

A guide to building integrated farm to school programs



# Connecting Classrooms, Cafeterias, Communities









## A FARM TO SCHOOL PROJECT of NOFA-VT and Shelburne Farms





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This guide is lovingly dedicated to

#### **ENID WONNACOTT**

(1961-2019)

Enid planted, tended, and nurtured
the VT FEED project during her entire tenure
as executive director of NOFA-Vermont.
Her passion for agriculture, dedication to our communities,
and love for Vermont were unparalleled.
The seeds that Enid planted will forever nourish us.

Thank you, Enid!

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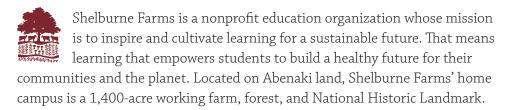
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## **VT FEED**

Vermont Food Education Every Day (VT FEED) began in 2000 as a collaborative farm to school project of three nonprofits: the Northeast Organic Farming Association of Vermont (NOFA-VT), Foodworks at Two Rivers, and Shelburne Farms. Today, Shelburne Farms and NOFA-VT provide leadership, resources, and support to an evolving farm to school movement, providing hundreds of school communities and producers with technical assistance, educational resources, and professional development in order to increase local, healthy food choices.

#### VT FEED believes that:

- In a sustainable food system, everyone has access to nutritious, healthy, affordable foods and opportunities to produce it.
- Students who are well-fed with nutritious foods are able to be more engaged and successful in their learning.
- Farm to school gives students the knowledge, skills, and values to make healthy choices for themselves and their communities.
- Local food systems are essential to the health of the local economy, environment, and communities.
- A healthy food system is critical to a sustainable future.
- School systems change when a diversity of partners and the school community align to invest in creating change together.



The Northeast Organic Farming Association of Vermont is a nonprofit association of farmers, gardeners, and consumers. Its mission is to promote organic practices to build an economically viable, ecologically sound, and socially just Vermont agricultural system that benefits all living things.

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# Overview

# Purpose and Use of this Guide

This Vermont FEED Guide is intended to support school communities in developing robust, long-lasting, and integrated farm to school programs, addressing whole school change. It reflects 20 years of practice, evaluative research, and innovation in the field. It is, in fact, the ninth farm to school resource that VT FEED has created since 2000. It is an updated compilation of earlier resources and offers new approaches and tools to help your school community successfully grow your farm to school program.



This guide is primarily intended for a multidisciplinary team of individuals working within the K-12 system: school nutrition staff, teachers, administrators, students, community members, and members of support organizations. Each school community will have a different level of experience and familiarity with farm to school. This resource can support a team as they align their existing activities to their school culture and community priorities, while also sustaining the changes.

The guide is organized around farm to school action planning, a step-by-step process to help you assemble a team, identify shared goals, and plan and conduct strategic activities. In addition, it provides valuable content on classroom curriculum, school meal programs, and community building. These are critical areas for action and influence. Finally, the guide is filled with useful templates, curricular design strategies, and creative ways to communicate and celebrate farm to school success. Revisit the tools and templates as your program develops or as you plan each new school year.

A robust, long-lasting, and integrated farm to school program should be able to:

- Maximize equitable student access to fresh, nutritious, locally grown foods
- Educate students about food systems and healthy eating habits through hands-on and community-based experiences
- Support and grow market opportunities for local producers and processors.

## What Is Farm to School?

Farm to school (FTS) is a program, policy, or initiative that intentionally connects students, school communities, and local farms with the goals of improving student nutrition and academic outcomes, strengthening local food systems, and protecting the environment. Comprehensive FTS programming includes strategies that are integrated across the cafeteria, classroom, and community, such as: serving fresh and local meals in cafeterias; offering food, farm, and nutrition education in the classroom; and building school relationships with farms and community organizations. Through FTS, students develop positive relationships with food

#### **FARM TO SCHOOL**

"enriches the connection communities have with fresh, healthy food and local food producers by changing food purchasing and education practices at schools and early care and education sites.

Students gain access to healthy, local foods as well as education opportunities such as school gardens, cooking lessons, and farm field trips. Farm to school empowers children and their families to make informed food choices while strengthening the local economy and contributing to vibrant communities."

—National Farm to School Network

and an understanding of how their food choices impact their bodies, the environment, and their communities—lessons and habits that will last a lifetime.

43,000 schools in all 50 states have farm to school programs today, reaching 20 million students and spending \$789 million a year on local food.

Because of their value to students and schools, farm to school efforts have been growing across the country. The USDA Farm to School Census reports that programs have grown from a handful of schools in the late 1990s to nearly 43,000 schools in all 50 states today, reaching more than 20 million students. Collectively, those schools are spending \$789 million a year on local food. In Vermont schools, \$915,000 was spent on local food in the 2013–2014 school year, out of \$16 million total.

#### WHO IS BEING SERVED BY U.S. **SCHOOL FOOD PROGRAMS?**

**4.6** million students eat SCHOOL BREAKFAST each day. 2.4 billion breakfasts annually

million students eat SCHOOL LUNCH each day, 5 billion lunches annually

Sources: "Economic Contribution and Potential Impact of Local Food Purchases Made by Vermont Schools," Center for Rural Studies, University of Vermont, 2017; National statistics based on schools reporting to the 2015 USDA FTS Census.



And there's so much room to grow! The United States serves approximately 31 million students each school day. That's 7.4 billion breakfasts and lunches served in a year! The scale of these food programs presents tremendous opportunities to feed more fresh, healthy food to hungry kids and to shift how all our students think about food and nutrition.

Note: Farm to school is growing in early childhood education, too—in center- and family-based child care settings, preschools, Head Start programs, and home visiting programs. Early childhood professionals may find the action planning tools and templates useful in their program development and in forging enhanced connections with public schools.

## Benefits of Farm to School

The long-term benefits of farm to school are many. There are health and education benefits to students, as well as positive impact on the local economy, the natural environment, and the greater community. The National Farm to School Network has compiled country-wide research into a short brief, *The Benefits of Farm School* (April 2017), excerpted here. See the brief for source citations.

#### **ECONOMIC DEVELOPMENT**

- Each dollar invested in farm to school contributes an additional \$0.06-\$2.16 to the economy; one state saw a \$1.4 million annual contribution.
- Individual farmers see an average 5% increase in income from farm to school sales and establish a long-term revenue stream.

#### **PUBLIC HEALTH**

- Farm to school activities support the development of healthy eating habits for children while improving family food security by boosting the quality of school meal programs.
- When schools offer school gardens, 44% of students eat more fruits and vegetables; when schools serve local food, 33% of students eat more fruits and vegetables.

#### **EDUCATION**

- Overall academic achievement in K-12 is enhanced, including grades and test scores; more opportunities for physical activity and social and emotional growth; increase in engagement.
- FTS offers innovative teaching platforms for core subjects, such as science, math, and language arts in PreK-12 settings, and greater opportunity for necessary experiential and hands-on learning.

#### **ENVIRONMENT**

- Waste of local food is reduced, both on the production side and the plate waste side; overall food waste decreases due to farm to school activities.
- FTS supports environmentally sound, sustainable and socially just food production, processing, packaging, transportation, and marketing.

#### **COMMUNITY ENGAGEMENT**

- FTS increases community awareness about and interest in purchasing local foods and foods served in school cafeterias.
- FTS increases support from parents and community for healthier school meals—connecting community and schools.

# 3 C Model of Change

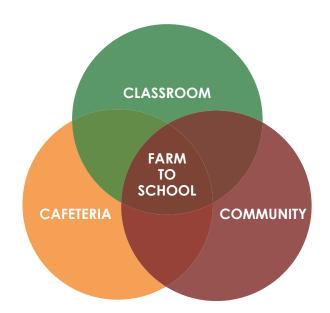
Farm to School is a comprehensive strategy that extends beyond serving a local product in the cafeteria. The "3 Cs" approach, which VT FEED developed in 2000, has taken root across the country as a successful model of change that integrates efforts in the cafeteria, the classroom, and the community to achieve robust and sustainable FTS programs.

VT FEED has found that the most successful programs are not "add-ons" (separate programs that run outside the regular policies, systems, and curricula of a school), but integrated throughout school culture. This requires collaboration among administration, food service, students, families, and teachers. Ideally, farm to school can link school wellness policies, nutrition programs, curriculum reform efforts, family-school-community partnerships, student voice, nurse, guidance, and after-school programs.

The school cafeteria is a major hub of activity. It can be the largest classroom in the school because it is a powerful educational environment connecting with every student. Farm to school programs demonstrate that nutrition and the cafeteria are integral to the school day and the education of the whole student. School cafeterias also can support

The school cafeteria is the largest classroom in the school. It can be a powerful educational environment that connects with every student.

the local food economy by buying from local farmers to incorporate healthy, local, and seasonal foods into school meals; connecting the expertise of school nutrition staff with food and nutrition education initiatives; reducing waste; encouraging



The 3 Cs of farm to school Farm to school is most successful and enduring when it is integrated into the cafeteria, classroom, and community.

student feedback; and making nutritious food accessible to all students. When school meals are produced sustainably, taste great, are nutritious, and support the local economy, everyone wins!

In the classroom, FTS education provides a real-life context for learning across all disciplines—science, math, art, language arts, social studies, and more. Classroom learning can be extended by engaging students both in hands-on community projects (building community gardens, visiting a local farm, volunteering with a local food pantry), and with the cafeteria (running taste tests for new recipes, learning culinary skills alongside school nutrition staff). Activities like these introduce students to new foods and empower students to make healthy food choices that last a lifetime. Farm to school naturally dovetails with the broader 4 Cs model in education: critical thinking, communication, collaboration, and creativity.

"With the right interventions, we can give every child a chance to get the nourishment

and support they need to thrive and grow. When our children eat healthy foods, we know that they grow stronger brains and they're better able to learn. When children are well fed, they have fewer discipline incidents and are able to engage in learning. We know that the best food we can give them is fresh food: unprocessed, full of nutrients straight from our farms to their plates."

—Rebecca Holcombe Former Vermont Secretary of Education





Making FTS connections within the community builds partnerships outside the school for place-based learning and garners community support for school initiatives. Youth have opportunities to learn about how their food is produced and to develop their own agency for creating change. Farmers build relationships with schools and other local institutions that allow them to expand into new wholesale markets and boost the local economy. Community dinners, service learning projects, and harvest festivals involve parents, families, and the whole community in building a food culture committed to healthy and sustainable food choices.

# Action Planning

his chapter guides a team of school-based changemakers through a step-bystep planning process to expand and grow their farm to school program. A number of tools utilized in the planning process are highlighted and linked to the appendices. Your team should review the process and tools and then decide how best to use this chapter based on where you are in adopting farm to school ideas throughout your school community.

#### WHAT IS IN THIS CHAPTER?

#### Step 1: Build

- Build your team
- Ask, listen, learn
- Assess current FTS efforts

#### Step 2: Plan

- Create your shared values statement
- Set goals
- Prioritize activities

#### Step 3: Act

- Dig in
- Spread the word
- Celebrate

#### Step 4: Adapt

Reflect and revise

#### **RELATED APPENDICES**

- Farm to School Rubric
- Farm to School Action Planning
- Impact & Feasibility Analysis
- Communications Planning Template
- Communications & Outreach Planning

# Action Planning

arm to school (FTS) efforts will be successful and long-lasting if you take the time to: (1) build buy-in within your school and community; (2) build and align your team around a shared goal; (3) identify roles; and (4) prioritize activities based on the available resources, impact, and feasibility.

Additionally, you may want to learn from the successes and challenges of others who have embarked on their own FTS journeys. There is lots of research and data to help guide you in the right direction. Action planning conversations allow a school team

to think about the work they are taking on within the larger school context, finding points of integration with existing priorities and needs. The process calls for continual reflection on where you have success or challenges, and adjusting your strategies as you learn along the way.



STEP 1 STEP 3 STEP 4 STEP 2

> The first step in the action planning process is to build a committed team. After you have your team in place, you want to build a strong base of information about what is happening at your school directly or indirectly connected to FTS, so you fully assess your starting point before making FTS plans.

### **Build Your** Team Ask, Assess BUILD ADAPT Create Shared Celebrate Values PLAN ACT Goals Prioritize Dig In

Farm to school action planning is actually a cycle of planning, acting, building, adapting—then repeating!

#### **BUILD YOUR TEAM**

When you start assembling a team (or begin rebuilding one) to grow farm to school, keep the 3 Cs in mind. Having team members from within the cafeteria, classroom, and community will greatly increase the likelihood of success in your action planning process. Many schools may already have a group that has been working on FTS or wellness, but possibly that group needs a "refresh" with some new planning and new team members.

STEP 1: BUILD STEP 2 STEP 3 STEP 4

Teams should be made up of individuals representing different roles in the school, including:

- School nutrition staff (food service directors, school chefs, kitchen managers)
- Classroom teachers and other staff
- School principals and vice principals
- School nurses
- Parents, school boards, or community members
- School superintendents, business managers, and curriculum coordinators (if planning for a district-wide initiative)
- Community partners
- Families and caregivers
- Students
- Food producers, processors, and businesses

Involve students as much as you can. Their voices can be powerful, and their experiences and opinions can often shed light on important aspects that adults may overlook. Additionally, students may be the best communicators of the positive changes underway. They might attend meetings, conduct

student surveys, offer feedback on new menu options, plan events, or educate younger students and their own families.

When forming a team, consider these questions:

- What skills or experience do you need on your team? What skills or experience do your potential members have?
- Who is already doing farm to school activities in your school? Is there a team member who can be a strong leader/influencer to really "rally the troops"?
- Are there people who might be interested in your work but don't know about it? Talk with them about how farm to school can help them achieve their own goals.
- Who in your community would have valuable input or resources to help support your team or connect you with others?
- What existing groups would be interested in your outcomes, e.g., wellness committees, sustainability clubs, food councils, and Parent



STEP 1: BUILD STEP 2 STEP 3 STEP 4

Teacher Organizations (PTOs)? In some schools, the FTS team is a subcommittee of a broader health or wellness committee or PTO.

How will your farm to school efforts reflect the diversity of your school and community? Are there new and different voices that could be included at the beginning of your planning process? Are there key individuals who can help you connect with more diverse groups?

As your team begins to meet, remind them that they are part of a growing state and national network that has resources to support you. (See "Connecting to Resources," in Community chapter, p.76.) Your team may want to talk with or visit other schools in your region that have FTS programs.

Some farm to school teams have developed a "hub and spoke" model for their meetings: Working groups (the "spokes") take on specific tasks and meet with interested members. A representative from each working group then meets regularly with the other representatives (the "hub") to share what is happening and to align efforts.

As your team is forming, it is important to take time to build trust and respect. The norms for how a team functions are an important indicator of how successful that team will be. Having norms that reinforce safety within a team, where people feel comfortable speaking up, is the best predictor of a team's success. In addition, take time to appreciate the contributions of your team members, and allow some time for socializing. Most volunteers appreciate the social component of volunteering. Simple relationship-building activities ranging from 10 to 45 minutes can be done during team meetings.

#### Organize Successful Meetings

One of the keys to a successful team is wellfacilitated, effective meetings. With your team, brainstorm the characteristics of meetings they've enjoyed and meetings they haven't. From this list, set your best practices and protocols. Here are a few tips:

**Facilitation:** Designate a facilitator to provide leadership and continuity to your meetings, and to keep your team on task and on time to meet goals. A good facilitator is an active listener who crafts agendas, sets up meeting spaces, and ensures clear communication with all members.

**Agendas:** Have clear meeting agendas with expected outcomes. Not every team member may need to be present at every meeting.

**Notes:** A note taker can focus on capturing information, decisions, and next steps while the facilitator runs the meeting. Consider designating a timekeeper if your group is large and highly involved. Share written notes with those who can't attend frequently, but who want to stay involved.

**Scheduling:** Set regular meetings so members can plan ahead. If diverse schedules prevent everyone interested from attending, consider having your meeting before or after other meetings, like a staff meeting or a PTO meeting. Schedule some meetings at a time when community and school nutrition personnel can attend.

**Communication:** Clear and effective communication helps create a welcoming environment where people feel comfortable sharing, are respectful of others, and value all ideas and perspectives.

Snacks and Fun: Offer healthy snacks and remember to have fun!

STEP 3 STEP 1: BUILD STEP 2 STEP 4

#### **ASK, LISTEN, LEARN**

Before you begin setting goals for your FTS programming, take stock of what is already happening and use that information to prioritize and determine your next steps.

Food activities are probably already happening at your school. The PTO may have a food-related fall fundraiser. Some classes may be using indoor growing lights or the school garden for science experiments. The cafeteria might have a federal Fresh



Fruit and Vegetable Program that provides snacks during the day. Perhaps some classes are taking farm field trips. You may even have a school store that sells snacks after school. All of these activities are potential opportunities to highlight fresh and local foods, and to build partnerships between the cafeteria, classroom, and community.

This is also the time to seek out voices that are often underrepresented in action planning for school activities. Is there a gathering or meeting of parents in your community involving English lan-

Seek out voices that are often underrepresented in planning school activities.

guage learners (ELL)? Could you connect with families that are part of afterschool or other youth development

programs? Have you included special educators, behavioral support staff, and ELL teachers? What activities or goals are already happening within these communities that farm to school could support? Ask around the school to identify these opportunities.

#### ASSESS CURRENT FTS EFFORTS

The Farm to School Rubric (see Appendix, p. 79) is a tool designed to help schools assess the depth and breadth of their farm to school activities. The rubric informs your action planning and identifies where you can deepen the program and make it long-lasting. The rubric can also help you identify your team's needs for technical assistance, or determine whether you are ready to find more resources and take action. It is also a great way to inform your team of activities that are already happening in the school.

To complete the rubric, consider where your school stands in each of the indicators listed, and circle the appropriate box. (See example of a completed Cafeteria rubric below.) You can complete the first three sections of the rubric—Cafeteria, Classroom, and Community—as a team, or you can assign each component to the person or persons most knowledgeable in that area. Bring the team together after the three sections are complete to share the answers. Then, as a team, complete the fourth section, Staying Power.

The rubric is a dynamic planning tool that can and should be revisited regularly—at least once a year is recommended. You will find that progress may

move both forward and backward as the result of your action steps, changes in personnel, or other factors. Don't be discouraged!

## Plan

STEP 2 STEP 3 STEP 4 STEP 1

Once the rubric is completed, you can begin prioritizing areas where you would like to grow in both the short and long term. To build momentum, plan for growth in both areas where your FTS efforts are just "emerging," and where they are "developing" or "deepening."

## EXAMPLE: FTS Rubric, Section 1: Cafeteria

Indicator	Emerging	Developing	Deepening	Thriving
School Nutrition Staff Engagement	School nutrition staff are interested in the creation of a farm to school program.	School nutrition staff representative regularly attends farm to school committee seetings and activities.	School nutrition staff play an active role in developing the farm to school program.	The director/manager and/ or several school nutrition staff work with faculty, administration, and commu- nity members to coordinate farm to school efforts and programming.
Local Procurement	Possibilities for incorporating local food into the menu and/or resources to help source local food have been identified.	Local sources of food identified and several local foods purchased via informal bid procedure and incorporated in school meals. School nutrition staff are trained and able to purchase local product through standard buying/bidding practices.	Local food regularly incorporated into menu for school year. School nutrition staff can adapt to fluctuating sources of local food, are regularly purchasing local foods through proper procurement methods, and can adapt their budget as necessary.	Annual purchasing contracts have been established between local farmers and the school. System in place to sustain the purchase of local food consistently; new local food sources evaluated regularly.
Infrastructure & Professional Development	School nutrition staff have begun to identify infrastruc- ture and professional devel- opment needs, and identify what changes are needed to make to incorporate local food into the meal program.	Infrastructure changes initiated or being planned. Professional development opportunities provided for school nutrition staff.	Infrastructure changes allow for incorporation of more local foods. All school nutrition staff have opportunities for professional development.	Food program infrastructure can sustain processing, cooking, and serving local foods over the long term. Plan in place for ongoing evaluations of infrastructure and professional development needs as local food purchasing increases.
Classroom & Community Connections	School nutrition staff are interested in conducting taste tests and/or can identify the possibilities for engaging faculty and students in nutrition education and the farm to school progam.	School nutrition staff work with farm to school committee to gain feedback from students on the farm to school program, and how to best incorporate nutrition education activities.	School nutrition staff workst- tee on taste tests, curriculum integration, and community farm to school events.	Community members, stu- tents, and school staff see the school food program as an integral part of the school and community and of the educational programming.

STEP 1 STEP 2: PLAN STEP 3 STEP 4

# CREATE YOUR SHARED VALUES STATEMENT

Many people come to a farm to school meeting with lists of activities that they want to see happen, and it can be hard to focus first on the overall vision. However, it is important for your team to develop a shared purpose and a shared understanding of the challenges you want to address, so that your selected activities will lead to the outcomes you want. Sharing your values is a positive way to frame solutions to challenges your team sees.

It is time to draft your team's farm to school values statement. Have each team member write down what they value most about food, education, and your community (e.g., healthy kids, vibrant local economy, connection to the community). Next, look for alignment among the individual values, and combine or reword them where you can. Also look at the mission or vision statement of your school or district (most have one). It can be strategic to align your own statement with existing school priorities. For example, "healthy kids," "engaged citizens," or "vibrant communities" are common school priorities that your work can support. Construct a sentence or two that links your shared values together. This shared statement will be the basis for setting your FTS goals.

Here are a few examples of FTS team values statements:

At our high school, we work to create authentic interactions with our local food system as a means to help students explore the importance of environmental and economic sustainability, personal well-being and nutrition, and connection to community (both people and resources). We seek to build more bridges between the school cafeteria—and its commitment to locally sourced, "from-scratch" meals—and classrooms to accomplish this goal.

At our middle school, we support a FTS program that fosters student ownership of healthy eating habits that also develop connections to (and stewardship of) their community, their environment, and their local economy.

We nourish our children with food that enhances our community's pride and directly connects to academic and lifelong learning.

#### **SET GOALS**

Now you have a values statement as a compass for your FTS efforts, and a completed rubric identifying where FTS currently stands (and where there's room to grow). You are ready to set specific goals.

The goals should be statements that address the outcomes you hope to achieve. Use active verbs, like *introduce*, *increase*, or *develop*, combined with a noun (i.e., what you want to introduce, increase, or develop). Make sure everyone understands the goals as written and make them as measurable and time specific as you can.

To help you set your goals, review your completed FTS rubric and your values statement. Where do you see opportunities, assets, and resources to build on? Where are there gaps that you wish to address? How do your goals get you closer to where you want to be?

Brainstorm a list of goals, then review the list with the team to ensure the goals represent all 3 Cs: the cafeteria, classroom, and community.

The Action Planning Template will help you record your goals and what you need to implement them. (See Appendix, pp. 84–87, and example on facing page.) It is aligned with the FTS rubric with sections for Cafeteria, Classroom, and Community, as well as a final page for Staying Power. Each

STEP 1 STEP 2: PLAN STEP 3 STEP 4

section suggests just one or two specific goals, with their associated action steps, roles, timelines, and resources needed.

The two-goal limit encourages you to recognize what is reasonable to accomplish during a busy school year. Use the long-term goals section at the bottom of each page to capture ideas for future years. Try to consider a one- to two-year time-frame when setting goals.

Keep your goals realistic. For example, if your team is just getting started, setting an aggressive first-year goal to increase local foods in the cafeteria to 30% may set your team up for disappointment and frustration. Instead, set goals that will require incremental changes that are more likely to be

Goals that require incremental changes are more likely to be successful and will build momentum and trust in your school.

successful. This will build momentum and trust in your school. Also, set goals that your team can accomplish themselves, before tackling systemic initiatives engaging lots of people.

Finally, before you move on to identifying activities, double-check that the goals align with your values statement.

