



Missouri F2S Guide for
PreK-12 Educators



PART I. F2S Introduction

What Is Farm to School?

In Missouri, Farm to School (F2S) is a **voluntary** program with three core elements: (1) school procurement of fresh foods from local farmers; (2) education in food, agriculture, health, and nutrition; and (3) edible school gardens with hands-on learning activities. Educational activities are flexible with free lesson plans and learning materials available to PreK-12 teachers.

As of 2013-2014, more than 900 Missouri public, private and charter schools participate in F2S, reaching about 431,990 PreK-12 students. Teacher lesson plans correlate with state [Missouri Learning Standards](#) in science, math, language arts, economics, business, and health.

Thirty-eight school districts also operated 116 edible school gardens across the state, offering opportunities for experiential learning beyond the classroom. Garden educators integrate their teachings with classroom curricula to reinforce student learning. From this experiential learning experience, students gain leadership, teamwork, problem-solving, communication, and often, entrepreneurship skills.

At the national level, F2S aims to “create sound policies and practices that will lead to local, equitable food systems that support family nutrition, local economies, and the environment” (NFSN, 2017).



How Do Schools and Students Benefit from F2S?

The Many Outcomes of F2S Research shows that F2S benefits public health, education, and local economies and can strengthen community engagement at your school.

- **Childhood obesity continues to rise in Missouri, and our youth need to consume more fruits and vegetables.** F2S educational activities build students' knowledge of food, nutrition and health and improve student consumption of fruits and vegetables at school and home (CDC, 2018; NFSN, 2017; Berezowitz, et. al, 2015; Sharps & Robinson, 2016).
- **The number of Missouri children facing food insecurity has more than doubled in the last ten years.** F2S programs provide an opportunity for students to increase their intake of essential nutrients, helping them to lower their risk factors for chronic health conditions (Carpenter, 2015; University of Missouri, 2016).
- **Nationally, about one third of F2S districts found greater community support** for school meals and greater acceptance of healthier school nutrition standards (USDA, 2015).

Getting Started is Easy!

Public, charter, and private schools can start one of three ways: integrate food and agriculture lessons into curricula; create a small learning garden; or offer a seasonal Missouri Grown product to students.

1. Set up a meeting with your colleagues, administrators, and food nutrition personnel to discuss how a F2S program can [benefit students and families](#) in your PreK-12 school. Set goals.
2. Adapt or adopt free, existing learning materials into school curricula for science, health, math, or language arts.
3. Partner with community volunteers and businesses to create a small container garden for experiential learning outside the classroom.
4. Go to your local farmers' market. Find a farmer, rancher, or grower who is willing to speak in your classroom or host a farm tour.
5. Create visibility. Share your story. Promote student learning outcomes.

Importantly, schools don't have deadlines, quotas, or requirements to meet! In fact, your school has the flexibility to customize F2S activities to meet your unique needs (e.g., budget, staff schedules, curriculum) and goals, such as improving student health.



Part II. Hands-on Teaching with Missouri Grown Products

Agriculture is Missouri’s leading industry and it offers creative teaching opportunities across the curriculum. For example, you can

- grow herbs in the classroom or cherry tomatoes in a small container outside your classroom windows.
- teach food safety by washing and tasting local fruits and vegetables or cooking a simple meal with locally grown meats, eggs, or grains.
- conduct a sensory tasting activity with local foods, using a blindfold to demonstrate how we use sight, smell, and taste.
- take a field trip to a local farm so students can learn about agriculture and food.

School Learning Gardens

For many teachers, edible school gardens offer an opportunity to teach about food, health, and nutrition through hands-on garden activities. Why? Research has shown that at schools with gardens, students eat more fruits and vegetables at school and at home. Further, some schools report being able to reduce food waste while gaining community support for nutritious school lunches and snacks.

Anyone may set up the garden — teacher, Master Gardener, farmer, FFA or 4-H club, personnel, or other volunteers. From planting through harvest, teachers can integrate lessons about food and agriculture as part of learning standards in health, science, mathematics and/or language arts.

Informal Learning with Locally Grown Foods in School Meals and Snacks

Food nutrition professionals are highly committed to student health, so include them in your F2S planning! Food nutrition directors and dietitians can be strong allies when encouraging the School Food Authority (SFA) to join your overall F2S initiative by purchasing Missouri Grown products. The key is for schools to start small, with one product that is seasonally available, affordable, and easy to use in school meals and snacks. During or after a snack or meal, teachers can launch an informal discussion with students on where the products originated, how they were grown, nutritional value, or the importance of food safety.

Publicize Student Learning Outcomes

Work with food nutrition personnel to host a local food tasting event in the school cafeteria. Involve parents and the community. Invite local farmers to meet students and their families. Alert the local media about the event. Talk about F2S activities at your school and examples of student learning.



