	Factory worker	\$835
Roller skating rink	\$34,540	Bank	\$99,000
Factory	\$88,200	TOTAL:	\$889,255

Lesson 2: Getting to Know Your Local Food System

Worksheet 2-3: The Benefits and Challenges of Locally Grown Foods

Name:

Instructions:

Read the article given to your group by your instructor. Read the article silently to yourself, and then discuss what you have read with your small group. As a group, answer the questions in this worksheet and select one person in your group to report back to the classroom.

You will read one of the following articles:

- “Is local Hamilton food better for you?” CBC News
- “Local Foods – Are they more Nutritious?” Cornell University
- “Is local more nutritious?” Harvard University School of Public Health
- “An Interview with Economist Michael Shuman” on Community Food Enterprises, Wendy Wasserman, Civil Eats
- “Buying Local Helps to Boost the Economy” Bernadette Logozar, Cornell University Cooperative Extension
- “L.A. Unified’s local food push is healthy for area economy too” Teresa Watanabe, Los Angeles Times

From this article, what do you think are the benefits of buying or eating locally grown food?

From reading this article, do you think there are any downsides or challenges to eating or buying locally grown food?

Does this article change any ideas you had about locally grown food previously?

Name something from this article that you would like to know more about? Name something from this article that you would like to know more about?

How can local foods and Farm to School programming encourage students to develop healthy eating habits?



Lesson 3

School Lunch:
How Does It Really
Work?



FARM TO SCHOOL

YOUTH LEADERSHIP CURRICULUM

Lesson 3
Farm to School Youth Leadership Curriculum: 11th & 12 Grades

Authors:

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The Institute for Agriculture and Trade Policy works locally and globally at the intersection of policy and practice to ensure fair and sustainable food, farm and trade systems.

More at iatp.org

FARM TO SCHOOL YOUTH LEADERSHIP CURRICULUM

The high school level Farm to School Youth Leadership Curriculum is designed to empower youth, teach them about their local food system, engage them in meaningful, hands-on learning activities that also strengthen their school's Farm to School program and link them directly with farmers in their community. Implementation of the curriculum in a high school setting simultaneously gives students ownership and commitment to their school's Farm to School program, while reducing the amount of legwork and research required of teachers or food service staff to establish or expand a farm to school program.

The curriculum is comprised of 6 Lessons, each containing a lesson summary, a list of lesson activities, lesson outcomes, facilitator preparation notes, a materials and equipment list, additional resources, detailed facilitator descriptions of core activities, additional recommended activities, a chart of the lesson's alignment to national and Minnesota academic standards and worksheets and handouts for students. The lessons can be taught consecutively over a semester or facilitators can choose to use single lessons or activities as a complement to their classes. Activities are interdisciplinary, and may fit into classes focused on Agriculture, Family and Consumer Sciences, Social Studies, Economics, Health, Science or other subjects. The curriculum was developed with the 11th and 12th grade high school classroom setting in mind, but could also be used by educators teaching about Farm to School or local foods systems in other settings. Occasional connections with external farmers or food service professionals deeply enrich the lessons; when these connections are recommended, this is indicated in the introductory notes to give the facilitator time to prepare.

Farm to School programs link children to nearby small and mid-size farms and ranches that produce fresh, healthy and minimally processed foods that are served at their schools. Aimed at educating children about where and how their food is grown, strengthening local economies and supporting healthy eating habits, the Farm to School movement is rapidly growing.

Farm to School advances the following goals:

- Promote children's health by providing fresh, healthy and minimally processed foods in schools and supporting the development of healthy eating habits
- Enhance children's "food literacy" by familiarizing them with foods grown nearby, teaching them how and where their food is grown, building knowledge about how to prepare healthy foods, and educating them about the health, nutrition, social and environmental impacts of food choices
- Strengthen local economies by expanding markets for small and mid-size agricultural producers and food entrepreneurs whose products have typically been unavailable in school meal programs
- Build vibrant locally oriented food systems by fostering positive relationships and increase understanding of local food systems among children, farmers, parents, educators and school districts, healthcare professionals, and other community members
- Advance environmental stewardship, where practicable, by supporting more sustainable food production methods, reducing reliance on long distance transportation, and reducing food waste

We hope that this curriculum will be useful in engaging students to start or expand a Farm to School program, and we welcome feedback and stories of how it works for you!

LESSON SUMMARY

In this lesson students will gain a broad understanding of their school meal program, including where the food in their school meal programs comes from and how it is prepared. Students will learn about the National School Lunch Program, assess your school's current engagement in Farm to School and interact with staff from your school's nutrition services.

ACTIVITIES

1. What's On Your Tray? Discuss Where Our School Food Comes From
2. Where Does Our School Food Come From Now? Research
3. Identify National School Lunch Program Requirements and Regulations

4. Complete a Farm to School Assessment
5. Talk With Your Food Service Professional

Additional Activity: Letter to the Editor

Additional Activity: Visit School Kitchen or School District's Central kitchen

LESSON OUTCOMES:

Students will be able to:

1. Describe the basics of your school's lunch program and what foods are on the menu
2. Identify basic tenets of the National School Lunch Program
3. Assess your school's current engagement in Farm to School
4. Compose questions about school meals to ask Food Service Staff

MATERIALS AND EQUIPMENT

■ Copies of Worksheets and Handouts for each student:

- Copies of the school menu for current or previous months.
- Worksheet 3-1: What's On Your Tray?
- Worksheet 3-2: An In-depth Look at School Lunch Origins
- Worksheet 3-3: MyPlate Research
- Worksheet 3-4: Farm to School Assessment

● Handout 3-1: The National School Lunch Program

- In advance of this lesson, invite your school district's food service professional or the lead food service personnel at your school to visit the classroom at the time of Activity 5. Because of many responsibilities during the school day, food service staff may have limited availability to visit your class. Be sure to invite her or him with sufficient lead time, and send a reminder as the date approaches.

ADDITIONAL RESOURCES

■ “NATIONAL SCHOOL LUNCH PROGRAM: BACKGROUND, TRENDS AND PROGRAMS”

- http://www.ers.usda.gov/media/205594/err61_1_.pdf

An annual summary document highlighting the major issues of the school meals program, written by the United State Department of Agriculture. (Offers a summary of current issues facing the NSLP on pages i–iv; an overview of the program on page 1–3; pages 16–25 offer an overview of the donated commodities program, meal requirements and effect on students’ diets; pages 26–30 discuss the difficulties of balancing the budget while attempting to increase consumption of more healthful foods.) (pdf)

■ “NATIONAL SCHOOL LUNCH PROGRAM FACT SHEET”

- <http://www.fns.usda.gov/cnd/lunch/AboutLunch/NSLPFactSheet.pdf>

A 1-page document summarizing the purpose of and statistics behind the USDA’s National School Lunch Program. (pdf)

■ “USDA FOODS: HEALTHY CHOICES FOR OUR SCHOOLS”

- http://www.fns.usda.gov/outreach/webinars/handouts/usda_foods_fact_sheet.pdf

Fact sheet explaining the domestically grown foods the USDA offers to schools at a reduced price as part of the school lunch program. (pdf)

■ “THE SCHOOL DAY JUST GOT HEALTHIER”

- <http://www.fns.usda.gov/healthierschoolday>

Information and resources related to improved nutrition requirements imposed by the Healthy Hunger Free Kids Act of 2010. (website)

■ “SCHOOL NUTRITION ASSOCIATION”

- <http://www.schoolnutrition.org/default.aspx>
Information and resources for school food professionals. (website)

■ FREE FOR ALL: FIXING SCHOOL FOOD IN AMERICA BY JANET POPPENDIECK

Drawing from extensive interviews with officials, workers, students and activists, Janet Poppendieck discusses the National School Lunch and Breakfast Programs and explores the deep politics of food provision from multiple perspectives. (book)

■ ANNUAL USDA REIMBURSEMENT RATE SCHEDULE

- <http://www.fns.usda.gov/cnd/governance/notices/naps/naps.htm>

■ GUIDELINES FOR PURCHASING LOCAL FOODS – EXAMPLES

- Your State may have guidelines for purchasing and serving locally grown food in schools.
- Visit your Department of Agriculture or Education website to look for this type of resource. Otherwise, you can look at the national guide as well. Examples:
- “Eat Smart—Farm Fresh!: A Guide to Buying and Serving Locally-Grown Produce in School Meals.” National, USDA
http://www.fns.usda.gov/cnd/guidance/farm-to-school-guidance_12-19-2005.pdf
- “Farm to School Kentucky Handbook” – Kentucky
http://www.kyagr.com/consumer/documents/FD_FS_KentuckyHandbook.pdf
- “Serving Locally Grown Produce in Food Facilities” – Minnesota
<http://www.mda.state.mn.us/food/safety/~media/Files/food/foodsafety/fs-produce.ashx>
- “A School’s Guide to Purchasing Washington-Grown Food” – Washington

<http://www.wafarmtoschool.org/Page/74/procurement-guide>

- “The Wisconsin Local Food Marketing Guide” – Wisconsin

http://datcp.wi.gov/uploads/Business/pdf/MK-DM-17_LFMG_Second_Edition_Final_Book_for_website.pdf

■ “FARM TO SCHOOL: A TOOL FOR SUCCESS WITH NEW NUTRITION STANDARDS”

- http://www.farmtoschool.org/files/publications_493.pdf

A National Farm to School Network Document outlining the improvements in school meal nutrition requirements and how Farm to School can help. (pdf)

■ “RETHINKING SCHOOL LUNCH GUIDE”

- <http://www.ecoliteracy.org/downloads/rethinking-school-lunch-guide>

Produced by the Center for Ecoliteracy, this publication inspires outside-the-box thinking about school meals and how they connect with curriculum, policy, health and wellness.

■ “SCHOOL MEALS: BUILDING BLOCKS FOR HEALTHY CHILDREN,” INSTITUTE FOR OF MEDICINE

- <http://www.iom.edu/~media/Files/Report%20Files/2009/School-Meals/School%20Meals%202009%20%20Report%20Brief.pdf>

The 2009 report from the Institute of Medicine outlining the importance of school meals and the need to change the nutritional requirements for meals (pdf)

■ THE SCHOOL MEAL REVOLUTION: SCHOOL FOOD AND THE CHALLENGE OF SUSTAINABLE DEVELOPMENT

This book looks at school meals across the country as a way to increase sustainability and healthy eating habits. (book)

LESSON INITIATION (10–15 MINUTES)

Ask students to think about a meal they have eaten recently with their family or friends. If the students have a meal they have helped to plan or prepare, ask them to think about that meal. Ask students to share their experiences, including what preparation took place by the person who cooked the meal. Some discussion prompts can include: menu planning, food shopping, ingredients, food costs, meal preparation, leftovers and cleanup.

After ample discussion, guide the conversation toward school meals. Ask students if they remember the term “School Food Service Professional” from earlier vocabulary. Remind students that a School Food Service Professional is the person who manages the food service for your district, which may include breakfast, lunch, snack and/or dinner programs. Ask students to imagine what it would be like to be in charge of lunch daily for the number of students in your school or district. Ask students to brainstorm what they think would be the most challenging part of being in charge of the meals in your school.

LESSON INTRODUCTION

Explain to students that in this lesson they will gain a broad understanding of their school meal program, including where the food in their school meal program comes from and how it is prepared. They will not only learn about the

National School Lunch Program generally, but will also complete a hands-on assessment of your school’s current engagement in Farm to School, and get to interact with staff from your school’s nutrition services.

ACTIVITY 1: WHAT'S ON YOUR TRAY? (20 min)

➔ Worksheet 3-1: What's On Your Tray?

Divide students into small groups and ask each group to select one meal from a school menu. Be sure each group selects a different meal. Ask students to list all the menu items in the meal, and all of the ingredients they can identify in each food. Are there any ingredients they

couldn't identify? When each group has completed their list, ask one representative from each group to share their list with the class. Ask the class if any food items or ingredients have been left off the list.



Example for teacher use only

Meal: Turkey sandwich, harvest medley blend, applesauce, carrots and milk.

Main Dish, Sides and Beverage Worksheet				
Turkey Sandwich	Applesauce	Harvest Vegetable Medley	Raw Baby Carrots	Milk
What are the main ingredients in each dish?				
If any part of the dish is made of different ingredients, please list them below				
<ul style="list-style-type: none"> ■ Bread (whole wheat flour, yeast, salt) ■ Sliced turkey meat ■ Slice of cheese (milk, rennet, salt) ■ Lettuce ■ Tomato ■ Mustard (mustard seeds, vinegar and salt) 	<ul style="list-style-type: none"> ■ Apples ■ Cinnamon 	<ul style="list-style-type: none"> ■ Potatoes ■ Sweet potatoes ■ Beets ■ Carrots ■ Olive Oil ■ Herbs 	<ul style="list-style-type: none"> ■ Carrots 	<ul style="list-style-type: none"> ■ Non-fat milk

Once students have identified all the ingredients in their meals, ask them to think about where each food item came from. Have students think back to Lesson 2 on Food Systems, and ask them if they can tell a story about how the food item travelled through the food system from field to plate. For instance:

- Bread – Made from wheat. Where is the origin? South Dakota, North Dakota, Oklahoma, etc. Was the bread baked at a bakery or in your school kitchen?
- Meat – Meat is required by the school lunch program to be of U.S. origin, but the turkey used in the school sandwich could have come from many places in the U.S. Who raised the turkeys and how? Was the turkey raised on pasture, eating grass and bugs, or raised inside and fed grains?
- Cheese – Cows live on dairy farms across the country. Their milk is typically stored in bulk tank on the farm and a large truck comes to pick up the milk, which is then mixed together at a cheese plant. Where do you

think the cows lived, and where was the cheese made? How were the cows raised?

