**The Extension Program Development Model: A Look at Commitment and Engagement**

by

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Abstract

This study examines program evaluation in Cooperative Extension by investigating staff commitment to systematic evaluation, commitment to the Extension Program Development Model, barriers and supports that impact engagement in systematic evaluations, and the application of evaluation results. A secondary purpose of this study was to explore in more detail Cooperative Extension state and field staff's personal commitment to the Extension Program Development Model. This study employed a mix-method approach. Quantitative data were collected from survey while qualitative data were collected from in depth interviews.

Findings from this study suggest that Cooperative Extension state and field staff are most committed to using evaluation results, analyzing data and focusing the evaluation. Likewise findings reveal that communication of information and attitudes and behaviors regarding program evaluation are predictors of an organizations' willingness to engage in or learn about evaluation. Finally results show that Cooperative Extension staff are more likely to use evaluation results to show impact and improve program.

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# CHAPTER 1. INTRODUCTION

## Background

In recent years funders of family youth and community programs have begun to experience significant budget cuts. Consequently, these budget constraints have led program funders to look more closely at how program funds are distributed and spent, and the impact of programs on families and communities. It is no longer acceptable for local agencies to just offer programs without documenting their impact or success nor is it all right to simply assume that programs are successful because program participants enjoyed them. Likewise, conventional measures of program success such as the number of relationships built or the number of individuals reached are no longer appropriate as indicators of program impact.

Therefore, "federal and state agencies, foundations, and non-profit agencies demand accountability for prevention programs and related initiatives that they fund" (Chinman et al., 2001, p. 302). For example, federal entities such as the U.S. Department of Health and Human Services, U.S. Department of Education, the National Science Foundation, the Centers for Disease Control, and the U.S. Department of Agriculture, just to name a few, were all impacted by the Government Performance and Results Act of 1993. This act resulted after Congress identified "waste and inefficiency in Federal programs and insufficient articulation of program goals and inadequate information on program performance" (GPRA Act of 1993). All federal programs were under great scrutiny, as the Act's purpose was to:

(1) improve the confidence of the American people in the capability of the Federal Government, by systematically holding Federal agencies accountable for achieving program results;

(2) initiate program performance reform with a series of pilot projects in setting program goals, measuring program performance against those goals, and reporting publicly on their progress;

(3) improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality, and customer satisfaction;

(4) help Federal managers improve service delivery, by requiring that they plan for meeting program objectives and by providing them with information about program results and service quality;

(5) improve congressional decision making by providing more objective information on achieving statutory objectives, and on the relative effectiveness and efficiency of Federal programs and spending; and

(6) improve internal management of the Federal Government (GPRA Act 1993)

As a result, administrators and practitioners employed by these departments are being asked more and more to monitor and develop program portfolios which in turn has led to progressively more pressure on program developers, implementers, and evaluators to be more purposeful and accountable in their efforts (Wells, 2005).

Although the era of accountability is relatively new, Cooperative Extension, a federally funded program under the US Department of Agriculture and the oldest outreach organization in the world, began to feel national pressure from several sources as early as 1977 about accountability and evaluation. McKenna (1983) notes from the Extension Oversight Hearings:

"As we continue down the road of reduced government spending, all USDA programs must come under close scrutiny" (p. 24). Likewise the Government Accounting Office is documented as stating," As resources for solving programs in our society become increasing scarce, the need to apply them more effectively increases. Public pressures to reduce growth of government programs while at the same time improving their effectiveness points to increased demands for evaluation in the future" (p. 24).

In 1977, Congress mandated the National Extension Evaluation, the USDA-Science and Education, responded by saying,

> Throughout the Extension system, there is a growing understanding of Extension's strong points, its limitations, and issues it must now face … already in motion are plans to build an ongoing Extension evaluation capability that will overcome certain limitations encountered by this evaluation. (McKenna, 1983, p. 24)

This mandate questioned the relevance, worth, merit and impact of Extension programs and as a result, Extension Administrators began putting greater emphasis on accountability and evaluation. Additionally, the Journal of Extension published its classic issue dedicated entirely to program evaluation in Cooperative Extension (http://www.joe.org/joe/1983September/index.php). The time had come when "Extension educators could no longer afford to simply assume that their programs worked or that their worth would be self-evident" (Rennekamp & Arnold, 2009, p. 1). This meant that Extension professionals had to a new way of thinking and working. For example, a new focus was placed on developing program development and evaluation skills and use of evaluation results.

## Extension Program Development

The Cooperative Extension System is a complex multifaceted organization with a unique structure of funding and accountability (Franz & Townson, 2008). The term "cooperative" is based on the systems funding sources: the county, state and federal government cooperatively support the mission of the organization. As such, Cooperative Extension Systems are accountable to many stakeholders at many levels. Because each Cooperative Extension Service receives different types/amounts of support from each of these three partners, the focus of each state's efforts will mostly depend on the needs, interests, and issues assessed at each level. Although each Cooperative Extension program operates with relative freedom and flexibility within states, a relatively consistent model is used to guide the development of extension educational programs (Franz & Townson, 2008). The Extension Program Development Model as shown in Figure 1 and the Basic Program Development Model shown in Figure 2 have the same fundamental elements: (1) situational analysis or needs assessment, (2) program design and implementation, and (3) program evaluation and reporting. It is noteworthy to mention that these models identify program evaluation as a continuous process that occurs throughout the program life cycle. Evaluation is a bidirectional dynamic activity that informs and clarifies previous processes.

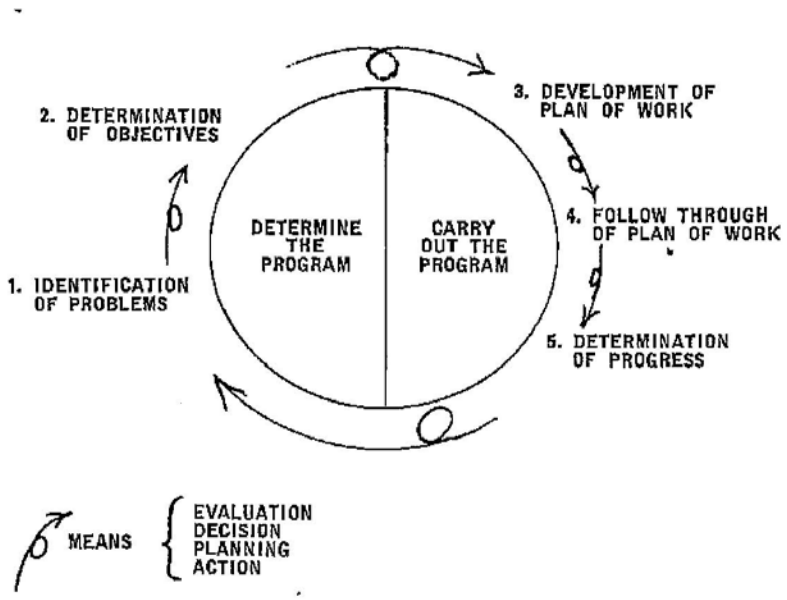


*Figure 1.* The Extension Program Development Model (Raudabaugh, 1959).

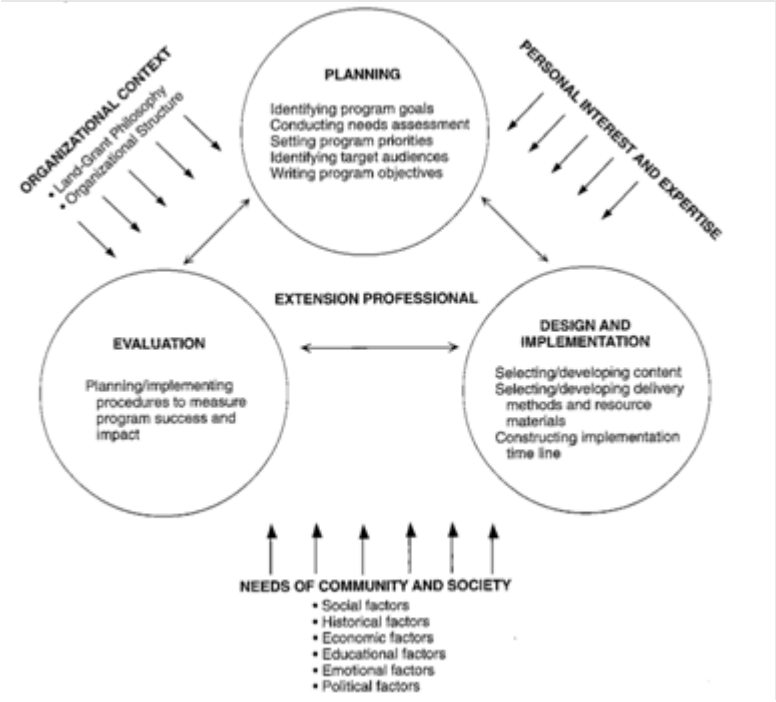


*Figure 2.* Program Development Model (Seevers, Graham, & Conklin, 2007).

## Statement of the Problem

Because local family and community practitioners are feeling the pressure from federal and state agencies to document program effectiveness they must be able, to a certain degree, to asses program needs, develop purposeful programs based on identified needs, and systematically evaluate the results of such efforts. However, these skills are not instinctive in nature. Furthermore, as issues in contemporary life become ever more complex, the need for multifaceted interventions turns out to be all the more essential. Yet successful programs, despite complexity, are not easily developed. For that reason, researchers have tried to delineate those aspects of programs that may contribute to implementation success or failure, continuous improvement, or impactful results. Program development skills are not alone in that program

evaluation skills are even more scarce at the local level. In fact when comparing the three levels of the program development model, program evaluation is often times neglected due to lack of evaluation knowledge or skills.

Although gains have been made towards accountability, developing a concept of program evaluation in Cooperative Extension has been a challenge. Program evaluation means different things to different people including extension and outreach professionals. Douglah (1998) maintains that "extension professionals must realize that program evaluation is more than simply filling out post-activity reaction questionnaire" (p. 2). In short, Cooperative Extension, as whole, must develop a commitment to systematic program evaluation and develop the capacity to engage in program evaluation and reconsider evaluation use (Rennekamp & Arnold, 2009).

## Purpose of the Study

The purpose of this study was an attempt to address developing a concept of program evaluation in Cooperative Extension by examining commitment to systematic evaluation, commitment to the Extension Program Development Model, barriers and supports that impact engagement in systematic evaluations, and the application of evaluation results.

## Research Questions

The following research questions are addressed:

1. To what extent do Cooperative Extension and Outreach staff engage in systematic program evaluation?
2. What factors increase or decrease Cooperative Extension and Outreach staff engagement in systematic program evaluation?
3. To what extent do Cooperative Extension and Outreach staff use evaluation results?

4. To what extent are Cooperative Extension and Outreach staff committed to the Extension Program Development Model?

## Significance of the Study

There is very little empirical evidence that addresses assessment and/or evaluation practices in high education. And of those that do, the focus is on formal education and academic programs (Peterson & Einarson, 2001). Cooperative Extension is the largest and oldest informal educational system in world but very little research has been devoted to examining the evaluation of these informal educational programs. This study offers an improvement over other researcher's approaches because it (1) focuses specifically on formal evaluation by Cooperative Extension and Outreach field and state staff rather than faculty in traditional academic departments, (2) addresses the formal evaluation of informal educational programs, and (3) addresses four issues related to engagement in systematic program evaluations within Cooperative Extension. This study begins by examining the current status of program evaluation use in Cooperative Extension. It then examines the factors that impact an individual's attitudes and behaviors relative to systematic program evaluations. Next, the organizational factors such as readiness and capacity to engage in systematic evaluations are examined, and finally, the ways in which evaluation results are used.

## Limitations

The following were limitations to the study.

1. A non-experimental design was used in this study.
2. Participants self-reported information and may have reported information that portrays them more positively.

3. All CES employees were invited to participate in this study; however, it is unclear who participated.
4. All Extension administrators were asked to forward the survey link to all state and field staff in their respective organizations. It is possible that not all administrators forwarded email to employees.
5. The survey link, information letter, and invitation to participate were sent via universities' E-mail systems. There are possibilities that the email was sent to individuals' junk mail, individuals ignored the email, or individuals don't check email on a regular basis.

## Delimitations

1. Only Cooperative Extension field and state staff were included in this study.
2. Only adults 19 years or older were included in this study.
3. Only land-grant colleges and universities were included in this study.

## Assumptions of the Study

The following assumptions were made regarding the study:

1. All Cooperative Extension directors emailed the survey link to all state and field staff in their organization.
2. All participants were knowledgeable enough about needs assessments, program design and implementation, and program evaluation to answer the survey questions.
3. All participants were involved enough in their organization to answer survey questions regarding readiness for organizational learning and evaluation.
4. All participants responded to survey questions in an honest and accurate way.

## Definition of Terms

Terms used in this study were:

**Cooperative Extension System (CES)**—a public-funded, nonformal, educational system that links the education and research resources of the U.S. Department of Agriculture (USDA), land-grant universities, and county administrative units. The basic mission of this system is to help people improve their lives through an educational process that uses scientific knowledge focused on issues and needs (Seevers, Graham, & Conklin, 2007, p. 242).

**County Extension Agent**—the Extension educator employed at the local, county or parish level. The agent's primary responsibilities are educator and advisor, and transferring the findings of research and new technology to the solution of problems in the community, farm/ranch, or home. The specific title of this position may vary from state to state with such titles as Farm Agent; County Agent; Agriculture, Home Economics or 4 H Agent; Youth Development Agent; Family and Consumer Science Educator (Seevers, Graham, & Conklin, 2007, p. 242).

**Extension Programs**—programs that address problems and issues that are common to most Extension units and central to the mission of the various Extension discipline areas. These base programs, which are ongoing from year to year, may also be multidisciplinary in nature.

a. ***Agricultural Program***—a program area of Extension work, the main objective of which is to help producers retain their competitiveness in world markets. The major goal is to increase profitability, create new and alternative opportunities, and use sound management practices that will help to preserve renewable natural resources (Seevers, Graham, & Conklin, 2007, p. 241).

b. ***Community Development Program***—a program area of Extension work with the objective of improving the physical, social, and economic conditions of a community. The program goals are to strengthen communities by increasing group effectiveness, and professionals target citizen groups, business and industry leaders, city and county governing bodies, and voluntary service and civic organizations (Seevers, Graham, & Conklin, 2007, p. 242).

c. ***Family and Consumer Sciences Program***—a program area of Extension work with emphasis on teaching family members how to improve the social, economic, and physical well-being of their families. Its goals are to assist families to manage resources better; make sound decisions; improve level of nutrition, diet and health; and build human capital (Seevers, Graham, & Conklin, 2007, p. 244).

d. ***4-H Program***—one of the program areas of Extension work is the objective of helping youth acquire the life skills and knowledge necessary to grow and succeed in a rapidly changing and complex society. The mission of the 4-H Youth Development program is to create supportive environments in which culturally diverse youth and adults can reach their fullest potential (Seevers, Graham, & Conklin, 2007, p. 244).

**Extension Specialist**—faculty members with expertise and specialized knowledge in a particular subject-matter area. They are involved in translating and disseminating research-based material to county Extension agents and their clientele groups. Specialists usually have a doctoral degree with rank equivalent to the campus professor system (Seevers, Graham, & Conklin, 2007, p. 248).

**Land-grant colleges and universities**—"An institution of higher education sustained and supported by the Morrill Acts of 1862 and 1890, and expanded by the Hatch Act of 1887, the Smith-Lever Act of 1914, and subsequent legislation" (Sanderson, 1988, p. 59).

**Needs assessment**—a formal process to obtain information on the current state verses the desired state, compare them, identify gaps, and arrive at needs-based priorities for organizational actions (Altschuld & Lepicki, 2010, p. 774).

**Program design and implementation**— "The step in the program planning process that builds on planning." It includes selection and development of program content, selection and/or development of program delivery methods and resources materials and creation of time lines for program implementation and evaluation. It also includes putting a program into operation (Seevers, Graham, Conklin, 2007 p. 242).

**Program development**—a continuous series of complex, interrelated processes which result in the accomplishment of the educational mission and objectives of the organization (as defined by the Extension Committee on Policy, 1974).

**Program evaluation**—the systematic collection of information about the activities, characteristics, and results of programs to make judgments about the program, improve or further develop program effectiveness, inform decisions about future programming, and/or increase understanding (Patton, 2008, p. 38).

**Stakeholders**—individuals who have vested interest in a program or evaluation findings.

a. People who have decision authority over the program, including other policy makers, funders, and advisory boards

b. People who have direct responsibility for the program, including program developers, administrators in the organization implementing the program, program managers, and direct service staff
c. People who are the intended beneficiaries of the program, their families, and their communities
d. People disadvantaged by the program, as in lost funding opportunities

(Greene, 2006 pp. 397–398)

## Organizational Overview

This chapter provides background, rationale, and significance for conducting this study. The rest of the study is organized as: Chapter 2 discusses the history of Cooperative Extension, the Extension Program Development Model, and literature and studies about program evaluation and organizational readiness. Chapter 3 outlines the research design, description of participants, sampling plan, data collection, and data analysis. Chapter 4 reports the results for each research question. Finally, Chapter 5 offers an interpretation of results, discussion of implications, and recommendations for further research.

# CHAPTER 2. LITERATURE REVIEW

This chapter will begin by providing a historical view of land-grant institutions, Cooperative Extension, its mission and complex infrastructure. The chapter will then discuss the program development, implementation, and evaluation in the context of the Cooperative Extension System with particular attention to the Extension Program Development Model. The literature will focus on best practices related to needs assessments, program development, program implementation and program evaluation. In addition, the program development component of the Extension Program Development Model will be further detailed in terms of best practices concerning focusing the evaluation, collecting analyzing and interpreting data, and using evaluation results. The chapter will commence with an examination of literature pertaining to Standard for Evaluation, the purpose of evaluation with regard to accountability and continuous improvement, then ending with a look at organizational readiness.

## History of Cooperative Extension

### Land-grant Institutions

Land-grant institutions, also known as the college for common people, were established with the Morrill Acts of 1862 and 1890 enacted by President Lincoln. The Morrill Act of 1862 granted land to states to be used or sold to raise money to fund state land-grant colleges and universities. The amount of land granted to each state was based on the number of congressional seats held by each state at the time (Rassmusen, 1989). Land-grant colleges and universities were established in all 50 states. The Morrill Act of 1890 was enacted to provide direct federal

funding to land grant institutions and prohibit racial discrimination at the same time. As a result, 18 additional colleges and universities, also known as 1890 Institutions, were either given land-grant status or formed. The 1890s, as they are commonly called, are Historically Black Colleges and Universities located in the South, below the Mason Dixon line. While the1862 institutions worked primarily with middle-class Whites, the 1890s worked primarily with low-income limited resource Blacks (Mayberry, 1989). Later in 1994, land-grant status was given to 33 American Indian colleges and universities.

Land-grant institutions were formed to address the agricultural and mechanical needs of local communities in the United States. The creation of the land-grant system was instrumental in making the United States a globally competitive agricultural and mechanical industry by targeting both traditional students and non-traditional students. That is, while traditional agricultural and mechanical students would be taught the latest innovations and best practices by researchers at the land-grant institutions, farmers were encouraged to attend the same classes to learn the same techniques (Boyer, 1990).

**Agriculture Experiment Station**

The Hatch Act of 1887 established the Agricultural Experiment Stations as result of the Morrill Act of 1862. The Agricultural Experiment Station (AES), a farm located on the campus of each land grant institution, was created with the intent

> … to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science. (Prawl et al., 1984, p. 18)

The main purpose of the agricultural experiment stations was to apply the research being conducted on college campuses to everyday agricultural problems:

> … it shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States.

It wasn't long before farmers started to look to agricultural researcher and the experiment station (farm) for answers to common and difficult questions regarding farming. Given the scope of the Act, the demand for information, demonstrations, and research, agricultural experiment stations across the U.S. began to feel overwhelmed with the burden of solving the nation's agricultural problems on its shoulders.

