4-H School Enrichment: A School and Community Partnership

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Abstract

The 4-H Youth Development School Enrichment Program is a collaborative effort between Cooperative Extension and local schools. The focus of the school enrichment program is to provide formal educators with experiential-based curricula on a wide variety of topics such as embryology, rocketry, theatre arts, nutrition, and electricity. Results from a recent statewide survey identified how collaborative relationships were formed, barriers to effective collaboration, and availability of resources and training for teachers to support 4-H school enrichment programs.

Introduction

Cooperative Extension has been described as the world’s largest non-formal educational organization and is recognized for its ability to rapidly meet the needs of a changing society (Seevers, Graham, Gamon, & Conklin, 1997). The Cooperative Extension system was established by an act of Congress in 1914 through the Smith-Lever Act. A partnership among federal, state, and local governments, Cooperative Extension programs extend research and new knowledge from land-grant universities to solve problems and enrich lives (Snider & Miller, 1993). The Extension Committee on Organization and Policy (1995) defines the mission of Cooperative Extension as enabling people to improve their lives and communities
through learning partnerships that put knowledge to work. Nationally, there are over 3,000 county extension offices with cooperative extension educators who serve as the conduit for disseminating research-based information from the land-grant universities to the people in their communities.

The youth development program of Cooperative Extension is 4-H. Research-based information is disseminated to youth through several types of 4-H programs and clubs. Youth learn by doing when enrolled as 4-H members in community clubs, project clubs, school enrichment experiences, after-school clubs, or as individual members with adult helpers. Through school enrichment programs and clubs 4-H reaches 6.6 million youth each year, including youth from diverse ethnic and socioeconomic backgrounds who reside in urban, suburban, and rural communities (USDA, 2000). The focus of the school enrichment program is to make the experiential content-based materials available to formal educators. For example, more than 54,000 youth were enrolled in the 4-H embryology program in 2000. This program is delivered almost exclusively in cooperation with local schools. Teachers receive project manuals and resource materials related to chick embryology. The experiential component of the program is the actual hatching of chicks in an incubator in the classroom. The 4-H program provides equipment and resources needed for a successful classroom experience.

In Pennsylvania, the 4-H Youth Development Program serves over 112,000 youth ages 8-19. Curricula (projects) and supporting resource materials are available from Pennsylvania’s 67 county Cooperative Extension offices. 4-H youth development educators employed by Penn State University, the state’s land grant university, are located in every county extension office. Responsibilities for 4-H youth educators related to school enrichment programs include training teachers to use 4-H youth curriculum, direct teaching of the curriculum, recruiting volunteers to teach 4-H projects, or supervising 4-H program assistants who are hired to support the 4-H school enrichment program.

4-H projects are the most common venue for information dissemination. Each project consists of a sequential, developmentally appropriate, experiential set of learning activities usually in the form of manuals or project books. A helper’s guide accompanies each project to assist the leader or teacher in working with and understanding youth, to familiarize them with the project topic, and to provide instructions for project implementation. In addition to providing good content information on such things as rocketry, pet care, electricity, theatre arts, workforce preparation, and communication and leadership, 4-H curricula are designed to experientially teach life skills to enable youth to become productive, caring, and contributing members of their communities.

Youth in the Pennsylvania 4-H program have over 140 educational projects from which to choose; however, not all of these projects are used in the school
setting. Projects offered as school enrichment experiences vary from county to county. Nationally, more than 3.5 million youth, in almost 115,000 classrooms, experienced 4-H curricula as part of their school day during 1999 (USDA, 2000). Over 79,000 youth in Pennsylvania participated in a 4-H experience in their school classroom in 1999.

School curricula are often developed and marketed to teachers by private educational companies and agencies, governmental agencies, and community-based organizations. Many of these curricula are offered to educators at a substantial cost or investment of time or other resources. Cooperative Extension’s 4-H program is able to provide teachers with readily accessible free or low-cost curricula. The experiential nature of 4-H curricula supports the societal expectation that teachers provide experiential activities as part of the curriculum (McNeely & Wells, 1997).

4-H youth development professionals are uniquely positioned to develop a school/community partnership by providing quality experiential educational curricula for youth in the school setting. In addition, many 4-H projects support educational objectives identified in the Pennsylvania Academic Standards, making the partnership more valuable for teachers, schools, and communities. A concerted effort is underway among state 4-H youth development programs to identify links between the 4-H curricula and state or national academic standards for students.

Cooperative Extension and the 4-H youth program benefit from partnering with local schools by increased student awareness of our vast resource base, curricula, youth activities, and leadership opportunities available for sustained involvement in the 4-H program. Those participating in 4-H school enrichment programs are enrolled as 4-H members and do receive information about Cooperative Extension and the 4-H youth program. One 4-H educator describes efforts to involve school enrichment youth in the traditional 4-H program:

Our youth who participate are encouraged and invited to participate in other 4-H opportunities and activities. Each member receives a personal promotional brochure, 4-H project book, 4-H pocket folder and special invitation for Day Camp and Overnight 4-H Camp. In addition, we provide recognition in the form of certificates and ribbons for project completion. Teachers score project books, idea books, posters, or whatever additional activity or display they do and we provide ribbons for recognition.