- Lettuce, Tomato—Lettuce and tomatoes are fresh vegetables which have a short shelf life. Do lettuce or tomatoes grow in your area right now, or are they grown somewhere else in the United States and shipped to your school?
- Mustard – Mustard is made from mustard seeds, which can be grown and stored for long periods of time.

Have the students discuss how and where the food may have traveled from where it was grown, different steps in aggregation with other products, shipment to and from processing facilities, to distribution and storage sites, etc. What parts of this supply chain are unknown to students? In doing this exercise, students will learn that the path food actually takes is sometimes much longer than just the distance between where the raw product is grown and where it is eaten.

ACTIVITY 2: WHERE DOES OUR FOOD COME FROM NOW? RESEARCH. (20-30 minutes)

➔ Worksheet 3-2: An In-depth Look at School Lunch Origins

Students can remain in small groups or work independently on this activity. Have students select one item from their “tray” in Activity 2 to research further using Worksheet 3-2. This Worksheet could also be assigned as homework.

When students have completed Worksheet 3-2 are completed, discuss the research process and their answers to the questions outlined on the worksheet, raising the following questions:

- Where are the ingredients from? Where are they processed?
- What information were you unable to find?
- Can you tell how far your food travelled in all the steps from farm to fork?
-

- What are the pros and cons of this system?
- Could Farm to School foods address the cons identified?
- For your food item, what may work well in a Farm to School system and what may not?

ACTIVITY 3: UNDERSTAND NATIONAL MEAL PROGRAM REQUIREMENTS AND REGULATIONS. (30-45 MINUTES)

➔ Handout 3-1: The National School Lunch Program

➔ Worksheet 3-3: MyPlate Research

As a class, read Handout 3-1 on the National School Lunch Program, along with any documents from the Additional Resource section useful to your class. Ask students to discuss the aspects of school meals that they did not know before and take notes in their Farm to School Journals. Some specific questions to ask students include:

- What foods do schools need to provide to students and in what quantities per meal?
- How are the requirements after July 2012 different than before July 2012? What does that mean for the foods that your school offers now? Have students explore the MyPlate website to identify how much of each food group they are recommended to eat, using Worksheet 3-3.
- What do the federal rules say about schools procuring food from nearby farmers (e.g., expressing “geographic preference”)?

ACTIVITY 4: FARM TO SCHOOL ASSESSMENT (45 MINUTES)

➔ Worksheet 3-4: Farm to School Assessment

In this lesson students will complete the Farm to School Assessment using Worksheet 3-4 to learn more about what their school is doing, and what their school has the capacity to do, when it comes to Farm to School. The information gathered through the assessment will complement the information students will learn from their food service professional in the next activity to give students a fuller picture of their school’s capacity to start or expand Farm to School programming. Students may have to save some questions to be answered by the food service professional during the visit of Activity 4.

To begin, allow students to work alone and then merge students into small groups. In small groups, students can compare answers and educate each other about responses to questions. After the small groups have answered the questions as thoroughly as possible, discuss as a class the questions that still cannot be answered or to which there

is no agreement. Make a list of the remaining questions to ask the food service professional if possible, or find the answers from school administrators or school cooks. If any of these staff people do not have offices in your school building, draft a class e-mail to gather the needed information.

After students have filled out the assessment and made a list of remaining questions, allow time for classroom discussion. Prompt the class with the following questions, which are also listed on the handout:

1. What did you learn from this School Food Assessment?
2. What surprised you most about what you learned?
3. With this new information, how do you think you can help Farm to School start or expand at your school?

ACTIVITY 5: MAKING A CONNECTION WITH YOUR FOOD SERVICE PROFESSIONAL (30-45 MINUTES)

➔ Worksheet 3-4: Farm to School Assessment

➔ Student Farm to School Journals

If possible, arrange for your school district's food service professional or the lead cook at your school to come in to your class to discuss your school's meal program. Have students bring any questions remaining from the assessment activity and ask them to write down any additional questions they have ahead of time. Give questions to your food service professional two weeks in advance of the visit to allow time for research and preparation. Encourage students to take notes on the presentation in their Farm to School Journals. Some specific topics that you can ask your guest to talk about include:

- How are meals and ingredients planned, purchased and prepared?
- What are the challenges of operating a school meal program and do you have ideas for how students can help?
- Can our school conduct scratch cooking or modified scratch cooking? Why or why not?
- How far in advance are menus planned? (several weeks, several months?)
- How did requirements change with the new federal rules in 2012? What is our school doing differently given the new federal requirements?
- How much can our school nutrition service spend per meal on food, labor and overhead?
- How is the food cost allocated across different meal components like fruits, vegetables, grains, protein/entrée and milk?
- What quantity of a specific ingredient is needed for one or multiple school meals?
- Are any Farm to School activities currently done in the school? What foods are grown or raised locally? Where and by whom?
- What food safety or other procurement rules do students need to understand before approaching farmers?
- What other advice does the FSD have about potential sources of local food? Delivery requirements, packaging, storage facility, skills of cafeteria staff, etc.?

Encourage students to develop a collaborative relationship with the food service representative and to be respectful of the hard work she or he undertakes to feed so many students.

ADDITIONAL ACTIVITY: LETTER TO THE EDITOR

Have students write an article for the school newspaper, a letter-to-the-editor or blog about your Farm to School class. Their article can discuss what they have learned throughout this lesson about the origins of foods currently used in their school and how Farm to School initiatives might be incorporated. Have students focus on one food item and be specific about the changes that Farm to School can support for that one food item. This activity can also be used as a test to show increased knowledge at the end of the lesson.

ADDITIONAL ACTIVITY: VISIT SCHOOL KITCHEN OR SCHOOL DISTRICT'S CENTRAL KITCHEN

If possible, arrange for students to visit your school kitchen or your district's central kitchen to shadow kitchen staff and/or shadow nutrition staff. Allow them opportunities to interview staff in different roles of involvement with the school meals in order to better understand how meals are prepared.

NATIONAL COMMON CORE STANDARDS FOR ENGLISH LANGUAGE ARTS

CCSS.ELA-LITERACY.RH.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

CCSS.ELA-LITERACY.RH.11-12.9 Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.

CCSS.ELA-LITERACY.SL.11-12.1B Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

CCSS.ELA-LITERACY.SL.11-12.1C Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.

CCSS.ELA-LITERACY.W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

THE COMMON CORE MATH STANDARDS

None identified

THE MN MATH STANDARDS (2007)

None identified

THE COMMON CORE SCIENCE STANDARDS

None identified

THE MN SCIENCE STANDARDS (2009)

9.4.1.2.1 Recognize that cells are composed primarily of a few elements (carbon, hydrogen, oxygen, nitrogen, phosphorus, and sulfur), and describe the basic molecular structures and the primary functions of carbohydrates, lipids, proteins and nucleic acids.

9.4.2.2.2 Explain how matter and energy is transformed and transferred among organisms in an ecosystem, and how energy is dissipated as heat into the environment.

THE MN SOCIAL STUDIES STANDARDS (2011)

None identified

WHAT IS THE NATIONAL SCHOOL LUNCH PROGRAM?

The National School Lunch Program is a federal meal program operating in over 101,000 public and nonprofit private schools and child care institutions. Approximately 31 million children participate in the National School Lunch Program and over 12.1 million children receive breakfast through the School Breakfast Program every day. In 1998, Congress expanded the National School Lunch Program to include reimbursement for snacks served to children in afterschool educational and enrichment programs.

The USDA Food and Nutrition Service administers the program at the federal level. On the state level, the National School Lunch Program is usually administered by state agencies like State Departments of Education, which operate the program through agreements with school food authorities.

Source: <http://www.fns.usda.gov/cnd/lunch/AboutLunch/NSLPFactSheet.pdf>

HOW DOES THE NATIONAL SCHOOL LUNCH PROGRAM WORK?

Generally, public or nonprofit private schools of high school grade may participate in the school lunch program. School districts and independent schools that choose to take part in the lunch or breakfast program are reimbursed by the government from the U.S. Department of Agriculture (USDA) for each meal they serve. In return, they must serve lunch and breakfast meals that meet Federal requirements. Schools can also be reimbursed for snacks served to children through age 18 in afterschool educational or enrichment programs and dinners.

Source: <http://www.fns.usda.gov/cnd/lunch/AboutLunch/NSLPFactSheet.pdf>

WHAT ARE THE NUTRITIONAL AND SAFETY REQUIREMENTS FOR SCHOOL LUNCHES?

The current School Lunch Program Requirements can be found at <http://www.gpo.gov/fdsys/pkg/FR-2012-01-26/pdf/2012-1010.pdf>.

School lunches must meet the applicable recommendations of the Dietary Guidelines for Americans, which recommend that no more than 30 percent of an individual's calories come from fat and less than 10 percent from saturated fat. Regulations also establish a standard for school lunches to provide one-third of the Recommended Dietary Allowances of protein, Vitamin A, Vitamin C, iron, calcium and calories. School lunches must meet federal nutrition requirements, but decisions about what specific foods to serve and how they are prepared are made by local school food authorities.

Source: <http://www.fns.usda.gov/cnd/lunch/AboutLunch/NSLPFactSheet.pdf>

There are rules that food service professionals must follow when serving school food. The following resources offer great information on serving local foods in school lunches:

- Food Safety Manual

<http://www.okfarmtoschool.com/resources/fts-distro-foodsafetymanual/index.htm>

- “Serving Locally Grown Produce in Food Facilities”

<http://www.mda.state.mn.us/food/safety/~media/Files/food/foodsafety/fs-produce.ashx>

NAME:

Instructions:

Working in your group, choose a meal from the school menu to examine together. List all the menu items in the meal, and then list all of the ingredients you can identify in each food item.



Once your group has identified as many ingredients as you can in your meal, try to identify where each ingredient came from. Think back to what we learned about Food Systems. Can you tell a story about how each food item travelled through the food system from field to plate?

Lesson 3: School Lunch: How Does It Really Work?
Worksheet 3-2: An In-depth Look at
School Lunch Origins

NAME:

In this assignment, you will do internet research on a school lunch food item to see how it came to your lunch tray. Three common steps for most food items are: 1.) production and harvest; 2.) processing and manufacturing; 3.) distribution and sale (retail, foodservice, etc.). Keep these steps in mind as you answer the following questions about your food item.

In what areas of the U.S. is your food item grown or raised?

“Food processing” includes when food items are washed, peeled, steamed, pureed, sliced, marinated etc. and how they are packaged. In what way was your food item processed into the form it takes on your tray?

Can you identify any information about where and how the ingredients of your food item were grown and processed by looking at the food manufacturer or source’s website? What information is available about ingredients’ sources and how it was processed? What information isn’t available? If time allows, contact the provider of the menu item and ask them these questions.

How did your food item travel from farm to processor to distributor to school? How far did it travel? Use an online maps website (e.g., Google Maps) to trace the distance from farm to fork when possible.

What are the pros and cons of how this food item reached your tray?

Could Farm to School foods address the cons identified?

NAME:

Instructions:

Explore the MyPlate website to find out what you should see on your school lunch tray!

Look at www.choosemyplate.gov/food-groups/ and click on “How much is needed?” to see a chart of how much of each group you should eat. For the following groups, what is the recommended amount for your age group? (K-5, 6-8, 9-12)

Fruits:

Vegetables:

Grains:

Proteins:

Dairy:

Oils:

Do you eat the recommended amount of each category? Are there some categories where you eat less than the recommended amount? Are there some categories in which you eat more than the recommended amount?

Do you think it's easy to eat the recommended amounts of all the food groups? Which ones are the most difficult? Which ones are the easiest?

NAME:

Instructions:

Answer the questions in this worksheet to the best of your ability. Use your food service vocabulary cards, your class interview with your school food service professional, school kitchen tour, school district website and your own observation to answer these questions. After answering the research questions, take time to answer the thoughtful wrap-up questions at the end.

GENERAL INFORMATION:

School District Name:

School Name:

Grades:

Number of Students:

Average Number of Students participating in the National Lunch Program per day:

FOOD SERVICE:

Name of your Food service professional:

Who operates your school/district's food service program? Does the school operate it themselves, or does an outside food service company?

Is food for your school meals prepared on-site in a kitchen at your school or in a central kitchen facility somewhere else in your school district?

What equipment is available in your school kitchen?

Does your school participate in the USDA National School Lunch Program? Yes No

Does your school serve breakfast? Yes No

Does your school serve a snack program? Yes No

Does your school serve dinner? Yes No

Does your school offer a salad or fresh fruit bar? Yes No

What distributor(s) does your school/district use?

How is most of the school's food purchased?

How and where is food delivered to the school?:

How much refrigerator or freezer space is available in your school kitchen?

Where do your school food ingredients come from now?

How many food service staff work in your school's kitchen and what are their roles?

