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An evaluation of the LSU Agricultural Center's Agriculture Leadership Development Program, 1988-2004

Michele Abington-Cooper
Louisiana State University and Agricultural and Mechanical College, mcooper@agcenter.lsu.edu

AN EVALUATION OF THE LSU AGRICULTURAL CENTER'S AGRICULTURAL
LEADERSHIP DEVELOPMENT PROGRAM, 1988-2004

A Dissertation

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Michele Abington-Cooper
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I'm sorry for all the times I called you in tears after statistics class. I will be walking across that stage for you much more than for me. I'm sorry I was not the first Abington to receive a doctorate, but at least I'll be the oldest!

To my daddy who won't be in the audience to see me receive my PhD, but will always be in my heart. I miss you every day, but am comforted by the fact that you always let me know how proud you were of me, so, somehow, I know you will know that "Mon Shell" did not quit this time either.

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To Robert for leaving his "comfort zone" so many times to show his concern and support.

To my brother, Mike, and niece, Liz, for the phone calls and encouragement and assurance that I COULD DO THIS!

To my family and friends who wished me well and are as relieved as I am that this goal has been accomplished

To all current and future graduates of the LSU AgCenter's Agriculture Leadership Development Program. The final test of whether this program is truly successful, is if you fulfill its goal of using your leadership skills for the betterment of Louisiana agriculture and communities.

To my first grandson, Jared Samuel Cooper. You have brought such joy to your families and to everyone you meet. May it always be so. Welcome to the family, sweetheart. I can't wait to spoil you rotten!

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ABSTRACT

The purpose of this study was to determine if participants in the LSU AgCenter's Agricultural Leadership Development Program have increased their leadership skills and become more involved in agricultural and community issues. The target population for this study was the 252 graduates of Classes I - VIII of the LSU Ag Leadership Program.

This was a descriptive study using quantitative data. The questionnaire was developed from a review of the literature and instruments from related research. It was validated by a panel of experts from the LSU School of Human Resource Education and Workforce Development and the LSU AgCenter. The field test was conducted with graduates from the Arkansas Rural Leadership Development Program, Texas Agriculture Leadership Development Program, and members of the 2004-2006 Ag Leadership class.

The study investigated research questions relating to the personal and demographic characteristics of the participants; their satisfaction with the program; whether it met their needs; their perceptions of the program's impact on their understanding of issues facing agriculture and Louisiana; becoming involved in agriculture and non-agriculture issues; relationships with others; self-concept; and development of leadership competencies. Participants were also asked to list key leadership positions they have held since participating in the program and give suggestions for topics to be added to the curriculum.

Conclusions drawn were limited to respondents to the written questionnaire. Respondents strongly agreed they were satisfied with the Ag Leadership program. It met their needs, helped them improve their self-concept, and positively impacted their relationships with others. The Ag Leadership program also had a positive impact on the development of respondents' leadership competencies.

The Ag Leadership program had a positive impact on respondents' ability to understand systems and forces affecting agriculture in the United States and issues facing Louisiana. It had a positive impact on respondents' influence on and involvement in agriculture and non-agriculture issues.

Respondents' suggestions of topics to be added to the program were in the areas of leadership development; the business of farming; production agriculture; environmental, political, and public policy issues; marketing and trade; agriculture and public opinion; family; community; and seminars.

CHAPTER 1: RATIONALE

The Importance of Agriculture to Louisiana

Agriculture is extremely important to the economic and social fabric of Louisiana. According to the LSU AgCenter's Summary of Agriculture and Natural Resources, in 2003, the farmers, foresters, fishermen and ranchers of Louisiana produced almost $4.4 billion in agricultural commodities. Processing added another $4.5 billion to the value of those products for a total contribution of nearly $9 billion to the economy of the state. These amounts do not include authorized government payments (LSU AgCenter, 2004).

Although agriculture is business—big business—it is much more than that for the generations of families who have devoted their lives to the land and Louisiana's agrarian tradition. The production of food and fiber is a way of life for those who work in it day—in and day—out. Agriculture also creates and maintains work for people in industries throughout the economy in production, storage, transportation, processing, and marketing of agriculture products. Agriculture often depends, not only on the knowledge and skills of the farmer, but also on unpredictable, uncontrollable forces such as the weather, market stability, pests, environmental activists and regulations, global competition, consumer demands, governmental policies and regulations, and the stability of the countries to which products are sold.

Agriculture in Louisiana, as it is in many states, is one of the basic industries that supports all other activities and pursuits of mankind. Unfortunately, not everyone recognizes the importance of this industry that provides such abundance for all. There is a critical need for agricultural leaders, not only to help educate the general public about the importance of agriculture, but also, to guide the industry through the 21st century.

The Louisiana State University Agricultural Center

In 1862 the United States Congress passed two acts which dramatically changed the future of agriculture. The Morrill Act created the Land Grant University System in which Louisiana State University plays a part, and the Organic Act created the United States Department of Agriculture (Seevers, Graham, Gamon, & Conklin 1997,). The Hatch Act, passed in 1887, establishing the agricultural experiment stations as part of the land-grant university system (Seevers et al.) and the Smith-Lever Act of 1914, creating the cooperative extension service (Seevers et al.) completed a trio which has made United States agriculture and farmers the most successful in the world.

The LSU Board of Supervisors recommended in 1971 that its agricultural activities have a separate identity from any of the existing campuses. To accomplish this goal, they established the Center for Agricultural Sciences and Rural Development in 1972. The name was changed in 1982 to the Louisiana State University Agricultural Center, which is now commonly known as the LSU AgCenter (LSU AgCenter, 2005).

The Louisiana Board of Regents' Master Plan for Higher Education calls for the LSU Agricultural Center to play an integral role in supporting agricultural industries, sustaining rural areas, and encouraging efficient use of resources through research and educational programs conducted by its experiment station and extension service (LSU AgCenter, 2005).

The mission of the LSU Agricultural Center is:

> To enhance the quality of life for people through research and educational programs that develop the best use of natural resources, conserve and protect the environment, enhance development of existing and new agricultural and related enterprises, develop human and community resources, and fulfill the acts of authorization and mandates of state and federal legislative bodies (LSU AgCenter, 2005, p. 1).

The goals of the LSU Agricultural Center are:

* To strengthen the productivity and profitability of Louisiana farms;
* To facilitate the wise use of natural resources and protection of the environment;
* To develop new agricultural crops and value-added products;
* To build leaders and good citizens through 4-H youth development;
* To strengthen families and communities; and
* To implement nutrition, diet, food safety, and health programs for better living (LSU AgCenter, 2005, p. 2).

One of the ways the LSU Agricultural Center has chosen to achieve its goals related to agriculture, 4-H, families, and communities is through programs to develop the leadership skills of the clientele affected by these programs. Masters Programs such as Master Gardner, Master Farmer, Master Horseman, and Master Cattlemen have reached the agriculture community. The Family and Consumer Science Program teaches leadership to its volunteers through the Family Community Leadership Program. Community and rural leaders are reached in many states through leadership programs. In Louisiana, this program is known as Community Leadership and Economic Development (CLED). Teen and adult volunteers in the 4-H program are also taught leadership development skills.

LSU Agricultural Center's Agriculture Leadership Development Program

History and Description

The LSU AgCenter's Agricultural Leadership Development Program (Ag Leadership Program) began in 1988 through the LSU Agricultural Center and the Louisiana Cooperative Extension Service. The Ag Leadership Program was developed to address four major issues facing agriculture on the national and international scene:

* the aging farmer (average age 52),

* the decline of the farm population (1.9% of the total U.S. population),

* the growing urban majority's isolation from farm problems, and

* the shift to a global economy.

These changes called for new emphasis on leadership which would help address the following problems: first, the need to develop informed and articulate agricultural leaders capable of pressing agriculture's claim to both public and legislative bodies; secondly, agriculture's increasing involvement and dependence on a global economy makes it necessary for agricultural leaders to become familiar with international trade; and third, the fact that Louisiana's agricultural diversity tends to create islands of self-interest concerned with particular commodities. It is vitally important that close ties be developed among the different segments of agriculture within the state so that agriculture speaks with one voice (Bignac & Falgout, 1995).

The Agriculture Leadership Development Program is designed for the men and women who will provide leadership for Louisiana's food, fiber, fisheries, and agriculture-related industries. According to the LSU AgCenter Agricultural Leadership Development Program web-site (2001), the program was established with the following three guidelines:

* Develop leaders who understand and prepare for global influences and opportunities.
* Develop leadership skills and awareness in participants so they become confident, effective communicators.
* Develop participant understanding and involvement in the social, economic, and political systems in which people strive to improve their enterprises and communities.

Based on these guidelines, the following performance objectives were developed for the participants:

* To enhance their understanding of agriculture and the food system and their interrelationship on local, state, regional, and international levels;
* To broaden their perspectives on major issues facing urban and rural Louisiana and the economy;
* To increase and broaden their understanding of U.S. economic, environmental, political, and social systems;
* To improve their leadership and communication skills;
* To develop opportunities for networking;
* To foster consensus-building and teamwork approaches to problem-solving; and
* To increase their ability, desire, and commitment to involve themselves in seeking solutions to today's problems and anticipating tomorrow's needs

Curriculum

The Ag Leadership Program seeks to address these problems and meet its goals through 10 seminars over a two-year period. Seven three-day seminars are held on the LSU campus. Three are travel seminars held in Washington, D.C., Chicago, and a foreign country. The Washington, D.C., trip is designed to study agriculture policy. Visits include the United States Department of Agriculture (U.S.D.A.), the National Farm Bureau Federation, non governmental organizations involved in agriculture issues, and the Senators and Congressmen who represent Louisiana. The Chicago seminar is conducted at the Chicago Board of Trade and is designed to study trade policy, agricultural markets, and futures markets. Classes VII-IX the Monsanto headquarters in St. Louis, Missouri en route to Chicago. The international trip allows the class to study international trade, farming operations, and culture. Classes I-III (1988-1994) traveled to Europe, Classes VI and V (1996-1998) went to Southeast Asia, and classes VI –VIII (2000-2004) traveled to South America.

Seminars are the central focus of the Ag Leadership Program. They have addressed agricultural issues relating to emerging technology and its impact on U.S. agriculture, the relationship between population trends and production and consumption, agriculture in the U.S. and throughout the world, farm policy, state public policy issues relating to agriculture, foreign policy, immigration, and the global economy and markets. Leadership competencies such as leadership development; communication, public speaking, team-building skills, negotiation, and conflict resolution skills; and interpersonal relationships are an integral part of the seminars. Issues specific to Louisiana such as natural resources, the environment, education, crime, family, and welfare reform are also addressed. Other issues covered in the seminars are state, national, and global perspectives of government and political issues; parliamentary procedure; business dress; and etiquette for business and social occasions.

The Ag Leadership Program provides outstanding instructors for the seminars. Some are provided by the LSU AgCenter's Research and Extension Specialists. Others presenters are recognized leaders in business, academe, and government. Policy makers and graduates of the Ag Leadership Program are frequently asked to visit the class and address the group.

Seminars conducted on campus include a variety of teaching methods including classroom lectures, field trips, and interactive learning. Each participant is asked to preside during at least one seminar session. This involves preparing the introduction for and introducing the speakers, leading discussions, and at times, conducting the reaction evaluation.

The first night of each three-day campus seminar is reserved for a social dinner meal among participants, instructors, and AgCenter personnel and administrators. This meal allows for informal interaction time. Traditionally, these meals are planned and prepared by a group (commodity or geographic area) of class members.

Organization

Although the Ag Leadership Program began as a program conducted by the Louisiana Cooperative Extension Service, it became a function of the LSU AgCenter in 1998. Dr. Mike Futrell presently serves as director of the program. Since its inception under the direction of Dr. Robert Soileau, the program has also been led by Dr. Jim Fowler and Dr. Ken Roberts. At times there have been assistant directors who assisted with coordinating the program. The program has an administrative assistant who makes physical arrangements for the seminars and coordinates travel for the instructors and the class when they attend out-of-state seminars. Salaries for the Director and Administrative Assistant are paid by the LSU AgCenter and are not part of the Ag Leadership budget.

A twelve-member board of directors serves as an oversight committee for the Ag Leadership Program. They oversee funding, the budget, programming and curriculum, and program results. They advise the Chancellor of the LSU AgCenter as well as the Director of the program. This group meets once or twice a year. A Curriculum Committee helps develop seminars for each two-year class and secure the best possible speakers. This committee meets as needed.

Participant Selection

The men and women who participate in the Ag Leadership Program are selected from throughout each region of the state by a nomination process. Each applicant and spouse fills out detailed applications. The classes are limited to 32-34 participants. Candidates provide information about themselves, their families, their agricultural connections, organization affiliations, and business experience. At least two letters of recommendation are required, and spouses are asked to send a letter of support. Candidates are not expected to meet specific academic requirements. The program has had participants with education levels ranging from high school graduates to Ph.D.s. A selection committee chosen from the LSU AgCenter, the Louisiana Farm Bureau, and other commodity groups and sponsors reviews applications and conducts interviews. Emphasis is placed on the applicant's background, a balance of interests, willingness and ability to commit the required time to the program, and potential for future contributions to agriculture and society as a whole. All participants must attend all seminars.

Funding

The Ag Leadership Development Program is privately funded, though each participant is asked to pay a $1,000 tuition fee and pay their own travel expenses to and from any seminars held within the state. A Robert R. Soileau scholarship is available to pay tuition for an applicant

whose financial resources show need. Two of the program's largest contributors are the Louisiana Farm Bureau Federation and the American Sugarcane League. Other commodity groups also contribute. A private endowment in the name of LSU AgCenter Chancellor Emeritus H. Rouse Caffey, under whose leadership the program was developed, has also been established to fund the program. Interest from this endowment helps support the program. In addition, the Chalkley family has established an endowed chair for the program, currently held by the Chancellor of the LSU AgCenter, Dr. William B. Richardson.

Statement of the Problem

The substantial time and financial commitment of the LSU AgCenter, sponsors, and participants make it important that the Agricultural Leadership Development Program be of the highest quality and make the expected impact, not only upon the graduates, but also on communities and Louisiana Agriculture. To date, except for a "Participant's Evaluation Form," completed at the end of each on-campus seminar, no formal evaluation of the program has been conducted. The program is now 16 years old and Class IX began in January 2004. There is a need for the LSU AgCenter, the Program Director, the Board of Directors, and sponsors to evaluate whether the program is meeting its objectives.

Purpose and Research Questions

The purpose of this study was to determine if participants in the LSU Ag Center's Agricultural Leadership Development Program have increased their leadership skills and become more involved in agricultural and community issues. The research questions for this study were as follows:

      1. What are the personal and demographic characteristics of the graduates of the Ag Leadership Program, namely, gender, ethnicity, marital status, current age, occupation, and educational level?

2. What occupations were participants engaged in when they began the Ag Leadership Program?

3. What occupations are participants of the Ag Leadership Program engaged in now?

4. To what extent do graduates of the Ag Leadership Program perceive the program has impacted their understanding of the systems and forces affecting agriculture in the U.S?

5. Do the graduates of the Ag Leadership Program perceive they are using their knowledge and skills by becoming actively involved in agriculture issues?

6. To what extent do graduates of the Ag Leadership Program perceive the program has impacted their understanding of selected issues facing Louisiana communities?

7. To what extent do graduates of the Ag Leadership program perceive the program has had a positive impact on their self-concept?

8. To what extent do graduates of the Ag Leadership program perceive the program has had a positive impact on their development of selected leadership competencies?

9. To what extent are graduates of the Ag Leadership Program more likely to take action on influencing agricultural issues?

10. To what extent are graduates of the Ag Leadership Program more likely to take action on influencing non-agricultural public policy issues?

11. To what extent do graduates of the Ag Leadership Program perceive they are using their knowledge and skills by becoming actively involved in non-agricultural public policy issues?

12. To what extent do graduates the Ag Leadership Program perceive the program has had an impact on the quality of their relationships with business associates, family, friends, and their peers?

13. To what extent are graduates of the Ag leadership Program satisfied with selected aspects of the program?

14. To what extent do graduates of the Ag Leadership Program perceive the curriculum met their needs?

15. What topics do graduates of the Ag Leadership Program perceive should be included in the curriculum?

16. What key leadership positions in agriculture have participants in the Ag Leadership Program held since completing the program?

17. What key leadership positions not related to agriculture have participants held since participating in the Ag Leadership Program?

18. What public elected offices have participant's run for and been elected to since participation in the Ag Leadership Program?

19. To what extent are participants in the Ag Leadership Program involved with the alumni association Ag Leaders of Louisiana (ALL)?

20. How important do participants in the Ag Leadership Program perceive the program is to the future of agriculture in Louisiana?

CHAPTER 2: REVIEW OF THE LITERATURE

Leadership: A Definition

Leadership is as difficult to define as it is to understand. Although Bass (1990, p.11), notes the word "leader" was used in the English language as early as the year 1300, the word "leadership" did not appear in the English language until the first half of the nineteenth century in writings about the political influence and control of British Parliament. And the word did not appear in most of the other modern languages until recent times. There are still languages, Ukrainian for instance, which have no word for leadership.

In his book Leaders: The Strategies for Taking Charge, Warren Bennis (1985) acknowledges there are over 350 definitions of leadership which have evolved from decades of analysis. Bennis believes that, because leadership is an art, its full meaning is hard to grasp. To him, however, leadership is a matter of doing the right things, rather than just doing things right. He believes leadership is using the power of both the right and left brain—intuition and logic, and like beauty, leadership may be difficult to describe, but you know it when you see it (1989).

Bass states that "…there are as many different definitions of leadership as there are persons who have attempted to define the concept" (1990, p.11). He refers to Pfeffer, in his article, The Ambiguity of Leadership, published in the Academy of Management Review in 1977, who notes that many of these definitions are ambiguous. Furthermore, according to Bavelas and Hollander & Julian (as cited in Bass, 1990, p.11), the distinction between leadership and other social-influence processes is often blurred. Bass adds that the many dimensions into which leadership has been cast and their overlapping meanings have added to the confusion. Bass also sites Spitzberg from his 1986 unpublished manuscript, Questioning Leadership, that "…the meaning of leadership may depend on the kind of institution in which it is found" (p. 11).

Bass cites, however, that there is sufficient similarity among the definitions to permit a rough

scheme of classification. In his estimation,

> leadership has been conceived as the focus of group processes, as a matter of personality, as a matter of inducing compliance, as the exercise of influence, as particular behaviors, as a form of persuasion, as a power relation, as an instrument to achieve goals, as an effect of interaction, as a differential role, as initiation of structure, and as many combinations of these definitions (Bass, 1990, p. 11).

> In The Handbook of Leadership, leadership is defined as "…an interaction between two

or more members of a group that often involves a structuring or restructuring of the situation and

the perceptions and expectations of the members" (Bass, 1990, p.19). Bass believes leaders are

considered agents of change, whose actions affect other people more than other people's actions

affect them (1990, p.20).

> Many believe leadership is influenced by whatever might be happening in society at the

time. Some studies, early on, tried to define certain personality traits that would distinguish a

leader from a non-leader (Howell, 1979). Others later examined certain situations as variables

related to leadership (Stogdill, 1948 as cited in Howell) which is where the situational leadership

paradigm began. This idea is also supported by Bass who believes we cannot understand

leadership wholly in a vacuum. Some of the variance in leadership is due to the person/leader,

some due to the situation, and some due to the assertiveness and initiative of the person/leader in

a situation. He believes that there are times when the situation may be the primary determinant

and others when the personal traits of the person are more important (1981).

describes leadership as having more to do with vision, intuition, and taking risks in our jobs than

managing. According to Bellman,

> Leadership is based on a belief in yourself, in the people you work with, in your profession, the future, and the ability to achieve something more. It reaches beyond what you know into what you believe. It is beyond reason and experience. Leading can build

on a rational base of good planning, organizing, and controlling, but these are managerial aids in the exercise of leadership rather than its essence (Bellmen, 1992, p.17).

Wren, in The Leader's Companion (1995, pp. 41-42), cites the following definitions of

leadership:

* The creative and directive force of morale (Munson, 1921).
* The process by which an agent induces a subordinate to behave in a desired manner (Bennis, 1959).
* The presence of a particular influence relationship between two or more persons (Hollander & Jullian, 1969).
* Directing and coordinating the work of group members (Fiedler, 1967).
* An interpersonal relation in which others comply because they want to, not because they have to (Merton, 1969).
* Transforming followers, creating visions of the goals that may be attained, and articulating for the followers the ways to attain those goals (Bass, 1985; Tichy & Devanna, 1986).
* The process of influencing an organized group toward accomplishing its goals (Roach & Behling,1984).
* Actions that focus resources to create desirable opportunities (Campbell, 1991) (pp. 41-42).

For the purposes of this study, this researcher has chosen the definition given by Raoch &

Behling, "The process of influencing an organized group toward accomplishing its goals" (1984,

as cited in Wren, 1995). This definition implies that leadership is shared among all members of a

group which includes followers as well, a concept with which this researcher concurs.

America was founded on the concept that a nation should have a government of, by, and

for the people. A democracy depends not on just a select few who are designated "leaders," but

on its entire citizenry, to make it work. The same can be said of organizations, programs, and

communities. Rural communities are facing complex challenges. There is a critical need for men

and women who can serve as a visible resource in helping communities face social,

environmental, and economic change.

Leadership and Personality

According to Fiedler & Garcia (1987), leaders need to be viewed as competent if the group is to be effective. According to their research, there is a positive correlation between the intelligence of the leader and the intelligence of the other members of a group. When intelligence was measured on standardized tests, there was a correlation of .28, which although positive, was neither high nor significant. The research of Taylor (1962) shows that people who have thought that a leader should be vastly superior to their group have been disappointed with the actuality. Those leaders frequently get ahead of their followers which can lead to misunderstandings and frustration for both the leader and the followers. When Taylor compared leaders and followers with psychological tests, the leaders were found to be consistently more self-sufficient, dominant, adjusted, and self- assured. They showed a willingness to decide upon courses of action, lead the way to action, and live with the consequences.

The personal magnetism often associated with leaders is frequently called charisma. This charisma may take many different forms. Charisma, according to Weber, is a certain quality of an individual which separates him from ordinary men. The charismatic leader demonstrates the importance of the leader-member relationship. In fact, Weber suggested that the magnetism of the charismatic leader makes others follow blindly, even at times, to their own destruction (as cited is Stogdill, 1974).

In his Handbook of Leadership, Bass cites 52 studies of the factors attributed to leadership. These studies showed that the most frequently occurring factors were descriptive of various skills of the leader. They included social and interpersonal skills, technical skills, administrative skills, intellectual skills, leadership effectiveness and achievement, social nearness, friendliness, supportive of the group task, and task motivation and application. Bass

suggests that these factors indicate leaders differ from each other in the effective use they make of interpersonal, administrative, technical, and intellectual skills. While some leaders might be described as more task-motivated, others were more motivated to maintaining personal relationships (1990).

The second most frequent set of factors listed in the study concerned how leaders relate to their groups. These behaviors included maintaining the cohesiveness of the group, coordination, task motivation, task performance, and high quality output. This strong concern for the group's performance, according to the study, was softened by the use of informal controls and "nurturant" behavior. Leaders were effective through maintaining a cohesive work group, maintaining coordination and teamwork, maintaining standards of performance, maintaining group freedom, and nurturant behavior (Bass, 1990, p. 85).

Factors concerned strictly with the personal characteristics of leaders were next in frequency. Leaders were described in terms of how emotionally well balanced they were; their willingness to assume responsibility; whether their conduct was ethical; their ability to communicate, readily; and whether they were dominant, energetic, experienced, courageous, and mature (Bass, 1990).

Bass considers the order of the frequency of these factors to be significant. He states:

> …it would appear that successful leadership involves certain skills and to be of value to their group or organization. These skills allow leaders to maintain satisfactory levels of group cohesiveness, drive, and productivity. Leaders are further assisted in the execution capabilities—interpersonal, technical, administrative, and intellectual—which enable leaders to be of value to their group or organization. These skills allow leaders to maintain satisfactory levels of group cohesiveness, drive, and productivity. Leaders are further assisted in the execution of these functions if they possess a high degree of motivation to complete tasks, personal integrity, communicative ability, and the like. In sum, the factorial studies seem to provide a well-balanced picture of the skills, functions, and personal characteristics of leaders in a wide variety of situations (1990, p. 86).

Transactional vs. Transformational Leadership

It has been said that there can be no leader if there are no followers. It can also be said that, unless a leader can effect change in his followers, he has not led them. Change is defined by Webster's New Encyclopedia of Dictionaries as, "to alter or make different" (p. 66). Transaction is defined as, "to carry through; to negotiate" (Webster, 1993, p.394). By contrast, the word transform is defined as, "to change form, nature, character, or disposition of" (Webster, 1993, p. 395). With these definitions in mind, a leader must "change" the nature, character, or disposition of his followers to be a true leader.

James MacGregor Burns first introduced a comprehensive theory to explain the differences between transactional and transformational leadership in his seminal work, Leadership, in 1978. His distinction was between political leaders. According to Burns, transactional leaders approach followers with an eye to exchanging one thing for another: jobs for votes, or subsides for campaign contributions. Such transactions comprise the bulk of the relationships among leaders and followers, especially in groups, legislatures, and parties (Burns, 1978, p.3).

Burns noted that, while the transformational leader also recognizes the need for a political follower, he or she seeks to go further in satisfying the follower's needs, in terms of Maslow's (1954) need hierarchy. The transformational leader seeks to engage the full person or follower, resulting in mutual stimulation and elevation that "…converts followers into leaders and may convert leaders into moral agents…" (Burns,1978, p.3). DuBrin (1995) contended that, although transformational leaders may have charismatic attributes, charisma is not a necessary element for transformation. Transformational leaders manage by inspiration while transactional leaders use contingent rewards and administrative actions to reinforce positive and reform negative

behaviors (Bass, 1985; 1990). Burns defined transformational leadership as "…a process in which leaders and followers raise one another to higher levels of morality and motivation" (1978, p.3). He maintains that a chief element of transformation centers on the ability of the leader to grow the needs of the follower, making the leadership more accountable to the follower, the source of leadership. At the core of transformational leadership is the concept of transformation, or change. Burns attributes certain characteristics to transformational leadership. According to Burns, transformational leadership is:

* collective rather than focused on the leader personally.
* dissensual and promotes change as a rule rather than simple status quo inaction. Change emerges from conflict, consensus, and consistency from dissensus.
* causative rather than reactive or inactive. The central component, the creation of change, emerges from transformation of values and morality rather than the reinforcement of the norm of transaction.
* morally purposeful. The ability to raise followers to a higher moral plane serves to motivate and renew rather than reinforce transactional solutions.
* elevating. Transformation means followers' needs must be taken to levels beyond; there must be challenge and growth (Burns, 1978, p.20).

Although Burns (1978) believed that transformational and transactional leadership belonged at opposite ends of a continuum, Bass (1985) disagreed. He claimed that the two were more similar than Burns had suggested. Bass reasoned that transactional leadership can, in fact, have positive effects. Although transactional leadership is immature, unrefined, and mediocre, Bass suggests it is still a foundation from which to build. Transformational leadership often grows from the basis of transactional leadership and that, according to Bass makes transactional leadership useful. Bass (1985, 1990) acknowledges that transaction alone cannot account for the benefits associated with the charismatic, inspirational, individually considerate, innovative, enterprising, and intellectually stimulating leadership of the transformational leader. He believes transactional leaders are characterized by contingent reward, management by exception in active and passive tenses, and laissez-faire behaviors.

Perhaps a better definition of transformational comes from Tichy and Devanna (1986) who state, "Transformation is about change, innovation, and entrepreneurship…" (p. viii). They assume that transformational leaders begin with a social fabric, disrupt that environment, and then recreate the social fabric to better reflect the overall business climate (Tichy & Devanna, 1986). In the book Leadership in Organizations (1989), Yukl describes transformational leadership as a process of micro-level and macro-level influence. He states that at the macro-level, the transformational leader takes charge of the social systems and reforms the organization by creating an appropriate power situation, while at the micro-level, the leader attends to the personalities in the organization to facilitate change at an interpersonal level (1989).

In the article, The Rethinking of Leadership, Barker suggests transformational leadership is based on interaction and influence, not directive power acts. He believes leadership is a social, not linear, process, ethically constrained, and emerges from crisis. In his opinion, leaders are interested in collective results not maximum benefit for individual gain, collective action for collective relief. According to Barker, leadership must forgo emphasizing productivity and performance to embrace a theory of change centered on human potential, common good, and interaction (Barker, 1994).

Historical Overview of Leadership and Leadership Development Research

The study of leadership is complex, and although many authors have tried to define the term and its components, they are still not sure they have conveyed the full meaning. Stogdill (1974) compiled a Handbook of Leadership which contains the research of 3,000 studies on leadership. This was his effort to promote understanding and application of leadership research. Stogdill's original handbook was expanded and revised by Bass (1981, 1990) to include 7,500

research studies on leadership. According to Bass, the quest to understand leadership dates back to Egyptian hieroglyphics.

The research on leadership is influenced by what is happening in society as a whole. In early leadership studies researchers tried to define a personality trait or group of traits which would distinguish leaders from non-leaders (Howell, 1979). Bass contends that leadership cannot be understood in a vacuum and may vary with the situation. Some leadership may occur because of the personality of the person and some due to the assertiveness and initiative of the person in a particular situation. The situation may be the primary determinant of the leadership at one time and personal traits more important at other times (1981).

Research conducted by Stogdill suggests that, although several research instruments have tried to measure leadership, they have not been reliable for use in the selection of leaders. This research suggests that the traits and abilities required for a leader vary from one situation to another. A person's past success as a leader may be the best predictor of leadership potential. Even then, a leader who has previously been successful may fail when placed in a situation which is incompatible with his personality (1974).

Contemporary Leadership Research

Margaret Wheatley in her book, Leadership and the New Science, states that, "Leadership, an amorphous phenomenon that has intrigued us since people began studying organizations, is being examined now for its relational aspects. More and more studies focus on followership, empowerment, and leader accessibility" (1992, p.12). She goes on to say that "…leadership skills have also taken on a relational slant…" (p. 144) as leaders are being encouraged to include stakeholders in decision-making, thereby evoking followership and empowering others. Wheatley points out that

earlier, when we focused on tasks, and people were the annoying inconvenience, we thought of 'situational' leadership—how the situation could affect our choice of styles. A different understanding of leadership has emerged recently. Leadership is always dependent on the context, but the context is established by the relationship we value. We cannot hope to influence any situation without respect for the complex network of people who contribute to our organizations (1992, p.144-145).

According to Bennis, whether we are looking at organizations, government agencies, institutions, or small enterprises, the key factor needed to enhance human resources is leadership (1885). In 1964, Bennis presented a new concept of man in an address he gave to the American Psychological Association. His description of a new concept of man is based on man's increased knowledge of his own complex and shifting needs rather than an over-simplified idea of man; a new concept of power, which is based on collaboration and reason, rather than coercion and threat; and a new concept of organizational values based on democratic ideals, rather than a depersonalized value system of democracy. According to Bennis, the key word in the organizational structure of the future will be temporary. Rather than be programmed into role expectations, groups will respond to specific problems. In addition, people within an organization will be evaluated flexibly and functionally according to their skill and professional training, rather than according to rank and status (1990).

This vision has not completely evolved as yet, according to Bennis, because bosses still confuse quantity for quality and substitute ambition for imagination. Bennis believes there is a need for organizations and individuals to grow both quantitatively and qualitatively. In order for organizations to accomplish this, they must have leadership, a sense of purpose, and commitment (1990).

