Cooperative Extension: A Complex Organization

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Chapter 1

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In this chapter, the authors present an historical overview of the Extension System, setting the context for the volume’s exploration of evaluation in a complex organization.

The Cooperative Extension System (CES), a land-grant university-based outreach and educational organization, exists nationally in every state and territory of the United States. Although most widely known for the 4-H program, CES educators work in local municipalities as an “extension” of the land-grant university providing diverse educational programs in agriculture, community development, food and nutrition, youth development, and natural resources, making it the largest adult education organization in the country (Griffith, 1991). Established in 1914, Cooperative Extension has local offices in more than 3,000 locations (typically county-based), with a common mission of providing research-based information and education to people to help improve their lives. This large and complex educational organization provides a unique program evaluation context.

This chapter provides an overview of Cooperative Extension including its land-grant history, organizational structure, staffing, programs, program partnerships, educational approaches, program development model, and organizational factors influencing evaluation to set the stage for this issue of New Directions for Evaluation.

The Land-Grant University System

Although the Cooperative Extension System was established in 1914, the earlier creation of land-grant colleges set the stage for the existence of extended education. In 1862 President Lincoln signed the Morrill Act into law granting land to each state, based on the number of congressional seats held, to be used or sold to raise funds for a state land-grant college (Rasmussen, 1989). Later, in 1890 the second Morrill Act gave states direct, annual federal appropriations to support their land-grant colleges and at the same time prohibit racial discrimination in admissions. At this time, 18 historically black colleges and universities were designated or formed, mostly across the south. Land-grant colleges were primarily designed to provide education and research in response to the needs of the agricultural community. In particular, 1890 land-grant colleges were charged with serving low resource audiences. This movement helped make the United States more competitive in agricultural and mechanical industries by teaching not only traditional students, but welcoming farmers into classrooms and lectures to learn about new discoveries in agriculture and mechanization (Boyer, 1990).

Land-grant college leaders were concerned about future support of their colleges and agricultural experiment stations, and they realized that new discoveries and innovations needed to be accepted and implemented by farmers to make the societal contributions expected of them. The idea of “extension work” predates the legislation that created Cooperative Extension. When cotton fields across the south were threatened by the boll weevil in 1904, the United States Department of Agriculture deployed special “agents” (the term agent has been replaced by educator in many states) to work with
farmers on their farms to combat this pest through demonstration-based education. In the
decade that followed, several innovative experiments for taking university-based
information to the people were launched. These included traveling workshops, moveable
schools, and agricultural trains where university faculty would take their lectures and
demonstrations on the road (Reck, 1951). Research bulletins and leaflets became popular
to disseminate information, but most were written for scholarly audiences, not the
average farmer. Professors in some states began offering institutes at various locales
during the winter to present their research to local farmers in a manner that was easily
understood and applied. However, it soon became apparent that the most effective
method of getting farmers to adopt changes was embedding university educators in local
communities.

In 1914, the Smith-Lever Act provided funds to land-grant universities allowing
them to place Extension educators in communities and on land-grant campuses all across
America\(^1\). Extension educators worked initially in agriculture and later in home
economics (now family and consumer sciences) and with 4-H clubs. Since these faculty
and staff lived and worked among people in particular communities they were in touch
with local needs. Home economics educators began demonstrations as an effective
educational model to help farm women improve food preparation and preservation, and
to care for their homes and families. The most widely recognized Cooperative Extension
program, 4-H, began early in the twentieth century. Educators found that teaching rural
boys and girls new techniques like the use of hybrid seed corn and tomatoes was an
effective way to get parents to adopt new technologies (Reck, 1951).
In 1994, federal land-grant designation was also given to 33 American Indian colleges. This final designation brought to 76 the number of colleges and universities in the land-grant system. The Cooperative Extension designation makes these land-grant universities unique by adding specific responsibilities for outreach and service to the more widely recognized research and teaching functions of public universities.

**Extension’s Multi-Faceted Structure**

The Cooperative Extension System is unique in its complex funding and accountability structure. While variations are found from state to state, Figure 1.1 illustrates general CES staffing and funding based on a four-part partnership.

