

# Fundamental Dimensions and Essential Elements of Exemplary Local Extension Units

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## Abstract

*Collaborative efforts between federal, state, and local government agencies enable local Extension units to deliver a high level of educational opportunities to local citizens. These units represent land-grant institutions by delivering non-formal education that aim to address local, regional, and state concerns. The purpose of this study was to establish consensus that defines the characteristics of an exemplary local Extension unit of the Cooperative Extension Service. This effort is significant because the extent to which these Extension partners have agreed on the components of successful Extension units has never been clearly defined and was unknown. Determining the characteristics of an exemplary local Extension unit will facilitate consistency in the delivery of non-formal education through Extension. Using a modified Delphi technique to survey administrators responsible for the operation of the local Extension unit, this study identified six fundamental dimensions of an exemplary local Extension unit: adequate facilities and infrastructure, well-prepared Extension educators, well-developed educational programs, organizational accountability, effective county unit leadership, and adequate financial capacity. Within these six fundamental dimensions, the study further identified 77 essential elements of exemplary local Extension units. Results of this study will provide the foundation for the development of standards to guide the improvement of local Extension offices.*

*Keywords:* extension; extension administration; organizational effectiveness

The Cooperative Extension Service was established to identify the problems of ordinary people, bring these problems to the attention of researchers, and deliver non-formal education to help solve these problems (McDowell, 2001). The local Extension unit has been the conduit by which the Cooperative Extension Service has communicated with local citizens, identified needs, and provided research-based educational solutions (Seevers, Graham & Conklin, 2007). Although each local Extension unit is different, most units have a hierarchy. There is a director that oversees the management of the office, a group of highly trained faculty and educators, and a team of support staff working to assist the unit's efforts. To fulfill the local Extension unit role, a number of duties and tasks must be performed by the local Extension unit. These include:

1. represent the land-grant institution in the county by delivering non-formal education that provides solutions to local concerns;
2. act as the liaison between local and state government;
3. facilitate the organization of local citizens to determine and deliver non-formal education;
4. develop collaborations and partnerships with other organizations;
5. administer a public facility where local citizens can call, write, or visit for information;
6. stay well-informed regarding social and economic changes in the county;
7. remain up-to-date on subject matter expertise;

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8. provide non-formal education through group presentations, one-on-one consultations, and mass media;
9. aid the communication between local needs and research; and
10. provide assessment of educational programs and communication of the same to local citizens (Seevers et al., 2007).

Standards have been used in many organizations to communicate performance expectations. For example, the American Association of Agricultural Education has continued efforts to update its standards for teacher education in agriculture (National Council for Agricultural Education, 2009). Results of a recent study on Extension program quality suggested that communication between the parties that administer Extension is needed to resolve problems associated with technology, facilities, and Extension's human capital (Harder, Moore, Mazurkewicz, & Benge, 2013). Further, delivering non-formal education to help solve the problems of local citizens has often been a collaborative effort between federal, state and local government. Each of these partners has contributed financial and human resources, infrastructure, and other program support. However, the extent to which these Extension partners have agreed on the components of successful Extension units has never been clearly defined. Agreement on the components of an exemplary local Extension unit is a prerequisite to standards of performance establishing the need for this study.

### **Theoretical Framework and Literature Review**

The theoretical and conceptual framework for this study was based upon the open systems theory (OST). An open system is one in which the internal and external environments continuously exchange feedback. OST has been referred to as a modern systems-based change management theory designed to create healthy, innovative and resilient organizations in today's fast changing and often unpredictable environments (Cummings & Worley, 2009). Open Systems Theory has often used models to illustrate the interrelated parts of an organizational system that are necessary to accomplish its purpose (Figure 1). Organizations utilize people and financial resources (inputs) and apply strategies (processes) to create products and services (outputs) to accomplish their objectives (outcomes) (Thompson & Strickland, 2003). These inputs, processes, outputs, and outcomes are guided by a strategic and institutional context that establishes priorities, policies, incentives, rules, and culture that are developed into a strategy that will create a competitive advantage (Thompson & Strickland, 2003). Users, often referred to as customers, clients, or stakeholders, both influence and are influenced by the priorities, policies, and culture developed by an organization.