Each county 4-H youth educator in Pennsylvania has unique methods of developing partnerships with local schools and each county has varying school participation rates. Some county 4-H youth educators expressed interest in a unified marketing effort to involve more schools and increase community awareness of 4-H resources. Other community-based programs, such as after-school programs,
home school programs, and programs offered by other youth-serving agencies would also benefit from more visible 4-H community partnerships.

**Purpose of the Survey**

The purpose of this survey was to determine how the partnerships between Pennsylvania classroom teachers and county 4-H youth development educators are established, how the teachers are trained, cost of the curricula to schools, barriers to establishing a school and 4-H partnership, and the need for a statewide marketing and promotion strategy for 4-H school enrichment programs. Articulating the answers to these questions may help school and 4-H youth partnerships to develop and grow statewide and nationally.

**Methodology**

The study’s population was 4-H youth educators in Pennsylvania (n=67). A survey was sent via e-mail to all 4-H youth educators. The e-mail list-serv is maintained by the College of Agricultural Sciences Information and Technology Unit and updated continuously using employee personnel records. Forty-one counties responded to the survey within three weeks. After three weeks, a follow up e-mail reminder and another copy of the survey was sent (Dillman, 2000). Three additional surveys were returned for a total of 44 responses, a 66% response rate.

Eight of the questions on the survey were quantitative in nature and five questions were open-ended. The questionnaire was reviewed by the Director for Marketing and Outreach Communications, an outreach marketing specialist, and the Extension State Program Leader for Children, Youth, and Families for face and content validity.

**Findings**

**Partnering for School Enrichment**

Ninety-four percent (94%) of the respondents indicated that they are currently conducting school enrichment programs in their counties. Of the counties who are conducting school enrichment, 4-H youth development educators indicated that they are currently partnering with teachers in 2,337 classrooms in Pennsylvania, an average of 55 classrooms per county.
Barriers to Partnership

The six percent of 4-H youth development educators who are not currently offering school enrichment programs identified several barriers to participating in this type of programming. These barriers to partnering were identified by the 4-H educators in both the school and extension environments. The cited barriers for not partnering with schools were:

- schools are reluctant to change their existing curriculum,
- detailed administrative process required to obtain school board approval for curriculum additions or enhancements,
- lack of promotional materials to introduce the school enrichment program to new teachers and classrooms, and
- lack of Cooperative Extension staff to initiate and manage a school enrichment program.

Current Strategies to Develop Partnerships

Establishing the 4-H/school partnership requires an investment of time from both Cooperative Extension and local schools. Differing strategies were used to introduce the school enrichment program, recruit new teachers or schools, and educate new and existing classroom teachers about the program. 4-H youth development educators identified, from a pre-determined set of responses, how they introduced or marketed the program to teachers in their counties (See Table 1).

Table 1: Current Strategies to Initiate Partnerships.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage using strategy</th>
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<tbody>
<tr>
<td>Presentations directly to teachers</td>
<td>22.3%</td>
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<tr>
<td>Marketing brochure or letter sent to teachers</td>
<td>30.1%</td>
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<tr>
<td>One-on-one discussions with teachers</td>
<td>28.2%</td>
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<tr>
<td>Article in 4-H Youth Development newsletter</td>
<td>4.9%</td>
</tr>
<tr>
<td>Other</td>
<td>14.6%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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The most frequent strategy employed by 4-H youth development educators was a marketing brochure or letter sent to teachers (30%), followed by one-on-one discussions with teachers (28%), presentations directly to teachers (22%), and promotional articles in county 4-H Youth Development newsletters (5%). The other strategies identified by the 4-H youth educators include: presentation to admin-
Receptiveness to Relationship Building Effort

4-H youth development educators were asked if a promotional brochure describing the 4-H school enrichment program to local school districts, home-school groups, and after-school groups would assist them in establishing partnerships with these groups. Slightly over 90% responded affirmatively. However, when asked if the marketing information should be distributed from a central location to all school districts in the state, slightly less than half (48%) were supportive of this strategy. The 52% that were not supportive of this strategy cited various reasons. The most frequently reported reasons amassed into two common themes: (1) the diversity in structure and delivery of county school enrichment programs; and (2) lack of sufficient resources to meet the demand for new partnerships. Those counties who have sufficient resources and would like to grow their program but rejected a central location strategy indicated that marketing information needs to be customizable to meet the diverse needs of county programs. County 4-H youth development educators also expressed the need to personalize letters and marketing information to begin building rapport with potential classroom teachers, reinforcing the need for locally-developed, custom marketing materials.

