

VERMONT FOOD SYSTEM PLAN ISSUE BRIEF



ISSUE:
*Agricultural
Literacy, K-12*

What's At Stake?

Almost everything we eat, wear, or use comes from a plant or animal on a farm, but we are losing the knowledge of how to grow food, work on farms, and cook with whole ingredients. Americans' physical separation from farms, declining direct involvement in farming, and dependence on consolidated national and global food supply chains sets up the next generation of Vermonters to lack knowledge and experience for self-reliance in this changing world, especially given climate change and global health pandemics. For Vermonters to be knowledgeable local food consumers and agricultural advocates, they need food and farm experiences throughout their lives. Starting with the earliest learners, the populace needs to be connected to the land and Vermont farmers, taught basic knowledge and skills in food and farming, shown the connection to other issues including climate and water, and develop work ethics and transferable skills.

Current Conditions

There is a growing national movement to increase agricultural knowledge via the K-12 educational system. Many Vermont students receive some form of agricultural education, but it is variable across the state. Vermont is a recognized leader in K-12 Farm to School (FTS) programs and offers traditional agricultural career path options for older students. However, Vermont lacks a coordinated approach to embedding agriculture education into all students' learning. Individual teachers must be confident, creative, motivated, and knowledgeable in place-based agricultural education integration to offer their students these opportunities.

Professional development opportunities are available to educators (pre-K-12) on food and agricultural curriculum integration through Vermont's Farm to School grant program, the Farm to School Institute, and the organizations that make up the Vermont Farm to School Network. Career and Technical Education (CTE) and Future Farmers of America (FFA) remain the lead options

for high school students to pursue agricultural career training, although an increasing number of middle and high schools are incorporating greenhouses, food system studies, and school gardens. School cafeterias are also important classrooms for improving agricultural literacy (see [School Food Procurement brief](#)).

Nonprofits and farm businesses throughout the state offer family programs, on-farm school field trips, after-school experiences, and summer camps. County fairs, 4-H, festivals, and farm-to-community programs provide out-of-school agricultural experiences. Vermont Ag Literacy Week and Open Farm Week encourage families to learn and explore more about Vermont agriculture. 4-H has had an increase in youth seeking animal experiences and UVM's animal science program is at capacity. With existing and historical networks in Vermont, increased national resources, and the growing interest in agricultural experiences, there is a pressing need to support and grow these programs.

61% of Vermont schools had a least some integration of FTS programming within the curriculum in the 2016/2017 school year.



68% had at least some FTS integration with the community.



81% had a school garden. Schools with elementary grades were more likely to have a garden.



Bottlenecks & Gaps

- FTS programs have dramatically increased food system education in Vermont, but there are education gaps in certain sectors (e.g., dairy).
- The Vermont Agency of Education (AOE) lacks staff to support existing agricultural education, or to identify and track how agricultural education programs can support Learning Plans.
- Existing agricultural education resources for educators are scattered, outdated, and conflicting. Existing programs have limited capacity to address the host of statewide pre-K-12 agricultural literacy issues and needs. Agricultural education in school cafeterias is often constrained by meal program budgets, infrastructure, and regulations.
- Some school authorities are steering kids away from agricultural careers, due to outdated perceptions of the field or budget implications of sending students to out-of-district CTEs.
- On-farm visits and education are hindered by farmer liability concerns and lack of knowledge on the part of educators about which farms are willing to host students.

Opportunities

- The COVID-19 pandemic and climate change have focused public attention on food system weaknesses while increasing public interest in local food. This heightened awareness, during large-scale economic recovery efforts, presents unique opportunities for K-12 agricultural literacy.
- Agricultural literacy can be improved by prioritizing K-12 meal programs as important educational tools and supporting them with adequate funding and resources.
- Many related efforts could be leveraged to align strategies and resources for increasing agriculture literacy in the state (e.g., agritourism, the FTS Network).
- Updated resources, relevant tools, and applicable models of agricultural literacy from other U.S. programs could be integrated into Vermont teacher professional development and student programming.
- Schools could expand ways to award educational credit to agricultural learning, linking to education initiatives (e.g., Proficiency Based Learning). Middle and high schools which offer hands-on agriculture programs could partner with CTEs.

Recommendations

- Increase AOE leadership, representation, and involvement in agricultural education initiatives. Create programmatic staff and/or a liaison to oversee CTE content, stay current on agricultural sector educational needs, access federal dollars, and serve as point person with agricultural education programs. Improve coordination between AOE, Department of Labor, and Agency of Agriculture, Food and Markets to support career exploration opportunities throughout the state that meet students' interest, address workforce needs, and offer statewide access to on-farm experiences.
- Convene statewide relevant partners to identify, and create a plan to address, the existing gaps in agricultural education in Vermont.
- The Vermont Legislature should fund the Vermont Farm to School Network with \$500,000 of annual base funding for FTS infrastructure grants, technical assistance, and training, to grow FTS in all counties.
- Support efforts by Vermont's CTEs to redesign the state educational funding model so that CTEs have independent funding streams and budgets and are not in competition with sending schools.
- Provide a greater variety of training opportunities by supporting existing (and developing new) programs such as apprenticeships, certificates, stackable credentials, and concurrent degrees, in an affordable and accessible format.
- To reduce farmer liability concerns about hosting on-farm visits, draft tightly crafted legislation around the definition of agritourism in a way that supports a limited liability statute for farms offering agritourism and educational experiences (see [Agritourism brief](#)).

Farm to Plate is Vermont's food system plan being implemented statewide to increase economic development and jobs in the farm and food sector and improve access to healthy local food for all Vermonters.

The Vermont Agency of Agriculture, Food & Markets (VAAFMM) facilitates, supports, and encourages the growth and viability of agriculture in Vermont while protecting the working landscape, human health, animal health, plant health, consumers, and the environment.

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