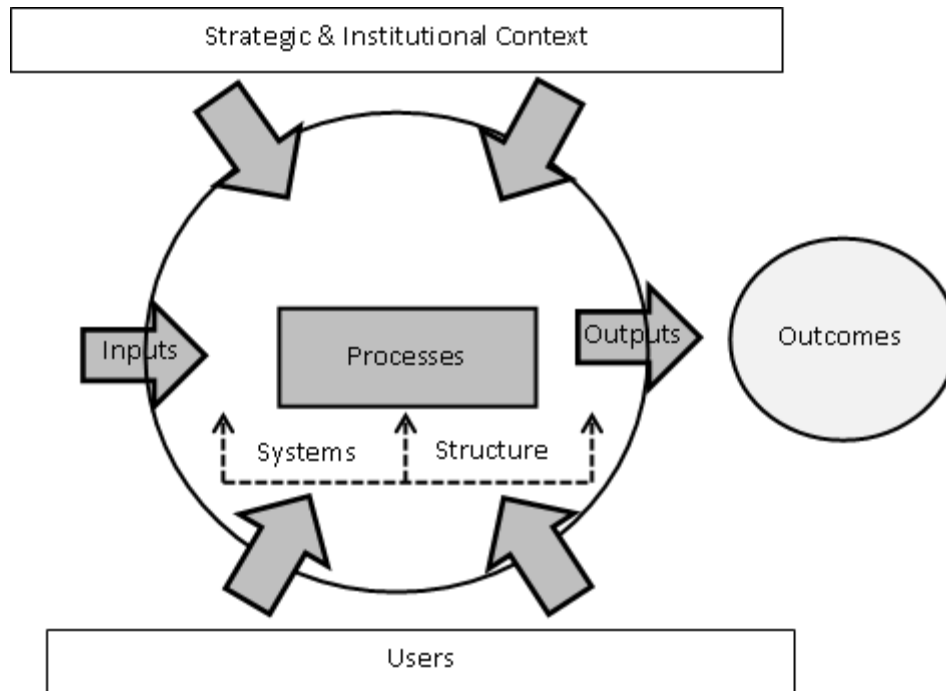


Figure 1. Open systems model of organizational structure and behavior (Reproduced with permission from Cummings & Worley, 2009)

Within the open system lie the strategic and institutional contexts. Institutional context has been defined as formal and informal traditions, customs, policies, and procedures that govern the strategic behavior of an organization (Wilson & Gill, 2003). In Extension, this institutional context has been driven by a strategic relationship between the Cooperative Extension Service and the research base of the land-grant system. Inputs often include people, raw materials, energy, information, and funds that are invested in an organization to fulfill its mission and objectives. Accomplishing the mission and objectives of an organization requires a strategic process (Thompson & Strickland, 2003). A strategic process includes a set of strategies and priorities that enable the organization to achieve better performance, efficiency, and effectiveness.

Outputs refer to the goods or services produced by an organization in a given time frame. Outcomes are the measured results achieved by an organizational strategy, set of inputs, processes, and outputs. Users refer to the consumers of products and services. For the local Extension unit, families, youth, and communities represent the users of Extension's services.

Guided by the OST developed by Cummings and Worley (2009) as the theoretical frame, this study proposed that a local Extension unit consists of complex factors that affect achievement of the established goals and objectives. These factors also govern the operational management of a local Extension unit through the Extension programs that provide solutions to local needs (Figure 2).

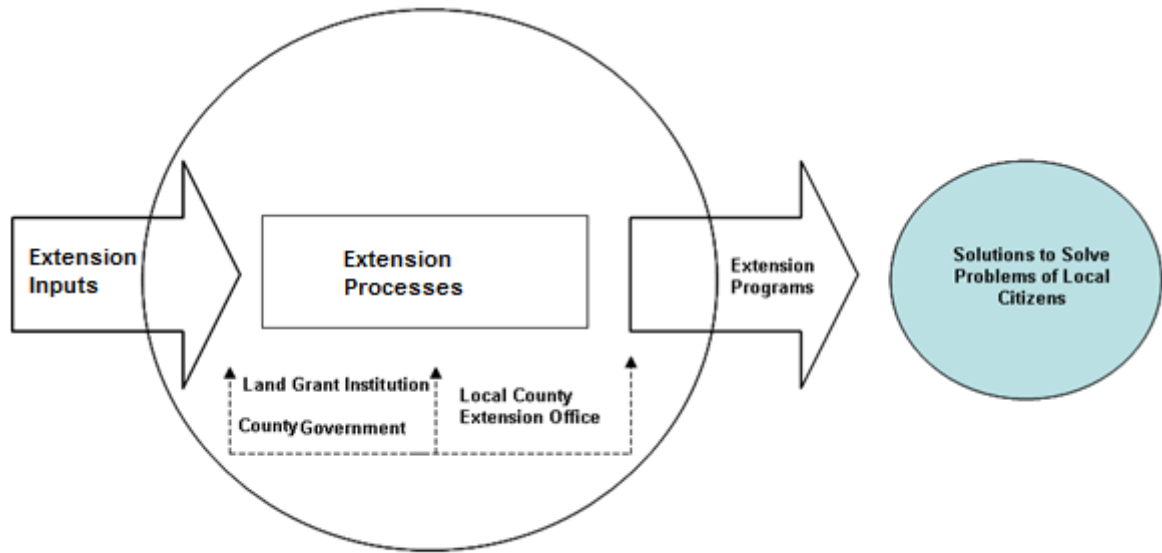


Figure 2. Conceptual framework for an exemplary local Extension unit.

### Fundamental Dimensions

Given that local Extension units act as the vehicle for addressing the needs of citizens in the community, the characteristics of local Extension units must be defined. With the exception of the tasks of a local Extension unit described by SeEVERS et al. (2007), there are no studies that define or describe a high quality local Extension unit. In order to define or describe an exemplary local Extension unit, one must have a thorough understanding of the foundation that supports the mission of the local Extension unit.

