

PLAC 570: Community Food Systems

Farm-to-School Project Report

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I. Issues

Children in America increasingly are suffering from diet-related diseases such as obesity and Type II diabetes as well as from behavioral disorders such as Attention Deficit and Attention Deficit Hyperactive Disorders. Not only are America's children eating more processed food, and fast food, but the food they are eating is also higher in fat and sugar than it was a few decades ago. Poor health and behavioral disorders have significant implications for students' future and their performance in school. Children have also become increasingly disconnected to their food. Specifically, children lack an adequate understanding of food production and the relationship to local places and their ecologies and associated environmental implications. Further, this disconnect has resulted in diminished understanding of the health and nutritional implications of food.

Recognizing the harmful effects of sugar-laden drinks and foods high in saturated fats on children's health, USDA and individual schools nationwide have made significant strides in improving school breakfast and lunch offerings for students in recent years. Yet most schools still purchase most of their food from major distributors whose sources are not necessarily local, and students are still missing an opportunity to gain a better understanding of local food production, local ecologies and the environmental implications of industrial agriculture. Students and local farmers are also missing an opportunity to be part of a local community food system. Farm to school programs that provide food from local farms to area schools have popped up across the nation in response to this issue. While other states including Kentucky, Vermont, North Carolina and New York have adopted statewide local farm-to-school policies and programs, Virginia has only recently begun to take interest in this issue. During the 2007 session of the General Assembly, Senator Russ Potts sponsored resolution [SJ 347](#) directing Virginia's Secretary of Agriculture to set up a task force to study implementing a farm-to-school program in Virginia, and we applaud his efforts toward a statewide policy and program.

II. Goals

Work Plan Goals:

- a. To improve student's health and nutrition in the Charlottesville region
- b. To expand students' understanding of their food system through school lunch and experiential learning
- c. To help teachers meet science/ecology standards of learning
- d. To provide an additional source of income to local farmers
- e. To address the inequitable accessibility to food that may result in poor health.

The goals from our work plan in some ways proved too far-reaching for the scope of this semester-long project, but we think that they can be achieved in time as the farms and schools that we contacted set up partnerships with each other and teachers integrate lessons about local food production into their Virginia Standards of Learning health and science curriculums.

It is our hope that launching a pilot farm-to-school program in Albemarle County will serve as a successful example for the Secretary's task force of how providing school children with fresh, local food benefits their physical health and academic performance and gives them a stronger understanding of their community and place, all while supporting Virginia's farmers. Additionally, we hope that this example will enable the various county school system administrators to adopt their own farm-to-school buying policies, committing to perhaps 100% of all produce coming from local farms when it is in season, and some portion of meat, eggs and dairy products sourced locally year-round.

III. Initial Assumptions and Hypothesis

In addition to providing fresh, local food in school cafeterias, an educational component can add legitimacy to a Farm to School initiative and garner support from teachers and administrators. Specifically, incorporating lessons on food, nutrition, gardening, farming, agriculture, and production in the classroom for kindergarten through fifth grade encourages an understanding of and a connection to food at a young age. These lessons can also help teachers meet the Virginia Standards of Learning (SOLs) not only in Health/Nutrition and Sciences but also in English, Math, and History. However, it is important to note that due to the increased pressures on teachers, incorporating a food lessons may be most effective if gradually phased into curricula and incorporated over content areas.

IV. Methodology

- i. Review existing research on local food in the Charlottesville/Albemarle School system, garden projects, etc.
- ii. Contact public school staff/faculty involved in garden projects, nutrition, food purchasing
- iii. Email Sustainable Community Food listserv to assess farm-side interest.
- iv. Identify willing and able partners in 1 school and 1 farm to pilot the project. Assess whether a school with lower-income students can pilot the project.
- v. Contact Curry School to find possible partner for designing a curriculum
- vi. Identify existing school garden curriculums with specified SOL's as models for the curriculum
- vii. Present the pilot project idea to PTO board and school principal to assess interest and support
- viii. Develop guidance document for other area schools that wish to implement a similar program
 1. Other programs/past research
 2. Local resources/willing farm partners/logistics
- ix. Develop visual presentation for the class and community

