

Penn State Cooperative Extension's Youth Programs Strengthen K-12 Education

Penn State Cooperative Extension offers nonformal educational programs designed to enhance the development of children and youth, to strengthen families, and to build caring, safe, and healthy communities. This report highlights some of the ways that we are making a difference in the lives of young people, families, volunteers, and communities. Our programs reach out to the K-12 educational system strengthening science, math, nutrition, communication and interpersonal skills.

4-H Clubs Change the Lives of Youth

- 33,000 youth, 8-19 years of age
- 1,820 clubs
- 67 counties
- 10,917 adult & youth volunteers
- National statistics suggest that the average 4-H volunteer contributes 220 hours per year. Valuing their time at \$16.54 per hour, the contribution of Pennsylvania 4-H volunteers was worth more than \$39 million in 2003.



For nearly 100 years, the Pennsylvania 4-H club program—a youth development program of Penn State Cooperative Extension—has provided supportive learning environments to help culturally diverse young people and adults to reach their full potential. During the program's early years, the educational experiences and life-skill development focused on

the farm and home, but as Pennsylvania's population changed, 4-H expanded its reach to serve urban and suburban young people.

Today, 4-H'ers not only participate in projects focusing on farm and home, made relevant in today's world through University research, but they also learn about computers, GIS/GPS, aerospace, and a variety of other science-based topics. Through school and community-focused experiential learning, young people develop knowledge and skills that meet the Pennsylvania educational standards and that prepare them to be capable, competent, and caring citizens in an ever-changing world.



4-H takes pride in its sustained commitment to working with young people. One example is the program's focus on citizenship. *Perry, Mifflin, and Juniata* counties's young people participate in a three-year program that begins by introducing them to township and county governments. In year two, they learn about state government, and in year three they learn about the federal government. They also learn about various government structures, career

opportunities, and the history of our government. During the program, the young people visit township, borough, or county governments, the state capital in Harrisburg, and Washington, D.C.

Ninety-one percent of the participants were able to identify county heritage, three responsibilities of citizenship, and five career opportunities. Sixty-seven percent listed the functions of their county government. Almost all young people indicated they are more likely to become active in local government after participating in the program.

To introduce children to agriculture and its impact in their community, *Warren County* hosted a Farm Day Camp for sixty children in which seventeen senior 4-H'ers gave presentations about their project animals. In evaluating their leadership, community awareness, citizenship and conflict resolution skills, 94 percent indicated they always or often have something worthwhile to share with others, 88 percent indicated they always or often participate in their community, 88 percent indicated they always or often have adults in their life they can talk to, 81 percent indicated they always or often resolve conflict.

4-H School Enrichment Program Broadens the Classroom Experience

- 73,000 youth
- 50,000 youth in Embryology
- 2,082 classrooms
- 60 counties

The 4-H school enrichment program brings hands-on science and leadership programming to young people from elementary through high school. Research-based educational materials help support Pennsylvania and National Academic Standards in science, environmental education, geography, family and consumer sciences, health, arts education, and other topics. These materials also provide opportunities for young people to practice life skills including communication, decision making, problem solving, caring for others, and responsibility.

Although agriculture is the largest business in Pennsylvania, most Pennsylvania children no longer live on farms. Their knowledge of food production and food systems is often limited to their trips to the grocery store. The Food System Education program provides a learner-centered educational experience for students in grades 1 through 6 in *Mifflin*, *Juniata*, and *Perry* counties. Students learn about wool production and processing, milk production and dairy product processing, honey production and the critical role of bees in food production, the role of corn by-products, food production and processing industries in Pennsylvania, and associated career opportunities, as well as economic, geographical, and climatological concepts affecting the national food

production, processing, transportation, and retailing systems. Teen leaders are trained to present the actual classroom lessons. In one year, over 6,000 students and about 50 teens were involved in the program.