A foundational component of an organization refers to a basic, necessary, or indispensable component required to achieve its mission, goals and objectives (Thompson & Strickland, 2003). In the attempt to identify these basic components, Rabin, Hildreth, and Miller (1996) suggested that without adequate financial resources, the other county Extension office responsibilities are irrelevant. Resource expenditures reflect the priorities of an organization and its leaders (McDowell, 2001). Ahearn, Yee, and Bottum (2003) described how local Extension unit funding is used, including facilities and infrastructure, operational expenses, salaries, and educational delivery. Finally, Linden (2003) described the role of public value for resources expended on Extension. The literature review suggested that the fundamental dimensions of local Extension units could include: (a) adequate and consistent funding, (b) effective county office leadership, (c) facilities and infrastructure, (d) well-trained educators, (e) well-developed Extension programs, and (f) organizational accountability (Ahearn et al., 2003; Linden, 2003; Rabin et al., 1996; SeEVERS et al., 2007; Thompson & Strickland, 2003).

Just as feedback provides an understanding of the fundamental dimensions of learning, each of the fundamental dimensions of an exemplary Extension office needs clarity (Clynes & Raftery, 2008). Essential elements provide a more detailed understanding of each fundamental dimension. Essential elements describe how a local Extension unit can be relevant and responsive to the clientele of a local community.

**Adequate and consistent funding.** Carroll, Gross, and Leist (2003) illustrated the importance of planning for and implementing a consistent, diverse funding strategy to support program staff, operations, and educational initiatives. The development of a reliable and varied funding stream allows for the creation of a sustainable community-based program. Crosby and

Hamernik (2002) highlighted the need for Extension to diversify traditional funding sources with funding from other public entities, nonprofits, and the private sector.

**County office leadership.** County office leadership serves to coordinate the local Extension unit by formulating, developing, implementing, and evaluating a local Extension unit strategy, including managing personnel functions (Radhakrishna, Yoder, & Baggett, 1994). Furthermore, the local Extension unit leadership has been the link between county Extension personnel and county and state administration (Radhakrishna et al., 1994). Thus, leadership has proven to be an essential dimension of exemplary local Extension units.

**Facilities and infrastructure.** An important aspect of efficiency within an organization is the role of facilities and infrastructure (Thompson and Strickland, 2003). Facilities and infrastructure impact (a) faculty and staff (Bitner, 1992; Roelofsen, 2002), (b) learning (Castaldi, 1994; Dejong, 1997), and (c) the community (Tranter, 2005). Roelofsen's (2002) research on the productivity of people and their office environment provided insight into strategic choices regarding the work environment. In a 1992 article, Bitner established that the same office environment that influences consumers also impacts employee satisfaction. Employee satisfaction drives employee performance and reduces turnover (Reichheld, 2000). Tranter (2005) suggested that public facilities should be used by self-organized groups in addition to their primary function. Public use of facilities adds value and importance to the ongoing development of place and community identity.

**Well-trained educators.** Extension educators are the basic resource for a successful Extension system (Chizari, Karbasioun, & Lindner, 1998). The local county Extension agent (a) represents the state land-grant institution in the county by delivering non-formal education that provides solutions to local concerns; (b) acts as the liaison between local and state government; (c) facilitates the organization of local citizens to determine and deliver non-formal education; (d) develops collaborations and partnerships with other organizations; (e) provides a public facility where local citizens can call, write, or visit for information; (f) keeps informed regarding social and economic changes in the county; (g) remains up to date on subject matter expertise; (h) provides non-formal education through group presentations, one-on-one consultations, and mass media; (i) facilitates the communication between local needs and research; and (j) provides assessment of educational programs and communication of the same to local citizens (Seever, et al., 2007). Scheer, Ferrari, Earnest, and Conners (2006) described a set of competencies for an exemplary Extension educator. These competencies included foundation and history of Extension, technology, communications, program development, applied research, diversity and pluralism, marketing and public relations, theories of human development and adult education, risk management, community development processes, and diffusion.

**Well-developed Extension programs.** Taylor-Powell, Douglass, and Stanek (1995) conducted a qualitative study utilizing three focus groups of stakeholders to gain their perceptions of quality Extension programs. Their study found that high quality Extension programs: (a) are led by a good staff; (b) are proportionate to number of residents; (c) serve a broad-based clientele; (d) provide unbiased and up-to-date information; (e) are responsive to local needs and emergencies; (f) are focused with well-defined areas of responsibility; (g) are supported by a long-term plan, which provides the basis for program prioritizing, direction, and continuity; (h) utilize resources efficiently; and (i) do not duplicate other programs.

Osborne (1991) conducted a descriptive-correlational study of the Ohio Cooperative Extension Service and found similar results. This study included a survey of county Extension personnel and county advisory board members. Results concluded that high quality Extension programs: (a) are based on needs that reflect current and future trends; (b) are planned in conjunction with district specialists; (c) are technically accurate, current, and research based; (d) are developed from a broad base of community networks and linkages; (e) utilize multiple delivery methods; (f) are innovative and/or involve risks; (g) are cost effective; (h) reach diverse

clientele; (i) target multiple audiences; and (j) have strong support from community leaders and decision makers.

In a 1991 research study conducted by the Maryland Cooperative Extension Service, high quality Extension programs were based upon research, relevant to clientele, constructed using a quality process, and found to provide utility (Smith, 1991). Boone (1985) created a model for Extension programs. In this model (a) programs in adult education are the local Extension office's strategy for responding to the needs of the target audience; (b) programs are the roadmap to behavioral changes by clientele; (c) programs provide the local Extension unit with a rationale for the allocation, deployment, and use of its resources; (d) programs provide direction for decisions on strategies for coping with the educational needs of learners; (e) programs provide local Extension units with an excellent public relations tool; (f) the design of plans of action guide the systematic development of change strategies identified in the program; (g) programs and plans of action have the resources needed to market them to the targeted audience; and (h) programs and plans of action provide a foundation for identifying, recruiting, and developing resource persons to assist with the implementation of the program. Each assumption of Boone's model provides insight into the essential elements of well-developed education programs.