V. Findings and Results

Curriculum Development

Although a Farm to School curriculum was not implemented for this project to date, the guidance document functions as a resource for teacher and schools who want to pair lessons about local food production with a farm to school purchasing program. Research has shown that children in farm-to-school programs, when given the choice and the education, will choose healthier foods. For example, studies of farm to salad bar program in California demonstrate that local, fresh farm products generate higher participation with children eating more fruits and vegetables compared to children not in such farm to school programs. Students who choose farm to-school meals also waste less food than their peers eating hot lunches.¹ Case studies provided in the model program portion of the guidance document provide more examples of the success of Farm to School programs that will hopefully inspire Charlottesville-area schools to believe that they can benefit from similar programs and curricula integration.

¹ "Frequently Asked Questions." Farm to School. 21 March 2007 <<http://www.farmtoschool.org/faq.htm>>

Farm to School Purchasing

Our intuitive choice in trying to set up farm to school partnerships was to work with public schools because we could reach the greatest number of students, as well as those students without access to adequate nutrition outside of school. Additionally, we chose to work with an elementary school because these are usually the smallest schools in a community with the most accessible administration, as well as a level of demand for produce most in line with what a single farmer could provide. Elementary school-aged children also seemed to be the most important to target for forming healthy eating habits at a young age.

The initial inquiry with the Albemarle County school system yielded a very positive and supportive response from Christina Pitsenberger, director of Food Services for county schools. Pitsenberger was interested in buying local food, liked the CSA idea and told us that we were welcome to contact schools to find a good candidate for the pilot program. The major barrier that she identified for setting up farm-to-school partnerships was getting food delivered to schools—the advantage of buying produce from a larger distributor with a truck fleet. Cost, of course, is also always a consideration, but she seemed more interested in finding farmers who wanted to sell and could deliver produce to schools, and working out costs later. Identifying interested farmers proved easiest to accomplish by sending an email out to the Eat Local listserv. Eat Local is an open community group that formed in response to the findings of the Spring 2006 Community Food Systems Class at UVA. The email yielded responses from five interested farmers, one of which was in Albemarle County and proximate to an elementary school².

Logistical and regulatory barriers to the pilot program continue to hinder its full implementation. Primarily, the Virginia Department of Health requires that every food vendor selling to public schools in Virginia must be certified by either USDA or the Virginia Department of Agriculture, yet the certification criteria apply to middleman delivery operations like Cavalier or Standard produce, not individual farmers. Because the farmer with whom the school would like to partner is not certified as a food vendor, Christina Pitsenberger cannot approve a purchase contract between the farmer and a school yet.

Even with permission from the director of food services to buy from a particular local farm, each school's cafeteria manager must still make his or her own decision about what the school can

² Farmers in Madison, Louisa and Augusta counties responded as well. I put Horse and Buggy CSA from Augusta in touch with Meriwether-Godsey, a private school catering company. I was not able to follow up fully with the other farmers.

afford. Additionally, it may simply take time to adjust to the idea of sourcing food from places other than Standard and Cavalier produce, and it will likely mean additional work for the cafeteria managers on the front end, setting up new contracts and placing purchase orders for seasonally available food.

VI. Recommendations

Curriculum Development

In addition to providing fresh, local food in school cafeterias, integrating food lessons with various SOL requirements will further the goal of connecting children to their food. We recommend that all stakeholders become proactive in launching the farm to school program. First, the decision must be made by the school division administrators to support such an initiative through policy and finances. Second, teachers must be aware of the need for such a program and be willing to incorporate across the content area in their curriculum. Third, food services must play a significant part in purchasing, preparing, and promoting local, healthy food in their cafeterias. Fourth, support and advocacy by parents and parent associations are essential for initiation and continuation of a farm to school program.