This collaboration provides fun and hands-on opportunities for young people to acquire knowledge and life skills while getting homework help. 4-H extension educators also provide staff training and technical assistance at these sites. These 4-H educational programs may take place after school or during the summer, when parents are in need of supervised care for their children.

In *Delaware* County, the indoor gardening project reaches special-needs, disabled, home-schooled, minority, and low-income students in 30 schools across the county. The project addresses nineteen different Pennsylvania state standards in science and technology, biological sciences, and environment and ecology at the 4th- and 7th-grade levels. Project materials for limited resource children are funded by donations from local garden clubs. Teachers and group leaders may select supplemental experiments, classroom activities, and Web-based activities to adapt the content to fit their needs. Hands-on activities make science fun and interesting, and students learn how to observe and write descriptions for their science activities.

4-H Afterschool Programming Offered

- 900 youth
- 46 units
- 7 counties

Afterschool programming is a growing effort for Pennsylvania 4-H, which has established an Afterschool Task Force to enhance these efforts. Many programs are being developed in which 4-H educators collaborate with organizations such as the Boys & Girls Clubs, YM/WCAs, public housing, churches, migrant education, Salvation Army, 21st Century After School Programs, and local family centers that already offer afterschool education and care.

One example of afterschool programming occurs in *Bucks* County, where a one-week robotics camp was held for children in grades 5 and 6. The program was offered through Penn State Cooperative Extension in cooperation with Penn State Continuing Education at Abington. In this hands-on workshop, the young people designed their own robot inventions using Lego parts combined with a computer interface. They used motors, sensors, and computer software to create moving robots that reacted to light, avoided obstacles, and did other amazing things. None of the participants had previously participated in this type of program. In addition to the science and technology knowledge they gained, they worked in groups to accomplish tasks.

Penn State Nutrition Links Teaches Youth from Low-Income Families about Food

- 48 counties
- 13,221 youth

Penn State Nutrition Links oversees the delivery of both the Expanded Food and Nutrition Education Program (EFNEP) and the Pennsylvania Nutrition Education Program (PA NEP). Both programs are federally funded to provide nutrition education to Pennsylvania residents with limited incomes. EFNEP programming is for youth and caretakers of young children. PA NEP is for anyone, of any age, who is eligible for food stamps.

Nutrition Links provides nutrition education to help children develop healthy eating patterns and skills in preparing nutritious meals and snacks. Participants get hands-on experiences in food preparation, food safety, fitness, avoiding substance abuse, and other health-related topics. Youth activities are conducted in a variety of educational settings, including classroom enrichment, afterschool programs, day camps, 4-H clubs, residential camps, community centers, neighborhood groups, church youth groups, low-income housing programs, homework clubs, home gardening workshops, and summer youth group activities.



In 2003, *Indiana* County children received nutrition education on the ingredients of hearty soups, lessons on food safety and food preparation and opportunities to sample various types of soups. In addition, recipes for the parents were sent home with the children. The children's knowledge of the food guide pyramid increased significantly. Over 80 percent of the children indicated that they had never thought about making soups at home, but planned to continue trying new soups. All of the children could identify at least two reasons for washing their hands before and/or during food preparation.



Cloverbuds for Younger Children

- 800 youth, 5 to 8 years of age
- 15 counties (first year of program)

The Cloverbuds program introduces boys and girls to the 4-H program through formal and nonformal, age-appropriate activities in science and technology, community expressive arts, healthy living, environmental/earth science, personal development, citizenship and civic education, consumerism/family science, and plants and animals.

In *York* County, a unique Intergenerational Cloverbud Camp was offered. Grandparents were invited to bring their 5- to 8-year-old grandchildren. Participants

attended a week-long day camp, which gave grandparents and grandchildren an opportunity to participate in activities from the Cloverbud curriculum.

Special Audiences Served

4-H reaches many special audiences in the K-12 school-age group.