What form do fruit and vegetable need to come in to be used in your school's kitchen (eg. Whole, fresh; fresh, precut; canned; frozen; dried)?

How is your school menu developed? Does your school have a cycle menu that repeats every 4 or 5 weeks, or does it take a different approach to planning menus?

What are some of the biggest challenges faced by your school's food service program?

What changes have taken place in the last 3-5 years?

FARM TO SCHOOL:

Does your school currently have a Farm to School Program? Yes No

Procurement and School Meals

Does your school or district currently purchase fruits, vegetables, meat, grains or other products that are grown or raised on local farms? Yes No

If yes, what foods are purchased from local farmers/ranchers/fishers etc.?

If yes, how does your school/district find local farmers?

If yes, are there signs in your cafeteria or eating space highlighting local foods? Yes No

If no, what types of local products are desired?

Gardening

Does your school have a garden or greenhouse? Yes No

If yes, what is grown in the garden or greenhouse?

If yes, is food from the garden or greenhouse used in your cafeteria or classroom?

If no, does your school have a space for a greenhouse or garden?

Nutrition and Agriculture Education

Does your school or classroom conduct any of the following activities?

Local food taste testing in the cafeteria: Yes . No

Cooking in the classroom: Yes No

School or classroom visits from chefs or farmers: Yes No

Field trips to farms, farmers markets, restaurants, grocery stores or something similar: Yes No

Farm to School curriculum: Yes No

Provide supporting materials for parents, staff or community about food and nutrition: Yes No

Have a chef in the classroom or cafeteria program: Yes No

Wellness Policy

Is Farm to School mentioned in your school/district's Wellness Policy? Yes No

WRAP UP SECTION FOR CLASSROOM DISCUSSION

What did you learn from this School Food Assessment?

What surprised you most about what you learned?

With this new information, how do you think you can help Farm to School start or expand at your school?



Lesson 4

Identify Opportunities
and Make a Farm to
School Plan



FARM TO SCHOOL

YOUTH LEADERSHIP CURRICULUM

Lesson 4
Farm to School Youth Leadership Curriculum: 11th & 12 Grades

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More at iatp.org

FARM TO SCHOOL YOUTH LEADERSHIP CURRICULUM

The high school level Farm to School Youth Leadership Curriculum is designed to empower youth, teach them about their local food system, engage them in meaningful, hands-on learning activities that also strengthen their school's Farm to School program and link them directly with farmers in their community. Implementation of the curriculum in a high school setting simultaneously gives students ownership and commitment to their school's Farm to School program, while reducing the amount of legwork and research required of teachers or food service staff to establish or expand a farm to school program.

The curriculum is comprised of 6 Lessons, each containing a lesson summary, a list of lesson activities, lesson outcomes, facilitator preparation notes, a materials and equipment list, additional resources, detailed facilitator descriptions of core activities, additional recommended activities, a chart of the lesson's alignment to national and Minnesota academic standards and worksheets and handouts for students. The lessons can be taught consecutively over a semester or facilitators can choose to use single lessons or activities as a complement to their classes. Activities are interdisciplinary, and may fit into classes focused on Agriculture, Family and Consumer Sciences, Social Studies, Economics, Health, Science or other subjects. The curriculum was developed with the 11th and 12th grade high school classroom setting in mind, but could also be used by educators teaching about Farm to School or local foods systems in other settings. Occasional connections with external farmers or food service professionals deeply enrich the lessons; when these connections are recommended, this is indicated in the introductory notes to give the facilitator time to prepare.

Farm to School programs link children to nearby small and mid-size farms and ranches that produce fresh, healthy and minimally processed foods that are served at their schools. Aimed at educating children about where and how their food is grown, strengthening local economies and supporting healthy eating habits, the Farm to School movement is rapidly growing.

Farm to School advances the following goals:

- Promote children's health by providing fresh, healthy and minimally processed foods in schools and supporting the development of healthy eating habits
- Enhance children's "food literacy" by familiarizing them with foods grown nearby, teaching them how and where their food is grown, building knowledge about how to prepare healthy foods, and educating them about the health, nutrition, social and environmental impacts of food choices
- Strengthen local economies by expanding markets for small and mid-size agricultural producers and food entrepreneurs whose products have typically been unavailable in school meal programs
- Build vibrant locally oriented food systems by fostering positive relationships and increase understanding of local food systems among children, farmers, parents, educators and school districts, healthcare professionals, and other community members
- Advance environmental stewardship, where practicable, by supporting more sustainable food production methods, reducing reliance on long distance transportation, and reducing food waste

We hope that this curriculum will be useful in engaging students to start or expand a Farm to School program, and we welcome feedback and stories of how it works for you!

LESSON SUMMARY

In this lesson, students will apply what they have learned about Farm to School principles to their own school environment to identify Farm to School foods that could potentially be incorporated into school meals given your school's kitchen facilities, the availability of locally grown foods and other factors. In Lesson 5, students will continue to use this information to connect with farmers to identify nearby sources of these priority foods.

LESSON ACTIVITIES

1. What's on the Menu?
2. Select a Local Food Recipe Appropriate for Your School
3. Presentations to School Food Service Staff, School Administrators, Parents or Other Students and Student Leadership Engagement

LESSON OBJECTIVES:

Students will be able to:

1. Identify foods that can be purchased locally
2. Select a Local Food Recipe Appropriate for Your School
3. Presentations to School Food Service Staff, School Administrators, Parents or Other Students and Student Leadership Engagement

MATERIALS AND EQUIPMENT

- Copies of Worksheets for all students:
 - Worksheet 4-1: Venn Diagram of Locally Grown Foods and School Meal Foods
 - Worksheet 4-2: Priority Local Food Item and Recipe Suggestions
- Multiple copies of four or five different months of your school's lunch menus.
- Your school or district's Wellness Policy.

ADDITIONAL RESOURCES

■ “GETTING STARTED: WISCONSIN FARM TO SCHOOL TOOLKIT”

➤ <http://www.cias.wisc.edu/toolkits/>

The opening chapter of this toolkit for Food School Nutrition Directors outlines the community, school and administrative basics to start purchasing local food. (website and pdf)

■ “WSDA WASHINGTON STATE FARM TO SCHOOL TOOLKIT”

➤ <http://www.wafarmtoschool.org/>

Through stories, photos, templates, documents and more, this toolkit highlights Farm to School and school garden successes throughout the state and draws together best practices and Farm to School tips.

■ “FARM TO SCHOOL DISTRIBUTION SYSTEMS: CASE STUDIES FROM DIFFERENT STATES”

➤ <http://www.okfarmtoschool.com/resources/fts-distro-foodsafetymanual/section1-FTS-distribution-systems.pdf>

This chapter from the Oklahoma Farm to School Toolkit provides detailed case studies of local food purchasing from a variety of different schools. (pdf)

■ “DISTRIBUTION MODELS FOR FARM TO SCHOOL”

➤ www.foodsecurity.org/f2s_distribution_method.pdf

This publication from the Community Food Security Coalition outlines four major methods of distribution for Farm to School. (pdf)

■ LOCAL FOOD RECIPE GUIDES

● Fresh from the Farm: The Massachusetts Farm to School Cookbook

➤ http://www.farmtoschool.org/files/publications_134.pdf

● Kidchen Expeditions Cookbook

➤ <http://www.kidchenexpedition.com/cookbook/>

● Minnesota Farm to School Recipes

➤ <http://www.extension.umn.edu/farm-to-school/toolkit/using-food/>

■ “FARM TO SCHOOL EVALUATION TOOLKIT”

➤ www.farmtoschool.org/files/resources_644.pdf

This toolkit provides templates for evaluating the impact of Farm to School programs on schools, students, food service and others and is produced by the National Farm to School Network and the University of North Carolina at Chapel Hill. (pdf)

LESSON INITIATION

Ask students if they have ever used a recipe to make their own food, or if they have a favorite recipe. What are some things that all recipes have in common? Have students ever tried to cook without a recipe? Could they imagine cooking a meal for a whole school?

LESSON INTRODUCTION

This lesson will involve students taking a leadership role in exploring how your school's Farm to School program could be started or expanded and going through the process of meeting logistical requirements for school meals. Optimally, students' research would inform decisions made by school foodservice personnel about what foods to include in their menus that come from nearby producers.

If that isn't possible at your school, students can still complete the process as a learning experience. Keep in mind: Even for schools that are able to incorporate some of the students' research into school meal planning, the timeline for implementing new menu ideas may be longer than the length of a class semester.

ACTIVITY 1: IDENTIFY OPPORTUNITIES TO SOURCE LOCALLY GROWN FOODS (90 MINUTES)

Materials:

A few months of school menus

Open this activity by reviewing Lesson 1 and Lesson 2 to refresh students about Farm to School and available locally grown foods. Allow students five minutes to flip through their Farm to School Journals to remember what they have learned previously.

STEP 1: Define Local (30 minutes)

Take this opportunity for the class to create their own definition of 'local' to apply to Farm to School food at the school.

Allow students to suggest different definitions of "local" and provide a reason for each suggestion. Write all the suggestions on the board, and then ask students to come to a consensus. Definitions may include a radius, specific counties, a specific hour drive, state or regional boundaries. The definition can be as creative as students prefer, including a tiered approach with a different definition of local applied to different food items.

STEP 2: Determine Important Local Products (30 minutes)

➔ Worksheet 4-1: Venn Diagram of Locally Grown Foods and School Meal Foods

Divide students into small groups that will work together for the remainder of Lesson 4 and all of Lesson 5. Students will start work in their small groups by completing a Venn Diagram on Worksheet 4-1 showing the overlap between foods that are grown or raised nearby and foods commonly used in your school meals. To determine the list of available products, students will refer back to the resources and information they gathered in Lesson 2, Activity 2. Students can supplement this information with their personal experience or any other research they would like to undertake.

Students will identify foods commonly used in their own school meals by referring to school menus from the previous year or semester and the information they have learned through their talk with the food service professional and the Farm to School Assessment.

For examples, students may see "Veggie Pizza" on the menu and infer that this menu item includes: wheat (dough), tomatoes (sauce) and vegetables (toppings). Another example may be "Chicken and Seasonal Vegetables" for which students will be able to select specific vegetables based on the month of the menu and their knowledge of seasonality in their geographic region.

STEP 3: Highlight Priority Foods (30 minutes)

Have each group select a "Priority Farm to School Food" from the foods listed in the overlapping portions of the Venn Diagram, indicating that the food is used in school meals already and is available locally. If possible, all groups in the class should select a different priority food in order to maximize the amount of local product research going forward. Use the following discussion questions to help select the "Priority Foods." Ask students to take good notes about the questions below as they can use this information to report back to their food service professional in Activity 3 below.

- A. Which items would be the easiest to replace in the menu? Replacing non-local with locally grown foods, for example exchanging non-local zucchini on the menu for local zucchini, might be a relatively straightforward way to get more locally grown foods in your school meals while local zucchini is in season. Similarly, can students select a food from the same category that would replace a food item that isn't otherwise available locally? Have students look for foods that are used often, and see if either of these replacement strategies would work. Examples of this replacement include substituting a non-local apple with a local apple, replacing non-local oranges with a local melon or replacing a non-local vegetable with a vegetable that can be grown locally. Review old menus and identify how many times locally grown foods could potentially be featured.

B. Look back at your meeting with the food service professional. Did she or he identify any locally grown foods that the nutrition staff view as priorities for incorporating into menus? Did she or he discuss any items that are already being purchased locally but that they would like to “scale up” and get more of?

C. What other considerations may be important to consider? Think about cost, if the item can be purchased whole or lightly processed (chopped, peeled, etc.), the capacity of the school’s kitchen facility to prepare this food, the quantities needed and if students may like it.

ACTIVITY 3: RESEARCH FOR YOUR FOOD SERVICE PROFESSIONALS (45 MINUTES)

► Worksheet 4-2: Priority Local Food Item and Recipe Suggestions

In this activity students will get to know a bit more about the food item selected in Activity 2. Although food items that can most easily be substituted into existing menus have been selected, students will have the opportunity to undertake additional research, to provide leadership to the school and to suggest local items and recipes to a food service professional. In this activity students will select a food service–appropriate recipe for a meal item that features the Priority Food their group selected. Then students will calculate how much of the product is needed to prepare the menu item for the average number of students eating school lunch at the school. Students will also figure out which form of the product is needed (fresh, raw, uncut, minimally processed, frozen, etc.)

STEP 1: Students will complete Worksheet 4-2 to provide information about their Priority Food Item to their food service professional. This worksheet will help them explain why they have selected the specific food item, and how the students think that the food item can be most easily inserted into the school menu.

STEP 2: Students will select a new recipe that features their Priority Food Item, and prepare information about the new recipe for the food service professional. Your food service professional may not be able to implement new recipes, but this activity may provide inspiration for your FSD even if it can’t be followed exactly. The following activity also utilizes your students’ math skills.

First, students will research the resources listed below to select one recipe that features their Priority Local Food Item. This information will be recorded in Worksheet 4-2. Students will then use the information they have learned from Lesson 3 on their school food service to:

1. Determine how many students, on average, eat lunch each day.
2. Determine what quantity of the Local Food Item (in culinary measurements) will be needed to prepare a lunch for the average number of students who eat at school each day. For example: The recipe is written to provide 100 meal servings, and calls for 10 cups of the Priority Food Item. How many cups of apples are needed to serve 200 students, the average number of students who eat lunch each day. (Answer: 20 cups).
3. The students will then estimate the amount of apples needed to supply the 20 cups.