#### **EXAMPLE:**

# FTS Action Planning, Section 1: Cafeteria

Goals	Action Steps	Person(s) Responsible (Lead person/ group member)	Timeline	Technical Assistance/ Resources Needed
Incorporate one local product a month	<ul> <li>Use Harvest of the Month materials</li> <li>Have "Try-It" Tuesdays</li> <li>Offer on menu next week</li> </ul>	FTS Coordinator and Nutrition Director	<ul><li>Plan this spring</li><li>Start next fall</li></ul>	<ul> <li>FTS Coordinators</li> <li>School Nutrition Director</li> <li>Harvest of the Month materials</li> </ul>
Increase student meal participation	<ul> <li>Improve marketing of meal program</li> <li>Have students help design menu</li> <li>Choose student ambassadors for meal program</li> </ul>	Nutrition Director and teacher Partner	Starting this fall	<ul> <li>Color ink on menu</li> <li>Digital &amp; print menus</li> <li>Find class to partner on menu design</li> <li>T-shirts &amp; Vests for ambassadors</li> </ul>

#### Long-term Ideas & Goals for Future School Years

- Research and make a plan for universal meals
- Establish a parent education program on food preparation

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#### **PRIORITIZE ACTIVITIES**

An activity is a specific effort, action, or set of steps to accomplish a goal. As you've been developing your action plan, your team has probably been generating plenty of activity ideas: composting, building gardens, cooking in the classroom, visiting farms, etc. Most of your farm to school time will ultimately be spent doing these tangible activities, and they will give your team a great sense of accomplishment. However, be careful that activities do not drive your process. You want to take on activities that will help you reach your agreed-upon goals.

Look at your goals and brainstorm what kind of activities might help you reach those goals. To decide which ones to include in your action plan for the coming year, start prioritizing your list. Combine redundant or similar ideas. Utilize the Impact & Feasibility Analysis Tool (see Appendix, p. 88) to help your team move more quickly and strategically through the decision-making process. Which activities will have the highest benefit or impact for the least effort, time, and cost? This will help you match actions to your capacity, and stay realistic about timing. It can also make your decisions feel less personal to anyone whose ideas aren't selected.

As you prioritize activities, consider:

- **Your team's energy.** Where are your team's energy and interests? If most people are excited about building a school garden but the team has identified offering afterschool cooking classes as an important activity, expand your team to include individuals excited about cooking.
- **Your capacity.** Do your activities match your capacity? Building a year-round greenhouse takes a lot more effort than building an outdoor garden.

- Momentum. Will the activity give you early success, credibility, visibility, and momentum for your bigger plans?
- Resources. Do you have the resources immediately available for this activity?
- Urgency. Does this activity address an immediate need or is it an opportunity with a short time frame?
- Logical sequencing. Do certain activities need to happen before others?
- **Your whole team.** Do your activities reflect the whole team's agreed-upon direction and not the interest of one person's focus?
- **Impact.** Which activities will have the greatest impact toward achieving your vision?

Now you can begin to fill in the Action Planning template with specifics (see Appendix, p. 84–87): what activities are required to reach your goal; who will be responsible for the task; what are the specifics to accomplish the tasks; what is the timeline for when work will be accomplished; and what technical assistance or resources would be helpful. If you have a large team, we recommend breaking up into smaller groups, one for each of the 3 Cs, plus a fourth to address staying power. Bring the full team back together and allow time for reporting on progress. You will most likely find that at least one activity from each group relates somehow to the other groups. This is a good sign—your team is finding synchronicity.

Now you have an action plan. It can be adjusted as needed, but it will help to guide your farm to school program, communicate your activities with the school community, and keep your team on track. Remind the team that all ideas from your initial brainstorm have been recorded and will be revisited in the future.



3 Act

STEP 1

STEP 2

STEP 3

STEP 4

#### DIG IN

With a plan in place, it is time to dig in and take action. The best first step is to take a step. You have planned for this, you have lined up your partners, and you are ready.

Don't go for the biggest effort first. Choose a sure win to pump everyone up and keep them engaged, or an activity that has high visibility in your community. Consider whether the action might be able to help leverage other actions.

Identify a good photo opportunity to highlight your first step. For example, students cooking or working in a garden or food service receiving the first delivery of local produce would make nice photos to share. Perhaps this positive image could be on the cover of your local paper or school's social media page. Sharing what you are doing is just as important as taking your action steps. Don't let communicating about your activities be a forgotten step; integrate communications into your activities to build support.

#### **Review and Adapt**

After you have completed the first few tasks, get your partners together to evaluate and reaffirm that you are headed in the right direction. Be prepared to deal with any unintended results of your actions. Has one of your activities gotten more attention than you expected? Is it worth putting more energy toward it before you move on to your next action? Observe and reflect on each activity. Being adaptable may lead you to some unexpected but even more powerful outcomes.

As your team gets farther along in the activities, be sure to establish an ongoing structure where team members can share, reflect, and adapt as the work unfolds. Being honest in your reflections as to what is not working is just as important as attending to

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what is working. If one of your activities doesn't go well, consider what you may be able to learn from this. Some of your most important next steps can emerge from failed first attempts.

#### Time Frames, Roles, and Accountability

When you created your action plan, you created timelines and deadlines. Honor these time frames, but don't be afraid to adapt them as you get into the work. Holding to unnecessary deadlines can turn team members off or burn people out. Remember that your action plan is a road map to get you where you want to go over time, but it is okay if detours emerge along the way. Just keep a steady but healthy pace for everyone.

Your action plan is a road map to get you where you want to go over time, but it is okay if detours emerge. Just keep a steady, healthy pace.

A steady pace will also help your group be accountable to their plans. Hold monthly or quarterly check-in meetings so your whole team knows that they are accountable to one another.

Consider any new team roles that might be emerging. Who on your team will remember to share the stories in the school newsletter or town paper? Has someone emerged as the natural leader of your group? Who is going to keep the action plan in mind and keep the group on track?

#### SPREAD THE WORD

By spreading the word, schools elicit donations, volunteers, and community recognition and support. Building support for your FTS program is essential in sustaining all the hard work that your team has done. In a research study conducted by Vermont FEED with school principals across Vermont (see Staying Power chapter, p. 27), communication about farm to school has been identified as one of the key factors leading to long-term staying power of a farm to school initiative. Think of it as a way to enhance the work underway. In many cases, it will make that work easier. A good outreach or communications plan can go a long way in ensuring that the bulk of the work does not rest on the shoulders of only a few volunteers. Find a team member who is excited by communications to fill this role.

Transparency builds trust. Organize your internal communications to make it easy for all committee members to access meeting notes, regardless of attendance, and make sure the school community knows that these notes are available to anyone interested. You might consider sharing a version of your action plan with the larger school community. Teams that have presented their plan to their school board and PTO have garnered greater buy-in.

Often the best way to publicize your work is through word of mouth. Students, families, and teachers can help build support when you let them in on your plans. Reach out to all these groups via school newsletters, announcements, teachers, and signs on the lunch line.

#### **Communication Considerations**

 Ask your school if there are any school- or district-based procedures or policies about sharing information with the media or on social media.

- Think about the messages you want to relay to the media, families, students, and teachers about the program as well as what you would like them to do with that information.
- It is just as important to share the story of what you are planning on doing as it is to share what activities are done. Use social media, your school newsletter, and the local paper to communicate your committee's plans, advertise your meeting dates, and ask for volunteers.
- Invite the media to your events, such as harvest dinners. Invite your farmers to speak about their products and promote your work. Consider partnering with another group at your school that already is hosting a program and add on to their event. At the dinner, offer and highlight locally sourced food prepared in your cafeteria.
- Continue to communicate information about your meal program even after changes are in place.
- Be sure to send event invitations to your school board and elected officials so they can see the changes you are making.
- Launch a quarterly school food newsletter or social media campaign with students so the school community can learn more about your program.
- Many communities have email lists where you can share the progress of your farm to school efforts.
- Present your FTS activities at city and town events such as school board meetings, Town Meeting, and rotary club meetings.

Vermont FEED has created two simple communications tools that can help you spread the word about your school's plans and activities to the audiences you need to reach. (See Appendix, Communications Planning Template, pp. 89–90, and Communications & Outreach Planning, pp.

# 5 Tips for Getting Press Coverage

#### **GET TO KNOW LOCAL PRESS.**

Read your local paper and media to get a sense for the kinds of stories they cover. Try to connect your story to big local issues and themes. Learn your paper's editorial calendar, including how much advance notice it needs for stories or announcements. (It's often three weeks!)

#### GET TO KNOW LOCAL REPORTERS.

Who covers the news for your town or school? Reach out to them with an email or phone call. Meet up for coffee and tell reporters about your program, or invite them for a tour of the garden and lunch at school. Be available to answer questions.

#### **SHARE GREAT STORIES.**

Offer content through stories or events and include a "hook" to draw in the reader. Share photographs and multimedia. Send copies of posters, fliers, and other materials. Practice your elevator pitch and arm yourself with great stories about impact and results.

#### **DEVELOP A MEDIA KIT.**

A media kit makes it easier for media to cover your project. Assemble basic information about your project (include key quotes and stories to illustrate the importance of your program), photographs, logo, and contact information. Have it ready to send out at a moment's notice, or post it online so reporters can find it easily at any time.

#### SHARE THE LOVE.

Have people involved in your project (students, community members) write stories, blogs, and editorials for the local paper or social media. And tell the world about the coverage you've received! Join your state's farm to school email list to post events.

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91–92.) Developing a relationship with your local media can go a long way when trying to bring the community into your program.

#### **CELEBRATE**

Celebrations to honor and mark your achievements are important and fun activities to have in your action plan. Whether you host a school community dinner, participate an existing town parade, or exhibit artwork and photos in the school, there are lots of creative ways to commemorate achievements. Look for celebration opportunities within your existing action plan, where you can recognize the work that has been done, in small and big ways. If one of your goals is to get awareness-building articles in the school newsletter, for example,

share images of students cooking or taste testing to educate readers *and* honor the student work. Celebrations do not need to be stand-alone events. Incorporating them into existing events or communications will often get more attention.

Many schools want to host a BIG BANG event to really draw attention to their program. These can be very fun and popular, but don't underestimate the amount of work they take to pull together. If you decide to host a large event, look for ways that it can fulfill multiple objectives. Maybe your school French teacher is already planning a school-wide French night. Could you partner with them to turn your cafeteria into a French Bistro with student waitstaff delivering homemade healthy French treats?



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It might be wiser to look for smaller, more frequent ways to celebrate. Hang a banner in the cafeteria? Be part of a small daily or weekly activity in your school? For example, you might pick a student each day to share one food fact on your school loudspeaker during morning messages. Continue to partner with existing activities. Have students prepare and serve tasty local dishes at school events or meetings to highlight school food changes.

Look for smaller, more frequent ways to celebrate and work with partners. Appreciation is a form of celebration! Consider participating in "harvest of the month" activities or celebrations that may already exist in your state. These pro-

grams often have fun resources available, such as posters, tabletop signs, recipes, or sample articles. Most of the work is done for you; you just have to adapt it for your school and community.

Appreciation is a form of celebration. Appreciate those who are on the front lines making changes, and the volunteers giving their time and expertise, and the decision makers (school administration, local leaders, state legislators), who are supporting your efforts—or who might one day.

It can be more impactful for your school and community to have five small ways to celebrate and bring out the Farm to School message than to host a single big event each year.

#### **EXAMPLE**

To celebrate the end of a math and social studies unit on understanding community and economy, one school hosts a school-based "farmers market." Students set up

# Creative Celebrations

- Share photos of your activities in school newsletters and town papers.
- Make a float for a town parade.
- Have a healthy snack table at your Back to School night, highlighting the types of snacks that you are encouraging for the school year.
- Host a community FTS dinner before a school event.
- Share a video of students talkina about what they have learned.
- Invite parents or local community groups to get a student-led tour of the school gardens and celebrate with homemade pizza that includes the garden produce.
- Invite farmers to your school and ask students to present their projects or cooking creations to the farmer who grew that food.
- Create an award for school or community members who are helping with your FTS activities.
- Highlight a new cafeteria food item in your newsletter with a recipe.
- Include community partners in school-wide volunteer celebrations.

stands with classroom-made local food items and small handmade crafts. They then invite teachers, parents, and community members to come and purchase their goods (\$0.50 an item) as they transform their gymnasium into an indoor market. Students then do a cost analysis on their items, looking at gross and net income. Finally, they donate their proceeds to the local food shelf or another food- or farm-related charity.



STEP 1

STEP 2

STEP 3

#### REFLECT AND REVISE

After you have worked with your team to develop and implement a farm to school action plan, you will want to learn from your activities and determine whether they were successful. Take time to reflect on both your successes and your challenges.

Here are some prompting questions to consider with your team when reflecting on your FTS work:

- Did we accomplish what we set out to do? Why or why not?
- What worked well and what didn't work very well? Why?
- What do we want to do more of and what would we do differently next time?
- How can we get feedback from students and others in our school community?
- Do we want to change any upcoming plans in our action plan based on this discussion?

It is absolutely necessary to revisit and potentially revise your action plan at the end of each year (or sooner) to assess what has been working well, and what has been challenging. Revisit your goals, their accompanying activities, and the timeline your team set to accomplish your plans. Things change, and you need to be nimble enough to adapt to staffing and administrative turnovers, new opportunities, and regulation changes. But don't be so flexible that you easily get off course. Trust that your team has done a good job planning your project, while allowing for adjustments along the way.

Revisit your FTS rubric and discuss what progress you have made to deepen your program. Plot any progress you have made on a new rubric. Also, revisit who is on your team and consider whether there are any new people you want to invite to help in your next steps. Review your long-term goals and identify what might be possible to include in next year's plans. Stick with it, work together, and have fun!

# Staying Power

This chapter is intended for your farm to school team, your school administrator, and/ or whoever is leading the coordination of farm to school in your school community. It covers the important considerations to be made when trying to make your work systemic and lasting. It covers the connection to wellness policy and overall school culture, while giving hints and s trategies to sustain coordination.

#### WHAT IS IN THIS CHAPTER?

#### **School Culture**

- Building relationships
- Broad and inclusive communications
- Embedded priorities
- Wellness Policy

#### Coordination Today & Tomorrow

#### **RELATED APPENDICES**

- Sample Job Description: School-Based Farm to School Coordinator
- Sample Job Description: District-Wide Farm to School Coordinator





## School Culture

This section is based on "Understanding School Culture and Its Relation to Farm to School," The Journal of Child Nutrition and Management, Spring 2018. For the article, VT FEED staff interviewed 10 Vermont principals.

A school's culture is one of the most powerful predictors of success in implementing new educational strategies. School culture means both the explicit and implicit values, traditions, and messages expressed in the day-to-day affairs of a school, and has been linked to educational value measures including teacher behavior, which impacts curriculum, school climate, and student achievement. How a school establishes its culture has to do with how the principal leads, how empowered the staff feel, and how well the individuals of the school work together.

When farm to school becomes part of a school's identity, it has staying power.

Many schools have found that adopting and embedding farm to school with all 3 Cs in mind has led to a long-term and systemic impact

on their school culture. When FTS becomes part of a school's identity, it has staying power. Not only do students eat healthier, but FTS is seen as good educational practice with solid pedagogy, improved health, and engaged professional learning that is

connected to the community. FTS and positive school culture create a win for all involved.

In the research, three major themes emerged as a way to understand the positive connection between FTS and school culture: (1) building relationships;

- (2) broad and inclusive communications; and
- (3) embedded priorities.

#### **BUILDING RELATIONSHIPS**

Relationships are foundational to support educational innovation and experimentation that lead to positive school culture. Trust in those relationships is key to setting the stage for a healthy school culture that embraces FTS. Successful FTS programming is often attributed to strong foundational community partnerships and internal relationships with school nutrition professionals, teachers, and other school staff who support innovation. One principal described how relationships with community partners and other schools were vital to her school's FTS success: "We're making an extension; we're making connections with other schools, other people. This work cannot be done in isolation."

When teachers and school nutrition staff feel trusted and supported, they feel empowered to try new things and new approaches to their work. These trusting relationships lead to partners acknowledging one another's attempts and successes, which naturally leads to celebrating and appreciating efforts. This supports a culture of innovation and experimentation.





"We're not doing anything magical here; it's just taking advantage of the fact that

you have smart people working with you. When they have a smart idea, have them define the goal and then get out of their way and let them do the work."

—Vermont Principal interviewed for study



"Farm to School has helped to promote a sense of pride in who we are and what we

are, and to promote good healthy nutrition. I think there's tremendous potential for that."

—Vermont Principal interviewed for study



#### **BROAD AND INCLUSIVE** COMMUNICATIONS

While it's clear FTS has great value for students, this value must be clearly and regularly communicated to multiple stakeholders in the school community and beyond in order to create a groundswell of support. As mentioned earlier in the Action Planning chapter (p. 11), communication is a significant part of any successful FTS program and crucial for impacting school culture. An atmosphere of open and frequent communication helps an entire school embrace its farm to school goals.

"Strong communication of the value of FTS can lead to support for policies and funding that can sustain programming beyond the passions of any one individual person," stated a principal. Schools should consider using current communication platforms to articulate the benefits, outcomes, and impacts of FTS to the students and school community. This could be through a weekly newsletter, school website, classroom webpages, local and regional TV and radio outlets, social media platforms, or other creative ways.

#### **EMBEDDED PRIORITIES**

As a school community identifies FTS as a schoolwide priority, people look for places to integrate

and embed goals and activities within the existing school environment. It is the daily practice of FTS in the cafeteria, classroom, and community that has the staying power and changes the overall school culture. Research by the Vermont Department of Health (2018) has found that 80% of Vermont schools are embedding FTS into their schools in at least one of the 3 Cs. A 2017 outside evaluation for VT FEED found that nine out of 10 schools that have adopted FTS have identified its positive impact on improving overall school culture.

## Wellness Policy

All school districts participating in the National School Lunch Program or the School Breakfast Program are required to develop and implement a school district wellness policy. These policies can be a great step toward creating a healthy, supportive school environment. The most successful policies are ones that establish goals, monitor success, and are revisited annually. (Most wellness policies are reviewed on a three-year cycle.)

Local wellness policy requirements were originally passed as part of the 2010 Healthy Hunger-Free Kids Act, then updated in 2016 to expand their scope. The 2016 final rule required districts to revise



local wellness policies and fully comply by June 30, 2017. The legislation requires that your community be involved in writing and reviewing your wellness policy, and that your school board approve it. Directing some of your team's energy to the wellness policy can be a great way to get board members involved in FTS efforts as well. (See Classroom chapter, p. 66 for an example from Minnesota of how to embed farm to school in a school's wellness policy.)

The State of Vermont has created some useful tools for schools as they navigate creating, implementing, and evaluating their school wellness.

- Vermont School Wellness Policy Guidelines and <u>Implementation</u>
- Local School Wellness Policy Action Implementation Tool

# Coordination Today & Tomorrow

It will take ongoing coordination to successfully implement your farm to school program. Schools do this in different ways during different stages of implementation. As you get started, it is easiest and makes the most sense to coordinate as a team. Sharing the work among a group of people will increase each person's commitment to the effort and spread out the work responsibilities so that no individual feels overburdened, just like the old adage "many hands make light work."

Some schools find a nice balance within their team and are able to sustain this shared coordination indefinitely. This has some real advantages for full school buy-in and ownership of the program. A team approach to coordination where you have regular team meetings; check in and support one another on work accomplished; have new members join the team and learn from senior team members; and reflect and plan together for future



work will lead to a comprehensive effort that can be woven into your school culture. To succeed, you will need clear, consistent communication, clarification of roles, and a clear process for decision making. Since farm to school impacts the cafeteria, classroom, and community, having leads from all three areas involved in coordination can succeed with strong teamwork.

Some schools choose to have an individual coordinate their farm to school efforts, either in a paid position or formally included in an existing staff position. In this case, establish a job description and work plan that allows focused attention on the farm to school goals.

Having a designated FTS coordinator can be an efficient way to communicate across the school and identify challenges quickly, and it demonstrates a school's investment in FTS. But when all coordination is done by one person or one position, others may back off responsibilities, which can create a difficult transition if the coordinator leaves. If your coordinator is in a temporary position such as a <a href="FoodCorps">FoodCorps</a> or <a href="AmeriCorps">AmeriCorps</a> volunteer, the team will have to work extra hard to embed the program in the school to sustain beyond the members' service. Success should never rest on one person.

Vermont recently conducted research about the types of tasks that farm to school coordinators and coordination teams had to dedicate time towards in order to achieve their farm to school goals. These tasks were organized into administrative, promotional, direct, and indirect services.

#### Top **administrative** tasks performed:

- Communicate with interested stakeholders
- Facilitate meetings
- Engage with the statewide farm to school network
- Generate reports, enter data
- Write grants to support programming

#### Top **promotional** activities performed:

- Present to school community
- Engage local media
- Highlight local food items on school menus
- Promote Harvest of the Month
- Run table at school/community events
- Advocate to school board

#### Top **direct** services performed:

- Arrange farm field trips
- Coordinate/manage school gardens
- Organize school taste tests
- Conduct education in school garden
- Conduct classroom cooking activities
- Conduct classroom nutrition lessons

#### Top **indirect** services performed:

- Plan school events
- Plan school gardens
- Plan school taste tests
- Plan classroom activities

In the Appendix, pp. 93–94, you will find two sample job descriptions: one for a school-based farm to school coordinator and one for a district-wide farm to school coordinator.

You may find that you try a variety of approaches to coordination over time. The most important factor to keep in mind when planning your long-term coordination strategy is to match your workload to the capacity of your coordinators. You don't want to burn out your school, your team, or your coordinator with unrealistic expectations.

# **Cafeteria**

This chapter is mostly intended for those on your farm to school team who are focusing on how to make changes in the school cafeteria toward more local food purchasing. The chapter covers strategies for buying local food and incorporating it into the cafeteria, while also trying to address the overall cafeteria environment. There is an extensive appendix that supports this chapter with necessary background information to help the reader navigate the complicated world of school nutrition programs.

#### WHAT IS IN THIS CHAPTER?

#### **Buying & Serving Local Foods**

- Defining local: Establishing values in your food program
- Affording local food for the long haul
- Procuring local food
- Where does the food come from?
- Who manages the school food program?

#### Incorporating Local Foods in the Menu

- Menu planning with the seasons
- School kitchen equipment for local foods
- Bringing kids to the table
- Taste-testing local foods

#### Improving the Cafeteria Environment

- The largest classroom in the school
- Composting in schools

#### RELATED APPENDICES

- Federal Role in School Meals
- What's in a School Meal?
- School Meal Finances 101
- 10 Reasons to Buy Local Food
- Tiered-Buying, Values-Based, Local Purchasing Plan
- Monthly Menu, Bristol Elementary School, VT
- Ways to Begin Incorporating Local and Regional Foods into School Lunch
- Creative Community Fundraising
- Fresh Fruit and Vegetable Program Regulations & Best Practices
- Tips for Buying Directly from Farmers
- Recommended Kitchen Equipment for From-Scratch Cooking
- 5 Steps to Implement a Taste Test Program in Your School
- Cafeteria Tips for Successful Taste Tests
- Classroom Tips for Successful Taste Tests

## Cafeteria

chool nutrition programs across the nation are increasingly embracing farm to school initiatives as a way to meet the demand for high-quality foods, encourage good nutrition, and increase student participation in meal programs. Because these programs increase access to fresh, whole foods away from home, they can have a significant impact on student health, public health outcomes (preventing obesity and diet-related diseases), and educational readiness (improving student behavior, ability to focus, and academic performance).

Before you launch into making changes to food in the cafeteria, it is vital to understand the very complex school food system that you'll be working in.

Student meals are an important part of a student's day. They present an opportunity to teach lifelong good nutrition and to help students establish a healthy relationship with food and the people who prepare and serve it. Some students meet most of their daily nutritional needs through school meal programs, including breakfast, snacks, lunch, afterschool meals, summer meals, and weekend backpack food programs.