**Organizational accountability.** Organizational accountability has become a cornerstone of local Extension units. Organizations act in accordance with the shared values of the people and stakeholders that comprise them (Stevenson, 1990). Peters and Pierre (2003) described organizational accountability as the timely and consequential pursuit of the organization's mission and goals. Organizational accountability includes the need to quantify and measure earned rewards and establish the method of assessing and recognizing performance.

### Purpose & Objectives

The purpose of the study was to seek consensus on the fundamental dimensions and essential elements of an exemplary local Extension unit. The following objectives framed the study:

1. Identify and establish consensus on the fundamental dimensions of an exemplary local Extension unit, as perceived by U.S. state Extension directors, Florida county Extension directors, and Florida county administrators.
2. Identify and establish consensus on the essential elements of an exemplary local Extension unit as perceived by state Extension directors, county Extension directors, and county administrators.
3. Compare and contrast the perceptions of the fundamental dimensions and essential elements of an exemplary local Extension office, as reported by state Extension directors, county Extension directors, and county administrators.

### Methods and Procedures

The Delphi technique has been designed as a group communication process for achieving convergence of opinion on a specific issue. Fischer (1978) stated "Delphi is a method of gathering and refining the opinions of experts in order to obtain consensus about some aspect of the present or the future" (p. 64). The Delphi process traditionally begins with an open-ended questionnaire that serves to solicit specific information from the Delphi subjects (Custer, Scarcella, & Stewart, 1999). For this research, a modified Delphi technique was used in order to improve the initial round response rate, provide a solid grounding in previously developed work, and reduce the likelihood of participant attrition (Custer et al., 1999; Dalkey & Helmer, 1963; Kerlinger, 1973). The modified technique employed a system in which panel members received a preliminary list of fundamental elements and essential elements in their initial questionnaire.

### **Delphi Panel Selection**

The selection of the Delphi panel is considered the most important step in the entire process because selection directly relates to the quality of the results generated (Jacobs, 1996; Judd, 1972; Taylor & Judd, 1989). To gain the most insight into county office operations, the target population of the Delphi panel of experts for this study included members that represent the administration and operation of the local Extension unit. The target populations included all state Extension directors in the U.S., county government administrators in Florida, and county Extension directors in Florida. State Extension directors in the U.S. were selected because of their understanding of the relationship between the federal partner of the Cooperative Extension Service and the land-grant university. County government administrators were selected because of their understanding of the local partner and the land-grant university. County Extension directors in Florida were selected because of their responsibility to implement state and local Extension initiatives. A list of all 184 state Extension directors, 67 Florida county administrators, and 67 Florida county Extension directors was compiled, making this a census study.

### **Instrumentation**

Typically, Round One of a Delphi study begins with opened-ended questions that are analyzed and categorized into statements. To improve the overall response rate, eight content experts, including current and former Extension personnel with the administrative responsibility for operations of the local Extension unit, prepared an initial list of the fundamental dimensions and essential elements. These initial statements were based upon a thorough review of the literature. The instrument for Round One of the Delphi method included six fundamental dimensions and 70 essential elements that the content experts felt characterized local Extension units. Cronbach's alpha was calculated to determine the internal consistency of the instrument. The reliability coefficients for the essential elements of each fundamental dimension ranged from .82 to .93.

Questions related to the fundamental dimensions were coded -1 (Disagree) and 1 (Agree). Questions related to the essential elements were coded from -2 (Strongly Disagree) to 2 (Strongly Agree). Consistent with Linstone and Turoff (2002), Delphi participants were selected because of their expertise and opinions. Therefore, no neutral position was provided. Instructions were provided which indicated to experts that a response to each question was not required. Experts were asked to agree or disagree with each of the statements on the instrument. Space was provided for panel members to add comments and additional characteristics of exemplary local Extension units. The respondents submitted their responses via a web-based questionnaire.

### **Consensus**

Although the Delphi method is a respected technique for seeking consensus, no commonly accepted definition of consensus in a Delphi study has existed (Fink, Kosekoff, Chassin, & Brook, 1984). However, Williams and Webb (1994) stressed the importance of defining consensus criteria prior to data collection. Thus, in this study, consensus was reached when each item received a mean score of  $\geq .01$  for a fundamental dimension and a mean score of  $\geq .50$  for an essential element. The researchers considered the views for each item to be stable when the mean difference between the first and second Delphi rounds did not exceed plus or minus .25 (Scheibe, Skutsch & Schofer, 1975). This study included all members of the three populations, and as such, consensus, or lack of, is represented in these populations. Statistical procedures were used to measure differences by demographic characteristics.

## **Round One**

Delphi participants were sent a pre-notice prior to the start of the first round. In Round One, Delphi participants were asked to indicate their level of agreement with each of the six fundamental dimensions and 70 essential elements of high quality local Extension units. One week after the initial survey was distributed, a generic reminder request was sent via electronic mail to those who had not yet completed Round One. After week two, a personalized electronic mail was sent to the remaining participants who had yet to complete Round One. Given the positive response rate to the Delphi instrument by the participants, no additional follow-up was determined to be necessary. Using guidelines established by Linstone and Turoff (2002), the results from Round One were summarized and returned to the participants. These results included the mean score for each fundamental dimension and essential element. Eleven new essential elements were identified by the Delphi participants during Round One, and all were included in Round Two.