Note to instructors: Recipes will be written using various measurements such as serving sizes, volumes (cups, quarts) or measurements of weight. To help convert these various measurements, have students familiarize themselves with these three resources (links provided below): the Oklahoma Farm to School Produce Calculator, Pecks to Pounds and the Food Buying Guide Calculator for School Nutrition Programs. If students seem frustrated remind them that this is what their food service professional must figure out in order to put their priority food item into a new recipe. Also, allow students to make estimates if needed, although they should make note of it.

In the next Lesson, students will focus on finding local farmers/growers who could supply this item to the school.

Recipe Ideas:

- “A Guide for Using Local Foods in Schools” (starting on page 85)
<http://www.vtfeed.org/materials/guide-using-local-food-schools>
- “Massachusetts Farm to School Cookbook”
http://www.massfarmtoschool.org/wp-content/uploads/2012/05/farm_to_school_cookbook.pdf
- “Minnesota Farm to School: Recipes”
<http://www.extension.umn.edu/farm-to-school/toolkit/using-food/recipes.html>
- “Now We’re Cooking! A Collection of Simple Scratch Recipes Served in Minnesota Schools”
<http://www.health.state.mn.us/schools/greattrays/pdfs/NowCooking.August22.pdf>
- “Kidchen Expedition: Oklahoma Farm to School Cookbook”
<http://www.kidchenexpedition.com/cookbook/>
- “USDA Recipes for Healthy Kids: Cookbook for Homes”
www.teamnutrition.usda.gov/resources/r4hk_homes.html
- “Oklahoma Farm to School Produce Calculator” (bottom of page, download Excel)
<http://www.okfarmtoschool.com/resources/fts-distro-foodsafetymanual/index.htm>
- “Pecks to Pounds”
<http://www.cias.wisc.edu/foodservtools/3-Locate-and-purchase-local-foods/pecks-to-pounds.pdf>
- “Food Buying Guide Calculator for School Nutrition Programs (National Food Service Management Institute)”
<http://fbg.nfsmi.org/>

ACTIVITY 4: SHARING YOUR RESEARCH WITH YOUR FOOD SERVICE PROFESSIONAL (30 MINUTES)

► Worksheet 4-2: Priority Local Food Item and Recipe Suggestions

Have students make copies of Worksheet 4-2 in order to share them with their food service professional and/or other people or groups who may also be interested in this information, like the school’s PTA, school administrators or others. Ask students to reflect on their selection of a Priority Food Item, recipe and calculations, and encourage them to write about the process they have just undertaken.

You may ask students to use the perspective of the food service professional to write about what it is like for her or him to do this planning on a regular basis for the entire school. Attach these explanatory papers to the worksheets to give context to the food service professional or other you share the Priority Foods with.

ADDITIONAL ACTIVITIES

Food Service Professional Feedback (20 minutes)

If possible, have students collect and report on the response from the food service professional: What factors did the student miss? Did it seem like a proposal worth exploring more? What additional information would be needed in the next phase? Can the students find that information?

NATIONAL COMMON CORE STANDARDS FOR ENGLISH LANGUAGE ARTS

CCSS.ELA-LITERACY.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

CCSS.ELA-LITERACY.RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CCSS.ELA-LITERACY.SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

CCSS.ELA-LITERACY.SL.11-12.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

CCSS.ELA-LITERACY.SL.11-12.6 Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

CCSS.ELA-LITERACY.SL.11-12.1B Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

CCSS.ELA-LITERACY.W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

THE COMMON CORE MATH STANDARDS

CCSS.MATH.CONTENT.HSN-Q.A.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

CCSS.MATH.CONTENT.HSN-Q.A.2 Define appropriate quantities for the purpose of descriptive modeling.

CCSS.MATH.CONTENT.HSN-Q.A.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

THE MN MATH STANDARDS (2007)

9.3.1.3 Understand that quantities associated with physical measurements must be assigned units; apply such units correctly in expressions, equations and problem solutions that involve measurements; and convert between measurement systems.

THE COMMON CORE SCIENCE STANDARDS

None identified

THE MN SCIENCE STANDARDS (2009)

9.1.3.1.1 Describe a system, including specifications of boundaries and subsystems, relationships to other systems, and identification of inputs and expected outputs.

9.1.3.4.5 Demonstrate how unit consistency and dimensional analysis can guide the calculation of quantitative solutions and verification of results.

THE MN SOCIAL STUDIES STANDARDS (2011)

None identified

Lesson 4: Identify Opportunities and Make a Farm to School Plan
Worksheet 4-1: Venn Diagram of Locally Grown Foods and School Meal Foods

NAME:

Instructions:

Use pencil to begin this project. Fill the two circles below with names of appropriate food items. To determine the list of products available in your area, refer back to the resources and information you gathered in Lesson 2, Activity 2. You can supplement this information with your personal experience or any other research you would like to undertake. To identify foods commonly used in your school meals, refer to school menus from the previous year and the information you have learned through your talk with the food service professional and through the Farm to School Assessment. For any products that appear in both lists, write them in the middle space where the two circles overlap called “Priority Foods” for possible inclusion in your school’s Farm to School program.

In what areas of the U.S. is your food item grown or raised?

GROUP MEMBERS' NAMES:

Priority Food Item(s):

Why we selected this as our Priority Food Item (Be sure to include anything you discussed in Activity 2):

Where the Priority Food Item fits into the existing school menu:

Concerns or drawbacks to this specific Priority Food Item:

Other notes to your food service professional:

Recipe Name:

Source of Recipe:

Web Address (Include a print out or photocopy if possible):

Average Number of Students eating lunch each day:

Quantity of Priority item listed in recipe:

Quantity of Priority Item needed for recipe scaled to feed average number of students:

Quantity of product to be purchased to meet needs of recipe:

Please provide additional notes to your food service professional including the tools you used to make your calculations and any estimates that you made.



Lesson 5

Communicating with Producers of Local Foods



FARM TO SCHOOL

YOUTH LEADERSHIP CURRICULUM

Lesson 5
Farm to School Youth Leadership Curriculum: 11th & 12 Grades

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The Institute for Agriculture and Trade Policy works locally and globally at the intersection of policy and practice to ensure fair and sustainable food, farm and trade systems.

More at iatp.org

FARM TO SCHOOL YOUTH LEADERSHIP CURRICULUM

The high school level Farm to School Youth Leadership Curriculum is designed to empower youth, teach them about their local food system, engage them in meaningful, hands-on learning activities that also strengthen their school's Farm to School program and link them directly with farmers in their community. Implementation of the curriculum in a high school setting simultaneously gives students ownership and commitment to their school's Farm to School program, while reducing the amount of legwork and research required of teachers or food service staff to establish or expand a farm to school program.

The curriculum is comprised of 6 Lessons, each containing a lesson summary, a list of lesson activities, lesson outcomes, facilitator preparation notes, a materials and equipment list, additional resources, detailed facilitator descriptions of core activities, additional recommended activities, a chart of the lesson's alignment to national and Minnesota academic standards and worksheets and handouts for students. The lessons can be taught consecutively over a semester or facilitators can choose to use single lessons or activities as a complement to their classes. Activities are interdisciplinary, and may fit into classes focused on Agriculture, Family and Consumer Sciences, Social Studies, Economics, Health, Science or other subjects. The curriculum was developed with the 11th and 12th grade high school classroom setting in mind, but could also be used by educators teaching about Farm to School or local foods systems in other settings. Occasional connections with external farmers or food service professionals deeply enrich the lessons; when these connections are recommended, this is indicated in the introductory notes to give the facilitator time to prepare.

Farm to School programs link children to nearby small and mid-size farms and ranches that produce fresh, healthy and minimally processed foods that are served at their schools. Aimed at educating children about where and how their food is grown, strengthening local economies and supporting healthy eating habits, the Farm to School movement is rapidly growing.

Farm to School advances the following goals:

- Promote children's health by providing fresh, healthy and minimally processed foods in schools and supporting the development of healthy eating habits
- Enhance children's "food literacy" by familiarizing them with foods grown nearby, teaching them how and where their food is grown, building knowledge about how to prepare healthy foods, and educating them about the health, nutrition, social and environmental impacts of food choices
- Strengthen local economies by expanding markets for small and mid-size agricultural producers and food entrepreneurs whose products have typically been unavailable in school meal programs
- Build vibrant locally oriented food systems by fostering positive relationships and increase understanding of local food systems among children, farmers, parents, educators and school districts, healthcare professionals, and other community members
- Advance environmental stewardship, where practicable, by supporting more sustainable food production methods, reducing reliance on long distance transportation, and reducing food waste

We hope that this curriculum will be useful in engaging students to start or expand a Farm to School program, and we welcome feedback and stories of how it works for you!

LESSON SUMMARY

In this lesson, students will think through the important information they will need to gather from farmers, seek out local producers and then try to make Farm to School connections. Students will develop scripts and tools for communicating with producers by phone or e-mail, and record the information they collect from their engagement with growers. Students will aggregate their information and share it with a school food service staff and/or the class.

LESSON ACTIVITIES

1. Who Are Our Local Farmers?
 2. Farmer Basics: What We Need to Know
 3. Preparing to Talk with Farmers: Developing a Script
 4. Communicate With a Farmer and Collect Information
 5. Compile Information and Share with Food Service Professional
- Additional Activity: Invite a farmer, extension educator or Master Gardener to talk with the class.
- Additional Activity: Reflect on what was learned (critical thinking and writing skills)

LESSON OBJECTIVES:

Students will be able to:

1. Identify appropriate local producers of specific Farm to School foods. Summarize and record farm information in provided worksheets. Apply knowledge of Farm to School and food systems to list and compare information necessary to collect from potential producers.
2. Complete e-mail and phone communication scripts and engage in useful conversations with farmers.
3. Catalog producer information to share with food service professional or others.
4. Reflect on the entire process of finding locally grown foods for use in your school.

MATERIALS AND EQUIPMENT

- Copies of Worksheets for all students:
 - Worksheet 5-1: Finding Local Producers
 - Worksheet 5-2: Farm to School Producer Profile (multiple copies, one for each producer)
 - Worksheet 5-3: What Information Will You Need from Potential Producers?
 - Worksheet 5-4: Producer Questionnaire (multiple copies, one for each producer)

- Worksheet 5-5: Farm to School E-mail Communications Template
 - Worksheet 5-6: Farm to School Phone Communications Template
 - Multiple folders or binders for students to collect and keep track of information for each producer.
- Students' Worksheet 4-2: Priority Local Food Item and Recipe Suggestions from Lesson 4, where students determined how much of a certain product is needed.
- Multiple print editions of local procurement directories and guides used in Lesson 2 and Lesson 4.
 - Internet access or printed copies of Food Safety information handout in Activity 2.
- Internet access and an e-mail address created specifically to allow students to e-mail inquiries to farmers. This can be as simple as a free e-mail account (like Gmail, Hotmail, etc) to which the teacher holds the password information, but allows students access to send e-mails.
 - During this lesson, the educator should be prepared to schedule a call time with one responsive producer from the students contact list. If it is difficult for students to identify local growers, be prepared with the name of a local farmer who may be able to respond to the class.
 - Contact a local farmer, extension educator or Master Gardener to visit class for an additional activity.

ADDITIONAL RESOURCES

■ **“MARKETING MICHIGAN PRODUCTS: A STEP BY STEP GUIDE”**

- http://www.mifarmtoschool.msu.edu/assets/farmToSchool/docs/MIFTS_Marketing_Guide.pdf

This Michigan Farm to School guide provides farmers and agricultural producers with guidance to market their products to local schools. (pdf)

■ **“ON-FARM FOOD SAFETY INFORMATION FOR FOOD SERVICE PERSONNEL”**

- <http://www.extension.umn.edu/farm-to-school/docs/farm-food-safety-questions.pdf>

A brief document outlining basic food safety information that producers can discuss with school food service personnel. (pdf)

- <http://www.okfarmtoschool.com/resources/fts-distro-foodsafetymanual/section2-food-safety.pdf>

This Oklahoma Farm to School Manual chapter on food safety provides the school perspective on food safety for school meals.

Note: Food safety requirements may vary by state or locale.

■ **4-H**

- <http://www.4-h.org/>

A youth development organization typically thought of as an agriculturally focused organization as a result of its history, 4-H today also focuses on citizenship, healthy living, science, engineering and technology programs

■ **FARM AID**

- <http://www.farmaid.org>

Willie Nelson, Neil Young and John Mellencamp organized the first Farm Aid concert in 1985 to raise awareness about the loss of family farms and to raise funds to keep farm families on their land. Dave Matthews joined the Farm Aid Board of Directors in 2001. Farm Aid is a nonprofit organization whose mission is to keep family farmers on their land. (website)

■ FFA

➤ <https://www.ffa.org/Pages/default.aspx>

The National FFA Organization (formerly Future Farmers of America) envisions a future in which

all agricultural education students will discover their passion in life and build on that insight to chart the course for their educations, career and personal future. (website)

EXAMPLES OF LOCAL FOOD PROCUREMENT GUIDES

■ LOCAL DIRT (WEBSITE)

A website for finding, selling and buying local food online.