**Cooperative Extension System**

Although the creation of the land-grant institutions and agriculture experiment stations increase the agriculture production and sustainability in local communities, it was not to the level expected. It wasn't long before land-grant leaders realized that inviting farmers to attend

university classes was not enough. Many farmers were not able or were unwilling to travel to universities to attend traditional classes. However, the future of land-grant institutions and agricultural experiment stations success and sustainability relied on farmers not only learning new information but actually adopting new practices.

Even though the Cooperative Extension wasn't created until 1914 by the Smith-Lever Act, extension work dates back to the late 1800s with the work of Booker T. Washington and George Washington Carver of Tuskegee Normal School, now named Tuskegee University (Mayberry, 1989). Carver, an agricultural researcher, was known for taking his research and innovations on the road. He would go to local farmers to do hands on demonstrations which taught the farmers how to yield better crops. Carver's moveable school, the Jessup Wagon, set the stage for what would later become the Cooperative Extension System. Agricultural and land-grant leaders noticed that farmers were more apt to adopt new practices with one-on-one localized support rather than university level support. In other words, it was realized that instead of having farmers come to classes at the university, the university should become localized and extend to the farmers. Hence cooperative (cooperation between USDA, land-grant institutions agricultural experiment stations, and state and local governments) extension (an extension of the land-grant system to the community) was established. Currently, the Cooperative Extension System includes 108 land-grant institutions located in over 3100 counties (http://www.nifa.usda.gov/qlinks/extension.html#today).

**Cooperative Extension Infrastructure**

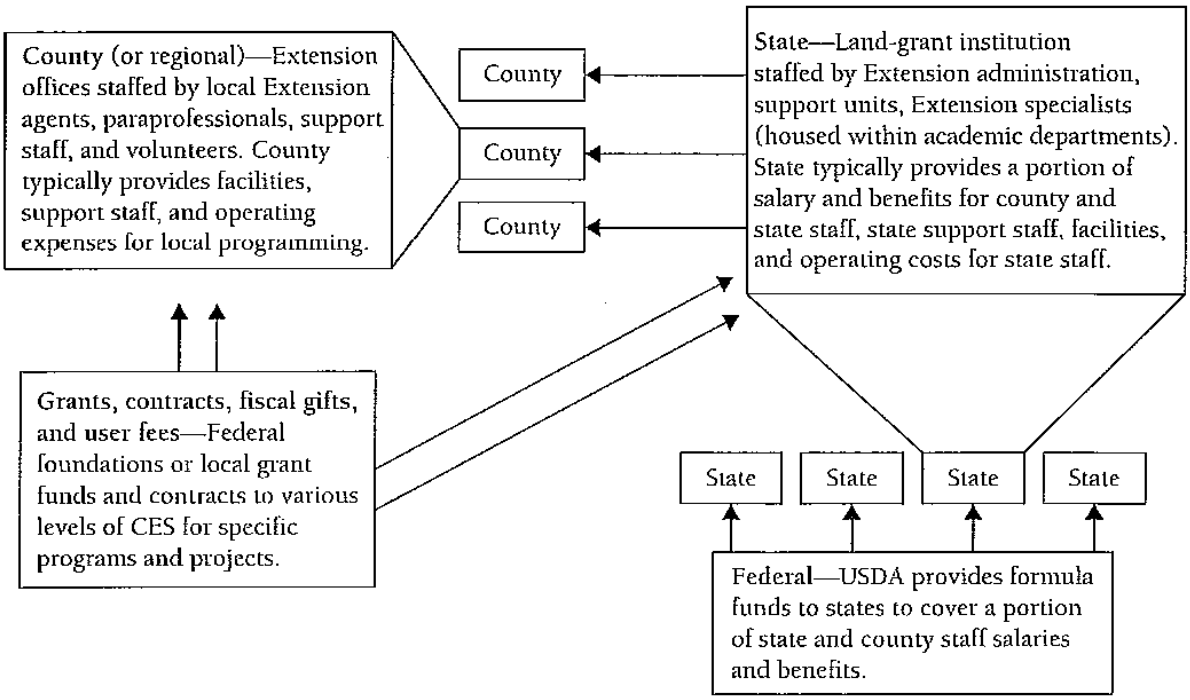


*Figure 3.* The Cooperative Extension Partnership (Franz & Townsen, 2008)

**Program Development, Implementation and Evaluation in Cooperative Extension**

According to the Administrative Handbook for Cooperative Extension Work, Extension's mission is " helping people improve their lives through an educational process which uses scientific knowledge focused on issues and needs" (United States Department of Agriculture, 2002, para. 2). The intent of Cooperative Extension is to take research-based information and make practical solutions for improving not only agriculture practices but also forestry and natural resource conservation practices. In addition to agriculture and natural resources, Cooperative Extension also focuses on improving and strengthening family life and positive youth development through initiatives such as 4-H. Although agriculture, family and consumer sciences, and 4-H were the traditional program areas initiated by the United States

Department of Agriculture, in an effort to remain competitive and keep with current trends and changing dynamics, Cooperative Extension programs have begun to address issues regarding leadership, community and economic development, and bio renewable energy (http://www.nifa.usda.gov/qlinks/extension.html, 2010). For example, the Alabama Cooperative Extension System has six state and federal initiatives: Family and Consumer Sciences, 4-H and Youth Development, Community and Economic Development, Agriculture and Natural Resources, Forestry and Wildlife, and Animal Science. Each initiative acts as an umbrella under which specific program areas are covered. For instance, the Family and Consumer Sciences umbrella covers program initiatives in family and child development, human nutrition diet and health, food safety, food preparation and food preservation, consumer affairs and person financial management, the nutrition education program, and the expanded food and nutrition education program. Likewise, the Community and Economic Development umbrella covers program initiatives in tourism, leadership, community resources development, and entrepreneurship.

The Cooperative Extension System has flexibility in how programs are initiated as long as they follow the federal priorities set by the United State Department of Agriculture. In other words not all Cooperative Extension Services offer the same state level initiatives but will follow the same federal or national initiatives. For example, some states address the federal initiative family and consumer sciences through comprehensive programs like the Alabama Cooperative Extension System, while others address it in a more limited manner, by offering fewer program initiatives. Tuskegee University Cooperative Extension Program addresses family and consumer sciences in a very limited role by focusing only on nutrition education. Likewise, Clemson University addresses family and consumer sciences by focuses primarily on food safety. Despite

the type of structure that exists across Cooperative Extension, the program development model is relatively uniform. The program development model includes situational analysis or needs assessments, program development and implementation, and program evaluation (Franz & Townsen, 2008).

**Situational Analysis or Needs Assessment**

"Effective extension education is an intentional effort, carefully designed to fulfill certain specifically predetermined and presumably important needs…one of the greatest strengths Extension has been its flexibility in helping people adjust to needs imposed by a changing environment" (Leagans, p. 89). Extension professionals are trained to "meet people where they are" or in other words, develop programs based of the current and immediate needs of individuals. Meeting people where they are is a critical part of Extension programming namely because Extension programs are voluntary; as such these programs are only successful to the degree in which they target and help meet identified individual, family, community or societal need. Needless to say, at the heart of extension programming is grassroots or localized involvement. Extension programming begins with assessing community needs through grassroots stakeholders. Extension state or field staff typically form a county advisory board that consists of primary, secondary, and tertiary stakeholders. A fundamental aspect of a needs assessment is the involvement of stakeholders in decisions about program planning. Stakeholders provide input on county needs and issues and work with the extension staff to address the needs. Situational analysis and needs assessments are conducted in a variety of ways, ranging in frequency and comprehensiveness. Although there is no right way to conduct a situational analysis or needs assessment, researchers agree that high quality assessments rely heavily on best practices (Taylor-Powell, 2008). Best practices include collecting data about

community needs and assets, analyzing the results from the situational analysis, and communicating the results of the assessment (see Figure 4). Needs assessments can be conducted in variety of ways such as the use of community advisory boards, use of existing assessments or records, the use of focus groups, the use of community surveys, or any combination of these.

- Engage stakeholders in decisions about program planning
- Collect data regarding community needs
- Use the results of situational analysis to plan programs
- Use key informants to guide program planning
- Use the county or community advisory board to guide program planning
- Use existing assessments and/or records to determine current programming needs
- Send out mass community surveys to assess county needs
- Communicate the results of the needs assessments
- Analyze the data from situational analysis
- Use the results of situational analysis to prioritize programming efforts
- Use the results of the situational analysis to prioritize the use of limited resources in program planning

*Figure 4.* Needs Assessment Best Practices (Taylor-Powell, 2008)

According to Altschuld and Lepicki (2009), high quality needs assessments are context driven and based in systems perspective. Witkin and Altschuld (1995) maintain that there are three levels of people who typically experience needs. The first level of people includes individuals who are the receivers of a program, service or product. In other words, level one

individuals can also be thought of as consumers. The second level consists of individuals who provide the service, program, or product to the consumers in level one. The third and final level of individuals experiencing needs is categorized as decision makers, administrators, managers, and others in leadership positions. In order for a needs assessment to be successful, information should be gathered in multiple stages and from several different individuals at all levels. The needs assessment committee (NAC) should take into account the historical, economic, political and social climate in which the needs assessment will exist.

The Alabama Cooperative Extension System implemented a comprehensive high quality needs assessment to identify current needs of the state. To gain insight from different perspectives and multiple levels, needs were assessed from state level stakeholders, county level stakeholders, and ACES employees. Surveys were sent to state and county stakeholders and followed up with state and local focus groups. To ensure that a wide range of program needs were addressed focus groups were arranged by topic area. Needs assessment focus groups were held in each county in the state. The results from the state, county and employee needs assessments were analyzed, communicated to stakeholders, and used to guide program development.

Although this section has outlined "best practices" for conducting a needs assessment, there is no right way or only way to conduct one (Sanders & Ruggles, 2000; Stolovitch & Keeps, 2002). When preparing for a needs assessment, a pragmatic approach is highly recommended since what works in one organization will not work in another.

Legean (1964) suggests the following questions as a way to focus a needs assessment:

1. Does the need really exit?
2. Who has the need?

3. How many individuals or families have the need?
4. Why does the need exit?
5. In what way is the need significant—economically, socially, or aesthetically?
6. What is the relative significance of the need?
7. What would likely be the consequence one or more years from now if no effort is made to meet the need?

The needs assessment results in the identification of a problem or in other words, "those areas of needs and interest wherein it is believed improvement can be accomplished, and which lie within the scope of legislation applicable to the Cooperative Extension Service, then become the foundation for an immediate and/or long-range program" (Raudabaugh, 1959).

**Program Development**

The second component of the Cooperative Extension program development model is the design phase. Program design occurs once the results of the needs assessment have been analyzed. Extension staff addresses the community needs through programs from the state and national initiatives. It is the mission of the Cooperative Extension System and the responsibility of Extension field and state staff to develop high quality programs based in the latest research and on best practices. However, these programs are not easily developed. For instance, there are several factors identified in the literature that should be considered when developing community-based programs. For example it is the position of family scientists and practitioners that an ecological perspective guide program development for families, youth, and communities (Schorr, 2009). That is, these programs see the child as developing through the family and see the family developing through the community and larger society (Bogenschneider, 1996; Cummings, 1999; Dumka, 1995; Hughes, 1994; Schorr, 1988; Wells, 2005).

Moreover, Schorr (1988) through her evaluation of community based programs found that comprehensive programs are more successful than those that offer fewer programs or services. During the program development phase, it is equally important to consider the certain characteristics of the program's target audience. For example, when program developers match the participant's age, gender, race or ethnicity, and social class, the program's design may have a better chance of reaching the intended audience (Hughes, 1994; Wells, 2005). Likewise, program developers should consider the skill level of the target audience, knowledge level of target audience, and the intentions of the target audience to comply with norms as they affect whether or not participants are willing and able to adopt behavior changes (Cummings, 1999; McLeroy et al., 1988; Wells, 2005).

In addition, extension program developers should be aware that participants' attitudes about specific program goals and related topics play a role in the programs' ability to reach its objectives. Participants are more likely to participate in programs and adopt behavior change when they have ownership and buy in, which is the importance of conducting needs assessments and developing programs based off the needs assessment results. Still another factor that extension program developers need to pay attention to when designing community based programs is the influence of the target audience's social support network (Wells, 2005). Research suggests a link between the existence of social support networks and the network members' acceptance of program goals as well as participants in the program. If the participants' network does not agree with and help foster the program's goals, then receptivity of those goals by the participant may be challenged (Wells, 2005). McLeroy et al. (1988) argue that support networks are key because they provide, "emotional support, information, access to new social contacts and social roles, and tangible assistance in fulfilling social and personal

obligations" (p. 351). As a result, people's individual decisions, attitudes, and behaviors can be heavily influenced; therefore, it is noteworthy that social support networks receive some attention (Wells, 2005).

**Program Implementation**

The next level of the model, program design and implementation, builds on the results of the needs assessment/situational analysis. Fixen et al. (2005) define implementation as a "specified set of activities designed to put into practice and activity or program of known dimensions" (p. 5). Once the needs have been identified, the program developer can begin the next steps of process which include identification of objectives, deciding on the delivery strategy, the dosage of the program, and materials to be used during the program. These elements should be purposive, planned, and carried out in a way that allows an unbiased independent observer to determine if the activity is being carried out as planned and to what extent (Fixen et al., 2005).

Small, Conney, and Connor (2009) conducted a review of literature highlighting the best practices and principals of program effectiveness. Researchers argue the most effective and successful programs are those that share elements of Figure 5 (Bond & Hauf, 2004; Borkowski et al., 2006; Bronte-Tinkew et al., 2008; Caspe & Lopez, 2006; Durlak, 2003; Kimpfer & Alvarado, 2003; Kumpfer & Alder, 2003; Nation et al., 2003; Weissberg et al., 2003).

- With theory driven content
- With sufficient dosage
- That are comprehensive
- That actively engaging
- That are developmentally appropriate
- That meet participants where they are
- That are socially and culturally relevant
- That are delivered by well-qualified staff
- That are delivered by well- trained staff
- That focus on building positive relationships

*Figure 5.* Program Implementation Best Practice

The program implementation phase addresses the methods or procedures for how the program's design will be carried out. It is the action plan for the program design. During the implementation phase, the program developer must decide how, when, where, to what extent, and how often the program will be conducted.

It is also critical that the program developers identify program goals, content, objectives, indicators, and outcomes. These factors should be based on characteristics of the target audience and the environment in which the program will exit (Wells, 2005). Because Cooperative Extension programs are based on local community needs, it is critical for successful implementation that programs are conducted in a variety of ways, at various times, and in diverse locations (Wiley, Branscomb, & Wang, 2007). Wasik (1993) adds that non-traditional community education programs, such as those programs that meet in non-traditional places (e.g.,

weekends, after school, early morning or late night) are able to reach a more diverse audience. In addition, Abell et al. (1999) suggest that successful implementation also may be affected by the participants' reasons for participating as well as his or her willingness to talk about sensitive issues.

Lastly, extension program developers should consider how program specific characteristics addressed in the design phase impact implementation. The family support literature points out that it is important that programs seek out, meet, and adapt to the needs of the participants' whom the program is intended to serve (Wells, 2005). The needs and constraints of participants, such as the lack of transportation, geographical isolation, scheduling conflicts or timing, and child care may present some potential barriers to participation — which may in turn affect program implementation. For instance, a typical cooperative extension program may be delivered through face-to-face, 8-week, 2-hour session at a local housing community to alleviate the barriers related to geographical isolation and lack of transportation. Often times family and consumer science programs such as parenting education or nutrition education provide educational sessions for parents and children to alleviate the burden of child care. Powell (1993) maintains that a program's capabilities and willingness to address and adapt to such needs influences that program's implementation success.

In addition, Abell et al. (1999) suggest that other key issues important in successful implementation are getting the participants to accept the program's goals and getting the participants to trust the staff members. These family scientists contend that a program's goals are more readily attainable when the participants agree with the program's goals and trust that the program staff genuinely care about them, their families, and their communities**.**

The use of a logic model, which documents a program's theory (Corbin, et al., 2004; Kellogg, 1996; Taylor & Powell, 2009) is an excellent map of implementation process. However, a program logic model is useless if the implementation processes are not carried out as intended. This disconnect between planned activities and actual activities can lead to implementation failure (Wandersman et al., 2005) or in other words, when the program theory is solid but carried out as originally planned (Rosenbaum, 1986). Researchers point out that implementation failure can manifest for a number of reasons including: inadequate inputs, novice or inexperienced staff; untrained staff; low fidelity; or low quality adaptation (Dalton, et al., 2007; Durlak & DuPre, 2008; Wandersman et al., 2005). Wandersman (2009) notes that often times organizations have lofty program theories that when put into practiced are not realized. Similarly, organizations may lack the capacity or infrastructure to actually implement the program's theory as planned or may implement the plan in less effective ways (Durlak & DuPre, 2008; Livet et al. 2008; Livet & Wandersman, 2005; Sax et al., 2002; Wandersman et al., 2008).

**Program Evaluation**

The final level of the program development model and the level on which this study will focus is the program evaluation phase. Although there are is no "blue print" for engaging in program evaluation, there are certain elements that can be considered best practices among experts in the field. For example, evaluation experts at the University of Wisconsin-Extension developed a planning guide, "*Planning a Program Evaluation"*, to help cooperative extension state and field staff determine the level of success realized from programmatic efforts (Taylor-Powell, 2008; Franz & Townsen, 2008). Chinman et al. (2001) posits " high-quality evaluation requires knowledge of research design, measurement, data collection, data analysis, interpretation of multiple sources of data, and presentation of findings, all within the context of

limited time and resources" (p. 302). Best practices shown in Figure 5 include: focusing the evaluation, collecting data, analyzing and interpreting data, using the results, managing the evaluation, and employing professional standards throughout the evaluation process (Russ-Eft & Preskill, 2009; Taylor-Powell, Steele, & Douglah, 2004).

Matthews (1959) suggests that evaluation should permeate all levels of the model to ensure quality and continuous improvement (see Figure 1). However, quality and continuous improvement are not the only reasons to evaluate. Evaluation helps extension educators grow professionally by developing their capacity to design high quality programs and evaluate them. Evaluation also helps to identify what works or doesn't work for whom and in what situations. Likewise evaluations help program designers prioritize program resources, establish a vision or mission, and document program outcomes (King & Coosky, 2008; Matthews, 1959; Patton, 2008; Rennekamp & Engle, 2008; Seevers, Graham, & Conklin, 2007).

**Focusing the Evaluation**

Focusing is the first step in conducting an evaluation. (See Figure 6 for a complete list of evaluation best practices.) It includes examining and clarifying a program's basic and underlying assumptions, inputs, activities, outputs, resources, short, mid and long term outcomes. Similarly focusing involves identifying stakeholders and how they will be engaged in the evaluation process. Still another part of focusing is defining the purpose which in turn determines the nature and scope of the evaluation.

- focusing the evaluation
- collecting data
- analyzing and interpreting data
- using the results
- managing the evaluation
- employing professional standards throughout the evaluation process

*Figure 6.* Program Evaluation Best Practices

Evaluations' purpose can be to improve, revise, or further develop the evaluand or in other words formative assessment (Sriven, 1991). For example, questions that a formative evaluation might seek to answer include: how well is the program being implemented, what barriers or facilitators to implementation exists, or how can this program be revised to reach a larger or more diverse audience?

On the other hand, evaluation's purpose can be to prove the merit, worth, or value of the program, or in other words, summative evaluation (Scriven, 1991). Examples of summative evaluation questions might include To what extent did the program meet its goals? or What impact did the program have on the participants? Summative evaluations can be further categorized into four common types of evaluations: monitoring and auditing, outcome evaluation, impact evaluation, and performance measurement (Russ-Eft & Preskill, 2008).