## **Round Two**

In Round Two, Delphi participants were given an opportunity to confirm or modify their responses from Round One and rate their level of agreement with the new items identified in Round One. An explanation was given that although consensus was desirable, participants should not feel compelled to align their rating with the group's rating. Similar to Round One, a reminder was sent one week after the Round Two instrument was distributed. After two weeks, a personalized electronic message was sent to the remaining participants who had yet to complete Round Two. The overall response rate for Round One was 71%, which included 42 responses from the 50 state Extension directors (84%), 31 responses from the 67 county government administrators in Florida (46%), and 58 responses from the 67 county Extension directors in Florida (86%). All who completed Round One also completed Round Two.

## **Findings**

**Objective 1. Establish consensus for the fundamental dimensions of an exemplary local Extension unit as perceived by U.S. state Extension directors, Florida county Extension directors, and Florida county administrators.** Consensus was established for six fundamental dimensions of an exemplary local Extension unit. These findings showed that according to state Extension directors, county Extension directors, and county government administrators, exemplary local Extension units have adequate facilities and infrastructure, well-trained educators, well-developed Extension programs, financial capacity, county office leadership, and organizational accountability (Table 1).



Table 1

*Fundamental Dimensions of an Exemplary Local Extension Unit.*

Fundamental Dimension	Mean <sup>a</sup>			
	State Extension Director	County Manager	County Extension Director	Round 2
Adequate facilities and infrastructure	0.88	0.90	1.00	0.92
Well-trained educators	1.00	1.00	1.00	1.00
Well-developed educational programs	1.00	1.00	1.00	1.00
Organizational accountability	1.00	1.00	1.00	1.00
Effective county office leadership	0.91	0.90	1.00	0.94
Adequate and consistent financial resources	1.00	1.00	1.00	1.00

<sup>a</sup>Disagree = -1.00 to 0.00, Agree = 0.01 to 1.00

**Objective 2. Establish consensus for the essential elements of an exemplary local Extension unit as perceived by state Extension directors, county Extension directors, and county administrators.** The Delphi panel initially considered 70 statements related to the essential elements of an exemplary local Extension unit, as identified by the eight-member content panel and review of the literature. Eleven additional essential elements were listed by the Delphi participants in Round One, all of which were added to Round Two for consideration. From the 81 essential elements considered by the Delphi panel, 77 achieved consensus.

Within the fundamental dimension “facilities and infrastructure”, nine essential elements achieved consensus. The views of the three groups did not exceed plus or minus .25 and were, therefore, judged to be very stable across the two rounds. The percentage of respondents that disagreed with an essential element ranged from 1.6% to 12.5%. Four of the essential elements were strongly agreed upon by the expert panel. It was concluded that Extension units must (1) provide offices and facilities that are accessible to members of the community; (2) enhance educational needs of learners; (3) enhance customer satisfaction; and (4) create a comfortable, efficient work environment (Table 2).

Table 2

*Mean Score of Essential Elements of Exemplary Local Extension Unit Related to Facilities and Infrastructure by Delphi Panel Type*

Essential Element	Mean <sup>a</sup>			
	State Extension Director	County County Manager	County Extension Director	Round 2
Provide accessibility to members of the community <sup>b</sup>	1.67	1.61	1.70	1.66
Enhance the educational needs of learners	1.71	1.58	1.64	1.61
Enhance customer satisfaction	1.67	1.46	1.55	1.57
Create a comfortable, efficient work environment	1.66	1.46	1.46	1.52
Enhance employee satisfaction	1.61	1.29	1.43	1.45
Provide a model for technological advancement <sup>b</sup>	1.15	0.82	1.02	1.02
Provide a model for environmental sensitivity <sup>b</sup>	0.85	0.89	0.98	0.92
Provide opportunities for other organizations to utilize local Extension unit	0.92	0.93	0.89	0.91
Provide a model for energy efficiency <sup>b</sup>	0.69	0.79	0.95	0.83

<sup>a</sup>Strongly Disagree = -2.00 to -1.50, Disagree = -1.49 to 0.49, Agree = 0.50 to 1.49, Strongly Agree = 1.50 to 2.00

<sup>b</sup>Write-in question

Within the fundamental dimension “well-trained educators,” 14 essential elements achieved consensus. The views of the three groups did not exceed plus or minus .25 and were, therefore, judged to be very stable across the two rounds. The percentage of respondents that disagreed with an essential element ranged from 1.0% to 4.7%. The expert panel “strongly agreed” on ten of the essential elements and “agreed” on four more (Table 3).

