

Staffing with Content Rich Volunteers

Introduction

Staffing with content rich volunteers brings “richness” and depth to 4-H Science programs. Many people who either work as science professionals or enjoy science-based hobbies would love to share their knowledge with others, but have found few volunteer opportunities available that capitalize on their specialized skills and interests. Partnering with these scientists can be a win-win scenario for all parties.

Traditional 4-H agriculture programming was built upon a solid partnership between 4-H and agricultural scientists at land grant universities. Twenty-first century 4-H Science programming needs to build these same kinds of partnerships. Today, however, it is not enough to rely upon the land grant university system. Program planners need to make concerted efforts to engage both science professionals and serious science hobbyists to create a sound infrastructure for youth science programs.

The purpose of this chapter is to help youth science program planners maximize their ability to recruit and sustain content rich volunteers. One point that cannot be overemphasized is that there are a variety of ways these science volunteers can be utilized – from one-shot speaking engagements to longer term service on advisory boards. It is important to think beyond the traditional club leader role when planning to engage content rich volunteers.

One final caveat: Scientists have cool *toys* (e.g., lab coats, goggles, computers, nets, GPS units, etc.), *workplaces* (e.g., laboratories, energy plants, wetlands, oceans, hydroponic gardens, observatories, research centers, etc.), and even *travelling exhibits* (e.g., soil tunnel, GPS/GIS mobile labs, robotics). Youth are instantly engaged – because scientists can make learning fun!

Promising Practices

The promising practices for *Staffing with Content Rich Volunteers* are subdivided into three categories: (a) Program Planning and Evaluation, (b) Recruitment, and (c) Training and Support.

Program Planning and Evaluation

1. *Read the chapter 4-H Science Program Design – 4-H Science Checklist*. This chapter provides fundamental program planning and evaluation information required for successful 4-H Science programs. The information contained here is specific to staffing with content rich volunteers.
2. *Build an infrastructure to actively support recruitment of content rich volunteers*. Create science advisory boards to assist with 4-H Science programming. For example, create a Science and Technology Program Development Committee as part of the county’s local 4-H Program Development Board to target recruitment of content rich volunteers for structured opportunities (e.g., clubs, speaker’s bureau, events, etc.).





3. *Know which roles content rich volunteers can play to enhance the program.* It is critical to design programs and events to capitalize on content rich volunteers *before* you begin the recruitment process. Failure to do so creates confusion on the part of the volunteer, and may result in negative or adverse feelings about the program. At minimum, program/event planners should clearly articulate (preferably in writing):
 - Need for the program,
 - Program implementation plans and evaluation criteria,
 - Recent outcomes and successes,
 - Volunteer responsibilities (e.g., duties, time commitment, etc.), and
 - Role of volunteer supervisors.
4. *Recognize there are roles available beyond “traditional club leader” or “teacher/facilitator.”* There are countless opportunities to involve content rich volunteers (e.g., presenters, judges, board members, etc.).
 - Invite them to join special interest committees, advisory boards, and so forth.
 - Engage them in the initial project or event planning process.
 - Provide opportunities for them to exhibit or host activity stations at events that bring science to the youth and/or community (e.g., Community Day, Robotics Events, 4-H Field Day, Earth Day, Recycling Awareness Day, etc.).
 - Include a Science Street Fair as part of your State Fair and invite science professionals, businesses, and hobby groups to participate.
5. *Familiarize yourself with local scientific societies and professional organizations.* Many have existing educational outreach projects. This is a great way to help build a relationship in the beginning, and has the potential to lead to guest speakers, judges, advisory board members, and so forth.
6. *Provide opportunities to involve funders in program planning and implementation.* There is a growing trend for corporate sponsors and contributors to want to do more than just provide monetary support or donate supplies. They want their employees actively involved in meaningful ways in the programs they support.