Image courtesy of Southern Boone Learning Garden.

Part III. Collaborating

You Don't Have to Do This Alone!

Quite often, multiple teachers as well as parents/guardians and community organizations become engaged in classroom education and F2S gardens. When you recruit collaborators and volunteers, be sure to emphasize the intended outcomes of F2S:

- increased student consumption of fresh, healthy foods;
- enhanced public knowledge of agriculture, health, and nutrition; and
- improved market opportunities for local producers and regional farmers.

Possible F2S Collaborators	
School	Community
Administrators	Farmers and ranchers
School Food Authority and staff	Extension professionals and Master Gardeners
Parents and other family	Local businesses, restaurants, and grocers;
Teachers and teacher aides	Nonprofits groups and faith-based organizations
Groundskeeper	Leader of a food bank or farmers' market
Webmaster	Local offices of state agencies, especially health
Students, including 4-H and FFA teens	Banks, foundations and civic groups
School district personnel	TV, radio or news media

Tap into the expertise of your stakeholders to help build support within the school and the community. The more people that support your cause, the easier it will be to expand your F2S program and achieve better results!

F2S Grant Program

Each year the United States Department of Agriculture (USDA) issues a Request for Applications for the [Farm to School Grant Program](#). Grant funds may be used for “training, supporting operations, planning, purchasing equipment, developing school gardens, developing partnerships, and implementing farm to school programs” (USDA, 2019). See the list of [current awardees](#) to imagine the many possibilities for your F2S program!

Team Approach Success Story: Southern Boone Learning Garden

Started by two moms in 2007 as an afterschool garden club, the SBLG now operates three gardens that serve 925 students, including special education. The garden educator collaborates with PreK-12 classroom teachers to integrate her lessons with their curricula, helping to address state learning standards in science, math, language arts, economics, business, and health. Gain insight into fundraising, volunteers, garden clubs, and lesson plans from the Southern Boone Learning Garden in Ashland, MO.



Image courtesy of Southern Boone Learning Garden.

Part IV. Resources

F2S Planning Resources

Planning Toolkit (free pdf) from USDA's Food Nutrition Service*

<https://fns-prod.azureedge.net/sites/default/files/f2s/F2S-Planning-Kit.pdf>

Getting Started Toolkit from Georgia Farm to School

<https://gafarmtoschool.org/>

Prek-12 Lesson Plans

Eating from the Garden Curriculum (Grades 4 & 5) by University of Missouri Extension. <http://missourifamilies.org/eatfromgarden/>

Growing with Missouri Harvest of the Season (PreK), from the MO Department of Health and Senior Services. <https://health.mo.gov/living/wellness/nutrition/farmtopreschool/pdf/grow-with-mo-toolkit.pdf>

Lesson Plans (K-5) from the Southern Boone Learning Garden in Missouri <http://www.sblearninggarden.org/lessonplans>

Fresh from the Farm Curriculum (K-12) from Colorado Farm to School <https://coloradofarmtoschool.org/schools/curriculum/>

Prek-12 Lesson Plans from Growing Minds <https://growing-minds.org/lesson-plans-landing-page/>

Teacher Center from the National Agriculture in the Classroom <https://www.agclassroom.org/teacher/index.cfm>

Grow It, Try It, Like It! Nutrition Education Kit Featuring MyPlate, from USDA's Food and Nutrition Services <https://www.fns.usda.gov/tn/team-nutrition-garden-resources>

How to Start a School Garden*

F2F School Garden Guide from University of Missouri Extension
<https://extension2.missouri.edu/programs/missouri-farm-to-school>

The Garden Starter from Grow Well Missouri <http://foodsecurity.missouri.edu/wp-content/uploads/2017/05/GARDENSTARTER-final-package.pdf>

Starting and Maintaining a School Garden from the National Farm to School Network. http://www.farmtoschool.org/Resources/School_Gardens_Fact_Sheet.pdf

*Additional gardening information is listed in our school garden guide.

Answers for Missouri Educators

University of Missouri Extension, Human Environmental Sciences

Contact: Lorin Fahrmeier

fahrmeierl@missouri.edu or 660-259-2230

Coordinates Missouri Farm to School educational programs and technical assistance like nutrition education, cooking demonstrations, and creating school gardens. Can also connect you the Master Gardener program and gardening materials based on University research.

Missouri Department of Health & Senior Services

Contact: Lisa Farmer

Lisa.farmer@health.mo.gov or 816-521-7740

Coordinates the PreK program, Growing with MO Harvest of the Season that contains information on edible gardens, family engagement, field trips and classroom learning experiences.

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