Farm-to-School Purchasing

Economies of scale dictate many of the business and policy decisions that city and county school systems must make, and thus the idea of individual schools within a district purchasing food from individual farms seems like a complicated procurement system for someone like Christina Pitsenberger to manage. A pilot program needs to prove feasible before the whole system can consider adopting a farm to school buying policy. Yet, it is likely that waiting until the General Assembly issues farm to school legislation with program guidelines and funding attached will be an easier choice for most city and county school systems than to implement a pilot program and at the grassroots level, as we are doing here. We recommend that Secretary Bloxom's task force address the issue of food vendor certification for farmers first and foremost, as this has proven to be our most significant barrier to implementing a pilot program in Albemarle County. Additionally, the hours we spent identifying interested parties and coordinating communications between them indicates that a Farm to School Program Coordinator position needs to be created within VDCAS or VDE in order to oversee this type of legwork. Finally, food services administrators and cafeteria managers in all the state's public school systems would benefit from trainings and information

sessions regarding why serving local food as part of school lunches is important and how to incorporate seasonally available food into their menus.

According to the National Farm to School website (www.farmtoschool.org), Virginia's neighbors North Carolina and Kentucky set up state-wide farm-to-school programs through partnerships with the state Department of Agriculture and national Department of Defense. While the Departments of Agriculture had contract information and could find farmers to sell to the program, the DoD had a procurement system already in place through which they ran all of the food. The DoD also negotiated prices and contracts with farmers. The 30 schools currently participating in North Carolina receive no funding for purchases, but the program is cost effective because they are able to use the DoD storage facilities and deliver system free of charge. New York state's farm to school program came about when a coalition of school food service directors, farmers, health professionals, and others interested in increasing use of local foods in schools surveyed local food service directors, forged links between farmers and schools and was a catalyst for the New York state legislature passing a farm to school bill that "charges the Departments of Education and of Agriculture and Markets with working together to facilitate the purchase of New York farm products by schools, universities, and other educational institutions" (www.farmtoschool.org).

While the Department of Agriculture taskforce must decide which state farm to school program model would work best in Virginia, we hope that the task force will recommend a model more like New York's that puts schools directly in touch with farmers and relies on support from the Departments of Education and Agriculture, rather than relying on the Department of Defense as a middle man, and limiting school's contact with local farmers. Farm to school purchasing programs need to be about more than local salad greens and apples. These programs need to foster relationships between students and farmers, teachers and farmers in order for to students to the role that farmers play in their communities.

Additional Resources

Virginia Curricula Models

Not only has there been national success in Farm to School initiatives and the incorporation of education components, there are existing Virginia schools and programs that have also embraced the Farm to School concept and integrated lessons with the SOLs. The following are examples Farm to School curricula.

Virginia Agriculture in the Classroom

Agriculture in the Classroom (AIRC) is a national grassroots program coordinated by the United States Department of Agriculture (USDA) with the goal of helping expand student awareness of the role of agriculture in the society, economy, and everyday life. AIRC is managed locally, carried out in each state depending on state needs and interests.³

Began in 1991, The Virginia Foundation for Agriculture in the Classroom (AIRC) is the state-wide initiative that supports this USDA AIRC initiative in Virginia.⁴ Virginia AIRC “is an integrated educational teacher training program designed to foster an understanding of how agriculture affects the quality of our lives.” Further, the program is greatly aligned with Virginia’s Standards of Learning (SOL), providing lessons and hands-on activities that are appropriate for incorporation into current classroom curriculum.⁵ The foundation offers workshops for teachers to learn gardening program strategies and curriculum methods. Further, the Virginia AIRC offers resources for teachers such as classroom materials for projects and lesson plans on its website. *For more information visit the Virginia AIRC website at www.agintheclass.com.*