However, school nutrition programs are complicated. Two federal and usually three state agencies are responsible for them (see Appendix, "Federal



Role in School Meals," pp. 95–96. ) Of the federal programs designed to provide nutritious meals and snacks to vulnerable populations in the U.S., most offer a financial reimbursement to the eligible entity that serves the meals. The reimbursement is typically tied to income levels. A meal served to a child from a lower-income family will receive a higher federal reimbursement rate than a meal served to a child from a higher-income family. (See Appendix, "School Meal Finances 101," p. 97). But in order to receive reimbursements, school programs must ensure that each meal meets certain requirements, especially in the area of nutritional value (See Appendix, "What's in a School Meal?" p. 94.) Before you launch into any effort to make changes to food in the cafeteria, it is vital to understand the very complex school food system that you'll be working in.

### **Buying & Serving** Local Foods

Incorporating local foods into the school food system takes a long-term, holistic approach involving teachers, families, food service staff, students, school administrators, farmers, and community members. Given the short growing season in many regions and limited school budgets, it also takes creativity!

However, the benefits can be huge. Successful farm to school programs help support strong breakfast, lunch, afterschool, and summer meal programs, and vice versa. When we serve students fresh, skillfully prepared foods from local producers, school lunch program participation rates may measurably

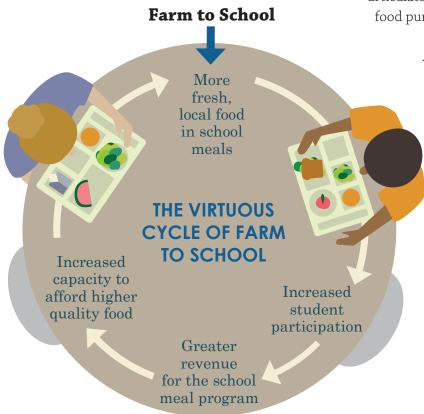
increase, and students may try and enjoy a greater number of foods. This, in turn, helps improve the bottom line for school food programs, while also improving student nutrition, investing students in their local farms and communities, and supporting regional farms. (See figure below, and Appendix, "10 Reasons to Buy Local Food," p. 99.)

### **DEFINING LOCAL: ESTABLISHING VALUES IN YOUR FOOD PROGRAM**

We all decide what food to purchase using conscious or unconscious values: cost, convenience, source, labor, safety, production practices, or sustainability. Schools and school nutrition programs are no different. Each institution has a unique set of priorities, challenges, and values that determine what food is purchased, how much, where it comes from, and how it will be used. Take some time to articulate what values are motivating your school's food purchasing decisions.

> A values-based local purchasing statement and plan can help make a school's purchasing decisions more transparent and guide future purchases. The first step in creating a successful program is to gather and articulate the values of the customers (students and staff), community, and food/nutrition program staff. These groups may have shared, similar, different, or even conflicting values. From these values, you can develop an agreedupon values statement.

> > Here is a values statement from one K-12 school that attended the Northeast Farm to School Institute:



Adapted from "What Is the 'Virtuous Cycle' of Expanding School Meals and Farm to School?" Hunger Free Vermont.



"When every eligible student is enrolled in their free school meal program, and more

students are eating breakfast and lunch, all students have access to the healthy, fresh, local food that farm to school makes available in the cafeteria and classroom. Plus, school meal program finances improve, giving schools more resources to purchase and process local foods."

—Hunger Free Vermont



We support a meal program that is fun and motivates kids to try new foods and learn about healthy new foods by offering a variety of nutritious, appealing, yummy foods that come from local farms when possible. We want our kids to know where food comes from and the many ways it can be prepared, teaching kids to make healthy choices for years to come.

When using the term local in your values statement, be specific and clear. Each school or district should develop its own definition of this term. What is considered local can vary from product to product and season to season. And often, when local is expressed as a value, most people are actually thinking of more than geography. Local has become a proxy for qualities such as fresh, whole, unprocessed, or humanely raised. Make your definition as simple, yet clear, as possible so that you can easily communicate it to the businesses you order from (see Appendix, "Tiered-Buying, Values-Based, Local Purchasing Plan," p. 100–101).

After you create your shared values statement and define local, you can set some local purchasing goals based on a tiered system.

- Tier 1: Ultra-local purchases, such as those from the local town or county
- **Tier 2:** Purchases from surrounding counties or the state
- **Tier 3:** Purchases from surrounding states or a region (from the distributors or food hubs)

When you state these goals and targets as part of your action plan, local purchasing becomes transparent and defined. This helps the public understand that "buying local" has layers that are achievable at different levels.

The word local has become a proxy for qualities such as fresh, whole, unprocessed, or humanely raised. Each school or district should develop its own definition of local that is simple yet clear.

### AFFORDING LOCAL FOOD FOR THE LONG HAUL

It can be challenging to serve fresh, nutritious meals with tight school food program budgets that are expected to break even or generate a profit. So how can local food fit into this picture? It's important to budget for any purchasing changes. Local food isn't always more expensive, but when calculating its full cost, consider the ease of ordering, procuring, shipping, and packaging, as well as any additional preparation time needed to clean and process local whole foods. (Have you ever cracked 200 eggs?!) Consider all these in relation to participation rates, reimbursements, and student preferences and creativity.



"We have raised money for local food purchasing through a variety of fundraisers, such

as an annual 5K run and a monthly winter farmers market. Our community also supplements our food service program and local purchasing efforts by anywhere from \$25,000 to 35,000 a year."

> — Barrett Williams, Principal Sharon Elementary School



The text on the facing page offers some steps you can take to begin incorporating local foods into your school food program. (See also Appendix, "Creative Community Fundraising Ideas," p. 102.) School food service programs are also expanding their local purchasing through the procurement process of the United States Department of Agriculture (USDA) outlined below.

### PROCURING LOCAL FOOD

USDA regulations require that School Food Authorities (SFAs) allow for full and open competition when purchasing any goods or services using funds from the school food service account. This is to make sure that federal funds (i.e., taxpayer dollars) are used effectively. Going through a procurement process might seem like just more paperwork, but it actually builds relationships between buyers and sellers: Buyers achieve a consistent supply of product and sellers know what is expected.

#### **Formal Procurement**

When an SFA uses federal, state, or local taxpayer dollars to procure school food, the USDA requires a formal procurement solicitation if the purchase is over a certain price threshold. (States can set that threshold lower if they choose.) The solicitation

requires public notification and a formal Request for Proposal or Invitation for Bid process.

#### Informal Procurement

Purchases below the threshold may be conducted more informally. In this case, SFAs can choose who to solicit bids from, but they must get price quotes from three or more vendors for the same product or service. The prices are recorded. The vendor who meets all the outlined SFA requirements and has the lowest price wins the bid. The requirements may include any criteria that are important to the school food program and can include specific farm to school criteria, such as a farmer's willingness to host a field trip or attend occasional activities at the school, or ability to deliver to a number of schools in the district, on certain days or at certain times.

See Procuring Local Foods for Child Nutrition Programs, USDA

### A bid solicitation with a farmer should include:

- The values statement for your food program (see p. 36)
- The number and location of schools to serve
- The total estimated volume of each item you want
- Delivery schedule: time of day, frequency, and location
- Packing requirements: standard box, grade, loose pack, bulk, etc.
- Payment terms, payment process
- Names/phone numbers of contact people for ordering and billing
- Other, such as willingness to host farm visits or attend local meals or taste tests

# Ways to Begin Incorporating Local and Regional Foods into School Meals

**Start slowly.** Begin sourcing a few products you know your program can afford. One Vermont school purchased local carrots from September through March its first year. The carrots stored well, they were affordable, and the school liked using them. This began a relationship with a local farm that is still evolving.

### Identify a few products you use most by volume.

Then substitute lower-cost items such as apples, potatoes, carrots, or winter squash on a trial basis. Simply replacing tomatoes with grated carrots on a sandwich or salad bar in winter can save you money.

**Look for competitively priced foods.** Storage crops such as potatoes, carrots, and squash, or crops at the height of their growing season, such as tomatoes, are often competitively priced. Fresh produce often yields less waste, too, which saves money.

**Identify nearby farms, and call to find out what they grow.** If they grow what you might want, ask if they would consider meeting with you to discuss products, prices, and logistics.

**Ask your distributor about local foods.** Ask them how you can determine who they buy from and how products are labeled in their product catalogs so that you can track your local purchases.

**Take advantage of fluctuations in the local and seasonal food supply.** Seek out recipes that use fresh, local, and in-season products, then build menus around these dishes.

**Involve interested teachers, administrators, families, and the community.** They can help you promote your plans, new menu items, or taste tests. Present to the PTO about changes you are making.

**Introduce new items in small batches over several menu cycles.** Before judging an item's success, introduce it six to eight times, along with regular menu items. People young and old often have to try a new food multiple times before liking it.

**Enlist classrooms and families to help conduct taste tests. This will** help warm students up to new foods before those foods appear in the cafeteria. Make a small batch in little cups to try in a classroom or in the lunch line. Collect feedback with a survey.

**Combine USDA Foods with local foods.** One school district's breakfast program features a carrot muffin that contains local carrots and syrup, along with USDA flour, oats, eggs, and dried milk.

**Try storage.** Purchasing food in bulk at the height of the growing season will save money because produce is priced to move then. You can store, freeze, or process the food for future use, or ask your local farmer to store it for you. Root crops can last through the winter if kept in a cool, dark place.

**Buy culinary-grade produce.** Ask a local farmer if they sell discounted "seconds," produce that is blemished, dented, or broken. (Don't expect to get it for free—it still cost the farmer to grow it!) Food that you'll process doesn't need to be picture perfect (such as apples for apple crisp or broccoli for a stir-fry).

#### Entice teachers and staff to buy adult meals.

This will generate more money for your program. Try offering teachers a free lunch that includes new foods one day. Let teachers request dishes in a survey, or offer a little something extra with their meals, such as a side dish of soup or a new recipe.

Revised from New School Cuisine: Nutritious and Seasonal Recipes for School Cooks by School Cooks.

### Micro-Purchasing

This method does not require soliciting bids, but you must record what you buy. Micro-purchasing is often used for one-time purchases, such as buying food for a harvest dinner, trying a new product, or buying a load of tomato seconds to make salsa. If the purchasing becomes more regular, it is necessary to go through a bid solicitation.

### WHERE DOES THE FOOD COME FROM?

School meal programs get their food from many different sources. In addition to those sources outlined below, schools can acquire food from their school gardens and district agricultural technology centers.

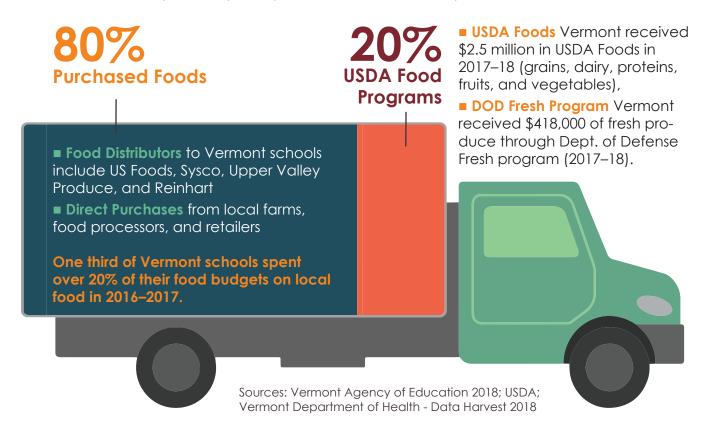
#### Wholesale Distributors

A majority of school food is purchased from the same wholesale food distributors that serve restaurants and supermarkets. Often a school or district sets a contract with a distributor that requires the school to buy a high percentage of its products through that distributor in order to get better overall pricing.

Working with distributors is very efficient. Orders can often be placed with only a day's notice, and deliveries can be made several times a week. Distributors also may carry a wide variety of products, including food, soap, and appliances. However, because they participate in the larger food system, many of their fresh foods come from distant states, traveling 1,500–2,500 miles before reaching the school. These distances can significantly impact food quality, food price, and the environment.

### Where does school food come from?

Vermont schools rely on two primary sources for the food they serve:



Distributors are a true resource for farms that do not have transportation or storage infrastructure. Some states are fortunate to have a number of distributors that look for and showcase local products. When purchasing from a distributor, whether you have a contract or purchase occasional items, ask them how much of the food they distribute is locally produced, and don't hesitate to ask them if they can increase that amount. (Remember to ask them for their definition of local, too.) Request local food products whenever possible, and ask for the names of the farms your distributor purchases from—it makes the distributor more aware of customer demand.

### **USDA** Foods (formerly USDA Commodities)

USDA foods are physical food items from the government that schools have access to if they participate in the National School Lunch Program. USDA foods include frozen products, canned products, dry goods such as pasta, and fresh fruits and vegetables. Although the food traditionally has been perceived as the "leftovers," once restaurants or consumers have purchased the quality foods, this is not so. When the USDA solicits bids from farmers and companies to supply goods to the program, it has quality and production requirements. The USDA purchases these foods in bulk, then offers them free to schools. Vermont schools receive \$2.5 million worth of federally purchased American-grown foods each year, or about 15% to 20% of a school's food budget. (Some beneficiaries, such as participants in the Child and Adult Care Food Program, can opt out of the program and take cash in lieu of USDA Foods, but schools cannot.)

USDA Foods have a dual mission: to support American agriculture and to support programs that serve children and others in need. A school's entitlement to USDA Foods is based on the number of lunches served the previous year, multiplied by the USDA Foods rate, which was \$0.30 to \$0.33 per lunch for 2017-18. (In 2015-16, Vermont

schools were entitled to \$2,283,338.) Schools must order items in March for the next school year, so forecasting food needs and preferences is important. Strategically, consider maximizing your "value for dollar" by purchasing USDA Foods that are not available locally, allowing more space in budget for local foods on the open market.

### Department of Defense (DoD) Fresh Program

All schools have the option to spend some or all of their USDA Foods value on fresh produce from the "DoD Fresh Program." This program supplies whole or minimally processed produce from farms that may or may not be local to your state. In the 2015-16 school year, Vermont schools spent 22.5% of their USDA Foods entitlement on produce from the DoD Fresh Program. Of that, \$94,000 came from Vermont farmers.

### **USDA Fresh Fruit & Vegetable Program**

This program (the FFVP) provides all K-8 students in participating schools with a variety of federally reimbursed fruits and vegetables as a snack before or after lunch. It is often available only to schools where 50% or more of the students qualify for free or reduced meals. The FFVP is a great opportunity to incorporate nutrition education in the classroom, offer a healthy snack at little cost to the food program, and support your local farmer by buying local.

The Fresh Fruit and Vegetable Program can also be readily integrated with state Harvest of the Month programs, which are available in many states. Learn about your state by going to the National Farm to School Network website. (See Appendix, "Fresh Fruit and Vegetable Program Regulations & Best Practices," p. 103.)

#### Food Hubs

The USDA defines a food hub as "a centrally located facility with a business management structure facilitating the aggregation, storage, processing,

distribution, and/or marketing of locally/regionally produced food products." Nationwide, about 11% of food hub sales are to K-12 food service. They specialize in serving farmers and buyers through education and clearly identifying food sources at the time of purchase. Also, food hubs tend to be focused on distribution within a region of a state, rather than a whole state.

### **Direct Purchasing**

Working with individual farmers can take some getting used to, especially if you're accustomed to one distributor supplying everything. For example, there will probably be additional paperwork if you place multiple orders with several local farmers, so having efficient procuring and ordering systems is essential.

In developing a system that works for both farmers and schools, openly communicating and negotiating is the foundation for building lasting, viable partnerships. Both sides will have issues and concerns. Farmers and food service directors can be partners in farm to school efforts when they trust one another and understand each other's motivations, needs, and constraints. (See Appendix, "Tips for Buying Directly from Farmers," p. 104.)

### **Forward Contracting**

In some school districts, farmers and school food service staff sit down together each spring to identify and plan for foods that the food service can use for the coming school year. The proper procurement procedures are applied, and a farmer commits to growing these foods for the coming year or season. A forward contract also contains contingency plans if the product is unavailable when ordered, and details how communication will occur between the farmer and school nutrition director when the ordering begins.

Forward contracting can save money because if farmers can secure a market for their products ahead of time, a better cost per pound can be negotiated. This requires discussion and planning between food service staff and farmers, and each party assumes a little risk. If the intent is to secure price ranges ahead of the planting and harvesting, it is important to have a forward contract that is properly solicited and bid on.

### **School Purchasing Cooperatives**

School districts can achieve significant savings by working together to arrange for sale prices on behalf of the school. In Vermont, more than 180 schools belong to the Food Directors Association. Companies bid for this collective contract and enrolled schools are obligated to purchase 95% of their food and supplies through the chosen vendor, although exceptions can be made for local produce and some local products the contracted company cannot provide (such as fresh bagels or pizza). This idea has worked in communities throughout the U.S.

#### **Food Donations**

Given budget constraints, it would seem logical to assume that schools would welcome donated or gleaned food. It's true that donated food can work well for a taste test, classroom experience, or trial of some new foods, but school nutrition directors are not necessarily able to accept regular donations. They plan menus a month in advance, and donated food supplies are often unpredictable. Additionally, imperfect produce often requires more staff hours to prepare. However, once a director has built a trusting purchasing relationship with a farmer, they are more likely to be able to accept imperfect (known as "culinary grade") produce. Local food donations certainly can build school-community relationships, when planned for. In all cases, however, it's important to adhere to the school's food safety requirements.

#### Grow a Row—On the Farm

Some innovative teachers and food service staff have experimented with inviting farmers to "grow a row for the school kitchen" with the help of students. Students plant a crop like potatoes or pumpkins at a farm they visit in the spring. The following fall, the students harvest the crop and bring it to the school to be stored, processed, or frozen for later use.

#### Grow a Row-At Home

Other food service staff have asked local families to "grow a row for the school kitchen" so that the school can receive produce donations all fall. Family food donations to schools were the foundation of school lunches prior to the start of the USDA program. Alternatively, community members, families, and PTAs could donate a Community Supported Agriculture (CSA) share for classroom taste tests or to the food service. (A CSA share allows you to pay for a "share" of a farmer's harvest in advance, and then receive a portion of the farmer's crops as they are harvested.) In either case, it is important to arrange this with the school nutrition staff prior to any produce showing up at the kitchen door!

### "Mystery Box"

In the fall of 2015, Berlin Elementary School teachers and Community Harvest of Central Vermont (CHCV) created the Mystery Box program. Each week, CHCV sends partnering teachers a box of a different kind of donated gleaned vegetables, enough for every student. The vegetables give teachers a jumping-off point for almost any kind of learning—math, science, research, art, writing. Sample templates are provided. Students learn about all the vegetables and in the end—maybe—taste and get excited about a new food!

### WHO MANAGES THE SCHOOL **FOOD PROGRAM?**

As defined by the USDA, a School Food Authority is the local government body legally responsible for administering and operating school food service programs in one or more schools. Usually a School Food Authority is a town school district, union school district, or private school.

There are two basic models for school food service: self-operated food programs and privately managed food services. Each is outlined below. Each model has its own unique advantages and challenges. It is possible under either system to begin incorporating local food into daily meals. For example, both models sometimes rely on centralized kitchens for efficiency. Centralized kitchens have the equipment, space, and labor to do scratch cooking with local foods that are then delivered to other schools in the district.

### **Self-Operated Food Programs**

"Independent" or "self-operated" school meal programs are managed by school nutrition staff who are employees of the supervisory union or school district. These programs follow the purchasing policies of the school, and the school nutrition directors usually have the independent authority to procure food through both formal and informal purchasing procedures. Sixty-five percent of Vermont schools have self-operated food programs (this percentage varies from state to state).

Directors of self-operated food services often enter into yearly or multiyear purchasing contracts for supplies and food, and purchase the majority of their foods from one or two major vendors to reduce contract and billing paperwork. However, they also have quite a bit of flexibility to make their own decisions about where and what to buy "off-contract" in order to purchase food from their local farming community.

### **Privately Managed Food Services**

Some schools outsource their meal programs to private, for-profit food service management companies, often operated by corporations that provide multiyear contracted food services to many schools, hospitals, and other institutions. The school or school district pays an annual management fee, and a cost per plate of a meal (depending on the meal program). Costs can vary depending on the size and remoteness of a school, inclusion of local foods, and number of programs being served. Individual food service managers or cooks at each school are restricted in what they can purchase outside the contract, unless the school specifies exceptions.

These companies, particularly in the Northeast, have shown an interest in purchasing local foods if the school food service manager is interested as well. Schools can include language in the contract applying geographic preference to vendors that supply local products. Thirty-five percent of Vermont schools have privately managed meal programs.

For more information about the bidding requirements of food service management companies in Vermont, visit:

Contracting with a Food Service Management Company Vermont Department of Education

### SCHOOL FOOD PROGRAMS **IN VERMONT**



self-operated by school or district

35% privately managed by food service company

Source: Vermont Agency of Education, Child Nutrition Services, 2018 data.

"One success has been working with the same local food producers over time and the relationship we have built with them.

They are able to provide us with a quality local food delivered right to our back door."

—High School Nutrition Director



### Incorporating Local Foods in the Menu

Incorporating local foods in the school menu does not need to happen at a grand scale to make a big impact. Try introducing one item at a time by adding a seasonal vegetable or two to a favorite recipe. Then enlist teachers and families for taste-testing the new foods and recipes.

Recipes in the New School Cuisine cookbook can help you (see next page). These recipes were developed by school cooks for school cooks, and most of the ingredients used are common in school kitchens. The recipes feature foods required by the latest USDA Meal Pattern for School Meals, and incorporate USDA Foods along with local food suggestions.

### MENU PLANNING WITH THE SEASONS

Years ago, school children in the Northeast couldn't have imagined eating fresh tomatoes in the dead of winter or feasting on strawberries after the leaves fell. But the global food system has made just about any food product available at any time of year. Because local purchasing often capitalizes on seasonally available produce, it can seem like it will return us to our ancestors' days. That doesn't have to be bad! Seasonal cooking, which simply means taking advantage of fruits and vegetables when they are ripe, can be both cost-effective and delicious. For example, you could reduce the offerings of tomatoes and cucumbers in the winter months and instead serve root crops, such as beets, parsnips, and winter squash. Since many students have not had much exposure to winter and root crops, however, these foods need to be introduced gradually through taste tests and repeated presentations.

### Vermont Seasonal Menu Items

#### **FALL**

- Summer squash spears with dip
- Fresh corn
- Corn chowder
- Late spinach mixed with salad greens
- Zucchini-carrot bread\*
- Pesto on pizza or pasta
- Apple crisp
- Swiss chard and peppers in rice pilaf
- Cabbage patch salad\*
- Kale chopped fine in soups/casseroles
- Vermont minestrone soup\*
- Winter squash in bread\*

#### WINTER

- Rutabaga, turnips, parsnips served as raw sticks with hummus or bean dip
- Beet, parsnip and carrot salad
- Chili with root vegetables
- Roasted potatoes
- Potato bar
- Chicken pot pie with winter vegetables
- Late harvest soup with root crops
- Rice pilaf with root vegetables
- Potatoes/root vegetables in soups/stews

#### LATE SPRING

- Spring roll-ups with early lettuce, spinach, cheese, and dressing
- Bok choy
- Stir-fried onions and herbs on rice
- Chicken Caesar salad with spinach

#### **SUMMER**

In the summer, you can wash, process, and freeze strawberries, blueberries, zucchini, swiss chard, and kale to use in recipes throughout the school year.

<sup>\*</sup> Many crops can be quick frozen without cooking and saved to use throughout the school year, if there is freezer space.

The Northeast's abundant harvest also includes dairy products, grains, meats, eggs, honey, and maple syrup, which store well or are available fresh year-round. If you have some freezer space, fall vegetables can be lightly processed and frozen to be used later. And don't forget to tap into the wide range of food products available throughout the year from states nearby. (See Appendix, "Vermont Harvest Calendar," p. 106.)

### Salad Bars

Salad bars have become popular as an appealing way to present fruits and vegetables. They allow students to take seconds and thirds, because there are no restrictions on fruit and vegetable servings per student. A salad bar can highlight produce from the school garden, offer samples to test new recipes, and be transformed into a taco bar or a potato bar at different times of the year.