Table 3

*Mean Score of Essential Elements Related to Extension Educators by Delphi Panel*

Essential Element	Mean <sup>a</sup>			Round 2
	State Extension Director	County Manager	County Extension Director	
Understand subject area research in their field of expertise	1.75	1.77	1.79	1.77
Understand and utilize appropriate communication techniques	1.73	1.55	1.79	1.71
Welcome diversity	1.75	1.47	1.67	1.65
Understand and utilize program planning, implementation, and evaluation techniques	1.75	1.45	1.68	1.65
Engage volunteers in Extension programs when necessary <sup>b</sup>	1.70	1.52	1.68	1.65
Are flexible <sup>b</sup>	1.63	1.77	1.57	1.64
Focus on customer service <sup>b</sup>	1.62	1.58	1.69	1.64
Understand and utilize technology	1.60	1.32	1.46	1.61
Understand the foundation and history of the Extension mission	1.63	1.48	1.60	1.58
Skilled in time management <sup>b</sup>	1.53	1.55	1.48	1.51
Utilize risk management techniques and	1.54	1.33	1.53	1.48
Understand community development theory and methods	1.68	1.40	1.33	1.47
Apply non-formal education and theory and methods	1.45	1.10	1.47	1.68
Understand leadership theory and methods	1.43	1.42	1.30	1.37

<sup>a</sup>Strongly Disagree = -2.00 to -1.50, Disagree = -1.49 to 0.49, Agree = 0.50 to 1.49, Strongly Agree = 1.50 to 2.00

<sup>b</sup>Write-in question

Within “well-developed education programs,” 17 essential elements achieved consensus. The views of the three groups did not exceed plus or minus .25 and were, therefore, judged to be very stable across the two rounds. The percentage of respondents that disagreed with an essential element ranged from 0.8% to 11.8%. Of those elements that achieved consensus, the expert panel “strongly agreed” on three essential elements and “agreed” on fourteen more (Table 4).

Table 4

*Mean Score of Essential Elements Related to Well-Developed Extension Programs by Delphi Panel*

Essential Element	Mean <sup>a</sup>			Round 2
	State Extension Director	County Manager	County Extension Director	
Add value to the community <sup>b</sup>	1.80	1.77	1.70	1.75
Ensure education programs are supported with research-based information	1.78	1.50	1.81	1.72
Ensure educational programs utilize measurable objectives	1.65	1.37	1.50	1.52
Encourage collaborations with external stakeholders	1.55	1.35	1.51	1.48
Clearly identify required resources to accomplish the goals and objectives of the program	1.65	1.42	1.38	1.47
Clearly state intended, measurable program outcomes	1.68	1.16	1.46	1.46
Identify specific target audiences with education programs	1.50	1.32	1.42	1.42
Are consistent with state priorities	1.60	1.33	1.28	1.39
Define skills, knowledge, and expectations for each program	1.33	1.39	1.37	1.39
Are consistent with county priorities	1.30	1.42	1.39	1.37
Identify the educational content to be provided by educational programs	1.55	1.23	1.29	1.35
Utilize peer review prior to program implementation	1.50	1.30	1.12	1.28
Ensure educational programs meet underserved audiences <sup>b</sup>	1.53	1.16	1.16	1.28
Specify how educational programs will be delivered to clientele	1.38	1.10	1.28	1.27
Utilize a systematic program planning model	1.56	0.97	1.13	1.23
Utilize a public relations/marketing plan	1.38	0.81	1.21	1.16
Ensure program advisory committees represent all stakeholder interests	1.10	1.00	1.16	1.10

<sup>a</sup>Strongly Disagree = -2.00 to -1.50, Disagree = -1.49 to 0.49, Agree = 0.50 to 1.49, Strongly Agree = 1.50 to 2.00

<sup>b</sup>Write-in question

Within “organizational accountability,” 9 essential elements achieved consensus. The views of the three groups did not exceed plus or minus .25 and were, therefore, judged to be very stable across the two rounds. The percentage of respondents that disagreed with an essential element ranged from 0.8% to 6.9%. Of those that achieved consensus, Delphi panel identified one element that was “strongly agreed” upon, and eight that were “agreed” upon (Table 5).

Table 5

*Mean Score of Essential Elements Related to Organizational Accountability by Delphi Panel*

Essential Element	Mean <sup>a</sup>			
	State Extension Director	County Manager	County Extension Director	Round 2
Focus on social, environmental, or economic impact to the county	1.61	1.26	1.56	1.50
Measure client perceptions of educational delivery	1.43	1.42	1.56	1.48
Measure behavior changes of program participants <sup>b</sup>	1.65	1.37	1.50	1.41
Measure knowledge gain of program participants	1.48	1.16	1.47	1.40
Measure client perceptions of educational content relevance	1.45	1.23	1.37	1.36
Measure skills developed by clientele	1.54	1.13	1.39	1.37
Define how each Extension program adds value to the local Extension unit	1.35	1.40	1.33	1.35
Identify clientele that used the program	1.28	1.19	1.28	1.26
Focus on social, environmental, or economic impact to the state	1.38	0.87	1.24	1.19

<sup>a</sup>Strongly Disagree = -2.00 to -1.50, Disagree = -1.49 to 0.49, Agree = 0.50 to 1.49, Strongly Agree = 1.50 to 2.00

<sup>b</sup>Write-in question

Within “county office leadership,” 23 essential elements achieved consensus. The views of the three groups did not exceed plus or minus .25 and were, therefore, judged to be very stable across the two rounds. The percentage of respondents that disagreed with an essential element ranged from 0.8% to 10.9%. Of those that achieved consensus, the panel identified 12 elements that were “strongly agreed” upon, and 11 that were “agreed” upon (Table 6).