Organizations use monitoring evaluation after a program has been established for an extended period of time or is an ongoing initiative to determine if the program needs minor adjustments, if resources are being used appropriately, or if the program is being implemented

according to the program's approved design (Mathison, 2005; Owen, 2006; Rossi & Freeman, 1985). Outcome evaluation is described as "the process and set of procedures for assessing, on a regular basis, the results of an agency's programs for its participants" ( United Way of America 1996). Plantz et al. (1997) further states that outcome evaluation concerns itself with the "benefits or changes in participants' knowledge, attitudes, values, skills, behavior, condition, or status" (p. 17).

Similar to monitoring evaluation, impact evaluation is undertaken to assess the long term effects of an established program on participants (Owen, 2006); however, impact evaluation differs from monitoring in that impact evaluation focuses on benefits to participants while monitoring focuses on program fidelity. Brickman (2004) maintains that impact evaluation is often conducted to assess the relationship between interventions and outcomes. Finally, performance measurement is most often associated with government and non-profit accountability. With the decrease in federal, state, and local resources and increase in demands for measurable results, the Government Performance and Results Act of 1993 (GPRA),

> … requires each federal program to identify indicators of outcome for major programs, to provide targets at the beginning of each fiscal year for each indicator, and to report on the actual values for each outcome indicator within six months after the end of the fiscal year. (Hatry, 1997, p. 32)

The U.S. government enacted the GPRA to "focus government activity on results, rather than on inputs or process" (Wargo, 1994, p. 65); however, when program evaluation focuses solely on results instead of context and/or implementation a very limited view of program success is captured. The Kellogg Foundation (2006) insists that "all too often, conventional approaches to evaluation focuses on examining only the outcomes and impact of a project

without examining the environment in which it operates or the processes involved in the project's development."

When organizations choose to only evaluate program results, it is at the risk of a holistic view of program success. In fact the AEA Evaluation Policy Task Force emphasized in their recommendations to the Office of Management and Budget that,

> … the key is to make program evaluation integral to managing government programs at all stages, from planning and initial development through start up, ongoing implementation, appropriations, and reauthorization. In short, what is needed is a transformation of the Federal management culture to one that incorporates evaluation as an essential management function. (AEA Evaluation Policy Task Force, 2009, p. 2)

The final step in focusing the evaluation is to select an evaluation design. Although there are several different evaluation designs available, they typically fall into two major paradigms. One view is quantitative, founded in the scientific method or empiricism while the other is qualitative, founded in ethnography and naturalism. Quantitative approaches to evaluation involve outcomes that can be counted or measured. For example, an evaluation may measure a participant's knowledge before and/or after participating in an activity, measure the intentions of individuals to adopt new practices, count the number of people who participate in an activity, or count the number of outputs from an activity. Evaluators who espouse to the quantitative approach believe that the evaluator is neutral, objective, and independent of the evaluand. The focus of a quantitative design is to examine cause and effect relationships. Typical quantitative designs might include: one-shot design; retrospective pretest; one group pretest-posttest design; posttest-only control group design; time series design; pretest-posttest control-group design;

regression-discontinuity design; and the Solomon four-group design (Creswell, 2003; Russ-Eft & Preskill, 2008; Taylor-Powell & Steele, 1996).

On the other hand, qualitative evaluations involve thick rich descriptions of the lived experiences of program participants, program staff members, or community members. The purpose of a qualitative design is to understand the context and experiences of individuals. For example, an evaluation may ask participants to describe their relationship with program staff, to describe why they decided to participate in the program, or describe their perceived benefits of the program. Those who embrace the qualitative approach contend that the evaluator and evaluand are intertwined because the evaluator brings his or her values, perspective, and experiences into the evaluation (Creswell, 2003; Patton, 2008; Taylor-Powell & Steele, 1996). Qualitative designs might include case study designs, ethnography, phenomenology, narrative, participatory, and grounded theory (Creswell, 2003; Lincoln & Guba, 1994; Patton, 2008).

Russ-Eft and Preskill (2008) note that most evaluators assume one or the other perspective as a result of their education, background, or training; therefore it is recommended that evaluators work in a team to ensure that both quantitative and qualitative approaches are used. Using both methods, also known as a mixed-methods approach, will ensure that numerical and narrative data are collected, which in turn provides a more complete picture of program processes and outcomes. The Kellogg Foundation (1996) argues that "just as no single treatment/program design can solve complex social problems, no single evaluation method can document and explain the complexity and richness of a project. Evaluation designs should incorporate both qualitative and quantitative data-collection methods whenever possible" (p. 70). Regardless of the design chosen for the evaluation, The Kellogg Foundation offers the following points of consideration when deciding on an evaluation design: "create a flexible and responsive

design; collect and analyze information from multiple perspectives; and always return to your evaluation questions" (p. 70).

**Collect, Analyze, and Interpret Data**

Program evaluation requires data collection; however, "methods follows purpose" (Taylor-Powell & Steele, 1996, p. 1). Before the process begins it is critical that certain factors are considered: the purpose and rationale of the evaluation, who will use the information and how will they use it, what information stakeholders would like to know, the key questions the evaluation seeks to answer; and possible sources of information (Patton & United Nations World Food Programme, n.d.; Russ-Eft &Preskill, 2008; Taylor-Powell & Steele, 1996; USAID, 2010; USAID Center for Development Information and Evaluation, 1996).

Data sources can be primary or secondary. Primary data are collected from direct contact with individuals while secondary data are pre-existing, or in other words, collected for some previous purpose. It is important to note that primary and secondary data are not mutually exclusive; data that are primary for one project or evaluation may then become secondary data for another. See Figure 7 for examples of sources of data for Cooperative Extension adapted from Taylor-Powell & Steele (1996 p. 3). Data sources may vary in availability from organization to organization but generally include: people, organizational records, observations, and national databases (Hatry & Lampkin, 2003; Russ-Eft & Preskill, 2008; Taylor-Powell & Steele, 1996).

| People | Existing Records | Pictorial Records |
|---|---|---|
| Participants, beneficiaries- those who benefit directly from indirectly from the program | Program documents: newsletters, work plans, accomplishment reports, statistical reports, receipts, logs, minutes, personnel records, proposals, project and grant records | Before and After pictures (ex. A garage before and after it became youth center, or an empty lot before it became a garden project) |
| Nonparticipant, proponents, critics, victims | Existing data bases (Census Bureau, Kids Count, State Boards of Vital Statistics) | Art work by children which illustrates their perception of, or responses to, their environment—their notions about violence, drugs and other issues |
| Key informants: anyone who has particular knowledge about the program or how it benefits participants. (ex., teachers, parents, religious leaders, previous participants) | Research reports, county trend data supplied with program planning materials | Videotape of a group meeting which illustrates how to conduct the order of business, and examples of leadership or collective decision making skills |
| People with special expertise ( ex., judges, college faculty, historians) | Public service and business records (ex. Farm records, fertilizer sales at local dealers, employment statistics, justice, social and health agency data) | Slides showing changes that have occurred over time, such as lakefront development, downtown restoration, gazing management systems, or program participants learning new skills such as training a pet or speaking in front of an audience |
| County residents, local leaders, and those who are influential in a community | Other evaluations of the same or similar programs | Video or photos of program activities showing the diversity of participants |
| Program staff, administrators, volunteers | Histories: county, program, life histories | Observation of practices such as erosion control and manure management or lawn care practices |
| Collaborators; competitors, funders | Media Records | Observation of verbal and nonverbal behavior (ex. people's reaction to a nutrition display) |
| Policy makers, legislators, federal, state, or county agency/organizational staff | | Observation of events and activities to record the numbers, characteristics, practices, interactions patterns and skill development of program participants |

*Figure 7.* Extension Related Examples of Data Sources.

The next process involved in systematic evaluation is determining the method of data collection. As stated previously, evaluations typically follow one of three designs (1) qualitative, (2) quantitative, or (3) mixed-methods—a combination of both qualitative and quantitative. As such, the evaluation design will direct the type of data collection method used. For example, evaluations that employ a qualitative design will use qualitative methods; while those evaluations that have a quantitative focus will use quantitative methods; and still those designs that are mixed will use a combination of both methods (Caracelli & Greene, 1993; Creswell, Plano Clark, Guttman, & Hanson, 2003; Johnson & Onwuegbuzie, 2004; Sandelwoski, 2000). Figure 8 provides examples of data collection methods typically used in the evaluation of extension programs. The method of data collection will also depend largely on the sources of data available and the purpose of the evaluation (Bazely, 2004; Creswell, et al., 2004; de Leeuw, 2005; Driscoll, et al., 2007; Johnson & Christensen, 2004; Patton, 2002, 2003; Sale, Lohfeld, & Brazil, 2002; Tashakkori & Teddlie, 2003).

| | |
|---|---|
| Survey | Case Study |
| Photographs, videotapes, slides | Document review and analysis |
| Simulated problem or situation | Portfolio review |
| Interview | Expert or peer review |
| Test | Testimonials |

*Figure 8.* Typical Data Collection Methods Used in Cooperative Extension Programs

Other factors important in the data collection process as it relates to evaluation are the points in time when data will be collected, pilot testing the data collection instrument, and finally

analyzing and interpreting the data after it has been collected. Data can be collect and numerous points during an evaluation. For example, data collection might occur at one point in time, after an event or intervention has taken place, also known as one shot. Other times data might be collected before and after and intervention or pre- then post-. Similar to the one shot design, other designs might employ a retrospective pretest where participants are asked to reflect on their attitudes, behaviors, or skills, after the intervention has ended. Participants think about and rate or compare what they know after an intervention relative to what they knew prior to the intervention but at the same point in time. Finally, data may be collected using at time series design in which participants are asked to respond before an intervention and several times after the intervention. This pattern of data collection is consistent with a longitudinal design.

Once data are collected it must be analyzed and then interpreted. When data are collected but not analyzed, evaluators run the risk of future evaluations being unsuccessful. Quantitative data are almost always analyzed using statistical analysis software like SPSS or SAS. Like the data collection method, the choice of statistical analysis depends on the purpose of the evaluation, the questions that the evaluation seeks to answer, the information stakeholders would like to know, and the information that stakeholders are capable of understanding. On the other hand qualitative data can be analyzed by hand or by using narrative coding software like NUD*IST (Non–Numerical Unstructured Data Indexing, Searching and Theory Building), QRS-NVivo, ATLAS.t, or Ethnograph. There are several frameworks that one might use when analyzing qualitative data: grounded theory, phenomenology, case study, ethnography, and narrative.

Data analysis allows the evaluator to make some sense of the evaluation results. Contrary to popular belief numbers don't speak for themselves. Numbers are relative and

therefore must interpreted and contextualized in order for them to be meaningful. Likewise narrative data must be interpreted as well. If evaluation results inform practice and practice provides evidence and evidence informs decisions, thoughts, and behaviors, then it becomes increasingly critical that the results, whether quantitative or qualitative, are interpreted with consequential validity, authenticity, and credibility (Lincoln & Guba, 1994; Messick, 1989, 1995; Reeves, 2002).

**Use**

An even more critical component of systematic evaluation is the concept of use. Evaluation use has received significant attention over the past 30 years (Alkin et al., 1979; Caplan, 1977; Cousins, 1996; Knorr, 1977; Patton et al., 1977; Preskill & Caracelli, 1997; Rog, 1985; Shula & Cousins, 1997; Weiss & Bucuvalas, 1977; Williams et al., 2002). In fact, Christie (2007) maintains that "Evaluation utilization is arguably the most researched area of evaluation and it also receives substantial attention in the theoretical literature" (p. 8).

There has been great debate over the terms 'use', 'utilization', and 'influence' (Alkin 2005; Henry, 2003; Henry & Mark, 2003; Kirkhart, 2000; Patton, 1997; Weiss, 1980, 1981). There is one school of thought supported by Weiss (1980) that maintains use "because of its overtones of instrumental episodic application. People do not utilize research the way that they utilize a hammer" (Patton, 2008, p. 109). Weiss argues that evaluation results are used and tools are utilized. On the contrary Patton (1997) asserts that "people use hammers; they don't utilize hammers" the term use is more "direct, specific, concrete and moment in time" rather utilization is "a dynamic process that occurs over time (p. 109). Still other researchers argue that evaluation use and utilization are synonymous in that they are "the application of evaluation processes,

products, or findings to produce an effect (Johnson, Greenseid, Toal, King, Lawrenz & Volk, 2009, p. 377).

Yet, Kirkhart (2000) doesn't support the term of use or utilization as she urges researchers to move away from both and turn instead to a unified construct of evaluation influence. She posits that researchers should be aware of evaluation influences and the consequences in the same manner that Messick (1989) argues that researches should ensure the consequential validity. Kirkhart states that influence is "the capacity or power of persons or things to produce effects on others by intangible or indirect means" (p.7) and is comprised of three major dimensions: time, intent, and source. Although Patton (2008) and Alkin (2005) both recognize the contributions and importance of Kirkhart's unified theory of evaluation influence and how these influences lead to unintended outcomes; however, both also agree that Kirkhart's framework of influence is inadequate for shaping evaluation practice. Alkin (2005) explains why,

> Evaluation use typically refers to the impact of the evaluation (findings or process) within the context of the program being evaluated, within some reasonable time frame. Evaluations influence refers to the impact on the external program, which may or may not be related to the program evaluated, or to the impact of the evaluation at some future time. An important distinction between evaluation influence and evaluation use is that evaluators who are concerned with evaluation use can actively pursue a course of action to potentially enhance utilization by recognizing the evaluation factors and attempting to be responsive to them, but the evaluation influence is more difficult to predict and control. (p. 436)

In other words when evaluators are aware of factors that impact evaluation use they can plan for them; evaluation influences, on the other hand, are outside the control of evaluators or other stakeholders involved in the evaluation process.

Despite the evolution of the concept of use the traditional views still focus primarily on evaluation results and how they are put into practice (Cummings 2002; Harnar & Preskill, 2007; Preskill & Caracelli, 1997). The results of an evaluation are generally used in three ways: instrumental use; persuasive use; and conceptual use (Greene, 1988; Rich 1977; Shulha & Cousins, 1997; Weiss, 1979). For example, instrumental use occurs when "the results of a program are tangibly used to make programmatic improvements" (Harnar & Preskill, 2002, p. 27), or for decision making (Cummings, 2002), and "the findings are linked to some subsequent, identifiable action" (Patton, 2008 p. 112). Persuasive use, on the other hand, occurs when evaluation results are levied to convince program funders or decision makers that the program reached its intended outcomes or when program developers are seeking additional resources for sustainability purposes (Weiss, 1998). Still, conceptual use occurs when "people change their thinking or understanding (conceptual schema) about the program on the basis of the evaluation's finding (Harnar & Preskill, 2007, p. 27 parenthesis in original) but "no action or decision flows from the findings (Patton, 2008, p. 112).

In addition, use is also described by Patton (2008, p. 112) in terms of "direct intended use; longer term, more incremental influences (influence and enlightenment); primary political uses (symbolic, persuasive, legitimative, imposed and mechanical use), misuse (mischievous misuses; inadvertent misuse, and overuse), nonuses (due to misevaluation; political nonuse; aggressive nonuse) and unintended effects (untended uses)." The primary uses of evaluation findings include: judgment, learning, accountability, monitoring, development or knowledge

(Patton, 2008). It is noteworthy to add that researcher maintain that these types of use are interrelated; can coexist in the same evaluation; and that conceptual use occurs prior to persuasive use or instrumental use (Cousins & Leithwood 1993; Greene, 1988; Huberman, 1987; Owen, 1993).

Alkin and Taut (2003) discuss use as not only use of evaluation results but also process use. Patton (1997) began to explore process use and defines it as "individual changes in thinking and behavior and program or organizational changes in procedures and culture that occurs during the evaluation process" (p. 90). Patton's (1997) introduction of *Utilization Focused Evaluation* examines in detail how participation in an evaluation, despite the results of the evaluation, has an impact those participating in the evaluation. Simply by being a part of the evaluation, stakeholders reported changes in how they approached and carried out their job duties. They did not equate their changes in attitude or behavior the actual results of the evaluation but instead to interactions and experiences stakeholders had while going through the evaluation process—hence process use.

Further support for process use is offered by Patton (2008) as he puts forth indicators for such use: "infusing evaluative thinking into the organizational culture, enhancing shared understanding, supporting and reinforcing the program intervention, instrumentation effects and reactivity, increasing engagement, self-determination, and ownership, and program and organizational development" (p. 158–159). Likewise, Forss, Reiben, and Carlsson (2002) encourage evaluators to consider process use indicators such as learning to learn; developing networks, boosting morale, strengthening the project; and creating shared understanding.

**Factors Impacting Use**

Significant research has also been conducted on facilitators of evaluation use ( Patton 2008; Patton, Grimes, Guthrie, Brenan, French, & Blyth, 1977; Fleisher & Christie, 2009; Harnar & Preskill, 2007; Johnson, Greenseid, Toal, Kind, Lawrenz, & Volkov, 2009). For example, Alkin, Daillak, and White (1979), integrated existing research focused on the use of evaluation results and found that three factors impacted consistently influenced the extent to which evaluation results are used: (1) human factors, (2) context factors, and (3) evaluation factors. Human factors are related to the characteristics of the evaluator and how the evaluator interacts with the users of the evaluation and the evaluation process, context factors are related to environment that evaluation exists in, and the evaluation factors are related to the technical processes of the evaluation such as the design, data collection, or purpose.

Likewise, through the examination of 18 empirical studies conducted between 1984 and 2005, Amo and Cousins (2007) found connection between process use, evaluation capacity building; and organizational learning that impacted the use of evaluation results. Similarly, Preskill, Zuckerman, and Matthews's 2003 study of process use discovered five factors that impact use: management support; advisory group characteristics; facilitation of evaluation processes; organization characteristics; frequency, methods, and quality of communications.

However, Cousins and Leithwood (1986) conducted the most extensive review of literature from 65 articles published between 1971 and 1986 in an attempt to identify factors that influence the use of evaluation results. The review of literature revealed that the use of evaluation results increased with a user-focused evaluation design. For example, evaluations had high levels of stakeholder involvement, possessed a methodological design that stakeholders

found to be credible, and had findings that were consistent with stakeholder values, attitudes, and beliefs. See Figure 9 for threats to utility.

| |
|---|
| Failure to focus on intended use by intended users |
| Failure to design the evaluation to fit the context and situation |
| Inadequate involvement of primary intended users in making methods decisions |
| Focusing on unimportant issues-low relevance |
| Inappropriate methods and measures given stakeholder questions and information needs |
| Poor stakeholder understanding of the generally and findings specifically |
| Low user belief and trust in the evaluation process and findings |
| Unbalanced data collection and reporting |
| Perceptions that the evaluation is unfair or that the evaluator is biased or less than impartial |
| Low evaluator credibility |
| Political naïveté |
| Failure to keep stakeholders adequately informed and involved along the way as design alternations are necessary |

*Figure 9.* Threats to Utility (Patton, 2008, p. 412).

Additional research on factors impacting use conducted by Hofsetter and Alkin (2003) underscored the personal factor as well. Through an extensive review of literature these researchers concluded that "numerous factors influence use. The 'personal factor' appears to be the most important determinant of what impact as well as the type of impact of a give evaluation" (p. 216). Hofsetter and Alkin (2003) offer four recommendations for increasing use: (1) engaging and involving intended users early in the evaluation (2) ensuring strong

communications between producers and users of evaluations, (3) reporting evaluation findings effectively and in ways that meaningful, useful, and easily understood, (4) maintaining credibility with potential users.