Tuckahoe Elementary Discovery Schoolyard

Tuckahoe Elementary Discovery Schoolyard, located in Arlington, provides an excellent example of embracing an educational and hands-on outlook on food lessons. According to visionaries of the Discovery Schoolyard, “Our vision is for a hands-on, learning schoolyard used in multiple ways. There are subjects taught with the outdoors as their inspiration (writing, art); subjects taught with the outdoors as their context (science, math); and an emphasis given to using

³ “About Agriculture in the Classroom.” USDA Agriculture in the Classroom. 21 March 2007
<<http://www.agclassroom.org/aitc/index.htm>>

⁴ “Virginia Foundation for Agriculture in the Classroom.” Virginia Foundation for Agriculture in the Classroom. 21 March 2007 <<http://www.agintheclass.com/foundation/foundation.asp>>

⁵ “Ag in the Classroom.” Virginia Foundation for Agriculture in the Classroom <<http://www.agintheclass.com/>>

the outdoors to teach the essentials of environmental stewardship so necessary to the quality of our lives.”⁶ Specifically, their “Bean Sprout Corner” consists of raised beds in which students may participate in the actual growing of food and flowers, providing teachers with an opportunity to connect SOLs in nutrition, science, and math lessons to the hands-on gardening experience.⁷

To learn more about how Tuckahoe teachers are integrating food lessons with SOL curriculum please visit <http://www.arlington.k12.va.us/schools/tuckahoe/schoolyard/>.

Pearson Corner Elementary Garden Roots and Shoots

Pearson Corner Elementary, located in Mechanicsville, has used Roots and Shoots, a school garden program originating at the Elizabeth Gamble Garden Center in Palo Alto, California in 1985, as their model.⁸ The teacher in charge of the Roots and Shoots inspired program at Pearson Corner seeks teacher feed back for ways in which to incorporate SOL needs in the garden. Some of the lessons that address SOLs include: life cycles (plants, frogs, butterflies), from flower to fruit, change over time, types of seeds, planting seeds, plant needs and parts, edible vs. non edible parts, deciduous vs. evergreen, plant benefits: provide food for animals, controls erosion, homes/habitat for animals. Further, currently the school is creating a “V is for Virginia” garden. In the garden they hope to grow cotton, tobacco, peanuts, corn and other Virginia plants that have played an important role in Virginia’s history. The ultimate intention is to create a history lesson emphasizing the history of these Virginia crops with SOL guidelines.

Pungoteauge Elementary and the Master Gardeners of the Eastern Shore

Pungoteauge Elementary in Melfa partnered with a volunteer group called Master Gardeners of the Eastern Shore which provide a Roots and Shoots model experience for interested schools. “This program is designed to educate 2nd grade students about gardening and the cycles of plants from seed to plant to flower to seed. The curriculum is tied in to the SOLs to reinforce knowledge and competencies required for student and school success.”⁹ Throughout the course of the growing season, children actively have a hand in growing fruits and vegetables such as lettuce, radish,

⁶ “Overview.” Tuckahoe Discovery Schoolyard. 21 March 2007

<<http://www.arlington.k12.va.us/schools/tuckahoe/schoolyard/overview.html>>

⁷ “Beansprout Corner.” Tuckahoe Discovery Schoolyard. 21 March 2007

<<http://www.arlington.k12.va.us/schools/tuckahoe/schoolyard/beansprout.html>>

⁸ “Home.” Roots and Shoots School Garden. 21 March 2007 <<http://www.rootsnshoots.info/>>

⁹ “Master Gardeners of the Eastern Shore Elementary Program.” Master Gardeners of the Eastern Shore. November 2004. (Email to Katie Hicklin from Kitty Croke, 13 March 2007).

spinach, etc., learning composting, maintenance, and harvesting techniques. When the plants are ready to be harvested, the children participate in a “Salad Day” in which they gather the various vegetables for a salad and get to eat it. Accompanied with this hands-on gardening experience, children learn various SOL objects such as parts of the plants, needs of plants, and nutrition. Together, this interested volunteer group and teachers, link experiential gardening learning with objectives of the SOLs.