Table 6

*Mean Score of Essential Elements Related to County Office Leadership by Delphi Panel*

Essential Element	Mean <sup>a</sup>			
	State Ext. Director	County Manager	County Ext. Director	Round 2
Remove organizational barriers	1.55	1.72	1.79	1.73
Empower people to make a difference	1.66	1.50	1.70	1.64
Reinforce success	1.61	1.59	1.67	1.63
Have integrity that others will follow	1.66	1.48	1.68	1.63
Lead with purpose, meaning, and values	1.61	1.55	1.56	1.57
Articulate local Extension unit mission and goals with faculty and staff	1.63	1.45	1.58	1.56
Are dedicated to personal growth and development	1.58	1.45	1.60	1.56
Are committed to their principles	1.58	1.48	1.55	1.54
Establish and articulate local Extension unit objectives with faculty and staff	1.63	1.38	1.52	1.52
Maintain a comprehensive public relations strategy to create local Extension unit visibility	1.47	1.50	1.56	1.52
Desire to serve others through their leadership	1.51	1.48	1.51	1.50
Ensure local Extension unit mission and goals are consistent with county government and state Extension priorities	1.53	1.62	1.42	1.50
Efficiently and effectively correct poor performance	1.63	1.45	1.36	1.46
Build enduring relationships with others	1.50	1.31	1.51	1.46
Fairly measure performance	1.58	1.38	1.35	1.43
Utilize natural abilities, but recognize their shortcomings and work to overcome them	1.37	1.32	1.44	1.39
Develop standards and benchmarks	1.61	1.34	1.26	1.39
Establish an organizational structure that communicates relationships between faculty, staff and Extension programs	1.39	1.24	1.37	1.35
Compare measured performance against established standards and benchmarks	1.55	1.38	1.16	1.33
Utilize an advisory committee to develop mission and goals of the Extension unit	1.55	1.10	1.16	1.27
Develop work groups to facilitate effective Extension programs	1.26	1.17	1.14	1.19
Are guided by their heart and mind	1.16	1.04	1.12	1.11
Define how each Extension program creates a competitive advantage	1.19	0.82	0.96	1.00

aStrongly Disagree = -2.00 to -1.50, Disagree = -1.49 to 0.49, Agree = 0.50 to 1.49, Strongly Agree = 1.50 to 2.00

bWrite-in question

Within “financial capacity”, five essential elements achieved consensus. The views of the three groups did not exceed plus or minus .25 and were, therefore, judged to be very stable across the two rounds. The percentage of respondents that disagreed with an essential element ranged from 1.6% to 12.5%. Of those that achieved consensus, one was “strongly agreed” upon, and four were “agreed upon” by the expert panel (Table 7).

Table 7

*Mean Score of Essential Elements Related to Financial Capacity by Delphi Panel*

Essential Element	Mean <sup>a</sup>			
	State Extension Director	County Manager	County Extension Director	Round 2
Leverage resources with partnering organizations	1.73	1.52	1.40	1.53
Establish sustainable, discretionary financial resources to support county programs	1.45	1.23	1.28	1.32
Maintain a balance between existing traditional sources of funding and new, alternative resources	1.43	1.26	1.23	1.30
Define faculty, staff, and financial resource requirements for each Extension program	1.35	1.39	1.19	1.29
Allocate funds based upon county priorities	1.18	1.26	1.35	1.27

<sup>a</sup>Strongly Disagree = -2.00 to -1.50, Disagree = -1.49 to 0.49, Agree = 0.50 to 1.49, Strongly Agree = 1.50 to 2.00

**Objective 3. Compare and contrast the perceptions of the fundamental dimensions and essential elements of an exemplary local Extension office as reported by state Extension directors, county administrators, and county Extension directors.** The final objective of this study was to compare and contrast the perceptions of the fundamental dimensions and essential elements of an exemplary local Extension unit by the respondent type and demographic. Respondents were either state Extension directors (n = 40), county administrators (n = 31) or county Extension directors (n = 57). Results showed that the ratings for each group were essentially the same in their perceptions of each of the fundamental dimensions and essential elements of an exemplary local Extension unit. Correlation analysis showed that none of the demographic characteristics of the experts were related to their perceptions of the fundamental dimensions and essential elements of an exemplary local Extension unit.

### Conclusions, Discussion, and Implications

Extension has thrived because of the distinctive relationship and synergy between its administrative partners (Buford, Bedeian, & Lindner, 1995). State Extension directors, county Extension educators, and managers in county government who oversee Extension strongly agree on the fundamental dimensions and essential elements that constitute exemplary Local Extension units. Strong participation at all levels of this partnership added to the credibility of the study. Participation included more than 80% of the current state Extension directors in the U.S., 46% of the county administrators in Florida, and 86% of county Extension directors in Florida. From a

national perspective, this study lays the groundwork for defining the characteristics of exemplary local Extension units.

In this study, respondents identified six fundamental dimensions of exemplary local Extension units. These included (a) adequate facilities and infrastructure, (b) well-trained educators, (c) well-developed educational programs, (d) effective organizational accountability systems, (e) effective county office leadership, and (f) adequate and consistent financial resources. These results were consistent with the theoretical framework developed by Cummings and Worley (2009). That is, within the strategic and institutional context of the research base of the land-grant university, systems and structures must be present to determine the problems of ordinary people, bring these problems to the attention of researchers, and deliver non-formal education to help solve these problems (McDowell, 2001). The results also provided further clarity through the identification of 77 essential elements within the six fundamental dimensions.