In his book, The Leadership Factor, Kotter contends that environmental and organizational changes in our society make the leadership factor more important. The environmental changes identified include internationalization of competition, deregulation,

maturation of markets, and the increasing speed of technological development that has increased competitive intensity in most industries. These changes have increased the need for higher levels of performance in productivity, innovation, and new approaches to marketing and distribution. Occurring simultaneously with these environmental changes are organizational changes in the business scene: growth in firms, product diversification, international expansion, and increased use of sophisticated technologies. These organizational changes have created increasing complexity in most firms and a resulting difficulty of making changes in an efficient and effective way. The resulting environment makes providing effective leadership much more difficult. Kotter predicts that even the best "professional managers" will be ineffective unless they can also lead. In Kotter's opinion, leaders who are effective share a vision of what should be, a strategy for achieving the vision, a cooperative network of resources, and a highly motivated group of key people committed to achieving the vision (1988).

Kotter's study showed that the leader worked hard to attract a large network of people needed to accomplish the agenda and then to elicit cooperation and teamwork from them. He then continued his efforts by working to keep the key people in that network involved and motivated toward working on the evolving agenda. That meant inspiring through his ability to sell, having a high energy level, and having a keen insight into the fundamental needs and values that made all those people behave like they did. The combination of an intelligent agenda for change and an energized network of resources worked (1988).

Bennis (1990) believes that a true leader is not only an innovator, but someone who makes every effort to locate and use other innovators in the organization. These leaders succeed best in a climate where conventional wisdom can be questioned and challenged, risks taken, and

errors embraced. Although innovators are creative, people who think in creative ways, they may be also viewed as troublemakers.

Vince Packard's description of leadership as the art of getting others to do something you are convinced should be done, is cited in Kouzes and Posner (1988). According to this research, most followers want leaders who are honest, competent, forward-looking, inspiring, credible, and have a clear sense of direction. When the leadership of an organization is perceived to be credible and have a strong philosophy, the employees are more likely to be proud to tell others they are a part of the organization, talk up the organization to friends, see their values as similar to those of the organization, and feel a sense of ownership for the organization. When the leadership of an organization is perceived to have low credibility, employees believe that other employees produce only when watched, are motivated primarily by money, say good things about the organization at work, but feel differently in private and would consider looking for another job during tough times.

In a study in which leaders described their personal best, ninety-five percent of the leaders used the words challenging, exciting, rewarding, dedication, intense, commitment, determination, inspiring, uplifting, motivating, unique, important, proud, and empowering. Frustration was expressed by twenty percent of the leaders. Fifteen percent also expressed fear and anxiety, although the vast majority were challenged and energized by the process. This study also revealed that leaders inspire others by their presence and competence, have high expectations of others, and bring out the best in others by their perception of what is possible. A leader, unlike a manager, inspires us to achieve even more than we believed we could by creating a self-fulfilling prophecy. A leader is confident and inspires confidence in others (Kouzes & Posner, 1988).

Leaders use three criteria to recognize performance. First, they make sure that people

know what is expected of them. They then provide feedback on performance. Finally, leaders

reward only those who meet the required standards (Kouzes & Posner, 1988).

According to the research of Kouzes and Posner (2002), leadership is a set of observable

and learnable practices. They identify Five Practices of Exemplary Leadership, five tenets

common to personal-best leadership that also include ten commitments of leadership. These are:

1. Model the Way
   * Find your voice by clarifying your personal value.
   * Set the example by aligning actions with shared values.
2. Inspire a Shared Vision
   * Envision the future by imagining exciting and ennobling possibilities.
   * Enlist others in a common vision by appealing to shared aspirations.
3. Challenge the Process
   * Search for opportunities by seeking innovative ways to change, grow, and improve.
   * Experiment and take risks by constantly generating small wins and learning from mistakes
4. Enable Others to Act
   * Foster collaboration by promoting cooperative goals and building trust.
   * Strengthen others by sharing power and discretion.
5. Encourage the Heart
   * Recognize contributions by showing appreciation for individual excellence.
   * Celebrate the values and victories by creating a spirit of community (p. 22).

If leaders are to effectively model the behavior they expect of others, they must be clear

about their own guiding principles. Titles may be granted, but a leader's behavior wins respect.

Leaders must first find their own voice, and then clearly give voice to their values. According to

Kouzes and Posner, "Modeling the way is essentially about earning the right and respect to lead

through direct individual involvement and action. People follow the person first, and then, the

plan" (Kouzes & Posner, 2002, p.15).

Leaders inspire a shared vision—they have a desire to make something happen, to change

the way things are, to create something no one else has ever created. Kouzes and Posner describe

this as living "their lives backward," because the leader sees pictures in his mind's eye of what the results will look like even before the project is started. If leaders are to enlist people in a vision, they must know their constituents and speak their language. According to Kouzes and Posner, "leadership is dialog, not a monolog. To enlist support, leaders must have intimate knowledge of people's dreams, hopes, aspiration, visions, and values" (Kouzes & Posner, 2002, p.16).

Leaders challenge the process—they venture out into the unknown by searching for opportunities to innovate, grow, and improve. This does not mean the ideas always come from the leader. In fact, the leader's primary contribution is the recognition of good ideas of others, the support of those ideas, and the willingness to challenge the system to get new products, services, and systems adopted. Kouzes and Posner suggest that it may be more accurate to say that leaders are early adopters of innovation. Innovation and change involve experimentation, risk, and failure, but leaders proceed anyway. They may deal with the potential risks by approaching change through incremental steps and small wins in order to build up confidence and strengthen commitment to the long-term future. Leaders also pay attention to the capacity of their constituents to take control of challenging situations and become fully committed to change. Kouzes and Posner consider leaders learners—they learn from their mistakes as well as successes (Kouzes & Posner, 2002, p.17).

Exemplary leaders, according to Kouzes and Posner, enable others to act. They consider leadership a team effort and, when they talk about their leadership experiences, use the word "we." Their sense of teamwork goes beyond a few direct reports or close confidents. Leaders engage all of those who must make a project work and live with the results. Leaders enable others to act by giving power away—not hoarding it. Kouzes and Posner consider a leader's

ability to enable others to act as essential to their success. They state that, "When leadership is a relationship founded on trust and confidence, people take risks, make changes, keep organizations and movements alive. Through that relationship, leaders turn their constituents into leaders themselves" (Kouzes & Posner, 2002, pp.18-19).

The practice of "Encouraging the Heart," according to Kouzes and Posner, is that part of the leader's job dealing with showing appreciation for people's contributions and creating a culture of celebration. This encouragement is serious business, not a pretentious ceremony designed to create a phony sense of camaraderie. Leaders know that "celebrations and rituals, when done with authenticity and from the heart, build a strong sense of collective identity and community spirit that can carry a group through extraordinarily tough times" (Kouzes & Posner, 2002, pp.19-20).

Through their research, Kouzes and Posner have come to believe leadership is a relationship between those who aspire to lead and those who choose to follow. According to Kouzes and Posner, "Success in leadership, success in business, and success in life has been, is now, and will continue to be a function of how well people work and play together" (Kouzes & Posner, 2002, pp.20-21).

In the article, Leadership-Seeing, Describing, and Pursuing What's Possible, Thornton (2005) states that, "Historians spend their lives dissecting the past; leaders focus their energies on the future" (¶ 1). According to Thornton, leaders see, describe, and pursue new possibilities with great vigor and are confident there is always something higher to achieve (¶1). He introduces the concept of the possibilities triangle: seeing what's possible, describing what's possible, and pursuing what's possible. Leaders "see what's possible" because they focus on current reality. They probe, observe, and evaluate what people say and how they think and

behave in order to find out what is being accomplished and what's not getting done. Thornton

cites Jim Collins, author of the book, Good to Great: Why Some Companies Make the

Leap…and Others Don't, who says that great leaders have the discipline to confront the most

brutal facts about the current situation. Leaders cut through the hype to uncover the truth (as

cited in Thornton, 2005). Leaders discover "what's possible" by having a fundamental belief in

people and their capacity to create new ideas, experiment, learn, adapt, grow, work as a unified

team, and create a better future. He gives six suggestions for those who want to discover what's

possible:

* Study the Best—There are always lessons to be learned by studying the attitudes and
  actions of the best performers in any area of expertise.
* Change Your Mission—Restate your purpose or mission to incorporate a wider range
  of possibilities.
* Be Curious—Ask questions, especially "why" and "what if."
* Start With a Clean Sheet of Paper—If you were starting out today, what would you
  do differently?
* Travel—Experience a different culture to gather new perspectives.
* Leave Your Comfort Zone—Growth only occurs when you leave your comfort zone
  (Thornton, 2005, ¶ 6).

Leaders are able to "describe what's possible" in a clear, concise, and compelling

manner. They paint a picture of a better future in a way others can visualize it, feel it, and

connect with it. Leaders "pursue what's possible" through execution—taking action. They "walk

the talk" and help people change by giving them support while encouraging them to leave their

comfort zones. This support may be in the form of psychological support—affirming their talents

and previous successes; training support—providing the necessary education and training to help

people use and apply their skills; cheerleading support—recognizing and rewarding efforts and

accomplishments, or feedback support—reinforcing desired behavior or defining when new

behavior is needed through feedback (Thornton, 2005, ¶. 8).

One of the maladies of leadership, according to Gardner (1984), is failure of confidence. Because too many leaders lack confidence, they add new twists to the art of "how to reach a decision without really deciding." When questions arise, they are decided by taking public opinion polls, devising statistical systems, cost accounting systems, and information processing systems in the hope that the course of action will be revealed. These systems destroy confidence by destroying the effectiveness of those who have a natural gift to lead. Kotter (1988) says that effective leadership in complex business settings cannot be totally developed outside the business setting in today's intensely competitive, technically changing environment. In his opinion, to be effective, individuals need broad knowledge of the industry (market, competition, products, technologies) and the company (key players and what makes them tick, the culture, the history, and the systems). Also necessary is a set of relationships in the firm and industry, an excellent reputation, and track record. Abilities and skills should include a keen mind and strong interpersonal skills. Personal values should be broadly based in all peoples and groups. A high energy level and strong drive to lead are important. According to Kotter's research, most firms today are reacting to short term economic change and parochial politics which undermines adequate leadership development of emerging leaders. He believes more leadership is needed at more levels of business and across managerial lines.

Vision is another trait necessary for today's leader. Taylor (1989) believes that what distinguishes leaders from others is that they can "see" a future for the organization. Because this vision is often not clearly understood by others and may not be logical to them, the leader must make their vision understood if they are to be successful.

Leadership Development Programs

There continues to be debate as to whether leaders are born or made. Kouzes and Posner (2002) hold that the belief that leadership cannot be learned is a more powerful deterrent to leadership development than is the leadership process itself. The tasks that leaders perform can be described and measured. In addition, the capacity to perform those tasks can be found in abundance throughout our society.

Research shows the skills of leadership can be learned (Adair, 1984). Adair identified several leadership skills and developed instructional and practice skills to help learners develop them. His theory is that one must understand the principles of leadership and then practice them in order to acquire the skills. Adair's identified skills include: thinking and problem solving skills; written, interpersonal, listening and speaking communication skills; and chairing effective meetings (1984).

Taylor (1962) feels leaders can be developed but not trained. Training can provide leaders with the opportunities to develop new vistas, awaken new curiosities, motivate new effort, stimulate new searches, and arouse desire for new learning, but Taylor does not believe training can redirect a man's basic likes and dislikes. He also does not believe that people who have been in a primarily technical job for 20 years can be made people centered by a simple change of job responsibility. According to Taylor, a person tends to continue to be what he/she has been. Although training can develop aptitudes, drives, and personality characteristics, it cannot create them. Taylor (1962) feels that coaching people who demonstrate leadership qualities will help them reach their leadership potential. In his opinion, a leader need not possess the personal magnetism people often associate with leaders in order to be successful.

Leadership Development Programs within the Cooperative Extension System

The Cooperative Extension Service has a long history of commitment to leadership development education. A study conducted on extension leadership development in 1990 reported that staff spent about seven hours a week, 15 percent of their work time, developing leadership shills in its clientele. Traditionally, these leadership development programs have been found primarily within the 4-H Club and Family and Consumer Science program areas of extension. This study also found, however, that extension staff tended to teach skills associated with stable social order and similarity in social values, working within groups, and knowing how to do things right. In other words, the expected outcomes are transactional leadership. According to this study, extension taught leadership more as "doing than understanding" and gave "less emphasis to dealing with change, diversity and conflict, transformational or visionary leadership, and to those situations involving knowledge, perception, and attitude" (Michael, Paxton & Howell, 1990, p.8).

In an effort to better understand the range of skills taught or the amount of effort directed toward teaching leadership skills, Extension Service, USDA, commissioned the National Impact Study of Leadership Development in Extension (NISLDE) to describe and assess Extension's leadership development work. In phase one of this study NISLDE dealt with definitional and measurement issues. They found no explicit leadership development policy statement. Nor was there a clear definition of leadership development that actually communicated what Extension staff taught when conducting leadership development programs (Paxton et al., 1993, p.1).

In order to more clearly define leadership development, NISLDE interviewed staff asking what the word meant to them. Their analysis found 13 broad competencies and four educational methods when discussing leadership development. The 13 leadership competencies were:

solving problems, directing projects or activities, forming and working with groups, planning for group action, managing meetings, communicating effectively, developing proficiency in teaching, mobilizing for group action, understanding and developing oneself, understanding financial matters, understanding leadership, understanding society, and understanding social change.

In phase two of the study in 1986, NISLDE sent a nationwide survey to more than 3,300 Extension faculty and their supervisors to determine the amount of time devoted to leadership development work in 1985. The response rate was 86 percent. The study found that more than 40 percent of Extension faculty members reported trying to develop all 13 competencies in their clientele, while nine percent did not try to develop any of these skills. Three-fifths reported combining teaching leadership skills with teaching non-leadership skills such as nutrition or agronomy. The findings did find that a majority of Extension faculty reported they were involved in leadership development, even if they considered it as part of their work in other areas.

Extension staff reported they spent an average of seven hours per week, or about 15 percent of their time teaching leadership skills. Most of the leadership development work was done by county agents, averaging nine hours per week, as opposed to specialists and district staff who averaged five hours per week.

When analyzing the list of 13 competencies, the study found that Extension staff taught skills associated with a stable social order, working within groups, and knowing how to do things right (transactional leadership) as opposed to doing the right things (transformational leadership).

The researchers found that more emphasis seems to be placed on "doing" than "understanding." Skills associated with behavioral change were taught more often than skills

associated with increasing understanding. Extension staff reported giving less emphasis to skills

dealing with change, diversity, and conflict (Paxton et al., 1993, p. 4).

There are two additional documents that show interest in leadership development efforts

within the Cooperative Extension System. One goal cited in For the Common Good: A Strategic

Plan for Leadership and Volunteer Development (Michael, 1994) is to have community—based,

action—oriented programming. In addition, three themes presented include leader and volunteer

development for the public well-being, community ownership, and civic action. In the document

Framing the Future: Strategic Framework for a System of Partnerships (Extension Committee on

Organization, & Policy and Cooperative State Research, Education, and Extension Service

Strategic Framework Team, 1995), there is a reference to educational processes that build and

foster vital and caring communities and emphasize shared leadership.

According to Lorilee Sandmann, Director of Community Outreach and Lela Vandenberg,

Assistant Professor in the Department of Resource Development at Michigan State University

(1995),

> The philosophy of leadership implicit in leadership development programs of the past is no longer adequate for dealing with the complex problems inherent in communities and organizations today. This implicit philosophy assumes that leadership rests in individuals who must be capable of inspiring and influencing others to solve problems and achieve goals. However, this "heroic" view of leadership is often based on a deficiency view of people. (p.1)

They cite Peter Senge in his book, The Fifth Discipline: The Art and Practice of the

Learning Organization, who says of heroic leadership and the deficiency view of people:

> Especially in the West, leaders are heroes—great men (and occasionally women) who rise to the fore' in times of crises…. At its heart, the traditional view of leadership is based on assumptions of people's powerlessness, their lack of personal vision and inability to master the forces of change, deficits which can be remedied only by a few great leaders (p. 340).

Sandmann and Vandenberg support the new philosophy of leadership, dubbed "post—

heroic" leadership by Huey in his February 21, 1994 Fortune Magazine article, entitled, "The

New Post-Heroic Leadership." Post-Heroic leadership is based on bottom-up transformation

fueled by shared power and community building. Sandemann and Vandenberg quote John

Nirenberg, author of The Living Organization: Transforming Teams into Workplace

Communities in which he states:

> It is not leadership from any one person that is required, it is an aspect of leadership each
> of us summons from within. In this respect, the same qualities we have sought in one
> person can be found distributed among many people who learn, in community, to
> exercise their "leadership" at appropriate moments. This occurs when people are vitally
> concerned about issues or when executing their responsibilities. Leadership thus becomes
> a rather fluid concept focusing on those behaviors which propel the work of the group
> forward (1993, p.198).

According to Sandmann and Vandenberg, there are three common themes among the

changes required by the new leadership philosophy: shared leadership, leadership as relationship,

and leadership in community. Shared leadership, also known as collective or group-centered

leadership, is based on the assumption that "…all of us have leadership qualities that can be

pooled and drawn upon as needed when we are working with others on vital common issues"

(¶ 4). Leadership as relationship "…revolves around the idea of a network of fluid relationships

and is built on the concepts of empowerment, participation, partnership, and service (¶ 5). The

theme, leadership in community, "…envisions community as the conceptual setting in which the

leadership relationship takes place" (¶ 5) (Sandmann & Vandenberg, 1995).

Community Action Leadership Development Framework

Sandmann and Vandenberg report the findings of a task force appointed in 1994 by

Director Gail Imig, Michigan State University Extension and charged with articulating a

conceptual framework to guide existing and future community-based leadership development

efforts. This task force concluded that:

> Leadership development for the 21st century is holistic: it is centered in groups and organizations, rather than individuals, and engages the group in heart, mind, spirit, and energy. The driving forces of this philosophy, then, are community, the heart of a group's leadership; vision, which engages the spirit; learning, which stimulates the mind; and action, which compels energy (¶ 10).

> Sandmann and Vandenberg state that, from this point of view,

> …leadership development shifts from individual-centered to collective centered; from a packaged curriculum to an evolving, customized educational process focused on building relationships; and from discrete leadership development programs to leadership development embedded in concrete issues identified by the participants in the process (1995,¶ 11).

According to Vandenberg and Sandmann, the task force labeled this community-based,

university-sponsored leadership effort CALD (community action leadership development) and

defined it as ". . . the development of energized communities of co-leaders and co-learners

committed to concerted action toward a collective vision" (1995, ¶ 11).

Sandmann & Vandenberg believe this framework can be thought of as "…the intersection

among the related domains of community development, organizational development, and

leadership development" (¶ 13). They define community development as "…the nurturing of a

group's spirit and the growth of its commitment, identity, loyalty, and willingness to engage in

concerted and effective action to achieve group to work for a common goal" (¶ 13);

organizational development as "…the increase of a group's capacity to engage in concerted and

effective action to achieve group goals" (¶ 13); and leadership development as "…the growth of

individuals' capacities to facilitate community development and organizational development"

(¶ 13). According to Sandmann and Vandenberg, from this perspective, community action

leadership development is ". . . leadership development for community organizations" and

"…aims to develop individuals' abilities to build both a group's community spirit and its capacity to engage in effective action" (Sandmann & Vandenberg, 1995, ¶ 13).

The Conceptual Framework for Community Action Leadership Development, according to Sandmann and Vandenberg, is composed of four parts. The first is driven by a holistic philosophy of community, vision, learning, and action and has been described earlier. The second relates these elements to seven action-based values. The third part of the framework examines the roles of designated leaders in promoting community action leadership. The fourth part is the application of methodological principles to these values and processes in terms of both method and content (Sandmann & Vandenberg, 1995).

The seven action-based values that make up the second part of the conceptual framework for community action leadership development are: visioning together, leading together, learning together, building community, developing energy/resources, acting together, and communicating. Designated leaders within this framework are designers, teachers and stewards who follow the following six principles of community action leadership development:

* Facilitation (informal or non-formal teaching) of the development of a cohesive learning group which values diversity and explores conflict constructively.
* Learner Focus: Learning facilitators need to understand the context in which their leadership is situated; the learners' needs, desires, and strengths; and the issues being addressed.
* Leadership Focus: A group-centered approach to leadership development, one centered on organizational development and capacity building.
* Issue/Action Focus: Efforts that aim for long-term impact must incorporate learning centered real issues that groups are facing, learning in action, and on-going reflection or collective self-examination.
* Non-Prescriptive: The content of CALD efforts must be determined with and by participants, not prescribed.
* Process as Content: The process or methodology of CALD, in many ways, becomes the content. The CALD learning group learns facilitation, community building, teamwork, group planning and decision making, organizational development, conflict management, and group reflection (Sandmann & Vandenberg, 1995, ¶13-19).

Although Sandmann and Vandenberg believe Cooperative Extension is "poised to make community action leadership development its hallmark of the 21st century and its unique and timely contribution to the burgeoning field of community leadership development" (¶ 20), they acknowledge that the conceptual framework must first be understood by extension faculty, staff and administrators. This can occur only if the framework is creatively and persistently applied and time, commitment, and resources devoted to assertively and energetically implementing it in professional, program, and organizational development. They believe particular attention must be given to the integration and sustainability of such an approach, including its modeling within internal organizational operations (Sandmann & Vandenberg, 1995).

> According to Sandman & Vandenberg,
>
> Cooperative Extension has the opportunity to take advantage of its position within land grant universities and USDA to usher in a new era in leadership development, one characterized by community, learning, vision, and action. It also has a responsibility— given its history and current work with leadership development, and its mission of extending knowledge to citizens who need it—to embrace, model, and share this 'post-heroic,' people-centered paradigm (Sandmann & Vandenberg, 1995, ¶ 22).

Tuskegee University

In Alabama, counties mainly in the south central section of the state have a higher than average percentage of black population. They also have high unemployment rates, low personal incomes, high poverty rates, low educational attainment levels, low business development, and poor health facilities. According to the Governor's Task Force on Economic Development, these counties pull down the average statistics for the State of Alabama (2001, as cited in Tackie et al., 2004).

In a study dealing with the assessment of mobilization and leadership challenges, Affolter and Findlay (2002, as cited in Tackie et al., 2004) concluded that most rural communities are unable to tackle major socio-economic problems unless they have the leadership skills to do so.

They also emphasized that community leaders or their representatives need to acquire certain

basic skills that help them to convene the community, facilitate meetings, develop strategic

plans, and approach outside institutions to solicit support (Tackie et al., 2004).

Research done by Tackie, Findlay, Baharanyi and Pierce (2004) suggests that community

leaders can be helped to organize and develop their communities. According to The Walk-The-

Talk Company, people must be involved in the decision-making process, strategy setting,

procedure development, and problem solving (2003, as cited in Tackie et al., 2004).

Unfortunately, people are often elected, appointed, or promoted to leadership positions without

any formal leadership training. Moving into leadership positions demands special skills (Tackie

et al., 2004).

The Cooperative Extension and Continuing Education Program at Tuskegee University,

realizing that community leaders need training to become effective in their positions, developed

and implemented a leadership for economic development training program. The leadership

training was designed to:

* encourage rural residents to develop leadership skills as an initial step toward the
  development of their communities,
* demonstrate positive community impact and at the same time extend knowledge to
  other members of the community,
* improve and enhance their personal skills, and
* promote volunteerism (Tackie et al., 2004, p.3).

In the fall of 2001, leadership skills development workshops were held for the Barbour

County Improvement Association (BCIA) members and other individuals in Barbour County, a

rural and predominately black county of Alabama. Barbour County has a significant number of

underserved and hard-to-reach residents. Twelve workshops were held over an eight month

period through May 2002 and used a participatory approach. Instructors came primarily from

Tuskegee University, but also from Auburn University and the Alabama Department of

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Economic and Community Affairs. Workshop topics included leadership styles, leadership and ethics, leadership for organizational effectiveness, building trust and teamwork, strategic planning, grantsmanship, zoning and land use, and developing 501c organizations (Tackie et al., 2004).

In November 2002, 36 participants were interviewed using a questionnaire designed to seek demographic and general information on the effects of the training. Four participants were not interviewed because of scheduling difficulties (Tackie et al., 2004).

Fifty percent (50%) of the participants interviewed were age 54 or younger, and 40 percent were 65 years or older. Forty percent (40%) had high school or technical/vocational education, and 50 percent had a college education. Thirty-six participants were black and four were Native American (Tackie et al., 2004).

When participants were asked reasons for participating in the workshops, 10 percent indicated they were seeking positive change in the community and 70 percent indicated they wanted to learn how to be effective leaders. Sixty percent (60%) of respondents said the workshops were very good or excellent and 80 percent rated the workshops as very good or excellent in meeting their expectations (Tackie et al., 2004).

Participants were also asked if they had used the information received at the workshops. Sixty percent (60%) said they had used the information and 40 percent said they had not used the information. Of those who indicated they had used the information, 50 percent said they now work well with people and are more involved with their organizations, at church and home, and 10 percent said they now write to agencies for information. Participants who said they had not used the information said they were involved in too many other activities, the opportunity had not presented itself, or they had been indisposed or sick. Information on sources of grants and

how to locate them and information on leadership styles were rated as most beneficial to the participants (Tackie et al., 2004).

When asked to name one thing they were doing differently as a result of the workshop, 20 percent of the participants said they were working more with people and 60 percent said they were now communicating better. When workshop attendants were asked to provide suggestions for future workshops, 50 percent said they would like for workshops to continue, 10 percent said they would like more information on business management, and 10 percent said they want more information on public speaking (Tackie et al., 2004).

These researchers did not indicate how the interview questions were developed or tested for validity and reliability. The study seems to be designed more to gather information on participant's reactions rather than his/her behavior change, even though participants were asked to indicate how they had used the information gained.

Georgia Community Leadership Program

The need for leadership in communities, and especially for rural communities in the South, has been well-documented by L. J. Beaulieu and Soileau (1990, as cited by Langone, 1992). At the national level, extension has emphasized the importance of leadership development and extension's role in providing training in this area (Langone, 1992).

Georgia identified the critical need for leadership development through an extension-sponsored, comprehensive local needs assessment in which communities analyzed local resources and developed plans for the future. A key finding of this assessment was the need for a broader, better-trained leadership base. This finding was supported by state leaders Berry (1996) and Niemi (1991) who publicly stated that unified, committed local leadership is crucial to rural development (as cited in Langone, 1992).

A workable definition for discussing community leadership and program development was formulated by the National Extension Task Force on Community Leadership (1986):

> Community leadership is that which involves influence, power, and input into public decision-making over one or more spheres of activity. The spheres of activity may include an organization, an area of interest, an institution, a town, county or a region. Leadership capacity extends beyond the skills necessary to maintain a social service and/or activities organization. The leadership skills include those necessary for public decision-making, policy development, program implementation, and organizational maintenance (as cited in Langone, 1992, ¶ 4).

This definition suggests the need for application of skills through involvement in local decision-making and action toward community goals (Langone, 1992).

In response to this need, the Georgia Cooperative Extension Service initiated its Community Leadership Program (CLP) in 1986. This program was designed to help develop or expand the leadership base in counties and equip local leaders with skills to manage and direct change in their own towns and cities. It is a county-based program, with co-sponsors including county extension, local Chambers of Commerce, boards of commissioners, and other groups interested in community leadership development. The CLP provides both an educational component and a forum for leaders to discuss current issues (Langone, 1992).

The 12-week CLP consists of three units of 30 instructional hours taught by state Extension Specialists in Leadership Development. Sessions include a combination of lectures, audiovisual media, small group and panel discussions, individual and group assignments, special projects, and informational tours. In addition to learning theory, the application of skills through case studies, simulations, and community planning is stressed. During class sessions participants discuss and prioritize their individual and community concerns, so that, by the last class, participants have formulated an action plan, enabling them to put their skills to work (Langone, 1992).

Evaluation of the impact of this program was based on the assumption that the ultimate impact of the Community Leadership Program would be reflected primarily in the ongoing leadership activities of its graduates since the program's inception. Data was obtained from 76 counties that had participated in the CLP between 1986 and 1991. The counties represented each area of the state and varying types of communities. The population of participating counties ranged from 5,700 to 56,000, with 68 percent of the counties below 20,000. A total of 2,648 leaders had participated in the program in those counties (Langone, 1992).

A questionnaire to obtain impact data was developed by the state project coordinator. It was distributed by district agents to participating counties. One questionnaire per county was completed jointly by county directors and CES agents actively involved in the program in 74 of the 76 counties. Questions were developed based on interviews, informal conversations, and participant observation with program planners and participants. There were 23 open- and close-ended questions which asked the county directors and agents for information about activities undertaken by participants after completing the program. Examples would be formation of ad hoc or ongoing committees to address specific local concerns, graduates who have run for elected office, sponsorship of repeat leadership classes, and involvement in special activities and other areas of impact. Responses and comments received from participants were also included (Langone, 1992).

Because many of the questions were open-ended in nature, qualitative analysis methods of inductive analysis and constant comparison were used to categorize and code statements. Totals and percentages were used on questions asking for quantitative reporting, resulting in descriptions of program impact experienced by the agents involved.

Analysis of the responses from agents and those they reported from participants showed the Community Leadership Program had a positive impact on the counties, residents, and the local extension service. Positive impacts were shown in networking, the role of extension, creating a unified spirit, and involvement. While these categories were distinct for purposes of analysis and reporting, the descriptions and quotations show the interrelatedness among categories (Langone, ¶ 14).

Involvement was reported from statements of the participants expressing their increased level and diversity of involvement and specific activities and examples of participation. Each county devised a future action plan during the CLP. Thirty-six (47%) of the county Community Leadership Programs formed ongoing alumni groups for the purpose of addressing issues in the county. Thirty-seven counties (49%) sponsored second leadership classes taught by local resource people for community leaders or targeted audiences. Participants in a number of counties formed task forces or organizations to address specific community concerns, such as drug abuse, illiteracy, land use planning, or water quality. Class members in several counties formed a Chamber of Commerce and programs in two counties resulted in the merger of separate city chambers into one countywide body. In another county, five alumni reactivated the Land Use Planning Commission by negotiating with elected officials who initially opposed such a board (Langone, 1992).

The CLP also motivated participants to become active in local and state affairs. More than 100 program graduates have run for political offices and others have been appointed to local and state task forces and boards. Several counties now require that appointees to local governing boards be graduates of the Community Leadership Program. Participants who were already

active in civic and business leadership roles now say they have greater skill and knowledge of effective leadership (Langone, 1992).

According to Langone, "This finding is significant to communities as they search for solutions and resources to solve the complex problems of the future. In a time of dwindling federal and state resources, Extension can help communities discover and develop local resources" (1992, ¶ 28).

Langone did not indicate how the survey instrument or questionnaire was tested for validity and reliability. The validity and reliability of the instrument could affect the validity of the entire study.

Oregon State University Family Community Leadership Program

Oregon State University Extension sought to address the problem of how polarized beliefs around community issues keep citizens from coming together to find ways to mutually address their community problems through the Family Community Leadership (FCL) Program. The FCL Program is a master volunteer program which recruits, trains, and supports adults in becoming effective community leaders. FCL volunteers are adults who receive an initial 24 hours of community leadership training, participate in ongoing training as members of a team, and practice these new skills through a minimum of 200 volunteer hours of community involvement. Community leadership skills taught in the FCL training program include:

* Group process skills;
* Facilitation and meeting management skills;
* Communication, diversity, and conflict management skills; and
* Teaching and presentation skills (Schauber & Kirk, 2001, ¶ 2)

The FCL Program in extension began in 1982 as a Kellogg Foundation-funded pilot to involve women in local public policy decision making. In Oregon, the FCL Program has evolved from these roots to become a strong local leadership development program, attracting a broad

cross section of community adults to learn about the process of community leadership (Schauber & Kirk, 2001).

The program objectives of the Marion, Polk, and Yamhill Counties FCL Program are:

* To recruit, train, and support a group of twelve new adult volunteers annually.
* To involve the volunteers in a tri-county team whose purposes are:
    a. to provide support and ongoing training for volunteers, and
    b. to respond to requests from the community for leadership training and facilitation (¶ 5)

Two target audiences in the FCL Program are the adult volunteer who is interested in developing leadership and group process skills and community groups who can benefit from the facilitation and training by FCL volunteers. This study focused on the program impacts for the FCL volunteers themselves (Schauber & Kirk, 2001).