Adjudicated Youth

Approximately 15 Pennsylvania 4-H programs currently serve this special population. In *Sullivan* County, for example, extension has been working at the Red Rock Job Corps Center for more than 10 years. This center houses about 200 at-risk youths, who rotate out of the facility every 18 months. During their stay, the young people participate in 4-H clubs, learning leadership skills by taking officer roles. By completing 4-H projects in nutrition, financial management, archery, gardening, canning, leadership, wildlife, bird watching, and hiking, the youth increase their knowledge and life skills.

Special Needs

Single teen parenthood is a predictor of future economic hardship for both parent and child. Young mothers are less likely to finish high school and far more likely to be poor, unmarried, and welfare-dependent than those who give birth at later ages. To address these issues, Penn State Cooperative Extension works with the *Montgomery* County Teen Parent Task Force to educate pregnant and parenting teens, empower them to make healthy decisions regarding care of themselves and their babies, and prepare them for independent living and for the world of work.

Participants learn about managing money, the importance of fathers, decision making, anger management, ages and stages of



growth, and child care. The teens in the program identify the following behavior changes: purchasing smoke detectors,

spending more time with children, reading to children more, using a car seat more often, establishing a budget and managing money better, and graduating from school to increase the chances of obtaining a better-paying job.

Promoting School Community-University Partnerships to Enhance Resilience (PROSPER)

- 6,000 youth and their families
- 14 school districts

Purpose

PROSPER supports partnerships that use scientifically-tested programs to promote positive youth development, strong families, and prevent youth problem behaviors. This work complies with the No Child Left Behind Act and the Safe and Drug Free Schools Act. To accomplish effective implementation, the project brings together extension personnel, public school staff, state prevention specialists, prevention researchers, and other interested community partners. The programs currently being implemented around the state include curricula from:

- The Strengthening Families Program (Iowa State University)
- Life Skills Training Program (National Health Promotion Associates)

- Project Alert (Best Foundation)
- All Stars (Tanglewood Research Corporation)

Goals

PROSPER's goals are to assess the effectiveness of prevention programs that meet No Child Left Behind criteria and to learn what aspects of community partnerships are most important in producing positive outcomes.

Participating Schools and Communities

PROSPER is a multi-year project including two successive cohorts of 6th grade students in 14 Pennsylvania and 14 Iowa school districts. Pennsylvania schools and communities include:

- *Adams County*—Littlestown School District, Gettysburg Area School District
- *Carbon County*—Jim Thorpe Area School District, Panther Valley School District
- *Lackawanna County*—Carbondale Area School District, Riverside School District
- *Lehigh County*—Northern Lehigh School District, Salisbury School District
- *Luzerne County*—Pittston Area School District, Wyoming Valley West School District
- *McKean County*—Bradford Area School District
- *Monroe County*—Stroudsburg Area School District
- *Perry County*—West Perry School District, Susquenita School District

All PROSPER programs have previously demonstrated effectiveness at reducing youth risk and enhancing resilience. PROSPER youths and families are

being followed longitudinally to assess the program's long-term impact and the effectiveness and sustainability of the community-University partnership.



The Wilson Family does the Treasure Map activity from the Life Skills Training

Additional Youth Programs Reading Wizards: Parents and Children Reading Together

This program provides practical information about reading to parents of children in two age groups: 2- to 5-year-olds and 5- to 12-year-olds. The Reading Wizards fact sheets include tips on how to make the most of reading time with children, as well as activities based on either Dr. Seuss or Harry Potter books, respectively. Penn State Cooperative Extension and 4-H educators make presentations about reading at PTO meetings and at staff trainings for child-care workers and provide the Reading Wizards materials for use with parents. Currently, 38 counties are using these resources with elementary schools, libraries, and child care centers.

Bullying: It Isn't Just Child's Play

The issue of bullying in elementary and middle schools has become an increasing concern. Extension educators have developed program materials in collaboration with the Prevention

Research Center in Penn State's College of Health and Human Development. One publication is designed for teachers and school administrators, and another is designed for parents. The publications focus on the prevention of bullying and the promotion of safe environments in schools and neighborhoods. Extension and 4-H educators present information on bullying prevention at PTO meetings and teacher in-services. Fifteen counties are currently using these resources with elementary and middle schools.