➤ <http://localdirt.com/>

■ LOCAL HARVEST (WEBSITE)

A searchable website listing direct-to-consumer farms across the country.

➤ <http://www.localharvest.org/>

■ PICK YOUR OWN (WEBSITE)

A guide to farms and orchards etc. that allow consumers to pick their own product.

➤ <http://www.pickyourown.org>

■ FOOD HUB (WEBSITE)

An online food hub supporting multiple western states.

➤ <http://food-hub.org/>

■ EATERS GUIDE TO LOCAL FOOD (PDF)

A printed, local food guide for a geographically specific areas within California published by the California Alliance with Family Farmers.

➤ <http://caff.org/programs/local-food-systems/local-food-guide/>

■ MINNESOTA GROWN DIRECTORY (PDF OR WEBSITE)

A print guide and searchable online database of Minnesota agricultural producers maintained by the Minnesota Department of Agriculture.

➤ <http://www3.mda.state.mn.us/mngrown/>

■ NEW MEXICO FARM TO SCHOOL DIRECTORY (PDF)

A list of farmers, producers and schools interested in participating in Farm to School.

➤ http://www.farmtotablenm.org/nm_fts_directory_oct07.pdf

LESSON INITIATION

Framing the discussion from the farmer perspective

Engage students in a classroom discussion about the “farmer side” of Farm to School. Ask students to indicate if they have ever grown their own food by a show of hands. This may be in a backyard garden, community garden plot, after school program, on their family farm, etcetera. Then ask students if they know farmers or gardeners who grow their own food.

Ask students, based on their experience or what they have learned in this curriculum, to imagine being a farmer. Ask students to brainstorm and throw out thoughts about

what it might be like to be a farmer and what they would have to think about in selling their product to schools. Can they imagine what it would be like to plan for a season, raise crops, harvest, market, sell and distribute their foods to schools? What might be challenging? What might be rewarding about life as a farmer, rancher or fisher? What type of costs would you include in assessing your bottom line (for example: land, equipment, seeds, distribution, labor)? Thinking through the daily and yearly schedule of a farmer, ask students if they can think of good or bad times throughout the day or year to try to get in touch with farmers? What communication methods may be most successful?

LESSON INTRODUCTION

Students will continue their leadership role in searching for Farm to School foods that could potentially be used in the meals at their school. Instructors will be searching for farms that grow and can provide the local foods you selected in Lesson 4.

Script to read to students:

Farmers and other agricultural producers are an essential part of Farm to School. As a group, you have learned a lot about your school food service program and the requirements of the National School Lunch Program. Farm to School includes both schools and farmers. In this lesson you will investigate the farmer side of Farm to School. This includes finding local producers who may be able to sell their products to our school and gathering information about each farmer so that our school could consider purchasing from him or her.

Just as each school’s food service program is different, so is each farm. Farms can vary in the products they produce, agricultural practices they use, size and scale, methods of distribution, how they market products, and more. Some farms are better suited for Farm to School than others. In this lesson, we will learn more about what is needed from a farmer in order for him or her to sell to Farm to School programs, and try to identify local farmers who may be a good fit for our school.

As students, you can serve a leadership role in connecting your school with local farmers. This is helpful and important because, for many school food service professionals, investigating many different individual farmers who grow specific products can be a challenge. It can be hard to know where to look for farmers, and can take a lot of time to seek out the right farms. As student leaders in this process, you can do the research and provide a list of potential farmers to your food service professional.

ACTIVITY 1: WHO ARE OUR LOCAL FARMERS? (45-90 MINUTES)

Materials:

Before this lesson, teachers should collect print editions of local food guides, compile names of resources, and/or prepare to access links to online resources on Worksheet 5-1: Finding Local Producers.

In this lesson, the true search for local food begins as students research and identify local farmers who grow or raise the specific products students identified as priority items in Lesson 4. Students will record farm information on Worksheet 5-1: Finding Local Producers. In this lesson, students will identify and use various resources for finding local farms and use the skills gained in previous lessons to identify appropriate farmers.

Finding local producers can be a challenge. Depending on your locale, there may be plentiful or limited resources identifying local farms. Before the lesson, familiarize yourself with online and print resources in your area, suggestions are listed in the resource section above and in Worksheet 5-1: Finding Local Producers. If possible, collect multiple copies of any print resources for students to use in the classroom during the lesson. In many cases, farms may not have a strong online presence, such as their own website or representation on “local food” websites.

STEP 1: Product and Quantities

Continuing in the small groups formed during Lesson 4, ask students to reference Worksheet 4-2: Priority Local Food Item and Recipe Suggestions and refresh themselves on the product and quantity of product they are trying to source. Students will transfer information from Worksheet 4-2 into Worksheet 5-1 at the beginning of this lesson. Make sure that the quantity students enter into Worksheet 5-1 is in a farm-ready measure like pounds or bushels, not in food service measurements like cups or quarts.

STEP 2: Resources to Connect with Local Food Producers

To search for Farm to School food options, students need to know what resources are available to them. In most cases, students will have to be detectives, looking in multiple places to find several farmers who grow the product they are looking for. Encourage students to use as many of the following resources as they can find. Be sure to provide print resources when available. Having hard copies in the

classroom for students to review is adequate if you don't have access to computers for your class. Below is a general list of resources that may provide local food guides:

1. Local food guides specific to your area
2. General, online farm locating websites
3. Local farmers market
4. University extension office
5. State Department of Agriculture
6. Other institutions in your area
7. Your school's current distributor
8. State Farm to School directory
9. Other local Farm to School-related resources

Who do students know locally? Some students may know (or be children or grandchildren of) local farmers. This may provide an opportunity to create connections and contacts with local farmers. Remind students to keep in mind the definition of Farm to School foods and locally grown foods that you collectively developed in Lesson 4.

Other organizations in your community might also know of additional farmers to connect with. You might consider approaching the Master Gardeners, FFA, County Extension service, farmer membership organizations or nonprofit organizations that support healthy eating, local food systems development or other relevant arenas. Remind students that not all online resources are created equal. Encourage students to recognize recently updated, well-maintained resources.

STEP 3: Finding our Farmers

After identifying appropriate resources for finding local food producers, students should begin to identify local farms that grow the foods they are searching for. Encourage students to find several farms that grow the product they are looking for. Remind students that all farms listed may not actually be able to provide the food item for a variety of reasons (such as delivery challenges, price, availability or quantity). Using copies of Worksheet 5-2: Farm to School Producer Profile students will begin

to record important information about each farm they find, including: Farm name, products they offer (beyond the specific product students are searching for), address, phone, e-mail and the farmer's name.

STEP 4: Sharing What We Have Learned

When each group has found five local farms, or determined fewer than five exist in your area, ask students to write the farm names on the board. When all groups have listed their farm names on the board, engage students in discussion about the process. Was it easier or harder than they

thought? What did students notice in the process? Since student groups will be contacting farms in an upcoming activity, reflect on the list of farms and identify any farms listed more than once among the groups. Students should also understand that some farms will be able to offer many different food items and groups must work together to make sure that each farm is only contacted once by the class. Ask students to make a note on Worksheet 5-2 of any farms they have listed that other groups have also listed.

ACTIVITY 2: FARMER BASICS: WHAT WE NEED TO KNOW ABOUT OUR FARM TO SCHOOL PARTNERS (45 MINUTES)

In this activity, students will use their existing knowledge of the food system and school lunch to identify the important information they need to collect from the farmers and producers they will communicate with later in this lesson. This is a multi-step activity where students will learn about food safety for Farm to School, brainstorm a list of important information, discuss, and then compare it to a formal information collection sheet.

STEP 1: Students will begin by reading the handout **On-Farm Food Safety Information for Food Service Personnel** (available at <http://www.extension.umn.edu/farm-to-school/docs/farm-food-safety-questions.pdf> for background information). This is a brief document that outlines basic food safety information that should be shared with both producers and school food service personnel. Note: Food safety resources may vary by state or locale. Coordinate with your school's foodservice professionals to clarify their protocols for on-farm food safety issues.

STEP 2: Using Worksheet 5-3: What Information Will You Need from Potential Producers?, students will work alone or in small groups to brainstorm the specific information they will need to collect from farmers about their products and practices. Ask students to refer to their information from Lessons 2 and 4 to fill out the worksheet. Students will use this information to compile a list of questions to ask of each potential producer. Students are encouraged to read a Farmer/Producer Handbook (such as the Michigan example in the resource section) that provides farmers

with an overview of Farm to School. These materials will help students understand the grower perspective on Farm to School.

Though it will be an important factor the school will consider, given the complexity of food safety requirements, students should leave the needed due diligence about on-farm food safety prior to purchasing to school food service professionals to conduct.

STEP 3: When students have completed filling out Worksheet 5-3: What Information Will You Need from Potential Producers?, reconvene as a class and ask students to name a few of the questions they listed in each category. If possible, write some of the suggestions on the bulletin board.

Step 4: Pass out Worksheet 5-4: Producer Questionnaire, and explain to students that this is a recommended list of questions that a food service professional should ask farmers. Ask students to compare the questions on their Worksheet 5-3 with those on Worksheet 5-4. Is anything from their list missing from Worksheet 5-4? Give students an opportunity to add or edit Worksheet 5-4, and to ask questions about topics that remain unclear. Explain to students that this is the questionnaire they will be working from when talking with potential producers.

ACTIVITY 3: PREPARING TO TALK WITH FARMERS: DEVELOPING A SCRIPT (45-90 minutes)

In most cases, students should contact farms directly, either by e-mail or phone, to collect the information they will need to complete Worksheet 5-4: Producer Questionnaire regarding Farm to School products for their school. In this activity, students will develop two scripts: one for e-mail inquiries and one for phone conversations. Students will customize and rehearse the two template scripts in Worksheet 5-5: Farm to School E-mail Communications Template and Worksheet 5-6: Farm to School Phone Communications Template as preparation to contact farmers. Due to the uncertainty that students will actually be able to make contact with busy farmers, emphasis should be placed on developing these scripts, practicing and attempting to make contact over contact itself.

STEP 1: As a class, ask students what next steps they need to take to contact farmers and collect more information about potential Farm to School products. Ask students what they think may be the best way to contact farmers and things they may want to consider when reaching out to farmers. Suggest topics like form of communication,

time of day and what information a farmer may need to know about who is calling. Write a list of topics on the board as students share them. Next, share with students that they will be contacting farmers directly and may have a chance to talk with them directly.

STEP 2: Have students read Worksheet 5-5: Farm to School E-mail Communications Template, and work in pairs to draft a message to send to potential producers. Students can attach a farmer profile one pager for the farm to fill out and link to information about selling food to schools in this e-mail.

STEP 3: Give each student Worksheet 5-6: Farm to School Phone Communications Template. Instruct students to fill in the blanks on the script based on the information they have talked about in this lesson. Students will then “role play” the phone script with each other. One student will read his or her script and the other student will pretend to be the farmer on the other end of the phone. Allows students to practice long enough for students to play each role.

ACTIVITY 4: COMMUNICATE WITH A FARMER AND COLLECT INFORMATION (45-90 minutes)

In this activity, students will reach out to farmers directly to collect information about their farm and products, and then compile the responses received from farmers. In this lesson the instructor should also attempt to schedule a group phone call or meeting time with a farmer so students have at least one successful interaction with a producer. Scheduling this meeting at the beginning of the activity can provide a helpful “test run” for students.

Before making contact, discuss as a class how to respond to possible questions or comments from farmers. There will be many different personalities they will encounter. They should be prepared to talk with producers and think on their feet, but preparation is key.

Students can use what they learned in Activity 3 to reach out to farmers by phone or by e-mail. There are pros and cons to each approach.

E-MAIL CONTACT: E-mails are less immediate, but allow students to send and receive messages flexibly and allows farmers time to think through responses or

schedule a time to talk by phone. The facilitator should create a special e-mail address for this project (using a free service such as Gmail or Yahoo) in order to protect student privacy and make sure e-mails from farmers are not overlooked. As all the e-mails will come to a central e-mail address, the facilitator can monitor all e-mail exchanges and watch for particularly responsive farmers who are interested in talking to the class. If possible, students can use e-mail to schedule a time to talk with individual farmers by phone, in order to assure both parties will be available, and then complete a phone call.

The facilitator should print e-mail responses from farmers and distribute them to the groups who sent the initial e-mail to that farmer. Students should look through e-mail responses from their producers to facilitate filling out their Worksheet 5-4: Producer Questionnaires. Remind students that these worksheets should be as complete as possible because they will be passed along to their food service professionals to help them explore new locally grown food options.

PHONE CONTACT: Phones can offer immediate contact, but only if the timing is right. Prepare students for some uncertainty when contacting producers by telephone and make sure they have adequate practice before the real call. If students choose to use the phone, prepare them to leave a message if the farmer does not answer her or his phone. In a voicemail, students should prepare to include the school phone number and the best time to return the call, and any specific instructions needed to get through to the classroom by phone. Facilitators should check in with students frequently about the phone calls that are made.