Delivery Strategies

County 4-H youth development educators partner with schools in several different ways to deliver school enrichment projects. Classroom teachers comprise the largest group (38%) of instructors of the 4-H curriculum (see Table 2). 4-H youth development educators deliver the curriculum themselves in about 28% of the programs, followed by 4-H program assistants and volunteers. 4-H program assistants are para-professionals hired by the local county extension office to assist with program implementation. Of the program assistants (19% of instructors overall), almost 58% indicated that conducting the 4-H school enrichment program was their primary responsibility. The remaining 42% have additional responsibilities related to Cooperative Extension community programming.
Realizing that the largest percentage of school enrichment projects are taught by classroom teachers, 74% of the 4-H youth development educators indicated that they provide in-service training for teachers who want to become involved in the 4-H school enrichment partnership. One county 4-H educator has had success with the “train the trainer” concept and asks tenured teachers who previously participated in the program to mentor new teachers. Educators report that the training occurs in a variety of forms such as a stand alone session, as part of in-service days for the participating school district, or one-on-one with teachers who want to conduct school enrichment projects in their classrooms.

4-H school enrichment materials can be offered at low or no cost to the schools because funding is provided from local, state, and federal dollars to support the 4-H program through Cooperative Extension. The majority of county cooperative extension offices (71%) do not have to charge a fee. A few counties (29%) do charge a small fee to recover the cost of supplies and travel. The 4-H embryology program is the project that most frequently has a fee associated with it, which covers the cost of incubators, eggs, food, and bedding. Fees for embryology ranged from $10-$50 per unit, including project books for the students.

### Discussion and Implications

Horton and Konen (1997) identify a model with components of a successful school enrichment program in science classrooms that has application to all school enrichment programs. The successful school enrichment program model contains the following components: (a) experiential teaching materials; (b) a partnership with local industry or business; (c) an introductory workshop for both teachers and partners; (d) support of both teachers and partners during the workshop program; (e) student materials and teaching supplies; and (f) program closure, including alternative assessment activities and a celebration of student accomplishments. Including a school-industry partnership [see (b) above] may not apply to all school enrichment programs, but would strengthen the experience if included as a component. Components of this model are already found in many of the school enrichment programs.
enrichment programs in Pennsylvania; however, using this model as a benchmark to assess current 4-H school enrichment programs may strengthen existing school and 4-H partnerships.

In consultation with Penn State University’s Outreach Marketing Unit, program fact sheets for 4-H youth educators were developed for local distribution to build and strengthen partnerships with local schools. Listed below are the 17 projects currently offered in the schools; these fact sheets were developed for those projects with the highest enrollment.

4-H School Enrichment Projects

<table>
<thead>
<tr>
<th>Outdoors and Nature</th>
<th>Health and Nutrition</th>
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<tbody>
<tr>
<td>Adopt-A-Tree</td>
<td>Adventures with Food</td>
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<tr>
<td>Catch the Bug</td>
<td>Food and Fitness for Fun</td>
</tr>
<tr>
<td>Chick Embryology</td>
<td>Health...It’s Your Choice</td>
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<tr>
<td>Indoor Gardening</td>
<td>Tasty Tidbits</td>
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<td>Meet the Plants</td>
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<td>Tree + Me = Forestry</td>
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<tr>
<td>Tree Top</td>
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<td>Wildlife is All Around Us</td>
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<tr>
<th>Science</th>
<th>The Arts</th>
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<tbody>
<tr>
<td>Electricity</td>
<td>Theatre Arts Adventures</td>
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<tr>
<td>Rocketry</td>
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<tr>
<th>Self Discovery</th>
<th>Work and Careers</th>
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<tbody>
<tr>
<td>Discovering Me!</td>
<td>Wild Over Work!</td>
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The program fact sheets can be found at http://pa4h.cas.psu.edu/school.html. Addressing the concerns of the 4-H youth educators regarding the need for autonomy in establishing local school partnerships, each fact sheet is a write-able PDF document. 4-H youth educators can personalize and customize their fact sheets to suit local needs.

A major organizational barrier to establishing partnerships with local schools identified by the 4-H youth educators was insufficient staff time and resources. This barrier is prohibiting initiation in some and growth in many of the school enrichment programs. Funding sources to support partnerships need to be sought, either locally or at the state level, to provide additional extension resources to conduct training, thereby increasing access for teachers to utilize these public resources in their classrooms.
Providing web-based project curricula to teachers may help to partially break down this barrier; however, some classroom teachers still need orientation, training, and/or the equipment and supplies to conduct the program. In addition, using a web-delivered strategy makes it more difficult for the classroom teacher to learn about the broader array of opportunities in the 4-H program. Web sites need to be intentionally built for those not familiar with 4-H and Cooperative Extension for this strategy to be successful.

Joy Dryfoos (1994), in her book *Full-Service Schools*, notes with the increase of dual-career families, more and more children are on their own after school and during vacation time. She suggests that organizations such as 4-H can play a key role in expanding their services to after-school clubs for high-risk children. Introducing students to 4-H during the school day may increase the likelihood that they will be receptive to becoming involved in non-school hours, especially if they had a good experience in the classroom. The likelihood of students enrolling in 4-H after a school enrichment experience is a topic for further study.

4-H is a key player in educating youth in our communities. Cooperative Extension partnering with schools is a mutually beneficial strategy to strengthen this role and support positive youth involvement. Promoting successful partnerships and available programs will provide Cooperative Extension and school administrators with the information needed for valuable connections that will ultimately benefit young people.

**References**


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