### Culturally Appropriate Menus<sup>1</sup>

Culturally appropriate menus include the ingredients and food preparations that acknowledge and appreciate the experiences, traditions, and diverse preferences of a group of people. These foods and preparations might be representative of another country's national cuisine, but they might also represent a culturally distinct part of your state. Understanding the student demographics of your school/district will help you determine what culturally appropriate foods will work best in your school nutrition program.

The food traditions of an increasingly diverse student population can create opportunities to develop popular menu items that meet federal guidelines and honor the background and experiences of your students. They also introduce a creative way to build farm to school programming into a meal program. For example, pollo guisado might be culturally appropriate to students with Dominican roots, and locally caught fish might be culturally appropriate to students in seaside communities. And inviting input from parents and community members provides an easy way for families to be involved in their children's school.

<sup>1</sup>Source: "Serving Up Tradition," Massachusetts Farm to School, 2017.



Free cookbook download at www.vtfeed.org.

### **New School Cuisine**

This recipe collection highlights Vermont school meal programs making food from scratch using locally sourced ingredients. We hope the recipes become part of school food culture nationally and inspire all the shining stars in our school kitchens who are cooking with love and hope for a healthier generation.

Some seasonal recipe ideas from the book:

- Fall: roasted vegetable hash
- Winter: Butternut squash barley
- Spring: Magenta Root Slaw
- Summer: Kale chips and sloppy joes with local beef



### SCHOOL KITCHEN EQUIPMENT FOR LOCAL FOODS

Local foods tend to be whole foods and, therefore, require time and labor to clean, chop, slice, and cook. Large-scale, commercial food processing equipment can be a great timesaver in this regard. A commercial food processor, for example, with a variety of blades, can both save time on salad bar prepping and make it more interesting. Similarly, a stand-alone steamer can help process produce for freezing, or be used to cook grains and pasta. (See Appendix, "Recommended Kitchen Equipment for From-Scratch Cooking," p. 107). Using commercial equipment properly requires training, however, and the equipment isn't cheap. To help finance the equipment, consider the following options:

- Apply for USDA equipment grants. (Ask your Agency or Department of Education.)
- Publish a wish list in your school newsletter for functioning appliances.
- Inquire at local restaurants and industrial kitchens about purchasing their older equipment when they upgrade.
- Work with your school parent group on fundraising for that salad bar unit that will allow you to serve fresh vegetables every day.

### BRINGING KIDS TO THE TABLE

Marketing is used to sell kids shoes, sodas, and more. So why shouldn't it be used to sell healthy, local foods, too? Promoting and marketing local food at school works best if it is a school-wide effort reinforced by teachers, administration, families, and food service staff.

The best way to publicize and build support for your farm to school work is to reach out to students, families, and teachers via school newsletters, announcements, and signs on the lunch line. And don't forget social media (see next page).



"You have to promote your products at every level—from school board to administration

to teachers and students. It has to be a movement, not just a good idea. I spend a lot of my time fighting to promote what is best for the school food program. It takes a lot of work and you can't do it sitting behind a desk."

—School Nutrition Director



Here are some ideas for promoting your local foods to your entire school community:

- Jazz up the monthly menu, creating symbols to identify scratch-cooked items and local foods. (See Appendix, "Monthly Menu, Bristol Elementary School, VT," p. 108.)
- Ask the farmers you work with to provide their logo for the lunch line. One Vermont farmer brought in her farm-grown flowers at the start of the school year and placed a sign next to them: "Welcome back to school—from our farm."
- Ask teachers to talk to their students about what's for lunch and where the food comes from.
- Advertise and market the changes you make on your menu—no matter how small those changes.
- Highlight annual Farm to School Month and National School Lunch Week (both in October) by serving local foods and/or trying new recipes.
- Launch a quarterly school food newspaper with teachers and students. Students can produce the articles so that the school and community can learn more about your food program.
- Promote local foods within the school community. Try offering a "free school lunch" coupon to staff for the first week of school, or make a special "teacher meal" weekly, such as a quiche or sandwich wrap with baby green salad. (Keep any free meals for adults separate from your federal school food program funds.)

### TASTE-TESTING LOCAL FOODS

Most school nutrition personnel know that if they introduce a radically new dish or food item, it will end up in the compost or trash. No one wants this, especially school nutrition personnel concerned about budgets, lunch sales, and wasted food. Just because it is a dish made from local food does not mean students will be impressed enough to try it.



Share the local food your featuring on your school's social media accounts.

If students learn where a food comes from and how it is grown, and use their senses to understand it, they are more likely to accept it.

That's where taste testing comes in. By familiarizing children with new foods, taste tests can help ensure that an item is marketable before it offered on the menu. Small bites—not an entire serving are a great way to introduce children to new foods in a fun, pressure-free format.



Not that it's easy. Children can be selective eaters predictably unpredictable!—whose taste preferences change and mature over time. In fact, a child may have to try a new food many times before accepting it. If students learn where the food comes from and how it is grown, have hands-on experiences with it, and use their senses to understand it, they are more likely to taste it and accept it. Best of all, students can experience new flavors with their peers and have a hand in preparing the food (ideally), and both the school and students can proudly say, "We are a school that tries new foods!"

No matter how enthusiastic you are about conducting regular taste tests, be respectful of school nutrition personnel and teachers. Everyone has the same goal—to feed our children the freshest, healthiest food possible—but we may have different ideas on how to get there. Be sure to listen to people's concerns and solve problems as a team. Also, make plans ahead of time (don't forget to include students!). Spontaneous taste tests can be fun once in a while but may not relate to the goals people want to achieve.

For taste-testing resources, see Appendix, "5 Steps to Implement Taste Tests," p. 109, "Cafeteria Tips for Successful Taste Tests," p. 110 and "Classroom Tips for Successful Taste Tests," p. 111.

### Improving the Cafeteria Environment

### THE LARGEST CLASSROOM IN THE **SCHOOL**

The School Nutrition Association named the school cafeteria "the largest classroom in the school." It's also a daily dining room. Yet how often do schools use this space to educate students (beyond hanging "Got Milk?" posters) or pay attention to the look and feel of the place?



In most schools, there's room for improvement. But this responsibility cannot rest just with the school nutrition staff. They are busiest when the students are there, and feel that their primary job is to make fresh and healthy meals, not advertise them.

Fortunately, some schools around the country have made changes to their cafeteria designs in order to create spaces that are more inviting to students and staff. There's a lot to learn from these schools.

The **Smarter Lunchrooms Movement** is a project of the Cornell Center for Behavioral Economics in Child Nutrition Programs. It has educated people all over the country about how humans behave toward food and the environment where it's served. Humans generally like to eat in pleasant surroundings, and those surroundings can even increase the perceived value of the food. Smarter Lunchrooms

provides strategies for free or low-cost solutions that nudge students to make healthy choices in the cafeteria. For example, schools have reported that when they place a selection of different fruits at the beginning and the end of their lunch lines, more students take fruit.

In your school, try setting up a focus group of students, teachers, staff, and parents and brainstorm how to make the cafeteria inviting: lunch lines, table configuration, walls. You can't change everything, but a school-wide effort to develop shortand long-term changes can be successful.

Here are a few examples of some modifications to improve the cafeteria environment:

The long tables that are so typical in school cafeterias generally create a lot of noise because students want to talk with friends

- sitting several seats away. Consider changing from long tables to round tables that seat eight students—there's no need to raise one's voice when everyone is sitting close!
- Brick and cement walls in the cafeteria are a structural necessity but reverberate noise. Consider installing noise-canceling panels to soften the sounds. They also make a great surface for student art!
- Art in the cafeteria might be one relatively easy change to make. Although there is no way to prove that food-related artwork in a cafeteria causes students to embrace healthier foods, images of food and farming can reinforce the message that these foods can be a part of one's life. Food-related artwork complements food-tasting discoveries. If students make the artwork themselves, their creative experiences can strengthen what they are learning in the classroom and during taste tests.

### Length of Time to Eat

What is the difference between eating a burger on a bun and eating a salad, besides different nutrients? Time! It takes more time to eat raw foods than cooked foods. Since 2012, federal nutrition guidelines have required schools to offer more fruits and vegetables at every school meal. Within a year or two of operating under these new guidelines, school staff were alarmed at the quantity of fruits and vegetables being thrown in the compost or garbage. It seemed that offering more did not mean kids would eat more. However, few schools considered the added time it took to eat raw fruits and vegetables! Students had to take more of these food items, but were not given more time to eat them. Thus, they would eat the easy food items first, like bread and cooked foods, save the apple for later, and throw out the cut-up vegetables or salad. Although schools have many time demands, we need to give students the time to eat the foods and nutrients that will help them be ready to learn.

### COMPOSTING IN SCHOOLS

Schools nationwide are establishing composting systems to reduce waste and demonstrate how food scraps fed back to the soil make a nutrient-rich starter soil for growing food. In Vermont, universal recycling is an established law for all institutions, with full compliance expected by 2020 (see box). Legislation notwithstanding, schools around the country are an excellent place to establish recycling and composting behaviors and tools that students can carry over into their households.

Because of the educational opportunities that composting presents, often schools want to compost on their campus (referred to as "on-site composting"). On-site composting can work, but it requires careful planning and a number of people willing to

### Ideas for Reducing Food Waste

- Schedule recess before lunch to increase student appetite and reduce plate waste.
- Extend the lunch period from 20 to 30 minutes to give time for students to eat fresh fruits and vegetables.
- Add a Share Table where kids can drop off unconsumed food and beverage items for other students to take additional helpings at no additional cost.

For more information, see: Food Tips for K-12 Schools: Get Kids to Eat More and Waste Less, EPA

Further with Food: Center for Food Loss and Waste Solutions

be the "keepers" of the program. It is also essential to educate everyone in the school, including students, all support staff, food nutrition staff, maintenance staff, and administrative staff, about composting.

Many schools choose to work with waste management companies instead. A company picks up the school's food scraps and brings them to an off-site compost operation. Although this can be logistically easier for a school, it still requires fully educating the school community because these haulers will not take compost that has been contaminated with plasticware or milk cartons, for example.

As you investigate the potential for composting at your school, know that many states have composting guides that can help you. In Vermont, the Agency of Natural Resources has created guides for both school composting and school recycling (see box). These include recommended practices and essential tips to help schools develop, launch, and refine composting or recycling programs.

- Getting Started With School Composting
- Universal Recycling: Recycling Guide for Schools (K-12)

Vermont Agency of Natural Resources

# "Classroom

his chapter is intended for the classroom teacher, school administrator, or farm to school advocate who is addressing the impact that farm to school has on students, the curriculum, and the overall educational environment. Each of the seven key educational benefits of farm to school has an example illustrating how it benefits student learning. In the appendix, there are a number of useful tools, step-by-step resources, and examples for developing one's farm to school curriculum.

### WHAT IS IN THIS CHAPTER?

#### 7 Educational Benefits of FTS

- Engages all learners
- Is a tool for meaning-making
- Leverages community resources and supports collaboration
- Connects the explicit and implicit curricula
- Is interdisciplinary
- Connects school initiatives
- Builds self-efficacy

### RELATED APPENDICES

- Developing Farm to School Curriculum
  - Farm to School & Big Ideas
  - Understanding by Design Unit Template
- Tips for Cooking with Children
- Cooking Cart Equipment Checklist
- Best Practices for School Community Gardens

## Classroom

he most powerful farm to school programs connect the cafeteria and community with learning in the classroom. We have explored how FTS in the cafeteria helps ready students to learn, but there's more to its educational impact. FTS is a powerful integrating context that helps engage students, is naturally interdisciplinary, is a lens for making meaning of subject content, and is a connector for implicit and explicit curriculum.

Students can develop deeper understanding of how their food choices impact their bodies, their families, the community, the local economy, and even the world's natural and economic resources. The 3 Cs framework of cafeteria, classroom, and community (outlined on p. 8) offers context-rich and content-rich learning. Additionally, when FTS involves project-based learning, students experience real-world applications of their learning on campus or out in the community. This reinforces students' understanding and allows them to make a difference in their place.

In the Appendix (p. 112–115), there is a complete tool to assist teachers in developing farm to school curriculum, leading the user through a step-by-step process of Understanding by Design (UBD) curriculum development with farm to school at the center. A seasoned teacher can follow this tool to identify desired results, establish enduring understandings and essential questions, plan learning opportunities, and perform continuous assessment.

## **7**Educational Benefits of Farm to School

### FTS ENGAGES ALL LEARNERS

Research shows a strong link between student engagement and academic achievement. FTS offers a powerful model for reaching both. Consider how many opportunities FTS provides for hands-on experiences: growing, tasting, cooking, and composting. Beyond that, FTS encourages systems thinking and problem solving around complex issues such as sustainable food production and food justice.

Moreover, as a human being who needs to fuel the body multiple times every day, each of us has a deep, personal relationship with food. Food is an expression of our values, our culture, and what brings us together. This prior knowledge can be a strong foundation to build upon with farm to school themes. Food and farming also engage learners on a sensory level. Students can literally see and taste the fruits of their learning when they engage in FTS themes in their own school community. If you have ever seen a child discover the bright orange root dangling from feathery greens as they pull a carrot from the ground, or teens engaged in debate about water quality and farming practices, it's clear that FTS engages the whole child—the social, emotional, physical, and intellectual being.

### Gardening as a Tool for Engagement

Gardening at school is a common and very effective activity for students to engage in as part of their school's FTS program. Tracing our favorite foods back to the soil is an impactful way to learn the full story of what we eat. A garden bed or a classroom

A garden bed or a classroom growing system can be the springboard for investigations into science, social studies, math, and literacy.

growing system can be the springboard for investigations into science, social studies, math, and literacy. It is an inviting space for students of all ages to explore concepts such as interdependence,

cycles, biodiversity, and biomimicry. Lessons and units may highlight a wide variety of living processes such as seed biology, culturally sustaining foods, and soil science.

A school garden presents a wonderful opportunity to introduce an outdoor classroom. Your school will have a unique set of resources that can help make learning through gardening come alive. If you want to build or use an existing outdoor or indoor garden, your school groundskeeping or facilities team will be key allies. Teaching colleagues who share your passion for food systems can also be strategic collaborators in your efforts. Consider tapping specialists, such as arts teachers, language teachers, and technology teachers to give your garden-based curriculum a power boost. Partnering with teachers and summer program providers who work with students of different ages can help provide care for an outdoor garden, which it will need throughout the growing season, while adding another social skills dimension to the student learning. Lastly, don't forget about the Master Gardeners in your school community. If you put out a call for the help and support you need to maximize the learning potential of your garden, you will likely be surprised by the invisible skill set within the school network. (See Appendix, "10 Best Practices for School Community Gardens," p. 124.)



**EXAMPLE:** Taste-testing while in the garden is a favorite and highly engaging activity for the first and second graders in Mrs. Magida's class at Thatcher Brook Primary School. The school's gardens are six small beds built into the hillside behind the school. The P.E. teacher and a handful of classroom teachers work each spring with students to till the soil, start seedlings, and plant before the end of the school year. And then throughout the summer, the gardens are managed by both the summer camp program that runs out of the school and a rotation of families that have signed up at the end of the year to help keep the garden beds weeded. By the time the school year starts back up at the end of August, the gardens are filled with lovely produce ready to enjoy. Some of the vegetables get taken into the school for classroom cooking and some herbs are used in the cafeteria, but much of the produce doesn't get more than three feet from the vine or stem it grows on. Students love to pick and eat the garden produce while still standing in the garden. Whether it is the warm sun-ripened cherry tomatoes or the fresh juicy lettuce leaves, it doesn't get more local than that!



FTS is not a curriculum in itself, nor is it intended to be an "add-on." It is simply where and how learning happens. Whether you teach all subjects in an elementary classroom, teach a discrete discipline in a middle or high school, or work as part of a multidisciplinary team, FTS offers relevant and meaningful learning for all students. As we support students along their journey from knowledge and inquiry to deep understanding and action, FTS themes and topics provide a deep dive into key concepts such as community, interdependence, systems, diversity, and long-term effects.

FTS extends learning beyond the classroom by connecting to local farmers, producers, community leaders, chefs, and others. This allows students to authentically apply new information, skills, and understanding to the real world. Beyond simply



building agricultural literacy, students can explore complex environmental, social, and economic issues at the local and global levels.

### Making Meaningful Compost

As students uncover the complete story of the food they eat, food waste often pops up as a problem to solve. Apple cores and orange peels at the end of snack time: uneaten lunch food in the cafeteria: bowls of vegetable scraps at the end of a cooking lesson—these are visible indicators of a bigger problem in our food system. Students see these things daily. The good news is they can do something about it!

Tackling food waste makes a perfect FTS student action project. While discovering the patterns of the problem and designing solutions, students are engaged in STEM (Science, Technology, Engineering, and Math) learning and the skills of critical thinking, communication, creativity, and collaboration. The

### **EXAMPLE:** Understanding Cycles: Composting

hen a small group of students showed interest in starting a composting program at Ferrisburgh Central School, the science teacher jumped at the opportunity. Over the next several years, she worked with students to conduct audits, meet with administration and the food service manager, and study models from neighboring schools. The school now composts all food scraps on site, approximately 40 pounds a day. Leftover food from snack time is ferried down to the cafeteria from each classroom in small buckets. This is added to the large plastic bins where staff and students put their lunch scraps and the kitchen staff put their cooking scraps. The fourth, fifth, and sixth grade students sort and weigh the food scraps daily, then wheel the bins to the compost shed. The fifth and sixth graders work in small groups with a teacher to layer the food scraps with manure, wood shavings, or shredded paper. The manure is donated to the school from local farms, with parent volunteers providing transportation. Throughout the year, classes visit the compost shed, checking on progress, taking and recording temperature readings (the compost cooks



at about 150°F), and making observations. Each classroom incorporates composting into the curriculum where it makes sense. In the spring, when the compost is finished, students spread it on the school garden to nourish the plants that produce food for the cafeteria, completing the cycle.

Updated from <u>Serving Up a School Culture of Health,</u> Wellness and Nutrition

problem solving often begins at the classroom level and expands outward as student understanding expands. In this learning process, the science of landfills and decomposition become additional chapters in the full story of food, typically leading to the start of a student-managed composting system or compost sorting in the cafeteria.

The level of complexity of a school composting system will depend on your students' developmental level, the classroom, and the school culture. Caring for a classroom worm bin is a wonderful opportunity for younger students to experience the process of decomposition, e.g., from apple core to vermi-

compost. Middle school students might take their food waste action from the cafeteria to the school garden with an outdoor composting system, perhaps a roto-composter or a three-bin system built by the students themselves.

Taking the action to the school-wide level raises new questions and complexities. How will you manage the flow of waste? How will this affect the daily life of students and staff at the school? What will be the impact on the natural community? What about pests and rodents? How will this help the school move toward a zero-waste culture? What do other people need to know about food waste? How does

the composting system connect with your community's larger waste management practices? Tackling the problem of food waste with a student-designed composting system is a FTS teaching and learning opportunity to embrace and celebrate!

The Vermont Agency of Natural Resources has developed two teacher's guides to composting that can help you tap into the educational opportunities of composting:

- School Composting: An Introduction (K-5 Teacher's Guide)
- School Composting: An Introduction (6-12 Teacher's Guide)

### FTS LEVERAGES COMMUNITY **RESOURCES AND SUPPORTS COLLABORATION**

By collaborating with community partners, educators can develop rich place-based learning opportunities that are relevant to their students' lives. You don't have to look far to find potential partners. Think about each person you engage with throughout the day as a possible partner, including farmers, graphic designers, and neighborhood grocers. Community partnerships make a curriculum locally relevant, and research suggests that they can also help address gaps in our schools. According to Larson, Shernoff, and Bempechat<sup>1</sup>, "Many of the gaps between underserved and more privileged populations currently plaguing our schools whether the achievement gap, the extracurricular gap, civic participation gap, or science gap amount to an overall opportunity gap." Community partners can help close this opportunity gap

<sup>1</sup>W. Larson, Reed & Shernoff, David & Bempechat, Janine. "Epilogue: A New Paradigm for the Science and Practice of Engaging Young People." Yearbook of the National Society for the Study of Education, Engaging Youth in Schools: Evidence-Based Models to Guide Future Innovations. 113. 323-337. 2014.

by working with students during the school day, engaging students in a way that educators alone cannot. It is especially important to consider a diversity of community partners and the roles they play in the food system in order to engage the full diversity of students in classrooms.

An individual teacher's FTS efforts will go even further with the support of other teachers in your school. There are many opportunities to invite people into the excitement.

- Start by thinking of the relationships or partnerships you already have. Could the focus of your work also include food systems?
- Who do you know who is teaching a complementary study? Perhaps there are specialists who are interested in gardening, food culture, cooking, or economics. They could add an additional angle to your teaching and become another advocate of FTS.
- Are there school-wide events that currently exist that could be an opportunity for a FTS connection? A STEM fair, fundraising event, or



- a book fair could be an opportunity to heighten the visibility of the school's FTS work.
- Are there new initiatives the faculty is working on? Connecting your FTS classroom efforts to any new initiative will build awareness and perhaps lead to new teaching partners.
- What are other teachers working on? Supporting their teaching goals through your FTS work is a win for everyone involved.

**EXAMPLE:** Kate Toland, a high school teacher at Peoples Academy, in Morristown, VT, holds a class centered on community sustainability where students are developing a sense of place and sustainability. Students work with and interview different community partners to understand what sustainable food systems look like in a rural community, and tour farms and processing facilities using the lenses of social justice, environmental integrity, and economic vitality. Students also create systems maps, learning to look for interconnections

and interdependencies and beginning to understand the complexity of food systems issues. Then students choose independent projects that build on inquiry, student voice, and community connections. One student examined systems and interdependence by making connections between food waste at grocery stores and local food insecurity. Another student researched a local organic dairy farm and learned about the challenges facing organic dairy farmers in the state. All the while, students are experiencing and making meaning of these complex ideas in their own community.

**EXAMPLE:** Inspired by the weekly cooking and tasting activities taking place at their school, three students at Flynn Elementary crafted a recipe for chatpate, a traditional Nepali street food dish, that they wanted to share with their class. While the recipe was a familiar staple for the three girls, the majority of their fellow students had never tried or even heard of the dish. In addition to creating the ingredient list and writing the



recipe, the three students helped introduce this special cooking activity and then guided their peers through preparing the dish in class with the school's mobile kitchen cart. The three young women enthusiastically and naturally stepped into leadership roles, freely sharing a bit of their home and culture. Their dish was a starting point for a poignant student-led discussion about our differences and similarities, both culturally and culinarily.

### FTS CONNECTS THE EXPLICIT AND IMPLICIT CURRICULA

FTS can be a way to connect a school's explicit curriculum, or what it teaches day-to-day in classrooms, with its implicit curriculum, or the way a school's values and understandings are expressed in its day-to-day operations. For example, through the explicit curriculum, students might learn about local agricultural systems and the benefits and challenges of eating local foods. At the same time, the implicit curriculum might be taught through the cafeteria by highlighting local foods on the menu and through the PTO by holding a fundraiser to buy more local foods for the school nutrition program. By connecting the implicit and the explicit curricula, FTS powerfully reinforces learning for students and models the values it teaches.

The culture within a school can bridge the explicit and implicit curricula. As referenced in the Staying Power chapter (pp. 27-32), a school's culture can impact students' learning and overall wellness. It can also impact the staff's wellness: Often teachers and administrators become keenly aware of their own nutrition and fitness habits when they realize they are modeling healthy choices for their students. It is also evident when a school's educational message is about healthy choices but this message is not modeled in the cafeteria. Schools learn to "walk the walk" by making policy and systemic changes in their schools while they are "talking the talk" about healthy choices in the curriculum. For example, in an effort to bring healthier foods into school



"Harwood has a strong culture developing around the concepts of

wellness and sustainability. Nonetheless, the student body is relatively unaware of the link between championing local food systems and its impact on both environmental/economic sustainability and personal nutrition. We hope that our FTS program begins to demonstrate how much power students have through their food choices."

> —Paul Kramer, Teacher Harwood Middle School



celebrations, a school in New York began offering parents the opportunity to pre-order healthy celebration foods from the cafeteria for birthdays and class parties, instead of bringing in store-bought brownies or cupcakes. With this initiative, the school also was able to guarantee that student dietary needs were being addressed.