Schauber & Kirk (2001) used a post-pre-method of self-report evaluation to document behavior change. The post-pre evaluation is a reliable method used to assess knowledge-based behavior change after an intervention, which in this study, was a combination of training and practice in the community. It is fairly easy to develop, use, and analyze. The post-pre-survey is a retrospective pre-test after an educational intervention as a means of minimizing a response-shift bias. The respondent answers the evaluation questions with the same frame of reference for both the pre- and post- questions (Rockwell & Kohn, 1989, as cited in Schauber & Kirk, 2001). For this study a post-pre-survey questionnaire was designed to address the following questions.

* In regard to the FCL volunteer, how has the program affected the following attributes:
    a. level of community involvement?
    b. facilitation skills and their confidence level in regard to facilitation?
    c. presentation and training skills?
    d. level of knowledge about group process and decision making?
* What do the volunteers do differently as a result of participating in the FCL Program?
* What do the volunteers see as the greatest impact of the FCL Program on them? (p.3)

A separate volunteer database provided information on how long the volunteer respondent had been in the program and how many volunteer hours he/she had reported to the FCL Program. This database was cross-referenced with the survey responses to help analyze the data from the perspective of how active the volunteers were (Schauber & Kirk, 2001).

According to Schauber & Kirk, a sample of convenience was drawn from 64 volunteers who had participated in FCL over the five-year period from 1993 to 1998. Of these, two volunteers had died, and six had moved out of the program with no further contact, leaving 56. The survey questionnaire was mailed with a stamped return envelope to all of these volunteers. A total of 30 questionnaires were returned, for a return rate of 54 percent (2001).

Two-thirds of those who returned the survey were either "very active" (active in the team meetings and involved in more than three FCL community events within the last six months) or "new" (had completed the State Training Institute within the last year) volunteers. A third of the returns were from "inactive" (had not participated in any FCL activities in the past year except for an occasional team meeting) or "slightly active" (participated in no more than two events in the last six months and marginally active on the team) volunteers. Thus, the data from the survey was biased toward more active or new volunteers (Schauber & Kirk, 2001).

Schauber & Kirk (2001) reported that 60 percent (N=18) of the respondents reported an increase in community participation since becoming involved in the FCL Program; 30 percent (N=9) showed the same level of participation before and after FCL; and one showed a decrease in participation. Among all respondents, the number of hours that they were involved in the community increased by an average of 7.2 hours per month, or 64 percent: they averaged 11.2 hours per month of volunteering in the community before joining FCL and 18.4 hours after joining FCL.

In addition to an increase in community participation, volunteers also showed an increase in taking on leadership roles in the community. Two-thirds (N=20) reported that before their FCL training, they spent an average of 6.4 hours per month in a community leadership role and after training their involvement in community leadership roles increased to16.5 hours per month. (Schauber & Kirk, 2001).

When Schauber and Kirk compared the average overall community participation with the average participation in a leadership role, it showed that before the FCL training respondents averaged 57 percent of their time in a leadership role. After FCL training, respondents averaged 90 percent of their community volunteer time in a leadership role (2001).

In response to a self-assessment, all respondents perceived themselves as increasing in facilitation skills and confidence levels after becoming an FCL volunteer. On average, the volunteers moved from a self-rating of "elementary" facilitation skills to a high "intermediate" level of facilitation skills. Overall, new volunteers perceived less change than did the experienced volunteers. In addition, confidence in facilitating a group moved from "elementary" to high "intermediate". Again, the change was greater with the experienced volunteers. Schauber and Kirk felt this might be because the longer one is in the program, the greater the perceived increase in facilitation skills (2001).

When rating their presentation skills, respondents' skills increased from "elementary" to high "intermediate." Again, the greatest perceived change was among the experienced volunteers. When volunteers were asked to rate their training skills before the FCL training, and since, their average rating moved from high "beginner" to "intermediate." Effective meetings and problem-solving skills were listed as the training topics volunteers presented most

frequently. Volunteers rated their knowledge of group process and decision-making techniques

before FCL to be "elementary" and high "intermediate" after (Schauber & Kirk, 2001).

According to Schauber & Kirk, respondents were also asked what they did differently

with groups as a result of their experience with FCL. There were five behavioral changes of the

volunteers that resulted from their experience with FCL:

1. Increased trust in group process through understanding stages of group
   development;
2. Improved listening to hear what people are really saying;
3. More awareness and consideration of the different styles and skill levels of group
   participants (including the ability to vary the process to include all styles);
4. Realization of the importance of and use of the tools and techniques for effective
   meetings so as to involve all participants; and
5. More preparedness for group meetings and events (2001, ¶ 19).

Volunteers were also asked to describe the greatest impact the FCL Program had on their

behavior. These five themes emerged:

1. Learning that everyone has talents to be developed;
2. Accepting people for who they are;
3. Trusting in people's abilities to make great decisions and impact their communities;
4. Confidence in speaking to a group; and
5. Co-facilitating with some great people (Schauber & Kirk, 2001, ¶ 20).

According to Schauber and Kirk, this type of information is critical for Extension leaders

in determining the wise use of resources for the greatest program impact. They recommend

further study is needed on what impact it has on overall community leadership capacity (2001).

The Ohio State University's Project EXCEL

The Ohio State University (OSU) Extension, in conjunction with Project EXCEL

(Excellence in Community Elected and Appointed Leadership), assists Ohio counties in

developing and teaching community leadership programs. However, prior to 1996, the impact of

community leadership programs upon the participants and the communities had not been

appropriately documented. Garee Earnest conducted a study, the purpose of which was to

identify potential impacts of community leadership development programs on program participants' leadership skills (1996).

The descriptive exploratory study was initiated in 1993. It was limited to community leadership programs supported by OSU Extension and Project EXCEL in the planning or teaching of at least 50 percent of their leadership programs during the 1992-93 program year. Seven county programs met the criterion. Participants for this study consisted of a census of 67 program participants, a purposeful sample of 36 program alumni, and a census of the seven program directors (Earnest, 1996).

Earnest used Kouzes and Posner's (1993) Leadership Practices Inventory (LPI) as pre- and post-assessments for program participants. The response rate was 85 percent (57 participants completed the program, five participants did not complete their program and five participants had incomplete data). The seven program directors were evaluated by in-depth face-to-face interviews. Focus group interviews were conducted with six of the 1992-93 Community Leadership Program alumni groups by OSU Extension personnel. The main purpose of the director interviews and focus group interviews was to gather overall impressions about their respective leadership programs. Earnest analyzed the quantitative data from the Leadership Practices Inventory utilizing SPSS for Windows 6.0. Program director and focus group interviews were analyzed using Ethnograph, a qualitative software computer program (1996).

After determining the pre- and post-test mean scores for the Leadership Practices Inventory, t- tests for dependent groups were used to make sure differences were not due to chance. The results showed program participants significantly increased (p<.01) their leadership skills in each area of the Leadership Practices Inventory, challenging the process, inspiring a

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shared vision, enabling others to act, modeling the way, and encouraging the heart (Earnest, 1996).

Qualitative analyses identified general themes of personal and community benefits, benefits attributed to OSU Extension and Project EXCEL, and program improvement suggestions. Program directors benefited through community awareness, understanding and interacting with others, an increased sense of teamwork, development of local leaders, implementation of community projects, the availability of quality instructors for reasonable fees, and increased networking with extension. Program directors suggested local programs could be improved by addressing fewer topics per day, holding class sessions year round, increasing sponsorship by local businesses and agencies, and keeping alumni actively involved with future classes (Earnest, 1996).

Alumni reported receiving the following benefits from attending the program: improved personal communication skills, personal networking within the community, community awareness, increased self-confidence, motivation and risk taking, understanding and interacting with others, a broadened perspective on many issues, improved teamwork, and improved problem solving abilities. They felt that gaining insight as to how government officials and agencies interrelate was an additional benefit. The program improvements suggested were: wanting to spend more time applying leadership skills (experiential learning) than just learning academic theory, needing a class project to practice leadership skills learned, reducing the amount of content and allowing more time for class discussion, improving recruitment efforts for future classes, and increasing community awareness of the leadership program.

According to Earnest, differences in the pre- and post-assessments indicated that the participants improved their leadership skills and practices as a result of participating in the respective community leadership programs. He concluded that participants:

- were more willing to challenge the status quo and take risks;
* broadened and changed their perspective of leadership roles/responsibilities within the community and were encouraging others to accept some leadership responsibility;
* developed a greater appreciation for teamwork and collaboration within their community and improved their problem solving skills; and
* learned to adapt their leadership styles to fit different contexts within the community (1996, ¶ 15).

The face-to-face and focus group interviews gave perceptual insights on how community leadership programs contributed to participants' personal and professional lives and to the community. Alumni were highly complimentary of their respective leadership programs. The most common benefits reported by alumni were:

* increased networking within the community;
* developed a greater understanding and ability to interact with people;
* increased self-confidence and the personal motivation to become actively involved in community affairs; and
* developed an understanding, appreciation, and acceptance of their leadership responsibility as a citizen (Earnest, 1996, ¶ 16).

Earnest recorded several suggestions offered by the program directors and alumni offered to improve the quality of the leadership programs. These suggestions were to:

* include additional topics such as grantsmanship, customer relations, boardsmanship, economic development, reinventing government, and public speaking;
* allow the class participants to develop their program agendas and goals in collaboration with program directors to make the program more learner-centered;
* reduce the amount of content per program day to allow the participants more time for discussion, reflection, and to see the relevance of the concepts being taught;
* develop workshops, seminars, discussion groups, and other means of making leadership development a life long learning process; and
* continue to promote the community leadership program within the community and secure additional funds from corporate and local sponsors. (1996, ¶ 17)

This researcher felt Earnest's study was very comprehensive, using both quantitative and qualitative statistical analyses. The Kouzes' and Posner Leadership Practices Inventory is recognized for its validity and reliability. This was used on a consensus population with a response rate of more than 85 percent. The researcher did not give much information about how the questions for the in-depth face-to-face interviews of the program directors and focus groups for alumni were developed and tested, which could influence the validity of the study.

Expanded Horizons Leadership Development Programs

In 1986, Kimball, Andrews & Quiroz studied five Expanded Horizons Leadership Development Programs in Michigan. After 18 months a follow-up evaluation suggested short-term, intensive leadership development programs are effective in changing behavior. They reported that, in spite of a small sample size, significant results were found. Participants reported they had become more involved in organizations that impact community decisions, increased their public affairs involvements, and rated themselves as more effective leaders after participation in the program (Kimball, 1986).

Agriculture/Rural Leadership Development Programs

In 1965, Michigan State University received a grant from the W. K. Kellogg Foundation to begin the "Kellogg Farmer's Study Program," initiating the forty-year history of agriculture/rural leadership development programs in the United States. Michigan's program was followed by 18 additional projects in 23 states (Foster, 2001). Currently, there are 30 programs in the United States, with three more emerging, and six international programs in Australia, U.K. Scotland, U.K. Nuffield, Canada, Ontario, and New Brunswick (Pope, 2005). Of the original W.K. Kellogg Foundation Programs, only California and Pennsylvania exist today in the same form. Over half of the programs in place at present were initiated without Kellogg support. The

average age of current programs is 15 years and 9 percent of them have operated continuously since their beginning (Foster, 2001).

Almost half (47%) of the agriculture or rural leadership development programs are university-based. Private non-profit groups or foundations conduct 32 percent and the remaining 21 percent are partnerships or collaborations. The total support garnered by 28 reporting U.S. agriculture/rural leadership programs in 2001 is over $111 million. The most typical financial sources are corporate grants (71%) and alumni donations (56%). University grants make up 23 percent of the financial sources followed by state appropriations (30%) and foundation grants (11%). The most typical in-kind sources are university space, equipment, etc. (90%) and faculty time (78%). Participation of partnering groups (37%) and community contributions (29%) are less typical in-kind resources (Foster, 2001).

By 2001 there were more than 7,500 alumni in the United States. The majority of alumni are male (72%) as are the program leaders (64%). Minority participation was estimated as less than five percent. Almost half (48%) of alumni were from production agriculture, with agribusiness making up 19 percent. Government agencies made up 8 percent, people who were rural, but not directly involved in agriculture made up 7 percent and agricultural organizations made up 6 percent. The final 12 percent of alumni came from universities, food–related businesses, etc. (Foster, 2001).

Alumni keep in touch with each other through newsletters, organized alumni associations, annual gatherings, outings and fundraisers, and through, in some cases, an alumni coordinator. Although 75 percent of the programs offer a broad scope of continuing education activities, many alumni feel these activities should have more purpose and definition.

Although the W.K. Kellogg Foundation no longer sponsors state agriculture leadership development programs, it has been offering grants (up to $10,000) to the state program conducting the Annual International Association of Programs for Agricultural Leaders (IAPAL) Meeting (Foster, 2001). Foster shared with the IAPAL Directors the following basic assumptions the W.K. Kellogg Foundation has about leadership in the 21st century:

* Leadership must be vision driven and value-based;
* Leadership must be transforming—focused on new ways of being;
* Leadership will be more about the individual's contribution to collective action;
* Collective leadership can only be expressed through shared vision, values, and purposes and confidence in others as leaders;
* Leadership is relational and contextual;
* Leaders must be more attentive to global implications of local decisions, and vise versa;
* Leaders in the 21st century will not change society as much as be changed by society (2001, p.2).

Conner, Cushmore and Duley, in their evaluation of the California Agricultural Leadership Program, identified the following skills needed for effective leadership:

Cognitive Skills: The ability to:
* Synthesize information from prior analysis;
* See thematic consistency in diverse information;
* Organize and communicate insights;
* Understand the many sides of a controversial issue;
* Learn from experience.

Interpersonal Skills:
* Accurate empathy—the ability to promote feelings of efficacy in another person. There are three aspects of this skill:
    i. A positive regard for others; the belief that people are capable of doing good things with a bit of support and encouragement;
    ii. Giving another person assistance (either solicited or unsolicited) that enables them to be effective;
    iii. The ability to control impulsive feelings of hostility or anger that make another person feel powerless and ineffective;
* The ability to seek and accept information as feedback performance;
* Communication: the ability to understand and communicate directly and often nonverbally through movement, facial expression, person-to-person actions; to listen with sensitivity to the hidden concerns, values and motives of the other; and to be at home in the exchange of feelings, attitudes, desires, and fears;

* Commitment: The ability to become involved: to be able to give and inspire trust and confidence, to care and to take action in accordance with one's values and concerns. Commitment is to people and relationships;

Action: The ability to:
* Take moderate risks;
* Set time-phased realistic goals;
* Learn interpersonal influence networks and use them;
* Identify and use work group coalitions;
* See oneself as making a difference—as a cause rather than as an effect;
* Make decisions in difficult situations; come to conclusions and take action on inadequate, unreliable, and conflicting information. Be able to trust feelings, attitudes, and beliefs as well as facts. Be able to search for the possible course, the viable alternative, the durable though inelegant solution;
* Solve problems by defining them, generating hypotheses, and collecting information from the social environment. The emphasis is on discovering problems and developing problem-solving approaches on the spot;
* Develop information sources from the environment through observations, the questioning of associates and chance acquaintances (Conner et al., 1990, p. 3).

After an extensive review of the literature and his own observations of successful leaders, Mike Beckingham, Executive Director of the Australian Rural Leadership Program, developed a profile of the leaders needed in the 21st century to meet Australia's economic and social needs. In his estimation, Australia will need leaders who are:

* Worldly, with a well developed interest in and knowledge of, community, industry, national, and international affairs. They will travel extensively, read widely, have a broad network of friends and associates, have a strong commitment to continuous learning and personal development, and will be fluent in several languages.
* Visionary with a strong sense of purpose and determination to realize that vision. They will be a strategic thinker and planner. They will be creative.
* Courageous, acting as a person who is prepared to challenge the status quo and who is prepared to take risks, but also disciplined to weigh up those risks before acting and learning from any mistakes.
* Communicators, with ability to share their vision of the future, to enlist others to their mission, to build and lead teams, to listen to others and give feedback and praise, to lobby, negotiate and resolve conflict and at all times to be friendly, tactful and diplomatic.
* Role models for others, having high standards of behavior, ethics and values. They will be reflective, have a thorough understanding of themselves and the influence they have on others, and have a strong commitment to personal development (as cited in Allen, Cairns, & Farley, 1997, pp. 24-25).

Evaluations of Agriculture/Rural Leadership Development Programs

The Kellogg Farmer Study Program has provided funds for many state leadership development programs. Research studies have evaluated some of them as well as programs modeled after the Kellogg Program. In 1969, Lowell Rothert's dissertation was "An Analysis of Changes in Critical Thinking Ability, Open-Mindedness, and Farm Policy Opinions of Participants in the Kellogg Farmer Study Program." Rothert's results show no significant difference in gain from pretest to post test by treatment over control groups on the variables critical thinking ability, open-mindedness, reading comprehension, and the ability to identify realistic farm policy alternatives. Higher levels of education were shown to be associated with greater critical thinking ability and open-mindedness. Greater gains in both critical thinking ability and open-mindedness were seen in program participants who had less education. Neither age nor gender seemed to be a factor in determining the amount of gain made in critical thinking ability. Age did not seem to be a factor in the gain in open-mindedness either.

The W.K. Kellogg Foundation conducted its own evaluation in 2001 by surveying over 7,500 alumni of the programs. This report was delivered at the IAPAL (International Association of Programs for Agriculture Leaders) Annual Meeting in San Luis Abispo, California. Although the Kellogg report did not indicate the number of respondents, they reported the overall impacts of these programs as: identifying and training effective leaders, building a strong leadership network, participation in local and statewide boards and councils, having influence on informing policy, promoting a broader perspective of agriculture and the food system, building a foundation for the future, greater recognition from major commodity groups, and greater civic and community involvement (Foster, 2001).

Almost all (93%) of the alumni respondents found participation in the program "very" beneficial. The most frequently mentioned program benefits were: networking, interaction with

others and building relationships; being exposed to varying perspectives and the big picture; building professional and interpersonal skills; increased self confidence and developing critical thinking and consensus building skills. All respondents felt they gained valuable skills by participating in the program. The most valuable skills listed were: professional (communication, team building, public speaking, etc.), interpersonal (listening and confidence in expressing opinions), and skills related to greater understanding of other's perspectives (looking at all angles, tolerance, consensus-building, etc.) (Foster,2001).

When asked if they had applied any of the skills they had learned to their professional and personal lives since graduating from the program, 98 percent indicated they had. Examples given of using these skills included listening more to constituents and negotiating more effectively, becoming more involved in policy (community zoning plans, EPA proposals), following better practices and management decisions (business expansion, community action), and using networking and positions (running for offices and boards) (Foster, 2001).

When asked about the overall impacts of the program, 74 percent indicated that participation in the program contributed "very much" to success in their careers. Even more, 82 percent, thought participation in the program contributed "very much" to their involvement in public service. More than half (53%) of the respondents thought the program has "very much" had a positive impact on agricultural policies and practices. Eighty-one (81%) percent of the respondents thought the program has "very much" helped them to learn of other perspectives (Foster, 2001).

The alumni offered suggestions for the future for those conducting agriculture leadership programs: provide challenging and more diverse topics, assist the alumni in linking nationally, offer better screening and recruitment of participants, change the program with the times,

encourage alumni participation, expand cross-cultural and global issue exposure, and insure

group dynamics (Foster, 2001).

Based on this alumni evaluation, Foster, on behalf of the W.K. Kellogg Foundation,

offered the IAPAL members the following challenges and opportunities facing the agriculture

leadership development programs in the future:

* Linking alumni nationally,
* Networking with a purpose,
* Impacting agricultural policies and practices,
* Addressing gender and diversity,
* Continuing education for alumni and program directors, and
* Capitalizing on technology (2001 p.1).

Foster challenged the IAPAL Directors to be more careful in selecting prospective

candidates for agriculture leadership development programs. He believes candidates for the

program should:

* Be able to use technology and information systems,
* Have a global/systems perspective,
* Know how to rely on partnerships and collaborations,
* Be able to see connections and relationships others may not
* Search for root causes of problems rather than chase symptoms,
* Recognize that innovation and creativity comes from diversity and inclusivity,
* Be a life-long learner,
* Use a learning perspective in all they do,
* Continue to bring honesty and integrity to leadership, and
* Bring action to significant issues (Foster, 2001, p. 1).

California, Michigan, Montana, and Pennsylvania Public Affairs Leadership Development Programs

In 1979, Robert Howell conducted a study of the California, Montana, Michigan, and

Pennsylvania leadership development programs. He measured changes in affiliations with

organizations, self assessment of program success, and spin off educational programs. Results

evident among those affiliations with organizations increased in all four programs, although in

different proportions. A positive relationship between participation in these programs and

running for public office was also shown in participants in all programs. The self assessment results showed that participants felt the program experiences substantially increased their leadership and problem-solving skills. A greater interest in public affairs and feelings of independence, growth, and self-worth as persons was also shown by participants. In addition, participants broadened their interest in community problems and issues; increased their desire to concentrate on specific issues; and gained confidence in their long-range future involvement in public affairs. When asked if the program made a difference in their lives, 95 percent responded it had and 91 percent reported they would participate again given the opportunity.

Missouri Agriculture Leadership of Tomorrow Program

In 1985 Bill McKinley conducted a study of the Missouri Program entitled "An Impact of the Missouri Agricultural Leadership of Tomorrow Program." The purpose of the study was to examine increases in public policy organizational membership by participants upon completion of the two-year program. His results showed an increase in organizational membership by participants upon completion of the two-year leadership development program. McKinley studied no other variables (McKinley (1985).

Nebraska Leadership Education/Action Development Program (LEAD)

The Nebraska LEAD Program began in 1981 with the support of the Nebraska Leadership Council. Although the LEAD Program officials have commissioned several follow-up studies to evaluate the extent to which the program's purposes and objectives have been achieved, the study conducted by the Gallup organization, which utilized a three-group approach is the one most recognized. The three target populations surveyed included Nebraska LEAD alumni, Nebraska LEAD candidates who had been selected for the program but had not yet

participated, and a random sample of those who had applied for the program, but not been

selected. The results were reported as follows:

* The Nebraska LEAD Program helped participants feel a greater commitment to persist in an agricultural occupation. Among the alumni, 89 percent expect to be in an ag-related occupation five years from now and 17 percent are currently considering an occupational change. Seventy-six percent (76%) of those not having the Nebraska LEAD experience expect to be in an ag-related occupation in five years, and approximately one-third were considering an occupational change.
* LEAD alumni were more active in a greater variety of organizations, particularly ag-related organizations. Further, they were more likely to be officers in those organizations and to devote more time participating in organizational activities. LEAD alumni were significantly more likely to be asked to speak to larger groups, both in terms of size and variety, than those who had not been through LEAD.
* The attitudes of Nebraska LEAD alumni were significantly different than either the new Program enrollees or non-accepted applicants on the following factors:
  a. Economics—Alumni have a more cosmopolitan understanding of agricultural economics. They were much more likely to recognize that the ag-economy differs little from the economics of other industries.
  b. Agricultural Policy—Alumni were much less parochial in their attitude toward the formulation and effect of policy. They were more likely to feel ag policy was reflective of urban sensitivity to farm issues.
  c. Farm Organizations—In addition to becoming more involved, alumni were significantly more likely to be supportive of farm organizations and more positive in their view of their effectiveness.
  d. Nebraska Legislature—While there was no statistically significant difference in the attitude of the three groups on this factor, there was a clear trend for Nebraska LEAD alumni to be more understanding of the legislature's sensitivity toward agricultural needs.
  e. Honesty—Alumni were broader in their view that others outside agriculture were as likely to be honest as those involved in agriculture.
  f. Foreign Policy—Although the differences were not statistically significant, there was a convincing trend that alumni feel those involved in agriculture were reasonably well informed on foreign policy.
* There were no significant differences among the three groups surveyed on the factors of social responsibility, the need for education for agriculture, or the future of agriculture.
* Nebraska LEAD alumni overwhelmingly endorsed the program.
  a. Ninety-six percent (96%) would strongly recommend the program to others.
  b. Seven out of ten reported that they have become more active in agriculture-related activities since their involvement in LEAD.
  c. Ratings of selected parts of the Nebraska LEAD Program were unusually high. Of particular benefit to participants was the opportunity to meet others, continued interaction with other participants, the study/travel seminars and discussion at

seminars. Rated slightly lower were the speakers at seminars, but this item still received a very high rating.

    d.   There were no consensus recommendations for improving the program (Gallup, 2005, ¶ 3).

The evaluators felt there was convincing and compelling evidence that Nebraska LEAD alumni have a broader and a deeper perspective of the factors affecting agricultural economics and policy than do non-participants. They tend to be more understanding of the wide variety of influences on society in general and agriculture issues in particular. They show evidence of being more tolerant of those not directly involved in agriculture, and they seem to appreciate more the relationships that exist between agriculture and other career orientations. They appear to be more sensitive to national and international issues, and there was evidence of a greater general awareness of the role of agriculture in the world community. Nebraska LEAD Alumni were more active as leaders in ag-related organizations and activities. They were extremely positive about the LEAD Program and attribute it with encouraging them to become more active in leadership roles (Gallup, 2005).

In the words of the researchers, ". . . by the measures of this research effort, the researchers say with confidence that the purpose, goals and objectives of the Nebraska LEAD Program are being achieved" (Gallup, 2005, ¶ 4). This study gave no information about how it was conducted except for focusing on the three target populations or what statistical analyses were run, therefore, we cannot make adequate determination about the validity of the findings.

Alabama Ag & Forestry LEADERS Program

The "Alabama Ag & Forestry LEADERS Program," supported by the Auburn University Department of Agricultural Economics and Rural Sociology and Alabama Cooperative Extension System began in 1988. In the spring of 2002 the program conducted a study of 176 of the 189 graduates of the seven classes which had graduated from 1990 through 2002. The study,

entitled "Life After LEADERS," sought to determine the types and levels of impact the program has had on the civic, political, and community involvement of their graduates. Measures were developed for rating participants' involvement and leadership activities in commodity, community, and government organizations. Differences among the participants were analyzed relative to their age, primary occupation, employment industry, and educational level. The study also compared the nature and extent of the impact LEADERS participation had in contrast to the program's goals (Sherman, Evans, & Dunkelberger, 2002).

The survey instrument of 39 questions was mailed to all graduates of the LEADERS program for which there were current addresses. There were 113 respondents from the 176 graduates contacted. The survey asked for graduates' reactions to questions and statements designed to determine the types and levels of involvement, knowledge, and attitudes of graduates both before and after participation in LEADERS. Graduates were asked to indicate the number of commodity organizations and leadership positions obtained since completing LEADERS. Each position held by the graduates were ranked on a three-point scale and each ranking totaled with the number of commodity organizations listed. A four-point scale was then used to rank this sum and represent commodity involvement. Graduates were asked to indicate the number of volunteer or community organizations and leadership positions they have held since completing LEADERS, as well as their level of involvement to 13 different community actions. To determine civic involvement, each community action was ranked on a three-point scale and each ranking totaled with the number of volunteer or community organizations and leadership positions listed. Graduates were also asked to indicate the number of political offices for which they had run or been appointed both before and after participating in LEADERS, if they actually held an office or worked for the election of a political candidate, as well as efforts concerning

seven different kinds of assistance in a campaign. Political involvement was determined by ranking the total of each type of campaign assistance, indication of working on a campaign, and attempt at running for an office on a three-point scale. A three-point scale was also used to rank the age of the graduates to determine if a difference existed between involvement ranking in any of these three areas occurred over time (Sherman et al., 2002).

After rankings to determine involvement and leadership activity in commodity, community, and political areas were designed, one-way ANOVAs were run to determine correlations between graduates' involvement and leadership activity and their primary employment industry, primary occupation, age, and level of education (Sherman et al., 2002). It should be noted that this study was a census study, not a random sample; therefore, the use of a one-way ANOVA is an inappropriate statistical analysis for this study. It can be said, however, that in the case of each statistically significant ANOVA reported in this study, there were substantial, not statistically significant, differences based on the differences among means. Only those differences that exceeded 2.0 are being reported by this researcher in these findings. (Hair et al.,1998).

Sherman reported significant correlations ($p<.05$) occurred between primary occupation and commodity involvement, but none between primary occupation and civic or political Involvement. The higher correlation between primary occupation and commodity involvement was not surprising since those in production agriculture, forestry, and fishing are more likely to be involved in commodity organizations relevant to their production efforts (Sherman et al., 2002).

Sherman also found significant correlations ($p<.05$) between primary industry and commodity and political involvement, which was also expected. Interesting to note is that the

mean ranking for graduates in an agricultural employment industry (1.62) is higher than that of

those involved in a forestry employment industry (1.24). The researcher attributes this to the fact

that farmers frequently devote land to forestry production as well. This might be an incentive for

them to participate in both agricultural and forestry commodity organizations. The significant

correlation between employment industry and political involvement was greatest for graduates in

an industry outside of agriculture and forestry. The mean was 1.54 for the non-agriculture and

forestry graduates as opposed to 1.07 for agriculture and 1.03 for forestry. This is an important

finding because one goal of the LEADERS program is to produce leaders that are politically

active, especially in agriculture and forestry policy making. There was not a significant

correlation between Employment Industry and Civic Involvement, but there was a correlation at

the .1 level. This suggests a slightly weaker relationship, but the researcher felt that Employment

Industry was a reliable indicator for Civic Involvement among LEADER graduates (Sherman et

al., 2002).

This study showed significant correlations ($p<.05$) between education levels and civic

involvement. Graduates with a post college education have the highest level of Civil

Involvement followed by those with a high school education or less, those with some college or

associate degrees, and, finally, those with a college degree. The researcher suggested these

results might be explained by some producers foregoing college or four year institutions and

working on family farms that have an established community presence. Also, some producers

engage in secondary trades to earn extra income and their skills are called upon in community

improvement projects. Sherman noted a correlation at the .1 level between educational levels and

political involvement, suggesting a weak relationship. Those with the highest level of education

were the most politically involved followed by those with associate degrees or some college. (Sherman et al., 2002).

There were significant correlations ($p<.05$) between age and commodity involvement with the highest level of commodity involvement among graduates between 40 and 49 years of age. This was followed by those 50, and over and lastly, graduates under 40 years of age. Sherman used a one-way ANOVA to determine any relationship between Class Number (time of graduation) and commodity involvement. There was a highly significant relationship (nearly .01) between class number and political involvement (Sherman et al., 2002).

This researcher gave no information on how the questionnaire was developed and tested for validity and reliability, which is a threat to the validity of the study. The length of time between the beginning of the LEADERS and this evaluation could also be a threat to internal validity because of maturation.

Florida Leadership Program for Agriculture and Natural Resources

In 2002, Carter conducted a study in which alumni from the Florida Leadership Program for Agriculture and Natural Resources (FLPANR) were interviewed to evaluate the effectiveness of the program. The population of the study consisted of a purposefully selected sample of past participants who represented different classes of the program. In addition to the interviews of program participants, interviews were also conducted with the spouses and a business associate of the participants (Carter, 2002).

The objectives of this study were:

* assess the program's impacts on the participant in the eyes of the participant,
* assess the program's impacts on the participant in the eyes of the participant's spouse,
* assess the program's impacts on the participant in the eyes of a third party who would be aware of changes in the individual, and
* compare common impacts among these three groups with the objectives of the program (Carter, 2002, p.197).

This study was qualitative in nature. In qualitative analysis is the goal is to isolate and define categories during the research project. In addition, the researcher expects that these categories will change during the course of the research. Carter used focus groups to interview alumni from the first three classes of the Florida program, their spouses (or significant individuals in their lives), and their employers or business partners. The information from these three groups was used to achieve triangulation. Carter referenced Patton (1987) who indicates that triangulation builds checks and balances into a design through the use of multiple data collection strategies; the triangulated design is aimed at increasing the rigor and strength of an evaluation. It also solves the problem of relying too much on any single data source or method and undermining the credibility of the findings of this method or source because of the weaknesses that may be found in a method or source (2002).