Ready, Set Go . . . Getting Children Ready for School



This recently launched program helps parents prepare children between the ages of 3 and 6 for school. Four publications each address a specific area (math,

science, art, and reading) with tips on how parents can have fun with their child while enhancing the child's skills.

Putting YOUTH Back Into Sports

A new program called Putting YOUTH Back Into Sports was developed as an educational opportunity for coaches, parents, officials, and youth sports organizations' leaders and administrators to promote physical activity and positive sportsmanship. The goal of this program is to transform youth sports programs to address the whole child, instead of viewing the young person as only a player.

Since most children will not grow up to be professional athletes, the curriculum takes the perspective that the primary goals of youth sports are to foster the development of general physical competence and to promote physical activity, fun, life skills, sportsmanship, and good health.



The curriculum, which was developed collaboratively by Penn State and South Dakota State University, has been piloted with the intention that it will be transferred to extension educators as a train-the-trainer curriculum.

Youth Engaged in Technology

· 400 youth

The Youth Engaged in Technology (YET) program aims to enhance young people's marketable skills—especially those related to information sciences and technology—social skills, and prosocial skills. Technology is used as a vehicle through which young people engage in learning and contributing. The primary audience is high school young people with background factors that place them at risk (such as poverty or lack of engagement).

The program is structured as an afterschool or evening club conducted at the high school. The club meets twice a week (eight times a

month) during the school year. The major focus of the meetings is on technology projects (robotics, GPS/GIS, Web page development, nanofabrication). However, club members are involved in a community-service activity related to technology (such as cyber teens/cyberseniors, or computer in a box).

By participating in YET, the young people have the opportunity to increase their knowledge and use of technology; improve their academic skills related to math and science; increase their sense of mattering in the community; and increase their connection to their community. By enabling young people to contribute their ideas, energies, competencies, compassion and their caring attitudes, YET is increasing the likelihood that young people will be successful and have a sense of belonging to their community. The underpinning theoretical framework of the YET program is Community Youth Development; therefore, the program's major elements include skill development and learning, relationship building, and opportunities to contribute. This program is being pilot-tested in two high schools in *Potter County* and one high school in *Washington County*.

Intergenerational Programs

Intergenerational programs mobilize the talents, skills, energy, and resources of older adults in service to young people and vice versa. Through a variety of outreach initiatives, Penn State Cooperative Extension works to help older adults find viable opportunities to continue being productive, contributing members

of their communities. Program teams may include extension educators, University faculty and staff, agency and community organization representatives, students, and volunteers.



Here are some ways the Penn State Intergenerational program supports young people:

Promoting Civic Engagement

The “Futures Festival” is a special-events strategy for mobilizing citizens of all ages to take part in a community visioning process, in which residents come together to share their concerns and hopes for their community. Planning for these events is driven by a collaborative process involving representatives of local community organizations and agencies. For example, a group of Penn State faculty, extension agents, and community leaders agreed that the Futures Festival model would be a useful tool for promoting an age-inclusive participation process in two southwestern Pennsylvania communities—an urban community in *Allegheny* County in the south end of Pittsburgh and a rural community in *Fayette* County. Events held in 2002 each drew about 300 participants.

Environmental Education

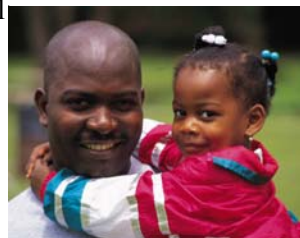
Central Pennsylvania is rich in both natural and human resources. However, many communities do not nurture these assets effectively. A collaborative team incorporating

resources and expertise from Shaver’s Creek Environmental Center and Penn State Cooperative Extension developed and piloted an intergenerational outdoor school program aimed at providing children and older adult volunteers with a broader understanding and appreciation for our environment. The next step is to develop intergenerational environmental education curricular materials for use in 4-H camps and other settings.

