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Perceptions of Agricultural Leadership Academic Programs at 1862 Land-Grant Universities

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Perceptions of Agricultural Leadership Academic Programs at 1862 Land-Grant Universities

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by

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This thesis is approved for recommendation to the Graduate Council.

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Abstract

This study sought to characterize perceptions of agricultural leadership programs in colleges of agriculture, food, life, human, or environmental sciences at 1862 land-grant institutions. Twenty-six academic programs were identified with a major, minor, graduate degree, specialization, concentration, or certificate in agricultural leadership. Programs were identified through analyzing the APLU and USDA NIFA websites, searching academic college websites, and contacting deans and departments heads. Objectives included identifying programs, describing the need for programs, describing evolution that has taken place within the discipline, describing faculty recommendations for future development and growth in the field, and examining why faculty believe programs are relevant. Mixed methods were employed with a survey instrument, document analysis, and qualitative interview. Quantitative data were analyzed via descriptive statistics, and qualitative data were analyzed using thematic analysis, including open and axial coding. Twenty-two respondents completed the survey, while 19 completed the interview. Agricultural leadership was formed from a need in the agricultural industry but holds roots in agricultural and extension education. The discipline evolved by taking on a broad appeal, as well as experiencing growth through the expansion of community and rural leadership development. Faculty recommended collaborative efforts across the discipline through establishing a professional organization, but also indicated a unified vision was imperative for growth. Faculty were asked about the outlook of the field and foresaw growth nationwide. When referencing the relevancy of agricultural leadership's role in academia, two themes emerged: a) agricultural leadership creates leaders through developing "human capital," and b) graduates promote industry growth through their political, policy, and public influence. Results aligned with research indicating the discipline should be analyzed to promote a unified vision for

sustainability. This vision includes collaboration to establish a set of standards and proficiencies to prepare students for roles as industry leaders. The study identified the top agricultural leadership programs at 1862 land-grant institutions, which were the University of Florida, Texas A&M University, the University of Nebraska, Oklahoma State University, and Virginia Polytechnic Institute and State University. Future recommendations for research included identifying perceptions of agricultural leadership beyond the scope of 1862 land-grant institutions.

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the present and the hope of the future. If we couple our hard work with the values and knowledge

learned during our time at the U of A, may our future be better than our past.

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I.   Introduction

A.   Need for the Study

Identifying the history and realities shaping perceptions surrounding agricultural leadership programs is imperative to understand how to lead these programs into the future (Williams, Townsend, & Linder, 2005). Velez, Moore, Bruce, and Stephens (2014) reported agricultural leadership programs typically have roots at land-grant universities, specifically within departments of agricultural education and extension and have shifted from primarily educating rural youth to educating undergraduates and graduates on becoming educated, empowered community members. Morgan, King, Rudd, & Kaufman (2013) indicated agricultural leadership programs continue to enjoy success at institutions across the country, but there is a lack of research that includes but is not limited to, program objectives, available courses, perceptions of programming, placement of graduates, and needs for programs.

Many post-secondary institutions have worked to increase leadership development opportunities for students via curricular and co-curricular activities, such as club and organizational events, internship and leadership experiences, and have added an increasingly wide variety of courses within departments of agricultural education and schools of agriculture (Fritz & Brown, 1998). Additionally, many educational systems have been criticized throughout recent decades because of their inability to develop leaders for a diversified workforce (Gardner, 1990). Agricultural students are no exception to the increased need for prepared graduates with the experiences and skills necessary to lead in their careers and society (Rosch & Coers, 2013). Odom, Boyd, and Williams (2012) contended leadership educators should work to foster unique learning experiences for students to develop better leaders.

Leadership programs should afford students with opportunities such as increasing self-efficacy through leadership practice, understanding group dynamics, growing their teamwork skills and organizational leadership abilities, and finally, acquiring developmental skills related to time management (Eich, 2008). Strickland (2011) indicated research identifying the impacts and outcomes of agricultural leadership programming has been limited; so, research must be conducted to identify the impacts and outcomes of agricultural leadership programs. Cronbach (1981) contended evaluations should both inform and improve operations in a given system or discipline. Timely evaluations are needed for programs to grow in terms of understanding short-, medium-, and long-term goals (Rohs & Langone, 1993).

B.   Statement of the Problem

A 1998 study by Schwartz, Axtman, and Freeman reported there has been significant growth in academic leadership programs at institutions nationwide. The growth of leadership education is directly attributed to an increased number of academic courses, certificates, majors, minors, specializations, and concentrations related to leadership development (Riggio, Ciulla, & Sorenson, 2003). A large number of post-secondary institutions are currently addressing the need for leadership development through diversified course offerings, and the growing numbers of leadership development courses are being offered in agricultural education departments (Fritz & Brown, 1998). Agricultural leadership programs have been praised for their networking opportunities, which has led to widespread support from the public and private sectors. Therefore, these programs are used to develop leaders for future service in rural communities and agricultural organizations (Kaufman & Carter, 2005).