--- INSERT FIGURE 1.1 ABOUT HERE ---

County and municipal governments provide funding and other support for local offices including partial salary coverage for local Extension educators. State government provides fiscal support for educators in local units and on land-grant campuses and agricultural research stations. The federal government through the U.S. Department of Agriculture’s Cooperative State Research, Education, and Extension Service also provides funding for a portion of Extension salaries and operations (Apps, 2002). Changes in local, county, and federal fiscal support for Extension are moderated by funding through grants, contracts, fiscal gifts, and user fees (Franz, 2002). For example, traditionally, funding for Cooperative Extension relied one third on federal funding, one third on state funding, and one third on county or local funding. Today, these portions can range from 10% to 70% for each partner. Budgets and fiscal sources can vary greatly
from location to location. For example, one county in rural Wisconsin receives approximately $200,000 to conduct extension programs while an urban New York county receives more than $1 million for its extension work.

At each land-grant college or university, Extension is located in a college of agriculture, in a different college, as part of two or more colleges, or stands alone as an academic unit outside a college. For example, at the University of New Hampshire, Cooperative Extension is a stand-alone unit, with a dean who reports directly to the Provost, while at Virginia Polytechnic Institute and State University, Extension is housed within the College of Agriculture and Life Sciences. In Wisconsin, Cooperative Extension falls under a broader outreach unit that also includes public television and radio, and continuing education; Extension faculty are located in a variety of colleges at the main campus in Madison as well other UW campuses across the state.

**Extension’s Staffing**

State Extension units are administered by academic officials located at land-grant university campuses and in district or regional offices in each state. Extension educators housed within campus academic departments or at campus research centers are typically responsible for coordinating needs assessment and program development, leading program-related research projects, and providing subject matter expertise to support educational programs. An educator also may work with Extension program evaluators to develop evaluation plans and tools for statewide educational programs.

County, multi-county, or multi-state Extension educators housed in local offices plan, implement, and evaluate educational experiences for their clientele. Staffing varies considerably from location to location based on local needs and available funding. For
example, in New York City 70 staff conduct programs on the urban environment, nutrition, health, families, and youth. On the other hand, some rural offices may have only a single 4-H educator in residence, with visiting agriculture or family and consumer sciences educators from other offices making farm visits, conducting workshops, and answering questions for clientele.

Finally, Extension recruits, trains, and uses hundreds of thousands of volunteers who help plan, deliver, and evaluate extension educational programs (Seevers, Graham, & Conklin, 2007). Volunteers serve in a variety of roles, including membership on local advisory councils, as Master Gardeners, and as 4-H leaders.

**Cooperative Extension Programs**

Historically, Extension has concentrated on three programmatic foci – agriculture, home economics, and 4-H with rural audiences. As U.S. demographics have changed, so has the programming of Cooperative Extension. Program areas now include agriculture and natural resources, family and consumer sciences, 4-H youth development, and community development. Although production agriculture remains an important component, programs now include a focus on practices that protect the environment. Today, diverse educational programs are offered for families and communities on topics such as nutrition and food safety, financial management, parenting, community and economic development, and water quality. In Ohio, Extension addresses current economic issues by helping families facing foreclosure through on-line tools and a home study course on money management and strategies for surviving financial crisis (Ohio State University Extension, 2008).
4-H programs are now available for a wide variety of youth from urban, rural, and suburban locations with a wide variety of interests. Project work ranges from aerospace, electricity, animals, nutrition and wellness, to computer technology. Rural audiences are still served but Extension’s clientele are increasingly urban and periurban. Extension is increasingly involved with more complex economic, environmental, and social issues (Seevers, Graham & Conklin, 2007). The Rural Bridges program in Washington state works with communities and industry to expand jobs and improve local economies through innovative uses of information technology (Washington State University, 2007). Further, in most states Extension programs target limited income families with nutrition education for those receiving state and federal aid. Many state Extension programs also offer youth development activities for low-income communities in after-school settings focused on life skill development. Other programs offer parenting training for prison inmates.