Early Childhood Education

Penn State has two accredited child-care facilities that care for children of University students, faculty, and staff—the Bennett Family Center and the Child Development Lab. In 2001, both centers entered into a collaborative arrangement with Cooperative Extension to plan the Penn State Early Childhood Education Intergenerational Program. The partnership expanded to include several local senior adult-oriented organizations, the Penn State Gerontology Center, and RSVP-Centre County. With funding from the Kellogg Leadership for Institutional

Change (LINC) initiative on campus, pilot projects were implemented at Bennett and the Child Development Lab and a guidebook, *Developing an Intergenerational Program in Your Early Childhood Care and Education Center*, was written. Training workshops for the early childhood community are being planned in locations throughout Pennsylvania.



High School Financial Planning Program

- 13,800 students
- 173 schools

The National Endowment for Financial Education (NEFE)—in partnership with the U.S. Department of Agriculture Cooperative State Research, Education, and Extension Service and the Credit Union National Association—developed the NEFE High School Financial Planning Program (HSFPP). The six-unit program acquaints high school sophomores, juniors and seniors with basic financial planning concepts and suggests experiences to illustrate how these concepts apply to everyday life.

Program materials are designed to give educators flexibility in presenting information. The program is divided into units and employs a building-block format to move from one unit to the next. This is a national program being implemented in all 50 states. Instructor manuals and student guides are available free to schools, cooperative extension, and credit unions.

Penn State Cooperative Extension has provided in-service education and partnered with the National Endowment for Financial Education for over ten years. The Philadelphia mayor’s office is currently reviewing the HSFPP for incorporation in the Philadelphia school system, and expansion will also occur in the Stroudsburg and Edinboro Intermediate Unit #5 in Pennsylvania.

Kids Learn About Land-Use

Adams County youth have a head start on learning how to make land-use decisions. Members of a partnership representing extension, the county, the land conservancy, and the school district led an educational project to teach young people about preserving agricultural land and open spaces in a growing county. More than 100 students participated in interactive learning that led to stimulating discussion and thoughtful land-use decisions.

A student wrote, “*Adams* County has a very good balance between urban and rural areas. It has the splendor of a sunset over the mountains or a night on the old-fashioned, beautifully decorated Gettysburg Square. *Adams* County should not be overdeveloped, especially the farmland. Farmland is the essence of what this county is. If we take the farmland and open space away from this county, we are losing ourselves.” The project also was presented to more than 100 members at the combined *Adams* and *Franklin* counties summer camp.

EXSELS

Extension and Schools Enhancing Life Skills (EXSELS) is a collaborative, school-based drug prevention project that is being conducted in eight Pennsylvania middle schools. Project ALERT, an evidence-based drug prevention curriculum and “model program” designated by the Substance Abuse and Mental Health Services

Administration is being used. Compared to control group students, Project ALERT students were more likely to believe that: (1) using cigarettes, alcohol, and marijuana can lead to addiction; (2) their peers would not approve of their use of cigarettes and alcohol; (3) there are negative social consequences of cigarette use; (4) peers will respect them if they refuse to smoke cigarettes; (5) fewer of their peers are using cigarettes, alcohol, and marijuana; and (6) they could refuse pressures to drink alcohol. Over the last three years, 1,248 seventh grade students received the curriculum. In addition, 1,119 of those students received the booster curriculum in the eighth grade.

Key Critical Elements

In all of our youth development programs, we strive to include:

- positive relationships with caring adults
- a safe physical and emotional environment
- opportunities to master skills and content
- opportunities for service to others
- opportunities for self-determination, decision-making and goal setting
- opportunities to be an active and engaged learner
- a positive connection to the future
- an inclusive atmosphere

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