Understanding how leadership is developed in differing cultures, programs, and organizations is of the upmost importance in working to understand the overall context of

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leadership (Nahavandi, 2006). Lee-Cooper (1994) contended administrators use evaluations as a tool necessary for analyses of policy making and decisions regarding program management. Connors and Swan (2006) revealed agricultural education and agricultural leadership research has been significantly inconsistent over the years. Kaufman, Rateau, Ellis, Kasperbauer, and Stacklin (2010) explained needs-assessments are the first step in working to evaluate leadership education programs. Bridges (1996) and Senge (1990) said scholars in the leadership discipline have warned academic institutions and organizations to work harder to ensure their survival in a changing workforce by becoming learning and knowledge-based to promote creativity and growth. Evaluating educational practices is the process where judgment can be made regarding the worth of programs, materials, and techniques (Borg & Gall, 1983).

Through the solicitation of input from experts in agricultural leadership education, one might better understand post-graduation career placement, academic programming objectives, research foci, agricultural leadership courses delivered, and the perceptions of faculty within the discipline (Morgan, King, Rudd, & Kaufman, 2013). Kaufman, Rateau, Ellis, Kasperbauer, and Stacklin (2010) contended more research must be conducted to clarify the understandings and benefits of agricultural leadership programming. Mannebach (1990) indicated changes within the agricultural education and leadership field have evolved at an unprecedented rate, which coincides with recommendations set forth from Spotanski and Carter (1993) that research related to leadership within the agricultural education context needs to explore priorities of future research, training, student development, and program growth. Finally, Williams, Townsend, and Linder (2005) recommended conducting a qualitative study to include leaders within the field to better understand knowledge of the discipline.

C.   Purpose Statement and Research Objectives

The purpose of this study was to identify current agricultural leadership academic programs in colleges of agriculture, food, human, life, or environmental sciences, and then characterize the perceptions of these programs from faculty members at the undergraduate and graduate levels. The study also encompassed programs which offered certifications, specializations, concentrations, and options focused in agricultural leadership. The following research objectives guided the study:

1. Identify current agricultural leadership programs at 1862 land-grant institutions that offer a major, minor, certification, option, specialization, or graduate degree in agricultural leadership;

2. Describe the need for the development of agricultural leadership programs at land-grant universities;

3. Describe agricultural leadership's discipline-wide evolution regarding curriculum, training, teaching practices, and courses offered;

4. Describe faculty members' recommendations on what should be developed or changed to holistically advance curriculum and update programming efforts within the field for future improvement and growth of agricultural leadership programs; and

5. Examine why faculty believe agricultural leadership-related programs are relevant by also analyzing their outlooks for the future of the discipline.

D.   Definitions of Key Terms

Agricultural leadership as a discipline: An academic discipline often within a department of agricultural education or college of agricultural, food, environmental, human, or life sciences or natural resources that offers agricultural leadership as a major, minor, emphasis, concentration,

certification, or specialization on the graduate or undergraduate level. (Pennington & Weeks, 2004)

Agricultural leadership faculty: Current faculty members who focus their attention on leadership-related academics within colleges of agricultural, food, human, environmental, or life sciences. These faculty members focus on teaching, research and extension, which is representative of the structure of the land-grant mission (R. S. Sapp, personal communication, May 5, 2015).

Leadership: Northouse (2015, p. 3) defines leadership as "a process whereby an individual influences a group of people to achieve a common goal." The definition of leadership is complex because each person shapes his or her outlook and practice of leadership differently (Draft, 2002). Regarding the needs of this study, leadership can be described as a variety of characteristics, qualities, traits, and skills that guide an individuals' method of interacting with, motivating, and influencing those around them.

Curriculum: Finch & Crunkilton (1999, p. 11) defines curriculum as "the sum of learning activities and experiences that a student has under the auspices or direction of the school." For purposes of this study, curriculum can be defined as all methods of teaching, educational topics, and class materials presented by faculty for students studying the agricultural leadership field.

Theory of Planned Behavior: The Theory of Planned Behavior is a model that processes human behavior beliefs, normative beliefs, and control beliefs to formulate one's intentions for being led to participate in a behavioral outcome (Ajzen, 2006).

Bloom's Taxonomy: Bloom's Taxonomy divides the way people learn into domains. The theory is widely used throughout education as a tool for evaluation and understanding for improvement

within a given discipline. The categories which comprise Bloom's Taxonomy are remembering, understanding, applying, analyzing, evaluating, and creating (Anderson et al., 2001).