In selecting participants for the interviews, Carter chose eight participants from each class based on their geographic distribution and commodity representation throughout Florida. For the selection process, the state was broken into four regions (North, East Central, West Central, and South), and two participants from each class were chosen for each region. Carter chose to interview the spouses because of their close proximity to the individual, and their ability to distinguish any inherent changes in the individual. The interview was designed to discuss whether or not the program has had an impact in the life of the participant, or on their life as the participant's spouse. Employers were interviewed because they have a vested interest in the success of the individual. Both spouses and employers would be able to tell if the participant has implemented any changes in his/her life as a result of participation in the program (Carter, 2002).

An interview questionnaire consisting of eight questions was used to gather data during the interview process. The questions were slightly altered for each group, but were derived from four

constructs or areas obtained from the objectives of the Florida Leadership Program and the original Kellogg Program. The four construct areas identified were: People Skills, Policy Development, Analytical Skills, and Personal Skills. Two questions per area were developed to assess knowledge that they gained in these four construct areas. The questions asked were relevant to what the participants learned; what their goals were; and what, if anything, had they implemented from the program into their professional and personal lives.

The questionnaire was reviewed by a panel of experts composed of faculty from the Department of Agricultural Education and Communication and the Department of Food and Resource Economics at the University of Florida to establish validity, and changes were made based on their recommendations. To insure reliability, the instrument was field-tested with a participant from the program, her husband, and her employer. No changes were made to the instrument after field testing (Carter, 2002). The responses from all three groups were analyzed to find common themes. Those themes were:

> **People Skills:** Networking was a theme found in the responses given by all three groups. It was viewed as an asset that allowed the participants to interact more effectively with people. Another prevalent theme was improved organizational skills in the participants. In addition, there was an improvement in the participant's ability to deal with people more effectively, which was credited to the use of the Myers Briggs Type Personality Indicator during the program. All three groups interviewed found that the better communication skills developed during the program increased the participants' leadership skills.

> **Policy Development:** Networking was another theme found in all three groups. The groups felt that networking allowed the participants to become more aware of the

influences that affect Florida agriculture and natural resources. All three groups also

felt the participants had gained broader perspective of the influences and issues that

occur in their industry and other industries in Florida agriculture and natural

resources. The participants increased their political understanding by becoming more

comfortable working within the political system, being more actively involved in the

political process, and having a greater understanding of the political process. This

theme was also common to all three groups.

Analytical Skills: Two common themes found in analytical skills were networking and a

broader perspective of Florida agriculture and natural resources. The broader

perspective given to the participants and the contacts and relationships that develop

through the program allowed the participants to better identify the issues that are

facing Florida agriculture and natural resources. The participants' ability to think

more critically since their participation in the program was a theme echoed by all

three groups.

Personal Skills: All three groups agreed that the program provided a basis for the

participants to continue to learn and develop and that the participants would do this

through involvement in the alumni association, boards, organizations, etc.

Networking was again discussed as an aid in the participants' continued growth and

development since they would remain in contact with people with interests in

common issues. Another common theme was a greater appreciation of the diversity of

people, where they are coming from, what they bring to the table, and why they think

the way they do.

Although many common themes were found in all three groups of interviews, the most common theme was networking. In fact, every person interviewed mentioned networking. Everyone agreed that participants came away from the program with a diverse network of individuals, who would be invaluable in the future. This network was important, not only as support for agriculture and natural resource related issues, but because, as a group, these alumni have a very powerful voice in the industry (Carter, 2002).

According to Carter, one outcome from the interviews that may have been a surprise, was that nothing was mentioned about the hardships of being away from home and from the business. A two-year program places a huge time commitment on the participant, their spouse, and their associates and may act as a hindrance to many who consider participating. Yet, this was not mentioned as a negative, and, many participants wished that the program would have been longer in length. Some of the participants felt that the program was too short and felt a void when the program was over. Many of the interviewees thought it was a positive experience because the participants learned that life can go on, businesses can run, and the family can exist without the participant right there overseeing the operations. Many of the spouses and associates felt this aspect was a validating experience for them because, when the participant was gone, they learned that they could handle the increased responsibility. Participants learned that they did not have to "micro-manage" everything to make it work (Carter, 2002).

Carter felt that the findings of this study showed that FLPANR is not only meeting its objectives, it is exceeding them. All of those interviewed had only positive things to say about the program. Participants felt that their lives had been enriched by their participation and that the lessons they learned, and the contacts they made would stay with them for the rest of their lives.

These results were substantiated by the responses of the spouses and associates, who reiterated the responses given by the participants (Carter, 2002).

This researcher, with the information given, was unclear about how Carter participants were chosen. With so many constraints on choosing participants (class number, geographic distribution, and commodity representation) it was not clear how a random sample could be chosen, which would be a threat to the external validity of the study. Carter also did not indicate whether participants, spouses, and business associates were interviewed together or separately, which would, in the opinion of this researcher, also affect the validity of the study. Participants, spouses and business partners interviewed together might feel uncomfortable giving truthful answers because the others are present. In addition, if the interviews were conducted by the researcher, who was at the time the Assistant Director of FLPANR, the respondents might have been uncomfortable giving other than positive responses. External validity could have been compromised by this as well as through the reactive effects of experimental arrangements because the participants knew they were part of a study. Also, Carter indicated that the questions were slightly altered for each interview, which is a threat to internal validity.

The University of Wisconsin Rural Leadership Program

In 1993, the University of Wisconsin-Extension, Madison conducted a study of the Wisconsin Rural Leadership Program (WLRP) to determine the extent to which the program's purposes and objectives were being met. The study was also to determine the participants' satisfaction with the program and get their suggestions for improvements that may be made. This study was made by Dhanakumar with support from Rossing and a review by Campbell.

All 118 WLRP alumni from the first four classes were included in the study. There were two types of survey instruments (qualitative and quantitative) designed for the study. All 118

participants responded to the quantitative part of the survey questionnaire and 105 responded to the qualitative telephone survey. The instrument set was validated by a jury of three experts on the staff of the Department of Continuing and Vocational Education of the University of Wisconsin-Madison, and UWEX Cooperative Extension Service and Community Dynamics Institute of the University of Wisconsin-Extension. Revisions were made after the jury review. The instrument was then pilot tested via telephone and face-to-face interviews with ten WLRP graduates. Revisions were made following the pilot test. No mention was made by the researcher of what types of revisions were made after the jury review or pilot test. The study was designed to be descriptive, exploratory, and analytical in nature. Data was analyzed using the Statistical Analysis for Science (SAS) package. Descriptive statistics were the primary statistical procedure used. Qualitative responses were summarized in narrative form (Dhanakumar, 1993).

The percentage of male respondents was 62 percent, with 82 percent reporting they were married, and 72 percent had children. The average mean age was 36. Over 40 percent had completed college, 19 percent had some post graduate work and 16 percent had completed a graduate degree. Incomes of above $50,000 were reported by 26-36 percent of each group (Dhanakumar, 1993).

Although WLRP is a statewide program, only 45 of the 71 counties had participants. Of those counties participating, seven contributed 37 percent of the participants and thirty-eight contributed 63 percent of the participants. Nearly 75 percent of the metro counties and 58 percent of non-metro counties in Wisconsin were covered by the program (Dhanakumar, 1993).

On a scale from -3 for major decrease, 0 for no effect, to +3 for major increase, Dhanakumar found that WRLP increased participants understanding of public issues most in the international, national , and government arenas. A major increase (35%) was shown in

participants' understanding of state and international issues. Similar results were reported for increase in understanding of relationships of issues and of operations of government across the local, state, national and international arenas (Dhanakumar, 1993).

WRLP contributed most to changes in participants' views and perspectives regarding their concept of community and views on leadership roles in society. Of less importance were the participants' views on public issues, the role of volunteer organizations, including political parties, and the nature and function of a democratic, pluralistic society (Dhanakumar, 1993).

The researcher found that sixty percent or more of the respondents reported WLRP contributed to a moderate to major increase in nearly every personal capacity, with the greatest increases reported in three areas: a sense that they can make a difference (78%), belief and confidence in self (77%), and skill in analyzing problems and alternatives (74%). There was less increase reported in participants' awareness of their values and beliefs; awareness of their life priorities; skill in handling conflict at interpersonal, group, organization or broader levels; commitment to their life priorities; and ability to speak effectively in public (Dhanakumar, 1993).

WRLP had the moderate to major effect in increasing participants' organizational capacities in the following areas: networking with other community activists and leaders (70%), skill in developing effective groups or teams (57%), and skill in building strong organizations. Two thirds of the respondents reported either no effect or little positive effect in strain and tension with community leaders (71%), number of organizations to which they belong (68%), and organizations in which they were active (62%)(Dhanakumar, 1993).

When asked about overall public affairs capacities and efforts, respondents reported that WRLP enhanced their public affairs capacities and efforts to the greatest extent in the breadth of

their interest in a variety of public problems and issues. On six items a range of 64 to 81 percent reported a moderate to major positive effect on their capacities in and attention they pay to public affairs. These items were:

* attention they pay to state level public issues (68%),

* quality of their decisions in public affairs (67%),

* attention to issues at the national level (69%),

* attention to issues at the national level (64%),

* breadth of rural leaders' interest in a variety of public problems and issues (81%), and

* confidence in participating in public affairs (66%).

The active involvement of leaders in public issues at the international level recorded the lowest mean (M = 0.58) (Dhanakumar, 1993).

Among WRLP participants 59 percent were involved in local community accomplishments and 56 percent in accomplishments beyond their community level. Community volunteering was by far the most common way of acquiring organizational membership. Participation frequencies were higher in service, community or voluntary organization than in public elected offices. Of the 118 participants responding to the survey, a total of 91 had held leadership positions in a public organization and 36 had run for a public office from 1-9 times.

Participants also rated changes in their personal, professional, and family life as a result of participating in WRLP. The primary impact reported was changes in the quality of their career, business, or professional life, where 66 percent reported a moderate or major contribution. Moderate to major contributions were also made by WLRP to participants' increased amount of travel (52%) and their quality of aesthetic, cultural, recreational, and, or, spiritual life (53%) (Dhanakumar,1993).

Almost all (91%) of the respondents reported that WLRP had a moderate to major effect on changes in their life and leadership. When asked what other factors contributed to their life and leadership, the factors reported to have major to moderate effects were: personal motivation and determination to change (72%) and experiences in their work life (71%) (Dhanakumar, 1993).

Dhanakumar also investigated WLRP leaders' efforts to involve other people in addressing community/public concerns and enhancing the community/public affairs leadership capabilities of other people. Sixty-three (96%) of the leaders reported efforts to involve others in community—public concerns and to develop leadership capabilities of others in the following areas: encouraging others to run for public office and school board, motivating people to participate in WLRP, attempting to empower rural citizens to do what they want to do in their own way, involving people in government issues, encouraging local volunteerism, urging and motivating people to express their own/community concerns to legislator and congressman, and other developmental activities in the areas of agriculture, community and economic development. The respondents were not involved in these activities indicated a lack of time as the reason (Dhanakumar, 1993).

Alumni were asked to record their overall views of the WLRP value to rural Wisconsin and alumni satisfaction with the program using a five point scale with 5=Very High and 1=Very Low. Responses showed M = 4.23 for WLRP value to rural Wisconsin and a M = 4.56 for their overall satisfaction with WLRP. When asked, through an open-ended question, which elements of the program had the most positive benefits for the participants, responses given were: an exposure to complex issues, meeting diverse people, networking systems and coalition building, self-confidence, and a learning about working systems of the government, community, and

political organizations. Another open-ended question asked for elements participants' thought should be added or enhanced in the program that could have significantly enhanced or supported the leaders' subsequent development and performance. Concerns expressed were the need for: a broader understanding of diversity and cultural enlightenment, a mentoring program with alumni, more personal self-development within the program, more emphasis on agriculture and environmental issues, adding entrepreneurs issues, advanced training on how to speak and present issues in public, more spouse involvement and issues on family management, enhancing the understanding of the leaders' role by the spouse, more time management, and a variety of human relations concerns (Dhanakumar, 1993).

When asked what changes they would make in re-shaping WLRP, nearly 75 percent responded that they were highly satisfied with the current mission, goals, and design of the program. The remaining 25 percent offered the following suggestions:

* re-design the program to pursue diversity, ethics, and increase representation from northern Wisconsin;

* change the intensity of the seminar time period (from 2 years to 1 or 3 years);

* increase the proportion of women participation;

* expand communication systems for networking among alumni and the program;

* focus on agriculture and rural issues; and

* focus on international trade and its applicability to local settings (Dhanakumar, 1993).

When asked about WLRP support to program alumni, respondents asked for more county or regional seminars for updates on rural issues, integration of WLRP with other existing leadership programs in the state (e.g., Wausau Leadership Program), involve more alumni in

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regional meetings and WLRP board, and maintain a good communication system with alumni (Dhanakumar, 1993).

The researcher asked participants in which ways they had supported WLRP since their graduation. Nearly 90 percent of respondents responded they had participated as a resource person, helped develop curriculum and conduct evaluations, served on recruitment and finance committees, served as a board member; been actively involved in graduation ceremonies and alumni activities, helped with educational and international seminars, and contributed funds to the program (Dhanakumar, 1993).

Alumni participation in the alumni association, formed in 1991, was also evaluated. Nearly 73 percent indicated they belonged to the association, but only 10 percent had had major involvement. The reasons given by respondents for not being involved were lack of time, spouse support, and motivation from the alumni association. When asked their view of the alumni association, there were both positive and negative responses from participants. Participant's responses regarding their financial support of the alumni association indicated that 68 percent were contributors.

The Philip Morris Agricultural Leadership Development Program

The Philip Morris Agricultural Leadership Development Program is conducted by the University of Kentucky, College of Agriculture in cooperation with Philip Morris U.S.A. In 1996 the university evaluated the program from 1985-1995. The evaluation had three basic objectives:

* to provide information to the University of Kentucky to be used to modify future leadership programs;

* to evaluate the impact that the program has had on individuals (and on agriculture in the burley-belt states); and

* to explore ideas and suggestions for developing additional programs for program

     alumni.

A questionnaire was mailed to all 113 graduates of the program. Eighty of the 113 (71%)

responded to the survey (Vantreese & Jones, 1996).

In order to gauge the benefits of participation in the leadership program, the questionnaire

had a series of both open- ended questions and specific categories of positive impacts for

participants to check. When asked specifically if the Ag Leadership Development Program was

worthwhile in terms of cost and time away from normal activities, 99 percent of the respondents

said yes, with the remainder undecided.

Participants were also asked to identify specific benefits received by participation in the

program. They were allowed to check as many as relevant from a list of 17 benefits. The results

showed the program strengths tended to concentrate on meeting new colleagues, increasing

leadership skills, and expanding participants' knowledge base of a variety of agriculture issues,

including increased knowledge of the global economy and both US and world agriculture

(Vantreese & Jones, 1996). Responses showed relative weaknesses in the program for increased

involvement in community, commodity and agriculture groups/activities and in planning group

meetings. Improvement in management skills and productivity were also ranked low, but these

were not stated objectives of the program (Vantreese & Jones, 1996).

Another set of questions measured other benefits of the program with participants

evaluating their responses using a numerical ranking of 1, indicating "not at all" to 10, "a great

deal". Respondents indicated that the program benefited them most in giving them a better

understanding of the public policy process and how to become involved in public issues,

increasing their knowledge of problems and policies related to tobacco and other commodities,

and stimulating them to engage in continuous (lifelong) learning experiences. Of lesser benefit was equipping participants to analyze complex problems facing tobacco and agricultural production and distribution, giving them a better understanding of themselves and others, and equipping them to assume leadership positions in addressing these complex problems. The program benefited participants the least in improving their ability to communicate effectively (Vantreese & Jones, 1996)

Two open-ended questions allowed participants to indicate (1) what kinds of information they found most useful from the program and (2) specific impacts of using that information. The most popular response was for the sessions regarding world trade and global agricultural policy. This was followed by friendships made and networks formed with their colleagues and the enhancement of communication skills and leadership qualities. The responses to the specific impact of using the information gained from the program yielded, in order: working with community groups; improved farm management and marketing skills; and positive changes in the way other people view the participants, such as enhanced credibility, which lead to more public exposure and opportunities for exerting influence (Vantreese & Jones, 1996).

The evaluation indicated that 100 percent of those who responded had shared information gained through the program with farmers and business associates, friends and neighbors, thereby expanding the realm of influence of the program. Other respondents shared program information with community groups, commodity groups and associations and civic clubs. Almost all (99%) of the respondents shared this information through private conversations, with 85 percent reporting to a group and 83 percent at a meeting. A small number provided a written report or conducted a training program (Vantreese & Jones, 1996).

Over one-fourth (27%) of the respondents implemented action at the local level on public policy issues studied during the leadership development program and a quarter of the respondents (25%) organized groups/networks to address agricultural issues or problems. These respondents worked with a variety of organizations for change (Vandresse & Jones, 1996).

Many of the alumni of the Philip Morris Ag Leadership Program have been elected to a variety of leadership positions. One-fifth (19%) of the respondents have been elected to public office; two- thirds (63%) to leadership positions in agriculture/commodity groups; one-third (35%) to leadership positions in civic clubs/organizations; and one-half (50%) to positions in church or other community organizations. Over one-half (62%) of the respondents indicated they had not become more involved because of work commitments and other family obligations (Vantreese & Jones, 1996).

Another set of survey questions measured the respondent's participation in organizations and the extent of involvement before and after participation in the leadership development program. Results showed that participants, as a whole, had increased their participation in a variety of organizations. The study also showed that participants increased the extent of their involvement at all levels of government after graduating from the program. (Vantreese & Jones, 1996).

Participants were then asked to evaluate their abilities in a variety of personal attributes after completing the program. A numerical scale of 1 through 10 was used with the lower numbers reflecting "Need to Learn", middle numbers "Need to Improve" and upper numbers "Do Well." There was no scale to reflect where the participants felt their level of ability was prior to participating in the program. Nor did the researcher indicate where he divided the lower, middle, and upper numbers. From the mean rankings given, it appears participants were most

adept at cooperating and working as a team member, asking questions, and developing pride and

confidence in themselves. The areas where the most improvement was needed were in

expressing feelings and keeping records (Vantreese & Jones, 1996).

Participants were asked to list topics they felt could be dropped and topics that should be

included in future programming. Results were conflicting in this area with some feeling there

should be fewer topics covered more thoroughly and others feeling there should be more topics

covered less in depth. There were, however, frequent comments about the excessive use of

economic theory and the need for more practical use of economics (Vantreese & Jones, 1996).

A wide variety of topics were suggested for futures programs. The general categories

include self-enhancement (more public speaking practice, including TV interviews, and sessions

to enhance public image such as etiquette and dressing for success), social issues (medical care,

child care, elderly care, and personal finance), community service (involvement in local

communities and fundraising for civic and community projects), political environment (sessions

on government policy, especially agriculture policy and the farm bill, how to conduct formal

meetings, get involved in politics, and contact with congressional staff and other political

figures), role of the third world (international trade and foreign policy, farming practices in other

parts of the world, the emerging power of the third world as it pertains to food production and

distribution, and dealing with trading in other cultures), utilizing technology (using the Internet

and other modern means of communication and how to make this technology work for them),

other economic issues (the structure of US agriculture including consumers, technology

suppliers, input suppliers, processors, marketing and vertical integration), and program format

(increased interactive activities and more hands-on experiential learning, expand all topics with

deeper insights and more practical experiences, and a more relaxed schedule on the Brazil trip

seeing more farms and less businesses). Several participants suggested that spouses be included in more programming since the "family farm" is viewed as a husband and wife team (Vantreese & Jones, 1996).

Participants were asked to give their response to the offering of an advanced seminar for alumni of the Philip Morris Agricultural Leadership Development Program. Over one-third (36%) indicated they were excited about the offering and an additional 62 percent expressed interest. When asked what subject matter should be included in the advanced seminar, the respondents noted that the issues they had suggested for future programming would work well (Vantreese & Jones, 1996).

The average age of respondents was 38 and all but 96 were male. Most (70%) of the respondents had a college degree, including 10 percent with a graduate degree. An additional 16 percent had completed some college. The majority, 79 percent were identified as tobacco farmers and 68 percent indicated a wide variety of other crops. By Kentucky standards, the farms operated by participants were large. Respondents also showed significant involvement in agribusiness. In fact two-fifths noted some type of agribusiness activity. More than 70 percent of the alumni responded to the eight-page survey, an indicator, according to Vantreese & Jones, of the high level of interest in the program (1996).

Of concern to this researcher is the fact that Vantreese and Jones reported no validation of the survey instrument. This could affect both the internal and external validity of the study.

Washington Agriculture and Forestry Leadership Development Program

In 1985, Robert Howell conducted a study of the Washington Agriculture and Forestry Leadership Program to determine if the program goals were being met and whether changes were needed. Results indicated participants showed a moderate to substantial increase on the variables

of promoting causes, willingness to listen, biases and prejudices, ability to influence, speaking ability, group skills, analyzing data, ability to lead groups, leadership of community organizations, ability to serve, leadership of agriculture and forestry organizations, and more effective industry representatives in the state. These variables relate to the goal of developing leadership skills.

Results from the impact areas related to the dependent variable, broadened perspectives, showed moderate to substantial mean scores in the independent variables of knowledge of resources, importance of fact gathering, breadth of interests, interrelationships, analyzing data, working with others, knowledge, leadership of community, ability to serve, leadership of agriculture and forestry organizations, and ability to view others with greater objectivity (Howell, 1985).

A moderate to substantial increase was shown in the independent variables of interest in public affairs, confidence, and a desire to serve. These independent variables relate to the dependent variable, encourage participation in public affairs (Howell, 1985).

In 1992, Olson conducted an evaluation of the Washington Agriculture and Forestry Education Foundation (WAFEF) two-year leadership development program for individuals in the natural resource industries. This program has been in existence since 1977. Candidates are selected for this Agriculture and Forestry Leadership Program based on the applicant's demonstrated aptitude for leadership, previous leadership experience, mid-career, representation from natural resource industries and geographic areas of the state, and participant commitment in time and financial resources as outlined at the initiation of the program. Thirty participants are selected annually by a committee representing natural resource industries, education, business and geographic areas of Washington (Olson, 1992).

The purpose of this evaluation was to assess the growth in the transactional and transformational leadership skills of participants as a result of participating in the program. The study evaluated the variables related to transactional and transformational leadership at the knowledge and practice level. It did not evaluate the entire Agriculture and Forestry Leadership Development Program. The researcher chose this focus because:

* the goals identified by the WAFEF are at the knowledge level of participation
* according to Bennett (1977), evaluation at the knowledge and practice level is an appropriate way to evaluate a program to determine overall effectiveness (as cited in Olson, 1992) and
* the WAFEF wanted to know if particular leadership skills were practiced as a result of participation in the program (Olson,1992, pp. 5-6).

The basic research questions for this study were:

* Does participation in the Washington Agriculture and Forestry Education Foundation's two year educational program increase the leadership abilities of the participants?
* Could the curriculum be improved, and if so, how (Olson, 1992, p.7).

Olson also investigated 16 hypotheses, which will be identified when results are discussed.

Olson defined the following terms for the purposes of this study. Transactional and Transformational leadership have been discussed extensively previously in this Study, but will be briefly defined here using Olson's research.

Transactional Leadership: Burns (1978) describes a transactional leader as one who approaches followers to exchange one thing for another. This comprises the bulk of leadership in groups.

Transformational Leadership: Burns (1978) definition,

The essence of transformational leadership is the capacity to adapt means to ends…to shape and reshape institutions and structures to achieve broad human purposes and moral aspirations…the secret of transformational leadership is the capacity of leaders to have their goals clearly and firmly in mind, to fashion new institutions relevant to those goals, to stand back from immediate events and day-to-day routines and understand the potential and consequences of change. (pp. 13-14).

Vision: Tichy (1986, as cited in Olson, 1992) gave vision two elements. One provides a conceptual framework for understanding the organization. The second has emotional appeal that has a motivational pull with which people can identify. A vision is motivating because it gives challenge for the organization in the reaching of excellence and a source of self-esteem for organizational members. In addition, vision provides a conceptual road map for what the organization will be like in the future. According to Taylor (1989, as cited in Olson, 1992,) vision creates a focus for what is possible.

Strategic Goal Setting: Olson defined goals as the stepping stones to creating the vision and measuring success (Olson, 1992, p. 14).

Empowerment: Peters (1987, as cited in Olson, 1992) defines empowerment as allowing people to risk and fail, listening to people's concerns and acting on them, getting people to come forth with ideas and suggestions in support of a course that both followers and leaders find worthy (p.14-15).

Environmental Scanning: Olson (1992) defines environmental scanning as an overt attempt to seek out threats and opportunities for decision making or in a proactive response to creating the future (p. 15).

Strategic Planning: Olson refers to White (1987, as cited in Olson, 1992) who describes strategic plans as guides for planned change, based as logically and intelligently as possible given the information available now. The thrust of strategic planning is to sort out what is critical from what is not and to concentrate efforts. Horton (1987, as cited in Olson, 1992) identifies three phases of a strategic plan: diagnostic, developing new plans to fit the current context, and finally, bringing the resources necessary to carry out the implementation (p. 15).

The instrument was tested for reliability using the statistical software SPSS (Statistical Package for the Social Sciences) on 28 participants. Alpha was set a priori as .05. The alpha for Part A was .94 and for Part B $a = .84$. Olson acknowledged that this study was subject to several threats to validity as described by Campbell and Stanley (1963). For these reasons, Olson describes her study as an "impact assessment" rather than an evaluation. Olson indicated that the validity of the study was threatened by selection because participants were selected for the program for their demonstrated leadership capabilities and potential for change, interaction of selection and maturation because participants were selected upon their past leadership efforts and leadership potential, and maturation because a few months to eleven years elapsed since participants' were exposed to the program. Olson determined that mortality was not a threat because there were 355 graduates of the 360 persons eligible for the program, the five missing cases can all be accounted for, and their absence was due to circumstances not related to the program (1992).

The results of this study showed:

* Participation increased their use of transactional leadership skills on an average of 1.78 points as a result of their participation in the WAFEF program. (The scale was minus four for decreased to plus four for increased. Zero was no effect.)
* Participants' increased their use of transformational leadership skills on an average of 1.89 points as a result of participation in the WAFEF program. (The scale was minus four for decreased to plus four for increase. Zero was no effect.)
* A very high correlation of .93 was found between participants' increased use of transformational leadership skills and increased use of transactional leadership skills.
* There was no difference between time of participation in the program and gain in transformational leadership skills. All classes of participants increased their transformational leadership skills similarly. This was found using a one-way analysis of variance.
* A positive correlation of .82 was found between personal goal setting abilities and transformational leadership.
* A positive relationship of .99 was found between vision and transformational leadership.
* A positive correlation of .86 was found between ethical leadership abilities and transformational leadership.

* A positive correlation of .95 was found between operational goal setting and transformational leadership.
* A positive correlation of .86 was found between team building skills and transformational leadership.
* A positive correlation of.94 was found between self assessment and transformational leadership.
* A positive correlation of .93 was found between abilities to inspire others and transformational leadership.
* A positive correlation of .86 was found between trust building abilities and transformational leadership.
* A positive correlation of .87 was found between ability to do environmental scanning and transformational leadership.
* A positive correlation of .94 was found between ability to empower others and transformational leadership.
* A positive correlation of .86 was found between value clarification and transformational leadership.
* A positive correlation of .87 was found between group conflict management and transformational leadership (Olson, 1992, pp.67-83).

In addition to the Likert scales used on specific questions, Olson used open-ended questions to gather information and better understand the achievements of graduates since participation in the WAFEF and to get recommendations for program development (Olson, 1992). The first question asked participants to identify three program factors they felt made the greatest difference in their leadership development. The most important factor, as identified by 130 responses, was the program's contribution to participants' leadership development in refining a variety of skills. A greater understanding of issues was also very important to forty-nine participants and another seventy identified a broader understanding of global issues. Other important factors were an increased confidence in achieving tasks, public speaking, inner strength, personal ideas, and a willingness to take risks (Olson, 1992).

The second question asked participants to give three results or accomplishments they could attribute to their participation in the WAFEF program. Responses were categorized into career promotion, personal growth, areas which expanded their horizons and or desire to do things, assumed a new leadership role by running for office or taking a leadership role in

organizations, and specific impacts participants felt they were making in organizations. There were 183 examples given on how participants were making a difference, 113 examples of new personal goals as well as feeling more capable and better at working with others and accomplishing goals. Fifty-two had become active in local and national politics working on issues which affect agriculture and forestry. Thirty-one felt their careers had advanced as a result of participation in the WAFEF (Olson, 1992).

To answer the question about how the curriculum could be improved, participants were asked to share opinions on specific questions and open-ended questions. Competencies were listed with a Likert scale. Respondents were asked to indicate the level to which the curriculum expanded their personal capacity in a set of twenty-four skills. They were then asked to go through the list of competencies again and indicate their recommendation for the importance of a set of skills in the future curriculum. The mean score of their personal gain and recommendation was recorded (Olson, 1992).

Results showed that respondents perception of their personal gain in every category except two was lower than the mean score recommendation for its importance for future programs. This could indicate the curriculum may not be meeting the needs of the participants. The categories understanding different cultures and other broadening experiences mean gain score and mean recommendation score were similar. The respondents gained most in understanding different cultures and other broadening experiences. Reading and writing skills, ability to delegate, management, and empowering others had the lowest gain scores.

Public speaking was identified as a skill in which participants wanted more opportunities. Areas where there was a broad discrepancy of almost four or more points between participants' gain and recommendations were: ethical leadership; communication skills in reading, writing,

and public speaking; and group conflict management. The researched concluded from this that these were areas participants felt were important, but their personal gain from participation was not as great as the value they place on the skill (Olson, 1992).

The final question asked participants to share additional suggestions for improving the leadership development curriculum. The researcher found that public policy considerations were felt to be very important to sixty persons. Several mentioned increasing the actions of participants through additional communication skills in the public policy area and increasing dialog or debate among participants. Some said the participants need to be pushed a little harder with more reading, writing, and homework (Olson, 1992).

Olson noted that because the mean scores on leadership skills ranged from .99 to 2.44, there seems to be room to challenge participants through greater involvement and responsibility. A suggestion was made by the researcher to ask participants to develop a project around personal or professional goals in which they can implement the skills taught (Olson, 1992).

When the researcher reviewed the types of skills where participants cited they gained the most, the strongest areas of development relate to personal development in setting new goals, increasing confidence in a number of areas, understanding issues, increased desire to serve the common good, and increasing personal motivation. Many questions relating to working with others and developing leadership in others had lower mean scores, but did show moderate increase. Participants did make larger increases in their ability to listen to and appreciate others points of view. This would indicate, according to Olson, that participants need increased emphasis on developing skills in working with others and developing their leadership skills and more opportunities to refine their people and organizational skills (1992). The open-ended question asking for curriculum suggestions identified health, different religions, risk assessment,

environmental issues (water quality and allocation), growth management, futuring, innovation, creativity, and the costs of leadership as issues seen as important for future programming (Olson, 1992).

Because the items on the questionnaire were highly and strongly related to transformational and transactional leadership, Olson recommends the WAFEF reexamine their curriculum and seek additional ways to push their participants harder through increased outside assignments, increasing content on developing the skills of leadership and increasing the opportunities for self and group reflection, discussion, and involvement (Olson, 1992). Although a vast majority of the respondents were married with children, a question was raised related to the lower gain in people and organizational skills and the absence of comments on the impacts on the family. The researcher suggested that, for future programming, some research should have explored the impact of one spouse participating in the program and the strain on family life (Olson, 1992).

California Agricultural Leadership Program

In 1990, Whent, Leising and Tibbits conducted an evaluation of the California Agricultural Leadership Program (CALP). The population for the study was 656 CALP graduates from nineteen classes in the time period from 1972-1990.

