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Sustainable Living Teen Volunteers

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**Non-Technical Summary**

Maine 4-H Youth Development programs have produced nationally-recognized environmental education and healthy lifestyle curricula that are research-based and have reached thousands of participants. Our new statewide initiative in Sustainable Living Education for youth and adults provides an excellent context for the CYFAR Maine Sustainable Communities Project (MSCP), Sustainable Living Teen Volunteers (SLTV). The SLTV program will be conducted at two of our current 4-H Camp and Learning Centers in collaboration with local schools. After completing their training, teens will teach sustainable living concepts and practices to youth in middle schools and 4-H clubs. The SLTVs will learn valuable life skills and participate in service learning in their communities. Richard Louv (2005) has documented some disturbing trends in current society: children ages six to eighteen are spending 30 hours or more per week using electronic media; 30% of children and teens are dangerously overweight or obese; nearly eight million children in the US have been diagnosed with learning disabilities and mental disorders; a 600 percent increase in prescriptions of psychotropic drugs in the last decade; among others. These trends have been linked to the decline in physical, imaginative, unstructured, outdoor play that was an everyday occurrence just a generation ago. In addition, evidence suggests that many of our youth do not value the environment, conservation, living sustainably, or outdoor experiences. Our Sustainable Living Teen Volunteer model will play a significant role in changing these attitudes and making a difference in the lives of Maine youth and their communities. It is expected that, over the course of the five years of this program, high school and middle school-aged youth will gain knowledge and learn skills related to living more sustainable lifestyles, and will share the knowledge and skills with other students, with their families, and with community members. It is expected that practices and behaviors that contribute to living a more sustainable lifestyle will be adopted by participants and those they teach, leading to improved quality of life and quality of the environment.

**Accomplishments**

**Major goals of the project**

The Maine Sustainable Communities Project (MSCP) is a five-year effort to provide Maine teens with knowledge, skills, attitudes, and behavior necessary for fulfilling contributing lives. In years one, two, and three, two Community Sites will collaborate with schools in some of Maine’s most economically disadvantaged communities to train Maine teens (grades 9 to 12), in Sustainable Living Education. A total of 160 high school students (grades 9 to 12) and 380 middle school students (grades 4 to 8) will participate in the program in years one, two, and three. In years four and five a third Community Site will be added, and the original two Community Sites will start a new cycle of the program. A total of 240 high school students and
570 middle school students will participate in the program in years four and five. Desired short-term outcomes of the program are that high school students will: participate in Sustainable Living Teen Volunteer (SLTV) training; learn and practice concepts of ecology and sustainable living; develop and conduct service learning projects and activities with middle school students; and mentor a total of 380 middle school students in grades 4 to 8. Middle schools students will: learn concepts of ecology and sustainable living. Outputs of the MSCP include: SLTV training; service learning projects conducted by SLTVs; mentoring of middle school students by SLTVs; on-going revision and updating of the Sustainable Living Volunteer curriculum and the Catalyst teen leadership development curriculum. Desired long-term outcomes of the program are that high school students will: develop positive relationships with caring adults in inclusive and safe environments; engage in their own learning; and will experience belonging, mastery, independence, and generosity. High school and middle school students will: engage in positive learning experiences in classroom and outdoor settings; learn the value of living sustainably and community service; and adopt sustainable living practices. Families and schools will: adopt sustainable living practices. Individuals, families, and schools will reduce their environmental impact.

What was accomplished under these goals?

Richard Louv (2005) has documented some disturbing trends in current society: children ages six to eighteen are spending 30 hours or more per week using electronic media; 30% of children and teens are dangerously overweight or obese; nearly eight million children in the US have been diagnosed with learning disabilities and mental disorders; a 600 percent increase in prescriptions of psychotropic drugs in the last decade; among others. These trends have been linked to the decline in physical, imaginative, unstructured, outdoor play that was an everyday occurrence just a generation ago. In addition, evidence suggests that many of our youth do not value the environment, conservation, living sustainably, or outdoor experiences. Our Sustainable Living Teen Volunteer model was successful in changing these attitudes and making a difference in the lives of Maine youth and their communities. Over the course of the five years of this program, 2,963 middle and high school students gained knowledge and learn life skills, shared this knowledge and skills with 6,339 younger students, and implemented 104 service learning projects. The project resulted in positive changes in students' attitudes towards school, learning, the outdoors, each other, and their teachers. Post-program surveys indicate that 58% believe they have a responsibility to solve environmental problems, and 64% believe they can change something in their communities for the better.

What opportunities for training and professional development has the project provided?

At each site, seasonal staff members were hired in spring and fall to conduct the residential program on-site and provide follow-up support to the schools after the training. Staff members received training in experiential education methods, use of low-ropes challenge course elements, and a process for identifying a service learning project (community assets or ripple effect mapping). Participants learned subject material in ecology, ecosystem science, and other STEM subjects specific to their curriculum needs. Participants also learned life skills, including team and group work, leaderships, problem solving, and decision-making. Teachers and adult chaperones participated with the students, learning experiential teaching methodologies that they were then able to use in their classrooms.

How have the results been disseminated to communities of interest?