Student Leadership Program Model: The basis of this model indicates there are three major types of leadership-enhancing activities: training, education, and development. This model is widely contended to aid in the development of leadership programs in teaching hands-on skills to students (Roberts & Ullom, 1991; Chambers, 1992).

Leadership Training and Skill Development: Skill development, also called training, involves a wide variety of activities designed to improve performance of an individual in the role they presently occupy. Leadership training and skill development activities are focused on the direction and development of the individual in a newly learned skill or piece of information to be used in a real and immediate situation (Roberts, 1981; Allen, 1996).

Leadership Traits: Numerous researchers indicate leadership is an inborn ability with an individual possessing a variety of traits that make him or her predisposed to become a leader. The traits most common traits include influence, intelligence, confidence, charisma, determination, sociability, extraversion, cognitive ability, initiative, persistence, achievement, and motivation (Stogdill, 1974; Northouse, 2015).

Leadership Skills: Formerly believed leadership was attributed to predestined traits, research over the last 10 years has begun to shift into the notion that individuals may develop into leaders once they learn various skills related to leadership. These skills can often be grouped into three main categories – administrative skills, interpersonal skills, and conceptual skills. Of these categories, examples include problem-solving, strategic planning, managing conflict, developing emotional intelligence, exhibiting technical confidence, and managing people (Lord & Hall, 2005; Northouse, 2015).

E.   Assumptions

The researcher included the following assumptions related to the study:

1. It can be assumed by the researcher the subjects answered all questions completely and truthfully.

2. Participants are current agricultural leadership faculty members who have advised students, conducted research, taught classes, and designed courses, which may create bias about the subject area.

3. It can be assumed the researcher will maintain some bias in relation to the subject area because of the researcher's background being heavily steeped in leadership development programming.

F.   Limitations

1. All results can be only generalized to the programs related to this area of study.

2. The perceptions derived from this study might not reflect the entirety of perceptions related to a faculty member's entire academic program or the discipline as a whole.

3. The data were based on experiences of the faculty who participated in the study.

4. Not all subjects completed the surveys administered.

5. Not all subjects chose to participate in the interview portion of the study.

II.   Review of Literature

A.   Conceptual Framework

Overview of the Land-Grant System

The origin of the land-grant university is both unique and complex because the current structure of land-grant schools required massive evolution to become modern research and teaching institutions, while also maintaining the heritage and roots from which they were derived (Bonnen, Lerner, & Simon, 1998). The earliest onset of agricultural and extension education or agricultural leadership programming has often been attributed to the Morrill Act of 1862, which was introduced to Congress by a United States Representative from Vermont named Justin Morrill (Comer, Campbell, Edwards, & Hillison, 2006). Representative Morrill envisioned a system of universities across the country that, by 1914, would work to promote research, teaching, and information dissemination (extension) to the public (Williams, 2007).

The Morrill Land-Grant Act would establish a university in each state to serve the needs of each person by teaching practical skills needed for success in an increasingly industrial economy and a changing agricultural industry (Herren & Edwards, 2002). Land-grant colleges of agriculture are unique because they serve a specialized, three-part mission: education, research, and extension (Ballenger & Kouadio, 1995). The basic premise of land-grants was to allow "common people" to attain formal and informal educations through higher- learning, public institutions and through extension education programs (Appleby, 2007).

The land-grant system followed a prolonged implementation process spanning from the initial creation of the system in 1862, to the passage of the Hatch Act in 1887 to establish experiment stations in each state, followed by the creation of additional endowments to include people of all races and backgrounds in the Morrill Act of 1890, and finally, the Smith-Lever Act

of 1914, which created the Cooperative Extension Service associated with the land-grant system to disseminate information to the public (Washington State University Extension, 2009). According to Washington State University's Cooperative Extension Service, with the USDA guiding the majority of the funds allocated for land-grant schools, there is currently at least one land-grant college in every state along with a cooperative extension service to follow suit. The original mission of the land-grant system would lay the bedrock for today's agricultural education and agricultural leadership programming (Edgar, 2007; Kelsey & Wall, 2003; & Williams, 2007).

History of Leadership Development

Beginning in the mid-1960s, agricultural leadership development programs (LDPs) have continued to provide opportunities for individuals involved in agriculture to cultivate their passion for both leadership and agriculture, as well as the impact they have in their industry or community (Carter & Culbertson, 2012). Leadership development programs, which draw their roots from the Kellogg Farmers Study Program that studied Michigan farmers, have been known to develop students' leadership knowledge, skills, attitudes, and behaviors through participation in these programs (Strickland, Carter, Harder, Roberts, & Wysocki, 2010).