**Program Partnerships**

Extension educators rarely plan, conduct, and evaluate educational work in isolation. To the contrary, they often build extensive partnerships and collaborations with government, non-governmental organizations (NGOs), and other groups to deepen and broaden the impact of their efforts (Franz, 2003). In Florida, Extension partners with the Florida Department of Environmental Protection and the Southwest Florida Water Management District to offer information and programs on Florida-friendly landscaping (University of Florida, 2008). In other states horticulture educators work with the green industry, public agencies, volunteers, homeowners’ associations, and turf managers on programs to reduce water pollution through decreased fertilizer application and other
practices. Family and consumer science educators work with social services, churches, schools, and nonprofit organizations to offer parenting programs. In Virginia, 4-H educators work with schools, health departments, hospitals, and civic clubs to address youth obesity in their communities through in-school programs, after-school programs, camps, and community fairs.

**Approaches to Extension Work**

As Figure 1.2 illustrates, Extension educators approach their work in a variety of ways. This model, created by Dr. Merrill Ewert, a past director of Cornell Cooperative Extension, focuses on two dimensions – process and content (Franz, 2002). *Process* refers to the methods used to deliver educational programs and *content* refers to the information shared that helps change learner’s knowledge or behavior. Combining these dimensions presents four domains that describe the ways extension work is conducted.

-- INSERT FIGURE 1.2 ABOUT HERE --

The first domain, “service,” includes functions conducted by Extension educators that range from soil testing and pressure canner testing to forming and serving on community committees and task forces. Educators using this approach provide low levels of process and content in delivering these services, but find the work important for building relationships with clientele groups and addressing basic clientele needs.

The “facilitation” approach finds Extension educators serving as facilitators of group process in educational settings rather than delivering information directly.
Educators using this approach excel at bringing a variety of voices to the table to solve multifaceted problems using a variety of techniques. Extension educators often facilitate public forums on community issues or strategic planning sessions for nonprofit organizations.

Extension educators are historically known for bringing land-grant research-based information to individuals, communities, and businesses through the third approach, “content transmission.” This approach includes the creation of fact sheets, curriculum, newsletters articles, Web-sites, PowerPoint presentations and other resources to address ongoing and emerging issues. Clientele access this information directly or through local Extension educators. Educators also create and disseminate localized content to supplement statewide or regional information.

The final approach to extension work, “transformative education” happens when Extension educators develop long-term educational relationships with clientele to focus on changes in their learning and behavior. This, in turn, leads to change in social, environmental, and economic conditions (Franz, 2002). These programs are intentionally designed to work with audiences over time rather than through one-time educational events. This allows learners to gain new competencies, apply what they’ve learned to their personal context, share results with each other, and adjust their application of learning as needed. This approach to extension work is often highlighted in documenting the value of Cooperative Extension to the public.

One example of transformative education includes an agricultural profitability program where the educator works in a community with farmers who struggle to survive economically. The educator develops a comprehensive program to provide information
and educational processes on best practices through publications, demonstrations, meetings, Web-based information, field days, farm visits, news articles, and more. This effort requires a long term, in-depth educational relationship with the farmers. In another example of transformative education, 4-H youth development educators conduct programs over many years that develop leadership skills in adults and youth through 4-H clubs, contests, camps, and other delivery methods. Finally, family and consumer science educators help transform communities and individuals over time through in-depth parenting programs that change parent and child behaviors through group discussion, presentations, individual counseling, Web-based information, news articles, and trying new parenting techniques in a supportive environment.

**Program Development Model**

In addition to educational approaches to extension work, a relatively consistent program development model is used for educational programming by Cooperative Extension across land-grant universities. The foundation of extension programming rests on a base of grassroots involvement. Educators infuse feedback from clients, advisory councils, and other stakeholder groups into programming (Buford, Bedeian & Lindner, 1995). This program development model’s basic elements include (1) situation analysis, (2) program design and implementation, and (3) program evaluation and reporting. In the first step, Extension educators work with stakeholders to scan the environment and determine issues and needs to be addressed by Extension. Most local and state Extension units work with volunteer advisory groups that assist with this process. Educators then work with stakeholders to create and carry out programs. Finally, educators and
stakeholders determine the level of success realized from these educational efforts through program evaluation and reporting.