Two instruments were developed to record data: The California Agricultural Leadership Program Twenty-year Follow-up Survey where the graduates rated themselves on three subscales (program objectives, family and peer relationships, and leadership) in the survey using a five point scale, and the Personal Interview Reporting Questionnaire which consisted of 14 open-ended questions about the benefits of the program, curriculum, teaching styles, assignments, and suggestions for program improvement. The surveys were mailed to the 656 graduates of CALP and

331, or 55 percent of the surveys were returned. Thirty-eight graduates were interviewed

throughout California Whent, Leising & Tibbits, 1990).

Based on the analysis of the data and findings, the following conclusions were drawn

concerning the effectiveness of the CALP:

* Participants of the CALP clearly perceived that the program has directly influenced their personal, career, and leadership development and growth in positive and dynamic ways.
* The CALP has achieved its primary goals and objectives of leadership development and broadening participants' perspectives.
* The major benefits to graduates from the CALP were increased personal contacts and interaction with classmates, increased leadership skills, travel experience, interaction with governmental and agricultural leaders, and increased awareness and understanding of other societies and cultures.
* The curriculum could be improved by greater active participation of class members during all segments of the program. Increased emphasis should be placed on the following subject matter areas: environmental and agricultural issues, written and verbal communications, self-assessment of individual leadership styles, and clinical practices of effective leadership techniques.
* Graduates with fewer years of formal education appeared to make the greatest gains in meeting the program's objectives and increasing their leadership skills.
* Benefits of the CALP are reaching a limited number of women and minorities in the agricultural industry.
* Graduates of the CALP tended to move from production-oriented careers to producer/non-agriculture and agribusiness/agriservice careers.
* Family and peer relationships generally improved as a result of the CALP.
* Graduates of the CALP appeared to increase membership in political and environmental organizations as well as increase their level of organizational involvement (Whent et al., 1990, p. 4).

Based on these results and conclusions, the researchers made the following nine

recommendations:

* As part of the program, an ongoing evaluation component that includes pre-and post-measures should be added to provide annual feedback to the Board of Directors and university seminar coordinators.
* Consideration should be given to increasing participant responsibility and involvement during seminars. Examples include: active learning, role playing, more interaction with students and speakers, less lecture, and increased reading and writing assignments.
* Curriculum contents should be revised to include more emphasis on communication and leadership skills (to include goal setting and personal development) throughout

the curriculum. Seminar content should include more focus on agricultural issues, including environmental concerns and urbanization of California.

* Increase the number of women and minorities in the CALP to reflect the changing demographic composition of the industry.
* Based on the fact that program graduates are tending to move into agribusiness occupations from production agriculture and, that being employed in an agribusiness or agri-service category predicted higher pre-measure and post-measure differences and higher post-measure scores, a change in the policy governing the number of agribusiness participants should be explored.
* Since respondents with high school and AA or technical school education (fewer total years of education) had greater gains in all three subscales of the instrument than respondents with higher educational degrees or years of education, it is recommended that more individuals with less than a B.S. or B.A. degree be considered for the program.
* The goals and objectives of the CALP should be revised and refined to reflect graduates' perceptions and facilitate future evaluation efforts.
* Both the Agricultural Education Foundation (source of funds for the CALP) and the Agricultural Leadership Association (the alumni association) should increase their level of communication with outside urban groups.
* Consideration should be given to having participants formulate, upon graduation, a written plan of future professional leadership development to serve as a means of moving the graduate into action following the program (Whent et al., 1990, p. 5).

There was no reference in this research report of how the survey instrument was evaluated for internal and external validity, which could affect the results of the evaluation. In addition, no indication was given about how the 38 graduates who were interviewed were selected. The research report refers to pre-measures in conducting regression analyses, but there is no indication of how these pre- measures were obtained.

As a result of the evaluation conducted by Whent, Leising, and Tibbitts, a Phase II evaluation of the California Agricultural leadership Program was conducted for the Agricultural Education Foundation by Conner, Cushmore, and Duley from the fall of 1990 to winter of 1991. Their task was to examine the mission, goals, objectives and activities of the program and the alignment between and among these components.

In order to accomplish this objective, the researchers reviewed a large set of program-related materials, attended seminars of Classes XX and XXI, talked with class participants from

these classes and other classes and with their spouses, attended meetings of the Dean's Council and the Strategic Planning Committee, interviewed each campus coordinator and the program director (President/CEO of the Foundation), and talked with Board members (Connor et al., 1991).

The researchers judged, based on their own evaluation, as well as previous evaluations and evaluations of other leadership development programs and approaches with which the researchers were familiar, that the California Agricultural Leadership Program is powerful, effective, and successful. It is an exemplary program and will continue to be a model, not only for agricultural leadership programs, but also for other long-term, comprehensive programs.

While the researchers felt that the mission and goals reflect what important actors in the program believe they should be and are, in fact, implemented in the program seminars and activities, they recommend changing the mission statement to bring it into even better alignment with the desired and actual activities. In addition, researchers recommended that participants should take greater responsibility for their own learning by setting personal goals during the program; select particular leadership aspects on which they will work during the program; have greater involvement in deciding the focus and content of seminar components and in implementing these components; and, with their spouses, plan and deal with spousal concerns with the aid of resource persons. They also thought participants need more opportunity to process their experiences. Alumni were urged to become more involved by ranking important leadership skills for agriculturists, identifying the social issues agricultural leaders will be confronted with in the near future, and serving as mentors for participants (Conner et al., 1991).

In order to achieve the goal of increased diversity and female involvement, the Board and staff should become intensely intentional about increasing cultural, economic, ethnic, and gender

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diversity of participants. A modification of the selection process should be undertaken, if necessary, to assure such involvement (Connor et al., 1991).

This study was very comprehensive in nature. The California program is the longest existing agricultural leadership development program on which we have evaluative data. While the eighteen-year span of time between the inception of this program and the evaluation provides longitudinal date on the value of the program, of concern to this researcher, however, is that the validity of the study could be compromised due to maturation. In addition, the researchers gave no information on how the evaluation instruments were developed or tested for internal and external validity, which could affect the validity of the study.

The Australian Rural Leadership Program

The Australian Rural Leadership Program, ARLP, was established in 1992 by the Australian Rural Leadership Foundation as an initiative of the Rural Industries Research and Development Corporation. It aimed to improve the competitiveness and profitability of rural industries through the development of leadership capability in a modern international context within industry and the support community. The program is designed for the development of the men and women who will lead rural Australia into the next century (Allen et al., 1997).

The Program was reviewed at the end of the second course (late 1996) by three independent consultants of Sigma Consultancy-Allen, Cairnes and Farley. They were asked to evaluate the program and make recommendations which might add to its quality, effectiveness and appeal. The program review was conducted by a review panel appointed by the Foundation. All graduates and current participants of Course 3 of the program, sponsors and a wide range of industry associations and community groups were invited to make an input into the review. Seventy-two industry and community organizations, sponsors, graduates and participants

responded to the invitation to contribute. The interviews were conducted individually and through telephone interviews. In addition, the panel members met with the Foundation's Executive Director, staff, and the Chairman of the Australian Rural Leadership Network. Participants were asked about the impact of the program on business, industry or community affairs, if they had personal contact with graduates, what the graduates were doing which could be attributed to participation in the ARLP, and their assessment of the continuing need for higher level of leadership development in rural industries and the rural community and how well the ARLP is fulfilling that need. Graduates and current participants were also asked about the impact of the Program on them personally and how they now approach their personal, business, industry, and community affairs (Allen et al., 1997).

Respondents to the review expressed strong support for the maintenance of a rich and diverse mix of program participants from across industries, the rural community, states and territories, and support agencies as one of the real strengths and learning opportunities of the program. There was especially strong support for the aboriginal, union, and tourist industry participation introduced in Course 2. Many participants commented that they gained as much or more from interaction with fellow participants as they did from the sessions (Allen et al., 1997).

Although some respondents suggested a more diverse mix of participants, one sponsor argued strongly for less diversity to make room for more industry participation. Some of the respondents suggested that the length and demands of the course, perceived age range, and "…militaristic background…" (p. 19) of the program made it less attractive to some potential participants, especially women. The understanding and support of partners and families was noted by many participants as key requirements for successful ARLP participation (Allen et al., 1997).

The perceived age range of 25-50 was of concern to some respondents and particularly to the Foundation for Australian Agricultural Women who considered that "…many aspiring leaders…" (p. 19) who are already leaders in the community have more time and energy to dedicate themselves in their late 40s and 50s when their family responsibilities are reduced and they have a wealth of knowledge to offer. Others, however, expressed concern about the lack of younger people in rural leadership positions currently held by those in their 50s and 60s. There was a general consensus that participants in the ARLP should be able to make a leadership contribution over a significant period of time after graduation. One participant indicated he was too young at the time of participation for the program to be really helpful (Allen et al., 1997).

Course size has been from 30 to 32 participants, but concern was expressed that there are insufficient top line applicants for the program and course size should be reduced to 24-26 participants. It was pointed out, however, that this would reduce the group diversity and overall level of participation when industry leaders are seeking greater leadership training. It would also increase the core cost per participant in the program (Allen et al., 1997).

There was concern by some of the respondents that some of the best candidates for the ARLP were not being attracted to the program because it was insufficiently promoted. Also, the absence of applications from two states was of some concern. Some of the participants and graduates indicated that they would have appreciated more objective feedback on their performance, an objective assessment of their leadership strengths and weaknesses, and a greater opportunity to act on that feedback during the Program (Allen et al., 1997).

The researchers were unable to objectively assess whether individuals in this elite program would have advanced to leadership positions irrespective of their ARLP experience. There was no paired control group without the ARLP experience for comparison, nor has any

assessment been made of the applicants who were not accepted into the program. In addition, there was no assessment of participants during the program (Allen et al., 1997).

  This researcher is concerned that no effort to validate the survey instrument was reported, which could affect the outcomes reported. In addition, it does not appear that the results given answered the questions reportedly asked by the panel. Because we do not know how many were invited to participate in the survey, we have no way to tell the response rate. This does not appear to be a research-based evaluation.

CHAPTER 3: RESEARCH DESIGN

Purpose and Research Questions

The purpose of this study was to determine if participants in the LSU Ag Center's

Agricultural Leadership Development Program have increased their leadership skills and become

more involved in agricultural and community issues. The research questions for this study were

as follows:

1. What are the personal and demographic characteristics the graduates of the Ag Leadership Program, namely, gender, ethnicity, marital status, current age, occupation, and educational level?

2. What occupations were participants engaged in when they began the Ag Leadership Program?

3. What occupations are participants of the Ag Leadership Program engaged in now?

4. To what extent do graduates of the Ag Leadership Program perceive the program has impacted their understanding of the systems and forces affecting agriculture in the U.S?

5. Do the graduates of the Ag Leadership Program perceive they are using their knowledge and skills by becoming actively involved in agriculture issues?

6. To what extent do graduates of the Ag Leadership Program perceive the program has impacted their understanding of selected issues facing Louisiana communities?

7. To what extent do graduates of the Ag Leadership program perceive the program has had a positive impact on their self-concept?

8. To what extent do graduates of the Ag Leadership program perceive the program has had a positive impact on their development of selected leadership competencies?

9. To what extent are graduates of the Ag Leadership Program more likely to take action on influencing agricultural issues?

10. To what extent are graduates of the Ag Leadership Program more likely to take action on influencing non-agricultural public policy issues?

11. To what extent do graduates of the Ag Leadership Program perceive they are using their knowledge and skills by becoming actively involved in non-agricultural public policy issues?

12. To what extent do graduates the Ag Leadership Program perceive the program has had an impact on the quality of their relationships with business associates, family, friends, and their peers?

13. To what extent are graduates of the Ag leadership Program satisfied with selected aspects of the program?

14. To what extent do graduates of the Ag Leadership Program perceive the curriculum met their needs?

15. What topics do graduates of the Ag Leadership Program perceive should be included in the curriculum?

16. What key leadership positions in agriculture have participants in the Ag Leadership Program held since completing the program?

17. What key leadership positions not related to agriculture have participants held since participating in the Ag Leadership Program?

18. What public elected offices have participant's run for and been elected to since participation in the Ag Leadership Program?

19. To what extent are participants in the Ag Leadership Program involved with the alumni association Ag Leaders of Louisiana (ALL)?

20. How important do participants in the Ag Leadership Program perceive the program is to the future of agriculture in Louisiana?

Methodology

Population

The target population for this study was defined as the 252 graduates of Classes I - VIII of the LSU AgCenter's Agriculture Leadership Development Program and the accessible population of 243 was defined as those graduates for whom correct addresses were available. Because this was a relatively small population, the researcher chose to do a census study.

Instrumentation

The questionnaire for this study was developed from the review of the literature and from other research instruments identified in related research (Dhanakumar, 1993); (Foster, 2001); (Howell, 1979, 1985); (Olson, 1996); (Vantreese & Jones, 1993); (Whent et al., 1990). The

questionnaire was validated by a panel of experts from the LSU School of Human Resource Education and Workforce Development and the LSU AgCenter. It was then field tested via e-mail by six graduates from the Arkansas Rural Leadership Development Program (LEAD-AR) and six graduates of the Texas Agriculture Leadership Development Program (TALL). In addition, 18 members of the current Ag Leadership class (IX) were asked to fill out questionnaires.

After these questionnaires were received and the data entered, the various scales were tested for reliability. According to Hair et al., reliability is an assessment of the degree of consistency between multiple measurements of a variable. This researcher used Cronbach's alpha to test for reliability. Cronbach's alpha is the most widely used diagnostic measure of the reliability coefficient that assesses the consistency of an entire scale of related questions. The measures range from 0 to 1. The generally agreed upon lower limit accepted for Cronbach's alpha is .70 (Hair et al., 1998). This researcher set *a priori* the following levels of acceptability: .70 - .79 = acceptable; .80 - .89 = high; .90 and above = very high.

In order for the researcher to identify logical combinations of the variables in this study and to better understand the interrelationships among these variables, a factor analysis was also run on each scale in the questionnaire. Factor analysis is a data reduction technique allowing researchers to determine if many variables can be described by a few factors. It searches for a group of variables, all of which are related to each other (Fraenkel & Wallen, 2002). In order to create a summated scale, an underlying assumption and essential requirement is that the items must be unidimensional. This means they are strongly associated with each other and represent a single concept. "The test of unidimensionality is that each summated scale should consist of items loading highly on a single factor" (Hair et al.,1998, p.117). "Factor loading is the means of

interpreting the role each variable plays in defining each factor. Factor loadings are the correlations of each variable and the factor. Loadings indicate the degree of correspondence between the variable and the factor, with higher loadings making the variable representative of the factor" (Hair et al.,1998, p. 106). The Eigenvalue is determined along with the factor analysis. It is the column sum of squared loadings for a factor. It is also referred to as the *latent root*. It represents the amount of variance accounted for by a factor (Hair et al., 1998, p. 89). The rationale for the latent root (eigenvalue) criterion is that any individual factor should account for the variance of at least a single variable if it is to be retained for interpretation. According to Hair (1998), "Each variable contributes a value of 1 to the total eigenvalue. Thus, only the factors having latent roots or eigenvalues greater than 1 are considered significant; all factors with latent roots less than 1 are considered insignificant and disregarded" (p. 103). The factor analysis for each scale was conducted by extracting only a single factor for the items in each scale (i.e., forcing all items into a single factor) to determine whether it measured a common construct. All scales were relatively strong on internal consistency and were measuring factors as intended. According to Hair (1998), for sample sizes of less than 100, the lowest factor loading to be considered significant is $\pm$ .30 (p.113). Loadings of $\pm$ .40 are considered more important, and if the loadings are $\pm$ .50 or greater, they are considered practically significant. The factor loading is the correlation of the variable and the factor, therefore the squared loading is the amount of the variable's total variance accounted for by the factor (111). The researcher designated .35 *a priori* as the minimum factor analysis acceptable for an item to be included in the survey because this was considered exploratory research. The results of these tests are shown in Tables 1-11.

In Table 1, the Cronbach's alpha for the scale "Participants understanding of the systems and forces affecting agriculture in the United States" scale is .86, clearly above the .70 lower

limit recommended by Hair et al. (1998). Item six (6), "Health Care", was removed because it only loaded at .19. The researcher decided to leave items four (4), "Family Roles and Responsibilities", which loaded at .28 in the belief that this item would load more strongly with the larger number of responses in the final data set. The factor analysis revealed that all other items were strongly associated with the other items in the scale.

Table 1. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to Participants Understanding the Systems and Forces Affecting Agriculture in the United States in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my ability to understand the following systems and forces affecting agriculture in the United States/nationally:	5.55	37.01	
14. Social systems (including welfare)			.80
1. Economic systems (including the global economy, taxation, and markets)			.79
11. Population demographics (domestic and global)			.78
12. Population growth (domestic and global)			.77
13. Rural development in the U.S.			.76
3. Environmental issues (domestic and global)			.73
15. Urban issues in the U.S. (e.g., development and sprawl)			.70
5. Foreign trade			.54
8. Interrelationships of agriculture issues at the local, state, national and international level			.51
9. Non-government organizations			.50
10. Political systems (domestic and global)			.46
7. Immigration			.43
2. Education systems (K-12, colleges, etc.)			.41
4. Family roles and responsibilities			.28
6. Health care			.19

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .86; N = 25.

Table 2 shows a Cronbach's alpha of .63 for the "Participant's involvement in agricultural issues" scale. This is below the recommended level of .70. Item 16, "At the Local

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Level" loaded at .32. Because .32 is only slightly lower than the .35 minimum set by the researcher, this item was left in the final questionnaire. The researcher believed that the larger number of responses in the final data set would increase both the loading on this item above the present level of .32 and the alpha above the minimum .70 recommended by Hair et al. (1998). The factor analysis revealed all other items strongly associated with other items in the scale.

Table 2. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for scaled Items Relating to Participants Involvement in Agriculture Issues in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my involvement in agricultural issues at the following levels:	2.01	50.30	
18. At the international level			.84
17. At the national level			.84
19. At the state level			.70
16. At the local level			.32

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha =.63; $N = 30$.

The Cronbach's alpha for the scale in Table 3 (Participant's ability to understand issues facing Louisiana communities) was .89 indicating a high level of reliability. All items in the scale loaded above .35. Item # 25, "Issues facing youth in Louisiana", loaded at .38.

The scale for Table 4 (Ag leadership program's positive impact on my self-concept) shows a Cronbach's alpha for the scale of .97 indicating a very high reliability. All of the items in the scale loaded above .84 showing a strong level of association with other items in the scale.

The scale in Table 5 (Ag leadership program's positive impact on the development of my leadership competencies) shows a very high level of reliability with a Cronbach's alpha of .92 All of the items in the scale show a factor loading ranging from .54 to 87 indicating a high level of association with the other items in the scale.

Table 3. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to Participants Ability to Understand Issues Facing Louisiana Communities in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my ability to understand the following issues facing Louisiana communities:	6.15	43.92	
32. Social Systems (including welfare)			.84
22. Economic systems (local and state, including taxation)			.80
29. Population demographics (local and state)			.79
31. Rural development			.74
30. Population growth (local and state)			.72
23. Education systems (local and state, K-12, college,)			.72
24. Family roles and responsibilities			.69
26. Louisiana's environmental problems			.66
20. Urban issues in Louisiana (development and sprawl)			.62
27. Louisiana's health care system			.62
28. Political systems (local and state)			.57
21. Crime in Louisiana			.51
33. Wetland loss and restoration on Louisiana's coast			.44
25. Issues facing youth in Louisiana (drugs, teen pregnancy, peer pressure, etc.)			.38

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .89; N = 29.

Table 4. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Self-Concept in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on the following aspects of my self-concept:	5.13	85.46	
37. My belief and confidence in myself			.96
35. My awareness of my beliefs			.95
34. My awareness of my life priorities			.95
36. My awareness of my values			.94
39. My sense that I can make a difference			.90
38. My commitment to my life priorities			.84

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .97; N = 28.

Table 5. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items
Relating to the Program's Impact on Participants Development of Leadership
Competencies in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on the development of my skills in the following leadership competencies:	6.72	56.00	
42. Communicating more effectively			.87
44. Encouraging others to participate in community problem-solving			.87
46. Handling situations in which there are conflicting opinions			.86
47. Leading groups and organizations			.84
51. Speaking effectively in public			.80
40. Analyzing problems and alternative solutions			.80
43. Developing effective groups or teams			.77
41. Building strong organizations			.70
49. Participating in community organizations			.69
50. Seeking long-term solutions rather than quick-fixes to problems and issues			.57
45. Fostering consensus building			.56
48. Networking with others			.54

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .92; N = 29.

The Cronbach's alpha for the scale in Table 6 (Participants influence on agricultural policy issues) is .92 indicating a very high level of reliability. The factor loadings for the items in the scale range from .75 to .87 indicating a strong association among the items in the scale.

The scale in Table 7 (Participants influence on non-agricultural policy issues) shows a very high level of reliability with a Cronbach's alpha of .96. The items in the scale loaded between .82 and .95 indicating a strong association between the other items in the scale.

The Cronbach's alpha for the scale in Table 8 (Participant's involvement in non-agricultural public policy issues) is .78, slightly above the .70 recommended by Hair. The factor loadings for the items ranged between .55 and .92 indicating a strong association with the other items in the scale.

Table 6. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Influence and Actions on Agriculture Issues in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my influence on agricultural issues as indicated by my taking the following actions:	4.70	67.19	
55. I exert effort to educate others on issues facing agriculture			.87
53. I engage in discussions of agriculture issues in organizations to which I belong			.85
56. I exert effort to improve the quality of decisions on agriculture issues			.84
54. I engage in discussions of agriculture issues in personal interactions			.84
57. I exert effort to involve others in issues facing agriculture			.81
52. I am involved in agriculture issues			.77
58. I exert effort to stay current on issues facing agriculture			.75

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .92; *N* = 29.

Table 7. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Influence and Actions on Non-Agriculture Issues in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my influence on non-agricultural public policy issues as indicated by my taking the following actions:	5.71	81.55	
63. I exert effort to improve the quality of decisions on public problems and issues			.95
64. I exert effort to involve others in public policy issues			.93
61. I am engaged in public policy discussions in personal interactions			.93
62. I exert effort to educate others about public policy issues			.92
65. I exert effort to stay current on non-agricultural policy issues			.89
60. I am engaged in public policy discussions in organizations to which I belong			.86
59. I am involved in public policy issues			.82

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .96; *N* = 28.

Table 8. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items
Relating to the Program's Impact on Participants Involvement in Non-Agriculture
Issues in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my involvement in non-agricultural public policy issues at the following levels:	2.48	62.05	
67. Local level			.92
68. State level			.88
66. National level			.75
69 International level			.55

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .78; N = 29.

Table 9, the scale for "Ag leadership program's impact on participant's relationships with others" showed a high level of reliability, with a Cronbach's alpha of .94. The factor loadings ranging between .75 and .96 show a strong association with the other items in the scale.

The Cronbach's alpha for the scale in Table 10 (Participant's satisfaction with the ag leadership program) is .91 indicating a high reliability for the scale. The factor loadings range from .39 to .94. Item # 80, "International seminar" loaded at .39, indicating a lower, but acceptable level of association with the other items in the scale. The other items loaded from .61 to .94, showing a stronger association with the other items in the scale.

Table 11, the scale for (Ag leadership program met my needs) had a high Cronbach's alpha level of .93 indicating strong reliability. The factor loadings for the items in the scale ranged from .58 to .87 indicating a strong level of association with the other items in the scale. Item # 101, "Variety of teaching styles" loaded at the lowest level of .58. Item # 98, "opportunity to work as part of a team," loaded the highest at .87.

Table 9. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Relationships with Others in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my relationships with the following individuals:	4.74	79.05	
75. My peers			.96
74. My friends			.96
73. My family			.96
70. My business associates			.93
72. My elected officials			.75
71. My community leaders			.73

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .94; N = 29.

Table 10. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Participants Satisfaction with the Program in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
I was satisfied with the following aspects of the Ag Leadership Development Program:	6.43	58.44	
85. Travel arrangements			.94
83. On-campus seminars			.93
84. Quality of speakers during on-campus seminars			.88
78. Effectiveness of program directors			.84
77. Communication between director and participants			.83
79. Interaction with classmates			.79
86. Washington D.C. seminar			.70
82. Lodging and meals at all seminars			.67
81. Length of Ag Leadership Program (two years)			.67
76. Chicago board of trade seminar			.61
80. International seminar			.39

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .91; N = 17.

Table 11. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Whether the Program Met Participants Needs in the Agriculture Leadership Program Pilot Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program met my needs in the following areas:	7.81	52.05	
98. Opportunity to work as part of a team			.87
95. Opportunity to improve leadership skills			.85
97. Opportunity to speak before others			.84
88. Coverage of agricultural issues			.81
91. Opportunity for exchange of ideas			.79
92. Opportunity for interaction with speakers			.74
96. Opportunity to practice problem solving			.73
93. Opportunity for networking			.68
100. Variety of activities			.67
89. Coverage of controversial issues			.66
94. Opportunity for travel			.65
99. Selection of topics covered			.64
90. Coverage of social issues			.63
87. Coverage of public policy issues			.61
101. Variety of teaching styles			.58

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .93; N = 29.

Data Collection

Prior to collecting data, the researcher applied for and received a Human Resource Subject Exemption from Louisiana State University's Institutional Review Board (IRB) for Human Research Subject Protection. This document can be viewed in Appendix A.

The researcher gathered data through a written questionnaire mailed to graduates of the Ag Leadership Program. A cover letter (Appendix B), the questionnaire (Appendix C), and a self-addressed stamped envelope was be mailed by the Director of the Ag Leadership Program on July 8th asking graduates to complete the survey and return it by July 22nd. There were 116 responses from the first mailing, a 47.7% response. A second mailing, with a new cover letter (Appendix D), and including an additional questionnaire and self-addressed stamped envelope,

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was sent on July 22nd to remind those who had not responded. Because the Director of the Ag Leadership Program was unavailable, the second mailing was sent by the researcher. Non-respondents were determined by a code on the questionnaire. The return date for the second mailing was August 12th. An additional 15 questionnaires were returned after the second mailing. The return rate was 53.9% (131 out of 243).

Five weeks after the first mailing a phone call was made to a random sample of 25 non-respondents asking them to respond to a randomly selected question from each sub-scale in the questionnaire. An independent *t* test was used to determine if the sample of phone respondents differed significantly from those who responded by mail. The independent *t* test is used to test the equality of the two population means. The test compares the variance of the returned sample ($n = 131$) to the variance of the telephone follow-up sample ($n = 25$; Ott, 1993, p.342). The telephone follow-up sample consisted of 25 randomly selected participants who answered the randomly selected questions by phone. The results of these tests are shown in Table 12.

As can be seen from Table 12, there was a significant difference ($P < .05$) between group 1 and group 2 for questions 14, 27, 37, and 72. Therefore, the data collected from the returned mailed questionnaires cannot be considered to represent all graduates of the LSU AgCenter Agriculture Leadership Development Program. All data reported, conclusions, and recommendations will only apply to those who responded to the mailed questionnaire.

Date Analysis

This was a descriptive study using quantitative data. The researcher used the statistical program SPSS to compile and analyze the data collected. Nominal data, frequencies and percentages were collected for the variables of gender, ethnicity, and the ordinal data of

Table 12. Independent *t* Tests on Selected Questionnaire Items Between Mail and Telephone Respondents.

Item #	Question	Mail Respondents			Telephone Respondents n=25				
		m	*sd*	*n*	*m*	*sd*	*df*	*t*	*P*
14	The Ag Leadership Program had a positive impact on my understanding of urban issues facing agriculture in the U.S.	3.91	.71	117	4.40	.65	151	-3.17	.002
27	The Ag Leadership Program had a positive impact on my understanding of issues facing Louisiana	4.05	.64	127	4.48	.59	154	-3.14	.002
37	The Ag Leadership Program had a positive impact on my commitment to my life priorities	4.24	.68	127	3.84	.90	152	2.54	.012
72	The Ag Leadership Program had a positive impact on my relationship with my family	4.20	.71	129	3.88	.60	152	2.12	.036
94	The curriculum met my need for the opportunity to improve my leadership skills	4.67	.49	127	4.48	.52	152	1.76	.088
43	The Ag Leadership Program had a positive impact on the development of my skills in encouraging others to participate in community problem-solving	4.22	.65	127	4.36	.57	152	-1.06	.295
67	The Ag Leadership Program had a positive impact on my involvement in non-agricultural issues at the national level.	3.43	.83	127	3.28	.69	152	.95	.348
79	I was satisfied with the International seminar.	4.58	.79	124	4.40	.19	150	.90	.377
58	The Ag Leadership Program had a positive impact on my influence on non-agricultural issues by my becoming involved in public policy issues	3.84	.75	124	4.00	.87	151	-.84	.406
17	The Ag Leadership Program had a positive impact on my involvement in agricultural issues at the national level	3.85	.93	117	3.92	1.04	153	-.30	.769
53	The Ag Leadership Program had a positive impact on my influence on agricultural issues by my engaging others in discussions of agriculture issues in personal interactions	4.44	.54	129	4.44	.71	153	-.01	.992

Note. One item was selected for this analysis from each of the sub-scales.

educational level. The results from the interval data were reported with number, mean, range and

standard deviation. Qualitative responses were reported in both narrative and table form. The

final questionnaire and data were again tested for reliability and a factor analysis was run on each

scale. The results are shown in Tables 13-23.

As can be seen in Table 13, the scale for "Participants understanding of the systems and

forces affecting agriculture in the United States," the Cronbach's alpha remained at .86, above.70

lower limit accepted by Hair (1998).

Table 13. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items
Relating to Participants Understanding the Systems and Forces Affecting Agriculture
in the United States in the Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my ability to understand the following systems and forces affecting agriculture in the United States/nationally:			
	5.08	36.32	
11. Population growth (domestic and global)			.69
2. Education systems (K-12, colleges, etc.)			.66
6. Immigration			.66
12. Rural development in the U.S.			.64
13. Social systems (including welfare)			.64
10. Population demographics (domestic and global)			.62
4. Family roles and responsibilities			.60
14. Urban Issues in the U.S. (e.g. development and sprawl)			.60
1. Economic systems (including the global economy, taxation, and markets)			.57
8. Non-government organizations			.57
5. Foreign trade			.57
9. Political systems (domestic and global)			.57
3. Environmental issues (domestic and global)			.53
7. Interrelationships of agriculture issues at the local, state, national and international levels			.48

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree,
3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .86; N = 117.

Item four (4), "Family Roles and Responsibilities", loaded at .60 in the final data. The factor

loading for the items in the final data scale ranged from .48 to .69 indicating a strong association

with the other items in the scale.

The scale in Table 14, "Participant's involvement in agricultural issues," has a

Cronbach's alpha of .80 showing a high reliability. The factor loading range for the entire scale

increased from .32 to .84 to .67 to .89, showing a strong level of association among the items in

the scale.

Table 14. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items
         Relating to Participants Involvement in Agriculture Issues in the Agriculture
         Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my involvement in agricultural issues at the following levels:	2.56	63.99	
16. At the state level			.89
17. At the national level			.89
18. At the international level			.74
15. At the local level			.67

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree,
3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .80; $N = 126$.

Table 15, the scale for "Participant's ability to understand issues facing Louisiana

communities" has a Cronbach's alpha of .91, a high level of reliability. The factor loadings

ranged from .53 to .77 indicating a strong level of association with other items in the scale.

The Cronbach's alpha for scale in Table 16 (Ag leadership program's positive impact on

my self-concept) was .90, showing a high reliability. The factor loadings ranged from .72 to .87

showing a strong association with other items in the scale.

The scale in Table 17 (Ag leadership program's positive impact on the development of

my leadership competencies) had a very high level of reliability, with a Cronbach's alpha of .93.