The study of leadership theories and methodologies, as well as the expansion of leadership programming, has exploded and advanced tremendously since college campuses began making leadership study areas a higher priority (Engbers, 2006). Agriculturally-based programs, such as the Kellogg program created by Dr. Arthur Mauch at Michigan State University, helped shape the agricultural leadership discipline and were organized to expand agriculturalists and rural citizens' knowledge in the liberal arts, networking skills,

communication techniques, political understanding, and industry and community awareness (Howell, Weir, & Cook, 1982).

Adair (1984) indicated students can learn leadership skills through formal and informal educational practices. A best practice for leadership development is to allow individuals to exercise their leadership skills and talents (Townsend, 2002). Theories regarding leadership, as a process, vary greatly from theorist to theorist (Bass & Avolio, 1994). Kaufman, Rateau, Ellis, Kasperbauer, and Stacklin (2010) determined the larger goal of leadership development is working to build students' leadership capacities as a measure to be proactive against unforeseen challenges in adapting to changing climates or cultures.

Leadership Development in Agricultural and Extension Education

From early beginnings, extension work emerged because large numbers of people began working together to improve agricultural techniques and practices, and also disseminate information from those who were better educated to those who were not, thereby creating a new generation of agricultural leaders (Smith & Wilson, 1930; Kelsey & Hearne, 1955). As the industrial revolution changed society's man-made capital from simply creating new machinery to mass production of goods and foods during the 19th century, the need for a knowledge-centered society was evident as strategic investment in human resources, organization and leadership aided to the evolution of problem-solving, innovation, and production efficiency (Boulding, 1953).

While the term "extension" is often substituted for "outreach," depending on what region of the country is being discussed, the main principle of land-grant institutions has not wavered. It is important to honor the traditional roles of these universities' (both extension and education programming), and their social responsibility of educating youth and adults about not only their

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wants but also their needs from situations ranging to agriculture to health and wellness (Bonnen, Lerner, & Simon, 1998). From the earliest days of extension outreach and education to today's colleges of agriculture and departments of agricultural education, mass evolution is taking place to keep up with changing trends within the discipline (Williams, 2007).

Within agricultural education, the field has grown to encompass a number of academic programming areas, which include teacher education, agricultural communications, extension education, international agricultural education, and leadership education (Edgar, 2007). Kelsey and Wall (2003) illustrate how agricultural leadership programs have a generational history in the United States rooted in agricultural and extension education. As early as the mid-1970's, it has been the charge of agricultural education programs across the country to provide leadership education and develop new leadership exercises and practices (Brown & Fritz, 1994).

The 1989 Strategic Plan for Agricultural Education highlighted a need to "amplify and expand the whole person concept of education, including leadership" (National Summit on Agricultural Education, 1989, p. 4). Research by Brown and Fritz (1994) indicated leadership courses and programs being offered by departments of agricultural education are well-received by faculty and students and continue to climb in both stability and growth. Many higher- learning institutions have exhibited a strong commitment to promoting leadership development programming since their inception and are working to prepare professional and societal leaders for future generations (Astin & Astin, 2000).

For decades, scholars in agricultural and extension education deduced the inception of the land-grant system can be attributed to the creation of programs such as the Boys and Girls of America, 4-H [formerly Corn Clubs] and the National FFA Organization (Simonsen et al., 2014). The land-grant system laid the framework to create future generations of leaders, and agricultural

and extension education programs have continued that legacy through secondary-education experiences and are important in the leadership development of young people through programs such as 4-H and FFA (Allen, Ricketts, & Priest, 2007). For example, Simonsen et al. (2014) concluded if a student served as an officer or team leader in an organization such as National Honor Society, 4-H, student council, or FFA, the student was more likely to continue pursuing leadership development in the future.

Leadership Development as an Academic Discipline

The teaching of leadership to students on college campuses has created a growing trend in higher education regarding co-curricular, academic leadership development programs (Riggio, Cuilla, & Sorenson, 2003; Schwartz, Axtman, & Freeman, 1998). Beyond the focus of theory development, leadership researchers must first focus on what has already been researched to build upon what can be done within the discipline (Connors & Swan, 2006). Leadership is a discipline, much like any other, where there is continuous scholarly discussion and debate regarding theories, concepts, and ideas (Williams, Townsend, & Linder, 2005). Astin and Astin (2000) emphasized the important role of leadership development in higher education for the growth of modern American society.