Patton (2008) categorizes two main factors impacting the use of evaluation results: the political factor and the personal factor. Patton describes the personal factor as, " the presence of an identifiable individual or group of people who personally care about the evaluation and the findings it generates. Where such a person or group is present, evaluations are more likely to be used; where the personal factor is absent, there is a correspondingly lower probability of evaluation impact (p.69)." He further elaborates on the personal factor by stating, " Although the specifics vary from case to case, the pattern in markedly clear: Where the personal factor emerges, where some individuals take direct, personal responsibility for getting findings to the right people, evaluations have impact. Where the personal factor is absent, there is a marked absence of impact. Use is not simply determined by some configuration of abstract factors; it is determined in large part by real, live, caring human beings (p 69)." In other words when organizations have individuals dedicated to and passionate about evaluation results are more likely to get used.

## Evaluation, Evaluative Inquiry, and Organizational Learning

"Program evaluation is the systematic collection of information about the activities, characteristics, and results of programs to make judgments about the program, improve or further develop program effectiveness, inform decisions about future programming, and/or increase understanding" (Patton, 2008, p. 39). Stakeholder involvement in the evaluation process is critical not only to the use of evaluation findings but also to developing the capacity of individuals to learn from being a part of the evaluation process. Patton's (1997) introduction of

process use was summarized as " individual changes in thinking and behavior, and program or organizational changes in procedures and culture, that occur among those involved in evaluation as a result of the learning that occurs during the evaluation process" (p. 90). When evaluations use a collaborative or participatory approach, the likelihood is that those involved in the evaluation will become more knowledgeable about evaluation, have more value for evaluation, and be more insightful about how program theory and outcomes are interrelated (Fetterman 1994; Greene 1988; Patton 1997; Smits & Champange, 2008). In fact the purpose of involving stakeholders or intended users in the evaluation process is to increase "(a) their buy-in to the evaluation, (b) their understanding of the evaluation process, and (c) ultimately, their use of the evaluation's findings" (Torres & Preskill, 2001, p. 388). Moreover, researchers maintain that when individuals are involved in participatory evaluations, learning occurs at three different levels: individual, team, and organization (Cousins & Earl, 1992; Owen & Lambert, 1995; Preskill, 1994; Preskill & Torres, 1999; Torres, Preskill, & Piontek, 1996). Russ-Eft and Preskill (2009) emphasizes that "Evaluation collects data, which is turned into information that, when used, is turned into knowledge at the individual level. If shared with others in the organization, that knowledge may then lead to organization level learning" (p. 213).

Watkins and Marsick (1992) elaborate on learning organizations:

> A learning organization is one that has embedded a continuous learning process and has an enhanced capacity to change or transform. This means that learning is a continuous, strategically-used-process-integrated with, and running parallel to, work- that yields changes in perceptions, thinking, behaviors, attitudes, values, and beliefs, mental models, systems, strategies, policies, and procedures. Learning is sought by individuals and shared among employees at various levels, functions, or units. As a result, learning is

> embedded in an organization's memory of past wisdom, current repertoire of beliefs and actions, and future thinking processes. (p. 128)

A similar definition offered by Torres and Preskill (2001) for organizational learning is

> a continuous process of growth and improvement (a) that uses information or feedback about both processes and outcomes (e.g., evaluation findings) to make changes; (b) is integrated with work activities, and within the organization's infrastructure (e.g., its culture, systems and structures, leadership, and communication mechanisms); and (c) invokes the alignment of values, attitudes, and perception among organizational members. (p. 388)

Similar to empowerment, participatory and collaborative approaches to evaluation of organizational learning can occur as a result of evaluative inquiry. Evaluative inquiry involves a focus on process and outcomes, shared learning across groups, perspective taking, and connection learning to performance (Preskill & Torres, 1999). Preskill and Torres (1999) maintain that evaluative inquiry is different from traditional forms of evaluation, including participatory, empowerment or collaborative methods in that traditional methods are typically episodic in nature; however, evaluative inquiry is conducted by internal members, is ongoing and dynamic, heavily influenced by stakeholder diversity, and is integrated into the way organizations do business.

There are four components to evaluative inquiry: dialogue, reflection, asking questions and identifying and clarifying value, beliefs, assumptions and knowledge. Each of these four elements are occurring during each phase of evaluation: (1) focusing, (2) carrying out, and (3) applying (see Figure 10 for the Model). However, Torres and Preskill (1999) stress that

organizations must have the necessary infrastructure; in other words, the organization's culture, leadership, systems and structures, and communication must be fluid, open, dynamic and safe.

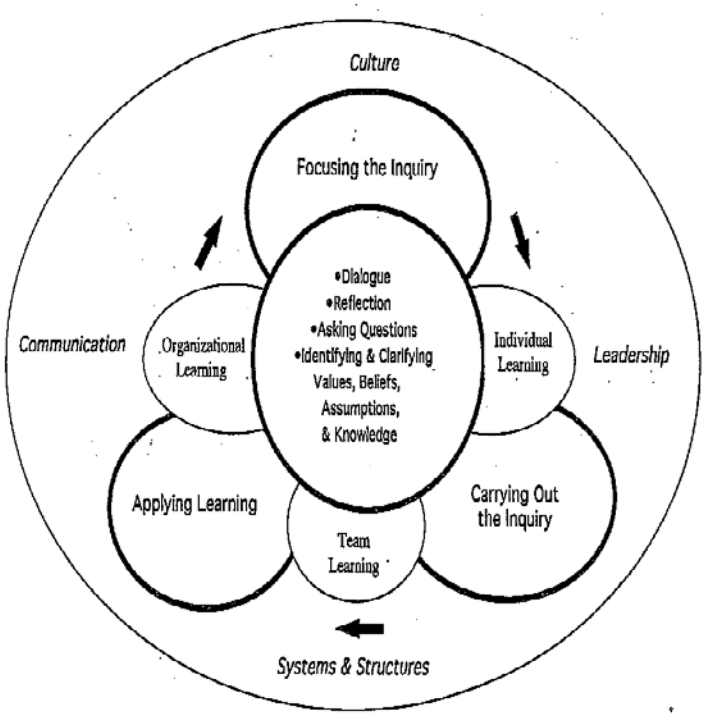


*Figure 10.* Model of Evaluative Inquiry and Organizational Learning (Torres & Preskill, 1999).

**Standards for Evaluation**

In an effort to make evaluators more accountable and increase the use of evaluation findings while promoting ethical and responsible practices in the field, the Joint Committee on Standards for Educational Evaluation, led by Daniel Stufflebeam, developed Standards for Evaluation. The Standards were created in 1980 and revised in 1994 and 2008. In an 1980 interview, Stuffelbeam commented on the Committee's process for developing the Standards:

> The standards that will be published essentially call for evaluations that have four features. These are utility, feasibility, propriety, and accuracy. And I think it is interesting that the Joint Committee decided on that particular order. Their rationale is

> that an evaluation should not be done at all if there is no prospect for its being useful to some audience. Second, it should not be done if it is not feasible to conduct in political terms, or practical terms, or cost effectiveness terms. Third, they do not think it should be done if we cannot demonstrate that it will be conducted fairly and ethically. Finally, if we can demonstrate that an evaluation will have utility, will be feasible and will be proper in its conduct, then they said we could turn to the difficult matters of the technical adequacy of the evaluation. (p. 90)

See Figure 11 for the Standards for Evaluation. The full set of standards can be viewed at www.eval.org.

Utility

The Utility Standards are intended to ensure that an evaluation will serve the practical information of intended users.

Feasibility

The Feasibility Standards are intended to ensure that an evaluation will be realistic, prudent, diplomatic, and frugal.

Propriety

The Propriety Standards are intended to ensure that an evaluation will be conducted legally, ethically, and with due regard for the welfare of those involved in the evaluation, as well as those affected by its results.

Accuracy

The Accuracy Standards are intended to ensure that an evaluation will reveal and convey technically adequate information about the features that determine worth or merit of the program being evaluated.

*Figure 11*. Standards for Evaluation (Patton, 2008, p. 29).

## Purpose of Evaluation: Accountability and Improvement

Depending on the type of evaluation conducted, the purpose, the stakeholders involved, and the intended use, evaluation results can be applied in numerous ways across and within organizations, including Cooperative Extension (Kellogg Foundation, 2009; Patton, 2008; Russ-Eft & Preskill, 2009). In some cases, however, evaluation results are used in ways that are inappropriate or in other cases, not used at all. Generally speaking, evaluation's purpose is typically what should drive the application of the results. For example, when conducting a formative evaluation the results should be used to examine the how well the process is going rather than if the program has merit or not. There are several different ways in which an organization can approach evaluation. Patton (1994) offers developmental evaluation; Scriven was first to coin formative and summative evaluation, while the United Way of America (1996), uses outcome evaluation. Still others include monitoring and auditing, impact evaluation, and performance measurement (Owen, 2006; Wargo 1994; Winston 1999). It is important to note that summative formative and developmental evaluations are dynamic in nature. Rather than operate in a linear fashion, they ideally should operate systemically.

## Reasons to Evaluate and Application of Evaluation Results

In addition to multiple types of evaluation, there are also multiple reasons to evaluate. Figure 12 shows some reasons why evaluations are conducted by organizations.

- To determine if a program is worth keeping
- To improve program functions or operations
- To show program impact/establish accountability
- To prioritize resources
- To determine if program objectives have been met

employee performance appraisals

*Figure 12.* Reasons to Evaluate

# CHAPTER 3. METHODS

## Purpose of the Study

The purpose of this two-phase, sequential mixed methods study was to gather quantitative results from Cooperative Extension and Outreach state and field staff, then to follow up with a smaller number of respondents to gain a better understanding the responses provided in the survey. In the first phase, quantitative research questions were used to establish a baseline for the organization's current evaluation practices. More specifically, the first phase focused on commitment to the Extension Program Development Model, barriers and supports that either decrease or increase engagement in systematic evaluations, organizational readiness for learning and evaluation and engagement in systematic evaluations, and the use of evaluation results. The second phase provided a follow-up to the first phase and allow for a deeper exploration of how evaluation is conducted and what impacts its use within Cooperative Extension. The following research questions will be addressed in this study:

1. To what extent does Cooperative Extension and Outreach staff engage in systematic program evaluation?
2. What factors increase or decrease Cooperative Extension and Outreach staff engagement in systematic program evaluation?
3. To what extent does Cooperative Extension and Outreach staff use evaluation results?

4. To what extent does Cooperative Extension and Outreach staff commit to the Extension Program Development Model?

## Research Design

This study employed a survey research design using sequential mixed methods. Mixed methods was appropriate for this study for a number of reasons (1) one data source was not enough to understand the nature of evaluation in a complex organization like Cooperative Extension, (2) there was need to explain the findings from the quantitative results, and (3) there was a need to highlight the primary study with a secondary method (Creswell & Plano-Clark, 2011). Consistent with mix methods research all five elements of worldviews (ontology, epistemology, axiology, methodology, and rhetoric) in this study was guided by a pragmatism in that the nature of the study aimed to solve real world problems related to evaluation in Cooperative Extension. As such solving the problem was the focus rather than a particular method.

The first phase of the sequential mixed methods was a quantitative design followed by a qualitative design. Survey research was used because data need to be obtained from several people in various locations inexpensively and quickly (Creswell, 2008, 2005; Russ-Eft & Preskill, 2009). Survey research was also used because it is a proven method to gather information about some characteristic, attitude, or behavior of this population (Babbie, 1990). Both methods were conducted using survey research. For example, a quantitative questionnaire will be used to address research questions while a qualitative semi structured interview will be used to gain a deeper understanding of the results from the quantitative questionnaire.

Quantitative questionnaires are advantages because they allow for cost efficient and rapid data collection. Quantitative questionnaires can also be administered to a large sample providing

strength in numbers. Finally responses from quantitative questionnaires can be easily tabulated, entered into a data set and analyzed relatively quickly. The quantitative questionnaire was developed using a combination of scales from the Readiness for Organizational Learning and Evaluation (ROLE), scales assessing the current state of evaluation practices in Extension, questions examining current uses of evaluation results, and some demographic questions. Once the questionnaire was developed and validated it was administered electronically via an online link.

As a way of strengthening the results of the quantitative questionnaire, the second phase of this sequential mixed method design involved qualitative measures. To begin, open-ended questions were embedded into the questionnaire. Secondly, a smaller sample of respondents was interviewed using semi-structured interviews. The interview protocol was based on the results of the quantitative questionnaire. This was a means of following up on numerical data with thick, rich descriptive data. Data and method triangulation is another advantage of using qualitative interviews. The interviews allowed for individual quotes to be used help provide more detailed explanation of results from the questionnaire.

The interviews also captured what was important to the participant, lead to greater understand about the context and practices of individuals, and depicted the dynamic relationship associated with causes and outcomes. Qualitative interviews will provide a platform for the voices of the participants to be heard and embrace the diversity of perspectives that participants bring with them. Finally, unintended, unknown, or unanticipated causes or outcomes were more likely to be captured with qualitative procedures.

## Participants

The population for this study was Cooperative Extension state and field staff from all Land Grant institutions in the United States. Cooperative Extension employs thousands of individuals located in 116 land grant colleges and universities and in roughly 3500 local county extension offices. There is a land grant institution in all 50 states and in southern states there are two land grant institutions, one predominately White university and one historically Black college or university.

State staff members work in a variety of positions. Some state staff members are extension administrators, others are extension specialists, still others are faculty in academic departments. There are also state staff that have a combination of positions; for example, some state staff have split appointments where a portion of their time is spent working as faculty in an academic department and as state extension specialists. State staff members are located at the university or state extension office. On the other hand, extension field staff members are located in specific counties across the states. They hold positions as county extension agents, regional extension agents, agent assistances, and county extension coordinators. Unlike state staff, field staff typically don't have split appointments. The only exception is when an agent or county extension coordinator works on a grant or special funded project. State and field staff work full time in one of six program areas. These are Family and Consumer Science, 4H and Youth Development, Agriculture, Natural Resources, Community and Economic Development, and Leadership Development.

## Sampling Plan

Two samples were examined in this study. While all state and field staff were asked to participate in Phase 1, a purposeful sample was used in Phase 2.

Phase 1 — Due to the nature of this study, all extension state and field staff were invited to participate in the quantitative part of the study. A list of all 1862, 1890, and 1994 extension directors was obtained from the United States Department of Agriculture directory. Prior to contacting staff, approval will be obtained from the extension administrator of each cooperative extension program. An invitation to respond to the questionnaire was emailed to state and field staff.

Phase 2 — A second and smaller list of potential participants was compiled from the Alabama Cooperative Extension employee database. This list contained the names of key informants who had knowledge of evaluation practices, who were administrators/decision makers, or individuals who were willing to be interviewed. Individuals on the key informant list were asked to provide the names and contact information of others who may have been interested in participating in the interviews.

## Procedures

### Phase 1

In Phase 1 of the study participants were contacted via their Extension Administrator. An email was composed explaining the nature of the study and asking for support by each administrator. The email included an endorsement letter from the Alabama Cooperative Extension System director, a cover letter and a copy of the survey. Each administrator was asked to send the email to all employees in their organization. For example, an email from the director of ACES sent to ACES-ALL was received by all ACES employees. Once the final version of the quantitative questionnaire was complete it was converted to an online format using Survey Monkey, an online tool used to create surveys to be administered electronically. In an attempt to have a high response rate, a cover letter was created to describe the nature of the study, provide

the necessary definition of relevant terms, and explain the intent of the questionnaire. Each participant received the Auburn University Office of Human Subjects approved electronic consent form. The respondents were asked to complete and submit the survey within two weeks after receiving the questionnaire link. Further, an executive summary of the results will be offered to those who participated. A follow-up reminder was sent two weeks after the initial link was sent out. A second reminder was sent two weeks after the second reminder was sent. Data collection stopped after five weeks.

**Phase 2**

In Phase 2 of the study a second and smaller list was compiled from the Alabama Cooperative Extension Systems employee database. The list was inclusive of evaluation staff and other key informants such as state leaders, state specialist, or administrators. These individuals were also asked to provide the names and contact information of others who may be interested in participating in the interviews. Individuals were contacted via email or phone and asked for permission to be interviewed. Face-to-face interviews were conducted in a location of the participants' choice. In each case the participant requested that the interview be held in his or her office. To allow sufficient time to read and understand the nature of the study and agree to participate, a consent form was given to each participant approximately one week prior to the day of the interview. Then, before the interviews started, the consent form was discussed in detail and participants were provided the opportunity to ask questions or express any concerns. Moreover, participants were reminded that they could refuse or decline participation in the study at any time. All consent forms and consent procedures were consistent with Auburn University Office of Human Subjects.

A semi-structured interview protocol was developed using the results from Phase 1, supporting literature, and experts in the field. The interview guide consisted of demographics and questions that primarily explored the responses from Phase 1. In addition to predetermined questions, participants were asked probing questions to explore or clarify responses. Interviews lasted approximately 45 to 60 minutes. Individual interviews were conducted in each participant's campus office. Prior to the interview, the consent form was reviewed in detail with each participant. The participants were informed that their participation in the study was strictly voluntary, that they could withdraw from the study at any time, and could refuse to answer any question that they did not feel comfortable answering without reprisal. Participants were also informed that the purpose of the study was to explore their experiences with and commitment to the Extension Program Development Model, and in particular experiences related to program evaluation. Participants were reassured that the results would remain confidential and that their real names would be replace with pseudonyms when reporting the results. Each participant agreed to be audiotaped. In addition, the participants also agreed to having detailed notes taken during the interview.

Among other things, participants were asked about their knowledge regarding the elements of the Extension Program Development Model, and in particular, attitudes towards needs assessment, program development and delivery, and program evaluation. Likewise, they were asked to describe their experiences in cooperative extension as they related to engaging in the Extension Program Development Model, their knowledge regarding the purpose and role of program evaluation, their perceptions regarding their evaluation skills and their knowledge regarding evaluation best practices. They were also asked to describe their experiences with

program evaluation, including use of results, in their extension organization. For a more detailed account of participants' experiences, probing questions were used.

## Instrumentation

### Phase 1

Data was collected using a quantitative survey instrument. The survey began with demographic questions such as age, gender, program area/department, position appointment type, institution/land grant designation, and highest degree obtained. Section II addressed the organizations' commitment to Extension Program Development Model. The Extension Program Development Model consists of three phases: (1) needs assessment or situational analysis, (2) program development/implementation, and (3) program evaluation. Section III of the survey examined the third level of the extension program development model program evaluation in depth.

Barriers and facilitators to systematic evaluation were explored using the Readiness for Organizational Learning and Evaluation (ROLE) instrument, developed by Hallie Preskill and Rosalie T. Torres. The ROLE instrument, "Is designed to help an organization determine its level of readiness for implementing organizational learning and evaluation practices and processes that support it" (Russ-Eft & Preskill, 2009, p. 498). The instrument consists of 78 items that are grouped into six dimensions: (1) Culture, (2) Leadership, (3) Systems and Structures, (4) Communication, (5) Teams, and (6) Evaluation. Of these six dimensions, three are further divided into eight subcategories. The Culture dimension has three subcategories: (a) collaboration and problem solving, (b) risk taking, and (c) participatory decision making. Likewise, the Systems and Structures dimension has three components: (a) open and accessible work environment, (b) relationship of work to organizational goals, (c) rewards and recognition

systems and practices. Lastly, the Communication of Information dimension has the following subcategories: (a) availability and (b) dissemination. Of the 78 items, 75 are measured on a 5-point Likert scale, with 1 being "Strongly Disagree" and 5 being "Strongly Agree"; three are yes/no; and three are multiple choice.

Section IV of the survey focused on the ways in which evaluation results are used in cooperative extension such as ensuring quality, accountability, continuous improvement, resource allocation, decision making, and performance appraisal. The fifth and final section of the survey examined the types of evaluations that cooperative extension programs conduct, for example, summative, formative, needs assessment, process/implementation, outcome and impact.