Pertinent Standards Of Learning Objectives:

With the increased demands on teachers to ensure their students’ meeting SOL objectives, it is imperative for Farm to School programs to provide an educational component, directly related to the SOLs. Teachers need to be able to feel they can integrate food lessons easily into SOLs they currently teach and not be burdened with additional curricula. In addition to directly addressing SOLs that pertain to food, opportunity exists for teaching across the content area. Teachers can also incorporate English, Math, and Social Science SOL objectives within each lesson plan. It is the intent of sample lesson plans to illustrate how this can be accomplished. *Teachers can view all the Standards on line at the Virginia Department of Education homepage at <http://www.pen.k12.va.us/>.*

SAMPLE LESSON PLANS:

For the purposes of this report, a sample lesson plan for each grade, kindergarten through fifth grade, has been provided to relate food lessons to other content SOL objectives. The following lesson plans serve as examples of how food, gardening, farming, and preparation lessons may be integrated into existing curricula—Farm to School may serve as a valuable learning too. Further, countless lesson plans may be found online on various teaching resource websites.

Kindergarten: Pumpkin Pudding

Concepts and Skills

- Scientific investigation
- Locally grown food choices
- Measurement, counting, identifying shapes, comparison
- Communicating ideas
- Community workers
- Comparing present food habits with past

- Thanksgiving history and traditions

SOLS Covered

Health – K.1

Science – K.1, K.9

English – K.11

Math – K.8, K.11, K.13, K.14

Social Studies – K.2, K.6

Materials

- Pumpkins, Teacher’s cutting tool, newspaper, wax paper
- Crock-pot to cook pumpkin meat
- Recipe as follows:

Serving Size : 16

1 large package instant vanilla sugar-free pudding

1 teaspoon pumpkin pie spice

1 cup cooked pumpkin

2 cups nonfat milk

1/4 cup cool whip

Mix together instant pudding, spice , and pumpkin. Add milk and

Cool Whip and beat together with wire whip. Refrigerated for 15 minutes, and serve. Can be served plain or individual graham cracker tart shells.

Source:<http://www.massrecipes.com/recipes/03/05/pumpkinpudding56902.html>

Activities

1. Field trip to Local Farmers Market to buy pumpkins
2. Discuss where people get most of their food today
3. Weigh, measure, compare, and describe pumpkins
4. Open and separate seeds from meat of pumpkin
5. Cook pumpkin in crock-pot for pudding
6. Count seeds
7. Make the Pudding as part of a Thanksgiving feast
8. Dry seeds to feed the birds outside the window during winter
9. Write and illustrate a group and individual story about the farm, the pudding, or Thanksgiving

Extensions

- Read stories about the first Thanksgiving

- Draw carved pumpkins
- Other recipes that children and parents could make at home

First Grade: Maple Syrup

Concepts and Skills

- Measurement
- Collection of data
- Graphing data
- Safety
- Communicating ideas
- Past versus present

SOLS Covered

Science – 1.1

Health – 1.3

English – 1.1, 1.12

Math – 1.12, 1.18

Social Studies – 1.1

Materials

- Parent volunteers
- 2 large buckets and large plastic containers
- Access to stove and large cooking pots

Activities

- Field trip to a local farm that has a maple sugar tree
- Watching the farmer drill a hole and place dripping tube in the tree and see the sap begin to drip into a bucket
- Different parents volunteering to take their children daily to collect the sap and bring to school
- Boiling down the sap to make maple syrup; this usually takes a couple school days.
Volunteer parents will frequently take a sample from the kitchen to the classroom so the children can note the change in consistency and color.
- Measure the syrup and compare to amount before boiling down

- Pancake breakfast using the syrup
- Make a book and illustrate the making of maple syrup
- Guest speaker (maybe science teacher or older student) to explain why so much sap made so little syrup

Extensions

- Encourage parents to visit a maple sugar camp (several in Highland County, Virginia)
- Visit a ‘pick-you-own-strawberry’ farm in May and pick strawberries for a class snack