Leadership programs, as aligned with the Student Leadership Program Model, have been theorized to consist of three main areas: training, education, and developmental programming (Roberts & Ullom, 1989). Allen (1996) indicated skill-building (also called training) implements activities where students can improve performance in various fields, such as personal growth, leadership and organizational development, and even political advancement. Leadership development is linked to the philosophy of continuous learning, which is the notion students

must be more educated as technologies change and our global economy diversifies at an increasingly rapid pace, as recommended by London and Smither (1999).

Leadership skills, like many other transferable skills, are developed through methods such as training, personal growth and experiences, observations and reflection, and finally, education (Brungardt, 1996). Fritz et al. (2003) indicated collegiate agricultural leadership programs have found their niche within departments of agricultural education because of their strong ties to youth organizations and working to train agricultural and extension educators.

Leadership development is imperative to implement into higher education in the United States as organizations and companies are seeking to fill positions where there has traditionally been a lack of leadership among employees (Figura, 1999). Linder and Baker (2005) suggested with changing trends in social, academic and business environments, agricultural leadership programs are helping to reshape agricultural education. As many universities aim to emphasize the education of tomorrow's leaders, who will contribute to the growth of our society through their mission statements and branding efforts, leadership is undoubtedly a cornerstone in higher education (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001).

Impact of Agricultural Leadership on Society

Our country is experiencing a crisis in leadership and requires better leaders being developed in all aspects of our society (Wren, 1995). Agricultural leadership programs are being held accountable for planning programs, which will have an impact on the effectiveness and efficiency for the impacts and outcomes of student participants (Boone, Safrit, & Jones, 2002). Carter (1999) said participants in non-academic agricultural leadership programs were found to have broadened their experiences related to cultural diversity, increased their networking skills,

advanced their critical thinking ability, and grew more aware of local, state, regional and national agricultural issues.

According to Strickland, Carter, Harder, Roberts, and Wysocki (2010), academic-related agricultural leadership alumni are heavily involved in local, state, regional and national organizations, and are said to be prone to read more, participate in leadership development activities, and also seek further higher-education opportunities. Agricultural leadership program participants have been identified as having increased self-confidence and a stronger understanding of leadership development about one's responsibilities as a leader in his or her community (Dhanakumar, Rossing, & Campbell, 1996). Russon and Reinelt (2004) concur there are large amounts of research depicting the impact of leadership programs regarding developing skills, capacities, and knowledge related to leadership.

Leadership development programs have been found to possess many benefits for participants and the communities in which they lived and worked (Galloway, 1997). Students who engage in agricultural leadership academic programs acquire extensive and relevant knowledge about local, state, regional, national and international issues impacting industry (Kaufman & Carter, 2005). Research by Eich (2008) focused on students' perspectives of high-quality leadership programming. The conclusions revealed there are three main clusters that highlight academic programs: (a) participants who are engaged in building and sustaining learning communities; (b) experiential learning experiences centered on students; and (c) continuous development of program areas grounded in research.

Lewis (1995), Watt (1995), and Wren (1994) indicate leadership courses and programs are comprised of several important considerations set forth by students: students' comfort level with the concept of leadership as a subject area; students' ability to identify leadership elements;

students' willingness to accept leadership as a process; students becoming aware of leadership practices; students working to develop a personal approach to leadership; students establishing leadership purposes; students' ability to enhance their analytical skills in relation to leadership concepts; and the sharing and communication of emerging and developing leadership theories.

The impact of leadership development has been characterized as giving individuals the capability to engage effectively with members of an organization, the establishment of meaningful dialog regarding the role of leadership as a process among students, higher ability to assume leadership roles or positions, and an increased likelihood of students to build a higher capacity for thoughts and ideas (Day, 2000; Huestedde & Woodward, 1996; McCauley, Moxley, & Van Velsor, 1998). Additional research concluded that leadership theory and practice, when coached, developed or taught, helps students reach their full potential to assume prominent roles in communities and organizations and also promotes growth in businesses, industry, and community development (Kristick, 2009; Russon & Reinelt ,2004; Taylor,1962).

Leadership development programs have been found to possess a multitude of benefits for students who are aiming to make an impact in the communities in which they live and work (Galloway, 1997). As advocated by Ewing, Bruce, and Ricketts (2009), the future success of students as they enter the job market is hinged on their ability to serve as leaders, and more importantly, our society will seek strong leaders based on one's participation in leadership development organizations and programming areas. Nearly two-thirds of students indicate they developed their communication, interpersonal, and personal growth skills after participating in curricular and co-curricular opportunities during their collegiate experiences, both inside and outside the classroom (Love & Yoder, 1980).