**Phase 2**

A semi structured interview was used to collect data for Phase 2. Consistent with mixed-method designs (Creswell & Plano-Clark, 2011), an effort to increase the validity of the merged data was attempted by structuring the questions in the interview guide in a manner that mimicked the questions from Phase 1. The interview questions consisted of questions related to needs assessments, program development and implementation and program evaluation. The interview questions were designed to further explore the responses from Phase 1. Respondents were asked to describe themselves in terms of gender, position, appointment type, and number of years in extension.

Among other things, participants were asked to give examples of and describe their experiences related to the Extension Program Development Model. In relation to Situational Analysis and Needs Assessment Best Practices for example, participants were asked discuss their experiences with engaging stakeholders, collecting data about community needs, using a county

or community advisory board, and using the results of the needs assessment to prioritize program efforts. Similarly, questions related to Program Development/Implementation Best Practices centered around experiences related to designing programs that are culturally relevant, focused on building positive relationships, and that are developmentally appropriate. Likewise, questions related to Program Evaluation Best Practices asked participants to share their experiences with program evaluation. Finally, because the interview was semi-structured, the nature and order of the questions were not the same for each participant. For example, when the participant mentioned something that was interestingly related to the interview but not initially a part of the interview protocol, the respondent was allowed to share his or her experience. Probing was also used to clarify the responses and experiences of participants.

## Reliability

### Phase 1

Alternative form, test-retest, internal consistency, and inter-rater are the most common forms coefficient estimates of reliability in educational research (Forbes & Ross, 2003). Test-retest requires logistics and a substantial number of people to take the survey once and then take it again at a later point in time; alternative form requires the difficult task of two instruments that measure the same construct and inter-rater is most often used with observational data. As a result, the survey utilized internal consistency as the measure of reliability; "Internal consistency estimates measure the degree to which parts of an assessment scare uniformly addressed the same construct" (p. 8). Forbes and Ross (2003) state that the advantage of using internal consistency coefficient estimates is that the instrument doesn't have to be given more than once.

## Validity

### Phase 1

Content validity was established by using the literature (Lambur, 2008; Patton, 2008; Raudabaugh, 1959; Russ-Eft & Preskill, 2009; Taylor-Powell & Boyd, 2008) as the foundation for content and questions. Experts in the field also reviewed the survey to examine content representation. Responses from the experts were used to revise the instrument prior to pilot testing. The survey was administered to a small number of individuals who represented the sample. They were asked to complete the survey via web cam or in person at which time their reactions to the instrument were recorded. They were asked probing questions that helped identify misconceptions, alternative explanations, disconnect in language or terminology, etc. The responses from the pilot study were used to revise the instrument further.

### Phase 2: Authenticity, Trustworthiness, Creditability

Consistent with Creswell (2003) specific procedures were used to help validate the authenticity, trustworthiness, and creditability of participants experiences (Lincoln & Guba, 2000). One such strategy was the use of member-checking. Each participant was given a copy his or her interview transcript to validate and review for accuracy. Of the 16 transcripts sent out 4 individuals responded. The comments that these individuals made was regarding the transcribing process and not the accuracy to of the content included in the transcripts (See Appendix C). Secondly, thick rich description was also used to help bring the readers closer to the experience of the participants.

In addition to member checking and using thick rich description, research biased is exposed and clarified. As an employee of Cooperative Extension I am deeply enmeshed in the "Extension way." I have worked in multiple positions including county agent, regional agent,

and extension specialist. Although I have tried tremendously to remain objective throughout this process I am sure that my own experiences as a Cooperative Extension employee have impacted every aspect of this study. While I spent prolonged time in the field it was in the roll of employee and not researcher. Distinguishing which role I was in during the process became more and more difficult.

Due to the fact that I am very much a part of the system in which I am studying I constantly reflected on how my experiences impacted this process. It was very difficult to determine how I "knew" things; therefore I used peer debriefing to help determine the accuracy of the analysis. A peer debriefer read through the study and asked questions to help ensure that was written was a true reflection of the participant's experiences as Cooperative Extension employees and not mine.

## Data Analysis

### Phase 1

The quantitative data was analyzed using SPSS 19 for Windows. Descriptive statistics such as frequencies and means were calculated to analyze survey responses related to the first research question. Research question one, "To what extent do Cooperative Extension and Outreach staff follow the Extension Program Development Model including systematic program evaluation?" was designed to establish a baseline of current extension practices related to program development and evaluation. The results show how often and to what extent extension state and field staff follow the Extension Program Development Model and in particular systematic program evaluation.

Research question two, "What is the relationship between barriers and facilitators of systematic evaluation and engagement in systematic program evaluation?", was examined using

regression analysis. The predictors were barriers and facilitators that impact engagement in systematic evaluation and the outcome was engaging in systematic evaluation. Research question three, "The extent to which extension organizations use evaluation results?", was examined by calculating frequencies and means. Finally, research question four " To what extent are Cooperative Extension Staff committed to the Extension Program Development Model" was examined by calculating frequencies and mean as well by exploring participants experiences with the model through in depth interviews.

**Phase 2**

Consistent with grounded theory (Glaser & Strauss, 1967), qualitative data was examined for latent themes unique to the lived experiences of the participants as well as for a priori themes consistent with the literature. Each interview was audiotaped with the permission of participants and transcribed verbatim (Creswell, 2005). Using the constant comparative method developed by Glaser and Strauss (1967), each piece of data were iteratively compared to all other convergent or divergent data to ensure appropriate categorizing and begin to lay the framework for pattern development. The data were analyzed across cases and within cases. Transcripts were analyzed using Atlas.ti, a tool for indexing, searching, and theorizing about non-numerical unstructured data. The steps involved in the qualitative data analysis included: (1) transcribing interviews (2) initial reading through interviews to get an idea of what was present, (2) re-reading the data and making memos and notes, and (3) coding the data by segmenting and labeling sentences and paragraphs.

## Summary

In summary, this chapter outlines the methods, procedures, data collection, and data analysis that were used to address the research questions specified in this study. The research

design is a sequential mixed-method, with Phase 1 focusing on quantitative methods and Phase 2 focusing on qualitative methods. Sampling and instrumentation, including efforts to ensure reliability, validity, dependability, trustworthiness, and creditability are discussed in the procedures. Finally, data analysis involved descriptive and inferential statistics as well as text analysis. Chapter 4 will present the results of this research study.

# CHAPTER IV. RESULTS

This two-phase, sequential mixed methods study was conducted to establish a baseline for current evaluation practices, examine staff commitment to the Extension Program Development Model, examine barriers and supports that either decrease or increase engagement in systematic evaluations, examine organizational readiness for learning and evaluation and engagement in systematic evaluations, and review the use of evaluation results. The second phase provided a follow-up to the first phase and allow for a deeper exploration of how the Extension Program Development Model is implemented in Cooperative Extension. The data and results of the analysis performed are presented in this chapter.

The first section includes demographic characteristics of the participants and institutions. The next section presents scale and subscale reliabilities. The third and final section provides the qualitative and quantitative results of each research question.

## Demographics

Three hundred forty five (345) individuals agreed to participate in the study; however, participants were allowed to skip questions that they didn't not feel comfortable answering or did not want to answer. As a result, the sample size for each question may be less than the overall number. A total of 275 reported their gender, of the staff that responded, 126 (45%) were male and 149 (54.2%) were female. Two-hundred sixty participants reported that their age range was 18–73 years old. Likewise, 269 individuals reported their location , of those that reported, 191 (71%) were located in the field while 78 ( 29) % were located at the State office. Two hundred

sixty one participants reported their program area. The majority of the respondents represented 3 program areas with 90 (34.5%) working in Agriculture, 79 (30.2%) in Family and Consumer Sciences, 46 (17.6%) in 4-H and Youth Development. In addition, 265 respondents reported their position in Cooperative Extension. Of those that replied 94 (35.5%) were County Extension Agents/Educators; 51 (19.2%) were State Specialists; 43 (16.2%) were Regional Extension Agents, 40 (15.1%) were County Extension Coordinators and 20(7.5%) were State Program Leaders/Administrators.

Furthermore, 267 reported their appointment type, of those that reported 239 (90%)were 100% Extension and 28 (10%) had an Extension/Academic split. Based on 261 responses the average number of years in Cooperative Extension was 17 (range 1–44 years). Lastly, 232 people identified their land grant designation, 193 (81%) were associated with a 1862 land grant institution, 37 (16%) with an 1890 Land grant institution and 2 (.9%) with a 1994 land grant institution. A total of 251 reported whether or not their institution had an evaluation specialist, of those reporting 91(36%) indicated having an evaluation specialist on staff; however, 160 (64%) indicated they did not have an evaluation specialist on staff (see Table 1).

Table 1

*Demographics*

| Variable | N | N Skipped | Percent |
|---|---|---|---|
| Gender | 275 | 70 | |
| Male | 126 | | 45.8 |
| Female | 149 | | 54.2 |
| Program Area | 261 | 84 | |
| FCS | 79 | | 30.3 |
| 4- H | 46 | | 17.6 |
| AG | 90 | | 34.5 |
| NR | 21 | | 8 |
| CRD | 19 | | 7.3 |
| LD | 6 | | 2.3 |
| Location | 269 | 79 | |
| State | 78 | | 29 |
| Field | 191 | | 71 |
| Highest Degree | 260 | 85 | |
| High School | 5 | | 2 |
| Bachelors | 36 | | 14 |
| Masters | 169 | | 65.1 |
| Doctorate | 50 | | 19.2 |

(table continues)

Table 1 (continued)

| Variable | N | N Skipped | Percent |
|---|---|---|---|
| Appointment Type | 267 | 78 | |
| 100 % Extension | 239 | | 90 |
| Extension/Academic | 28 | | 10 |
| Position | 265 | 80 | |
| County Agent | 94 | | 35 |
| Regional Agent | 43 | | 16.2 |
| County Coordinator | 40 | | 15.1 |
| State Specialist | 51 | | 7.4 |
| State Program Leader | 1 | | .4 |
| Land-grant Designation | 232 | 113 | |
| 1862 | 193 | | 83 |
| 1890 | 37 | | 16 |
| 1994 | 2 | | .8 |
| Evaluation Specialist | 251 | 94 | |
| Yes | 91 | | 36 |
| No | 160 | | 64 |
| Age | 260 | 18-73 | 47.80 |
| Years in Extension | 261 | 1-44 | 17 |

The major variables in this study include commitment to Extension Program Development Model which is measured by the extent to which participants engaged in behaviors

consistent with the best practices in relation to the Model: needs assessment, program development, and program evaluation. For example, regarding needs assessment and program development best practices, participants were asked to indicate how often they "Engage stakeholders in decisions about program planning," "Use a county or community advisory board to guide program planning," "Design/implement programs with theory driven content," "Design/implement programs that are socially and culturally relevant." The program development subscale was further delineated into 6 categories: (1) manage, (2) focus, (3) collect, (4) analyze, (5) use, and (6) standards. Among other things participants were asked to tell how often they, "developed an evaluation timeline," "define what is being evaluated," "select methods of data collection," "analyze the data that has been collected," and "share the findings of evaluation results."

Other variables in the study include readiness for organizational learning and evaluation as measured by participants' experiences related to organizational culture, leadership, systems and structures, communication of information, and evaluation. Use is another variable in the study. Use is defined as the application of evaluation results. For instance, participants were asked to indicate the ways in which they had applied evaluations results such as "determining if a program is worth keeping," "show program impact," and "establish accountability," Scale and subscale reliabilities are presented in Table 2.

Table 2

*Scale and Subscale Reliability*

| Subscale | N (Sample Size) | Number of Items | Reliability |
|---|---|---|---|
| Use (use subscale) | 292 | 11 | .896 |
| Data Analysis (data analysis subscale) | 287 | 5 | .946 |
| Focus (focus subscale) | 291 | 8 | .956 |
| Standards for Evaluation (evaluation standards) | 289 | 4 | .925 |
| Data Collection (data collection subscale) | 289 | 5 | .893 |
| Manage (manage subscale) | 291 | 5 | .812 |
| Needs Assessment | 345 | 11 | .901 |
| Program Development | 311 | 11 | .923 |
| Program app | 285 | 7 | .882 |
| Organizational Readiness | 281 | 28 | .933 |

## Phase 1: Quantitative Results

### Research Question 1: To what extent do Cooperative Extension and Outreach staff engage in systematic program evaluation?

Table 3 depicts the results for commitment to systematic program evaluation, which is addressed by research question one, “To what extent do Cooperative Extension staff engage in systematic evaluation”. The data show that Cooperative Extension staff is most committed to the use of program evaluation results with a Mean score of 3.93 and .97 SD. The best practice

for program evaluation use focused on ways in which results are put into practice. For example, 292 individuals responded that the results of evaluations are shared with administration, other staff members, and stakeholders and that results are used in decision making and as well as determining next steps.

Table 3

*Commitment to Systematic Program Evaluation Mean and Standard Deviation*

| Systematic Program Evaluation Component | N (Sample Size) | No. of Items | Mean | SD |
|---|---|---|---|---|
| Use | 292 | 11 | 3.93 | .97 |
| Analyze | 287 | 5 | 3.85 | 1.01 |
| Focus | 291 | 8 | 3.74 | .98 |
| Standards | 289 | 4 | 3.58 | 1.04 |
| Data Collection | 289 | 5 | 3.39 | .97 |
| Manage | 291 | 5 | 2.89 | .99 |

The second highest level of commitment for systematic evaluation was data analysis, with a mean score of 3.84 and a standard deviation of 1.01. Two hundred eighty-seven (287) Cooperative Extension staff members responded that they analyze data once it has been collected. The final two systematic evaluation best practice subscales with mean scores above 3.5 were focusing the evaluation and evaluation standards of practice. With regards to focusing the evaluation, 291 staff members noted that they develop and evaluation plan, rationale and

purpose. Respondents also indicated that they developed a program logic model to guide the evaluation plan.

Evaluation standards of practice examined the extent to which staff members engage in ethical behaviors while conducting evaluations. Respondents indicated that evaluations were conducted with feasibility, utility, accuracy and propriety. Best practice subscales for data collection and managing the evaluation have less than desirable mean scores of 3.39 and 2.88 respectively.

**Research Question 2: What factors increase or decrease Cooperative Extension and Outreach staff engagement in systematic program evaluation?**

A backwards elimination regression was used to determine the best predictors of engagement in systematic program evaluation. Using five predictors, an overall $R^2$ of .156 was reached. While this model was statistically significant ($F = 9.882$, $p < .001$), a simpler model retaining just two predictors emerged. The final restricted model contained the variables of communication of information and evaluation and achieved an $R^2$ of .155 ($F = 24.937$, $p < .001$). The $R^2$ difference of 001 between these two models was not statistically significant (F Change = 1.057, p = <.05). Therefore, the more restricted model containing two predictors, communication of information and evaluation, was preferred.

Table 4

*RQ 2 Regression Findings Pertaining to Engagement in Systematic Evaluation*

| | $R^2$ | S.E Estimate | | | | |
|---|---|---|---|---|---|---|
| Factor | | | r | Semi-partial | Beta | R Square |
| Full Model | .156[a] | .76 | | | | |
| 1 culture | | | .662 | .001 | 001 | |
| 2 leadership | | | 607 | -.014 | -.020 | |
| 3 systems & structures | | | .599 | .010 | .184 | |
| 4 communication of information | | | .654 | .151 | .208** | |
| 5 evaluation | | | .408 | .235 | .266*** | |
| Restricted Model | .155[b] | .76 | | | | |
| 1 communication of information | | | | .190 | .207** | |
| 2 evaluation | | | | .243 | .264*** | |

*p < .05,**p < .01, ***p < .001

[a] F(5.268) = 9.882, p < .001

[b] F(2,271) = 24.937, p < .001

**Research Question 3. To what extent does Cooperative Extension and Outreach staff use evaluation results?**

Cooperative Extension staff indicated that the results of evaluations are primarily used to show program impact (Mean = 4.36; standard deviation = .94), improve program functions and

processes (Mean = 4.11; standard deviation = 1.03), and help ensure that objectives are being met (Mean = 4.04; standard deviation = .99). On the other hand, evaluation results were less likely to be used to determine a program's worth, prioritize resources, establish accountability, or examine employee performance (Table 5).

Table 5

*Ways that Evaluation Results are Used in Cooperative Extension*

| Application of Evaluation | N (Sample Size) | Mean | SD |
|---|---|---|---|
| Show Impact | 284 | 4.36 | .94 |
| Improve Programs | 284 | 4.11 | 1.03 |
| Objectives Met | 283 | 4.04 | .99 |
| Worth Keeping | 282 | 3.73 | 1.18 |
| Accountability | 278 | 3.73 | 1.25 |
| Prioritize Resources | 283 | 3.55 | 1.16 |
| Employee Performance | 279 | 3.15 | 1.45 |

**Research Question 4. To what extent does Cooperative Extension and Outreach staff use evaluation results?**

Of the three components of the Extension Program Development Model, respondents indicated that they are most committed to program development and implementation best practice (Mean = 3.95; standard deviation = .77). Program development was followed by program evaluation (Mean = 3.55; standard deviation = .86 and needs assessment (Mean = 3.33; standard deviation = .81) respectively (see Table 6).

Table 6

*Commitment to the Extension Program Development Model*

| Program Development Model | N ( Sample Size) | Number of Items | Mean | SD |
|---|---|---|---|---|
| Program Design | 311 | 11 | 3.95 | .77 |
| Program Evaluation | 294 | 31 | 3.55 | .86 |
| Needs Assessment | 345 | 11 | 3.33 | .81 |

## Phase 2: Qualitative Results

### Demographics

Semi structured interviews were conducted with 16 individuals who were current Cooperative Extension System employees (see Table 7). Of the 16 that agreed to be interviewed, 5 were male, 11 were female, 9 were African American, and 7 were White. Using maximum variance, participants were selected according their position in the organization: state or field staff. State staff were further categorized into smaller groups: administration or state specialist while field staff remained one group. At the time of participation, 9 individuals were state level employees and of that 9, 4 were in administrative roles while the other 5 were state extension specialists.

The interesting thing about the sample is the majority of them had served in several different capacities throughout their careers in Cooperative Extension. For example, one participant said, "I started as a county extension agent in Jefferson County in 1965. I worked there until 1976," and since 1976 has held several other field and state level positions. Another participant stated, "I've been so many damn things; 4-H was one of the things that I really, really loved. Overall I have been everywhere." Still another participant at the field level shared,

> I started off as 4-H agent in the northern part of the state and then moved to being a CEC in West Alabama, and then after the restructuring became an REA in Central Alabama. I've been in every position there is to be in in the county after 20 years.

The experiences related to multiple positions was a common theme across all three levels of participant categories and allowed participants to speak about their experiences with needs assessments, program development/implementation, and program development from multiple perspectives which in turn provided thick rich data.

Another common theme with regards to demographics was related to land grant designation or in other words, whether or not participants were affiliated with an 1862 or 1890 land grant college. Of the 16 participants interviewed, 10 worked with an 1862, 1 worked with an 1890, and 4 had worked with both 1890 and 1862 land grant institutions throughout their career. For example, one participant said,

> I've worked at a both 1890 and 1862. Aww, let me share with you something I bet you don't know. You see I started off as the Assistant Negro County Agent at Jones Institute back when Extension … this is long before what you would know about back when Extension was segregated. Then in 1965, as a result of the Civil Rights, Extension was forced to integrate and I started working at Wilson College as a county extension agent and been here eva since.

Other participants mentioned having worked across states throughout their career. For example, 4 of the 16 participants spoke of experiences with Cooperative Extension programs located in at least two states. There was significant overlap among participants with regards to position type, program area, and land grant affiliation. Table 7 provides additional details about participant characteristics. While some categories were mutually exclusive, for example gender,

position, location, and land grant designation were not. When participants had an overlap in categories their responses were coded accordingly.