### FTS IS INTERDISCIPLINARY

As educators, we often find ourselves teaching discrete, single subjects. By instead using an interdisciplinary approach grounded in real-world examples, we can develop problem-solving and critical thinking skills in students. Using FTS as a focus within curricular units can provide meaning and evidence that learning is connected to some-

thing we do every day—eat! Employing FTS topics and themes to integrate disciplines and connect campus and cafeteria practices and community

Farm to school topics and themes integrate disciplines to put the world together for students. partnerships puts the world together for our students. We immediately help them see

the connections between the curriculum and their daily lives at home, in school, and in the community. Teachers find that while investigating a real-world issue such as hunger, they are able to simultaneously address and evaluate particular science, social stud-

### Examples of FTS and National Standards

#### NATIONAL STANDARD FTS CONNECTION **Grade 2 ELA Standard:** Cycles and Food Systems Students learn about plant and CCSS.ELA-LITERACY.RI.2.5 animal life cycles of regional crops Know and use various text features (e.g., captions, and make informational text postbold print, subheadings, glossaries, indexes, elecers for a local grocery store or caftronic menus, icons) to locate key facts or informaeteria about those products. tion in a text efficiently. Grade 6 Math Standard: Ratios and Cooking Students adapt recipes and do CCSS.MATH.CONTENT.6.RP.A.2 Understand the concept of a unit rate a/b price comparisons for their favorite family meals (serving 4–6 people) associated with a ratio a:b with $b \neq 0$ , and use rate to serve in the cafeteria (serving language in the context of a ratio relationship. 150 people). Next Generation Science Standard: HS-ESS3-6 Systems and Climate Change Students who demonstrate understanding can: Use Students explore how human a computational representation to illustrate the relaactivity has impacted agricultural tionships among Earth systems and how those relasystems in their region.

Learn more about FTS and national standards

tionships are being modified due to human activity.

ies, literacy, math, and civics standards (see table, previous page). And students connect their learning to relevant local and global issues, seeing the importance and impact of their learning and actions.

### Cooking in the Curriculum

Cooking with students is a wonderful way to engage with food systems education. The more students participate in the cooking process, the greater the learning potential. As with all learning activities, you can get the most impact out of cooking with students when it is embedded in your curriculum. The possible curricular connections are endless, but here are a few good starting points.

- **Math:** Counting, measurement, doubling, halving, fractions, and ratios can all be a part of making food from a recipe.
- **Science:** Cooking is all about transformations and chemistry. Students in any grade can hone their skills of inquiry, observation, and prediction while tasting, handling, and preparing
- **Literacy:** Recipes can be your nonfiction text for building encoding and decoding skills. Procedural writing skills can be practiced as students write down their own favorite recipes or a newly innovated dish.
- **Social Studies:** Food is a key aspect of any cultural study, whether you are studying families, the local community, or ancient history. Prepare foods that are important to the people, place and moment in time you are studying.
- **Socio-Emotional Learning:** Cooking with others can build students' interpersonal skills, engage their senses, and teach them to problem-solve, communicate, and collaborate. Taste-testing encourages healthy risk-taking behaviors—a transferable skill.
- **Health:** Food education is an easy link to mandated "Comprehensive Health Education" that includes nutrition, personal healthy habits, body functions, and community health.



### Cooking with Children

Set students up for success. Which cooking steps can students do independently? What do they need to know or be able to do in order to succeed with more challenging tasks?

Keep it simple. More frequent and regular cooking experiences as a part of curriculum may be more impactful than preparing big, complex recipes twice a year.

Look for financial support. Don't let a lack of funds prevent you from cooking in the classroom. For culinary supplies, try your school food service, PTO, or local food stores, or try fitting them within the school budget.

For more ideas, see Appendix, "Tips for Cooking with Children," p. 121.



This cooking cart was created from a retired salad bar!

### **Cooking Carts**

While many teachers would like to cook in the classroom, often gathering the necessary supplies and tools is a barrier. Some schools are making cooking more accessible to teachers with "cooking carts"—a wheeled food preparation cart that can be rolled between classrooms. A cart has a flat top, a shelf or two, and a cabinet for storing simple cooking and prepping utensils and basic ingredients such as herbs, oil, and salt. (See Appendix, "Cooking Cart Equipment Checklist," p. 123.)



"The cooking cart supports teachers who are not highly skilled with cooking

because all the tools and some basic ingredients are available."

> —Aziza Malik, teacher Champlain Elementary School

### FTS CONNECTS **SCHOOL INITIATIVES**

FTS can activate diverse initiatives across a whole system. The themes of food, farming, and nutrition can bridge separate initiatives such as wellness policies, behavior intervention systems, and trauma-informed practices, leading to a healthy and supportive learning environment. Additionally, these themes link academic standards, school nutrition programming, and campus projects such as school gardens, indoor gardens, greenhouses, and school-wide composting efforts. In a crowded curriculum and an overburdened learning system, FTS connects the varied initiatives and programs that schools engage in from year to year.

#### **EXAMPLE:**

One easy connector between existing school initiatives and FTS is the establishment of Personalized Learning Plans (PLP). PLP's offer flexible pathways toward graduation for secondary education students working

with their educators to create personalized plans that reflect and document student learning overtime. At Champlain Valley Union High School, the environmental science teacher is creating a Sustainability Hub, where students explore multiple aspects of their world (including food, culture, community, natural resources, etc...) through class instruction, real world problem solving and their PLP. Students have expanded their Farm to Table gardens, created a bike water pump, planted a riparian buffer, worked on storm water 3D models, installed rain barrels, conducted a micrinvertebate survey, and more. Community partners are vital, as students learn to work with teams of professionals, connecting the school with their greater community, while identifying new role models for students.

This helps CVU meet their school and PLP goals of:

- 1. Engaging students using a cohort model to focus on a common goal through personalized pursuits
- 2. To have a physical place that will model sustainable practices and mindsets
- 3. To utilize an interactive design process
- 4. To tackle real-world problems in collaboration with community partners

### FTS BUILDS SELF-EFFICACY

FTS leads to civic engagement and action now and in the future, impacting not only students, but also the community. As students explore food systems, nutrition, and related topics they are called upon to take action for themselves, for their community, or for the globe. Take for example high school students who are learning about agricultural work in the U.S.—understanding disparities among companies in working conditions, wages, and worker health and safety. As they uncover this information, they work with their school nutrition staff to ensure that the products they serve in the cafeteria meet Fair Food Program standards and Fair Trade Certification.

Students engaged in FTS build knowledge of food systems and practice essential skills that lead them to understanding an essential capacity: self-efficacy, or an ability to make a difference. This creates a foundation of engaged citizenship for the future and leads to healthier and more just communities. Really, when you consider it, FTS is a means to a better world for all!

### **EXAMPLE:** Understanding Food Access

eg Hopkins, fourth grade teacher at Sharon Elementary School, has integrated a unit on food equity into their curriculum. Students explore food access in their community and assess whether or not there is equitable access to healthy foods for everyone. Students visit the food pantry, make a meal that is nutritious and affordable, and engage in a service-learning project. Meg is able to integrate standards for writing, speaking and listening as students create opinion pieces to engage in dialogue about food equity. Application of math and civic skills abound as recipes and budgets are created and students deepen their understanding about community issues.



"Food education matters because it's our connection to

each other. We all have this in common. I don't have to try to get them to care, they are so fully engaged."

> —Meg Hopkins, teacher Sharon Elementary School

# Incorporating Farm to School in a School Wellness Policy

An excerpt from Public Health Law Center—Promoting Health in Minnesota Schools—FARM TO SCHOOL

### **Farm to School Program**

- 1. Farm to school programs enhance the nutritional and educational experience of school children by providing:
  - a. Nutritious, locally grown food as part of the school food program; and
  - b. Opportunities for school children to visit local farms and learn about the origins of their food and how their food is grown. Farm visits serve as an interdisciplinary teaching tool to influence student food choices and lifelong healthy eating habits.
- 2. Farm to school programs provide students with the opportunity to eat healthy, locally grown foods and be exposed to a variety of fresh produce that reflects the ethnic and cultural diversity of the student population. The school district will support the development of farm to school programs to help students eat more nutritious foods and promote healthier lifelong eating patterns; support the local economy and local farmers; and teach students about the origins of their foods and how their food is grown.
- 3. The school district supports the integration of a farm to school program into the school food program and the curricular and co-curricular activities as appropriate to facilitate the nutritional and educational goals of the school district.
- 4. The school district, to the extent possible, will buy and feature farm fresh foods, incorporate a nutrition education curriculum, and provide students with experiential learning opportunities.
- 5. The school district will support the sustainability of a farm to school program through activities including, but not limited to, fundraising, solicitation of community donations, use of

- existing resources, and allocation of school district funds.
- 6. The school district will provide information to encourage families to teach children about health, nutrition, and the importance of daily physical activity.
- 7. The school district will encourage and support healthy eating by students and engage in nutrition promotion that is:
  - a. Integrated into other areas of the curriculum such as math, science, language arts, social sciences, and elective subjects where appropriate and that provides eating experiences, farm visits, garden activities, and cooking classes.
  - b. Enjoyable, developmentally appropriate, and culturally relevant, and that includes participatory activities, such as contests, promotions, taste testings, and field trips to include farms and gardens.
  - c. A part of a curriculum where students will learn to develop life-long skills in nutrition, health education, and physical activity.
- 8. The district will recognize the lunch period as an integral part of the educational program. The district will strive to use the school cafeteria as a "learning laboratory" to allow students to apply nutrition skills taught in the classroom. Healthy foods, including fruits, vegetables, whole grains, and low fat dairy products, will be encouraged.
- 9. Neighboring school districts will work cooperatively and, whenever possible, purchase collectively in order to increase the amount of products purchased from local farms.

# Community

his chapter is intended for the farm to school team members who are focusing on overall program coordination, farmer relationships, and community engagement. The chapter covers many aspects of connecting to your school community, your greater town, and the larger farm to school community throughout the country. The community can often be the most easily overlooked "C" of the 3 Cs model of farm to school, but has proven to be the one that most likely sustains the long-term efforts of your team.

### WHAT IS IN THIS CHAPTER?

### **Working with Community Partners**

- Engage families
- Cultivate community volunteers
- Seek out unexpected partners

### **Connecting with Farms and Farmers**

- Farm-based field trips
- Farmer in the classroom
- Farmer correspondence

### School Gardens Connecting to Resources

### **RELATED APPENDICES**

■ 10 Best Practices for School Community Gardens

# Community

hen starting or growing a farm to school program, community support is as important to the longterm success of your efforts as buyin from educators, school nutrition professionals, and school administrators. Think of your community as the audience, co-workers, supporters, and beneficiaries of your farm to school program. Many programs look to their communities for financial support, but consider the long-term benefits that your Farm to School program can offer the community and in turn how that broadens the impact and the longevity of the program. Families, farmers, volunteers, community organizations, government, and local businesses can help your FTS team accomplish its goals, while raising awareness about your efforts, which will in turn generate more support.

### All communities have intrinsic educational assets and resources that can enhance learning experiences for students.

Community-based learning (or place-based education) refers to a wide variety of instructional methods and programs that educators use to connect what is being taught in schools to their surrounding communities, including local institutions, history, literature, cultural heritage, and natural environments. Community-based learning is motivated by the idea that all communities have intrinsic educational assets and resources that can enhance learning experiences for students. Students



directly experience issues they are studying in the curriculum and participate in ongoing efforts to analyze and solve problems in the community. When it is inclusive, exploring your community can foster community pride. But be sure to take time to learn about and honor all the people in your community's history (including Indigenous people, white settlers, enslaved people, and immigrant populations) and the roles they have played in shaping that history. A key element in community-based learning programs is the opportunity students have to both apply what they are learning in real-world

settings and reflect in a classroom setting on their service experiences. Place-based education has been found to boost students' engagement, academic achievement, and sense of personal efficacy as stewards of their local environment and community. It also can re-energize teachers.

# Working with Community Partners

Identifying and partnering with community members is an important aspect of your farm to school work. Some partners will be assets in your planning phase; others will be instrumental as you implement your plan. Take time as a team to brainstorm who to involve, and communicate that you are looking for partners. This will help determine your scope of work and long-term success.

### **ENGAGE FAMILIES**

Families are often the first community partners considered when a team is establishing a farm to school program. This makes sense, because family members can be helpful in many ways. They are often willing to join an active committee or volunteer for specific events. They can help you promote your school's work to the larger community through their social networks, and over time, they can develop into strong program advocates, as they become aware of the value and success of your work.

How do you recruit families and/or make them aware of your farm to school efforts? Connecting with your school's Parent Teacher Organization/ Association (PTO/PTA) might be the first order of business. Does your PTO host events? Does it put out a newsletter? What sort of funding might it have available to your committee?

### Community Circle Activity

This activity highlights the value of community members in achieving your FTS goals.

- 1. Participants stand around a large circle, outlined with a rope or string.
- 2. Half of the group enters the circle and each person in this group selects a premade card naming a role in the community (e.g., Local Bank, Food Shelf, Department of Health, University Cooperative Extension).
- 3. Participants remaining on the outside of the circle form pairs: one person assumes the role of an educator and another the role of the school nutrition director.
- 4. Each pair decides on one person from inside the circle who they would like to have help their FTS efforts, and invites that person out of the circle to join them.

- 5. After all the pairs have chosen a person from inside the circle, each pair shares why they chose that role to help with their FTS program.
- 6. Participants remaining inside the circle then state why *they* should have been chosen. Any participant can also share a real-life example of their work with a community partner.

The two most important lessons in all this? First, you do not have to do it alone! There is much potential support from your community. Second, be sure to devote time and people power to reaching out to your community. You can't get more people on board with your FTS work if they don't know about it.

Not all parents and caregivers are comfortable with or able to join the PTO or an existing school committee. How will you reach these parents? Perhaps their first language isn't English, or they have other barriers preventing them from participating. Brainstorm places to meet parents where they are already gathering and feel most comfortable. Identify groups or individuals who may already be working with these families. Perhaps faith-based or community-based organizations can partner with you in reaching out to families. Make sure that you have ways to reach families and caregivers who either cannot or choose not to participate in your existing ways.

To build awareness among school families about your FTS efforts, try connecting your activities to other school events. For example, your annual harvest dinner highlighting local farm partnerships could be connected to a dinner honoring student athletes or to a science fair at the school. You might also reach families by conducting taste tests outside school hours—at recitals, theater productions, or other community service events. Or try offering school lunch as a community dinner, inviting families into the cafeteria for a free meal showcasing the healthy local food that their child actually eats! If one goal is to truly integrate a culture of health into the school, then connecting with existing initiatives is key. (It will also prevent burnout among family members and staff who are constantly volunteering their time outside school hours for other events!)

### **CULTIVATE COMMUNITY VOLUNTEERS**

Beyond the immediate families of the students, there are often other volunteers in your community. Some schools have found that retirees or senior members of their communities have skills or time to offer. Imagine the untapped cooking skills that local grandparents may be willing to share, or the gardening skills that members of a local senior center or community gardening club might donate.



Larger local businesses may also have a staff volunteer program in which employees volunteer for nonprofits (including schools) on company time.

It is crucial to remember to respect your volunteers' time and be clear with your expectations. Some volunteers will feel comfortable with an undefined time commitment and may serve on your committee for years; others will be happier to help out with a specific short-term project. You can ask volunteers to fill specific roles or poll them about their personal skills and interests. However you enlist them, remember that sometimes volunteers simply can't make their commitments, so have a backup plan for last-minute changes. Don't forget to honor their service, too. Many schools have end-of-year thank you dinners or local hero awards, and often a studentsigned thank you note is appreciation enough.

### SEEK OUT UNEXPECTED PARTNERS

### **Uncommon School Partners**

It can't be stressed enough: Cultivate partners within the school first. Some of them can be easy to overlook. Maybe the music teacher could integrate garden songs or historic farm work songs into her

lessons. Maybe the afterschool program is considering adding a cooking club. Don't forget the P.E. teacher, the school nurse, the art teacher, librarian, or summer school or service-learning coordinator. Give each of these potential partners the chance to learn about your farm to school planning to see if they can identify ways to be part of it.

You may think that the custodial staff would not be interested in your FTS plans. But they often are just as important to include as the principal. If they have to mow around new gardens, need to clean up after cooking lessons, or are asked to haul school compost, the school maintenance staff need to be invited to the table from the beginning. They may

## Community Partners

- Banks
- Hardware stores
- Chefs and restaurants
- Food banks
- Faith-based or cultural organizations
- Artist collectives
- Grocery stores, farmers markets, and food coops
- Local colleges and universities
- Cooperative Extension Service
- City, county, town employees
- Health professionals
- Community service groups (Rotary, Lions, Kiwanis, Knights of Columbus)
- Local and state wellness councils
- Youth programs (Boy Scouts, Girl Scouts, 4-H, Odyssey of the Mind)
- Libraries
- Garden clubs or organizations
- Senior volunteer programs
- Master Gardeners

have some great ideas since they are involved on a daily basis in school facility projects.

### **Uncommon Community Partners**

Each community has unique assets that might benefit your farm to school efforts. The community college, the nearby hardware store, or the local restaurant may relish the opportunity to work with their school on food- and farm-related projects. There are examples throughout the country of grocery stores, local food banks, religious groups, rotary clubs, and healthcare facilities partnering with schools to achieve their farm to school goals.

As you contact some of these potential partners, take time to listen to their needs. They will be more interested in helping you meet your goals if you are helping them meet theirs. Create mutually beneficial situations in which all partners are achieving more collectively than they would have individually.

## Connecting with Farms and Farmers

There are many ways to connect schools to farms and farmers. Connecting school food service to local farmers is explored extensively in the *Cafeteria* chapter (pp. 33–51). Successful strategies to connect classrooms to farms include farm-based field trips, farmer visits to the classroom, and farmer correspondence.

Farm-based education immerses students in nature, culture, history, and community. It teaches them valuable life skills, builds their self-esteem, and deepens their sense of place. Farms create a meaningful and relevant context for learning that is cross-curricular and engages the whole student —mind, body, and spirit. Vermont FEED's research has shown that students who know a farmer or experience growing food are more likely to eat fruits and vegetables.

### FARM-BASED FIELD TRIPS

Start by scheduling a handful of visits to a farm in a school year, or by picking one or two classrooms to go on multiple visits. A one-time visit is a perfectly good starting point, but students will learn best about the cycles of food and farming if they are given multiple farm experiences through the seasons.

Before you take a trip to a local farm, consider:

**Transportation:** How will you get to the farm and how will you move around the farm once you're there? (If it's a large farm, you and your students might need to walk or drive between points.) Talk this through with the farmer ahead of time. Also discuss parking options, so your bus or cars don't get in the way of the farm's activities or business.

**Safety:** Talk to the farmer in advance about any potential hazards on the farm, such as electric fences, stinging insects, territorial roosters, large equipment, or manure pits. Arrive prepared for them. (Don't forget to ask the farmer about bathroom facilities, too!) As with any other field trip, arrive with a firstaid kit, allergy and other medications, and an emergency plan for a sick student. Some educators find it helpful to do a pre-visit alone to identify safety issues that a farmer may not see, and to take photos of the farm to prepare students for their learning experience. Be sure to talk with your students about any safety issues before your visit.

**On-Farm Activities:** The depth of learning that happens on a farm visit depends on how students spend their time there. Sending a group of rambunctious first graders on an hour-long farm tour may let them see the whole working farm, but how much will they get out of it? If they help dig potatoes while investigating soil insects and link that to the classroom life-cycle lessons, their experience will be more memorable and influential.



### Harvest Hill Farm

"When I see the second graders from Walden and Hardwick planting potatoes with their measuring sticks, with the spirit of cooperation, enthusiasm, inquisitiveness, and being allowed to get their hands dirty, it is to me what farming and relationships are all about. When they return in September to harvest, it becomes a bit more educational. They are able to see what has magically happened in the soil with the potatoes that they had planted. There are many questions about how did the potatoes grow? There are so many aspects of farming which are wonderful, but to hear the children, their teachers, and other adults be so happy and encouraging to each other is what it is all about for me. And of course they all get to have their own bag, weigh out five pounds of potatoes, and take them home."

-Bill Half, Harvest Hill Farm

To create meaningful student experiences, start by asking your farmer what is happening on the farm at that time of year. Is it lambing season? Are they harvesting garlic? Share what learning outcomes you're hoping for, and together you can match farm activities to your learning objectives. (Remember, though, that while farmers are very adaptable, you should not expect them to be natural educators.)

You might consider having several stations of activities for small group explorations, or having students participate in some real farm tasks, like picking rocks out of a potato row or moving compost or straw. A task should be short (less than an hour), benefit the farm, and be simple enough that it does not create more work for the farmer. It can also be a great way to thank the farmer for hosting you!

During your visit, farmers will be thinking about the safety of the visitors. and of their animals, crops, and barns. Visitors can unknowingly bring contaminants onto a farm, so please ask about and respect any rules farmers may have to protect their business. They may ask that you wear booties over your shoes while visiting the animals, hand wash before harvesting vegetables, or not enter certain barns or greenhouses. Knowing these boundaries up front will help you, your students, and the farmer have a positive experience.

See more on collaborating with farmers at Farm-Based Education Network.

### FARMER IN THE CLASSROOM

The cost of busing for multiple farm-based field trips can be prohibitive, so consider hosting a farmer in the classroom as a pre- or post-visit experience. Many farmers are more than happy to visit with students, share their experiences, answer questions, and even bring in some sample farm products. Classes could also host a farmer virtually by using an online conferencing platform (Facetime, Zoom Conferencing, etc.) Students can prepare interview questions and develop interviewing skills during these classroom visits. However, be sensitive to the amount of time you request of the farmer and when during their season you are requesting it. If possible, consider offering the farmer a stipend for their visit(s), to acknowledge the value of their time.

### FARMER CORRESPONDENCE

Ongoing correspondence between students and farmers, especially before or after a farm field trip, can greatly deepen the relationship and learning. Whether handwritten letters or short inquisitive emails, the more points of contact that students have with farmers, the more they will understand a farmer's work—its complexity, seasonal rhythms,



and challenges—and feel connected to their community and their food. Three or four letters during the school year has worked well.

### School Gardens

School gardens are a high-priority and high-impact activity in many FTS action plans. They can be amazing opportunities to engage students in realworld hands-on learning while producing real food for classroom lessons, harvest dinners, and taste tests. Many school gardens are built, maintained, and managed by community members or groups. Adult gardening clubs, Master Gardeners, town recreation departments, and even 4-H clubs can be key partners in your garden's long-term success. (See p. 56 in the Classroom chapter for more about connecting gardens to the classroom curriculum.) Before your committee takes on building a school community garden, be sure to research how to

manage and maintain one, especially during the summer. Consider incremental growth, start small, and expand as interest and support grow.

Many resources are available online to help you plan, build, and sustain a school community garden. The Vermont Community Garden Network has created a wonderful resource. "10 Best Practices for School Community Gardens" (see Appendix, p. 124). Before you dig your first spade of soil, read through this and other resources, and also consider the following questions:

- Where will you build the gardens?
- How will you make them accessible to everyone?
- Will the garden get direct sunlight for at least six hours a day?
- Is there a water source?
- Who is building the gardens?
- Who will coordinate garden activities and communication?

- Will the gardens be in a place where they will be remembered and cared for?
- Can the grounds maintenance staff mow around the gardens? Will they be using any sprays, chemicals, etc., on the school grounds?
- Will there be an ongoing funding source each spring for soil amendments, seeds, and plants?
- How will you maintain the garden both during the school year and over summer break?
- What will you do with the produce?
- How will the garden be integrated into the school curriculum or programming?
- How will you train teachers to use the garden?

Include all the relevant school staff in your early planning efforts. Include school administrators and building and grounds staff in discussing the garden location; school nutrition staff if you are planning for the garden to produce food for the school cafeteria; and teachers if you are planning on curricular integration. There are school committees that have built gardens with the best of intentions, but the gardens have ended up underutilized and eventually abandoned. In those cases, during the planning process, the committees neglected to get buy-in from teachers or food service and built the gardens without ongoing maintenance plans.