Second Grade: Stone Soup

Concepts and Skills

- Measurement
- Plants as food source
- Healthy food choices
- Scarcity of food
- Safety
- Reading fiction
- Writing stories

SOLS Covered

Science – 2.8

Health – 2.2

English – 2.8, 2.11

Math – 2.7

Social Studies – 2.9

Materials

- “Stone Soup” story
- Large crock pot and utensils
- Vegetables

Activities

- Read “Stone Soup”
- Field trip to a local farmer market in late summer when vegetables are available

- Students select a variety of locally grown vegetables to make their soup (tomatoes, potatoes, carrots, beans, peppers, onions, etc.)
- Measure ingredients as they are put in the pot to make the soup
- Eat the soup
- Write own story and illustrate about things farmers grow

Extensions

- Ask parents to take turns preparing soup once a week during the month of February using as many vegetables as possible

Third Grade: Seeds to Plants

Concepts and Skills

- Scientific Investigation
- Measurement
- Graphing data
- Descriptive and report writing

SOLS Covered

Science – 3.1, 3.6, 3.8

English – 3.9, 3.10

Math – 3.14, 3.17, 3.21, 3.22

Materials

- Seeds saved from locally grown tomato
- Potting soil
- Milk cartons

Activities

- In the beginning of the school year, have children take seeds from locally grown tomatoes, dry, and store in a dark place
- In early April, plant the seeds
- Journal the plants growth by measuring weekly and recording
- Discuss and supply things plants need for growth—sunlight, water, proper temperature
- Graph the plants growth using weekly measurements

Extensions

- Make an excel template for the students to enter plant data to produce a graph (if teacher is not able to do a template, ask the computer lab person for assistance)
- Students should plan a small vegetable or herb garden for their home—should research foods that grow well in their environment

Fourth Grade: Local Food Shed

Concepts and Skills

- Research
- Collecting data
- Map skills
- Descriptive and report writing
- Oral Presentation

SOLS Covered

Science – 4.1, 4.8

English – 4.6

Health – 4.1

Materials

- Map of Charlottesville and surrounding counties
- Computer and library for research
- Magazines with pictures of food
- Poster board and glue

Activities

- Children will outline the counties adjacent to Charlottesville
- Research locally grown food
- Guest speaker from the local Department of Agriculture regarding locally grown food production
- Make a collage by cutting and pasting food pictures that represents local food shed
- Make a days menu using as many locally grown foods as possible using the latest nutritional guidelines
- Oral presentation and discussion of menus

Extensions

- Visit local farmer's market
- Make a list of food items that the students eat that cannot be grown locally and must be transported into the area

Fifth Grade: Food Service Symbols

Concepts and Skills

- Research and Investigation
- Representation of Data
- Use of symbols to convey meaning
- Note taking

SOLS Covered

Science – 5.1

Health – 5.2

English – 5.1, 5.7

Art – 5.6, 5.9

Materials

- Library and Internet for research
- Note cards
- Art supplies

Activities

- School Nutritionist as guest speaker
- Research dietary standards for a “healthy choice food”
- Research locally grown “healthy foods”
- Create art work symbols to identify a healthy choice food, a locally grown food choice, an unhealthy food choice, and an “eat small serving” food choice. Small groups would work on a different symbol
- Make a chart and explain symbols to all grade levels in the school
- Evaluate school menus, assigning a symbol to each item
- Ask food services to display the correct symbol with each food item served

Extensions

- After several weeks of using the symbols, investigate if eating habits of any grade level have changed

Additional Curricula Resources:

The following are possible curriculum and educational related sources for Farm to School programs.

Agriculture in the Classroom (AIRC)

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

AIRC a grassroots program developed by the United States Department of Agriculture, offers many resources for teachers and those who may want to start a farm to school program that is integrated with curriculum. The website provides a National Resource Directory with lesson plans to help teachers teach across the curriculum for grades K-12. The AgroWorld E-zine provides current events and resources that enhance curricula.