Recruitment

1. *Prepare your message in advance.* Know what you want to say. At the very least include:
 - The need to train and prepare future scientists, because this is usually a known and hot-topic for individuals with STEM backgrounds;
 - A *brief* description of the program, the need for the program, the role(s) available for potential volunteers, and time commitment required;
 - Assurances that appropriate training and support will be provided; and
 - Current outcomes and successes as well as the meaningful impact expected by what the volunteer(s) will do.

2. *Look for content-rich volunteers who enjoy working with young people.* The old adage continues to hold true: “They don’t care what you know, until they know you care.”
3. *Start recruiting “where you are.”* Content rich volunteers may be literally in your backyard.
 - Use existing content-rich volunteers to recruit new ones. Current volunteers can return to their workplace or organization and share the positive experiences they had volunteering with 4-H. Use program planning promising practices (above) to ensure the volunteers have a solid, positive experience.
 - Target 4-H alumni. They know and appreciate 4-H Science programs and have lots of skills and enthusiasm to share.
 - Mine personal connections, such as relatives, neighbors, the local pharmacist, and so forth.
4. *Leave your recruiting “comfort zone.”* It is necessary to step out of the confines of the 4-H Program to recruit content rich volunteers. Fortunately, there are many places to find them:
 - Science-related businesses and professionals (e.g., utility companies, hospitals, veterinarians, pharmacists, etc.);
 - Educational institutions, research institutions and facilities (e.g., land grant universities, technical colleges, etc.);
 - Local, county, and state government/public agencies (e.g., resource conservation districts, waste management, departments of environmental quality and natural resources, etc.);
 - Local branches of professional associations and societies (e.g., The Society of Women Engineers, Geoscience Information Society, Alaska Robotics Education Association, etc.);
 - Retiree organizations (e.g., American Association of Retired Persons, Alliance for Retired Americans, Retired Teachers’ Association); and
 - Science hobby groups (e.g., geocaching/geospatial, robotics, rocketry, film-making, etc.).
5. *Recruit at community events.* There are a multitude of events geared toward youth and their parents throughout the year in most communities (e.g., Water Awareness Days, Children’s Day in the Plaza, school events, Master Gardener Educational Events, etc.).
 - Host a booth with activities and recruitment information.
 - Remember that events aimed at children and youth can reach parents or other significant adults who attend.
 - Take time to visit other booths. There may be other adults participating in the event who would welcome the opportunity to volunteer.
6. *Get the word out in appropriate venues about volunteer opportunities.* Advertise for specific opportunities and program needs in trade publications; talk to chambers of commerce; make presentations to employee groups (Lunch & Learn); send eBlasts (electronic newsletters) to advisory groups, current and former volunteers, current and former program participants, and so forth.





7. *Connect the 4-H Science program's mission to the volunteer's personal or organizational mission.* Develop relationships around a shared interest.
 - As a potential volunteer observes that his/her vision aligns with the program, she/he is more likely to invest time and resources into the program.
 - Professional organizations are also concerned about growing the next generation of science professionals, and will want to help meet this future need.
8. *Research the employee volunteer practices of local science-based corporations.* For example:
 - Does the company provide release time for their employees to volunteer with other programs?
 - Does the program need prior approval to qualify for support?
 - Does the company provide funding to organizations their employees volunteer with after a specified number of volunteer hours have been completed?

Training and Support

This section contains information specific to training and supporting content rich volunteers. *All* volunteers need appropriate training in positive youth development (PYD) principles, science processing skills, the experiential learning cycle, developmentally appropriate practices, and science inquiry regardless of content knowledge levels.

1. *Read the chapter Training Others to Deliver High Quality Science Programming.* This chapter provides an in-depth discussion of promising practices for training staff and volunteers. The promising practices contained here are geared specifically to training and supporting content rich volunteers.
2. *Offer volunteer development opportunities.* It is important to provide content rich volunteers with as many opportunities and experiences as possible to increase successful outcomes.
 - Include discussion about PYD as often as possible. Content-rich volunteers may have little to no previous exposure in this area.
 - Teach volunteers how to frame their knowledge and skills in an age appropriate manner, and how to locate and/or use age-appropriate curricula and activities. A solid content piece will prove ineffective if the facilitator does not understand the unique needs of young people.
 - Encourage science professionals to bring their toys (tools) from work when they will be working with the youth. Such props are virtually guaranteed to engage youth interest, and will ease any anxiety the presenter may have.
3. *Steward content rich volunteers.* Think of content rich volunteer involvement as a donation, and steward volunteers just as you would a donor.
 - Develop ongoing relationships with volunteers through recognition, accountability, and communication.
 - Acknowledge contributions, follow through with program plans, and share program successes.
 - Continue to initiate contact with volunteers (thanking them for service) even after program is complete. There may be opportunities for future engagements.