Twenty-three essential elements related to leadership of an exemplary local Extension unit were identified. More than half (52%) of these elements were strongly agreed upon by these experts. Results were consistent with Radhakrishna et al. (1994), who suggested that local Extension unit leadership has been the link between county Extension personnel and county and state administration.

Similar to Chizari et al. (1998), this study highlighted the significance of well-trained educators. Specifically, well-trained educators should possess the qualities described by Scheer et al. (2006), including competencies related to their subject matter expertise, technology, communications, diversity and pluralism, program development, applied research, diversity and pluralism, marketing and public relations, theories of human development and adult education, risk management, community development process and diffusion.

Boone (1985) suggested that successful solutions to community needs are the result of well-developed educational programs. The administrative experts of this study agreed with Boone. Additionally, they gave their strongest support for well-developed educational programs that add value to the community and those that are supported by the research base of the university.

Consensus on the essential elements related to organizational accountability focused strongly on the need for impacts to be local ( $m = 1.50$ ) and least with state impacts ( $m = 1.19$ ). Perhaps this consensus lends credence to the research of Stevenson (1990), who suggested that organizations act in accordance with the shared values of the people and stakeholders, and support for Peters and Pierre (2003), who provided that accountability is the timely and consequential pursuit of the organization's mission and goals.

The expert panel strongly supported only one of the essential elements related to adequate funding and financial capacity – the need for local Extension units to leverage resources with other organizations ( $m = 1.53$ ). Crosby and Hamernik (2002) reported similar findings. The panel of experts established consensus for facilities and infrastructure that are accessible ( $m = 1.67$ ), enhance the educational needs of learners ( $m = 1.61$ ), enhance customer satisfaction ( $m = 1.61$ ), and provide an efficient work environment ( $m = 1.52$ ). This was consistent with Bitner (1992), who established that office environments influence consumer and employee satisfaction. Finally, this study concluded that the views about the fundamental dimensions of local Extension units by state Extension directors, county Extension directors, and managers in county government do not vary based upon their standard demographic characteristics.

This study illustrates that exemplary local Extension units involve an array of administrators, educators, processes, and operations. Units will run more efficiently with cohesive force of an enlightened network of administrators. The challenge then becomes getting all parties to further their initiatives towards these elements. The common ground established in this study has provided an initial motivation to further develop exemplary local Extension units.

This study provides insight into the complexity and breadth of the fundamental dimensions and essential elements of exemplary local Extension units as well as the subsequent



challenges of cultivating the presence of the identified characteristics. Administrators can use the findings to develop policies and procedures that promote exemplary local Extension units. Procedures could include reviewing existing funding and hiring practices. County Extension directors can use this study to identify the extent to which these fundamental dimensions and essential elements are present in the local Extension unit. County Extension educators can also use this study to assess their role in an exemplary local Extension unit. Assessment could include reviewing and applying the subject matter research associated with their Extension programs and utilizing appropriate delivery and communication techniques. Further, extension educators should work collaboratively with state faculty to plan, implement, and evaluate customer-focused educational programs. State specialists can use this study to examine their role in local Extension unit success. They should conduct research and collaborate with other experts within Extension and the university to develop the best practices in each subject area. In-service training using multiple delivery methods to convey the best practices for a subject area should be provided. Evaluation and assessment of impacts of Extension programs should be a collaborative effort between Extension educators and key stakeholders.

Given the substantial number of fundamental dimensions and essential elements of exemplary local Extension units, a well-developed strategy will be required for implementation. This study identifies areas where agreement is strong, and perhaps provides a starting point for implementation. These attributes could be used to develop policies and procedures for staff recruitment, selection, and training at both the local and state level. Further, results of this study could be used as part of the county Extension unit review process. Priorities for each of the fundamental dimensions could be established for areas needing improvement. Advisory members and key stakeholders could be empowered to assist in communicating characteristics of exemplary local Extension units with other constituencies.

### **Recommendations**

Based upon the findings, the following recommendations were made:

1. Administrators and educators should have an open discussion of the fundamental dimensions and essential elements that characterize exemplary local Extension units and clarify gaps that may exist in their state.
2. State and county Extension educators and administrators should use the fundamental dimensions and essential elements for conducting honest appraisals of current local Extension units and developing long-term improvement plans in the context of statewide advancement.
3. The fundamental dimensions and essential elements should be developed into a format that allows consistent and easy analysis of local Extension units as a precursor to the development of comprehensive improvement plans.
4. The fundamental dimensions and essential elements should be routinely included in Extension educator and administrator preparation and professional development programs.
5. The fundamental dimensions and essential elements should be used to support funding requests aimed at establishing and/or advancing local Extension units.
6. The fundamental dimensions and essential elements should be an integral part of all county Extension program reviews.

Experts of this study provided consensus on what constitutes an exemplary local Extension unit. Further research will be necessary to address the criteria needed to measure each of the essential elements of an exemplary local Extension unit. Standards will need to be developed and instruments created to measure high quality local Extension units and support where needed. Program administrators should become closely attuned to the criteria discussed. Incorporating the findings of this study in strategic planning will secure the program's relevance

in society and enable long-term eminence. By unlocking the keys to establishing successful units, the Cooperative Extension Service will be able to navigate any pressures or challenges it faces in the future.

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