The impact of leadership programming stretches far beyond the classroom or the community but is also felt in the workforce, as documented by a 2011 study by the Association of Public Land-Grant Universities (APLU) and the University Industry Consortium (UIC). This study, spearheaded by researchers at Michigan State University, revealed employability skills are changing as our society is evolving. The study identified leadership and teamwork as two of the most sought-after skills for new employees (Crawford, Lang, Fink, Dalton, & Fielitz, 2011). Moreover, the same APLU/UIC study recommended quality employees should be able to recognize when to lead or follow, work with multiple approaches with a variety people in unique settings, build lasting and professional relationships, and be aware of others needs by promoting sensitivity and diversity in the workplace. Furthermore, the conclusions of the study revealed leadership ranks in the top seven of the most important soft skills sought by employers hiring new employees. Additionally, leadership was the fifth most important skill set to be developed by new employees, with all stakeholder groups suggesting the biggest aspect of being a leader is seeing the "big picture" within a company or organization (Crawford, et. al., 2011).

Because of the growing importance of leadership in communities, companies, and college campuses, the National Leadership Education Research Agenda (NLERA) was formed in 2011 to assist in the guiding and development of a more structured approach to understand and teach leadership (Andenoro, et. al., 2013). Leadership's impact has driven the NLERA to introduce research priorities, which include (a) teaching, learning and curriculum development; (b) programmatic assessment and evaluation; (c) the psychological development of leader, learners, and follower; (c) the sociological development of the leader, learner, and follower; (d) the influences of social identity; (e) social change and community development; and (f) global and intercultural leadership (Andenoro, et. al., 2013 p. 9-28). A number of the expected outcomes

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include a better understanding of the process of educating students for mastering a given expertise as a leader; the development of leaders, followers, and learners' psychological capacities; the development of more a more vibrant, resilient society; and the development of intercultural leadership educators and global leadership organizations (Andenoro, et. al., 2013).

Assessing the Agricultural Leadership Discipline

Because of the growth taking place in the leadership discipline, Brungardt, Greenleaf, Brungardt, and Arsendorf (2006) recommended studying a wide variety of programs across the country to examine the unique structures and operations of these departments. According to Eich (2008), high-quality leadership programs consist of a diverse student body, which leads to outcomes, such as collaboration for unique learning opportunities, social capital and networking, and new ideas to shape leadership perspectives. Faculty members often neglect the planning and revision of curriculum because of a lack of effective methods to undertake such an effort (Morgan, King, Rudd, & Kaufman, 2013). Research for program assessments within academic disciplines are necessary to create changes and improvements to ensure program success, and should be regularly conducted so evaluations can measure the effectiveness of academic (Large, 2014). Townsend (2002) recommended research must be conducted regarding teaching and learning environments and developing productive curricula to improve the field for leadership in the changing world.

As the agricultural leadership discipline continues to grow and mature, Velez, Moore, Bruce, and Stephens (2014) recommend continued research will further examine program development. If leadership development is to grow and evolve as a sector of the agricultural education discipline, it is imperative to continue making efforts to improve and enhance the field (Fritz & Brown, 1998). Connors and Swan (2006) suggested leadership development within the

field of agricultural education has been researched for decades; however, if professionals and researchers want to further the knowledge base of agricultural leadership, a clear dialog, and collaborative efforts must be made to showcase what has been and is currently being done. While there is ample research identifying the impact of leadership development programs, there is little information showcasing the development of leadership programming as a discipline over time (Russon & Reinelt, 2004).

Black (2006) contends evaluation of these programs suggest agricultural leadership opportunities at universities increase graduates community involvement, awareness of agricultural programs, and improves business- and decision-making skills. The growth and development of leadership education is hinged on agricultural educators who must recognize the needs of students, work to implement new strategies for effective leadership, set goals for the advancement of academic programming growth, and guide and direct the future of a changing industry (Birkenholz & Schumacher, 1993). Lamm, Carter, and Lamm (2015) indicated it is important to continuously and accurately evaluate the outcomes and impacts from leadership development programs for university administrators to continue support professionally and financially.

Periodic examination of academic disciplines is imperative when seeking results to improve student success, academic programming at colleges and universities, and industry expertise (Large, 2014). Many academic programs experience life cycles of highs and lows that include introduction, growth, maturity, and decline (Acquah, 2010). The evaluation of different disciplines in academia creates the establishment for common focus areas, professional cohesion, and collaborative goals and strategic visions for academic departments (Miller, Stewart, & West, 2006). To continue growth of the discipline, researchers must strive to understand what has

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already been studied within the field and summarize that information when making suggestions and recommendations for further studies (Connors & Swan, 2006).

Agricultural curriculum should be dynamic and able to accommodate new situations and environments within agricultural industries to ensure survival, and agricultural education departments should regularly examine all facets of curriculum to promote the growth and development of a growing academic field (Graham, 2001). Bennis and Nanus (1985) emphasized leadership to be one of the most studied but least understood subject areas. Further recommendation for evaluation is important in determining the long-term impact of agricultural leadership programming related to agricultural sciences and natural resources (Diem & Nikola, 2005).