RECORD KEEPING IS IMPORTANT: When a farmer responds to an e-mail or phone call, students should record his or her response in Worksheet 5-4: Producer Questionnaire. Students should create a folder for each producer and keep all information for that producer together, including the filled out Worksheet 5-2: Producer Profile and Worksheet 5-4: Producer Questionnaire. Students should make sure to record all of their interactions with the producers, recording the date of the e-mail or call and the answers to the questions they asked. For each farmer, have the student indicate what they learned about the farmer's products, pricing, delivery, etc., and what follow-up is needed. Also have the students document any objections or questions they heard so those can be planned for in the future and answers will be available.

RESPONDING AND FOLLOWING UP TO CONTACT FROM FARMERS: Students should respond politely to each e-mail or phone call, thanking the farmer for responding and letting the farmer know that they will pass their information on to their food service professional.

The compiled information should be presented to the food service professional as a resource for connecting with local producers, offering a head start for making connections.

Once students have made initial connections, it is likely that they will need to have one or more follow-up contact opportunities with each farmer to clarify whether the farm's product would be a good fit for the school. Students need to be persistent to reach farmers (particularly in the spring when farmers are busy planting or at harvest time) and will need to be very clear about the types of information they need from farmers. Students may also need to go back to the directory to find additional farms to contact if needed. Discuss with the food service professional and jointly figure out next steps.

ALL-CLASS COMMUNICATION WITH ENTHUSIASTIC PRODUCER: If possible, the facilitator should invite a very responsive farmer to join the class in person, via Skype or over the phone. That way all students can engage with the farmer and ask producer-specific Farm to School questions. This will require some extra legwork from the facilitator.

The facilitator should initiate the visit or call and ask introductory questions. Then students should participate in the conversation, asking specific questions they have rehearsed from their scripts and any other questions that come to mind about what a farmer experiences as a grower and what he/she considers when selling a product to schools. All students should take notes during the phone call and the class will discuss the conversation after the farmer departs.

ACTIVITY 5: COMPILE INFORMATION AND PRESENT/SHARE WITH FOOD SERVICE PROFESSIONAL (45-90 MINUTES)

Create copies of the worksheets detailing information from each farm interested in selling to the school. Compile this information in a binder or notebook to be shared with your food service professional, including any extra notes and information recorded about the producers as well.

As a companion to the binder, ask students to write a summary of the process of finding farmers along with any recommendations on specific farmers or food products based on the students' experiences. Ask students to

provide their overview, along with answers to the following questions as a "memo" to their food service professional.

- What did you learn from interacting with farmers?
- What did you learn about agriculture and farmers in your area?
- Which products seem promising and which do not?

■ What are the implications of this research for your school's Farm to School program?

■ What did you learn about the economics of school meals?

ADDITIONAL ACTIVITY: INVITE A FARMER, EXTENSION EDUCATOR OR MASTER GARDENER TO TALK WITH THE CLASS.

ADDITIONAL ACTIVITY: REFLECT ON WHAT WAS LEARNED (CRITICAL THINKING AND WRITING SKILLS). HAVE STUDENTS RECORD THEIR EXPERIENCES IN THEIR FARM TO SCHOOL JOURNAL.

NATIONAL COMMON CORE STANDARDS FOR ENGLISH LANGUAGE ARTS

CCSS.ELA-LITERACY.SL.11-12.1A Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.

CCSS.ELA-LITERACY.SL.11-12.1B Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

CCSS.ELA-LITERACY.SL.11-12.1C Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.

CCSS.ELA-LITERACY.SL.11-12.1D Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions

when possible; and determine what additional information or research is required to deepen the investigation or complete the task.

CCSS.ELA-LITERACY.SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

CCSS.ELA-LITERACY.W.11-12.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

CCSS.ELA-LITERACY.W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

THE COMMON CORE MATH STANDARDS

None identified

THE MN MATH STANDARDS (2007)

None identified

THE COMMON CORE SCIENCE STANDARDS

None identified

THE MN SCIENCE STANDARDS (2009)

None identified

THE MN SOCIAL STUDIES STANDARDS (2011)

9.2.4.6.2 Explain the impact of various market structures on long-run profit, price, production, and efficiency in the market.

9.2.4.5.1 Describe the role of households, businesses and governments in the movement of resources, goods and services, and money in an economy.

9.2.4.5.2 Describe the role of markets in the movement of resources, goods and services, and money in an economy.

NAME: _____

Instructions:

Working in your small group, research and identify at least 5 local farmers who grow or raise the specific products students identified as priority items in Lesson 4. Reference Worksheet 4-2: Priority Local Food Item and Recipe Suggestions to refresh yourselves on the product and quantity of product you are trying to source and transfer that information into this worksheet.

General list of resources that may provide leads for finding local foods:

1. Friends and family who are farmers
2. General, online farm locating websites
3. Local farmers market
4. University extension office
5. State Department of Agriculture
6. Ask other institutions in your area who they purchase from
7. Your school's current distributor
8. State Farm to School Directory
9. Local food guides specific to your area
10. Master Gardeners
11. Local FFA chapter
12. Farmer membership organizations

13. Non-profit organizations that support healthy eating

14. Local food systems development organizations

Websites to kick-start your research:

Remember, not all online resources are created equal! Look for recently updated and well-maintained resources.

- Local Dirt (website)
A website for finding, selling and buying local food online
<http://localdirt.com>
- Local Harvest (website)
A searchable website listing direct-to-consumer farms across the country
<http://www.localharvest.org>
- Pick Your Own (website)
A guide to farms and orchards etc. that allow consumers to pick their own product.
<http://www.pickyourown.org>

1. Group members' names _____

2. What local food item are you searching for? _____

3. How much do you need? Make sure that the quantity you enter is in a farm-ready measure like pounds, not in measurements like cups or quarts _____

4. In what geographic area are you looking for farmers?

5. List the names of five farms that grow the product you are looking for. Fill out one Worksheet 5-2: Farm to School Producer Profile for each farm.

1.) _____

2.) _____

3.) _____

4.) _____

5.) _____

NAME:

Instructions:

Identify local farms that grow the foods you have identified as priorities and fill out one Worksheet 5-2 for each producer. Try to find several farms that grow the product you are looking for, as not all farms listed will be able to provide the food item for a variety of reasons (such as delivery challenges, price, availability or quantity).

Product:

FARM #1

Farm name	
Farmer contact name	
Phone	
E-mail address	
Farm address	
Location	
Interested in Farm to School?	
Availability of Product	
Delivery options	
Date e-mailed	
Date phoned	

Notes:

FARM #2

Farm name

Farmer contact
name

Phone

E-mail address

Farm address

Location

Interested in
Farm to School?

Availability of
Product

Delivery options

Date e-mailed

Date phoned

Notes:

Lesson 5: Communicating with Producers of Local Foods
Worksheet 5-3: What Information Will You Need from Potential Producers?

NAME:

Instructions:

This is a time for you to brainstorm the information you may need to request from a local farmer or producer to determine if she or he may be able to sell a product to your school. The information is divided into five sections below. Refer to your vocabulary list or materials from previous lessons if you need ideas.

Note: Given the complexity of food safety requirements, students should leave the needed due diligence about on-farm food safety to school food service professionals to conduct.

General Logistical Questions

These are the big picture questions about the farm, its location, farm history and management, products raised and how food is grown.

Procurement and Price

These are questions that will help you meet needs for quantity, specifications, price and more. For each food, schools would need information covered in Lesson 5, such as parameters from the food service professional about the quantity needed (minimum and maximum) and info on the price typically paid for non-local product that is purchased whole by the case (i.e., uncut).

Delivery

What do you need to know about delivery options?

Farm to School Education

Farm to School is more than just selling local foods to schools. Are there other ways a farmer could participate at your school? Is this important to you?

NAME:

Instructions:

Compare the questions on this worksheet with the questions you came up with on Worksheet 5-3: What Information Will You Need from Potential Producers? and add any important questions that are not already included in this worksheet. When talking to the producer, replace “product X” with the priority food item you are researching.

Farm Name:

Contact Name:

Address:

City, State, Zip:

Phone Number:

E-mail Address:

Website:

General

Please tell me about your farm’s history.

What foods do you produce?

Have you supplied food to schools or other institutions in the past? Yes No

Do you have a greenhouse or hoop house to extend production season? Yes No

What months do you have *product X* to sell?

How much of *product X* do you typically have to sell?

Please describe your farm practices and any steps you use to minimize chemical fertilizer or pesticide use (e.g., IPM, green manure, compost) your pest-management strategies or anything else you would like to share about your farm operation?

Are there other products you could sell to schools?

Are you able to provide a listing what you have available, prices and ordering instructions?

How do you prefer that customers place orders?

Delivery

Are you able to deliver to a school? (central location, multiple schools, etc.)

Do you have a minimum order requirement?

Are items needing refrigeration delivered in a refrigerated truck?

Can you deliver an invoice with the product?

Additional comments about delivery?

Other Farm to School Activities

Are you able to provide materials about your business for promotional purposes?

Would you host a visit from school food service staff or school representative?

Would you be interested in visiting the school lunchroom or classrooms as a guest presenter?

Would you be interested in hosting a classroom field trip to your farm/facility for students?

Resources Used

- Wisconsin Farm to School Toolkit for School Nutrition Directors: <http://www.cias.wisc.edu/toolkits/>
- Purchasing Michigan Products: A Step-by-Step Guide
- Website

Food Safety and Liability

Given the complexity of food safety requirements, students should leave the needed due diligence about on-farm food safety prior to purchasing to school food service professionals to conduct.

Tips on Writing a Professional E-mail

Reference from the University of North Carolina at Chapel Hill: <http://writingcenter.unc.edu/handouts/effective-e-mail-communication/>

1. Fill in the subject line with a topic that the recipient will understand. Example: “Local foods for our school foodservice” or “Contracting of produce for our school.”
2. Include a formal greeting line such as “Dear Farmer Jane.”
3. Put your main point in the first sentence and try to keep your message shorter than two or three paragraphs.
4. Ask for a timely reply so your school can plan for the coming year.
5. Use correct grammar, punctuation and capitalization.
6. Do not use abbreviations or acronyms (LOL, BRB, etc.)
7. Be polite, and remember to say “please” and “thank you.”
8. Close the message with “Sincerely,” followed by your name and contact information, such as your school name, school address and phone number.
9. Spellcheck, edit and proofread before hitting “send.”

As a class you should develop a template together with the introductory paragraph, body (including details of what your needs are) and closing paragraph.

DEVELOPING AN E-MAIL SCRIPT

NAME:

Instructions:

Use this example as a starting point for drafting your own e-mail to the producers you have identified.

.....

E-mail Subject: _____

Dear _____,

My name is _____ and I am a student at your school name here School. Our class is working on a project to identify locally grown foods that could be served in our school cafeteria. Our class found your information in/on name of resources. We are interested in understanding more about your product offerings, and are specifically looking for information about priority product you identified. Would you be able to answer a few other questions about your farm's products?

Thank you for your consideration. Please reach me at your contact information. If I don't hear back from you, I will give you a call next week.

Student Name, Grade

School Name

School Address

Teacher's Name

Project E-mail

Draft your own e-mail in the space below.

- After asking all your questions, thank your farmer and ask if there are any questions. Tell the farmer you will share all of the information with your food service professional.

- If the farmer says no, be sure to thank them for their time and ask them if they know of any other producers who may be able to provide that product.

Possible Questions/Comments Producers might have (Prepare possible responses here):

Be prepared to answer any questions the farmer may have. Write down answers to these questions below as preparation:

- I have never worked with schools before. How does that work?

- I couldn't provide the whole quantity that is needed. Would your school consider buying a smaller amount from me?

- What if I don't have the amount you need at the time of harvest because of bad weather or pests?

Brainstorm more possibilities as a class! Preparation is key!

- Prepare a short script to read in case you must leave a message and write it here. Include your name, contact information and a brief description of why you are calling.

After preparing script and practicing with classmates, run through how it went and read your questions out loud.



Lesson 6

Increasing Student
Awareness and
Engagement in
Farm to School



FARM TO SCHOOL

YOUTH LEADERSHIP CURRICULUM

Lesson 6
Farm to School Youth Leadership Curriculum: 11th & 12 Grades

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The Institute for Agriculture and Trade Policy works locally and globally at the intersection of policy and practice to ensure fair and sustainable food, farm and trade systems.

More at iatp.org

FARM TO SCHOOL YOUTH LEADERSHIP CURRICULUM

The high school level Farm to School Youth Leadership Curriculum is designed to empower youth, teach them about their local food system, engage them in meaningful, hands-on learning activities that also strengthen their school's Farm to School program and link them directly with farmers in their community. Implementation of the curriculum in a high school setting simultaneously gives students ownership and commitment to their school's Farm to School program, while reducing the amount of legwork and research required of teachers or food service staff to establish or expand a farm to school program.

The curriculum is comprised of 6 Lessons, each containing a lesson summary, a list of lesson activities, lesson outcomes, facilitator preparation notes, a materials and equipment list, additional resources, detailed facilitator descriptions of core activities, additional recommended activities, a chart of the lesson's alignment to national and Minnesota academic standards and worksheets and handouts for students. The lessons can be taught consecutively over a semester or facilitators can choose to use single lessons or activities as a complement to their classes. Activities are interdisciplinary, and may fit into classes focused on Agriculture, Family and Consumer Sciences, Social Studies, Economics, Health, Science or other subjects. The curriculum was developed with the 11th and 12th grade high school classroom setting in mind, but could also be used by educators teaching about Farm to School or local foods systems in other settings. Occasional connections with external farmers or food service professionals deeply enrich the lessons; when these connections are recommended, this is indicated in the introductory notes to give the facilitator time to prepare.