Table 15. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to Participants Ability to Understand Issues Facing Louisiana Communities in the Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my ability to understand the following issues facing Louisiana communities:	6.32	45.16	
22. Education systems (local and state, K-12, college,)			.77
31. Social Systems (including welfare)			.74
29. Population growth (local and state)			.73
20. Crime in Louisiana			.70
28. Population demographics (local and state)			.70
24. Issues facing youth in Louisiana (drugs, teen pregnancy, peer pressure, etc.)			.69
23. Family roles and responsibilities			.68
26. Louisiana's health care system			.67
21. Economic systems (local and state, including taxation)			.67
30. Rural development			.66
19. Urban issues in Louisiana (development and sprawl)			.65
25. Louisiana's environmental problems			.60
27. Political systems (local and state)			.57
32. Wetland loss and restoration on Louisiana's coast			.53

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .91; N = 127.

The factor loadings ranged from .72 to .86 indicating a strong level of association with the other items in the scale.

The Cronbach's alpha for the scale in Table 18 (Participants influence on agricultural policy issues) is .92 showing a very high level of reliability. There is also a strong level of association among the items in the scale with factor loadings ranging from .77 to .85.

Table 16. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Self-Concept in the Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on the following aspects of my self-concept:	4.06	67.62	
33. My awareness of my life priorities			.87
34. My awareness of my beliefs			.84
35. My awareness of my values			.84
36. My belief and confidence in myself			.84
37. My commitment to my life priorities			.81
38. My sense that I can make a difference			.72

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .90; *N* = 127.

Table 17. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Development of Leadership Competencies in the Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on the development of my skills in the following leadership competencies:	6.94	57.80	
40. Building strong organizations			.86
42. Developing effective groups or teams			.81
46. Leading groups and organizations			.80
49. Seeking long-term solutions rather than quick-fixes to problems and issues			.79
48. Participating in community organizations			.78
45. Handling situations in which there are conflicting opinions			.77
41. Communicating more effectively			.76
39. Analyzing problems and alternative solutions			.76
47. Networking with others			.71
44. Fostering consensus building			.71
50. Speaking effectively in public			.68
43. Encouraging others to participate in community problem-solving			.67

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .93; *N* = 127.

Table 18. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Influence and Actions on Agriculture Issues in the Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my influence on agricultural issues as indicated by my taking the following actions:	4.76	67.97	
53. I engage in discussions of agriculture issues in personal interactions			.85
52. I engage in discussions of agriculture issues in organizations to which I belong			.85
55. I exert effort to improve the quality of decisions on agriculture issues			.84
51. I am involved in agriculture issues			.83
57. I exert effort to stay current on issues facing agriculture			.82
56. I exert effort to involve others in issues facing agriculture			.81
54. I exert effort to educate others on issues facing agriculture			.77

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .92; N = 129.

The scale reported in Table 19 (Participants influence on non-agricultural policy issues) is also high in reliability with a Cronbach's alpha of .89. The factor loadings range from .64 to .85 indicating a strong level of association with other items in the scale.

The Cronbach's alpha for the scale in Table 20 (Participant's involvement in non-agricultural public policy issues) remained the lowest for all the scales at .78, showing an acceptable level of reliability. The factor loadings ranged between .61 and .87 indicating a strong level of association with other items in the scale.

The reliability for the scale in Table 21 "Ag leadership program's impact on participant's relationships with others" was very high with a Cronbach's alpha of .91. There was a strong level of association among the items in the scale with factor loadings ranging from .79 to .88.

Table 19. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Influence and Actions on Non-Agriculture Issues in the Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my influence on non-agricultural public policy issues as indicated by my taking the following actions:	4.22	60.31	
63. I exert effort to involve others in public policy issues			.85
62. I exert effort to improve the quality of decisions on public problems and issues			.84
61. I exert effort to educate others about public policy issues			.83
60. I am engaged in public policy discussions in personal interactions			.79
59. I am engaged in public policy discussions in organizations to which I belong			.75
58. I am involved in public policy issues			.72
64. I exert effort to stay current on non-agricultural policy issues			.64

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .89; *N* = 127.

Table 20. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items Relating to the Program's Impact on Participants Involvement in Non-Agriculture Issues in the Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my involvement in non-agricultural public policy issues at the following levels:	2.45	61.25	
67. National level			.87
66. State level			.86
68 International level			.78
65. Local level			.61

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .78; *N* = 127.

Table 21. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items
Relating to the Program's Impact on Participants Relationships with Others in the
Agriculture Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program has had a positive impact on my relationships with the following individuals:	4.20	69.95	
72. My family			.88
74. My peers			.86
73. My friends			.86
70. My community leaders			.82
69. My business associates			.82
71. My elected officials			.79

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree,
3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .91; *N* = 129.

The Cronbach's alpha for the scale in Table 22 (Participant's satisfaction with the ag

leadership program) is .89 showing a high level of reliability for this scale. The factor loadings

Table 22. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items
Relating to the Participants Satisfaction with the Program in the Agriculture
Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
I was satisfied with the following aspects of the Ag Leadership Development Program:	5.48	49.84	
82. On-campus seminars			.78
84. Travel arrangements			.77
80. Length of Ag Leadership Program (two years)			.76
83. Quality of speakers during on-campus seminars			.75
81. Lodging and meals at all seminars			.74
85. Washington D.C. seminar			.74
77. Effectiveness of program directors			.72
76. Communication between director and participants			.69
78. Interaction with classmates			.68
79. International seminar			.65
75. Chicago board of trade seminar			.43

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree,
3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .89; *N* = 124.

ranged from .43 to .77, lower than the other scales, but still showing a strong level of association

with other items in the scale.

The scale in Table 23 (Ag leadership program met my needs) shows a Cronbach's alpha

of .92 indicating very high reliability. The factor loadings ranged from .59 to .80. This indicates

a strong level of association with other items in the scale.

Table 23. Alpha, Eigenvalue, Percent Variance Explained, and Factor Loading for Scaled Items
Relating to the Whether the Program Met Participants Needs in the Agriculture
Leadership Program Final Questionnaire

Scale/Items	Eigen-Value	Percent Variance Explained	Factor Loading
The Ag Leadership Program met my needs in the following areas:	7.21	48.03	
98. Selection of topics covered			.80
91. Opportunity for interaction with speakers			.77
94. Opportunity to improve leadership skills			.76
97. Opportunity to work as part of a team			.75
95. Opportunity to practice problem-solving			.75
99. Variety of activities			.74
96. Opportunity to speak before others			.73
100. Variety of teaching styles			.68
90. Opportunity for exchange of ideas			.66
86. Coverage of public policy issues			.65
88. Coverage of controversial issues			.64
87. Coverage of agricultural issues			.64
92. Opportunity for networking			.62
93. Opportunity for travel			.61
89. Coverage of social issues			.59

Note. The scale used for these items was as follows: 1=Strongly Disagree, 2=Disagree,
3=Undecided, 4=Agree, 5=Strongly Agree. alpha = .92; $N = 127$.

The internal consistency on all scales in the final data was at or above the acceptable

levels recommended by Hair and set *a priori* by the researcher of .70 - .79 = acceptable, .80 - .89

= high, and .90 and above = very high. The lowest scale reliability was $a = .78$, in the acceptable

range, and the highest reliability was $a = .93$, in the very high range. Only one scale (Table 20)

was in the acceptable reliability range set by the researcher. Four scales, Tables 13, 14, 19, and

22 fell within the high reliability range. Six scales, Tables 15, 16, 17, 18, 91, and 92 fell within the very high reliability range.

Hair states that, for a sample of 100 respondents, factor loadings of .55 and above are significant. The factor loadings for all but two scales in the final questionnaire were significant. Item #75, "Chicago Board of Trade" loaded at .43; item #7, "Interrelationships of agriculture issues at the local, state, national and international levels loaded at .48. Six additional items in the final data loaded below .60. Item numbers 3, "Environmental issues" and 32, "Wetland loss and restoration on the Louisiana coast loaded at .53; and items #1 "Economic systems," #5 "Foreign trade," #8 "Non-government organizations," #9 "Political systems at the national level," and #27 "Political systems at the state and local level" all loaded at .57.

Limitations of the Study

Conclusions drawn from this study are subject to the limitations inherent in surveys, i.e., respondents, instruments, and methodology. The opinions of the participants reflect what they believed to be true at the time they answered the questionnaire. They may be inclined not to give accurate information or their true comments because the LSU AgCenter is conducting the program or because of personal relationships with present and former directors of the program. The study is also limited by obtaining only the participants' opinions and not that of their followers, spouses or partners, co-workers, or supervisors. According to Bass and Tammarino (1989, as cited in Bass, 1990), self-ratings of leadership were not predictive of the performance and promotability of Naval officers, although the ratings of their supervisors were. The researcher acknowledges that it would be valuable to include the perception of participants' followers as well. There is, however, difficulty in implementing this approach. Participants may no longer be associated or active in the same occupation or organizations as they were when they

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began the program. Organizations and followers may have changed over time. In addition, this researcher found no systematic and reliable procedure for collecting data from followers.

History is a major threat. Ideally, researchers would analyze both pre- and post- data from participants or compare results to a control group in order to determine the impact of the program. In this case, however, there is no pre data available, so the researcher must rely on the post-data alone. Another difficulty is the lack of a definitive definition of the term "leadership". Because leadership means different things to different people and may have been addressed differently in each class, it is difficult to determine how the program has affected participants' leadership abilities. Maturation may be a threat because as little as a year and as many as seventeen years have elapsed since participants were exposed to the program.

CHAPTER 4: FINDINGS

The population for this study was the 252 graduates of Classes I thru VIII of the LSU AgCenter's Agriculture Leadership Development Program. Because this was a relatively small population, the researcher chose to do a census study. After removing the graduates for whom correct addresses were not available, the accessible frame was 243. There were 116 responses from the first mailing and 15 after the second mailing, resulting in a 53 percent response rate. All of the responses ($N = 131$) were used for the analyses required by the research questions in this study.

Research Question 1: Personal and Demographic Characteristics of the Graduates of the LSU AgCenter Agriculture Leadership Development Program

The first research question of this study was to describe the personal and demographic characteristics of Classes I-XIII of the LSU AgCenter Agriculture Leadership Development Program. Characteristics included gender, ethnicity, marital status, educational level, current age and occupation.

Table 24 (categorical data) shows the descriptive personal characteristics of the respondents. Most of the respondents ($N = 120$, 91.60%) were male and most described themselves as white ($N = 128$, 97.70%). The majority ($N = 122$, 93.10%) were married. Seventy-two (55%) were college graduates, 10 (7.60 %) had completed some graduate work, and 20 (15.30%) had obtained a graduate degree. High school graduates made up 14.50 percent ($N = 19$) of the respondents. The age of respondents ranged from 29-66 with an average age of 45.7.

Research Question 2: Occupations Held by Participants When They Began the Ag Leadership Program

Participants were asked to list their occupation when they began the Ag Leadership Program and all major commodities in which they were involved. Table 23 gives a complete list

Table 24. Personal Characteristics of Graduates of the LSU AgCenter Agriculture Leadership
Development Program

Personal Characteristics	*N*	%
Gender		
Male	120	91.6
Female	10	7.6
Missing data	1	.8
		100
Ethnicity		
White	128	97.7
Black	2	1.5
Hispanic	0	0
Asian	0	0
Other	0	0
Missing data	1	.8
		100
Marital Status		
Married	122	93.1
Divorced	6	4.6
Never Married	2	1.5
Separated	0	0
Widowed	0	0
Missing data	1	.8
		100
Educational Level		
College Graduate	72	55.0
Graduate Degree	20	15.3
High School Graduate	19	14.5
Some Post Graduate Work	10	7.6
Some College	9	6.9
Technical School Graduate	1	.8
Completed Some High School	0	0
		100

Note. $N = 131$

of responses. Some listed more than one commodity. Production agriculture was the occupation

most frequently listed by participants at the beginning of the program. Eighty respondents

described themselves as farmers or ranchers. The commodities in which they were most involved

included: sugarcane (32), soybeans (29), cotton (24), corn (20), cattle (19), rice (19), and timber

(15). Other grains included wheat, milo, and oats. Sweet potatoes, sunflowers, vegetables and horses were also listed. There were three alligator farmers, eight crawfish farmers, two poultry farmers, and a dairy farmer. Two commercial fishermen were involved in shrimp, fish, crabs, and oysters. There were also two nursery owners.

Forty-two respondents (32%) described themselves as being involved in some type of agri-business (sales and service), seven in banking, farm finance and bookkeeping, and twelve in farm management. Other occupations listed included: logging, private business, marketing, public relations, newspaper publishing, physical therapy, Director of a Chamber of Commerce, veterinarian, investment representative, land management, cotton specialist, merchant, executive, construction, operator for DOW Chemical, biologist, agronomist, and a volunteer.

Research Question 3. Occupations in Which Participants Of the Ag Leadership Program Are Now Engaged

Nineteen respondents (16%) indicated they had changed occupations since finishing the Ag Leadership program, but were still in some type of agriculture related business. Some moved into management positions within their agriculture related businesses or managers of agriculture/commodity associations. Six went into sales, agri-business and service. The Louisiana Department of Agriculture and Forestry gained an Assistant Commissioner, Assistant Manager, and a staff member who were Ag Leadership graduates. Two graduates became landscape and lawn care contractors and three went into land management. Five went into production agriculture or became farm managers. One respondent, who came into the Ag Leadership program as a farmer, now describes himself as a "more diversified" farmer. One became a regional sales manager for timber, and another now has a career as a Research Associate with Louisiana State University. Eleven participants left the field of agriculture altogether.

Table 25. Occupations Held by Participants When They Began the Ag Leadership Program

Occupation	*n*
Farmer-Single Commodity	19
Cotton	5
Dairy	1
Poultry	1
Rice	2
Sugarcane	9
Sweet Potatoes	1
Farmers/Ranchers-Multiple Commodities	56
Farm Managers/Book-keepers	6
Alligators	1
Catfish	9
Cattle	15
Commercial Fisheries	1
Corn	18
Cotton	15
Crabs	1
Grains	2
Horses	2
Milo	4
Oats	1
Okra	1
Oysters	2
Poultry	1
Peppers	1
Rice	16
Shrimp	1
Soybeans	23
Sunflowers	1
Sugar Cane	12
Sweet Potatoes	2
Timber	5
Wheat	8
Other Occupations-Part-time Farmers	36
Ag Chemical Sales	2
Ag Equipment Sales	1
Ag Finance	2
Agronomist	1
Banking	2
Biologist	1
Business Owner	1
Construction Owner	1

(table con'd.)

Occupation	n
Cotton Specialist	1
Customer Support Manager	1
Director, Chamber of Commerce	1
Executive	1
Forester	6
Grain Merchant	2
Land Management	1
Loan manager	1
Manager	1
Marketing	1
Nursery Owner	2
Operator-Dow Chemical	1
Physical Therapist	1
Procurement Forester	1
Public Relations	1
Volunteer	1
Part-time Farmer Commodities	14
Alligators	2
Cattle	6
Corn	2
Cotton	5
Forest Products	1
Ornamental Plants	2
Poultry	1
Rice	3
Seafood	1
Sod	1
Soybeans	5
Sugar Cane	9
Timber	9
Wheat	2
Other Occupations	16
Ag Business Owner	1
Ag Equipment Dealer	1
Ag Representative	1
Ag Sales	4
Banker	2
Business Owner	1
Logger	1
Newspaper Publisher	1
Sales	1
Sales Manager	1
Veterinarian	1
Vice-President of Grain Company	1

$N = 130$

They went into private business, real estate, life insurance, banking, construction, food processing, trucking, and management in other types of businesses. One participant became a law firm manager, another became a developer; and one retired.

Table 26.   Occupations in Which Participants Are Now Engaged.

Occupation	*n*
Farmer-Single Commodity	22
Cotton	5
Dairy	1
Nursery Owner	2
Poultry	1
Rice	1
Sugar cane	11
Timber	1
Farmers-Multiple Commodities	34
Farm Managers	4
Farm Book-keepers	1
Commercial Fishermen	1
Alligators	1
Catfish	8
Cattle	14
Corn	16
Grains	2
Horses	2
Milo	3
Oats	1
Cotton	15
Crabs	1
Oysters	2
Rice	14
Shrimp	1
Soybeans	23
Sugar Cane	14
Sunflowers	1
Sweet potatoes	1
Timber	3
Wheat	7
Other Occupations-Part-time Farmers	33
Ag Association Manager	1
Ag Business	3
Agronomist	1
As Sales	1

(table con'd.)

Occupation	*n*
Assistant Commissioner of Louisiana Department Ag & Forestry	1
Assistant Manager Louisiana Department Ag & Forestry	1
Banker	1
Construction Owner	1
Construction Manager	1
Director, Chamber of Commerce	1
Elected Official	1
Executive	1
Food Processor	1
Forester	3
Land Manager	5
Landscape & Lawn care	1
Manager	1
Manager of Ag Land Company	1
Miner	1
Operator-Dow Chemical	1
Physical Therapist	1
Regional Timber Sales	1
State Forester	1
Trucker-Ag Equipment/Oil Field Equipment	1
Volunteer	1
Part-time Farmers-Commodities	19
Alligators	2
Cattle	7
Corn	5
Cotton	6
Forest Products	1
Grains	1
Milo	2
Okra	1
Ornamental Plants	2
Peppers	1
Poultry	1
Rice	5
Seafood	1
Sod	1
Soybeans	5
Sugar Cane	9
Sweet Potatoes	1
Timber	12
Wheat	3
Other Occupations	20
Ag Representative	1

(table con'd.)

Occupation	n
Ag sales	1
Assistant Manager, Louisiana Department of Ag & Forestry	1
Banker	2
C E O-Ag Equipment	1
Customer Support-Sales Manager	1
Department of Ag & Forestry	1
Investment Representative	1
Landscape Construction	1
Law Firm Administrator	1
Life Insurance Agent	1
Logger	1
President-Barge & River Services	1
Private Business	1
Real estate	1
Research Associate-LSU AgCenter	1
Retired	1
Sales Manager	2
Veterinarian	1

$N = 130$

Research Question 4: Respondents' Perceptions of Their Ability to Understand Systems and Forces Affecting Agriculture in the United States/Nationally

All responses to the 100 Likert-type scaled items in the questionnaire were recorded on a

five point scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 =

Strongly Agree. The grand means for each scale were interpreted as follows:

Grand Mean = 1.00 – 1.49: Strongly Disagree

Grand Mean = 1.50-2.49: Disagree

Grand Mean = 2.50-3.49: Undecided

Grand Mean = 3.50-4.49: Agree

Grand Mean = 4.50-5.00: Strongly Agree

As can be seen in scale in Table 25, when participants were asked if the Ag Leadership

Program had a positive impact on their ability to understand 14 selected systems and forces

affecting agriculture in the United States, the Grand *M* for the entire scale was 3.97, which

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indicated that the respondents agreed that the Ag Leadership Program has had a positive impact.

The respondents agreed with all of the items in the scale. The highest mean (4.32) was for item

#7, Interrelationships of agriculture issues at the local, state, national, and international levels.

Domestic and global environmental issues ($M = 4.25$) economic systems ($M = 4.24$), and foreign

trade ($M = 4.20$) also fell in the higher end of the agree scale. Immigration had the lowest mean

at 3.50, followed by educational systems and social systems with means of 3.70, both still in the

Agree category.

Table 27. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to
Participants Understanding of Systems and Forces Affecting Agriculture in the
United States in the Agriculture Leadership Program Final Questionnaire

Scale/Items	*M*	*SD*
The Ag Leadership Program has had a positive impact on my ability to understand the following systems and forces affecting agriculture in the United States/nationally:	**3.97**	**.40**
7. Interrelationships of agriculture issues at the local, state, national and international levels	4.32	.61
3. Environmental issues (domestic and global)	4.25	.52
5. Foreign trade	4.20	.61
1. Economic systems (including the global economy, taxation, and markets)	4.24	.54
12. Rural development in the U.S.	4.09	.60
9. Political systems (domestic and global)	4.02	.64
10. Population demographics (domestic and global)	4.02	.59
11. Population growth (domestic and global)	4.00	.69
14. Urban Issues in the U.S. (e.g. development and sprawl)	3.97	.68
4. Family roles and responsibilities	3.85	.80
8. Non-government organizations	3.77	.71
2. Education systems (K-12, colleges, etc.)	3.70	.78
13. Social systems (including welfare)	3.70	.69
6. Immigration	3.50	.85

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .86; *N* = 117.

Research Question 5: Respondents' Perception of How They Are Using Their Knowledge and Skills Gained in the Ag Leadership Program by Becoming Actively Involved in Agricultural Issues

As can be seen in from the scale in Table 26, when asked how participants are using their knowledge and skills gained in the Ag Leadership program by becoming actively involved in agricultural issues, the Grand M for the entire scale was 3.97, which indicated that the respondents agreed that they were becoming actively involved in agricultural issues. The respondents indicated the highest levels of participation in agricultural issues at the local ($M =$ 4.35) and state ($M =$ 4.23) levels. There was less participation at the national level ($M =$ 3.86) and international level ($M =$ 3.44).

Table 28. Frequency, Mean, and Standard Deviation of the Scales and Scale Items Relating to the Program's Impact on Participants Involvement in Agriculture Issues in the Agriculture Leadership Program Final Questionnaire

Scale/Items	M	SD
The Ag Leadership Program has had a positive impact on my involvement in agricultural issues at the following levels:	**3.97**	**.66**
15. At the local level	4.35	.62
16. At the state level	4.23	.75
17. At the national level	3.86	.94
18. At the international level	3.44	.94

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale;   alpha = .80; *N*= 126.

Research Question 6: Respondents' Perception of the Extent to Which Participation in the Ag Leadership Program Impacted Their Understanding of Selected Issues Facing Louisiana Communities

Participants were also asked if the Ag Leadership Program had a positive impact on their ability to understand selected issues facing Louisiana. The scale in Table 27 shows the Grand Mean for this scale was 3.79 indicating the respondents agreed the Ag Leadership program had a positive impact on their understanding of these issues. The respondents indicated they had a

greater level of understanding in the issues of wetland loss and restoration on Louisiana's coast

(*M* = 4.17), rural development (*M* = 4.14), and Louisiana's environmental problems (*M* = 4.14).

They indicated lower levels of understanding in the issues of crime in Louisiana (*M* = 3.20),

issues facing youth in Louisiana (*M* = 3.23), and the Louisiana health care system (*M* = 3.30).

Research Question 7: Respondents' Perception of How Participation in the Ag Leadership Program Impacted Their Self-Concept

When asked if the Ag Leadership Program had a positive influence on certain aspects of

their self-concept, respondents indicated, by a Grand Mean of 4.22 (Table 28) that they agreed

the program had a positive impact on their self-concept. Their mean responses indicated a greater

Table 29. Frequency, Mean, and Standard Deviation of the Scale and Scale Items Relating to Participants Understanding of Issues Facing Louisiana Communities in the Agriculture Leadership Program Final Questionnaire

Scale/Items	*M*	*SD*
The Ag Leadership Program has had a positive impact on my ability to understand the following issues facing Louisiana communities:	**3.79**	**.48**
32. Wetland loss and restoration on Louisiana's coast	4.17	.68
30. Rural development	4.14	.64
25. Louisiana's environmental problems	4.10	.60
27. Political systems (local and state)	4.06	.63
19. Urban issues in Louisiana (development and sprawl)	3.98	.62
21. Economic systems (local and state, including taxation)	3.98	.62
29. Population growth (local and state)	3.97	.69
28. Population demographics (local and state)	3.94	.68
23. Family roles and responsibilities	3.81	.80
22. Education systems (local and state, K-12, college,)	3.72	.79
31. Social Systems (including welfare)	3.49	.69
26. Louisiana's health care system	3.30	.75
24. Issues facing youth in Louisiana (drugs, teen pregnancy, peer pressure, etc.)	3.23	.90
20. Crime in Louisiana	3.20	.80

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .90; *N* = 127.

impact in their belief that they could make a difference ($M = 4.40$), their belief and confidence in themselves ($M = 4.39$), and their commitment to their life priorities ($M = 4.24$). Their mean responses on the awareness of their life priorities ($M = 4.16$), awareness of their values ($M = 4.13$), and awareness of their beliefs ($M = 4.05$) were lower, but still in the agree range.

Table 30. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to the Program's Impact on Participants Self-Concept in the Agriculture Leadership Program Final Questionnaire

Scale/Items	*M*	*SD*
The Ag Leadership Program has had a positive impact on the following aspects of my self-concept:	**4.22**	**.58**
38. My sense that I can make a difference	4.40	.62
36. My belief and confidence in myself	4.39	.66
37. My commitment to my life priorities	4.24	.68
33. My awareness of my life priorities	4.16	.73
35. My awareness of my values	4.13	.74
34. My awareness of my beliefs	4.05	.78

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .90; *N* =127.

Research Question 8: Respondents' Perception of How Participation in the Ag Leadership Program Impacted Their Development of Selected Leadership Competencies

One of the primary performance objectives of the Ag Leadership Program is for participants to develop leadership skills. Participants were asked if the Ag Leadership Program had a positive impact on their development of selected leadership competencies. The Grand Mean, shown in Table 29, for this scale was 4.26 indicating that the respondents agreed the Ag Leadership program had a positive impact on their development of these competencies. The mean responses indicated that the most positive impacts were made in communicating effectively ($M = 4.48$), networking with others ($M = 4.41$), leading groups and organizations (M

= 4.35), and developing effective groups and teams (*M* = 4.29). Although it fell in the agree

range, responses to respondents ability to foster consensus building had the lowest mean of 3.92.

Research Question 9: Respondents' Response on the Extent to Which They are More Likely to Take Action on Influencing Agricultural Issues as a Result of Participating in the Ag Leadership Program

All respondents agreed, as indicated by a Grand Mean of 4.40 shown in Table 30, that, as

a result of participating in the Ag Leadership program, they are more likely to take action on

influencing agricultural issues. The means for respondents staying current on issues facing

agriculture (*M* = 4.49), engaging in discussions of agriculture issues in their personal interactions

(*M* = 4.44), and engaging others in discussions of agriculture issues in organizations to which

they belong (*M* = 4.43) were the highest. The lowest mean (*M* = 4.27) was for the impacts on

respondents exerting an effort to involve others in issues facing agriculture.

Table 31. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to Participants Development of Leadership Competencies in the Agriculture Leadership Program Final Questionnaire

Scale/Items	*M*	*SD*
The Ag Leadership Program has had a positive impact on the development of my skills in the following leadership competencies:	**4.26**	**.48**
41. Communicating more effectively	4.48	.59
47. Networking with others	4.41	.58
46. Leading groups and organizations	4.35	.65
48. Participating in community organizations	4.33	.62
50. Speaking effectively in public	4.31	.62
42. Developing effective groups or teams	4.29	.63
40. Building strong organizations	4.24	.66
43. Encouraging others to participate in community problem-solving	4.23	.66
39. Analyzing problems and alternative solutions	4.20	.61
45. Handling situations in which there are conflicting opinions	4.19	.63
49. Seeking long-term solutions rather than quick-fixes to problems and issues	4.14	.71
44. Fostering consensus building	3.92	.67

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .93; *N* = 127.

Table 32. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to the Program's Impact on Participants Influence and Actions on Agriculture Issues in the Agriculture Leadership Program Final Questionnaire

Scale/Items	M	SD
The Ag Leadership Program has had a positive impact on my influence on agricultural issues as indicated by my taking the following actions:	**4.40**	**.49**
57. I exert effort to stay current on issues facing agriculture	4.49	.52
53. I engage in discussions of agriculture issues in personal interactions	4.44	.54
52. I engage in discussions of agriculture issues in organizations to which I belong	4.43	.58
54. I exert effort to educate others on issues facing agriculture	4.40	.61
55. I exert effort to improve the quality of decisions on agriculture issues	4.36	.64
51. I am involved in agriculture issues	4.37	.61
56. I exert effort to involve others in issues facing agriculture	4.27	.65

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .92; *N* = 129.

Table 33. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to the Program's Impact on Participants Influence and Actions on Non-Agriculture Issues in the Agriculture Leadership Program Final Questionnaire

Scale/Items	M	SD
The Ag Leadership Program has had a positive impact on my influence on non-agricultural public policy issues as indicated by my taking the following actions:	**3.95**	**.50**
64. I exert effort to stay current on non-agricultural policy issues	4.14	.60
60. I am engaged in public policy discussions in personal interactions	4.02	.57
59. I am engaged in public policy discussions in organizations to which I belong	3.99	.60
62. I exert effort to improve the quality of decisions on public problems and issues	3.95	.66
61. I exert effort to educate others about public policy issues	3.85	.66
63. I exert effort to involve others in public policy issues	3.85	.65
58. I am involved in public policy issues	3.84	.75

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean= 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .89; *N* = 124.

Research Question 10: Respondents' Response on the Extent to Which They are More Likely to Take Action on Influencing Non-Agricultural Issues as a Result of Participating the Ag Leadership Program

A similar question asked whether the participants in Ag Leadership program are more likely to take action on influencing non-agricultural public policy issues. Respondents agreed as indicated by Grand Mean of 3.95 that they are more likely to take action on influencing non-agricultural public policy issues. These results are shown in the scale in Table 33. Grand mean respondents staying current on non-agricultural public policy issues ($M = 4.14$) and their engaging in public policy discussions in their personal interactions ($M = 4.02$) were the highest. The lowest means were for respondents exerting effort to educate others about public policy issues ($M = 3.85$) and their involvement in public policy issues ($M = 3.84$).

Research Question 11: Respondents' Perception of How They Are Using Their Knowledge and Skills Gained in the Ag Leadership Program by Becoming Actively Involved in Non-Agricultural Issues

When asked their level of involvement in non-agricultural issues, respondents indicated less involvement that in agricultural issues, Table 32 shows a Grand Mean for the scale of 3.59, indicating a lower level of agreement than that for involvement in agricultural issues ($M = 3.97$). The highest mean level for level of involvement in non-agricultural issues was at the local level ($M = 4.02$) and the least at the international level ($M = 3.09$). Involvement at the state level showed a mean of 3.83 followed by the national level with a mean of 3.42.

Research Question 12: Respondents' Response To the Extent to Which They Perceive Participation in the Ag Leadership Program Had a Positive Impact on the Quality of Their Relationships with Business Associates, Family, Friends, and Peers?

As can be seen by the scale in Table 33, respondents agreed by a Grand Mean of 4.25, that the Ag Leadership Program had positive impacts on their relationships with others with whom they interact. The mean levels for positive impacts with respondents' peers ($M = 4.33$) and

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community leaders (*M* = 4.26) were the highest. The mean for respondents' relationships with

their family (*M* = 4.20) was the lowest.

Table 34. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to
the Program's Impact on Participants Involvement in Non-Agriculture Issues in the
Agriculture Leadership Program Final Questionnaire

Scale/Items	*M*	*SD*
The Ag Leadership Program has had a positive impact on my involvement in non-agricultural public policy issues at the following levels:	**3.59**	**.60**
65. Local level	4.02	.70
66. State level	3.81	.72
67. National level	3.42	.83
68 International level	3.09	.83

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The
grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly
Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean
= 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the
Grand Mean and Standard Deviation for the scale. alpha = .78; *N* = 127.

Table 35. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to
the Program's Impact on Participants Relationships with Others in the Agriculture
Leadership Program Final Questionnaire

Scale/Items	*M*	*SD*
The Ag Leadership Program has had a positive impact on my relationships with the following individuals:	**4.25**	**.55**
74. My peers	4.33	.64
70. My community leaders	4.26	.58
69. My business associates	4.24	.66
71. My elected officials	4.23	.61
73. My friends	4.21	.71
72. My Family	4.20	.71

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The
grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly
Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean
= 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the
Grand Mean and Standard Deviation for the scale. alpha = .91; *N* = 129.

Research Question 13: Respondents' Satisfaction with Selected Aspects of the Ag Leadership Program

Respondents in the Ag Leadership Program indicated, by a Grand Mean of 4.59 shown in

the scale in Table 34, that they strongly agreed they were satisfied with selected aspects of the

Ag leadership program. They had the highest level of agreement that they were satisfied with

the Washington D.C. Seminar and Interaction with classmates ($M = 4.71$). Effectiveness of

program directors followed with a mean of 4.65 and lodging and meals at all seminars was next,

with a mean of 4.53. The Chicago Board of Trade seminar, with a lower mean of 4.52, still fell

within the strongly agree criteria.