After each residential environmental education program was complete, participants completed a program evaluation that asked them to rate their experience, what they learned, and how they felt about the experience and their own outcomes. Results were reported to schools and group leaders, funders, and program supports. Descriptions of the project have been included in the national CYFAR Annual Report. Local programs were shared with the general public through social media, school newsletters, and the websites of local organizations. For example, during year one, students the Belfast Community Outreach Program in Education (BCOPE), collaborated with the Belfast Free Library to host a gallery showing of the nature photography they produced through their service learning project. Students were on hand to talk about the project with members of the community who attended the showing. In another project, students from the Walker School in Liberty shared information about the project with patrons at the farmer's market they established at the school. Several schools were featured in articles about their service learning projects in school newsletters, on school websites, and in local papers. A good example of a multi-year project is the GOT Farms project (Greenhouses of Telstar) at the Telstar Middle and High School in Oxford County. Students have created a website (http://gotfarms.wordpress.com/), videos, and other media to share their school garden, greenhouse, and farm stand project with the local community.

What do you plan to do during the next reporting period to accomplish the goals?

{Nothing to report}
Actual FTEs for this Reporting Period

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Target Audience

Primary audience participants were low-income teens in public middle and high schools in Maine. Secondary audience participants were elementary and middle public school students in Maine. Most participants, both primary and secondary audience, were from schools with greater than 50% eligibility for the National School Lunch Program. A total of 2,963 primary audience students (grades 6 to 12) participated in the program over five years, from 59 different schools (some schools participated for multiple years). An additional 6,339 secondary audience youth, primarily elementary school students, were reached through mentoring and involvement in service learning projects. Racial and ethnic minorities were represented in proportions equivalent to those in the general population of youth in Maine: 95% White, non-Hispanic; 2% Black, non-Hispanic; 1% Asian, non-Hispanic; 2% Hispanic.

Participants began their program with a two-day to four-day residential environmental education training program at UMaine 4-H Camp and Learning Center to Bryant Pond in western Maine, or at UMaine 4-H Camp and Learning Center at Tanglewood in mid-coast Maine. Program content was tailored to the needs of each classroom or group, but all included sessions on teamwork, leadership, ecology and ecosystems, and sustainability. During the program students were led through a process to identify assets and needs in their community (either their school or their town), and to select a service learning project to implement after they returned. Initial plans were made for implementation, and follow-up sessions at the school helped ensure completion of the project. The program used experiential, hands-on learning, with a focus on problem solving and critical thinking.

Products

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Other Products

Product Type
Educational Aids or Curricula

Description
In years one to three, two Community Sites collaborated with schools in some of Maine's most economically disadvantaged communities to train public middle and high school students (grades 6 to 12), in sustainability, teamwork, leadership, and service learning. In years four and five, an additional Community Site joined the project, reaching primarily 4-H clubs and community groups. Over the five years of the project, 120 two-day to four-day residential environmental education trainings were conducted with a total of 2,963 primary audience students from 162 classrooms or groups, along with 422 teachers and 258 chaperones. All primary audience students demonstrated learning of ecological and sustainability concepts and practices, and demonstrated learning of life skills (especially team work and leadership). A total of 104 service learning projects were implemented: 34 school or community gardens were developed; 20 nature trails; 17 outdoor classrooms; 13 watershed restoration projects; 12 food security efforts; 12 art, photography, or theater projects; 11 health and wellness projects; 10 landscaping or cleanup projects on school or community property; others included control of invasive species, alternative energy, creating an afterschool teen center, and local history projects.

Long-term outcomes of the program, based on follow-up online surveys of participants, included: 64% agreed or strongly agreed that doing outdoor science makes it easier to understand classroom science; 78% that learning outdoors makes it easier to relate school learning to real life; 72% that they are more aware of environmental impact of personal actions; 44% that they feel more accepted by classmates; 46% that they feel more comfortable working with kids who are not their good friends; 63% that some classmates have skills they didn’t know about; 59% that they feel more confident about their future; 54% that made new friends; 58% that they believe they have a responsibility to solve environmental problems; 64% that they believe can change something in their community for the better.

Here are several examples of specific projects conducted by participants:

During the 2013-2014 school year students from Walker Elementary School in Liberty chose the theme of “Improving Health in Waldo County” for their service learning projects. One group of students noted that the Belfast Cooperative, a natural foods store, carried cigarettes, albeit “natural” ones. The students felt that this was not in line with the store’s mission of being a source of healthy, nutritious, and safe products for the community. The students created a well-reasoned, research-based proposal to have the cigarettes removed from the store and presented this to the Co-op’s Board of Directors. Following their presentation, the Board voted unanimously to remove cigarettes from the store’s inventory.

Another group of students from Walker Elementary identified the need for greater access to healthy, locally grown food in their community. In partnership with local farmers, they established a weekly farmer’s market on their school grounds.

During Christmas vacation of 2013 Hebron Station Elementary School was the site of a spill of 1,900 gallons of heating oil that leached into the nearby wetlands. Students were not able to return to school right away and had to hold K-6th grade classes at Oxford Hills High School. When the 6th graders returned to school they decided that they wanted to document and track this historic event for future generations to remember. They created a picture book that could be used with all grade levels to teach about and remember the event. Students read newspaper articles, interviewed students from all grade levels, interviewed school personnel, and had a Maine Department of Environmental Protection worker come to school to help the 6th graders understand the clean up process. They published their book in spring 2014 and sent one to the library at Bryant Pond 4-H Camp and Learning Center, gave one to the Hebron Town Office, and kept one for the school library. This program was a success both in the process and publication.

The New Suncook Elementary School students worked with Bryant Pond Field Teachers to create a teambuilding manual for the challenge course elements that were built on site and for the activities that the students wanted to include. This document is to be used by teachers in all grade levels to facilitate team activities with their students.

In southern Maine, a 4-H group used online resources to develop an organic hand lotion made with local seaweed as an ingredient, then conducted a blind comparison test with a commercially available brand. The majority of the 48 participants in the test preferred the organic lotion for its effectiveness, smell, and texture.
Changes/Problems

{Nothing to report}