Table 7

*Demographics*

| Variable | N | N Skipped | Percent |
|---|---|---|---|
| Gender | 16 | 0 | |
| Male | 5 | | 31 |
| Female | 11 | | 69 |
| Program Area | 16 | 0 | |
| FCS | 10 | | 63 |
| 4-H | 5 | | 32 |
| AG | 3 | | 19 |
| NR | 4 | | 2.5 |
| CRD | 3 | | 1.9 |
| LD | 0 | | 0 |
| Location | 16 | 0 | 79 |
| State | 9 | | 56.2 |
| Field | 7 | | 44 |
| Highest Degree | 16 | | 85 |
| Bachelors | 1 | | .062 |
| Masters | 10 | | 62.5 |
| Doctorate | 5 | | 31.2 |

Table 7 (continued)

| Variable | N | N Skipped | Percent |
|---|---|---|---|
| Appointment Type | 16 | 0 | |
| 100 % Extension | 16 | | 100 |
| Extension/Academic | 1 | | .062 |
| Position | 16 | 0 | |
| Negro County Agent | 1 | | .062 |
| County Agent | 8 | | 50 |
| Regional Agent | 4 | | 25 |
| County Coordinator | 3 | | 11.6 |
| State Specialist | 6 | | 1.9 |
| Administration | 4 | | 25 |
| Land-grant Designation | 16 | 0 | |
| 1862 | 15 | | 94 |
| 1890 | 5 | | 32 |
| 1994 | 0 | | 0 |
| Age | 16 | | 28–73 |
| Years in Extension | 16 | | 3–46 |

Semi-structured interviews were framed around the three components of the Extension Program Development Model: needs assessment, program development, and program evaluation. The purpose was to explore and better understand participants' lived experiences related to the three components of the Extension Program Development Model. The survey questions from

Phase 1 provided the basis for the interview questions. The following results are presented based on themes arising from each component of the Model.

**Needs Assessment**

In all most of the transcripts participants explicitly expressed a deep belief that needs assessments are fundamental in Cooperative Extension. For example, one participant pointed out,

> We need to go to our statewide partners, stakeholders, consensus building groups, and organizations, agencies that we partner with, and really get a good sense of what direction they see. We don't have a monopoly on assessing these issues and knowing what is important to the state by listening and dialoguing with those state partners, we get a good sense of what are the issues that are affecting the state that we need to be focusing on.…

This expert also demonstrates that participants use the needs assessment to guide program planning.

Participants comments indicated that they are extremely committed to the needs assessment process and understand how needs assessments impact program development and implementation as shown by another participant's comments,

> The needs assessment at all levels is important to really get the facts and interest and needs of the clientele you are going to serve. If you fail to get those needs and have input from the clientele based on what they want, based on what they need, you likely not going to be able to get a high number of participants or an appreciation for what you have done. The old saying is, "You don't plan for me, you plan with me" and by doing a needs assessment of the clientele that gives them the chance to have um ownership of the program development that you are coming up with. They also serve as a promoter of the program you are trying to put forth, IF they have input in determining the needs.

In fact when asked the question: “From your perspective, is the needs assessment basic to the program development process”, he added with an emphatic tone,

> Absolutely, because you may be planning something, that although you may feel like they need but you may be planning something that the clientele may not feel that they need. Or you may be planning something that is not related to their culture or related to their interest it may be that they say “I didn’t have anything to do with planning this so don’t come pushin’ it on me now.”

These comments denote that participants engage stakeholders in decisions about program planning. Even more revealing is that participants believe that the lack of stakeholder engagement creates a barrier to program implementation and success and therefore is unthinkable in Cooperative Extension. The following comment by another participant exemplifies this point, “We have a situation now in one of our counties, where the agent sends out fliers and nobody comes to her meetings. Why? Those people in the community don’t know her.” Although the general consensus of participants in the study supported a commitment to stakeholder engagement, this expert also provides some evidence that signifies that not all Cooperative Extension employees are as committed as others.

Even though the majority of participants seemed to be committed to the needs assessment process there was some differences regarding needs assessment methods such as data sources and data collection. Responses suggested that individuals had participated in varying methods of collecting data and used varying types of data sources. These responses also indicate that there are varying degrees of comprehensiveness as well. For example one participant describe a comprehensive needs assessment,

> So part of it is to look at, when we went through the comprehensive needs assessment, is to engage the grass roots constituents on these key issues to look at how we could narrow those lists down to something that really relates to what's important to the community and then through that process begin to narrow down some key themes that are important statewide, and so part of that was based on the grass tops discussion, gets down to the grass roots level, and then out of that we are able to identify what are some of those important priorities.

Another described needs assessment in a less comprehensive but still formal manner,

> Then each of us had our individual program committees. So I had a livestock program committee that I was expected to meet with and sit with them. And we talked about they were needing, what was on their mind. And it was a two-way exchange. So they were seeing what they needed and what was being developed here on campus at this time, what was the emerging research areas and those topics that would be of interest to them. There was a horticulture plan and family consumer science, which I had a little bit but not much involvement in. But I had responsibility primarily for the livestock program. And I had responsibility for county council committee on livestock.… We called it them, at that time, county extension council. But it is the Advisory Board. And the needs assessment grew out of that — when I say it was a two-way street.

He went on the describe the "two way street" by adding,

> We also worked very closely with the leaders at that time, in my area – Farm Bureau. We worked with the Cattleman's Association. We actually met with them and heard the issues that they were talkin' about, what their concerns were, and what their needs might be as far as the needs assessment. The other piece of the needs assessment was done

> from the state level; primarily by the extension specialists. They met at the state level with livestock producers and determined what their needs were. And all this came together to develop the local county plan of work force. And I had responsibility for the livestock area in that plan of work.

Then there were participants who talked about needs assessment in less formal ways. For instance one participant said, "Well, one of the things that I've done over the years to ascertain what people want and what people need, I listen to the people. People will let you know what they need; and then, you develop a program based on those needs." She elaborated further with a detail account of her experiences,

> Just a today story, when I was doing Home Food Preservation as a Specialist people when their freezer would go out and they'd lose the food in the freezer, they would call and ask what was the estimated retail value of the food that they lost. So, that says that the people needed to know the estimated retail value of foods that they canned, froze, or dried in the case of a loss, if the power went out, or if they had a flood, or tornado. And so, that was the kind of thing that we did, whatever the people wanted.
>
> During the holidays, they'd call in wanting to know how to bake a turkey, how to store the turkey. So, that gave us an idea of the kinds of publications we would need, or the kinds of radio programs, or television programs that we needed to put on during the holiday season. So, in my area, or the area of Family Programs, the families indicate what their needs are and you build programs around that.

**Program Design and Implementation**

The second phase of the Extension Program Development Model focuses on program design and implementation. This phase of the model was discussed in varying contexts by

participants. Some participants talked about the program planning process, which culminates with the Plan of Work, or more commonly called the POW by Extension employees, as exhibited by the following excerpt, "

> When had–once those six program initiatives were identified, we have our assistant directors develop a logic model for each of those, and our teams look at those logic models and think about how they can begin to transition part of their program to deal with those strategic initiatives that went along well with their expertise and then begin to identify some new program opportunities or maybe recast some things that were on the books already, and fitting with those strategic program initiatives. Then each of our teams developed a plan of work and that plan of work was shared with the county coordinators and then the whole process kind of culminated in developing count plan support based on what the regional extension agents count offer through teams, and then also that will open the dialogue for any county-specific initiatives that county coordinator's brought to the table and says these things that I want that the team is prepared to offer based on what we were able to synthesize out of the needs assessments activities for out counties, and then I'll keep the door open for any county-specific initiatives that would be unique to that county.

While others, although not explicitly, discussed program design and implementation in the context of best practices discussed in the literature include designing and implementing programs: (1) with theory driven content, (2) of sufficient dosage, (3) of sufficient intensity, (4) that are comprehensive, (5) that are actively engaging, (6) developmentally appropriate, (7) meet participants where they are, (8) are socially and culturally relevant, (9) delivered by well-qualified staff, (10) delivered by well-trained staff, (11) that focus on building positive

relationships. Of these eleven practices, participants did not mention experiences related to designing programs that focus on building positive relationships, are actively engaging, or developmentally appropriate.

Comments related to designing and implementing programs that are socially and culturally relevant and delivered by well -trained well qualified staff showed up in the data, however comments were minimal and centered around professional development opportunities for staff such as "we have excellent in service trainings for people," and "in a nut shell staff should be well trained in a given area."

**Meet People Where They Are.** The vast majority of comments presented in the data with regards to program design and implementation showed that participants in the study were dedicated to "meeting people were they are." The term is indicative of a belief that it is the responsibility of the Cooperative Extension staff to be open-minded, flexible, non-judgmental, genuine and knowledgeable. One participant's heart felt sentiments give meaning to the notion of "meeting people where they are," he said,

> It is our responsibility, but you know you never will be able to satisfy everyone, it is our responsibility to know where to get the resources or the answer to the question, that is the role of the professional extension person. That is what you owe to the clientele or participant. You it the extension agent's responsibility to help get the participant a little bit further than they would get by themselves.

Other participants spoke explicitly about the ability and obligation of Cooperative Extension employees to "meet people where they are." Statements found in the data revealed that participants' ideas, perceptions, and behaviors regarding this factor ranged from considering

an individual's skills, knowledge, and intent to comply with norms to scheduling programs at non-traditional times to holding programs at non-traditional locations.

Comments such as " We have got to make sure our programs are designed to meet the needs of all groups instead of just creating one size for everybody, that's just not gonna fit right," show that participants value diversity and understand that cookie cutter programs often times are a miss-match between the target audience and the program. Another participant candidly shared a very personal experience, which had a profound impact on her career in Cooperative Extension,

> Well, I started out in the hospital as a hospital dietician. And, I was always concerned when the patients would come in the hospital. We would feed them what they called a therapeutic diet, which was a special diet based on their condition. And we would go in and teach the patient about the diet, but we didn't know anything about the patient. My last patient that I taught in a hospital, which convinced me thoroughly that I needed to make a change in my career… I was teaching the patient about low fat, low cholesterol diet, and talked about broiling, boiling and baking. I didn't know anything about the patient. He was homeless. And so that helped me to understand that you need to know what people are up against. You can't help them if you don't know.

Other comments pointed to the need for Cooperative Extension employees to not only take into consideration an individual's skills, knowledge and intentions but also the individual's prior life experiences shape their willingness to meet in traditional Extension locations. For example one participant argued:

> …We need to design programs and implement programs right in the community because everybody's not goon come to B Courthouse, which is one of the thing that was

> happening in Extension. We didn't meet a lot of people's needs because we held meetings in courthouses. And, courthouses have a negative connotation for a lot of audiences. So, they didn't come to the meetings.

When prompted to give an example, she said:

> There are some groups of people, you're gonna have to go to their house. They are not going to meet in a group. We found that to be thru in trying to teach nutrition education to limited resource audiences. Some of them will meet at a house with three or four people. Some will meet at a community center, in a group. And some of them, you got to come to their house to meet them one on one.

**Program Evaluation**

The literature points out the best practices in program evaluation as: managing, focusing, collecting data, analyzing data, and using data while maintaining professional standards of accuracy, utility, feasibility, and propriety. When asked the question: "Please describe your experience with program evaluation?," participants' responses did not support the best practices found in the literature. In fact, comments such as "My experience, well, let me back up, if you are talking about the system, the system is very weak on evaluating programs and that is an area that we need to get very strong in," signify very little if any commitment to program evaluation.

This prompted further exploration into why participants were unable to provide detailed information regarding this particular level of the Extension Program Development Model as opposed to the other levels. Responses to probing questions such as, "What is your definition of program evaluation?," denoted that participants had various meanings of evaluation. One participant said, "Okay, I like to think of evaluation in this sense of outcomes and impact." Another participant provided a more complete definition; he declared,

> Program evaluation is looking at the content of the program looking at the impact that it having that you can define it having on the clientele that's participating in the program. And looking at the program content as it relates to looking at adjustments if it is necessary or where it's necessary as far as making changes. And you are looking at the implementation process looking to see if it meets the clientele it is intended to meet, that you are working with.

Still another participant added an even more comprehensive definition,

> There're different levels. One from a very base level, the evaluation aspect is trying to determine if clients were satisfied from a particular program, if they learned something, and that's kind of the happiness quotient approach. The next level up is being able to say okay, we really are trying to capture whether or not we have achieved some outcomes with this client group, and that might have to occur with some sort of follow-up evaluation after the initial approach where we determine whether or not someone maybe learned something from the awareness program after the three or six month period, or it could be longer, did they adopt a new behavior? Did they make a change? Over the longer term, and that might take a year, two, three, or five years, can we go back to some of those client groups and find out if we actually adopted that new condition or change.

Further probing lead to comments explaining participants lack of program evaluation experiences. For instance, one participant argued, "… part of our past has caused us current issues regarding what we do to stakeholders is that many time we have a thousand great things going on that we couldn't put our finger on anything to look at what kind of actual impact we were having." This comment suggests that extension employees are really good at developing

and implementing programs but at the expense of evaluating the success or impact of such programs.

Other comments that point towards reasons why individuals in cooperative extension lacked evaluation experiences centered on the norm of what was acceptable. One participant shared, "At that time, most of the activities that we were layin' out, were activities. So when you held four meetings and did such and such, that was checked off as successful." This excerpt seems to suggest that programs were deemed successful as long as they were planned and implemented. Another participant believed that "less emphasis on program evaluation lead to the concept of takin' one's word" that a program was successful rather than having "proof that the clientele you are serving experience behavior change."

These comments point towards the history and culture of the organization as the main reasons that have directed the program evaluation paths of participants in this study as one participant explicitly put it,

> It's organizational culture. Our culture is based on a strong history… We had good funding from the federal, state, and local. We had good funding. So we didn't have to do these sorts of things (seek grants and contracts). We were told, 'Don't spend your time doin' it' with the bureaucracy of a grant.

This comment signifies that due to multiple, steady, and guaranteed appropriations, some land grant institutions were fortunate in that they did not have to rely on grants and contracts for funding and therefore did not concern themselves with accountability or impact and was emphatically echoed by someone else,

> "Our culture is that we've never had to do it. The money would just be there. It was a good thing to do. We should do it. And it's nice to do. But the money was coming,

whether we did it or not—to a great extent. That was the mind set our organization from top down. Like I told you earlier, we had a former director who said, 'Don't do that. We don't need it because the money's flowin. And just don't need to do that.' So don't waste your time with … the writing and the follow up and that sort of thing.

## Integration of Findings

The findings from Phase 2 of this study provide details of the lived experiences of Cooperative Extension staff. The major themes revealed that these individuals have a variety of experiences implementing the Extension Program Development Model. Some participants were very familiar with the aspects of each component of the model and provided very lucid examples while others' did not. One theme however that showed up throughout the interviews is the notion of meeting people where they are. This theme is consistent with the results of the quantitative phase which indicate that Extension professional are highly committed to "meeting people where they are" (M=4.26). This theme is also aligned with program implementation best practice literature. Another major theme that was revealed in the data was that of stakeholder engagement. This theme also provides support for findings from Phase I. Data from Phase 1 indicated that most Extension staff are committed to engaging stakeholders in the program planning process (M=3.76). Still another factor that was consistent across both Phases and consistent with the literature was related to planning and developing programs that are of sufficient dosage. In the qualitative phase this theme showed up in the data as staff talked about the importance of not having "a one size fits all" program which is consistent with the high commitment to developing programs of sufficient dosage reflected in the quantitative data (M=3.38). Finally, one other factor was consistent across themes and that was the use of mass mail out to assess community needs. This factor was least visible in the qualitative data, in other

words one person currently used mass mail outs to assess community needs. Likewise, Extension staff reported the lowest level of commitment (M=1.92) with regards to using mass mail outs. This behavior is consistent with literature that suggest more updated ways of assessing community needs such as online surveys, focus groups, or town hall meetings.

## Summary

This chapter provided the research findings of a mixed method study of Cooperative Extension state and field staff's commitment to the Extension Program Development Model and in particular the third level of the model: program evaluation. Findings from statistical analysis of frequencies, means and predictors of an organization's readiness for learning and evaluation were presented as well as themes derived from qualitative analysis. SPSS Version 19 and ATLAS.ti Version 6 were used to complete data analysis. The discussion of these findings will be presented in Chapter 5.

# CHAPTER 5. DISCUSSION, LIMITATIONS, IMPLICATIONS AND RECOMMENDATIONS

This chapter will present the overview of the study. It will focus in particular on a discussion of findings from Chapter 4 as they pertain to other research and professional literature. The chapter will then examine the limitations of this study, followed by implications for research and practice. This section will conclude with recommendations for future research and use of evaluation in Cooperative Extension.

## Overview of the Study

The purpose of this study was to address program evaluation in Cooperative Extension by examining commitment to the Extension Program Development Model and in particular systematic evaluation, organizational capacity for engaging in and learning about program evaluation, barriers and supports that impact engagement in systematic evaluations, and the application of evaluation results. The following research questions were examined:

1. To what extent do Cooperative Extension and Outreach staff engage in systematic program evaluation
2. What factors increase or decrease Cooperative Extension and Outreach staff engagement in systematic program evaluation?
3. What is the relationship between organizational readiness of learning and evaluation and engagement in systematic evaluation?

4. To what extent does Cooperative Extension and Outreach staff use evaluation results?

Data collection in this mix-method study occurred in two phases: Phase 1, in which a quantitative survey was administered to Cooperative Extension state and field staff across the US and Phase 2, in which in-depth qualitative interviews were conducted with a smaller sample of Cooperative Extension state and field staff in the South East Region of the US.

Results from Phase 1 showed that Cooperative Extension employees are most engaged in use of evaluation results and least engaged in managing the evaluation. Backwards elimination regression determined that the best predictors of engaging in systematic evaluation in Cooperative Extension are communication of information, in particular availability and dissemination, and employees' positive attitudes and perceptions about evaluation. Likewise results disclosed that Cooperative Extension employees are most likely to use evaluation results to show impact, improve programs, and determine if objectives are met. Finally, with regard to commitment to the Extension Program Development Model, results pointed towards a high level of commitment for program development level rather than needs assessment or program evaluation level.

Phase 2 explored participants' experiences with the Extension Program Development Model. Participants were asked to describe their experiences conducting needs assessments, program design and implementation, and program evaluation. Results showed that participants had significant experiences with needs assessments; however, they were inconsistent. For example, some participants spoke in a lot of detail about conducting comprehensive needs assessments while others spoke of less formal means of assessing needs and collecting data such as " I listen to people, people tell you what they want." On the other hand, participants did not

have considerable experiences with program evaluation, but their comments did help explain why this was the case. The following section of this chapter will discuss the results of this study in more detail.

## Discussion of Findings

### Research Question 1

Research question 1 was, "To what extent do Cooperative Extension staff engage in systematic program evaluation?" Results show that Cooperative Extension staff engage in systematic evaluation; however in varying degrees. Systematic evaluation is made up of five components: manage, focus, data collection, data analysis, and use of results. When individuals engage in systematic evaluation it is with the expectation that the evaluator will work to ensure that the professional standards for evaluations are adhered to. These standards include: accuracy, feasibility, utility, and propriety.

When examining results from this study, it was found that Cooperative Extension staff are most likely to share the findings of evaluation results, share lessons learned from the evaluation conducted, use the results of the evaluation in decision making and to determine next steps. In addition, Cooperative Extension staff are most likely to process, analyze, and interpret the data that has been collected; consider what has been learned from the data; and consider what the limitations for the data are. Staff also indicated that they are more inclined to focus the evaluation by defining the purpose of the evaluation and by defining what is being evaluated. Similarly, staff take the time to determine the use and users of the evaluation, which is critical in a complex system like Cooperative Extension. Stakeholders are actively engaged in the process; key questions and indictors are developed in a purposeful manner all while considering an appropriate research design. Significant research has been conducted on stakeholder engagement

and the literature supports the inclusion of stakeholders in evaluation (Greene 1987; Patton, 2008, Fetterman 1994; Greene 1988; Patton 1997; Smits & Champange, 2008; Torres & Preskill 2001). Stakeholder engagement is nothing new to Cooperative Extension; in fact it is considered an integral part of "the way we do business." Because Cooperative Extension's success stems from the relationships built with people and communities, it is ever so important that staff understand and engage in these particular best practices.