Farm to School programs link children to nearby small and mid-size farms and ranches that produce fresh, healthy and minimally processed foods that are served at their schools. Aimed at educating children about where and how their food is grown, strengthening local economies and supporting healthy eating habits, the Farm to School movement is rapidly growing.

Farm to School advances the following goals:

- Promote children's health by providing fresh, healthy and minimally processed foods in schools and supporting the development of healthy eating habits
- Enhance children's "food literacy" by familiarizing them with foods grown nearby, teaching them how and where their food is grown, building knowledge about how to prepare healthy foods, and educating them about the health, nutrition, social and environmental impacts of food choices
- Strengthen local economies by expanding markets for small and mid-size agricultural producers and food entrepreneurs whose products have typically been unavailable in school meal programs
- Build vibrant locally oriented food systems by fostering positive relationships and increase understanding of local food systems among children, farmers, parents, educators and school districts, healthcare professionals, and other community members
- Advance environmental stewardship, where practicable, by supporting more sustainable food production methods, reducing reliance on long distance transportation, and reducing food waste

We hope that this curriculum will be useful in engaging students to start or expand a Farm to School program, and we welcome feedback and stories of how it works for you!

LESSON SUMMARY

In this lesson, students will draw on information learned in all previous lessons to communicate about Farm to School with the school and larger community. Students will learn techniques to communicate with their community, and will create a campaign to promote and engage fellow students in Farm to School issues. Lastly, they will take stock of how Farm to School issues have evolved at their school over the time of this course and will make recommendations for future Farm to School activities.

Note: Even if your school does not currently have an active Farm to School program students can reflect on their experience and make recommendations for the future.

LESSON ACTIVITIES

1. Develop a Slogan and Logo for your Farm to School Program
 2. Create a Farm to School Communications Plan
 3. Engage Your School Community in Farm to School
 4. Share Farm to School with the Larger Community
 5. Take Stock and Look Ahead
- Additional Activity: Plan a Farm to School Month event
- Additional Activity: Plan a farm field trip or invite a farmer to visit your school
- Additional Activity: Taste tests for priority food items

LESSON OBJECTIVES:

Students will be able to:

1. Develop a communications strategy.
2. Identify the basic principles of logo and slogan design.
3. Compose persuasive arguments about Farm to School for internal and external audiences.
4. Reflect and build on previous lessons.

MATERIALS AND EQUIPMENT

- Copies of worksheets and handouts for all students.
 - Worksheet 6-1: Designing a Farm to School Logo and Slogan
 - Worksheet 6-2: Developing a Communications Plan: In Your School
 - Worksheet 6-3: Developing a Communications Plan: In Your Community
 - Worksheet 6-4: Taking Stock and Looking Forward
 - Handout 6-1: Ideas for In-school Communications

- Handout 6-2: Ideas for External Community Engagement

- Handout 6-3: Farm to School and Local Foods Resources

ADDITIONAL RESOURCES

- “WISCONSIN LOCAL FOOD MARKETING GUIDE”

- http://datcp.wi.gov/uploads/Business/pdf/MK-DM_17_LFMG_Second_Edition_Final_Book_for_website.pdf

- “UNIVERSITY OF MINNESOTA EXTENSION FARM TO SCHOOL TOOLKIT”

- <http://www1.extension.umn.edu/food/farm-to-school/toolkit/promoting-food/>

Provides information on individual food items for educational and marketing purposes. FOR EXAMPLE: If you click on the Apple at the bottom

on the homepage it will give you promotional ideas like fun facts, newsletters, and curriculum ideas.

- Check with organizations or agencies working in your state to support Farm to School to see if marketing materials, logos and other materials are available for your area.
- The Appalachian Sustainable Agriculture Project in North Carolina has good ideas for organizing visits to nearby farms:
 - <http://growing-minds.org/FarmFieldTripBooklet.pdf>

LESSON INITIATION

Before the class begins, write the words “Communication” and “Plan” on the board or overhead projector. Gather the class as a full group and first ask students to ponder the word “Communication.” Ask students to provide a definition or synonym for the word, and write student responses on the board around the word “Communication.” The formal definition, according to Merriam Webster Dictionary is “A process by which information is exchanged between individuals through a common system of symbols, signs, or behavior.”

Next ask students to list different types of communication we use today, and list them on the board or overhead projector. Examples include verbal, non-verbal, written, sign language, newspapers, radio, television, conversation, advertisements, internet, e-mail, etc. The goal is for students to think broadly about how (and why) we communicate.

Next, ask students to think about the word “Plan.” Ask students to offer synonyms or definitions of the word, or to present the class with examples when they have created a “plan.” Again, write the student ideas on the board. Last, ask students to put the two words together and think about a “Communications Plan” and how it may relate to sharing information or engaging the school and community about Farm to School.

Ask students if they can share examples of people getting involved in a cause or spurred to some kind of action through communication of information. Ask students what methods they think would be effective in communicating around Farm to School in their school? What about in the wider community? Encourage discussion.

LESSON INTRODUCTION

In this lesson students will reflect on all the information and skills they have learned in this curriculum and apply it to one final set of activities. This lesson is flexible and allows the class to build off of the Farm to School work completed in previous lessons of the curriculum. To begin, students will learn about developing a communications plan to spread the word about Farm to School inside and outside of school using different techniques. Students will also develop a logo and slogan to promote Farm to School activities. Lastly, students will assess the progress their Farm to School program has made through the semester or year, and set future program goals (which will extend

beyond when they are in the class). Activities 3 and 4 use similar skills to engage different communities; the instructor can determine if students will complete both activities or just one. This lesson includes two additional activities which can be done in conjunction with this lesson or when the time is appropriate. These include planning a Farm to School Month event, which is celebrated in October in many states, and organizing a farm tour or farmer visit. As student leaders, the class will combine their knowledge of Farm to School with communications skills to encourage the growth of different Farm to School activities on campus and in their wider community.

ACTIVITY 1: DEVELOP A SLOGAN AND LOGO FOR YOUR FARM TO SCHOOL PROGRAM (45 MINUTES)

➔ Worksheet 6-1: Designing a Farm to School Logo and Slogan

In this activity students will develop a “brand” for their school’s the Farm to School program by designing a logo and creating a slogan. Students will work in small groups and present their logos and slogans to the whole class. At the end of the presentations students can vote on a favorite slogan and logo, or work cooperatively to combine existing ideas into a final version that will be used to promote Farm to School in their school.

STEP 1: Have a brief discussion with students about outreach. Ask students to define advertising, and provide a few examples that they may see in their daily lives. What are some examples of advertisements or marketing for products they use every day? What about marketing campaigns for things that aren’t objects, like a public service announcement? Ask students if they can think of advertising examples for any non-object, like an emergency preparedness advertisement or a campaign to encourage kids to exercise. Ask students if they can think of the logo or slogan for any products that they use. Define the terms if necessary.

Logo: “A symbol or other small design adopted by an organization to identify its products. The symbol may be placed on a uniform, vehicle, advertisement, etc.” Adapted from Oxford Dictionary

Slogan: “A short and striking or memorable phrase used in advertising. A motto associated with a political party, social movement or other group.” Adapted from Oxford Dictionary

STEP 2: Pass out Worksheet 6-1: Designing a Farm to School Logo and Slogan. Explain to students that, working alone or in small groups, they will design a slogan and logo for the Farm to School program. Let students know that at the end of their work time, one representative from the group will share the logo and slogan with the entire class.

STEP 3: Students share their logos and slogans with the entire class. If the classroom goal is to develop one slogan and logo for the program, the class can then vote or collectively re-design a final product. Alternatively, students can create multiple promotional campaigns that will all be used at the same time. The final logos and slogans can be used in Activities 2, 3 and 4 that follow.

ACTIVITY 2: CREATE A FARM TO SCHOOL COMMUNICATIONS PLAN (45 MINUTES)

➔ Worksheet 6-2: Developing a Communications Plan: In Your School

➔ Worksheet 6-3: Developing a Communications Plan: In Your Community

➔ Handout 6-1: Ideas for In-School Communications

➔ Handout 6-2: Ideas for External Community Engagement

In this activity, students will develop a communications plan to share information and engage school and community partners in Farm to School. The communications plan will outline student projects for Activity 3 & 4.

STEP 1: Ask students to form small groups or work individually. Remind students about the communications plan talked about in the Lesson Introduction. Explain

to students that in this activity, students will develop their own communications plan for sharing Farm to School messages and engaging partners inside and outside the school. Pass out Worksheet 6-2: Developing a Communications Plan: In Your School and Worksheet 6-3: Developing a Communications Plan: In Your Community

to each student. Also, pass out Handout 6-1: Ideas for In-School Communications and Handout 6-2: Ideas for External Community Engagement.

STEP 2: Ask students to fill out Worksheets 6-2 and 6-3 based on what they have learned, implemented and would like to see in their Farm to School program. In Activities 3 and 4, students will have the opportunity to complete the communications plan to further engage their school and community in Farm to School.

ACTIVITY 3: ENGAGE YOUR SCHOOL COMMUNITY IN FARM TO SCHOOL (45, 90, 130, OR 180 MINUTES, DEPENDING ON LEVEL OF ENGAGEMENT)

- ➔ [Worksheet 6-2: Developing a Communications Plan: In Your School](#)
- ➔ [Handout 6-1: Ideas for In-School Communications](#)

In this lesson, students will fully develop and carry out their ideas from Worksheets 6-2: Developing a Communications Plan: In Your School. Students will work in small groups to solidify their goal, audience, message and channel and then create the materials and relationships required to carry out the communication. Allow sufficient time for planning and implementation. If teacher and student capacity is limited, students can vote on one project to undertake collectively and work on different aspects of the project. Students will log the details of their project in their Farm to School journals. The instructor may choose to ask students to develop and submit promotional materials as an assessment tool.

For example (for teacher use only): A group of students may select their goal to be “Planning a Successful Farmer Assembly” on campus. The students determine their audience to be the entire high school, faculty and staff that usually attend a Friday morning assembly. The message they would like to convey is “What it’s like to be a farmer,” and the farmer they invite as a speaker will help share that message. The determined channel will be the regular Friday assembly. Students will then continue to plan the execution of their project by using the skills they have learned in these lessons, such as: finding a farmer, scheduling an assembly day and time with school administration, creating advertising posters and notices for the newsletter, etc.

Note: This type of activity may be appropriate for your school even if the school doesn’t currently have a Farm to School program.

ACTIVITY 4: SHARE FARM TO SCHOOL WITH THE LARGER COMMUNITY (45, 90, 135, OR 180 MINUTES, DEPENDING ON LEVEL OF ENGAGEMENT)

- ➔ Worksheet 6-3: Developing a Communications Plan: In Your Community
- ➔ Handout 6-2: Ideas for External Community Engagement

In this lesson, students will fully develop and carry out their ideas from Worksheet 6-3: Developing a Communications Plan: In Your Community. Students will work in small groups to solidify their goal, audience, message and channel and then create the materials and relationships required to carry out the communication. Allow sufficient time for planning and implementation. If teacher and student capacity is limited, students can vote on one project to undertake collectively and work on different aspects of the project. Students will log the details of their project in their Farm to School journals. The instructor may choose to ask students to develop and submit promotional tools as an assessment tool.

For example (for teacher use only): A group of students may select their goal as “sharing the benefits of Farm to School with members of the community.” They determine their audience to be people in the community under a certain age. The message they want to convey is that Farm to School is good for students, farmers and the community. They have determined their channel to be the local radio station that caters to young people. They have decided to record and edit a public service announcement in class that they can send to the radio station to play on air. As with Activity 3, students will use the skills they have learned in the previous lessons to carry out the details of the communication plan, such as writing a script outlining the benefits of Farm to School and contacting the local radio station.

ACTIVITY 5: TAKE STOCK AND LOOK AHEAD (90–135 MINUTES)

- ➔ Farm to School Journals
- ➔ Past worksheets and handouts
- ➔ Worksheet 6-4: Taking Stock and Looking Ahead

In this lesson, students will both reflect on their Farm to School achievement and look forward to what they would like to see in the future. It may be helpful to invite your school’s food service professional to part of this activity. The instructor may ask students to develop and write up analysis and recommendations for future Farm to School programming at your school as an assessment activity.

Ask students the following questions: How have our school’s Farm to School planning and activities evolved over the course of our class? What should happen in the future to start or expand Farm to School efforts given everything you have learned and heard from students, farmers, foodservice staff and other stakeholders?

STEP 1: Provide time for students to reflect by looking through their Farm to School Journal, Farm to School Assessment materials, worksheets, handouts, lists of Farm to School programs in other communities and interviews with farmers. Ask them to think about all they have learned, and what, if anything, has changed within their school since beginning this curriculum.

STEP 2: Students will work individually to fill out Worksheet 6-4: Taking Stock and Looking Forward. When students have completed the worksheet, ask them to share their answers with the class. When talking about goals for the future of Farm to School, work together to identify potential barriers or challenges that may limit the school in reaching those goals and strategies for addressing them.

