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. Farm to school implementation differs by location but always includes one or more of the following:

**Procurement:** Local foods are purchased, promoted and served in the cafeteria or as a snack or taste-test.

**Education:** Students participate in education activities related to agriculture, food, health or nutrition.

**School gardens:** Students engage in hands-on learning through gardening. Farm to school empowers children and their families to make informed food choices while strengthening the local economy and contributing to vibrant communities.

Farm to school activities provide a variety of benefits to students, parents, schools, communities and food producers. This document outlines those cross-sectoral benefits and cites the research behind them. Farm to school is growing our future leaders, consumers, producers and community members.

### Cross-Sectoral Benefits of Farm to School

#### PUBLIC HEALTH
Farm to school activities provide healthy food options and nutrition and food-based education to influence healthy eating behaviors and healthy lifestyles in children and families. Through the use of school and community gardens, farm to school can contribute to healthy neighborhoods where communities have a better understanding of how food is grown and how food affects their health and wellness.

#### ECONOMY
Farm to school provides economic development opportunities to producers (e.g. farmers, ranchers, fishers) and laborers, distributors, processors, cooks and foodservice staff, as well as others who support the local food system.

#### EDUCATION
Farm to school can support educational outcomes for students by increasing student access to healthy foods in schools and promoting food and agriculture-based learning activities to enhance the quality of the educational experience. Farm to school curriculum and experiential activities are a platform to teach core content areas such as science, math and language arts.

#### ENVIRONMENT
Farm to school activities can support environmentally sound, sustainable and socially just approaches to food production, processing, packaging, transportation and marketing. Farm to school activities may promote an ecological ethic among participants, develop infrastructure that supports healthy environments and promote agriculture and food distribution practices that mitigate climate change.
Student Health and Achievement

Farm to school is a school-based strategy that focuses on creating a healthy school food environment.\(^1\) Farm to school activities support children’s development of healthy eating habits—such as preferences for and consumption of fruits and vegetables—while improving family food security by boosting the quality of school meal programs.\(^2-5\)

Key outcomes include:

- Improvement in early childhood and K-12 eating behaviors, including choosing healthier options in the cafeteria; consuming more fruits and vegetables through farm to school meals and at home (+0.99 to +1.3 servings/day); consuming less unhealthy foods and sodas; reducing screen time; and increasing physical activity.\(^6-31\)
- Increase in knowledge and awareness about gardening, agriculture, healthy eating, local foods and seasonality (in early childhood and K-12 settings).\(^7,20-22,26,31-33\)
- Demonstrated willingness to try new foods and healthier options (in early childhood and K-12 settings).\(^7,20-22,30-33\)
- Enhanced overall academic achievement in K-12 settings; provides children with an understanding of agriculture and the environment; and improves life skills, self-esteem, social skills and behavior.\(^34-35\)

Food Service Costs, Revenue, Interest

- Increase in student meal participation from 3 percent to 16 percent (average +9 percent), thus generating increased revenue through school meals programs.\(^8-9,20-21,23-25,36\)
- Improvements in food service operations, such as increased cafeteria offerings of fruits and vegetables; development of new seasonal recipes; and changes in cafeteria waste management policies.\(^8-9,21,23-25,36,37\)
- Improvement in food service staff motivation and morale; increase in knowledge and interest in local food preparation and seasonal recipes; and increase in interactions with teachers to strengthen classroom/cafeteria connections.\(^7,22,38\)

Benefits for Farmers

In general, purchases from local sources increase as farm to school programming matures. Studies demonstrate sites with local sourcing of up to 50 percent of all produce purchases in season.\(^7,9,20,22-23,25,36-37,39\)

- Average 5 percent increase in income from farm to school sales for individual farmers.\(^7,9,20,22-23,36,39\)
- Increase in market diversification; positive relationships with school districts, parents and community members; farmers contracted to plant crops for schools; opportunities to explore processing and preservation methods for institutional markets; establishment of grower collaboratives or cooperatives to supply institutional markets.\(^36-37\)