Although not as high as the aforementioned practices, staff reported that when conducting evaluations they are committed to the standards for program evaluation. For example before initiating an evaluation they ensure, with in reason, that evaluations have utility, are feasible, accurate, and propriety, or in other words ensure that the evaluation will serve the information needs of the intended users; that the evaluation will be realistic, prudent, diplomatic and frugal; that the evaluation will reveal and convey technically adequate information about the features that determine worth or merit of the program being evaluated; and that an evaluation will be conducted legally, ethically, and with due regard for the welfare of those involved in the evaluation, as well as those affected by its results. It is suggested that staff may be more committed to some of these standards more so than others. For instance, the feasibility standards supports efforts of cost effectiveness; however, these data show that of all evaluation best practices Cooperative Extension staff are least likely to develop and evaluation budget or evaluation timeline. Low commitment to developing an evaluation budget and timeline might be attributed to lack of skills or knowledge related to project management or lack of control over fiscal decisions.

In addition to being least likely to develop an evaluation budget or timeline, Cooperative Extension staff are also least likely to identify possible data sources, select methods of data

collection, pilot test data collection instruments and actually collect data. Staff also indicated that they are not as committed to managing the evaluation, which entails obtaining human subjects protection in evaluations. This may be the case because human subjects' protection is associated with research and many institutions distinguish between research and evaluation. In such instances staff not required to obtain human subjects protection for evaluation purposes. Auburn University one of the land grant universities affiliated with the Alabama Cooperative Extension System (ACES) is one such institution that distinguishes between research and evaluation. As a result ACES staff members do not have to submit an application to the Office of Human Subjects unless the study is categorized as research. It is expected that due to varying requirements with regards to human subjects that Cooperative Extension staff may show little to no engagement in this practice.

**Research Question 2**

Research question 2 was, "What factors increase or decrease Cooperative Extension staff engagement in systematic program evaluation?" The Readiness for Organizational Learning and Evaluation (ROLE) was used to examine this research question. Research suggests that several factors are relative to an organization such as Cooperative Extension being ready to learn about and engage in systematic evaluation including valuing evaluation (Taut 2007; Smith, 1992; Russ-Eft & Preskill, 2009;). Torres & Preskill, (1999) reviewed literature relative to organizational learning and evaluation processes and practices. These researchers found six dimensions that consist of: Culture, Leadership, Systems and Structures, Communication of Information, Teams and Evaluation.

Based on staff opinions and experiences regarding these six dimensions, regression analysis indicated that communication of information and evaluation were the best predictors of

organizational learning and engaging in systematic evaluation in Cooperative Extension. Communication of information pertains to the availability and dissemination of information within the organization as well as to external stakeholders. It comes as no surprise that this dimension would manifest in these data. Once again, given that the complex structure of Cooperative Extension requires stakeholder satisfaction on multiple levels (federal, state, and local) one would expect there to be a mechanism for gathering information from stakeholders. Most Cooperative Extension organizations, if not all, have some type of system in place for gauging how well they are doing with respect to stakeholders. Going back to the previously mentioned Alabama Cooperative Extension System, a great deal of time, energy, and resources are devoted to gathering and dissemination of information. Employees are surveyed on a number of topics and results provide the basis for decision making and are accessible to the entire organization. Monthly, quarterly, bi-annual and yearly meetings occur between departments to plan, share, and report. For instance, the system program team meets once a month, while the program priority teams meet quarterly. Information is dispersed regularly in a variety of ways including face to face, webinars, video conference, conference calls, and others. Information about program planning, program evaluation, stakeholder engagement, among other things, is also provided to employees via the ACES intranet.

When responding to questions related to evaluation respondents were prompted to consider the following definition before answering, “Evaluation is a process of systematic inquiry to provide information for decision making about some object — a program, project, process, organization, system or product. Use of evaluation results might lead to making refinements to the program or to offering new services or products.” Thinking about this definition staff pointed out that it would be a useful endeavor to integrate evaluation into daily

activities and further agree that the integration of evaluation activities into day to day activities would allow for high quality decision making, would help provide better programs, processes, products or services.

The positive attitude toward evaluative inquiry in Cooperative Extension might be attributed to the increase pressure from federal, state, and local funders to show impact at multiple levels. Process use might also account for this phenomenon since Cooperative Extension staff reported being more likely to engage stakeholders in the evaluation process. Process use occurs when individuals learn to appreciate evaluation as a result of being a part of one.

**Research Question 3**

Research question 3 was, "To what extent does Cooperative Extension staff use evaluation results?" Use is one of the most research topics with regards to evaluation results. When organizations conduct evaluations the results are used in a myriad of ways. Sometimes organizations may conduct evaluations to show impact, ensure quality, improve programs, and prioritize resources. The literature indicates that Cooperative Extension use evaluation results to show impact and demonstrate accountability (Taylor Powell, 2008) These data support the literature as results suggests that Cooperative Extension staff are most likely use evaluation results to show program impact; improve programs; or determine if objectives have been met.

It is important to note that staff may use evaluation results in more than one way at a time. It is not uncommon to use evaluation results to show program impact while determining if program objectives have been met. Because Cooperative Extension organizations are charged designing and delivering programs that improve the quality of life for individuals, families, and communities, and reporting the results of such efforts back to multi level stakeholders it stands to

reason that participants would indicate that they use results to show program impact above all others. Within the Cooperative Extension community impact has been the driving force behind evaluations due to the GPRA Act of 1993. Since this time, states have felt increased pressure from the federal level to "focus on achieving results and to demonstrate, in annual performance reports and budget requests, how their activities will help achieve agency or government wide goals" (GAO Report to Congressional Committees, 2002, p. 1).

The literature also suggest that often times when organizations are pressured to show results and outcomes often times it is at the expense of program improvement or quality. However, these data support a different notion. Next to showing impact, staff indicated that they use results to improve programs. Perhaps over the years of focusing on outcomes and impact, staff have come to appreciate that improved programs are more likely to lead to improved outcomes. Finally, although occurring less frequently these data show that results are likely to be used for accountability requirements, or to decide if a program is worth keeping. Staff pointed out that that evaluation results are less likely to be used as a justification to prioritize resources and least likely to be used as a means of capturing employee performance.

**Research Question 4**

Research question 4 was, "To what extent are Cooperative Extension staff committed to the Extension Program Development Model?" The Extension Program Development Model is comprised of three levels: needs assessment, program design and implementation, and program evaluation. Although Extension systems have the same purpose relative to advancing the goals of the federal agency that governs them, USDA/NIFA, each state has significant latitude on how they choose to address national initiatives within their individual state. This model was

developed to offset the vast amount of flexibility and inconsistencies among Cooperative Extension organizations nationwide.

Data from the quantitative phase show that Cooperative Extension staff are most committed the second level of the model: program development. Programs are at the heart of Cooperative Extension across the nation. Commitment to program deign and implementation means that Cooperative Extension staff round the country are more likely to design and implement programs that are actively engaging, developmentally appropriate, and meets participants where they are. It also points toward programs that are designed and implemented by well- trained well qualified staff. These findings are consistent with the literature supporting successful program development and implementation (Small et al. 2009; Fixen et al. 2005; Kimpfer & Alvarado, 2003). Generally speaking, a lot of emphasis is placed on staff and in particular county or field level staff in Cooperative Extension. This is the case because of Cooperative Extension's historical ties to the community. The county field agent is the community's connection, the land grant university and the land grant universities' connection to the community. Research suggests that staff characteristics play an important part in program successful program implementation (Abell et al. 1999; Durlak, 2003; Wells, 2005; Waskik, 1993). They must have the ability to deliver programs to diverse audiences and in a manner that is respectful of differences and must come across as non- threatening. Staff members must also be well trained in their subject matter and in some cases in several subject matter areas.

Similarly Cooperative Extension employees tend to put a lot of energy into meeting people where they are. The notion of meeting people where they are is a fundamental aspect of Cooperative Extension (Taylor-Powell & Steele, 1996). It means that state specialists and field staff are willing to meet participants at non-traditional times and in non-traditional locations. It

also is indicative of staff's sense of responsibility to "know their target audience" when designing programs for a particular community. Or their willingness to be flexible to meet the learning styles of participants, be sensitive cultural sensitive, and aware of various group dynamics while designing and implementing community programs. This commitment was evident in the qualitative data as well.

The areas of program development that Cooperative Extension may struggle with might include developing and implementing programs that are of sufficient dosage, intensity, and frequency. Likewise developing and implementing programs that are comprehensive in nature might also be more challenging. The issues that families and communities face are sometime more complex than the scope or breadth of Cooperative Extension. This is more of a concern in program areas that deal with families and children such as Family and Consumer Sciences, Youth Development, or Community Resource Development. The typical audiences in these program areas are often times low income, geographically isolated, inner city, under employed, sometimes incarcerated. The issues and challenges these groups face are beyond what Cooperative Extension programs can provide alone as a protective factor. Cooperative Extension staff acknowledge that the complexities of some of today's issue faced by individuals, families, and communities seems beyond its reach. In fact this concern was mentioned during the in depth interviews. The following except explains,

> You have to give strong consideration at to the resources that are available to you to use. Now there was time when one person more or less could get with a family and do the planning or what have you but now a days the problems are so complex that you are gonna have to have the human resources, um let me see, the human resources with a lot of different agencies and institutions and awww and different kind of services and with

different kinds of resources, to handle the complexity of the problem. Awww and that's different from the time when one or two people could get together and say "we can solve this problem.

This comment adds validation to the literature which suggests that no single agency, not even one whose reach is as broad as Cooperative Extension, can tackle the complex problems of today. Cooperative Extension staff understand the combating societal tribulations require "forging and sustaining ever more effective partnerships" (Schorr, 2006, p. 6). Collaboration with stakeholders is critical especially at a time when budget cuts are steadily increasing. To accommodate this challenge, staff rely on relationships with other agencies to fill in the gaps and provide participants with a more holistic approach to service, which is aligned with recommendations in the literature. Finally, participants reported that they are more likely to conduct systematic evaluations than they are to conduct needs assessments. Again this may be the case because of the emphasis from funders and stakeholders to capture the outcomes and impacts to program efforts. These data are consistent with literature that supports Cooperative Extension's commitment to program development and implementation.

## Limitations of Study

One limitation of this study is social desirability. As with all self-reported information, participants might respond in ways that reflect social norms and that might not be an accurate account of their actually thoughts or behaviors. It is highly possible that participants in this study portrayed themselves more positively as not to highlight the fact that they might evaluate programs as they know they should.

A second limitation of this study is the sampling strategy. It is unclear whether or not the email inviting Cooperative Extension employees to participate in the study was actually sent by

Cooperative Extension administrators to their respective employees. It is possible that directors might not have sent the invitation to employees if they did not agree with the purpose of the study, the items on the survey, or the outcome of the study. This might be especially true in organizations that struggle with the needs assessments, program development and more importantly program evaluation.

A third limitation of this study is the inability to determine which land grant university employees are affiliated with. This would be helpful to identify possible patterns across the larger Cooperative Extension network. Because Cooperative Extension is flexible and focuses primarily county or state specific needs it is difficult to determine aspects of evaluation that are working well and those that are not. However this might be accomplished by examining individual state's response and then examining those data for a panoramic view of what's happening across the larger network.

A final limitation of this study is regarding the participant's current level of knowledge regarding the Extension Program Development Model and program evaluation. It is assumed that participants had the required level of knowledge regarding best practices associated with the elements of the model and in particular evaluation. However, given that many Cooperative Extension organizations are just beginning to focus on these processes it is highly likely that employees might not have been able to judge their own knowledge and behaviors in comparison with what best practices are.

## Implications

This study has some implications for research and practice in the context of a complex system like Cooperative Extension. To begin, with regards to engaging in systematic evaluation results imply that Cooperative Extension state and field staff are more committed to some

aspects than to others. The term systematic evaluation implies that the processes involved are aligned and occur in a circular pattern. When staff choose to engage in the parts of evaluation that they are most comfortable with it impacts the quality of the evaluation in several other areas. The processes involved in systematic evaluation are interrelated, contextual, and systemic and therefore require that each process receive equal attention when attempting to conduct any type of program evaluation. Because Cooperative Extension does not have a strong history of being results focused many employees may be unfamiliar with the process involved in systematic program evaluation. Lack of familiarity with evaluation process might be alleviated with more focus on evaluation capacity building (ECB) within Cooperative Extension. Preskill and Boyle offer this explanation and goal of evaluation capacity building,

> ECB involves the design and implementation of teaching and learning strategies to help individuals, groups, and organizations, learn about what constitutes effective, useful, and professional evaluation practice. The ultimate goal of ECB is sustainable evaluation practice—where members continuously ask questions that matter, collect, analyze, and interpret data, and use evaluation findings for decision-making and action. For evaluation practice to be sustained, participants must be provided with leadership support, incentives, resources, and opportunities to transfer their learning about evaluation to their everyday work. Sustainable evaluation practice also requires the development of systems, processes, policies, and plans that help embed evaluation work into the way the organization accomplishes its mission and strategic goals. (2008 p. 444)

This point leads to another implication for research and practice, which is one of organizational readiness for learning and evaluation within of Cooperative Extension. Cooperative Extension staff and the organization as a whole must begin to move towards results

and effectiveness and away from "believing" that they have made an impact. This can be accomplished by first diagnosing each state's readiness for learning and evaluation and then focusing on evaluation capacity building. Some states have already begun to move in this direction while others are still behind. Some Cooperative Extension organizations like Wisconsin Cooperative Extension, have been focusing on evaluation since the early 1960's, publishing evaluation studies in peer reviewed journals, presenting at leading evaluation conferences, and conduction scholarly research in the field. However, this is not the norm. Many Cooperative Extension organizations struggle with how to balance tradition with new expectations for being outcome focused.

## Recommendations for Future Research and Practice

The results of this study offer new opportunities for additional research and practice. First this study should be replicated with Cooperative Extension staff in individual states or perhaps on a regional level. By looking at evaluation practices on a state by state or regional level more distinct patterns of behavior across states might be more visible. Likewise, by grouping states by region might also bring to light patterns of behavior that are unique to particular demographics.

It might also be useful to examine patterns of behavior within states as well. Looking at data within states allows for further research by program areas. Even though Cooperative Extension organizations function somewhat independently they do have program areas in common. These program areas at the focus of national initiatives and therefore are reflected at the state level. There is a good possibility that variations exist across and within program areas. For example, family and consumer science staff might be better at program development since this group generally is from an applied field, whereas forestry staff might be lacking in this area

because they are generally from a scientific field. The opposite might be true of the ability to conduct evaluations or research. Further research might show that individuals who are more familiar with scientific methods might be more inclined to focus on evaluation best practices rather than program development.

Another opportunity for further research includes the examination of location of evaluation. It is also possible that differences among field and state staff exits. In addition, there might be variations among staff who work in research centers or experiment stations rather than in county offices or the state headquarters. Furthermore, one might also want to study the differences among staff with joint appointments in academic units as compared to staff who are 100% Extension. Finally this study should be repeated in the future to determine if Cooperative Extension staff have changed over time.

In the future organizations such as Cooperative Extension might consider hiring an evaluation specialist at a minimum and create an evaluation team. The results from this study show that 65% of the participants indicated that they do not have an evaluation specialist on staff; however, research suggest that having a person on staff who is dedicated to evaluation and use of results is critical to integrating evaluation in the organization (Patton, 2008) might be careful to look for particular characteristics in an evaluation specialist such as credibility, integrity, ethics, and excellent interpersonal skills. These evaluator characteristics are especially critical because they impact the way organizational members' respond to the evaluator which in turn impacts evaluation in the organization.

Another recommendation for increasing effective program evaluation and use is integrating evaluation into the county, state, and federal program planning and development process. The annual plan of work (POW), a common document that guides programming efforts

across all Cooperative Extension programs is an excellent place to begin integration because the POW mimics the logic models in that the POW connects program inputs, activities, outputs and outcomes.

Still another recommendation for increasing evaluation and use of evaluation results is to implement a reward or recognize high quality impactful programs and evaluations. Currently Cooperative Extension employees generally report contact numbers as evidence of program effectiveness or impact; while numbers are evidence of implementation evaluation they are necessary but not sufficient for impact evaluation. Employees might feel more inclined to engage in high quality evaluations if their efforts are truly appreciated and valued.

Increasing engagement in evaluation and use of results will require that CES administrator be committed to high quality evaluation which means that human and financial resources must be made available to employees. Employees will need evaluation capacity building training before they can be expected to engage in high quality evaluation. Some employees may need program development training or training in the overall Extension Program Development Model. In many cases the assumption is made that Extension employees "just know" how to do programs. This statement implies that these skills are inherent in the Extension employee but they are not. Like any skill program development and program evaluation skills are learned are require significant experience and practice to do. And because "the bane of program evaluation is a poorly designed program" (The Kellogg Foundation, 1996), it seems logical that Cooperative Extension organizations would invest heavily in training and professional development that builds that capacity of employees in these areas.

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Appendix 1

Informed Consent Letter

ALABAMA COOPERATIVE Extension SYSTEM

*Alabama A&M and Auburn Universities*

**(NOTE: DO NOT SIGN THIS DOCUMENT UNLESS AN IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)**

**INFORMED CONSENT**
**for a Research Study entitled**
**"The Extension Program Development Model: A Look at Commitment and Engagement "**

**You are invited to participate in a research study** to (1) examine cooperative Extension state and field staff's commitment to program development, implementation, and evaluation best practices and (2) examine the barriers and supports that either decrease or increase engagement in systematic program evaluation. The study is being conducted by *Jennifer Wells*, Doctoral Candidate, under the direction of *David Shannon*, Professor in the Department of Educational Foundations Leadership and Technology (EFLT) Auburn University. You were selected as a possible participant because you are a Cooperative Extension employee and are age 19 or older.

**What will be involved if you participate?** Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an in-depth interview about your commitment to program development, program implementation, and program evaluation best practices as well as your beliefs and attitudes regarding factors that influence the use of best practices. Your total time commitment will be approximately 45 minutes.

**Are there any risks or discomforts?** The risks associated with participating in this study are breach of confidentiality. To minimize these risks, real names will not be included when the data are transcribed, presented or published.

**Will you receive compensation for participating?** You will not be compensated for participation.

**Are there any costs?** There are no costs associated with participation.

Participant's initials _____

The Auburn University Institutional Review Board has approved this document for use from 2/16/11 to 2/15/12 Protocol # 11-007 EP 1102

ALABAMA COOPERATIVE Extension SYSTEM

*Alabama A&M and Auburn Universities*

**If you change your mind about participating,** you can be withdrawn from the study at any time. Your participation in the study is completely. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Educational Foundations Leadership and Technology or the Alabama Cooperative Extension System.

**Your privacy will be protected. Any data obtained in connection with this study will remain confidential.** We will protect your privacy and the data you provide by using not collecting any identifiable information during the interview. Each interviewee's information will be private, confidential, and will not be shared with anyone. Your name will not be used during the interview, transcription, or reporting. Instead you will be assigned a pseudo name. We hope to present our findings at professional meetings and in publications (e.g. *used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting*). Mrs. Wells and Dr. David Shannon will ensure that the list linking that name to you is locked in a secure location separated from your interview data and that the list is accessible only to Mrs. Wells and Dr. Shannon. Data will be stored on a pass-word protected computer at the researcher's office. The consent forms will be stored in a locked file cabinet in the researcher's.
**If you have questions about this study,** *please ask them now or* contact Jennifer Wells at (334) 750-4189 or Dr. David Shannon at (334) 844-5221. A copy of this document will be given to you to keep.