There is little empirical research on how student leadership program quality and activities contribute to leadership development and learning processes (Eich, 2008). Large (2014) discussed how empirical data can be used to guide further studies in understanding where an academic discipline is headed; how to construct new, unique opportunities for student learning and development; and, finally, how to better address issues related to the growth of academic programs and curriculum development. Miller (1976) recommended evaluations should be conducted on a regular basis to determine the extent of how agricultural leadership programs are contributing to communication roles, community involvement efforts, improved decision-making abilities, and overall capability of students to assume leadership roles.

Although the discipline has continued to show trends in growth, there is little consistency among universities and colleges about guidelines and frameworks to drive the field regarding courses offered and content of course material (Brungardt, 1996). Morgan, King, Rudd, and Kaufman (2013) contend curriculum planning and development is often neglected because of the

difficulty of predicting future needs; so, many needs can only be assessed after students fail to enroll or withdraw from a given program area. While it is difficult to predict the future needs and trends of students, Sprecker and Rudd (1997) acknowledge colleges of agricultural, food or life sciences or natural resources must face the difficult task of fulfilling the needs and success of future graduates.

B.   Theoretical Framework

Ajzen's Theory of Planned Behavior

Leadership programming has been shaped by theories, models, and methods that have changed and developed as the discipline continues to evolve (Clark, 2001). The first of two theories to guide this study is Ajzen's Theory of Planned Behavior, and, the second theory, Bloom's Taxonomy. Both of these theories focus on human behavior decision-making, learning style, and interaction. It can be difficult to pinpoint and characterize human behaviors. This idea is contended by Jago (1982), who identifies "harder" sciences, such as chemistry, physics or biology can be easier to characterize based on "laws" that govern a particular phenomenon, whereas "softer" sciences, such as human behavior or interaction, remain imprecise or inexact because of the complexities of human emotion.

Ajzen's Theory focusses on intentions that represent the motivations of an individual about his or her conscious plans or decisions to begin a certain behavior (Ajzen, 1985, 1988, 1991, 2006). According to Conner and Armitage (1998), the Theory of Planned Behavior has experienced a high degree of success in predicting varieties of behaviors, and serves as a solid theory for creating effective design decisions in producing change behaviors.

> "According to the theory, human behavior is guided by three kinds of considerations: beliefs about the likely outcomes (behavioral beliefs), beliefs about the normative expectations of others and motivation to comply with these expectations (normative beliefs), and beliefs about the presence of factors that may facilitate or impede

performance of the behavior and the perceived power of these factors (control beliefs)" (Ajzen, 2006, p. 1).

Kaufman and Carter (2005) articulated agricultural leadership programming makes strong connections to networking, which is important when considering the motivations and expectations of others to work toward creating value for the areas where these programs exist. Bennis (1992) discovered leadership theory can be taught, which ties directly into Ajzen's theory that one's beliefs about certain factors can facilitate or impede the performances or behaviors of others. Ajzen's theory highlights the idea that faculty members developed leadership programs at higher-learning institutions by using behavioral decisions based on industry and student needs.

Many higher-education institutions have realized the importance of formal leadership education within the last decade (Williams, Townsend & Linder, 2005). With this idea of higher education embracing formal leadership programming opportunities for students, it is important to identify and understand what agricultural leadership-related faculty foresee in the future of the field, and conceptualize what they believe will motivate the behavior of students to continue enrolling in leadership programs (Moore, Odom & Moore, 2013). Ajzen's theory explains "normative beliefs result in perceived social pressure" to be the subjective norm.