## Connecting to Resources

A community of FTS practitioners beyond your school are waiting to welcome you into their networks. You don't need to work in isolation! Lots of schools and communities are going through the same FTS planning and implementation process you are. Although each community is unique and should capitalize on its unique assets, there is great

value to networking with other communities to see what they are doing. You can learn a lot from their successes—and share your own story.

The National Farm to School Network (NFSN) is a great place to start when you're just getting going, and also a great resource for ongoing ideas and resources after your program is underway. Through the NFSN, you can research your own state to see who is nearby to help you, including state agencies, Cooperative Extension Service, statewide nonprofits, and all the state-level networks that support farm to school efforts in each state. In addition to the NFSN, the <u>USDA Food Nutrition Service Office of Community Food Systems</u> has an array of helpful resources and support materials on its website.

In Vermont, the <u>Vermont Farm to School Network</u> <u>website</u> shares information about media events, funding sources, current news, policy campaigns, and tools. In addition, VT FEED has an extensive website where you can find program planning tools, curricular resources, professional development opportunities, connections to technical assistance, and information about our annual Farm to School Institute.

No matter where you live, local farm to school organizations will keep you abreast of farm to school happenings in your state, including funding opportunities, recent news, and statewide gatherings. There are statewide, regional, and national farm to school conferences and workshops that will allow you and your school the opportunity to develop new skills and ideas, and learn from others. Stay in touch with these groups and seek out these connections. They will only make your school's farm to school program stronger.

Good luck, and enjoy your FTS adventure!

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### Farm to School Rubric

|--|

### FTS MEMBERS COMPLETING RUBRIC:

The rubric on the following pages is designed to help schools or districts assess the stage of their farm to school program. This can help inform action planning to identify what next steps might be taken to deepen the program and give it greater staying power. It can also be used to identify readiness for farm to school grants and needs for technical assistance.

The rubric is broken into four sections: Cafeteria, Classroom, Community, and Staying Power. To use the rubric, go through each indicator and identify the description that best matches the current state of your farm to school program. In some cases part of the description might apply to your program and part of it might not, or you might feel that your program falls somewhere between two descriptions. In that case, choose the one description that most fully describes your program, but also highlight any parts of the adjacent description that may apply to your program. Use the blank column to further describe or clarify any responses.

While this rubric is designed as a general tool for all farm to school programs, there will certainly be aspects of your program that may not show up in the indicators or descriptions. Feel free to add language in the appropriate section or blank column that more fully describes your program. This rubric is simply a starting point for you to create a quick snapshot of your farm to school program, so please adapt it to be useful for your needs.

This assessment can be done by an individual (gathering input as needed from food service staff, faculty, and community members), or collaboratively, by a team. A collaborative assessment will likely lead to the most accurate picture of current practices, and can encourage more strategic action planning.

# FTS Rubric, Section 1: Cafeteria

Indicator	Emerging	Developing	Deepening	Thriving	
School Nutrition Staff Engagement	School nutrition staff are interested in the creation of a farm to school program.	School nutrition staff representative regularly attends farm to school committee meetings and activities.	School nutrition staff play an active role in developing the farm to school program.	The director/manager and/or several school nutrition staff work with faculty, administration, and community members to coordinate farm to school efforts and programming.	
Local Procurement	Possibilities for incorporating local food into the menu and/or resources to help source local food have been identified.	Local sources of food identified and several local foods purchased via informal bid procedure and incorporated in school meals. School nutrition staff are trained and able to purchase local product through standard buying/bidding practices.	Local food regularly incorporated into menu for school year. School nutrition staff can adapt to fluctuating sources of local food, are regularly purchasing local foods through proper procurement methods, and can adapt their budget as necessary.	Annual purchasing contracts have been established between local farmers and the school. There is a system in place to sustain the purchase of local food consistently; new local food sources evaluated regularly.	
Infrastructure & Professional Development	School nutrition staff have begun to identify what changes are needed to incorporate local food into the meal program, including infrastructure upgrades, professional development offerings, etc.	Infrastructure changes have been initiated or are being planned. Professional development opportunities are provided for school nutrition staff.	Infrastructure changes allow for incorporation of more local foods. All school nutrition staff have opportunities for professional development.	Food program infrastructure can process, cook, and serve local foods over the long-term. A plan is in place for ongoing evaluations of infrastructure and professional development needs as local food purchasing increases.	
Classroom & Community Connections	School nutrition staff are interested in conducting taste tests and/or can identify the possibilities for engaging faculty and students in nutrition education and the farm to school program.	School nutrition staff work with farm to school committee to gain feedback from students on the farm to school program, and how to best incorporate nutrition education activities.	School nutrition staff work with farm to school committee on taste tests, curriculum integration, and community farm to school events.	Community members, students, and school staff see the school food program as an integral part of the school and community and of the educational programming.	

# FTS Rubric, Section 2: Classroom

Indicator	Emerging	Developing	Deepening	Thriving	
Faculty Involvement	Faculty are interested in creation of farm to school program.	Faculty representative regularly attends farm to school committee meetings or does regular farm to school activities.	Faculty representatives help to plan and implement farm to school activities beyond their own classrooms. Faculty have opportunities for farm to school professional development.	Multiple faculty members work with school nutrition staff, administration, and community members to coordinate farm to school efforts. All faculty have ongoing professional development opportunities.	
Integrating with Curriculum	Faculty can identify possibilities for integrating food, farm, and nutrition (FFN) topics into curriculum (including wellness, food studies, gardening, etc.).	Some faculty teach lessons or units integrating FFN topics.	Most grades teach lessons or units integrating FFN.	School has a coordinated approach to integrating FFN into curriculum across all grades and in multiple disciplines.	
Experiential Learning Opportunities	Faculty can identify possibilities for using hands-on experiences (growing, cooking, gardening, etc.) as learning experiences.	Some faculty provide experiences through which students can engage in hands-on learning experiences related to FFN.	Most faculty provide hands-on learning experiences that are embedded within larger units of study and support established goals for learning.	School has a coordinated approach to providing students with hands-on learning experiences; each grade provides opportunities for scaffolded experiences that build from grade to grade.	
Cafeteria & Community as Resource	Faculty have an interest in connecting their classroom to the cafeteria and community (farms, producers, etc.).	Faculty have connected classroom learning with the cafeteria or community. Some grade levels have experiences with local farms/farmers/food producers (field trips, class visits, etc.).	Faculty connect cafeteria taste tests with classroom learning. Teachers consider school food program as a nutrition and food education resource. Students have experiences with local farms/farmers/food producers (field trips, class visits, etc.).	School has a coordinated approach to connecting cafeteria taste tests with classroom learning. School has a coordinated approach to providing students experiences with local farms/farmers/food producers.	

# FTS Rubric, Section 3: Community

Indicator	Emerging	Developing	Deepening	Thriving	
Community Engagement	Community members (including local organizations) interested in the creation of a farm to school program. Community members (including parents and organizations) can identify possibilities for community involvement in a farm to school program.	Community members have committed to be a resource for farm to school program.	Community members actively participate on farm to school committee and provide help with fundraising, classroom and cafeteria activities, or field trips.	A network of community members has been established to provide ongoing help with fundraising, classroom and cafeteria activities, and field trips. The farm to school program is linked to community events.	
Family Engagement	Families interested in creation of farm to school program.	Families have opportunities to get involved in farm to school efforts (taste tests, farm to school committee, etc.). Family representatives regularly attend farm to school committee meetings or participate in farm to school activities.	Families actively participate in a range of farm to school activities (tastetests, field trips, classroom activities, fundraising, cafeteria, etc.).	PTO/PTA or other family organizations have made long-term commitment to farm to school program. A network of families has been established to provide ongoing support.	
Farms & Community- based Purchasing	Farmers/producers interested in partnering with school.	Farmers, food producers, and local food-based businesses have offered to sell a product for school meals.	School is sourcing product from local farmers, food producers, and food-based businesses at multiple times during the school year.	Long-term relationships established between local farms, food producers, and foodbased businesses for sourcing food and providing food- and nutrition-based experiences throughout the school year.	
Community Educational Opportunities (businesses, nonprofits, govern- ment agencies, civic groups, etc.)	Community members interested in partnering with school.	Community members and organizations offer to be resource for school educational opportunities (field trips, farm visits, class speakers, etc.).	School is using community members and organizations as resource for educational opportunities during the school year.	Long-term relationships established between community members and organizations to provide educational opportunities throughout the school year.	

# FTS Rubric, Section 4: Staying Power

Indicator	Fmerging	Davaloning	Deenening	Thriving	
Administrative Support	School administration is interested in the creation of a farm to school program.	Administration is in regular contact with farm to school activities and/or farm to school committee.	Administration supports staff-wide farm to school professional development and participates in farm to school activities.	Administration supports inclusion of farm to school tasks into job descriptions and/or provides release time for staff to do farm to school work. Administration is a resource to other school administrators on how to start and sustain a farm to school program.	
School Culture	There is general interest in the school community in the creation of a farm to school program.	A farm to school committee has been created and is active, with representation from school administration, school nutrition staff, faculty, and community members.	School community members continually revisit their farm to school action plan and develop ideas for the future. All school community members are provided ongoing opportunities for farm to school professional development. School community has waste reduction strategies that meet state guidelines and are implemented schoolwide (classroom, cafeteria, events, etc).	School community members feel farm to school is integral part of school, part of "who they are." School is showcased as farm to school model for district or state, and school practices are shared at local, regional, or national level. When new school staff are hired, interest in and ability to contribute to farm to school program are considered as hiring criteria.	
Communica- tion	Communication about farm to school takes place within peer groups (faculty, administration, school food service, families, community members).	Some members of school community are aware of farm to school program. School community members start to communicate about farm to school across peer groups.	Most members of school community are aware of farm to school program. Vehicles for communication across peer groups have been established (such as meetings, email list, newsletters, website, etc.).	All members of the school community are aware of farm to school program. System in place for communicating about farm to school that allows everyone to have access to information.	
Funding/ Resources	Funding or resource possibilities identified to launch farm to school program.	Initial funding or resources secured to support farm to school efforts.	Diversified sources of funding and resources developed to sustain farm to school.	System for funding and access to resources in place that can sustain farm to school program over the long term.	

# FTS Action Planning, Section 1: Cafeteria Review indicators in rubric to help inform your goals

Goals	Action Steps (What needs to be done now?)	Person(s) Responsible (Lead person/group member)	Timeline (By when do items need to be done?)	Technical Assistance/ Resources Needed
🛱	Long-Term Ideas & Goals for Future School Years			

# FTS Action Planning, Section 2: Classroom

line do items Resources Needed Resources Needed	
Timeline (By when do items need to be done?)	
Person(s) Responsible (Lead person/group member)	
Action Steps (What needs to be done now?)	
Goals	

# FTS Action Planning, Section 3: Community

Review indicators in rubric to help inform your goals

JIS		
Long-Ierm Ideas & Goals tor Future School Years		
Long-Term Ideas & Go		

# FTS Action Planning, Section 4: Staying Power

Technical Assistance/ Resources Needed		
(By when do items need to be done?)		
Person(s) Responsible (Lead person/group member)		ν <sub>0</sub>
Action Steps (What needs to be done now?)		Long-Term Ideas & Goals for Future School Years
Goals		Long-Term Ideas & Goo

### Impact & Feasibility Analysis

In order to set priorities on what actions to do first, you can use this simple "impact and feasibility analysis" tool to facilitate a group discussion. It is similar to a cost-benefit analysis that helps you prioritize, match actions to your capacity, and stay realistic about timing.

### AS YOU PRIORITIZE YOUR ACTIVITIES, KEEP IN MIND:

- School community support (where has there been the most energy, interest?)
- Potential uptake (are resources immediately available for this activity?)
- Urgency (does this address an immediate need or is it an opportunity with a short time frame?)
- Logical sequencing (do certain activities need to happen before others?)
- Momentum (will the activity give you early success? credibility and visibility for your bigger plans?)
- Champions (is there a champion ready to make it happen?)
- Mission (does this further your FTS mission and goals?)
- Cost (does it offer good value in terms of cost?)
- Quality of ideas (Are these activities easily doable and broadly supported? Do they have high visibility and value?)

**STEP 1:** Write each activity on a separate sticky note.

**STEP 2:** Clarify what it would take to make each idea happen; be specific as to the time, people, and resources that would be required.

**STEP 3:** Sort your ideas using the matrix at right (it can be drawn easily on easel paper). As a team, place each activity in the box where it best belongs.

**STEP 4:** Identify your priorities based on higher impact and higher feasibility.

and Benefits	High	1st CHOICES high value, visibility, and broad support	2nd CHOICES probably worth it
Value and B	Low	<b>3rd CHOICES</b> easy, but of less value	4th CHOICES not worth it
		Easy/Cheap	Hard/ Expensive

**Effort and Cost** 

### PRIORITY SETTING MATRIX

Depending on which quadrant an activity lands in, it will become clear which ones are more feasible and will have a greater impact. Make these your first priority. Activities that have less impact, but that are easy to accomplish, can help you build momentum. Activities that have the greatest impact but that are less feasible may be added to your action plan as future projects.

CONTINUED

# Communications Planning Template

Communications Goal:

Audience(s)	Beliefs & Interests	Calls to Action	Messages	Channels/Connectors
Who do you want to reach?	What do they care about and know regarding FTS?	What do you want them to do?	What messages will resonate?	How can you reach them? Who can help?

# Communications Planning Template continued

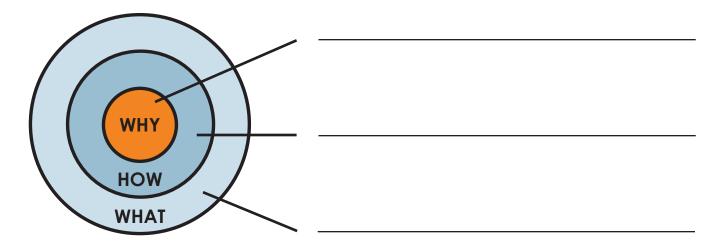
Channels/Connectors	How can you reach them? Who can help?	
Messages	What messages will resonate?	
Calls to Action	What do you want them to do?	
Beliefs & Interests	What do they care about and know regarding FTS?	
Audience(s)	Who do you want to reach?	

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### Communications & Outreach Planning

### **KNOW YOURSELF**

Articulate the **Why, How, and What** of your Farm to School program.



Write an **Elevator Pitch** for your program—a short (50- to 100-word) description of what you believe, what you're doing, and why it matters.

Identify a **Communications Goal** (e.g., increase food awareness, publicize event).

continued

DENTIFY YOUR AUDIENCES & NETWORKS

Brainstorm the different groups and demographics in your community (however you define it—school community, town, region, etc.) and focus in on the ones that you are trying to reach in order to advance your particular communications goal.

- **Community Network:** Formal (e.g., church members, historic society) or informal (e.g., neighbors, diner regulars) groups in your community
- **Connectors:** People who represent "hubs" (connect to many different networks, groups, or people) or "bridges" (link disconnected groups) within the community
- **Audience:** Group or demographic that you are trying to reach (e.g., elementary students, PTO members, parents, city council)

Identify YOUR CALLS TO ACTION

Identify what you would like each audience to do after receiving your message and communications. (See sidebar.)

ARTICULATE YOUR KEY MESSAGES

Key messages are the main points that you want to convey through your communications. They are a balance between what you want to convey and the context or tailoring that will make it relevant to a particular audience. Even if your call to action is the same for different audiences, your key messages may not be.

Example key messages for meal program participation

- **For Parents:** Meal program is healthy, affordable, and will save you time and effort.
- **For Teachers:** Meals are delicious and your participation will set an important example.
- **For Students:** Meals taste great and it's cool to eat school lunch.

Now that you know what you want to say, choose the communications channels that your audiences use and that will maximize reach, efficiency, and impact. (See sidebar.)

I IDENTIFY THE BEST COMMUNICATIONS

### 3. Calls to Action

- Sign up for email list
- Purchase school lunches
- Cook healthy meals
- Follow on social media
- Tell a friend
- Donate money
- Volunteer to help
- Read a story or blog post
- Take a class

### 5. Channels & Opportunities

- Social media (Facebook, Twitter, Instagram)
- Local newspaper
- School news
- Signs and bulletin boards
- Table tents, placemats
- Connectors
- Posters and postcards
- Blogs and websites
- Tables at events
- Sidewalk chalk
- Email lists and forums
- T-shirts
- Trusted messengers
- Pick-up and drop-off times
- Community events
- Community centers (libraries, restaurants)
- Contests and promotions
- Group meetings

### SAMPLE JOB DESCRIPTION

### School-Based Farm to School Coordinator

The successful candidate will collaborate with the farm to school committee, the food service manager, and local farmers to foster a positive school nutrition environment by supporting the use of fresh, local food in the cafeteria, integrating nutrition education curriculum into classroom experiences, and cultivating interactions between local farmers and the community. Specific responsibilities include:

### **Cafeteria:** To increase consumption of local foods in cafeteria:

- Implement monthly taste tests in cafeteria, with student prepared recipes, and establish systems for recording and using feedback about new foods and recipes
- Market local food served in cafeteria
- Communicate with cafeteria staff on school garden harvest and timeline for delivering food to the cafeteria

### **Classroom:** To integrate nutrition education into existing curriculum:

- Support existing classroom activities
- Develop, coordinate, and facilitate delivery of educational programs
- Build on existing and forge new relationships with local farmers to arrange field trips and school visits
- Attend relevant school meetings
- Engage students in the planting and harvesting of school garden

### **Community:** To raise awareness of and build support for the FTS program and local agriculture:

- Design and distribute outreach materials to communicate with parents
- Keep website updated
- Work with school nutrition director/staff and committee to hold annual harvest festival featuring local food and fundraising opportunities
- Write articles and press releases to publicize FTS activities
- Maintain school garden through the summer months, utilizing community volunteers as much as possible

### **Sustainability:** To provide for the future sustainability and growth of the FTS program:

- Build a network of active volunteers to assist with responsibilities listed
- Collect and use feedback to inform practices and next steps
- Plan and implement fundraising initiatives with FSM and committee
- Develop and maintain partnerships with community members, including volunteers, farms, individual donors, businesses, and grantors
- Create and maintain a directory of school, farm, and partner contacts

### **Skills Needed**

- Ability to communicate and collaborate with a variety of people
- Strong public speaking and writing skills
- Organization and problem-solving skills
- Ability to locate resources in an efficient manner
- Knowledge of local food system and sustainable agriculture a plus
- Knowledge of Common Core and Next Generation Science Standards a plus
- Grant-writing and fundraising experience a plus

### SAMPLE JOB DESCRIPTION

### District-Wide Farm to School Coordinator

Our supervisory union (SU) needs an energetic, creative person to coordinate SU-wide farm to school activities. The coordinator will work closely with school based coordinators to promote school gardens, professional development opportunities, field trip possibilities, curriculum development and fundraising for long-term sustainability.

### Responsibilities

The coordinator will:

- Facilitate monthly steering committee meetings
- Help organize and support school garden efforts
- Identify field trip opportunities to local farms for participating schools
- Identify professional training opportunities for in-school FTS coordinators
- Help document FTS activities undertaken at school in writing and with photographs, and provide report to funding sources
- Communicate efforts with staff, students, parents, school administrators and the broader communities to engage their ideas, energy, and involvement in the FTS programs

### Qualifications

The coordinator must have excellent communication (written and oral) and organizational skills in order to work with in-school FTS coordinators, school staff, administrators, and community members.

### Required

- Basic computer skills related to email, word processing, spreadsheets, and Internet searches
- Reliable transportation
- Ability to work well with students, staff, parents, school administrators, farmers, and other community members
- Familiarity with schools
- Experience in fundraising and grant-writing
- Availability during school hours and some evening meetings
- College degree in related field

### **Preferred**

- Education and/or experience in local food, healthy eating, gardening, farming
- Experience working with elementary school students
- Familiarity with the communities of our district schools

## Government Role in School Meals — FEDERAL —

### **U.S. DEPARTMENT OF AGRICULTURE (USDA)**

**Food and Nutrition Service** Sets standards, promulgates rules, administers pass-through funds to the states, and oversees the following programs:

- **National School Lunch Program (NSLP)\*:** Publicly funded school meal programs began with lunch in 1942, in response to widespread malnutrition discovered during World War II. This became the National School Lunch Program.
- **National School Breakfast Program (SBP)\*:** Piloted in 1966 to serve schools in poor neighborhoods and in areas where students traveled long distances to school, it continues in almost all schools today. The program was modeled on meal programs developed by the Black Panthers to serve children in their communities.
- **Fresh Fruit & Vegetable Program (FFVP):** Piloted in 2002, the program now serves elementary schools nationwide where at least 50% of students receive free or reduced-price meals through the NSLP. Priority is given to schools with greater percentages of food insecure students.
- The Child and Adult Care Food Program (CACFP): Assists "child and adult care institutions and family or group day care homes for the provision of nutritious foods that contribute to the wellness, healthy growth, and development of young children, and the health and wellness of older adults and chronically impaired disabled persons." Through CACFP, more than 4.2 million children and 130,000 adults receive nutritious meals and snacks each day.
- **Schools/Child Nutrition Commodity Programs:** Provided \$1.3 billion in USDA Foods (formerly "commodities") in FY 2018, including \$1.7 million to Vermont schools.
  - USDA Farm Service Agency supplies price-supported items
  - USDA Agricultural Marketing Service supplies seasonal and perishable commodities through the DoD

Office of Community Food Systems Offers various grants in support of Farm to School initiatives.

### **U.S. DEPARTMENT OF DEFENSE (DOD)**

**DoD Fresh Program** Provided \$158 million in fresh produce to schools across the U.S. and territories (FY 2015), and ~\$100,000 to Vermont (FY 2016). Some produce is sourced within each state by the procurement specialist in the Child Nutrition Program. In nine pilot states (Vermont is not one of them) the DoD's new Farm to School Program focuses on linking local farms directly to schools for produce sales. DoD is involved in school food because it has the best transportation system to get fresh produce to schools, army bases, and prisons.

\*These two programs collectively subsidize about 38% of the total cost of Vermont school meal programs through reimbursements for free and reduced-cost meals and snacks.

continued

# Government Role in School Meals — STATE —

Responsibilities for school meals vary from state to state. The State of Vermont's role is outlined below.

### **VERMONT AGENCY OF EDUCATION**

### **Child Nutrition Programs**

Oversees all federally funded school food programs. Monitors, trains, and provides technical assistance to School Food Authorities. Oversees the distribution of USDA Food Program.

### **VERMONT DEPARTMENT OF HEALTH**

### Food and Lodging Division

Performs kitchen and cafeteria inspections.

### VERMONT AGENCY OF AGRICULTURE, FOOD, & MARKETS: AGRICULTURAL DEVELOPMENT

Manages the Farm to School Grant program and related technical assistance for grantees.

# Government Role in School Meals — LOCAL/SCHOOL —

### **LOCAL SCHOOLS & SCHOOL DISTRICTS**

In addition to federal school meal programs, many schools sell "competitive foods." These are any foods or beverages that compete with nutritionally complete school meals for student attention and money. Sold in vending machines, snack bars, and a la carte lines, these foods may help balance a school meal program budget or support athletic programs, PTOs, school clubs, and/or events. In 2013, USDA issued the "Smart Snacks in School" program, which created nutrition standards for these competitive foods.

### School Meal Finances 101

School food programs are supported by three main sources: federal and state reimbursements, students/families, and USDA Foods. Schools in the federal school lunch or breakfast programs are reimbursed by the USDA at annually fixed rates for each nutritionally compliant student meal they serve, depending on meal category.