Research Question 14: Respondents' Perception of the Extent to Which the Ag Leadership Program Curriculum Met Their Needs

When asked if the Ag Leadership Program met their needs in selected areas, respondents

responded that they agreed, as indicated by a Grand Mean of 4.38 in Table 35. The means for

the opportunity to improve their leadership skills ($M = 4.68$), the opportunity to travel ($M = 4.64$), and the opportunity to speak before others ($M = 4.60$) were the highest. The selection of

topics covered ($M = 4.17$), coverage of controversial issues ($M = 4.10$), and the coverage of

social issues ($M = 3.91$), although showing a lower mean, all fell within the agree criteria.

Research Question 15: Topics Graduates of the Ag Leadership Program Perceive Should be Included in the Curriculum

Eighty (80) respondents offered numerous and varied suggestions of topics they thought

should be added to the Ag Leader program. A complete unedited listing of these

recommendations can be found in Appendix E. The responses have been compiled and

synthesized into related topics and are listed below:

Leadership Skill Development
Focus on servant leadership and ethic—success not measured monetarily
Leadership skills
More work on problem-solving
Formal networking training
More challenges to think "outside the box"
Holding an office or being a board member of an agriculture organization
Speculation of outcomes from a "what-if" view. Ex. What if there was no USDA, REA,
    etc.—"Mind-bending" concepts for a largely "practical" bunch
More networking opportunities among classmates
Encouraging young leaders to step up to the plate   (list con'd.)

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More public speaking training and opportunities
More written communication training
Language skills

The Business of Farming
Developing more business skills—what makes a successful businessman?
Financial forecasting and planning
Interaction with effective business managers outside of agriculture
Making a business plan
Personnel management—how to attract and keep good employees
Computer skills and training on use of internet
Information on how to be more self-sufficient
Time management
How to balance work and family
More on ethics and corporate responsibility
Importance of being a good financial planner and manager
Exit plans—retirement planning
Farm safety
Labor issues and immigration-migrant labor-legal and illegal
Insurance (crop, life, disability, etc.)
Legal risk assessment
Estate planning
Farm Bill—subsidies
Taxes
Farm unions that work
Credit counseling

Production Agriculture Issues
Alternatives to farming
Value-added farm products and "niche" markets
Keeping agriculture profitable
More emphasis on diversification
More commodity involvement
Does production agriculture have a future in the U.S?
Feasibility studies on the future of individual commodities
Land formation, irrigation, drainage, etc.
The future of agriculture in Louisiana
More producer information exchange
Networking and interaction with farm organizations and farmers from other states

Marketing and Trade Issues
Global Trade Issues—the truth, not what the media and politicians say.
Foreign and other trade issues like CAFTA
More international trade policy issues and true free trade
More emphasis on global economics
U.S. hurdles to compete in global markets

Exploring markets that could take Louisiana agriculture to the next level
More commodity training—"mock" trading throughout the 2 year class giving each
    student an account to manage
Risk-assessment-long-term markets
Realizing that in world trade for every winner, there is a loser
The effects of currency devaluations on trade
The politics of world trade—indirect subsidies from 3rd world countries
A visit to the Southern United States Trade association (SUSTA)
Commodity pricing and marketing options

Political and Public Policy Issues
Public policy from a Libertarian angle.
Emphasize more local involvement
Advocacy for natural resources preparing for the future
More interaction with state and local politicians
Government and the political class as an agent of "negative" change
Effective communication with elected officials from local to national levels
Session on how the government uses agriculture commodities as a high priority in
    international politics
More politically related topics-at all levels
More education on state and local government workings
How to become more involved politically-state and federal
See first-hand how Political Action Committees work
Knowledge of local and state government land use regulations
Global issues affecting agriculture
A visit to the state capitol when the Legislature is in session

Agriculture and the Consuming Public
Trouble-shooting negative public opinion on agriculture issues
More information and interaction with news media
How to improve consumer perception of agriculture
Urban sprawl/encroachment affecting agriculture
Ag and economic development
More public awareness of agriculture issues

Environmental Issues
Coastal Erosion
Wetlands issues
More from DEQ, EPA, and OSHA
More information on environmental issues facing agriculture
More information and interaction with extremist environmental groups

Family and Community Issues
Support of traditional family unit
Survival of rural communities   (list con'd.)

More family issues and domestic communication
Health care

Seminars
Move some seminars around the state
International speakers
Keep seminars professional
More involvement of Farm Bureau
Involvement with non-production agriculture groups
Distance the program from perceived bureaucracy of LSU Ag Center (paper pushers)
A current issues roundtable
Concurrent sessions with choices of which to attend

Other
Purpose and function of land-grant universities
More international issues (language, business acquaintances)
The need for a young labor force for agriculture-more to consider careers in forestry,
    logging, etc.
How to encourage the existence of family farms for generations
Biotechnology (plant genetics/biofuel opportunities)
Real estate (investing and marketing)
Education and clarification of statistical data and its interpretation or lack of proper
    interpretation—how to clarify info
Dealing with people from other cultures
Homeland security and Agro-terrorism
Visit fish and shellfish facilities locally and internationally

Ag Leaders of Louisiana (ALL)
Encourage attendance in ALL
Move ALL meetings around the state
More interaction among past, present, and future Ag Leaders

Research Question 16: What Key Leadership Positions in Agriculture Have Participants in the Ag Leadership Program Held Since Completing the Program?

The scale in Table 36 shows the key leadership positions held in agriculture reported by

respondents. The largest participation reported was in parish Farm Bureau. Eleven respondents

have held the position of Parish Farm Bureau President. Six respondents were members of Soil

and Water Conservation Districts in leadership positions. At the state level, the largest level of

participation was again in Farm Bureau, with 29 respondents holding positions of leadership.

Leadership positions held in the rice, sweet potato, and cotton commodity groups were also high.

At the national level, most of the leadership positions were held in the American Sugar Cane League. One of the most important leadership positions held by a graduate of the Ag Leadership program is as a member of the National Council for Ag Research, Extension, and Teaching (CARET) because this group affects policy for the Cooperative State Research, Extension, and Education Service (CSREES).

Table 36. Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to the Participants Satisfaction with the Program in the Agriculture Leadership Program Final Questionnaire

Scale/Items	M	SD
I was satisfied with these aspects of the Ag Leadership Development Program:	**4.59**	**.40**
85. Washington D.C. seminar	4.71	.47
78. Interaction with classmates	4.71	.47
77. Effectiveness of program directors	4.65	.53
79. International seminar	4.60	.73
84. Travel arrangements	4.60	.60
76. Communication between director and participants	4.60	.54
82. On-campus seminars	4.60	.54
80. Length of Ag Leadership Program (two years)	4.58	.57
81. Lodging and meals at all seminars	4.53	.68
75. Chicago board of trade seminar	4.52	.62
83. Quality of speakers during on-campus seminars	4.44	.62

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .89; *N* = 124.

Research Question 17: What Key Leadership Positions Not Related to Agriculture Have Participants Held Since Participating in the Ag Leadership Program?

The scale in Table 37 indicates the key leadership positions not related to agriculture reported by respondents. A variety of positions were reported by the respondents. The area showing the highest level of participation was in parish Chambers of Commerce, with 13 respondents holding leadership positions. There were also leadership positions held in private school boards, banking, and church-related positions.

Table 37.   Frequency, Mean, and Standard Deviation for the Scale and Scale Items Relating to the Whether the Program Met Participants Needs in the Agriculture Leadership Program Final Questionnaire

Scale/Items	*M*	*SD*
The Ag Leadership Program met my needs in the following areas:	**4.38**	**.42**
94. Opportunity to improve leadership skills	4.68	.49
93. Opportunity for travel	4.64	.48
96. Opportunity to speak before others	4.60	.52
90. Opportunity for exchange of ideas	4.54	.56
87. Coverage of agricultural issues	4.54	.56
91. Opportunity for interaction with speakers	4.49	.56
92. Opportunity for networking	4.46	.63
97. Opportunity to work as part of a team	4.43	.66
95. Opportunity to practice problem-solving	4.39	.68
99. Variety of activities	4.28	.64
86. Coverage of public policy issues	4.23	.58
100. Variety of teaching styles	4.22	.72
98. Selection of topics covered	4.17	.70
88. Coverage of controversial issues	4.10	.72
89. Coverage of social issues	3.91	.65

Note. 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. The grand means for each scale were interpreted as follows: Grand Mean = 1.00 – 1.49: Strongly Disagree; Grand Mean = 1.50-2.49: Disagree; Grand Mean = 2.50-3.49: Undecided; Grand Mean = 3.50-4.49: Agree; and Grand Mean = 4.50-5.00: Strongly Agree. The *M* and *SD* in bold are the Grand Mean and Standard Deviation for the scale. alpha = .92; *N* = 127.

Research Question 18. Public Elected Offices Participant's Run for and Been Elected to Since Participation in the Ag Leadership Program

Twelve of the respondents indicated they had run for public office. Offices sought

included U.S. Congress, State Senator, State Representative, Mayor, Police Jury, School Board,

City Council, and District Supervisor of Soil and water Districts. Among those elected to public

office were a State Senator, Mayor, four City Councilmen, two District Supervisors of Soil and

Water Conservation Districts, and a Police Jury member.

Research Question 19. Extent to Which Participants in the Ag Leadership Program Are Involved With the Alumni Association Ag Leaders of Louisiana (ALL)

The alumni association for graduates of the Ag Leadership Program is Ag Leaders of

Louisiana (ALL). Meetings are held twice a year. Only 15 percent (*N*= 24) of the respondents

reported they usually attend ALL Meetings. Forty-nine percent ($N = 77$) reported they sometimes

attend the meetings, and 34 percent ($N = 53$) reported they never attend ALL meetings. Of the

reasons given for not attending ALL meetings, the lack of time was the one most frequently

given.

Table 38. Key Leadership Positions in Agriculture Held by Respondents Since Participating in the Ag Leadership Program

Level of Participation Position	Number
Local:	
Farm Bureau-President	11
Vice-President	3
Secretary/Treasurer	3
Board	3
Committee	2
Rice Growers/Council-President	2
Board	3
Sugar Co-op-President	1
Secretary/Treasurer	1
Board	1
Cattleman's Association-President	3
Elevator/Gin/Coop	5
Nicholls State University Ag Alumni	1
4-H Livestock Advisory Committee	3
Farm Credit Associations-Board	4
Farm Safety Day-Chair	1
Co-Founder of Vermilion Coastal Coalition	1
Vermilion Ag Coalition-president	2
Area/District Level:	
Soil & Water Conservation Districts-Supervisor/Chair/Director	6
Vice-President	1
Cal-Cam Rice Growers-Chair	2
South Louisiana Sugar Co-op-Vice President/Board	2
NE Louisiana Rice Growers Association-President	2
NE Agri-Business Council-Board	3
District Livestock Show-Chairman	3
Louisiana Association of Consulting Foresters-Chapter Chair	1
Teche Farm Supply-Board	1
SE District Louisiana Brahman Association-Board	1

(table con'd.)

Level of Participation	
Position	Number
State Level:	
Farm Bureau-Board	10
Committee Chairs	8
Committee Members	11
Farmer of the Year Finalist	1
Rice Growers/Council/PAC-Board	3
Committee Chair	2
Sweet Potato Association/Commission-President/Chair	5
Vice-President	1
Board	2
LSCPI-General Manager/CEO	1
Louisiana Division American Sugar Cane Technologists	1
Louisiana Soy & Grain Promotion Board	1
Louisiana Cotton Producers-President	3
Vice-President	1
Board	2
Boll Weevil Eradication Board, LDA&F –Vice-President	1
Board	1
Louisiana Forestry Association-President	1
Board	1
Louisiana Logging Council-President	1
Louisiana Seafood Advisory Board	3
Louisiana Shrimp Association-President	1
Louisiana Ag Industries Association-Board	1
Louisiana Consultant Association-Ag Industry Representative	1
Louisiana Ag Industry Association-Ag Industry Representative	1
Progressive Ag Foundation-Vice-President/Chairman of the Board	1
Louisiana Cattleman's Association-Director	1
Louisiana Beef Advisory Committee-Board	1
Louisiana Seed Commission-Chair	1
Louisiana Feed Commission	1
Louisiana Fertilizer Commission	1
Louisiana Horticulture Commission	1
Louisiana Turfgrass Association-Board	1
Louisiana Nursery Landscape Association-President	1
Board	1
Louisiana Structural Pest Control Commission-Chair	1
Farm Equipment Dealers Association-Vice-president	3
LSU AgCenter-various committees	1
Agro-Terrorism Response Team	2
Ag Leaders of Louisiana (ALL)-President	1
Director	1
	(table con'd.)

Level of Participation 　　Position	Number
Regional:	
Southern Loggers Association-Board	1
Staplcotn-Advisory Committee	2
Board	1
National Level:	1
National Council for Ag Research, Extension, & Teaching (CARET)	
National Council of Forestry Association Directors-President	1
Forestry Industry Association-President	1
National Cotton Council-Mid-South Chair	1
Chair-American Cotton Producers	1
Wild American Shrimp Inc.-Marketing Committee	2
National Fisheries Institute-Board	2
American Sugar Cane League-President	2
Vice-president	2
Board	2
General manager/Committee Chair	1
American Logging Council-Southern Representative	1
International:	
International Society of Sugar Cane Technology-Board	1

N = 94

Table 39.　Key Leadership Positions Not Related to Agriculture Held by Respondents Since
　　　　　　Participating in the Ag Leadership Program

Level of Participation 　　Position	Number
Local:	
Scout Master	2
Lion's Club-President	2
Vice-President	1
Rotary-President	2
Treasurer	1
Committee Chair	1
YMCA-President	1
Chamber of Commerce-President	4
Director	3
Board	5
Co-op Representative	1
Parish Home Rules Charter Commission	1
Parish Government Advisory Group	1
Private School Boards-President	2
Vice-President	1
Chairman	3
	(table con'd.)

Level of Participation	
Position	Number
Bank-President	2
Director & Chairman of Board	2
Board member	3
Church-Deacon	1
Finance Committee	3
Council	1
Men's Leader	1
Knights of Columbus-Trustee	1
Financial Secretary	1
Parish Port Commission	2
Board Member-Think First	1
MEO	1
Dixie Business Center	1
Economic Development Foundation	1
Medical Center Committee	1
Mass Communication Alumni	1
Lake Advisory Committee	1
Parish Surgery Center	1
School Athletic Commission	1
Christian Education-Chair	1
Fire Boards/Districts	6
Abbeville General Hospital-Board/Building Committee	1
Avoyelles 4-H Museum Acquisition Committee Chair	1
Parish recreation Board-Vice-President	1
Feliciana Visions-Co-Founder/President	1
Giant Omelet Celebration-President	1
Louisiana Ag Credit-Associate Director	1
LIDEA-Vice-President	1
Parish Water Protection Committee-Chair	1
Water System-Secretary/Treasurer	1
Vermilion Water Channel Committee	1
Parish Planning and Zoning Commission	1
Parish 4-H Foundation-Chair	1
4-H Advisor/Leader	2
Manship Hall of fame Committee-Chair	1
Triple H Club-Vice-President	1
Hunting Club-Co-Chair	1
Golden Girls Investments-Advisor	1
Local 953 Apprentice Board-Trustee	1
Parish Hospital Center-Director	1

(table con'd.)

Level of Participation	
Position	Number
Area/District	
Tensas Basin Levee District-Board	1
Electric Co-Op-Board	1
Teche-Vermilion Fresh water District-President	1
State:	
LSU Foundation Chair	1
Louisiana 4-H Foundation Trustee	1
Louisiana Wildlife & Fisheries Commission-Chair	1
Louisiana Wildlife & Fisheries Foundation-President	1
I-49 task Force	1

$N = 80$

Busy schedules, conflicts with work and family, personal reasons, finances, timing, and

logistics of meetings were also frequently given reasons. Two respondents said that ALL had no

clear purpose and lacked connectivity. One listed health reasons and another was not interested.

Several said they had just lost touch with classmates after all these years and one had never heard

about the organization.

Research Question 20. Important Participants In The Ag Leadership Program Perceive The Program Is To The Future Of Agriculture In Louisiana

The questionnaire asked how important participants thought the LSU AgCenter's

Agriculture Leadership Development Program was to the future of agriculture in Louisiana.

Seventy-seven percent indicated the program was extremely important. Another 22 percent

indicated it was moderately important, and only one percent said the program was only slightly

important to the future of agriculture in Louisiana.

CHAPTER 5: SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Purpose and Research Questions

The purpose of this study was to determine if participants in the LSU Ag Center's

Agricultural Leadership Development Program have increased their leadership skills and become

more involved in agricultural and community issues. The research questions for this study were

as follows:

1. What are the personal and demographic characteristics of the graduates of the Ag Leadership Program, namely, gender, ethnicity, marital status, current age, occupation, and educational level?

2. What occupations were participants engaged in when they began the Ag Leadership Program?

3. What occupations are participants of the Ag Leadership Program engaged in now?

4. To what extent do graduates of the Ag Leadership Program perceive the program has impacted their understanding of the systems and forces affecting agriculture in the U.S?

5. Do the graduates of the Ag Leadership Program perceive they are using their knowledge and skills by becoming actively involved in agriculture issues?

6. To what extent do graduates of the Ag Leadership Program perceive the program has impacted their understanding of selected issues facing Louisiana communities?

7. To what extent do graduates of the Ag Leadership program perceive the program has had a positive impact on their self-concept?

8. To what extent do graduates of the Ag Leadership program perceive the program has had a positive impact on their development of selected leadership competencies?

9. To what extent are graduates of the Ag Leadership Program more likely to take action on influencing agricultural issues?

10. To what extent are graduates of the Ag Leadership Program more likely to take action on influencing non-agricultural public policy issues?

11. To what extent do graduates of the Ag Leadership Program perceive they are using their knowledge and skills by becoming actively involved in non-agricultural public policy issues?

12. To what extent do graduates the Ag Leadership Program perceive the program has had an impact on the quality of their relationships with business associates, family, friends, and their peers?

13. To what extent are graduates of the Ag leadership Program satisfied with selected aspects of the program?

14. To what extent do graduates of the Ag Leadership Program perceive the curriculum met their needs?

15. What topics do graduates of the Ag Leadership Program perceive should be included in the curriculum?

16. What key leadership positions in agriculture have participants in the Ag Leadership Program held since completing the program?

17. What key leadership positions not related to agriculture have participants held since participating in the Ag Leadership Program?

18. What public elected offices have participant's run for and been elected to since participation in the Ag Leadership Program?

19. To what extent are participants in the Ag Leadership Program involved with the alumni association Ag Leaders of Louisiana (ALL)?

20. How important do participants in the Ag Leadership Program perceive the program is to the future of agriculture in Louisiana?

Procedures

The target population for this study was the 252 graduates of Classes I - VIII of the LSU AgCenter's Agriculture Leadership Development Program. Because this was a relatively small population, the researcher chose to do a census study.

The questionnaire for this study was developed from the review of the literature and from other research instruments from related research. It was validated by a panel of experts from the LSU School of Human Resource Education and Workforce Development and the LSU AgCenter. The field test was conducted via e-mail by six graduates from the Arkansas Rural Leadership Development Program (LEAD-AR) and six graduates of the Texas Agriculture Leadership development Program (TALL). In addition, 18 members of the current Ag

Leadership class (IV) were asked to fill out questionnaires. After these questionnaires were received and the data entered, the various scales were tested for reliability using Cronbach's alpha and a factor analysis was run on each item in the scales. All scales were relatively strong on internal consistency and were measuring factors as intended. The researcher decided to use .35 as the minimum factor loading acceptable for a question to be included in the scale. Item six (6), "Health Care", was removed because it only loaded at .19. The researcher decided to leave items four (4), "Family Roles and Responsibilities", which loaded at .28, and item 16, "At the Local Level", which loaded at .32, in the belief that, with a larger number of respondents, these items would load more strongly. The factor loadings in the final data set all showed a high association with the other items in the scale.

The researcher gathered data through a written questionnaire mailed to graduates of the Ag Leadership Program. The questionnaire with a cover letter and a self-addressed stamped envelope was mailed by the Director of the Ag Leadership Program on July 8th asking graduates to complete the survey and return it by July 22nd. There were 116 responses from the first mailing. Twelve questionnaires were returned for incorrect addresses. Correct addresses were found for three of those returned and they were re-mailed. Updated addresses were not found for the remaining nine. After removing the graduates for whom correct addresses were not available, the resulting frame was 243. A second mailing, which included an additional questionnaire, was sent on July 22nd to remind those who had not responded. Because the Director of the Ag Leadership Program was unavailable, the second mailing was sent by the researcher. Non-respondents were determined by a code on the questionnaire. The return date for the second mailing was August 12th. An additional 15 questionnaires were returned after the second mailing. Five weeks after the first mailing a phone call was made to a random sample of 25 non-

respondents asking them to respond a random selected question from each sub-scale in the questionnaire. An inferential t test was used to determine if the sub-sample of phone respondents differed significantly from those who responded by mail. Significant differences existed between the mail and phone respondents ($P < .05$) for questions 14, 27, 37, and 72. Therefore, the data collected from the returned mailed questionnaires cannot be considered representative of all graduates of the LSU AgCenter Agriculture Leadership Development Program. All data reported, conclusions, and recommendations will only apply to those who responded to the mailed questionnaire.

This was a descriptive study using quantitative data. The researcher used the statistical program SPSS to compile the data collected. Frequencies and percentages were collected for the nominal variables of gender and ethnicity, and for the ordinal variable of educational level. The results from the interval data were reported with number, mean, and standard deviation.

Summary of Findings

Research Question 1

Findings from research question one indicated that the majority of the respondents were male ($N = 120$, 91.6%) were male and most described themselves as white ($N = 128$, 97.7%). The majority ($N = 122$, 93.1%) were married. Seventy-two (55%) were college graduates, 10 (7.6%) had completed some graduate work, and 20 (15.3%) had obtained a graduate degree. High school graduates made up 14.50 percent ($N = 19$) of the respondents. The age of respondents ranged from 29-66 with an average age of 45.7.

Research Question 2

Production agriculture was the occupation most frequently listed by participants at the beginning of the Ag Leadership program. Eighty ($n = 80$) participants described themselves as

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farmers or ranchers. They were also asked to list the commodities in which they were involved. The commodities in which they were involved included: sugarcane (32), soybeans (29), cotton (24), corn (20), cattle (19), rice (19), and timber (15). There were three alligator farmers, eight crawfish farmers, two poultry farmers, two commercial fishermen, two nursery owners, and a dairy farmer.

The majority of those respondents involved in non-production agriculture ($n =42$) described themselves as being involved in some type of agri-business (sales and service), seven were in banking, farm finance and bookkeeping, and twelve were in farm management. Other occupations listed included: logging, private business, marketing, public relations, newspaper publishing, physical therapy, Director of a Chamber of Commerce, veterinarian, investment representative, land management, cotton specialist, merchant, executive, construction, operator for DOW Chemical, biologist, agronomist, and a volunteer.

Research Question 3

Nineteen ($n =19$) respondents indicated they had changed occupations since finishing the Ag Leadership program, but were still in some type of agriculture related business. Some moved into management positions within their agriculture related businesses or became managers of agriculture/commodity associations. Six went into sales, agri-business, and agri-service. The Louisiana Department of Agriculture and Forestry gained an Assistant Commissioner, Assistant Manager, and a staff member who were Ag Leadership graduates. Two graduates became landscape and lawn care contractors and three went into land management. Five went into production agriculture or became farm managers. One graduate, who came into the Ag Leadership program as a farmer, now describes himself as a "more diversified" farmer. One

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became a regional sales manager for timber, and another now has a career as a Research Associate with Louisiana State University.

Eleven participants left the field of agriculture altogether. They went into private business, real estate, life insurance, banking, construction, food processing, trucking, and management in other types of businesses. One participant became a law firm manager, another became a developer; and one retired.

Research Question 4

Participants were asked if the Ag Leadership Program had a positive impact on their ability to understand 14 selected systems and forces affecting agriculture in the United States. The respondents agreed with all of the items in the scale. The Grand Mean for the entire scale was 3.97 which indicated that the respondents agreed that the Ag Leadership program had a positive impact on their ability to understand these systems and forces affecting agriculture.

Research Question 5

When asked how participants are using their knowledge and skills gained in the Ag Leadership program by becoming actively involved in agricultural issues at the local, state, national, and international level, the Grand Mean for the entire scale was 3.97 which indicates the respondents agreed that they have become more actively involved in agricultural issues since graduating from the Ag Leadership program.

Research Question 6

Participants were also asked if the Ag Leadership Program had a positive impact on their ability to understand selected issues facing Louisiana. The Grand Mean for this scale was 3.79 indicating the respondents agreed the Ag Leadership program had a positive impact on their understanding of these issues.

Research Question 7

When asked if the Ag Leadership Program had a positive influence on certain aspects of their self-concept, respondents indicated by a Grand Mean of 4.22 that they agreed the program had a positive impact on their self-concept. The program had the largest influence on respondents' belief that they could make a difference.

Research Question 8

The Ag Leadership program also had a positive impact on respondents' development of leadership competencies. When participants were asked if the Ag Leadership Program had a positive impact on their development of selected leadership competencies, the Grand Mean for this scale was 4.26 indicating that the respondents agreed the Ag leadership program had had a positive impact on their development of these competencies.

Research Question 9

All respondents agreed that the Ag Leadership Program had a positive impact on their influence on agricultural issues. This was evident by the Grand Mean of 4.40 for this scale.

Research Question 10

The Ag Leadership Program had a positive impact on respondents influence on non-agricultural public policy issues. The Grand Mean for this scale was 3.95. This indicated that the respondents agreed the program had a positive impact of their influence on non-agricultural public policy issues.

Research Question 11

When asked about their level of involvement in non-agricultural issues, respondents indicated less involvement than in agricultural issues. The Grand Mean for the scale was 3.59,

indicating a lower level of agreement than Grand Mean of 3.97 listed for involvement in agriculture issues

Research Question 12

The Ag Leadership Program had positive impacts on respondents' relationships with their business associates, community leaders, elected officials, family, friends, and peers. This was indicated by a Grand Mean of 4.25 which indicated respondents' agreed that the Ag Leadership program had a positive impact on their relationships with others. The most positive impact was with respondents' peers.

Research Question 13

Respondents were asked if they were satisfied with certain aspects of the Ag Leadership program. They indicated by a Grand Mean of 4.59 that they strongly agreed they were satisfied with the Agriculture Leadership Development Program.

Research Question 14

When asked if the Ag Leadership Program met their needs in selected areas, respondents' responses fell in the range of agree in each item in the scale. The Grand Mean of the scale was 4.38 indicating respondents agreed the program met their needs.

Research Question 15

Participants were asked what topics they perceived should be added to the Ag Leadership program. Their suggestions fell into 11 general areas: leadership skill development, the business of farming, production agriculture issues, marketing and trade issues, political and public policy issues, agriculture and the consuming public, environmental issues, family and community issues, seminars, other issues, and Ag Leaders of Louisiana.

The respondents indicated an interest in what one called, "the business of farming." Among the many items respondents asked for was more information on developing better business and management skills, labor issues, time management, and balancing work and family. Respondents also felt they needed more opportunities for developing the communication skills necessary for becoming effective leaders. Respondents expressed an interest in more interaction with public officials at the state level and public policy education. Marketing, trade issues, and global economics were other areas respondents felt needed more emphasis in the program.

Research Question 16

Participants were asked to list key leadership positions in agriculture they have held since graduating from the Ag Leadership program. Ninety-four participants responded to this question. Respondents reported holding 177 leadership positions. The largest participation ($n = 22$) reported at the local level is in Farm Bureau. This was also true at the state level ($n = 29$), but there were also leadership positions held in commodity groups at the state level ($n = 36$). At the national level, most of the leadership positions were held in the American Sugar Cane League ($n = 7$). One of the most important leadership positions held by a graduate of the Ag Leadership program is as a member of the National Council for Ag Research, Extension, and Teaching (CARET) because this group affects policy for the Cooperative State Research, Extension, and Education Service (CSREES). One respondent held a position at the international level on the board of the International Society of Sugar Cane Technology.

Research Question 17

Participants were also asked to list non-agriculture key leadership positions they have held since participating in the Ag leadership program. Eighty responded to this question. Respondents reported 92 leadership positions held. The area showing the highest level of

participation was in parish Chambers of Commerce (n =13). There were also leadership positions held in private school boards (n =6), banking (n = 7), and church-related positions (n = 8).

Research Question 18

Twelve (n = 12) of the respondents indicated they had run for public office from the local and parish level to district and state levels. Among those elected to public office were a State Senator, Mayor, four City Councilmen, two District Supervisors of Soil and Water Conservation Districts, and a Police Jury member.

Research Question 19

There were 129 responses to participant's involvement in the alumni group Ag Leaders of Louisiana (ALL). Only 15 percent (N= 24) of the respondents reported they usually attend the ALL meetings. Forty-nine percent (N = 77) reported they sometimes attend the meetings, and 34 percent (N = 53) reported they never attend ALL meetings. Of the reasons given for not attending ALL meetings, the lack of time was the one most frequently given. Busy schedules, conflicts with work and family, personal reasons, finances, timing, and logistics of meetings were also frequently given reasons.

Research Question 20

Seventy-seven percent of the 129 respondents indicated the Ag Leadership Program was extremely important to the future of agriculture in Louisiana. Another 22 percent indicated it was moderately important, and only one percent said the program was only slightly important to the future of agriculture in Louisiana.

<div align="center">

Conclusions

</div>

The conclusions drawn are limited to the respondents to the written questionnaire. Respondents strongly agreed they were satisfied with the LSU AgCenter Agriculture Leadership

Development Program. This conclusion is based on the finding that the scale mean was in the strongly agree range. The Ag Leadership program also met their needs, helped them improve their self-concept, and had a positive impact on their relationships with others. This conclusion is based on the finding that each of these scales had a mean in the agree range.

The Ag Leadership program had a positive impact on the development of respondents' leadership competencies, especially in communicating effectively. This is supported by respondents rating their development of the leadership competencies listed in the agree range.

The Ag Leadership program had a positive impact on respondents' ability to understand systems and forces affecting agriculture in the United States by rating each item in the scale in the agree range. The Ag Leadership program had a positive impact on respondents' influence on and involvement in agriculture issues by their taking actions at the local, state, national, and international levels. This conclusion is based on the finding that grand means for each scale were in the agree range. This is conclusions also supported by 94 of the respondents listing 177 key leadership positions in agriculture they have held since graduating from the program.

The Ag Leadership program had a positive impact on respondents' ability to understand issues facing Louisiana. The Grand Mean for this scale was in the agree range, indicating the respondents agreed the program had a positive impact on their understanding of these issues.

The Ag Leadership program had a positive impact on respondents' influence on and involvement in non-agricultural issues by their taking actions at the local, state, national and international levels. This conclusion is based on the finding that the grand means for both of these scales were in the agree range. This conclusion is also supported by 80 of the respondents reporting 92 non-agriculture related key leadership positions they have held since participation in the Ag Leadership program.

Respondents made suggestions on topics they felt should be added to the Ag Leadership program in 11 different areas. Based on the number of respondents suggesting each topic, it appears the following topics should be added to the curriculum of the Ag Leader Program:

* more training in and opportunities to use communication skills,

* further exploration and discussion of the concept of leadership and leadership development,

* more training in business and management skills,

* more information and discussion of labor and immigration issues,

* more interaction with farm organizations and farmers from other states,

* more information on foreign and other trade issues,

* more "hands-on" experience with commodity marketing,

* more training on present and emerging technology benefiting agriculture,

* more interaction with local and state politicians and lawmakers,

* more training on how to effectively communicate with elected officials,

* more information and practice on interacting with the media,

* more information on environmental issues facing agriculture,

* more interaction with extremist environmental groups,

* more information and discussion on the survival of rural communities,

* more information on the forestry and fisheries industries,

* more information on homeland security and agro-terrorism,

* move some seminars around the state, and

* strengthen communication among alumni.