STEP 3: Encourage and help students organize interviews with the people they have listed at the end of Worksheet 6-4: Taking Stock and Looking Forward. If possible, invite your food service professional to return to the classroom and talk about what, if any, changes have been made through the students' work. Have they have done anything new with buying or menu building, acted on the farmer connections presented to them earlier in the semester by students or changed their practices for sourcing food? The timeline for changes in food procurement will probably be longer than a class semester, so some of the initial changes may include expanded knowledge and awareness about Farm to School among student and school staff. Emphasize the importance of these shifts of mindset are the first steps toward action.

STEP 4: As a class, or in small groups, ask students to summarize the progress the Farm to School program has made and suggest recommendations for where the

program can go in the future. Remind them of what they have learned during this course regarding the cafeteria, classroom and wider community. The timeline for future action will be beyond when the students are in this course. Emphasize to students that their work on Farm to School can have a lasting impact on their community. Ask students to think of this summary as a final report; they should make recommendations for a specific audience like the school's administrative leadership, foodservice staff, teachers, students or parents.

If this class will be offered next semester or next year, students could also make recommendations to future students about how they could focus their energies to expand Farm to School programming, improve student awareness of locally grown food and farming, build deeper relationships with farmers in your community and any additional recommendations they may have.

This final report will be the culmination of the project.

ADDITIONAL ACTIVITY: PLAN A FARM TO SCHOOL MONTH EVENT

There are many different ways to celebrate and promote Farm to School, both on the big and small scale. In 2010, Congress approved a resolution officially designating October as National Farm to School Month. This is a great way to celebrate Farm to School. Some states, districts or schools have their own week or month to celebrate Farm to School. Do some research online to see when your region celebrates Farm to School. If National Farm

to School Month, or the time your school celebrates Farm to School, falls during this curriculum, students can plan a special Farm to School event. The National Farm to School Network provides resources and ideas for Farm to School Month online at www.farmentoschoolmonth.org. Spend time with your students planning a small or large Farm to School event for your school during your Farm to School Month (or week).

ADDITIONAL ACTIVITY: PLAN A FARM FIELD TRIP OR FARMER VISIT

If time and resources are available, the instructor or students can plan a field trip to a local farm. This can be coordinated through a farmer the students met during their research, or a local farmer already affiliated with the school. See the resource section for information on

planning a successful farm fieldtrip. If resources for a field trip are not available, invite a farmer to visit the school and talk with your Farm to School students or the entire school.

ADDITIONAL ACTIVITY: TASTE TESTS FOR PRIORITY FOOD ITEMS

Working with the Family and Consumer Science (FACS) Department or your current food service department you may be able to develop taste test days utilizing different Farm to School foods that students haven't tried before. Students could be in charge of promoting the event with posters and announcements, and creating signage for the foodservice to use when serving samples. If your school has a garden, featuring foods grown there may be an option. Make sure to coordinate closely with your school's foodservice professionals.

You can also have students vote on recipes for different locally grown foods, allowing students to choose their favorite preparation style out of a variety of methods. This could include giving each student a sticky dot to place on a board listing each item or having students vote on a slip of paper. Students can create an announcement for the school system announcements or have a poster or white board in the cafeteria to post results after the taste test.

The following resources have various recipes using popular Farm to School Foods:

- <http://www.extension.umn.edu/farm-to-school/using-food/recipes.html>
- http://www.mass.gov/agr/markets/Farm_to_school/docs/farm_to_school_cookbook.pdf
- <http://www.health.state.mn.us/schools/greattrays/pdfs/NowCooking.August22.pdf>
- http://food-hub.org/files/resources/FEED_TasteTestGuideFINAL_lores.pdf
- <http://www.okfarmtoschool.com/pdf/Taste-testing-new-foods.pdf>

NATIONAL COMMON CORE STANDARDS FOR ENGLISH LANGUAGE ARTS

CCSS.ELA-LITERACY.RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

CCSS.ELA-Literacy.SL.11-12.1b Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.

CCSS.ELA-LITERACY.SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are

addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

CCSS.ELA-LITERACY.SL.11-12.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

CCSS.ELA-LITERACY.SL.11-12.6 Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

CCSS.ELA-LITERACY.W.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

THE COMMON CORE MATH STANDARDS

None identified

THE MN MATH STANDARDS (2007)

None identified

THE COMMON CORE SCIENCE STANDARDS

None identified

THE MN SCIENCE STANDARDS (2009)

None identified

THE MN SOCIAL STUDIES STANDARDS (2011)

9.1.3.4.5 Explain the responsibilities and duties for all individuals (citizens and non-citizens) in a republic.

NAME:

Instructions:

Use the sheet below to create a logo and slogan for your Farm to School program. Before you start writing or drawing, brainstorm with your group and identify key words and images that fit your vision for Farm to School.

SLOGAN DEFINITION AND TIPS:

A slogan is

“a short and striking or memorable phrase used in advertising. A motto associated with a political party, social movement or other group.”

Adapted from Oxford Dictionary.

Think up a creative phrase that will get attention! Revisit your Farm to School journal for vocabulary, themes or ideas you have collected that may be helpful here.

LOGO DEFINITION AND TIPS:

A logo is

“a symbol or other small design adopted by an organization to identify its products. The symbol may be placed on a uniform, vehicle, advertisement etc”

Adapted from Oxford Dictionary.

Create a symbol, picture or other visual element that conveys the message of your Farm to School program and is easy for people to identify. The logo can include words or phrases too, like the name of your school or program or a call to action.

NAME:

Instructions:

A plan is a good way to figure out what actions you need to undertake in order to achieve a certain goal. This worksheet will help you, your small group or your class to plan and share your Farm to School information with your school or community. To develop your communications plan, answer the questions below:

What is your purpose or goal?

This is what you hope to accomplish through your communications with your school and community. Is it education? Persuasion? Advertising?

Who is your audience?

Your audience is the people or group you want to communicate with. What people or group do you want to reach? Pick one group within your school and one group outside of your school. Examples include students, administrators, teachers, food service staff, parents, etc.

What is your message?

Your message is what you want to communicate to your audience. What do you want to communicate about your Farm to School Program? Do you want to teach people what Farm to School is? Are you sharing profiles about the farmers you have interviewed through these lessons? Are you persuading your classmates to help

you start a school garden or try a local vegetable? Are you trying to advertise an upcoming field trip to a farm? Would you like to educate your school on the benefits of Farm to School? A message is usually short and sweet. Pick one or two messages to focus on.

What are your communication channels?

This is the means by which you'll get your message across, and there may be a lot of different ways to do it. How does the audience you've selected communicate within your school? In the larger community? Brainstorm some ideas here like your school newsletter, morning announcements, smart boards in classrooms, lunchroom bulletin board, student assembly, town newspaper, local television station, etc. Think about who manages each communication channel, how you will get information to that person and how much lead time they may need.

Create a timeline of your communications plan.

Make a list of the steps you would have to take in the order you would complete them. How long would each step take? Can you create a timeline for completing your communications plan?

The answers to these questions constitute your Farm to School communications plan. In the next lesson you will implement your plan by designing your message and distribute it to your intended audience.

*Adapted from The Community Toolbox at: http://ctb.ku.edu/en/tablecontents/sub_section_main_1059.aspx

NAME:

A plan is a good way to figure out what actions you need to undertake in order to achieve a certain goal. This worksheet will help you, your small group or your class to plan and share your Farm to School information with your community. To develop your communications plan, answer the questions below.

What is your purpose or goal?

This is what you hope to accomplish through your communications with your school and community. Is it education? Persuasion? Advertising?

Who is your audience?

Your audience is the people or groups you want to communicate with. What people or groups do you want to reach? Pick one group within your school and one group outside of your school. Examples include parents, school neighbors, etc.

What is your message?

Your message is what you want to communicate to your audience. What do you want to communicate about your Farm to School Program? Do you want to teach people what Farm to School is? Are you sharing profiles about the farmers you have interviewed through these lessons? Are you trying to advertise an upcoming field trip to a farm? Would you like to educate your community on the benefits of Farm to School? A message is usually short and sweet. Pick one or two messages to focus on.

What are your communication channels?

This is how you want to communicate, and there may be a lot of different ways to do it. How do people communicate in the larger community? Brainstorm some ideas here like your town newspaper, local television station, etc. Think about who manages each communication channel, how you will get information to that person and how much lead time they may need.

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NAME:

What did you think or know about Farm to School before you started this project?

Name one aspect or type of Farm to School project that could take place each in the cafeteria, classroom and community.

What do you think has changed in your school food service department because of the work your class has done? Have you noticed any changes in the menu, purchasing of local foods, work with local farmers or in people's thinking about where to source foods?

If you had the chance, what questions would you like to ask your food service professional about the Farm to School program and any changes they have made?

What changes have you noticed within the classroom or community when it comes to Farm to School or local foods?

What Farm to School changes would you still like to see take place at your school? (This could be in the cafeteria, classroom, school education or your community.)

What can you do to make these changes possible?

Farm to School Signage in Food Service Line

Create labels or signs that the food service department can use to mark the Farm to School foods in the line so student can find them. It's great to include a photo and the name of the farmer who produced it if you can.

Lunch Line Marketing

How could Farm to School foods be marketed in the lunch line? How will students know the origin of Farm to School foods? How can the students highlight certain foods or farmers?

Educational Opportunities

Plan field trips, Agriculture in the Classroom sessions, farmer visits or trips to the Farmers' Market for younger students or your own class. Include students, staff and teachers in educational events.

Taste Tests

Organize a taste test, or monthly taste tests, of different Farm to School foods. Design a plan to educate students about the new food items and encourage them to try new foods.

School Lunch Menu

Mark all Farm to School items on the school menu and coordinate with foodservice staff to include educational information about some of the Farm to School products on the menu.

School Morning/Afternoon Announcements

If your school has announcements in the morning or afternoon over the intercom, or you have a school news broadcast, share information about Farm to School each week or month. This could include the locally grown foods you are serving at lunch, short profiles of local farmers or readings or news about agricultural topics.

Educational Opportunities in the Cafeteria

Make posters for other students in your school to learn about farming and food production. Hang posters in the cafeteria or other places around school.

Educational Opportunities in the Classroom

On days when locally grown foods are served, provide a fun one-paragraph introduction to Farm to School for teachers to read to their first hour or to the hour they have right before lunch. This will create some dialogue in the classroom as well as make the students aware of what Farm to School foods to look for in the lunch line.

Farmer Promotion

Highlight the local farmers who have been interviewed in this class, or who are selling products to your school. Have a whiteboard put up in the beginning of the lunch line that menu items can be written on. On Farm to School days you can list the farm's name, the farmer's name, the farm's location and which food item that they have provided. Include photos of producers and food items on the farm when possible. You could make Farmer Trading Cards (like baseball cards) with profiles of the farmers you have met. Or, make a farmer calendar, or feature farmers in your school newsletter.

Arrange for a farmer to visit your school. Ask him or her to do a presentation in class or at a school assembly or greet students as they enter the cafeteria.

Start or highlight school gardening activities. If you don't have a school garden, look to see if enough people are interested to start one. If you do have a garden, share the news about the garden with your school mates.

Highlight classroom activities in your school related to Farm to School themes like the impact of federal policies on local agriculture, weather and seasonality, growing food, food justice, health and nutrition, local economic development, etc.

Coordinate with FFA or other farm-related groups to have farm animals visit your school and advertise the event to the school community

Write an age-appropriate Farm to School lesson and share it with a classroom of students in elementary or middle school or a school club.

Create a Farm to School Facebook page for your school. Share highlights about what you are doing at your school and encourage others to participate.

Research local grocery stores, colleges, hospitals or other institutions that are working with local growers and serving local food. Write profiles about your research and share them with your school and outside community.

Newspaper

Work with your local newspaper to prepare a press release about your Farm to School program. This could include information on the farmers that sell to your school, the products you are featuring for school meals, sharing what you've learned about the benefits of Farm to School, your experience in the class or your Farm to School plan for your school. Many newspapers offer a free blog for groups and organizations. Students could write a weekly column about local farmers and Farm to School efforts.

Radio

Write and record Public Service announcements about Farm to School, local farmers or local food in general. This may be especially popular during the Farm to School Month. Students could be guests on a morning radio show to talk about Farm to School and about their connection with local farmers. Ask your local station if they would be interested recording a live interview with students at the school during lunch one day!

Events

If your Farm to School program is holding a Farm to School event, issue Invitations and Invite local Radio Stations, Newspapers, officials, business owners, parents and community members to food tastings or lunch on Farm to School days.

Television

Send a press release to your local television news channel and tell them about your Farm to School program.

Local Grocery

Partner with your local grocery store to highlight Farm to School. Ask if they will put your Farm to School banner up in the store, or highlight locally grown foods that are in the store and in your lunchline.

Local Institutions

Talk with local institutions that serve meals (hospitals, colleges, etc.) to see what they are doing with local foods. Ask if you can share your Farm to School newsletter, farmer profiles, logo or banner in their cafeterias to help raise awareness about local farms and food.

Local FFA

Partner with your local FFA or similar organization to share the message about Farm to School and create programming at your school or within your community. This may be a good way to reach out to students from other schools.