Case Studies

Enfield – Targeted Recruitment of STEM Professionals and Enthusiasts. The 4-H SLO (San Louis Obispo) SCIENTISTS Program from the start has been very intentional about stepping away from the usual recruitment modes, and has worked hard to reach people in science, technology, and engineering organizations, businesses, educational institutions, research institutions and facilities, public agencies, and other venues. The program has used letters and flyers; called individuals; presented at professional society meetings and luncheons; met with presidents, department heads, CEOs; and engaged in media campaigns for specific 4-H SLO SCIENTISTS facilitator recruitments. Some volunteers have been facilitators for over five years, and one former electric company employee is in his 11th year as a facilitator. The following companies/agencies/professions were targeted for volunteer recruitment, along with many others: the electric and gas companies; Air Pollution Control District; Regional Water Resources Board; local colleges and universities; staff and members of relevant clubs (e.g., Society of Women Engineers); Resource Conservation Districts; High-tech Companies; pharmacists, veterinarians, and health technicians; and retiree organizations and professional societies. –**Richard Enfield, University of California**

Nichnadowicz – Corporate Scientists Enhance Summer 4-H Program. As part of the Summer Science Program, science professionals are recruited to share their careers with youth. The science professionals are from the corporation that funds the program. Over the years a variety of scientists have visited the day camps, including chemists, biologists, and technicians who care for lab animals. Anyone who likes science and youth is welcome to visit the camp sites. When the scientists visit, they illustrate their jobs in many unique and often entertaining ways. Science professionals are recruited to visit the sites through the company’s community outreach department. Two months before volunteers are needed, the company is emailed a news release about the upcoming opportunity. It states when and where volunteers are needed and how 4-H can help science professionals share their occupations with young people. The company then distributes this to its employees via email. This outreach usually nets about five volunteers each year. Program staff support the scientists with youth development and group management principles. –**Jim Nichnadowicz, Rutgers University**

Rudolph – Experts from Public Science Agencies Support Annual SET Expo. The 2010 Teens and Tweens Empowerment Conference is the annual event for the Teens Making Impact Extension (TMI) team project. The TMI program promotes positive youth development by focusing on life skills, career education, communication, and civic engagement. More than 160 youth and adults participated in the event packed with educational and fun-filled activities. The theme was “Exploring Health and Fitness, Science, Engineering and Technology,” and the conference began with the Science, Engineering and Technology Expo. Exhibits and mini workshops were led by staff members from NASA’s Marshall Space Flight Center, Unmanned Aircraft System in Huntsville, the Defense Intelligence Agency, and faculty and staff from Alabama A&M University (Departments of Physics, Forestry, and Family and Consumer Sciences).The conference featured a number of content rich volunteers. For instance, forensic Science workshops were taught to older youth by Dr. Lonnie D. Ginsberg, who is responsible for the daily operation of the Huntsville Regional Crime Laboratory and the Florence Satellite Crime Laboratory. –**Danielle Rudolph, Alabama A&M University**





Resources

4-H Science Professional Development Toolkit – an online set of resources and training activities to be used by youth development professionals and volunteers to support 4-H Science programs. Includes a section on *Recruiting and Developing 4-H Science Content Rich Volunteers* – complete with training guide, sample volunteer position description, and 12 tips to successful content rich volunteers. Available at <http://www.4-h.org/Professional-Development/Content/Science/Implementation/Recruiting-and-Developing-Volunteers/>.