Community and Economy

- Increase in community awareness and interest about purchasing local foods and foods served in school cafeterias.\(^7,22\)
- Increase in economic activity. In one study, each dollar invested in farm to school stimulated an additional $2.16 of local economic activity.\(^40\)
- Strengthened connections within the state’s food economy.\(^40\)
- Improved household food security.\(^40\)
- Creation and maintenance of jobs; for every job created by school districts purchasing local foods, additional economic activity would create another 1.67 jobs.\(^40\)

Teachers

- Positive changes in teachers’ diets and lifestyles; positive attitudes about integrating farm to school related information in curriculum.\(^7,20-22,30\)

Parents

- Increase in ability and interest in incorporating healthier foods in family diets and guiding children in early childhood and K-12 age groups to make healthier choices; positive changes in shopping patterns reflecting healthy and local foods.\(^7,20,22,27,33\)
- Increase in knowledge among parents of young children about farmers’ markets in the area.\(^33\)
- Increase among young children in asking their families to make healthier purchases.\(^33\)
## Summary of Farm to School Benefits

The core elements of farm to school (local procurement, school gardens, food and farm related education) provide for unique cross-sectoral outcomes and linkages in public health, community economic development, education and environmental quality.

<table>
<thead>
<tr>
<th>Population</th>
<th>Benefits</th>
<th>Cross-sector Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit and vegetable consumption</td>
<td>Increased +0.99 to +1.3 servings/day</td>
<td>Public Health</td>
</tr>
<tr>
<td>Physical activity</td>
<td>Reduced screen time and increased physical activity</td>
<td>Public Health</td>
</tr>
<tr>
<td>Food-system awareness</td>
<td>Increased knowledge regarding: gardening, agriculture, healthy food, local food, seasonality</td>
<td>Public Health</td>
</tr>
<tr>
<td>Food choices</td>
<td>Willingness to try new and healthy food; choosing healthier options in the cafeteria and at home</td>
<td>Public Health, Education, Environmental Quality</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>Overall improvement (K-12)</td>
<td>Education</td>
</tr>
<tr>
<td>Behavior</td>
<td>Improved life skills, self-esteem and social skills</td>
<td>Education</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meal participation</td>
<td>Average increase of 9% (range 3% to 16%)</td>
<td>Public Health, Economic Development</td>
</tr>
<tr>
<td>Local Sourcing</td>
<td>Up to 50% of all produce purchases in season</td>
<td>Economic Development, Environmental Quality</td>
</tr>
<tr>
<td>Improved cafeteria operations</td>
<td>Increased offerings of fruits and vegetables, new seasonal recipes, new waste management policies</td>
<td>Public Health</td>
</tr>
<tr>
<td>Food service staff</td>
<td>Improved morale, increased knowledge</td>
<td>Education, Economic Development</td>
</tr>
<tr>
<td>Teachers</td>
<td>Positive diet and lifestyle changes</td>
<td>Public Health</td>
</tr>
<tr>
<td><strong>Farmers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>Average increase of 5%</td>
<td>Economic Development</td>
</tr>
<tr>
<td>Markets</td>
<td>Increased diversification and new opportunities</td>
<td>Economic Development</td>
</tr>
<tr>
<td><strong>Community</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economy</td>
<td>$2.16 economic activity generated for every $1 spent</td>
<td>Economic Development</td>
</tr>
<tr>
<td>Job creation</td>
<td>Each new farm to school job contributes to the creation of additional 1.67 jobs</td>
<td>Economic Development</td>
</tr>
<tr>
<td>Families</td>
<td>Increased food security and positive diet changes</td>
<td>Public Health</td>
</tr>
</tbody>
</table>


23. Center for Food and Justice, UEP, Occidental College. Riverside Farm to School Demonstration Project: Final grant report to the California Endowment. Los Angeles, CA: A report of the Center for Food and Justice, UEP, Occidental College; December 2006 and 2004.