**Organizational Factors Influencing Evaluation in Extension**

The organizational complexity of Extension provides a rich context in which to explore factors that influence the success of program evaluation efforts. Some of these factors include the following:

- The main driver for program evaluation in Cooperative Extension is public accountability to maintain and increase funding. With its reliance on multiple funding streams from local, state, federal, and nongovernmental sources, Extension strives to tell the story of program impact and public value to a variety of audiences. This process becomes increasingly critical as competition for public funding increases and as economic, environmental, and social issues become more complex. In addition, the variety of fiscal and programmatic timelines prescribed by funders can present challenges for the coordination of data collection and reporting.

- Cooperative Extension has a variety of levels of operation – community, county, regional, state, multistate, and national. An understanding of how the organization functions at each of these levels, as well as across levels, is needed to make program evaluation efforts useful and relevant.

- Evaluation staffing and support differ across states and are organized in a variety of ways. Some states provide very little support for program evaluation, even in cases where they place a strong organizational focus on program impact. In these
instances local audiences and educators may see evaluation as unnecessary or an “add-on” to programming. In other states, Extension educators operate as evaluation practitioners supported by a cadre of professionally trained evaluators. In all instances, additional support is needed to build the capacity of educators to conduct program evaluation and to provide resources to hire external evaluators when the occasion demands.

- Cooperative Extension educators across the country have a large amount of autonomy in planning, implementing, and evaluating their educational programming. Their efforts may include statewide or regional programming but may also be local and context-specific. Educators value this autonomy but it sometimes creates challenges for building educator evaluation capacity and may make collecting multisite evaluation data difficult.

- Cooperative Extension addresses a wide scope of stakeholder interests in educational programs and outcomes. This can result in differing goals among partners who sponsor and work with Extension programs. Consistent with Extension’s strong volunteer base and grassroots focus on programming, stakeholders are often involved in program evaluation efforts. Their participation may include evaluation planning, data collection, data analysis, and reporting results. The involvement of stakeholders in program evaluation has become increasingly important as Extension educators broaden and deepen their programming efforts, but it may also present challenges for coordination of activities.
• The Extension evaluation culture often uses limited evaluation methodologies. Post-surveys of educational activities are common, but focus groups, interviews, observations, and use of secondary data is much less so. The use of control groups is rare. The focus of program evaluation efforts can involve performance, program, and product improvement, but evidence of Extension’s ability to effect positive environmental, economic, and social change are currently given greatest emphasis.

Summary

The Cooperative Extension System addresses public needs through community-based educational programs. The organization has grown to become the largest adult education organization in the United States with multifaceted structures and staffing patterns, a wide variety of programs and program partnerships, and a diversity of educational approaches. These organizational factors have become more complex over time, increasing the importance of program evaluation for communicating Cooperative Extension’s public value, understanding its programs, and continuing its sustainability. Further chapters in this volume address how Cooperative Extension deals with program evaluation within this complex environment.
References


**Notes**

(1) Extension educators hold a variety of titles across the nation including but not limited to agents, associates, program assistants, faculty, and specialists.

(2) Master volunteers usually receive in-depth training of at least 40 hours and are required to give at least 40 hours of public service in return.
Figure 1.1. The Cooperative Extension System Partnership

County (or regional) Extension Offices staffed by local Extension Agents, paraprofessionals, support staff and volunteers. County typically provides facilities, support staff and operating expenses for local programming.

State Land-grant Institution staffed by Extension administration, support units, Extension specialists (housed within academic departments). State typically provides a portion of salary and benefits for county and state staff, state support staff, facilities and operating costs for state staff.

Grants, contracts, fiscal gifts, and user fees – Federal foundations and/or local grant funds and contracts to various levels of CES for specific programs/projects.

Federal – CSREES/USDA provides formula funds to states to cover a portion of state and county staff salaries/benefits.
Figure 1.2. Extension Educational Approaches

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