### WHO FUNDS A TYPICAL SCHOOL LUNCH?

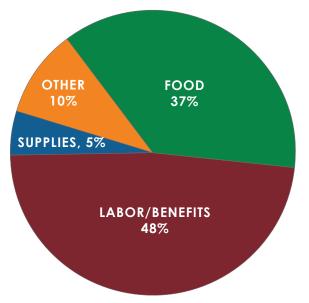
MEAL CATEGORY	FEDERAL CASH REIMBURSEMENT		STATE CONTRIBUTION		USDA FOODS CONTRIBUTION		FAMILY CONTRIBUTION		TOTAL MEAL REVENUE
FREE*	\$3.23	+	\$0.32	+	\$0.32	+	0	=	\$3.55
REDUCED+	\$2.83		0		\$0.32		0		\$3.55
PAID	\$0.31		0		\$0.32		\$2.78		\$3.41

<sup>\*</sup>For families with incomes at or below 130% of the poverty level (\$31,960 for a family of four in 2017–18).

\*For families with incomes 130% to 185% of the poverty level (\$45,510 for a family of four in 2017–18). Several states, including Vermont, have eliminated reduced-price meals; eligible students now receive free breakfast/lunch.

The USDA Community Eligibility Provision (CEP) allows the schools and districts with the nation's highest poverty levels to serve breakfast and lunch free to all enrolled students (universal meals) without collecting household applications. CEP schools are reimbursed using a formula based on the percentage of students categorically eligible for free meals because of their participation in other federal programs, such as the Supplemental Nutrition

### AVERAGE COST BREAKDOWN TO PRODUCE A SCHOOL MEAL



Source: The USDA Food and Nutrition Services School Lunch and Breakfast Cost Study-II, 2013.

Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF). Schools must have at least 40% of their students directly certified (often through SNAP benefits) to qualify for the CEP program.

Schools determine what to charge for their meals and always aim to increase access. The USDA's Paid Lunch Equity Tool provides average prices to help schools do this, realizing that many factors affect meal pricing.

### SUGGESTED SCHOOL MEAL PRICING

Based on USDA's Paid Lunch Equity Tool

TYPE OF MEAL	AVERAGE PRICE*
Student Breakfast (Elementary)	\$1.25-1.50
Student Lunch	\$2.78
Adult Meal	\$3.45

<sup>\*2016–17</sup> school year

### What's in a School Meal?

To receive federal reimbursements, school meal programs must offer meals that meet federal nutrition standards, based on the 2010 Dietary Guidelines for Americans. Referred to as "the meal pattern," the standards require the right balance of fruits, vegetables, low-fat or fat-free milk, whole grains, and lean protein in every meal. The Healthy, Hunger-Free Kids Act of 2010 required USDA to update these standards. Effective in 2012, the new standards require more fruit, vegetables, and whole grains, and limit sodium, calories, and unhealthy fat in every meal. As of 2018, however, the USDA has allowed states to temporarily relax some of the guidelines for milk, whole grains, and sodium, because of their impact on menu planning, procurement, and contracts.



Source: School Nutrition Association.

### 10 Reasons to Buy Local Food

- 1. Locally grown food tastes and looks better.
  - Crops are picked at their peak, and farmstead products like cheese are handcrafted for best flavor. Livestock products are processed in nearby facilities, and typically the farmer has a direct relationship with processors to oversee quality. This is rarely the case in large industrial facilities.
- 2. Local food is better for you. The shorter the time between the farm and your table, the less likely that nutrients will be lost from fresh food. Food imported from far away is older and has traveled on trucks or planes, and sat in warehouses, before it gets to you.
- 3. Local food preserves genetic diversity. In the large-scale agricultural production systems, plant varieties are chosen for their ability to ripen uniformly, withstand harvesting, survive packing, and last a long time on the shelf. This limits genetic diversity. Smaller local farms, in contrast, often grow many different varieties of crops to provide a long harvest season, an array of colors, and the best flavors. Livestock diversity is also higher where there are many small farms rather than few large farms.
- **4. Local food is safe.** There's a unique kind of assurance that comes from looking a farmer in the eye at farmers markets or driving by the fields where your food comes from. Local farmers aren't anonymous, and they take their responsibility to the consumer seriously.
- **5. Local food supports local families.** The wholesale prices that farmers get for their products are low, often near the cost of production. Local farmers who sell direct to consumers cut out the intermediary and get full retail price for their food, which helps farm families stay on the land.

- buy direct from a farmer, you engage in a timehonored connection between eater and grower. Knowing farmers gives you insight into the seasons, the land, and your food. It can also give you access to a place where your children and grandchildren can learn about nature and agriculture.
- 7. Buying ocal food preserves open space.
  - When farmers get paid more for their products by marketing locally, they're less likely to sell farmland for development—your local farm purchases are proactively preserving our working landscape. That landscape is essential to other economic activity, such as tourism and recreation.
- **8. Local food keeps taxes down.** According to studies by the American Farmland Trust, farms contribute more in taxes than they require in services. (Most development contributes less in taxes than the cost of required services.) Cows don't go to school; tomatoes don't dial 911.
- **9. Local food benefits the environment and wildlife.** Well-managed farms provide ecosystem services: They conserve fertile soil, protect water sources, and sequester carbon from the atmosphere. A farm environment is a patchwork of fields, meadows, woods, ponds, and buildings that provide habitat for wildlife.
- 10. Local food is an investment in the future.

By supporting local farmers today, you are helping to ensure there will be farms in your community tomorrow. That's important for food security, especially in light of an uncertain energy future and our current reliance on fossil fuels to produce, package, distribute, and store food.

## Tiered-Buying, Values-Based, Local Purchasing Plan

Each institution has a unique set of priorities, challenges, and values that determine what food it purchases, how much, where it comes from, and how it will be used. This worksheet will help you articulate your food values, what program considerations and logistics impact your purchasing, and how these factors determine your goals toward local/regional and values-based purchasing. Once you've completed this worksheet, you will be able to better communicate the good work your food/nutrition program is doing to purchase local and values-based products.

People buy food based on conscious or unconscious values. These may include a food item's quality, cost, convenience, source, labor, safety, production practices, distribution, economic impact, and sustainability. Reach out to the three audiences below to gather their thoughts on the values they consider when purchasing food. Their values may be shared, similar, different, or even conflicting—there are no wrong answers!

Food/Nutrition Program Staff	Community Members	Customers

Values Statement	
At	, we support

Food/Nutrition Program Staff		Customers	
Use your values statement and the	considerations above	e to inform what fo	oods you're able to purchase and how
you will use them. Consider factors your daily menu, and salad bars or o	such as seasonality,	whole vs. processe	ed foods, special projects or events,
What Will You Purchase?		How Will You	Use the Food?
YOUR PURCHASING		egory considerin	g product availability, your relation-
ships with farmers, distribu	-	0 ,	, ,
Local Community/County	Your State		Regional/Other
Make clear, specific goals (e.g., perce or antibiotic-free products, highligh	0	•	ounty/state, percentage of fair trade Share your goals with your customers

### Creative Community Fundraising

Here are a handful of VT FEED's favorite ideas (and a few tried-and-true ones) for raising funds to purchase and prepare local foods while building community relationships. Some offer students opportunities for physical activity, while others promote community service—some do both! When planning any fundraising event, be sure to check with local authorities regarding any rules or regulations around games of chance or sale of other goods.

**Administrative Fun:** Put out a money jar in the school office to collect spare change from students and staff. The secretary can count the collection daily and post the total. At set increments (e.g., \$100, \$500), the principal or vice principal has to do a stunt, such as a cheer or a scene from a play.

**Buy Local School Fundraising Groups:** Support the Buy Local movement through <u>CloseBuy</u>, <u>Farm-Raiser</u>, and <u>RedBarn</u> fundraising companies.

**Calendar Raffle:** Solicit 30 prizes (gift certificates, cash, gifts) from local businesses and award one prize a day for a month. Students sell tickets for \$10 each and each ticket has 30 chances of winning! One elementary school makes \$10,000 a year on this fundraiser.

**Cookbook:** Create a school cafeteria cookbook and sell it as part of a yearly fundraiser. Maybe an English class and art class can team up to create it?

**Date Night/Kids' Night Out:** Set up games and movies for kids in your cafeteria or gymnasium (with plenty of responsible adult supervision) so the other adults get an evening out. Base donations on the going rate for child care.

### G.S.T. Auction (Goods, Services, and Talents):

Solicit local businesses (or families or groups of school children) to donate anything they can offer. One school auctioned a week at a time share (airfare not included), hair care services, a lawn tractor, furniture, and gift certificates, raising \$20,000.

**Handmade School Store Gifts:** Students can make hand salves, upcycled jewelry, and small gifts

to sell as part of their sustainability and economics studies. Consider including garden produce or schoolyard chicken eggs if seasonally appropriate.

**Harvest Dinner:** Consider combining a benefit dinner with an established event that has large community support, such as a Veterans Day meal, Thanksgiving Feast, or community-wide school meeting.

**Plant Sale:** Ask families to divide their perennials and donate plants for a sale. One garden club makes \$1,000 to \$2,000 each year from a sale like this.

**Seed Saving and Selling:** At the end of school gardening season, save seeds from the tomatoes, peppers, or other produce to dry and sell next spring in homemade seed packets. One pumpkin can produce hundreds of seeds, so 20 seeds in a packet for \$2 can add up.

**Sled-A-Thon:** Each student seeks pledges for each trip down the hill. One school held this event and raised over \$2,000. A potluck was held afterward for the participants and their families.

**Spring Yardwork:** One soccer team offered to rake yards and spread compost at a bargain rate. Ten players worked three half days each, and each boy made \$240. Customers were asked for donations for the work, and those donations exceeded expectations.

**Take-Out Dinner from School Cafeteria:** School cafeteria kitchens mostly sit quiet during dinner time. Some schools have started programs allowing busy families to grab a healthy meal for their family while supporting their school meal program.

# Fresh Fruit and Vegetable Program Regulations & Best Practices

The most effective Fresh Fruit and Vegetable (FFVP) programs are administered in the classroom, combined with nutrition education. Modeling healthy eating habits can be a very effective way to encourage students to try new foods.

### **USE FFVP FEDERAL FUNDS TO:**

- Purchase, prepare, and distribute fresh fruits and vegetables to classrooms.
- Reimburse allowable FFVP program expenses.
   (Administrative costs are limited to 10% of total allotment and may be used for equipment used in the program.)

### **PROGRAM REQUIREMENTS**

- The Fresh Fruit and Vegetable Program must remain separate from the National School Lunch and Breakfast Program.
- All fruits and vegetables must be available to all enrolled school children at no charge.
- Serve fresh fruits and vegetables during the school day as snacks, not with breakfast, lunch, or afterschool snack.
- Publicize the availability of fresh fruit and vegetable snacks widely in both school and community.

### **LEFTOVER FRUITS & VEGETABLES**

### Cut

- Follow safe handling procedures.
- Items opened in classrooms are assumed to be contaminated and should be discarded.
- Unopened containers and items not handled in classrooms are considered safe to re-serve.
- You may use leftover cut products in the National School Lunch or Breakfast Program, but only to avoid spoilage.

### Whole

 Can be offered again later in the week, preferably the next day, only as part of the FFVP.

### OTHER CONSIDERATIONS

- Handle locally sourced produce the same way you handle produce from other sources.
- It is appropriate to ask local suppliers about their food safety protocols.
- Be clear about your quality standards.
- Only low-fat or nonfat vegetable dips can be served with fruits and vegetables.
- Serving size for a condiment is one to two tablespoons.
- To increase palatability, fresh vegetables (not canned, frozen, or dried) may be cooked once per week and must always be presented as part of a nutrition education lesson.

### Tips for Buying Directly from Farmers

Having a direct buying relationship with one or several farmers or producers can be extra work, but can also be educational and rewarding. You can learn more about local food—how it's grown or produced—and benefit from extra products when they are in abundance.

The school food procurement system doesn't naturally lend itself to buying directly from farmers. In developing a system that works for farmers and schools, both sides will have concerns. Being open to dialogue and negotiation is the first step toward building lasting, viable partnerships.

**Do a little research.** See who is growing products in your area. Besides over the Internet, you can also connect with farmers at farmers markets, roadside stands, and U-pick farms. You might even connect with neighbors who may plant more than they need.

**Prepare a short list of products.** Make a short list of products, volumes, and frequency of purchasing for the items you want. If you know how you will use them (cut up raw or cooked or both), note that as well. Don't forget meat, eggs, and dairy!

**Set up business appointments.** Contact the farmers in the early morning or evening, since many farmers are in their fields or marketing their crops during the day. If you leave a message, be sure to indicate when is a good time to call you back and if you have a direct phone extension.

**Request free samples.** When you meet a farmer interested in working with you, ask if they can provide a free sample of the product so that you can see if it will meet your school's needs and requirements.

**Visit farmers at their farms.** Observing local farm businesses in action gives you a better idea about food safety, availability, pricing, and challenges and will demonstrate to the growers your sincere interest in their product. Farm visits also give you the chance to speak directly to a farmer about what you want and need in the unique context of your farm to school relationship.

Talk to farmers as early as possible so they can plan accordingly. Hold winter meetings when farmers are less busy, and plan what products you want to use with the farmers so they have some notice and can be prepared for what you want to buy. To develop a reputation as a reliable customer, commit to a realistic purchasing volume and develop a realistic delivery schedule that suits your and the farmer's needs.

Be aware of your school's insurance coverage requirements. Most farmers carry liability insurance. Make sure they do before you enter into contracts that may require it.

### Ask farmers to develop a weekly availability

**sheet.** Having up-to-date information about availability, the size of food items, quality, estimated quantity, and price per unit will make it easier for you to make good purchasing decisions.

Look for products that are difficult to obtain from long-distance shippers. Certain foods, particularly produce, are not on the distributors' trucks because they are unusual (such as ground cherries) or difficult to transport (such as small plums). Be sure to ask your farmers if they have some interesting or unusual products that you could try out in your program.

continued

Work with the growers to arrange for supply replacements. Sometimes the weather does not cooperate and planned produce is unavailable. Often farmers are able to offer you a substitution. However, it is good to have a backup of frozen vegetables just in case.

**Decide whether to do a micro-purchase or an informal bid.** With one-time purchases or if you are trying out a new farm or new products, consider documenting the buy as a micro-purchase. For repeated and consistent purchasing, you must solicit bids through the "three bids and a buy" informal bid solicitation process.

Clearly establish a payment schedule. Farmers' costs are incurred upfront and they are often accustomed to presenting an invoice and receiving payment upon delivery. School districts often have a payment cycle of 30 days, 90 days, or even longer. This difference in operation needs to be worked out between a school district and the farmer.

### Invite local farmers to have lunch at your school and sample the foods you prepare.

Seeing what you are doing and meeting the students will further your relationships and let them see your program in action.

**Start small and have partners.** Rather than buying a large variety of products, or setting up relationships with numbers of farmers, start with one or two farms and three to six products that you use regularly. Then make sure that your local products are noticed. Enlist the help of teachers and parents to help you advertise your local purchasing in school newsletters and on menus and posters.

**Stay in touch.** Don't forget to keep farmers in the communication loop with notices of meetings and content. Invite them to take part in the process.

## Vermont Harvest Calendar

This calendar presents the diverse array of farm products that are available throughout the seasons at local farmers markets, farm stands, and retail stores. Foods in season are at peak flavor and nutritional value, and their cost is often at its lowest. Find out when your favorite fruits and vegetables are freshest and which products are **in season now**.

January	February	March	April	May	June
Apples	Apples	Apples	Apples	Asparagus*	Asparagus
Beets	Beets	Beets	Carrots	Greens*	Chard*
Cabbage	Cabbage	Carrots	Parsnips	Parsnips	Greens
Carrots	Carrots	Onions	Potatoes ,	Radishes*	Lettuce*
Celeriac	Onions	Parsnips	Turnips	Rhubarb*	Peas*
Garlic	Parsnips	Potatoes		Scallions*	Radishes
Onion	Potatoes	Rutabaga		Spinach*	Rhubarb
Parsnips	Rutabaga	Turnips			Scallions
Potatoes	Turnips	Winter Squash			Spinach
Rutabaga	Winter Squash				Strawberries*
Turnips	Vi a				
Winter Squash					

July	August	September	October	November	December
Beans*	Apples*	Apples	Apples	Apples	Apples
Beets*	Beans	Beans	Beans	Beets	Beets
Broccoli	Beets	Beets	Beets	Broccoli	Brussels Sprouts
Carrots*	Blackberries*	Blueberries	Blueberries	Brussels Sprouts	Cabbage
Cauliflower*	Blueberries*	Broccoli	Broccoli	Cabbage	Carrots
Fennel*	Broccoli	Brussels Sprouts*	Brussels Sprouts	Carrots	Celeriac
Greens	Cabbage*	Cabbage	Cabbage	Cauliflower	Garlic
Kale*	Carrots	Carrots	Carrots	Celeriac	Kale
Lettuce	Cauliflower	Cauliflower	Cauliflower	Celery	Onions
Melons*	Celery*	Celeriac*	Celeriac	Chard	Parsnips
Peas	Chard	Celery	Celery	Kale	Potatoes
Potatoes*	Corn*	Chard	Chard	Leeks	Pumpkins
Radishes	Cucumbers*	Corn	Cucumbers	Onions	Radishes
Raspberries*	Eggplant*	Cucumbers 1/	Eggplant	Parsnips	Rutabaga
Scallions	Fennel	Eggplant 1	Greens	Potatoes	Turnips
Spinach	Garlic*	Fennel	Kale	Pumpkins	Winter Squash
Summer Squash*	Greens	Greens	Leeks	Radishes	
Tomatoes*	Kale	Kale	Lettuce	Rutabaga	
Turnips*	Leeks*	Leeks	Onions	Turnips	
	Lettuce	Lettuce	Parsnips	Winter Squash	
he della	Melons	Onions	Peppers	· · · · · · · · · · · · · · · · · · ·	
a de la	Onions*	Parsnips*	Potatoes		
	Peas	Peppers	Pumpkins		
	Peppers*	Potatoes	Radishes		
d'aces	Potatoes	Pumpkins*	Rutabaga*		
	Radishes	Radishes	Scallions		
	Raspberries	Raspberries	Spinach	The second second	
	Scallions	Scallions	Summer Squash	3	*Fruit or
	Spinach	Spinach	Turnips		vegetable
	Summer Squash	Summer Squash	Winter Squash		comes into
	Tomatoes	Tomatoes	MILLEL 2400211	Constant of the Constant of th	season this
					month.
	Turnips	Turnips			THOTHII.
	Watermelon*	Winter Squash*			

Source: "Farm to School: Highlighting Local Fruits & Vegetables," by VT FEED and Vermont Agency of Education.

Download at <a href="https://www.vteed.org/feed-resources-library.">wtfeed.org/feed-resources-library.</a>

# Recommended Kitchen Equipment for From-Scratch Cooking

High-quality equipment is available to improve production times and flexibility when you are incorporating scratch recipes into your program. Whether you choose local potatoes, culinary sauces and seasonings, cheeses, or meats, having the right equipment can help the transition to scratch cooking.

### **WEDGE MAKERS/FRY CUTTERS**

- Sunkist Fresh Fruit and Vegetable Sectionizer
- <u>Wedge Maker Insta-Cut</u>
- Nemco Easy FryKutter (used by REAP Food Group in Madison, Wisconsin to prep 500+ pounds of carrot, sweet potato, or kohlrabi sticks weekly)

### **TILT SKILLETS**

Great for boiling potatoes and pasta, stir-fries, batch-cook recipes, grilled sandwiches, and more.

- Cleveland floor model: SEL30T1, SEL40T1 gas, tabletop model; SET15 gas
- Vulcan-Heart floor model (VE30): 30-gallon
   V-Series electric
- Southbend: 30-gallon gas with open leg frame base #BGLT-30 (NG)
- Market Forge: 1200-TILT, Electric, 23 Gallon Capacity, Countertop Model 301-1200

### **STEAMERS & COMBI/CONVI OVENS**

A wonderful addition for steaming or browning potatoes, meats, processed items, and homemade pizza

- Blodgett BCX-14 series full-size combi ovens
- Cleveland 10 pans-full size boiler-less electric OES-10.20 Convotherm
- Cleveland OES-6.10 Convotherm "The Mini"
- Hobart Boiler-less steamers HC24EA3 and HC24EA5

### **FOOD BLENDERS**

Warren Immersion Food Blender
 Recommended: 18" Heavy-Duty, #WSB65

### PANINI/CLAMSHELL GRILLS

Step up your sandwich offerings utilizing fresh, local ingredients in a hot, grilled sandwich

- <u>Cadco Unox CPG-10 single sandwich grill with ribbed plates</u>
- Cadco Unox CPG-20 double sandwich grill with ribbed plates, Waring (WPG150) 12" grooved full-top panini grill, Panini Perfetto series
- Star (GX10IS) 15 3/4" Grill Express smooth two-sided grill

### **MIXERS**

Mashed potatoes cooked from scratch are only the beginning!

Hobart Legacy Mixers, countertop, 12 and 20 quart

**NOTE:** Manufacturers update models and model numbers frequently. The equipment models recommended here were available as of 2018.

Source: Wisconsin Farm to School.

# Monthly Menu, Bristol Elementary School, VI



# 5 Steps to Implementing a Taste Test Program in Your School

### 1. GET PARTNERS

Assemble a team to plan how, what, and where to do taste tests. Make sure to enlist school nutrition staff for their expertise. Get students involved, too! (See #4.) Maybe every month a classroom can sign up and work with the school nutrition personnel to decide what food to test and how to set it up in the cafeteria.

### 2. KNOW YOUR GOALS

Before a taste test, establish a few goals that are easy to communicate. Are you trying to expand children's food choices? Encourage more healthy snack or lunch choices brought from home? Do you want to broaden the school lunch or breakfast menu? Introduce local foods? Whatever your goals, communicate them school-wide.

### 3. THINK THROUGH THE DETAILS

Decide with your team what food you want to feature. Where will you get it? (Perhaps your school wants to build a relationship with a nearby farm where you know you can get local potatoes.) What recipe will you try? (roasted sweet potatoes, maybe?) How much will the ingredients cost? (Will the farmer donate potatoes or is the school nutrition staff willing to spend extra money for them?) Does the kitchen have the staff and equipment to prepare the food? How will the food be ordered? Who will prepare it? If the students like the new food, is the recipe repeatable on the lunch or breakfast line? Again, be sure to meet and talk through all these questions with the school food nutrition director and cooking staff.

### 4. OFFER HANDS-ON EXPERIENCES

Children learn best when they are actively involved and using their hands. Children who help prepare food for a taste test are more likely to try it and like it than children who have not been involved. If at all possible, include monthly hands-on lessons in the classroom or cafeteria so that students can participate in making the food for the taste tests.

### 5. MARKET!

Invite families to help, either in your weekly newsletter or through a special invitation. Invite the principal, business manager, superintendent, and/or school board members. You don't have to have an extraordinary event; just showing people what you are doing on a regular basis makes an impression.

# Cafeteria Tips for Successful Taste Tests

Taste-testing can highlight a Harvest of the Month food item, be part of the Fresh Fruit and Vegetable Program (FFVP), or be tied to curriculum. Here are some suggestions and tips we have collected over the years from schools around the country!

### **CHOOSE FOODS THAT:**

- Increase consumption of whole grains, fruits, and vegetables
- Can be featured on the menu as a regular breakfast or lunch item
- Meet school food program requirements for nutrition, presentation, and cost
- Always start with the school nutrition personnel. They can help you decide what foods to try based on what they know about the students (they know everyone!).
- Ask the PTO or a local business to help purchase the food.
- Start with regular monthly taste tests of simple, affordable food, so it's easy to repeat if students like it. Fresh-cut items work well.
- Find families or community volunteers (e.g., PTO members) who can coordinate taste tests a few hours a month, or related classroom activities. School nutrition personnel are unlikely to have the time to do this, although they can participate in some parts.
- If possible, work with teachers and school nutrition personnel to have a small group of students help prepare the food. Remember, "If they make it, they will eat it."
- Use local foods when possible and invite your local farmer or processor to join your taste test to add excitement.