Implications

The findings of this study indicate the LSU AgCenter Agriculture Leadership Development Program is accomplishing its objectives as indicated in the Program's guidelines:

* Develop leaders, who understand and prepare for global influences and opportunities,

* Develop leadership skills and awareness in participants so they become confident, effective communicators, and

* Develop participant understanding and involvement in the social, economic, and political systems in which people strive to improve their enterprises and communities.

The Grand Mean for all scales in the evaluation questionnaire fell within the Agree or Strongly Agree ranges, indicating the respondents were satisfied with the program, feel it meets their needs, and has influenced them to become more involved in both agriculture and non-agriculture issues.

Even though the respondents were satisfied with the Ag Leadership program, they did make suggestions for areas and issues they felt should either be enhanced or added to the curriculum. They appear to understand that farming is a business and suggested that future classes should receive more training in business and management practices as well as leadership development.

Recommendations

Based on the conclusions and findings in this study, the researcher finds no reason to recommend major program changes. The participants perceive the program is effective and meets their needs.

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Recommendations for Further Study

Based on the findings of this study, on comments received from the respondents, and on findings of other similar studies, the following recommendations for further study are made:

* Further research should be conducted to determine whether women and minorities are being adequately served by the Ag Leader Program.

* This research measured respondents' perception of the impact the program had on the participants' development of certain leadership competencies. Additional studies to actually measure the leadership competencies of participants as implemented in real leadership situations should be conducted.

* Additional studies should be conducted on whether the Ag Leadership program can actually take credit for the participants' involvement in agriculture and non-agriculture issues or whether participants would have assumed these roles without participation in the program.

* Beginning with Class X (January 2006), consideration should be given to using the Kouzes and Posner Leadership Practices Inventory as a pre and post-assessment of participants.

* Beginning with Class XI (January 2008), consideration should be given to conducting a 360 degree assessment of the program, culminating in determining the long-term value of the program to the participants.

REFERENCES

Adair, J. (1984). *The skills of leadership*. New York, NY: Nichols Publishing.

Allen, G., Cairnes, M., & Farley, R. (1997). *A review of the Australian rural leadership program*. Deakin, Victoria, Australia: The Australian Rural Leadership Foundation and Rural Industries Research and Development Corporation.

Barker, R. A. (1994). The rethinking of leadership. *Journal of Leadership Studies,1* (2), 46-54.

Bass, B. (1981). *Bass and Stogdill's Handbook of Leadership* (Rev. Ed.). New York, NY: Free Press.

Bass, B. (1985). *Leadership and performance beyond expectation*. New York, NY: Free Press.

Bass, B. (1990). *Bass and Stogdill's handbook of leadership* (Rev. Ed.). New York, NY: Free Press.

Bellman, Geoffrey M. (1992). *Getting things done when you are not in charge*. San Francisco, CA: Berrett-Koehler.

Bennett, Claude. (1977). *Analyzing Impacts of Extension Programs*. Washington, D.C: Extension Service, United States Department of Agriculture.

Bennis, W. & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York, NY: Harper and Row.

Bennis, W. (1990). *Why leaders can't lead*. San Francisco, CA: Jossey-Bass.

Bennis, W. (1989). *On becoming a leader*. New York, NY: Addison-Wesley.

Brignac, G. & Falgout, J. (1995). *LSU agriculture leadership development program evaluation design manual* (Evaluation Design Project for VED 7602). Baton Rouge, LA: Author.

Carter, Hanna S. (2002). Evaluation of the Florida leadership program agriculture and natural resources. *Journal of Agricultural Educator Research, 50* (1), 193-199.

Crawford, C. B. & Strothkirch, C.S. (2004). Transformational leader as person-centered communicator: Empirical findings and observations for leadership educators. *Journal of Leadership Education, 3*(1), 40-42.

Dhanakumar, V.G. (1993). *An evaluation of the impact of the Wisconsin rural leadership program (WRLP)*. Madison, WI: University of Wisconsin-Extension.

Drath, William H. (1996). Changing our minds about leadership. *Issues & Observations, 16* (1).

DuBrin, A.J. (1995). *Leadership: Research findings, practice, and skills*. Boston, MA: Houghton Mifflin.

Earnest, Garee W.(1996). Evaluating community leadership programs. *Journal of Extension, 34* (1).

Extension Committee on Organization, & Policy and Cooperative State Research, Education, and Extension Service Strategic Framework Team. (1995). *Framing the future: Strategic framework for a system of partnerships.* Washington, DC: Author.

Fiedler, F. & Garcia, J. (1987). *New approaches to effective leadership*. New York: Wiley & Son.

Foster, Rick (2001, October). *Leadership for leaders in agriculture*. Symposium conducted at the annual meeting of the International Association of Programs for Agriculture Leaders, San Luis Abispo, CA.

Fraenkel, Jack R., & Wallen, Norman E. (2000). *How to design & evaluate research in education* (4th ed.). Boston, MA: McGraw-Hill.

Gallup Leadership Institute (2005). *Nebraska LEAD Program. Follow-up Study*, Nebraska Agricultural Leadership Council, Inc. Lincoln, NE: University of Nebraska. Retrieved February 3, 2005 from http://lead.unl.edu/followup.htm.

Gardner, J. (1984). *Excellence*. New York, NY: W.W. Norton & Company.

Hair, Joseph F., Anderson, Rolph E., Tatham, Ronald L., & Black, William C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Hinton, K. L. (1994). Extension's role in developing community volunteers. *Journal of Extension, 32* (2).

Howell, R. (1985). *Survey of program graduates of the Washington Agriculture and Forestry Leadership Program*. Pullman, WA: Washington State University, Department of Rural Sociology.

Howell, R., Weir, I. & Cook, A. (1979). *Public affairs leadership development: An assessment of programs conducted in California, Michigan. Montana and Pennsylvania*. Pullman, WA: Washington State University, Dept. of Rural Sociology.

Kimball, W., Andrews, M. & Quiroz, C. (1986). *Impacts on the participants of five expanding horizons leadership development programs in Michigan*. East Lansing, MI: Michigan State University, Department of Resource Development.

Kirkpatrick, D. (1996, January). Great ideas revisited. *Training & Development,* 54-59.

Kotter, J. (1988). *The leadership factor*. London, England: The Free Press.

Kouzes, L & Posner, B. (1988). *The leadership challenge*. San Francisco, CA: Jossey-Bass.

Kouzes, L. & Posner, B. (2002). *The leadership challenge*. San Francisco, CA: Jossey-Bass.

Langone, C. A. (1992). Building community leadership. *Journal of Extension, 30* (4).

LSU AgCenter (2004). *Louisiana Summary of Agriculture & Natural Resources 2003.* Publication #2382. Baton Rouge, LA: Author.

LSU AgCenter (2001). *LSU AgCenter agricultural leadership development program. About the Program.* Baton Rouge, LA: Author. Retrieved February 3, 2005, from http://www.lsuagcenter.com/subjects/agleadership/about.asp.html.

LSU AgCenter (2005). *LSU AgCenter. About the Center.* Baton Rouge, LA: Author. Retrieved February 3, 2005 from http://www.lsuagcenter.com/nav/ about.asp.html.

McKinley, L. (1985). *An impact of the Missouri agricultural leadership of tomorrow program.* Columbia, MO: University of Missouri. (Undated Abstract)

Michael, J.A. (Ed.). 1994. *For the common good: A strategic plan for leadership and volunteer development.* Washington, DC: United States Department of Agriculture.

Michael, J.A., Paxson, M.C., & Howell, R.E. (1990). *Developing leadership among Extension clientele*. Washington, DC: United States Department of Agriculture.

Nirenberg, J. (1993). *The living organization: Transforming teams into workplace communities.* Homewood, IL: Business One Irwin.

Olson, L. (1992). *Washington agriculture and forestry education foundation's impact on transformational and transactional leadership styles of participants*. East Lansing, MI: Michigan State University.

Ott, R. L. (1993). *An introduction to statistical methods and data analysis* (4th ed.). Belmont, CA: Duxbury Press.

Paxon, C.M., Howell, R.E., Michael, J. A., & Wong, S.K. (1993). Leadership development in extension. *Journal of Extension, 31* (1).

Penrose, C.D. (2001). Developing leadership skills with grazing councils. *Journal of Extension, 39* (3).

Phillips, J. J. (1997). *Handbook of training evaluation and measurement methods* (3rd ed). Houston, TX: Gulf Publishing Company.

Sandmann, L.R., & Vandenberg, L.(1995). A framework for 21st century leadership. *Journal of Extension, 33* (6).

Schauber, A.C. & Kirk, A.R. (2001). Impact of a community leadership program on the volunteer leader. *Journal of Extension, 39* (3).

Senge, P.M. (1990). The fifth discipline: *The art and practice of the learning organization*. New York, NY: Doubleday/Currency.

Sherman J., Evans D. & Dunkelberger J., (2002). *Life after leaders: A study of involvement after graduation, Alabama ag & forestry leaders*. Auburn, AL: Auburn University of Agricultural Economics and Rural Sociology and Alabama Cooperative Extension System.

Stogdill, R. (1974). *Handbook of leadership.* New York, NY: Free Press.

Taylor, J. (1962). *How to select and develop leaders*. New York, NY: McGraw Hill. Pp. 22-24.

Tackie, N. O., Findlay, H.J., Baharanti, N., & Pierce, A. (2004). Leadership training for transforming the community: A participatory approach. *Journal of Extension, 42* (6).

Thornton, P.B. (2005). Leadership-seeing, describing, and pursuing what's possible. Excerpt from the book, *Leadership-seeing, describing, and pursuing what's possible*. Bloomington, IN: Unlimited Publishing. Retrieved on February 3, 2005 from http://www.refresher.com/!pbtpossible.html.

Tichy, N., & Devanna, M. (1986). *Transformational leadership*. New York, NY: Wiley.

Vantreese, V. L. & Jones, L.D. (1993). *An evaluation of the Philip Morris agricultural leadership development program.* Lexington, KY: University of Kentucky, Lexington, Kentucky.

Webster (1993). *Webster's new encyclopedia of dictionaries*. Baltimore, MD: Ottenheimer Publishers, Inc.

Whent, L., Leising, J. & Tibbitts, N. (1990). *Evaluation of the California agricultural leadership program.* Davis, CA: University of California, Davis.

Wren, J. T.(Ed.) (1995). *The leader's companion*. New York, NY: The Free Press.

Yukl, G.A. (1989). *Leadership in organizations*. Englewood Cliffs, NJ: Prentice Hall.

APPENDIX A: HUMAN RESEARCH SUBJECT EXEMPTION

HUMAN RESEARCH SUBJECT PROTECTION   Office:203 B-1 David Boyd Hall

APPLICATION FOR EXEMPTION FROM INSTITUTIONAL OVERSIGHT

Unless they are qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/projects using living humans as subjects, or samples or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This Form helps the PI determine if a project may be exempted, and is used to request an exemption.

Instructions: Complete this form.

Exemption Applicant: If it appears that your study qualifies for exemption send:

(A) Two copies of this completed form,
(B) a brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts A & B),
(C) copies of all instruments to be used. If this proposal is part of a grant proposal include a copy of the proposal and all recruitment material.
(D) the consent form that you will use in the study. A Waiver of Written Informed Consent is attached and must be completed only if you do not intend to have a signed consent form.

to: ONE screening committee member (listed at the end of this form)in the most closely related department/discipline or to IRB office.

If exemption seems likely, submit it. If not, submit regular IRB application. Help is available from Dr. Robert Mathews, 578-8692, irb@lsu.edu or any screening committee member.

Principal Investigator __Michele Abington-Cooper__   **Student?** __Y__ Y/N

Ph: __578-3687__ **E-mail** ___mcooper@agctr.lsu.edu___ **Dept/Unit** __School of Human Res Ed & Wk Dev__

If **Student**, name supervising professor __Dr. Joe W. Kotrlik__   Ph:__578-5753__
Mailing Address___142 Old Forestry Bldg,___   Ph_____
Project Title __Relationships Between Participation in the LSU Agriculture Center's Agricultural Leadership Development Program and Participants Leadership and Involvement in Agricultural and Community Issues__

Agency expected to fund project_____ N/A
Subject pool (e.g. Psychology Students)__Adult Participants in LSU AgCenter's Leadership Development Program__
Circle any "**vulnerable populations**" to be used: (children <18; the mentally impaired, pregnant women, the aged, other). Projects with incarcerated persons cannot be exempted.
I certify my responses are accurate and complete. If the project scope or design is later changed I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted.

PI Signature _____ **Date** 7/7/05 (no per signatures)
==
Screening Committee Action: Exempted √ Not Exempted ___ Category/Paragraph_____

Reviewer __Mathews__   Signature _____   Date 7/7/05

Part A: DETERMINATION OF "RESEARCH" and POTENTIAL FOR RISK

This section determines whether the project meets the Department of Health and Human Services (HSS) definition of

APPENDIX B: FIRST LETTER TO RESEARCH STUDY PARTICIPANTS

July 7, 2003

Dear Graduate of the Ag Leader Program:

The LSU AgCenter Agriculture Leadership Development Program began in 1988 and will soon graduate Class IX. The substantial time and financial commitment of the LSU AgCenter, sponsors, and participants, make it extremely important that the Agriculture Leadership Development Program be of the highest quality possible and make the expected impact, not only upon the graduates, but also on communities and agriculture in Louisiana.

In an effort to assess the accomplishments of the Agriculture Leadership Development Program, we are conducting an in-depth evaluation. Although this study will benefit the Agriculture Leadership Program, it is actually the work of a doctoral student and, although the questionnaires will be returned to our office, they will not be seen by either Veda or me. We ask your cooperation in filling out the enclosed questionnaire and returning it as soon as possible, but no later than Friday, July 22nd, 2005. A self-addressed envelope is enclosed for your convenience.

You will notice a small number in the upper left hand corner of the survey. This number will be used as a method to follow-up non-responses and will be eliminated prior to entering the data. By completing and returning the survey, you are giving your consent to participate in the study. Please read each section directions carefully. Some appear similar, but have a different focus. The survey should take no more than 10 minutes of your time.

Thank you in advance for your cooperation in this very important study. We look forward to seeing the results and sharing them with you.

Sincerely,

Dr. Mike Futrell, Director
LSU Agricultural Center's
Agriculture Leadership Development Program.

APPENDIX C: RESEARCH INSTRUMENT

YOUR EXPERIENCES WITH THE LSU AGRICULTURAL CENTER'S
AG LEADERSHIP PROGRAM

DIRECTIONS: PLEASE INDICATE YOUR LEVEL OF AGREEMENT WITH THE STATEMENTS BELOW:

Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The Ag Leadership Program has had a positive impact on my ability to understand the following systems and forces affecting agriculture in the <u>United States/nationally</u>:					
1. Economic systems (including the global economy, taxation, and markets)					
2. Education systems (K-12, colleges, etc.)					
3. Environmental issues (domestic and global)					
4. Family Roles and Responsibilities					
5. Foreign trade					
6. Immigration					
7. Interrelationships of agriculture issues at the local, state, national and international levels					
8. Non-government organizations					
9. Political systems (domestic and global)					
10. Population demographics (domestic and global)					
11. Population growth (domestic and global)					
12. Rural development in the U.S.					
13. Social systems (including welfare)					
14. Urban issues in the U.S. (e.g., development and sprawl)					
The Ag Leadership Program has had a positive impact on my involvement in <u>agricultural issues</u> at the following levels:					
15. At the local level					
16. At the state level					
17. At the national level					
18. At the international level					

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Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The Ag Leadership Program has had a positive impact on my ability to understand the following issues facing <u>Louisiana communities</u>:					
19. Urban issues in Louisiana (development and sprawl)					
20. Crime in Louisiana					
21. Economic systems (local and state, including taxation)					
22. Education systems (local and state, including K-12, college, etc.)					
23. Family roles and responsibilities					
24. Issues facing youth in Louisiana (drugs, teen pregnancy, peer pressure, etc.)					
25. Louisiana's environmental problems					
26. Louisiana's health care system					
27. Political systems (local and state)					
28. Population demographics (local and state)					
29. Population growth (local and state)					
30. Rural development					
31. Social systems (including welfare)					
32. Wetland loss and restoration on Louisiana's coast					
The Ag Leadership Program has had a positive impact on the following aspects of my self-concept:					
33. My awareness of my life priorities					
34. My awareness of my beliefs					
35. My awareness of my values					
36. My belief and confidence in myself					
37. My commitment to my life priorities					
38. My sense that I can make a difference					
The Ag Leadership Program has had a positive impact on the development of my skills in the following leadership competencies:					
39. Analyzing problems and alternative solutions					
40. Building strong organizations					
41. Communicating more effectively					
42. Developing effective groups or teams					
43. Encouraging others to participate in community problem-solving					
44. Fostering consensus-building					
45. Handling situations in which there are conflicting opinions					
46. Leading groups and organizations					
47. Networking with others					
48. Participating in community organizations					

Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
49. Seeking long-term solutions rather than quick-fixes to problems and issues					
50. Speaking effectively in public					
The Ag Leadership Program has had a positive impact on my influence on <u>agricultural issues</u> as indicated by my taking the following actions:					
51. I am involved in agriculture issues					
52. I engage in discussions of agricultural issues in organizations to which I belong					
53. I engage in discussions of agricultural issues in personal interactions					
54. I exert effort to educate others on issues facing agriculture					
55. I exert effort to improve the quality of decisions on agricultural issues					
56. I exert effort to involve others in issues facing agriculture					
57. I exert effort to stay current on issues facing agriculture					
The Ag Leadership Program has had a positive impact on my influence on <u>non-agricultural public policy issues</u> as indicated by my taking the following actions:					
58. I am involved in public policy issues					
59. I am engaged in public policy discussions in organizations to which I belong					
60. I am engaged in public policy discussions in personal interactions					
61. I exert effort to educate others about public policy issues					
62. I exert effort to improve the quality of decisions on public problems and issues					
63. I exert effort to involve others in public policy issues					
64. I exert effort to stay current on non-agricultural policy issues					
The Ag Leadership Program has had a positive impact on my involvement in <u>non-agricultural public policy</u> issues at the following levels:					
65. Local level					
66. State level					
67. National level					
68. International level					

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Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The Ag Leadership Program has had a positive impact on the quality of my relationships with the following individuals:					
69. My business associates					
70. My community leaders					
71. My elected officials					
72. My family					
73. My friends					
74. My peers					
I was satisfied with the following aspects of the Ag Leadership Development Program:					
75. Chicago Board of Trade Seminar					
76. Communication between director and participants					
77. Effectiveness of program directors					
78. Interaction with classmates					
79. International seminar					
80. Length of Ag Leadership Program (two years)					
81. Lodging and meals at all seminars					
82. On-campus seminars					
83. Quality of speakers during on-campus seminars					
84. Travel arrangements					
85. Washington D.C. seminar					
The Ag Leadership Program met my needs in the following areas:					
86. Coverage of public policy issues					
87. Coverage of agricultural issues					
88. Coverage of controversial issues					
89. Coverage of social issues					
90. Opportunity for exchange of ideas					
91. Opportunity for interaction with speakers					
92. Opportunity for networking					
93. Opportunity for travel					
94. Opportunity to improve leadership skills					
95. Opportunity to practice problem-solving					
96. Opportunity to speak before others					
97. Opportunity to work as part of a team					
98. Selection of topics covered					
99. Variety of activities					
100. Variety of teaching styles					

101. How involved have you been in ALL (Ag Leaders of Louisiana)? (✔ your response)
     _____   I never attend meetings
     _____I occasionally attend meetings
     _____   I usually attend meetings

102. If you have never attended ALL meetings, please tell us why?

     _____

103. What <u>key leadership positions in agriculture</u> organizations have you held since participating
     in the Ag Leadership Program?

	Position	Organization/Agency
	_____	_____
	_____	_____

104. What <u>key leadership positions</u> not related to agriculture have you held since participating in
     the Ag Leadership Program?

	Position	Organization
	_____	_____
	_____	_____

105. Have you run for public office since participating in the Ag Leadership Program? (✔ your
     response)
              _____ Yes   _____ No

     If yes, what public office(s)?
     _____

     Please CIRCLE those public office(s) listed above to which you were elected.

106. How important is the LSU AgCenter's Agriculture Leadership Development Program to the
     future of agriculture in Louisiana? (✔ your response)

Not	Slightly	Moderately	Extremely
_____ Important	_____ Important	_____ Important	_____ Important

107. As you consider your experiences and challenges over the years, what topics do you feel should be added that could significantly enhance or support the development and performance of future participants?

1.

2.

3.

BACKGROUND INFORMATION. FINALLY, PLEASE TELL US ABOUT YOURSELF.

---

108. Gender (✔ your response): ____Male   ____Female

109. Ethnicity (✔ your response): ____White   ____Hispanic   ____Black   ____ Asian
____Other

110. Your present marital status. (✔ your response)
____Never Married
____Married
____Divorced
____Separated
____Widowed

111. What was your age as of December 31, 2004? _____

112. What was your primary occupation when you entered the Ag Leadership program?
_____

113. What is your primary occupation now?
_____

114. If you are involved in specific agricultural commodities, what are they?
_____

115. Which was your educational level when you started the Ag Leader Program? (✔ your response)
_____Completed Some High School
_____High School Graduate
_____Technical School Graduate
_____Some College
_____College Graduate
_____Some Post-Graduate Work
_____Graduate Degree

PLEASE RETURN THIS SURVEY IN THE ENCLOSED
SELF-ADDRESSED ENVELOPE BY JULY 22, 2005 TO:

Dr. Mike Futrell, Director
LSU AgCenter Agricultural Leadership Program
P.O. Box 25100
Baton Rouge, LA 70894-5100

APPENDIX D: SECOND LETTER TO RESEARCH STUDY PARTICIPANTS

August 2, 2005

Dear Graduate of the Ag Leader Program:

The substantial time and financial commitment of the LSU AgCenter, sponsors, and participants, make it extremely important that the Agriculture Leadership Development Program be of the highest quality possible and make the expected impact, not only upon the graduates, but also on communities and agriculture in Louisiana. In an effort to assess the accomplishments of the Agriculture Leadership Development Program, a survey was sent to you on July 8th. As of today, I have not received your response.

This survey is designed to evaluate the LSU AgCenter Agriculture Leadership development Program. This study will benefit the Agriculture Leadership Program through identifying program areas that may need strengthening or added as well as give a comprehensive report of the program's accomplishments to sponsors and the LSU AgCenter. A summary will also be shared with past participants. I ask your cooperation in filling out the enclosed questionnaire and returning it as soon as possible, but no later than Monday, August 12, 2005. A self-addressed envelope is enclosed for your convenience.

You will notice a small number in the upper left hand corner of the survey. This number will be used as a method to follow-up non-responses and will be eliminated prior to entering the data. By completing and returning the survey, you are giving your consent to participate in the study. Please read each section directions carefully. Some appear similar, but have a different focus. The survey should take no more than 10 minutes of your time.

Thank you in advance for your cooperation in this very important study. I look forward to seeing the results and sharing them with you.

Sincerely,

Michele Abington-Cooper
Assistant Professor
LSU AgCenter

APPENDIX E: TOPICS PARTICIPANTS FELT SHOULD BE ADDED TO THE AG LEADERSHIP PROGRAM THAT COULD ENHANCE OR SUPPORT THE DEVELOPMENT AND PERFORMANCE OF FUTURE PARTICIPANTS (UNEDITED)

Better define/understand global threats to industry—knowledge leveling between U.S. and foreign competitors

Internet training for those unfamiliar with it

Become more familiar with state government i.e. visit and time at state capitol and Department of Ag

More coastal environmental issues

More education in business with regards to the global economy that we must compete in these days

Less instruction on rural development

Farm bill programs

Commodity pricing/marketing options

More government policy education

More public awareness of ag issues

Emphasis on the economics of agriculture

While it is already part of the program, speaking in public and media are becoming more and more important

More financial planning and credit counseling

More interaction with <u>farmers</u> from other areas of the country and internationally

Concurrent sessions with choices of which to participate in

Visit with SUSTA-Southern United States Trade Association

Visit to a fish or shellfish facilities locally and internationally

A visit to the state capitol when in session

Language skills

Dealing with the media

Realizing that in world trade, for every winner there is a loser.

Effects of currency devaluations on trade

Politics of world trade

Indirect subsides from 3rd world countries

World trade

Home Land Security

Economic well-being

Exit plan (who will take over when I retire)

International trade

More interaction between past, present, and future Ag Leadership members

Business plans (H 2 A Labor) [sic]

Dealing with people from other cultures (i.e. Mexico, Japan)

There should be more humanities/leaders who don't measure success monetarily

Business qualities (emphasis on businesses who function for the good of community could be highlighted. An example would be a textile company, years ago, that burned down, but kept paying employees until it was rebuilt.) There is a lack of leadership (vacuum of good leaders). I see many who justify hurting others in the name of "business decisions." I see this epidemic on local, state, and national levels. Corporate greed is a misnomer—there is only people greed.

Current issues roundtable

Purpose and function of Land-Grant Universities

Advocacy for natural resources, preparing for future

International trade & competitiveness
Commodity marketing

What's the future of agriculture

How to deal with global trade

Keep it professional

Distance itself from perceived bureaucracy of LSU AgCenter (talking heads)

Survival of rural communities

Support of the traditional family unit

Encouragement of young leaders to step up to the plate

The program seems to cover important issues

Nothing comes to mind

World trade

U.S. hurdles to compete > what can be done

Urban encroachment

Environmental issues

Governmental trade deals or politics

The desire to stay connected to this group (ALL)

World trade > affecting U.S. agriculture

Migrant labor > legal ⇔ illegal

Financial forecasting & planning

Leadership skills

Economics

Great the way it is

Law

Politics

Trade

More exposure of class members to effective business managers outside of agriculture

Marketing

Finance

Employee management

The business of agriculture-it is great to learn how to communicate, but to stay in farming our farmers in La. need better business skills

A class or study on how the government uses agriculture commodities as a high priority in international politics, yet gives agriculture so little support or recognition

More work on problem-solving

How urban sprawl is affecting ag

How to develop different markets for our products

How to develop diversity in our businesses

Local taxes

Immigration

Risk management-legal and long term market

Alternatives to farming as an occupation

More international trade topics

International speakers

Regional ALL meetings

Involvement of Farm Bureau

Continue to attend ALL functions in future

Holding some office/board of an agricultural nature

Include horticulture more in program

How to improve consumer perception of ag

Address labor

Involvement with non-ag groups

Education and clarification of statistical data and its interpretation or lack of proper interpretation. How to respond to a group & clarify info.

Ag and economic development

Diversification

Keeping ag profitable

Personnel management—how to attract and keep good employees

Time management

How to balance work & family life

The importance of being a good financial manager & planner

Knowledge of local and state government land use regulations

Wetland issues

Insurance (crop, life, liability, etc.)

Real estate (investing & marketing, etc.)

Land formation & irrigation & drainage, etc.

More information on global issues that affect agriculture

International trade policy & free trade

Biotechnology (plant genetics/biofuel opportunities)

Trouble shooting negative public opinion on Ag issues

More politically related at state, nat'l [sic] & international

Trade policy

Cover ways to diversify farming or whatever occupation you have, as to succeed and survive

Education to public more on the importance of agriculture

Public speaking based on agricultural skills

More public speaking

Health care in Louisiana

Remember—you one day will retire

Cafta!

More instruction in state level politics

Networking with farm organizations in other states

Exploring markets that could take Louisiana ag to the next level

The future price of all farm comodities [sic]

Today's loss of production of all comodities [sic]

Risk that's involved in ag farm comodities [sic]

More on marketing & international trade

Extra stress on value added ag activities & commodities

The future of agriculture in our state

Global trade

Farm Bill-subsidy

Niche' markets

More networking opportunities amongst classmates

More challenges to think "outside the box"

More emphasis on diversification

Developing more business skills

More commodity involvement

Policy from a libertarian angle

Speculation of outcomes from a "what-if" view (ex. What if---no REA, UDSA, etc.)

Government & the political class as an agent of negative change

More information/interaction with news media and environmental extremist groups

Move some seminars to various parts of the state

Value-added farm products

Farm safety

More local involvement

Trade issues and the truth. Not what the media & politicians say

Foreign trade issues like CAFTA

Effectively communicating with elected officials

Does production agriculture have a future in the U.S.

Farm Unions that work

More producer information exchange

More commodity training—futures, call, puts—"mock" trading throughout 2 yr class—each student have account

More ethics and corporate responsibility

Formal networking training

More from DEQ, EPA, OSHA

Coastal/wetlands issues

Family development issues (domestic communications)

Aquaculture/fisheries

Additional forestry related topics

More public speaking activities

Written communication activities

How to effectively communicate with your State Senator & Rep

How to encourage existence of family farms for generations

Environmental issues

Feasibility studies if future of individual commodities

What makes successful business people?

How to be more involved politically, state & federal

See 1st hand how political action committees work

Education concerning state & local government workings expanded

Labor force—we need young people to consider forestry, logging, etc.

More emphasis on global economics

More international issues (languages, business acquaintances)

Information on how to be more self sufficient

Public speaking

Computer skills

Michele Abington-Cooper was born Gerelyn Michele Abington, along with her twin sister, Ina Louise Abington (deceased), on March 7, 1947, in Shreveport, Louisiana. Her parents are William Henry and Corinne Carver Abington of Keatchie, Louisiana. She has a brother, George Michael, two years her junior. Michele grew up in rural Caddo Parish and attended Greenwood High School through the eighth grade. She attended Oak Terrace Junior High and graduated from Woodlawn High School in Shreveport in 1965. After graduation, Michele attended Northeast Louisiana University in Monroe, Louisiana, receiving a Bachelor of Science degree in home economics with a minor in English. She then obtained a teaching graduate assistantship and received her masters in Administration and Supervision with a minor in home economics in August of 1971. During college Michele married Dennis Allen Cooper and had a son, Michael Raymond, in 1968.

Upon graduation from college, Michele went to work as Assistant Home Economist with the Louisiana Cooperative Extension Service in Franklin Parish. She worked there for 25 years as 4-H Agent serving youth, parents, volunteers, and the community. Her 4-H members excelled in the clothing, foods and nutrition, public speaking and demonstrations, citizenship, and leadership projects. Two of Michele's 4-H members were elected State 4-H President and many more held other offices and attended National 4-H Congress and Conference. During that time she received the Distinguished Service Awards from NAE4-HA (National Association of 4-H Agents) and NAEHE (National Association of Extension Home Economists), served as Vice-President of LHEA (Louisiana Home Economist Association) where she received the Outstanding Young Home Economist Award, and served three years on the National Board of NAE4-HA. She was named Woman of the Year by the Winnsboro Junior Chamber of

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Commerce and ABWA (American Business Woman's Association) and received the First Mississippi Award from the Cooperative Extension Service. She and her co-worker twice received the 4-H Team Award from LCAAA (Louisiana County Agents Association). She is also a member of ESP (Epsilon Sigma Phi) a national extension fraternity, and served on the ESP National Board for two years. In the spring of 1996, the mayor of Winnsboro proclaimed May 23rd as Michele Abington-Cooper Day.

In 1996 Michele re-located to Baton Rouge to serve as Assistant Director of the LSU AgCenter Agriculture Leadership Development Program, work in youth and adult environmental programs, and pursue the degree of Doctor of Philosophy. In 2000 Michele transferred to the Program Organization and Development Department to conduct leadership development programs within the organization. Michele became part of the State 4-H Staff in 2001 as the 4-H Environmental and Natural Resource Education Specialist. In this capacity she serves as Director of the 4-H Shooting Sports, Sport fishing and ATV Safety Programs in addition to environmental education camping programs.

Michele now serves as Assistant Professor in the 4-H Youth Development Department. She resides in Plaquemine, Louisiana, and is the proud grandmother of Jared Samuel Cooper born February 18, 2005.