Center for Ecoliteracy

<http://www.ecoliteracy.org/programs/rsl.html>

The Center for Ecoliteracy's program, Rethinking School Lunch (RSL), offers a systems approach to address the crisis in childhood obesity, provide nutrition education, and teach ecological knowledge. The RSL page offers an online RSL guide, providing technical assistance, grant, and presentation advice. RSL provides a model framework for a comprehensive curriculum that integrates campus gardens, kitchen classrooms, school lunch, and a wide range of academic subjects.

Kids Gardening

<http://www.kidsgardening.com/>

Kids Gardening website offers classroom guides for gardening projects and activities linked to curriculum. The site also offers a "search" function in which schools with garden programs may be located based on location and various programs or foci offered.

National Farm to School

<http://www.farmtoschool.org/links.htm>

The National Farm to School links page contains several resources for model programs as well as curriculum materials.

New Hampshire Farm to School

<http://www.nhfarmtoschool.org/curriculum.html>

The curriculum page on the New Hampshire National Farm to School website contains several links to educational resources.

Sustainable Agriculture Education (SAGE)

<http://www.sagecenter.org/Projectareas/Ed/KC.htm>

The SAGE website offers links to sustainable agriculture resources (publication, programs, etc). *Kids Cook Farm Fresh Foods* which is a sustainable agriculture curriculum for grades 2 - 7 consisting of recipes, activities, and farm profiles, may be ordered.

United States Department of Agriculture (USDA)

http://www.nal.usda.gov/afsic/AFSIC_pubs/k-12.htm

The USDA offers a list of sustainable agriculture resources for teachers, grade K-12. The site also offers sustainable agriculture contact information for teachers.

Virginia Agriculture in the Classroom

<http://www.agintheclass.com/>

The Virginia Agriculture in the Classroom website provides resources and educational materials for teachers. There is a comprehensive list of lesson plans that may be downloaded as well as additional classroom materials to teach agriculture that may be purchased.

The Virginia Cooperative Extension

<http://www.ext.vt.edu/resources/>

The Virginia Cooperative Extension website offers educational programs and resources on basically anything related to agriculture. The site offers a wealth of information on such subjects as crops and grains, fruits and vegetables, health and nutrition, natural resources and environmental management, livestock, poultry and dairy, etc.

Virginia Programs with Integrated Curriculum

The following lists a few schools in which food lessons have been integrated into SOL objectives.

Tuckahoe Elementary Discovery Schoolyard

<http://www.arlington.k12.va.us/schools/tuckahoe/schoolyard/>

Tuckahoe Elementary, located in Arlington, has seven outdoor classrooms. This schoolyard is nationally recognized and greatly emphasizes experiential outdoor learning and SOL objectives. The Bean Sprout curriculum and the Peter Rabbit gardening curriculum for 1st grades may be of interested.

Contact information: Mary Mclean, mary_mclean@apsva.us

Body Camp Elementary

Body Camp Elementary, located in Bedford, has an after school gardening program that links the SOLs with the gardening experiences.

Contact information: Annette Jenkins, Awjteachk@aol.com

Francis Mallory Elementary

Francis Mallory Elementary, located in Hampton, has created a city wide enrichment program called Community CHROME Enrichment Program. CHROME is an after-school enrichment program, where students in grades one through fifth grade participate in science projects (some related to food). The curriculum is drawn from SOLs for grades 1-5.

Contact information: Gwyn Lomax, Gwynlomax@aol.com

Pearson Corner Elementary Garden Roots and Shoots

Pearson Corner Elementary, located in Mechanicsville, has a Roots and Shoots garden program that specifically links SOL objectives to gardening.

Contact information: Anne Gilardi, gilardi@comcast.net

Pungoteauge Elementary and the Master Gardeners of the Eastern Shore

Master Gardeners of the Eastern shore are volunteers who teach gardening lessons to Pungoteauge students. Lessons greatly have an SOL focus.

Contact information: Kitty Croke, thecrokes@verizon.net