- Offer small servings ("Try-It Bites") in a positive, non-coercive atmosphere.
- Survey students to capture student voice: "Tried it," "Liked it," "Don't like it yet."
- Advertise taste tests in the school newsletter or in letters home to families, announce the results, and share what the next steps are for that new food.
- Openly appreciate efforts made, and celebrate successes and lessons learned.
- Assemble a team to help you stay committed and to think about the big picture (e.g., what time-consuming foods need to be prepped now, for a meal in a day or two?).
- Invite teachers to try the food in front of the students. They're great role models!
- Always give quick pointers about food safety ("wash your hands!"), and show proper use of kitchen tools to ensure safe behavior.

# Classroom Tips for Successful Taste Tests

Taste-testing can highlight a Harvest of the Month food item, be part of the Fresh Fruit and Vegetable Program (FFVP), or be tied to curriculum. Here are some suggestions and tips we have collected over the years from schools around the country!

### **CHOOSE FOODS THAT:**

- Increase consumption of whole grains, fruits, and vegetables
- Can be featured on the menu as a regular breakfast or lunch item
- Meet school food program requirements for nutrition, presentation, and cost
- Try short, informal sessions.
- Find a time each week or month that fits well into the class schedule. Snack time is often a good time.
- Keep it simple! Roasted slices of delicata squash, different types of lettuce, or a sampling of locally grown apples can be part of a dynamic tastetesting lesson.
- Keep the school nutrition personnel aware and involved—they might be able to provide some of the raw ingredients and feature the foods on their menus.
- Show where your local food is grown on a state or county map. (Compare it to bananas grown in South America!)
- Integrate taste tests into the curriculum. In math, for example, show students a parsnip, have them estimate the weight, then have them weigh it. Ask younger children to guess the color of a peeled vegetable before it is peeled.

- Try foods that are (or could be) served in the school food program.
- Always give quick pointers about food safety ("wash your hands!"), and show proper use of kitchen tools to ensure safe behavior.
- Invite a farmer or processor to bring his or her local food and discuss how it is grown or made.
- Be sure to communicate regularly with families about what their children are trying—they won't believe it!
- Invite classes to experiment with recipes and create names for new dressings and dips.
- Always check with the school nutrition personnel before you borrow any equipment and be sure to clean it and return it.

# Developing Farm to School Curriculum

Adapted from Shelburne Farms Guide to Education for Sustainability, based on Understanding by Design: Guide to Creating High-Quality Units, by Wiggins & McTighe

This appendix item specifically helps educators develop curriculum that connects food, farming, and nutrition to students' lives and their communities, and supports the application of learning in a variety of settings. The steps are based on the principles of "Backward Design" in *Understanding by Design*.

## STAGE Identify desired results

targeted standards, enduring understandings, essential questions



Determine
acceptable
evidence
ongoing & culminating
assessment



STAGE Plan learning opportunities focusing questions, continuous assessment

### STAGE 1: IDENTIFY DESIRED RESULTS

Beginning the curriculum design process with your intended outcomes guides the development of relevant learning opportunities and assessments. It can be tempting to begin with a learning activity that you are familiar with and that your students enjoy doing, and then try to identify standards to fit the activity. However, beginning with the end in mind ensures that student outcomes purposefully drive the development of the learning opportunities and assessments. You can always weave your favorite activity in later, once you know what you hope students will gain from it.

Target standards and proficiencies before you adapt or add to the learning activities and assessments when you modify or enhance an existing unit to include FTS. This will help you see how FTS addresses standards in multiple disciplines, such as science, social studies, STEM, the arts, career and technical education, and physical education. Whether you use national standards, district curricula, or proficiency-based graduate requirements, FTS themes and topics allow students to interact with concepts in a real-world context, engage in learning with their full senses, and turn their understanding into action.

**Enduring understandings** are the foundational ideas that you want students to remember from a unit of study. They focus on larger concepts or principles, not simply facts, and are transferable to new contexts or topics. A standard itself might contain language that describes the enduring understanding.

**Example:** The Common Core ELA standard for eighth grade (CCSS.ELA-LITERACY.SL.8.1) says "Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly." The enduring understanding might be: Acknowledging diverse perspectives helps us build empathy, value others, and deepen our own thinking.

Once you have defined the enduring understandings for a unit, you can identify what skills and background knowledge students need. In the example above, students will likely need to understand that people have multiple viewpoints and opinions on complex issues such as sustainable agriculture and that diversity of thinking helps us to consider issues more broadly and deeply. They will also need to practice reflection, open-ended questioning, and listening skills.

Enduring understandings are not limited to the language in the standards or grade expectations. They can be defined by community, family, student, and school values and priorities as well.

Understanding by Design offers four filters to help craft enduring understandings:

- To what extent is the content, topic, or skill relevant and transferable to the larger world (does it connect to a big idea)?
- Is this a foundational concept or principle of the content area?
- What about this content or topic is often misunderstood by students and needs to be uncovered?
- How can the topic, content, and learning opportunities engage students?

The table on p. 116, "Farm to School & Big Ideas," offers some ideas on connecting food system education to concepts such as cycles, diversity, and interdependence.

**Essential questions**, as defined by curriculum expert Heidi Hayes Jacobs, are the "essence of what you believe students should examine and know in the short time they have with you." Instead of statements telling students what they will learn, questions help engage students in learning, offering opportunities for student voice, inquiry, investigation, and interpretation. Essential questions may be thought of as an "umbrella" for the content and skills you will uncover in an entire unit or the academic year.

The essential question can put the concepts into the context of your topic or subject area. As an overarching question for the unit or yearlong study, it will bridge learning opportunities or multiple units. A great question can place the students themselves squarely in the middle of the study, preparing them to actively participate in their own learning, as well as in their community. In general, essential questions have no clear correct answer. They raise other questions, they recur naturally, and they address foundational principles and concepts. Involving students in crafting the essential question builds ownership, and is in itself a powerful learning opportunity.

To help you and your students develop an essential question, ask yourself, Does the question:

- Address FTS with personal or community relevance?
- Present possibilities for personal and social action in school, in the cafeteria, or in the community?
- Cut across a wide range of knowledge, skills, and resources?
- Pose opportunities for in-depth/extended work?
- Present possibilities for a wide variety of teaching and learning activities?
- Allow for students to sufficiently explore the topic, given time and resources?
- Invite opportunities for culminating teaching and learning activities and assessments in which students demonstrate how they have grappled with the question?

Your work throughout the unit—each learning opportunity, discussion, and assessment—will help students build their understanding and formulate ideas to effectively respond to the essential question. Giving students the chance to reflect throughout the unit (in a learning notebook, online journal, or class discussion) helps them build understanding, and keeps you aware of their progress. Done intentionally, organized reflection can be the basis of a series of formative assessments, allowing both teacher and students to monitor progress.

# STAGE 2: DETERMINE ACCEPTABLE EVIDENCE

The assessment tools you use to measure your students' knowledge, skills, and attitudes in FTS are like those used in authentic assessment of any other subject. Define the criteria or the measurable pieces of the standards at the beginning of the design process to help you develop learning experiences that can be evaluated effectively for student understanding.

While engaging in this process, ask yourself:

- Have I helped the students put the criteria into words they can understand?
- Do the criteria reflect what is most important to be learned in each activity or the unit as a whole (i.e., is it an enduring understanding)?

It's helpful to choose a particular aspect of the criteria and turn it into a concrete learning expectation; e.g., "Students will be able to name at least six parts of the food system in their community and describe what they need to work better or to keep on working well."

# Plan the Culminating Activity (Final Assessment)

In keeping with the "Backward Design" process, crafting the final assessment (activity, performance, experiment, written or oral presentation, etc.) before any other learning activities is a good way to think about the skills and knowledge students will need to acquire along the way to help them achieve understanding. The culminating activity will give students a chance to engage in and respond to the essential question, and can often be an occasion to share their knowledge with the community. The product or performance should be designed to allow you to assess the key learning outcomes and criteria you have identified. An assessment rubric can specifically address the learning outcomes and criteria.

At the end of the design process, revisit the criteria to ensure that the learning activities (Stage 3) support what you will assess.

# STAGE 3: PLAN LEARNING OPPORTUNITIES

Learning opportunities, traditionally referred to as lesson plans, help students gain content understanding and acquire or strengthen skills identified in Stage 1 of the design process. Learning opportunities should be carefully considered and sequenced to build toward students' ability to respond to the unit's essential question in a summative assessment.

### **Focusing Questions**

While the essential question you choose in Stage 1 is the overarching question, more specific questions target the content and skills that students need to be able to later respond to the essential question. Focusing questions launch, shape, and assess individual lessons. They offer an intriguing way to open activities, connect to prior learning, and reflect and summarize learning.

Focusing questions about food, farming, and nutrition put big ideas into the context of your topic or subject area. Like essential questions, they should be important and relevant to the learner, and help organize the search for answers. The focusing questions frame the learning, engage the learner, link to other questions, and guide the exploration and uncovering of important ideas. Putting "we" in the question ("What can we...?" "How can we...?" "What is our...?") centers the learner in the activity and stimulates engagement.

For example, to work toward Next Generation Science Standard 5-LS2-1: "Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment," the teacher and students might develop focusing questions such as:

- What is a food system?
- What are the roles in the food system?
- What role do we play in the food system?
- What role do decomposers have in a food system?
- What matter is there in a food system?
- What makes a food system healthy?
- What do we do that models our understanding of how matter moves in the food system?
- What solutions can we design to ensure a healthy food system?

In this example, each focusing question leads to activities designed to help students learn more about food systems. Such activities could include reading and book discussions, teacher or guest presentations, art

projects, or field trips to local farms, compost facilities, other places within the food system, and so on.

Focusing questions can drive the ongoing assessment needed to support and evaluate student progress. During each lesson, students work on some activity or product—data collection, drawings, lists, poems, art projects, reports. These artifacts can be used as evidence of what they have learned, and can be assessed using criteria established beforehand. Each week's work might culminate in a group project, written piece, drawing, science notebook entry, or class discussion that responds to the focusing question. As the unit progresses, the sequence of learning opportunities and assessments build toward an enduring understanding of the essential question, "How can we create a food system that reflects the principle of how matter cycles in an ecosystem?"

### Perform Continuous Assessment

The foremost purpose of assessment is to help students and teachers understand where they are now and where they need to go. Assessment does not happen only at the culmination of a unit in order to assign a grade. Within the learning opportunities, perform ongoing formative assessments of skills and content to help you determine what learning opportunity students need next or which ones should be revisited. You might assess journal entries, review science notebooks, give quizzes, or use discussions as opportunities for assessment. Varying the types of assessment you do throughout a unit helps students demonstrate different skills and learning styles. Products, performances, tasks with scoring guides, peer review, self-assessment, and anecdotal observations are all valid methods.

Opportunities for authentic assessment are often present with culminating projects or performances. For example, when students share their knowledge with community members by presenting before the school board, they are demonstrating their learning. Providing students with assessment criteria at the beginning of a unit or project helps them work

toward the targeted goals with focus. Frequently referring to a unit rubric or other generalized assessment tool that becomes familiar to students can be useful in evaluating student progress because it makes growth visible over time.

In Stage 2 you chose criteria to assess students' understanding of FTS content and skills. As you plan each learning opportunity, make sure it supports students in being able to respond to the essential question. Here are some guiding questions to consider:

- Do the learning opportunities enable students to acquire the specific skills and knowledge that I intended?
- Are the most important learning goals reflected in the assessment criteria?
- Are the focusing questions interesting and relevant to the students?
- Do the formative assessments allow for students to monitor their own progress?
- Am I able to be flexible and responsive to formative assessment data (can I adapt my unit plan to respond to student needs along the way)?

### List Resources

In the final stage of design, list resources you will use to align with and enrich learning throughout the unit. Some resources to consider:

- Text, videos, websites
- Organizations, guest speakers, resource people
- Community events, farm field trips, restaurants/ food processors, and other FTS places

Thoughtfully selecting resources will directly impact the learning outcome and better support your efforts as the teacher-designer. After all, the way in which we approach curriculum design is a critical element of FTS.

# Farm to School and Big Ideas

Adapted with permission from Shelburne Farms

Concept / Grade Level	Farm to School Connection / Curricular Idea
Community PreK– Kindergarten	Students explore the concept of community by considering the roles that people play to get food from farm to table. Students explore their own role in the food system and, as "community helpers," grow seedlings for the school garden as a service project.  ESSENTIAL QUESTION: What is my responsibility to our community?
Cycles 1st–2nd Grade	Students explore cycles all around them—investigating everything from pollinating insects to seasonal cycles—and how they impact their own lives. Students learn about the local agricultural cycles of maple sugaring and apple growing, and engage with local farmers and community businesses involved in these product cycles.  ESSENTIAL QUESTION: What cycles can we find in our community?
Systems  3rd–4th Grade	Students investigate local food systems by tracing locally available products back to their source and evaluating and assessing the impact of different food choices. Through working with local farmers, students also explore farming practices to better understand the importance of ecological diversity. Students develop skills for reading and writing informational texts by creating informational posters about the local food system for display at a grocery store.  ESSENTIAL QUESTION: How does change happen in a system?

continued

### Concept / Farm to School Connection / Curricular Idea **Grade Level** Students learn about change over time as they explore biological and social adaptation and change. They research geologic forces and how bedrock influences soil types. They study early settlements in their community to Change & understand why people settled near rivers and on rich agricultural soils. They Adaptation study regional human migration patterns through time and how shifting demographics and diversity have shaped the local community. Students also explore the impacts of human migration on the natural/agricultural world. 5th-6th As a culminating project, students create a museum display with maps Grade illustrating how their community has changed over time. **ESSENTIAL QUESTION:** In what ways does the land shape culture? Students explore economics by launching a small food-focused business with Intertheir classmates. With the help of local business people, they conduct market dependence research, create a business plan, and track data on costs and revenues. Finally, students write annual reports to shareholders, describing the economic, environmental, and social outcomes of their business. 7th-8th Grade **ESSENTIAL QUESTION:** In what ways do we depend on natural systems? Students are immersed in a study of sustainable agriculture and water: watersheds, management, rights, natural limits, and equity issues. They Limits compare local water use and regulation to locales with similar demographics and geography, both nationally and internationally. Students then make 9th-10th recommendations to local regulating agencies on resource management. Grade **ESSENTIAL QUESTION: What can communities learn** from natural systems to improve our common future? Students collaborate with the school nutrition director to analyze food purchasing in the school community and evaluate locally available options. **Long Term**

# **Effects**

### 11th-12th Grade

They consider the economic, ecological, and social justice issues related to food purchasing, such as fair trade and ecological packaging. Students research opportunities to increase local products served and present their findings/ recommendations to the school.

ESSENTIAL QUESTION: How might the ways we live today impact how people will live in the future?

# Understanding by Design Unit Template v2.1

STAGE 1: Desired Results	d Results		
Established Goals	Meaning		
	BIG IDEAS	ENDURING UNDERSTANDINGS Students will understand that	ESSENTIAL QUESTIONS Students will keep considering
	Acquisition		The unit incorporates food,
Students will have the opportunity to:  grow/cultivate harvest taste cook engage in the inquiry process	Students will know	Students will be skilled at	
work with a	Transfer		The unit uses the campus/
(farmer, baker, etc.)  — participate in a community event to share their learning	Students will be able to indepen	able to independently use their learning to	cafeteria or community when

Adapted with permission from the Understanding by Design Guide to Creating High-Quality Units by Grant Wiggins and Jay McTighe, 2011.

# Understanding by Design Unit Template v2.1 continued

		PERFORMANCE TASKS	Students will show that they really understand by evidence of	OTHER EVIDENCE	Students will show they have achieved Stage 1 goals by
vidence	EVALUATIVE CRITERIA				
STAGE 2: Evidence	CODE (Link to Stage 1)				

Adapted with permission from the Understanding by Design Guide to Creating High-Quality Units by Grant Wiggins and Jay McTighe, 2011.

# Understanding by Design Unit Template v2.1 continued

	titudes using	Progress Monitoring		
arning Plan	Pre-assessment of driving knowledge, skill, understandings, and attitudes using surveys and simulations	Learning Events	Student success at transfer, meaning, and acquisition depends on	
STAGE 3: Learning Plan	CODE (Linked to Goals, Big Ideas, and Lens)			

Adapted with permission from the Understanding by Design Guide to Creating High-Quality Units by Grant Wiggins and Jay McTighe, 2011.

# Tips for Cooking with Children

### **ELIMINATE INTERFERENCES**

Tie back long hair, pull up long sleeves, and secure other articles of clothing that could pose safety or hygiene risks.

### PRACTICE GOOD HAND HYGIENE

Wash hands with soap and warm water before touching any food or utensils. Gloves are not required if the food you are preparing will ultimately be cooked, but they are recommended if the food will be served raw. Encourage arm sneezing, and stress the importance of not touching your face, hair, etc. once hands are clean.

### MAINTAIN A CLEAN COOKING AREA

Start with a clean workspace. Clean all countertops and surfaces before preparing food on them.

### **SET UP EARLY**

Prepare work stations ahead of time with ingredients and proper tools.

### **WORK IN SMALL GROUPS**

Cooking with children is most successful when they can work in small groups of no more than five, ideally with an adult per group. Younger children benefit from even smaller groups. Increase the adult-child ratio by involving parent volunteers in classroom cooking activities.

### HAVE A JOB FOR EVERYONE

Include every student in the cooking process by assigning everyone a job. This may mean giving each student a small task or even making up a job. Tasks can include reading the recipe aloud, checking to be sure you have included all the ingredients, washing produce or dishes, drying dishes, measuring, stirring, or helping another student. Every job is important and children are easily excited by the task at hand.

### TEACH KNIFE SAFETY

Be careful with knives and other sharp tools such as graters and peelers. Instill the importance of responsibility that comes with handling knives and kitchen equipment. Teach children the proper ways to hold, wash, carry, and store these tools. Most children take this responsibility very seriously.

### **USE THE RIGHT TOOL FOR THE JOB**

Kids can cut produce, as long as you give them a safe and appropriate knife for the task. To start, use plastic disposable knives, plastic knives from a kid's set, or butter or dinner knives with blunt serrated edges and rounded points. These knives can readily cut herbs, peeled fruit, and soft vegetables like zucchini, cucumbers, and tomatoes. Sometimes a sharper or larger knife is more appropriate for cutting harder vegetables or foods. With proper use, it can be a safer option than a blunt, inadequate tool. Select a tool that is appropriate for the job. Use your discretion in gauging the readiness of your students for using more professional cutting tools and always monitor use closely. For any knife use, demonstrate proper cutting technique first.

### **USE SAFE CUTTING TECHNIQUES**

- Place a wet paper towel under your cutting board to prevent it from slipping around on the table.
- Use a claw-like grip (with fingers curled slightly under) to hold the food steady on the cutting board. The knuckles act as a bumper, and fingertips are kept away from the knife blade.
- Before cutting rounded objects, such as potatoes, carrots, or zucchini, give the object a flat edge so that it does not roll around on the board. Do this by cutting a small slice from one side of the food so that it can lie flat on your work surface.
- Tools should stay with the cutting board.

### **DEMONSTRATE**

Always demonstrate the correct cut, size, technique, etc. before handing the task over to the students.

### **READ THE RECIPE**

Ask a child to read each instruction aloud as you prepare the food. Students will get a sense of turntaking and sequencing from following directions in order. This also helps to pace the process so that you can focus on one job at a time and avoid multiple distractions.

### MAKE CLEANUP PART OF THE ROUTINE

Cleaning up is an important part of the cooking process, and students may love using a mop or dustpan as much as they love the food preparation. But save cleaning until the cake is in the oven!

### TASTE!

Have the students taste the food they are preparing. Encourage the practice of trying new things, but never force anyone to eat something against their will. If someone is really hesitant to taste the food, offer the option of a "No-thank-you bite." You encourage students to try one small bite and give them permission to then say, "No, thank you," to more. But at least they have tried the food! (Remember to keep cleanliness in mind when tasting the food, too. Use clean tasting utensils to prevent contamination.)

### **KEEP TRYING NEW FOODS**

Model healthy choices by eating food (especially new foods!) with the students. Establish a routine with students for sitting down and eating food together as a group so new foods become routine, too.

### "DON'T YUCK MY YUM"

Remind students that we do not say negative things about how something tastes because it might offend someone and discourage others from trying something new. If a student tries something that they do not like, request that they quietly spit it out in a napkin so other students have an opportunity to form their own opinions. Encourage students to use respectful language like "I don't care for it." Remind students that sometimes it takes trying new things 10 times before you begin to like them.

From: Farm to School: Highlighting Local Fruits and Vegetables: Materials to Inspire Your USDA Fresh Fruit & Vegetable Program,
VT FEED and Vermont Agency of Education. Funded by a USDA Specialty Crop Block Grant through
Vermont Agency of Agriculture, Food, & Markets.

# Cooking Cart Equipment Checklist

### **APPLIANCES**

- Induction range
- Blender
- Electric griddle
- Immersion blender
- Hand mixer

### **COOKING UTENSILS**

- Can opener
- Lemon/lime squeezer (2)
- Cheese grater (5)
- Measuring spoon set (6)
- Measuring cup sets (5)
- Rolling pin (2)
- Salad spinner
- Wooden spoon (4)
- Sandwich spreader (5)
- Vegetable peeler (5)
- Large whisk (4)
- Small whisk (4)
- Chef's knife
- Paring knife (10)
- Plastic lettuce knife (5)
- Cutting boards (10)
- Rubber spatulas (10)
- Turners (10)
- Slotted serving spoons (4)
- Solid serving spoons (6)
- Ladle
- Tongs
- Apple peeler/corer/slicer (5)
- Apple slicer (5)
- Colander
- Mixing bowls (3)

### **POTS AND PANS**

- Stockpot with lid
- Steamer basket for stockpot
- Saute pan with lid
- Large saucepan with lid
- Small saucepan with lid
- Baking dish (2)
- Baking sheet (2)
- Loaf pan
- Muffin pan (2)

### **TABLEWARE**

- Melamine plates (20)
- Melamine bowls (20)
- Dinner spoons (24)
- Dinner forks (24)
- Dinner knives (24)

### **MISCELLANEOUS**

- First aid kit
- Potholders (4)
- Aprons (20)
- Plastic lined tablecloths (5)
- Kitchen towels (4)
- Cleaning cloths
- Tote box (for dirty dishes)
- Dishwashing liquid

# 10 Best Practices for School Community Gardens

### 1. LOCATION, LOCATION, LOCATION

The most sustainable gardens occupy a highly visible site on or next to school grounds. The site should be well drained with plenty of sunlight, access to water, and minimal soil compaction. Always test soil!

### 2. PERMANENCE

A colorful and durable sign and a sturdy fence are good first steps toward permanence. Clearly posted rules, regular updates in school newsletters, and successful fundraising and accounting are also key.

### 3. ORGANIC GARDENING

Consider organic practices for the health of your garden and community by avoiding synthetic pesticides and chemical fertilizers. Increase soil fertility through crop rotation, cover crops, and compost.

### 4. CROP DIVERSITY

Plant a variety of vegetables and flowers to support a wide range of beneficial insects and soil microorganisms. Experiment with companion plants that enhance growth or suppress pests.

### 5. CURRICULUM INTEGRATION

Work with administrators, teachers, and community partners to integrate the garden into farm to school, Ag in the Classroom, nutrition programs, and other subjects.

### 6. ORGANIZATION

A skilled coordinator and steering committee, effective communications, shared planning and decision making, and youth engagement are essential to a sustainable school community garden.

### 7. ADMINISTRATIVE AND SCHOOL BOARD SUPPORT

Raise awareness by making a presentation and conducting a garden taste test at the next school board meeting or by hosting a school event in the garden and inviting your school board to attend or speak.

### 8. COMMITMENT

Work for continuous improvement in your garden and educational program. Seek feedback.

### 9. COMMUNITY ACCESS

Involve the community in your garden, especially during the summer. Consider individual garden beds or plots for interested families and weekly summer gathering times.

### 10. CELEBRATION AND ACKNOWLEDGMENT

Thank sponsors, volunteers, and donors, and share surplus produce and flowers with neighbors and people in need. Build social capital through garden potlucks and harvest celebrations. Have fun!

Source: Vermont Community Garden Network. Used with permission.