**If you have questions about your rights as a research participant,** you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

**HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.**

Participant's signature Date

Printed Name

Jennifer A. Wells 2/17/11
Investigator obtaining consent Date

Jennifer H. Wells
Printed Name

David Shannon 2/17/11
Co-Investigator Date

David Shannon
Printed Name

The Auburn University Institutional Review Board has approved this document for use from 2/16/11 to 2/15/12 Protocol # 11-007 EP 1102

ALABAMA COOPERATIVE Extension SYSTEM

*Alabama A&M and Auburn Universities*

**(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)**

**INFORMATION LETTER**
**for a Research Study entitled**
**"The Extension Program Development Model: A Look at Commitment and Engagement "**

**You are invited to participate in a research study** to (1) examine cooperative Extension state and field staff's commitment to program development, implementation, and evaluation best practices and (2) examine the barriers and supports that either decrease or increase engagement in systematic program evaluation. The study is being conducted by *Jennifer Wells,* Doctoral Candidate, under the direction of *David Shannon,* Professor in the Department of Educational Foundations Leadership and Technology (EFLT) Auburn University. You were selected as a possible participant because you are a Cooperative Extension employee and are age 19 or older.

**What will be involved if you participate?** Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an on line survey about your commitment to program development, program implementation, and program evaluation best practices as well as your beliefs and attitudes regarding factors that influence the use of best practices. Your total time commitment will be approximately 20 minutes.

**Are there any risks or discomforts?** The risks associated with participating in this study are breach of confidentiality. To minimize these risks, real names will not be included when the data are transcribed, presented or published.

**Are there any benefits to yourself or others?** If you participate in this study, you may benefit from thinking about the questions being asked during the interview. A potential benefit to participating in this study is a greater knowledge and awareness of the factors that acts barriers or facilitators to engaging in systematic program evaluation. We/I cannot promise you that you will receive any or all of the benefits described.

**Will you receive compensation for participating?** You will not be compensated for participation.

**Are there any costs?** There are no costs associated with participation.

The Auburn University Institutional Review Board has approved this document for use from 2/16/11 to 2/15/12 Protocol # 11-007 EP 1102

ALABAMA COOPERATIVE Extension SYSTEM

*Alabama A&M and Auburn Universities*

**Any data obtained in connection with this study will remain anonymous.** We will protect your privacy and the data you provide by not collecting any identifiable information on the survey. In addition, the web server will not collect your email or IP address. We plan to examine the information in aggregate, and hope to present our findings at professional meetings and in publications. Data will be stored on a password protected computer at the researcher's office. The consent forms will be stored in a locked file cabinet in the researcher's office.

**If you have questions about this study,** please contact Jennifer Wells at (334) 750-4189 or David Shannon at (334) 844-5221. You may also contact Jennifer Wells at wellsja@auburn.edu or David Shannon at shanndm@auburn.edu.

**If you have questions about your rights as a research participant,** you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.
YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Jennifer C. Wells 2/19/11
Investigator Date

David Shannon 2/19/11
Co-Investigator Date

*The Auburn University Institutional Review Board has approved this document for use from* 2/16/11 *to* 2/15/12. *Protocol #* 11-007 EP 1102

*LINK TO SURVEY*

The Auburn University Institutional Review Board has approved this document for use from 2/16/11 to 2/15/12 Protocol # 11-007 EP 1102

Appendix 2

Focus Group Questions

Focus Group Questions

**Needs Assessment**

1. Please share with me your experiences with conducting a needs assessment.
    a. What process did you use?
    b. What mechanisms did you use to get information?
    c. Who was involved in the process?
    d. What facilitators existed?
    e. What barriers existed?

**Program Development/Implementation**

2. Please share with me your experiences with developing or implementing a program.
    a. What process did you use?
    b. What mechanisms did you use to get information?
    c. Who was involved in the process?
    d. What facilitators existed?
    e. What barriers existed?

**Program Evaluation**

3. Please share with me your experiences with program evaluation.
    a. What process did you use?
    b. What mechanisms did you use to get information?
    c. Who was involved in the process?
    d. What facilitators existed?
    e. What barriers existed?

Appendix 3

Dissertation Survey

# The Extension Program Development Model: A Look at Engagement and

## 1. Information Letter

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

INFORMATION LETTER
for a Research Study entitled
"The Extension Program Development Model: A Look at Commitment and Engagement "

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What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an on line survey about your commitment to program development, program implementation, and program evaluation best practices as well as your beliefs and attitudes regarding factors that influence the use of best practices. Your total time commitment will be approximately 20 minutes.

Are there any risks or discomforts? The risks associated with participating in this study are breach of confidentiality. To minimize these risks, real names will not be included when the data are transcribed, presented or published.

Are there any benefits to yourself or others? If you participate in this study, you may benefit from thinking about the questions being asked during the interview. A potential benefit to participating in this study is a greater knowledge and awareness of the factors that acts barriers or facilitators to engaging in systematic program evaluation. We/I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? You will not be compensated for participation.

Are there any costs? There are no costs associated with participation.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting any identifiable information on the survey. In addition, the web server will not collect your email or IP address. We plan to examine the information in aggregate, and hope to present our findings at professional meetings and in publications (e.g. used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting). Data will be stored on a pass-word protected computer at the researcher's office. The consent forms will be stored in a locked file cabinet in the researcher's office.

If you have questions about this study, please contact Jennifer Wells at (334) 750-4189 or via e-mail at wellsja@auburn.edu or David Shannon at (334) 844-5221 or via e-mail at shanndm@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE "NEXT" BUTTON BELOW.

YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Jennifer Wells
Investigator

David Shannon
Co-Investigator

The Auburn University Institutional Review Board has approved this document for use from February 16, 2011 to February 15, 2012. Protocol #11-007 EP 1102.

## The Extension Program Development Model: A Look at Engagement and

### 2. Situational Analysis/Needs Assessment Best Practices

The following section will ask you about your experiences conducting needs assessments or situational analyses.

**1. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Engage stakeholders in decisions about program planning | ◯ | ◯ | ◯ | ◯ | ◯ |
| Collect data regarding community needs | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use the results of situational analysis to plan programs | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use key informants to guide program planning | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use the county or community advisory board to guide program planning | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use existing assessments and/or records to determine current programming needs | ◯ | ◯ | ◯ | ◯ | ◯ |
| Mail out mass community surveys to assess county needs | ◯ | ◯ | ◯ | ◯ | ◯ |
| Communicate the results of the needs assessments to various stakeholders | ◯ | ◯ | ◯ | ◯ | ◯ |
| Analyze the data from situational analyses | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use the results of situational analyses to prioritize programming efforts | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use the results of the situational analyses to prioritize the use of limited resources in program planning | ◯ | ◯ | ◯ | ◯ | ◯ |

## The Extension Program Development Model: A Look at Engagement and

### 3. Program Development / Implementation Best Practices

The following section will ask you about your experiences designing or implementing programs.

**1. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Design/implement programs with theory driven content | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs of sufficient dosage | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs of sufficient intensity | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that are comprehensive | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that are actively engaging | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that are developmentally appropriate | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that meet participants where they are | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that are socially and culturally relevant | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that are delivered by well-qualified staff | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that are delivered by well trained staff | ◯ | ◯ | ◯ | ◯ | ◯ |
| Design/implement programs that focus on building positive relationships | ◯ | ◯ | ◯ | ◯ | ◯ |

## The Extension Program Development Model: A Look at Engagement and

### 4. Program Evaluation Best Practices

The following section will ask you about your experiences with program evaluation.

**1. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Obtain Human Subjects Protection in evaluations | ◯ | ◯ | ◯ | ◯ | ◯ |
| Develop an evaluation time line | ◯ | ◯ | ◯ | ◯ | ◯ |
| Develop an evaluation budget | ◯ | ◯ | ◯ | ◯ | ◯ |
| Divide evaluation responsibilities | ◯ | ◯ | ◯ | ◯ | ◯ |
| Engage stakeholders | ◯ | ◯ | ◯ | ◯ | ◯ |

**2. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Define the purpose of the evaluation | ◯ | ◯ | ◯ | ◯ | ◯ |
| Define what is being evaluated | ◯ | ◯ | ◯ | ◯ | ◯ |
| Determine the use of the evaluation | ◯ | ◯ | ◯ | ◯ | ◯ |
| Determine the users of the evaluation | ◯ | ◯ | ◯ | ◯ | ◯ |
| Engage stakeholders in the evaluation process | ◯ | ◯ | ◯ | ◯ | ◯ |
| Purposefully determine the evaluation's key questions | ◯ | ◯ | ◯ | ◯ | ◯ |
| Purposefully select meaningful indicators | ◯ | ◯ | ◯ | ◯ | ◯ |
| Purposefully determine the evaluation design | ◯ | ◯ | ◯ | ◯ | ◯ |

**3. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Identify possible sources of data | ◯ | ◯ | ◯ | ◯ | ◯ |
| Select methods of data collection | ◯ | ◯ | ◯ | ◯ | ◯ |
| Develop a data collection schedule | ◯ | ◯ | ◯ | ◯ | ◯ |
| Pilot test the data collection instrument | ◯ | ◯ | ◯ | ◯ | ◯ |
| Collect data | ◯ | ◯ | ◯ | ◯ | ◯ |

**4. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Process the data that has been collected | ◯ | ◯ | ◯ | ◯ | ◯ |
| Analyze the data that has been collected | ◯ | ◯ | ◯ | ◯ | ◯ |
| Interpret the data that has been collected | ◯ | ◯ | ◯ | ◯ | ◯ |
| Consider what you have learned from the data | ◯ | ◯ | ◯ | ◯ | ◯ |
| Consider the limitations of the evaluation | ◯ | ◯ | ◯ | ◯ | ◯ |

**5. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Share the findings of evaluation results | ◯ | ◯ | ◯ | ◯ | ◯ |
| Share lessons learned from evaluation conducted | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use the results of evaluations in decision making | ◯ | ◯ | ◯ | ◯ | ◯ |
| Use results of evaluations to determine next steps | ◯ | ◯ | ◯ | ◯ | ◯ |

## The Extension Program Development Model: A Look at Engagement and

### 5. Standards of Evaluation

The following section will ask you about your experiences with the Standards of Program Evaluation.

**1. Please indicate to what extent you engage in the following:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| Determine the utility of an evaluation | ◯ | ◯ | ◯ | ◯ | ◯ |
| Determine the feasibility of the evaluation | ◯ | ◯ | ◯ | ◯ | ◯ |
| Ensure that evaluations are conducted with propriety | ◯ | ◯ | ◯ | ◯ | ◯ |
| Ensure that evaluations are conducted with accuracy | ◯ | ◯ | ◯ | ◯ | ◯ |

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### 6. Types of Evaluation

The following section will ask you about experiences with various types of evaluations.

**1. Please indicate the ways in which you use evaluation:**

| | Not at All | Rarely | Half the Time | Frequently | A Great Extent |
|---|---|---|---|---|---|
| To determine if a program is worth keeping | ◯ | ◯ | ◯ | ◯ | ◯ |
| To improve program functions/operations | ◯ | ◯ | ◯ | ◯ | ◯ |
| To show program impact | ◯ | ◯ | ◯ | ◯ | ◯ |
| To prioritize the organization's resources | ◯ | ◯ | ◯ | ◯ | ◯ |
| To determine if program objects have been met | ◯ | ◯ | ◯ | ◯ | ◯ |
| As a means for employee performance appraisal | ◯ | ◯ | ◯ | ◯ | ◯ |
| To establish accountability | ◯ | ◯ | ◯ | ◯ | ◯ |

## The Extension Program Development Model: A Look at Engagement and

### 7. Readiness for Organzational Learning and Evaluation

The following section will ask you about your experiences as a member of your Extension organization. For each of the following items below, indicate the number that best represents your opinion based on your experiences, and not how you think other individuals would answer, or your organization's official policy or intent.

**1. Please indicate below how much you agree or diagree with the following:**

| | Strongly Disagree | Disagree | Mixed | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Employees continuously look for ways to improve processes, products, and services | ◯ | ◯ | ◯ | ◯ | ◯ |
| Employees are more concerned about how their work contributes to the success of the organization than they are about individual success | ◯ | ◯ | ◯ | ◯ | ◯ |
| Employees operate from a spirit of cooperation, rather than competition | ◯ | ◯ | ◯ | ◯ | ◯ |
| Mistakes made by employees are viewed as opportunities for learning | ◯ | ◯ | ◯ | ◯ | ◯ |
| Employees continuously ask themselves how they're doing, what they can do better, and what is working | ◯ | ◯ | ◯ | ◯ | ◯ |
| Employees are committed to being innovative and forward looking | ◯ | ◯ | ◯ | ◯ | ◯ |

**2. Please indicate how much you agree or disagree with the following:**

| | Strongly Disagree | Disagree | Mixed | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Employees generally trust their supervisors | ◯ | ◯ | ◯ | ◯ | ◯ |
| Supervisors view individuals' capacity to learn as the organization's greatest resource | ◯ | ◯ | ◯ | ◯ | ◯ |
| Employees use data/information to inform their decision-making | ◯ | ◯ | ◯ | ◯ | ◯ |
| Supervisors take the role of coaching, mentoring, and facilitating employee's learning | ◯ | ◯ | ◯ | ◯ | ◯ |
| Supervisors make realistic commitments for employees (e.g., time, resources, workload) | ◯ | ◯ | ◯ | ◯ | ◯ |
| Supervisors are open to negative feedback from employees | ◯ | ◯ | ◯ | ◯ | ◯ |
| Supervisors are more concerned with serving the organization than seeking personal power or gain | ◯ | ◯ | ◯ | ◯ | ◯ |
| Supervisors use data/information to inform their decision-making | ◯ | ◯ | ◯ | ◯ | ◯ |
| There are few boundaries between departments/units that keep employees from working together | ◯ | ◯ | ◯ | ◯ | ◯ |
| Employees' performance goals are clearly aligned with the organization's strategic goals | ◯ | ◯ | ◯ | ◯ | ◯ |

## The Extension Program Development Model: A Look at Engagement and

**3. Please indicate how much you agree or disagree with the following:**

| | Strongly Disagree | Disagree | Mixed | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Information is gathered from clients, customers, suppliers, or other stakeholders to gauge how well we're doing | ◯ | ◯ | ◯ | ◯ | ◯ |
| Currently available information tells us what we need to know about the effectiveness of our programs, processes, products, and services | ◯ | ◯ | ◯ | ◯ | ◯ |
| When new informations that would be helpful to others is learned or discovered, it gets disseminated to those individuals | ◯ | ◯ | ◯ | ◯ | ◯ |
| When new informations that would be helpful to others is learned or discovered, it gets disseminated to those individuals | ◯ | ◯ | ◯ | ◯ | ◯ |

## The Extension Program Development Model: A Look at Engagement and

### 8. Evaluation

Please use the following definition of evaluation when responding to the item below:

Evaluation is a process of systematic inquiry to provide information for decision-making about some object- a program, project, process, organization, system, or product. Use of evaluation results might lead to making refinements to the program or to offering new services or products.

**1. Please indicate how much you agree or disagree with the following:**

| | Strongly Disagree | Disagree | Mixed | Agree | Strongly Agree |
|---|---|---|---|---|---|
| The integration of evaluation activities into our work has enhanced(or would enhance)the quality of decision-making | ◯ | ◯ | ◯ | ◯ | ◯ |
| It has been (or would be) worthwhile to integrate evaluation activities into our daily work practices | ◯ | ◯ | ◯ | ◯ | ◯ |
| Supervisors like (or would like) us to evaluate our efforts | ◯ | ◯ | ◯ | ◯ | ◯ |
| Evaluation helps (or would help) us provide better programs, processes, products, and services | ◯ | ◯ | ◯ | ◯ | ◯ |
| There would be support among employees if we tried to do more (or any) evaluation work | ◯ | ◯ | ◯ | ◯ | ◯ |
| Doing (more) evaluation would make it easier to convince supervisors of needed changes | ◯ | ◯ | ◯ | ◯ | ◯ |
| This would be a good time to begin (or renew or intensify)efforts to conduct evaluations | ◯ | ◯ | ◯ | ◯ | ◯ |
| There are evaluation processes in place that enable employees to review how well changes we make are working | ◯ | ◯ | ◯ | ◯ | ◯ |

## The Extension Program Development Model: A Look at Engagement and

### 9. Demograhics

The following section will ask you to tell us about yourself.

**1. Age**

**2. Gender**

**3. Program Area/Department**

Other (please specify)

**4. Location**

- [ ] Field
- [ ] State

Other (please specify)

**5. Position**

Other (please specify)

**6. Appointment Type**

Other (please specify)

**7. Number of Years in Extension**

**8. Number of Years in Current Position**

**9. Land-Grant Designation**

Other (please specify)

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**10. HIghest Degree Obtained**

Other (please specify)

**11. Is there an Evaluation Specialist on staff**

Other (please specify)

Appendix 4

Member Checking Emails

**Jennifer Wells Marshall**

**From:** [redacted]
**Sent:** [redacted]
**To:** Jennifer Wells
**Subject:** RE: Dissertation Interveiw Transcript

Jennifer,

Amazing accuracy! Thank you for the opportunity to review. The best to you as this major effort comes to fruition.

Sincerely,

[redacted]

---

**From:** Jennifer Wells
**Sent:** [redacted]
**To:** [redacted]
**Subject:** Dissertation Interveiw Transcript

[redacted]

Thanks for agreeing to participate in my dissertation research. Your comments were a very valuable. I have attached a copy of your interview transcript for your records. Please feel free to read through it. As I wrap this up I am giving each participant a chance to review their interview transcript for authenticity. The main thing is that you feel comfortable that I have transcribed your thoughts and words. You are free to change anything that you like, just let me know the changes by Jan 31. I have to give my final draft to my committee by Feb 7. This is not a necessary process, you do not have to do it. I just want to give you the opportunity if you'd like.

Thanks so much
Jennifer

**Jennifer Wells Marshall**

**From:** [redacted]
**Sent:** [redacted]
**To:** Jennifer Wells
**Subject:** RE: Dissertation Interview Transcript

Good to hear from you. Great progress. The transcript could use some editing but the content is valid . best wishes,. gaines

---

**From:** Jennifer Wells
**Sent:** [redacted]
**To:** [redacted]
**Subject:** Dissertation Interview Transcript

Dr. Smith
How are you? Thank you so much for agreeing to participate in my dissertation research. Your comments were invaluable! I have attached a copy of your transcript for your records. Please feel free to read it and make sure that I have transcribe your thoughts and words. The main thing is that you feel that the transcript is authentic and valid. You don't have to do this but I wanted to give you opportunity if you wanted it. I have to get the final draft to my committee by Feb 7 so if you would like to make changes please let me know by Jan 31.

Thanks again
Jennifer

[redacted]

Appendix 5

Codebook Excerpt

Examples from Codebook

**Needs Assessment (talks about needs assessment best practices such as data sources, engaging stakeholders, collecting data to assess community needs)**

**Examples of Needs Assessments Comments**

So the plan of work for each county at each area in a particular county was developed multiple ways from a one-on-one contact with the Advisory Council. And then the county agent also had responsibility to work with leaders and experts in that particular field.

Well, one of the things that I've done over the years to ascertain what people want and what people need, I listen to the people. People will let you know what they need; and then, you develop a program based on those needs.

**Program Development (talk about program implementation best practices such as meeting people where they are, developing programs of sufficient dosage, using theory to guide programming)**

**Example of Program Development/Implementation Comment**

And you just touched on something. Some groups of people, you're gonna have to go to their house. They are not going to meet in a group. We found that to be true in trying to teach nutrition education to limited resource audiences. Some of them will meet at a house with three or four people. Some of them will meet at a community center, in a group. And, some of them, you got to come to their house to meet them one-on-one.