Within the agricultural leadership discipline, many students and faculty members come from a rural background or have been associated with programs such as 4-H or The National FFA Organization (Connors & Swan, 2006). Just as Ajzen (1991) recommended, social pressure from peers appears to be the norm; so, faculty often choose to participate or work in the agricultural leadership discipline because it is familiar and considered socially normal, regardless of their skills, knowledge or attitude beforehand. Essentially, if a person finds a particular attitude or situation more favorable as a norm, the stronger the person's intentions should be to perform the behavior in question (Ajzen, 2006).
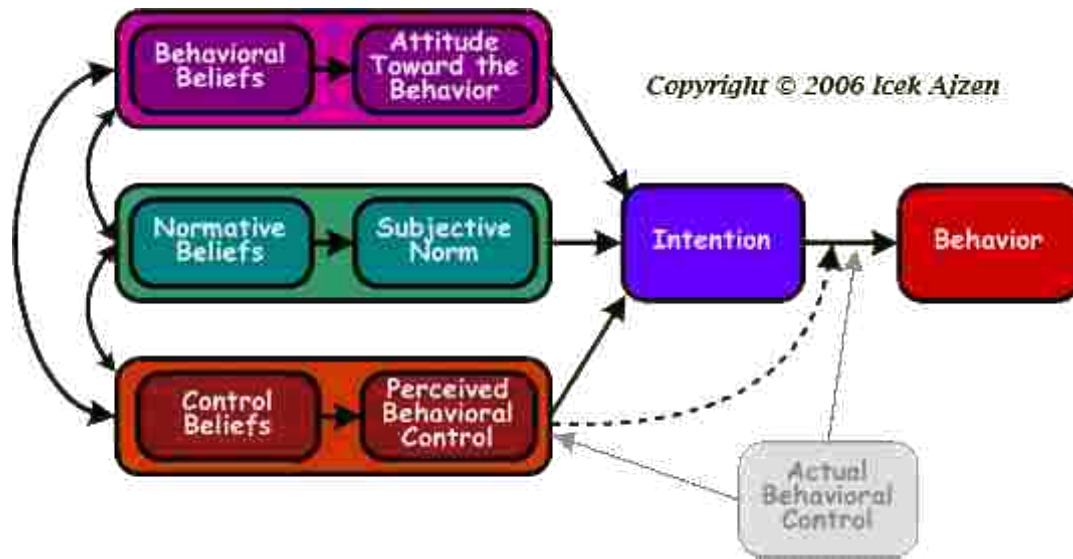
Figure 1. Schematic representation of Ajzen's Theory (Ajzen, 2006)

Ajzen (2006) contends at the most basic root of the theory, human behavior is shaped immensely by three major types of considerations: behavioral, normative, and control beliefs. Each of these beliefs and behaviors can be intertwined with one another to form an individual's intentions and their behavior. Behavioral beliefs focus on the likely outcomes and refers to motivational factors that influence a given behavior where there is a stronger intention to perform the said behavior, resulting in the most likely outcome (behavior) will be exhibited. Next are normative beliefs, where one's motivations comply with their expectations for a given outcome. The normative belief references social norms where there is a customary code of behavior within a group or larger cultural context. These social norms are considered to be the standard of a given group of people. The final main element comprising Ajzen's model is controlled behavioral beliefs. The final main segment of the model relates directly to the perceived power of one's own ability to easily or difficultly perform a task or behavior.

Building onto the three main elements of the theory are attitudes, subjective norms and perceived behavioral controls. First, attitude references the degree to which a person may or may

not have a favorable opinion of the given behavior of interest. The aspect of attitudes entails considerations related to outcomes of performing the behavior in a social context. Next are subjective norms, where a belief about whether or not the majority of people approve or disapprove of the behavior and how a person may or may not engage in a behavior because of not knowing a peer's perception of what may be thought of participating in the given behavior. The last sub-area for the model is perceived power, which refers to the perceived presence of factors that may or may not impede or motivate a person' performance of a given behavior related to the behavioral control over these factors (Ajzen, 2006).

Bloom's Taxonomy

Krathwohl (2002) described how Bloom's Taxonomy aids academic disciplines by serving as a growth model, and contends the theory puts forth a multi-tiered model to explain the processing people go through. Bloom's Taxonomy is popular among many academic disciplines as a form of understanding how people learn or master a given subject in a process. Bloom's Taxonomy can be used as a model for academic programming growth. With history traced back to 1956, Bloom's Taxonomy has served as a model for academic growth (Forehand, 2005). Krathwohl (2002) identifies Bloom's Taxonomy as a useful framework when working to understand the intended expectations of students and what they might learn as a result of the instruction.

Often thought to be an accurate tool for the measurement of thinking, Bloom's Taxonomy is widely applied to teaching and educational applications across an array of academic disciplines and programs (Krathwohl, 2002). Although it was updated in the mid-1990's, Forehand (2005) wrote Bloom's Taxonomy served as one of the pioneering theories, which was able to systematically classify how people processed thinking and learning.

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Qualitative studies are optimum for understanding perceptions related to leadership development programming (Conger, 1998).

Houghton (2004) provided extensive questioning of where researchers should begin in seeking how to improve human thinking. While it can be difficult to categorize human thinking, it must be investigated and improved regarding leadership development programming. Bryman (2004) reiterated the notion of research about leadership being steeped heavily in qualitative methodologies, but it is, in fact, these same methodologies that can be aligned with theories such as Bloom's Taxonomy to render the most valuable data. To understand the perceptions, ideas, behaviors and thought-processes regarding agricultural leadership programming among pioneers within the field, Bloom's Taxonomy allows that measurement to take place.
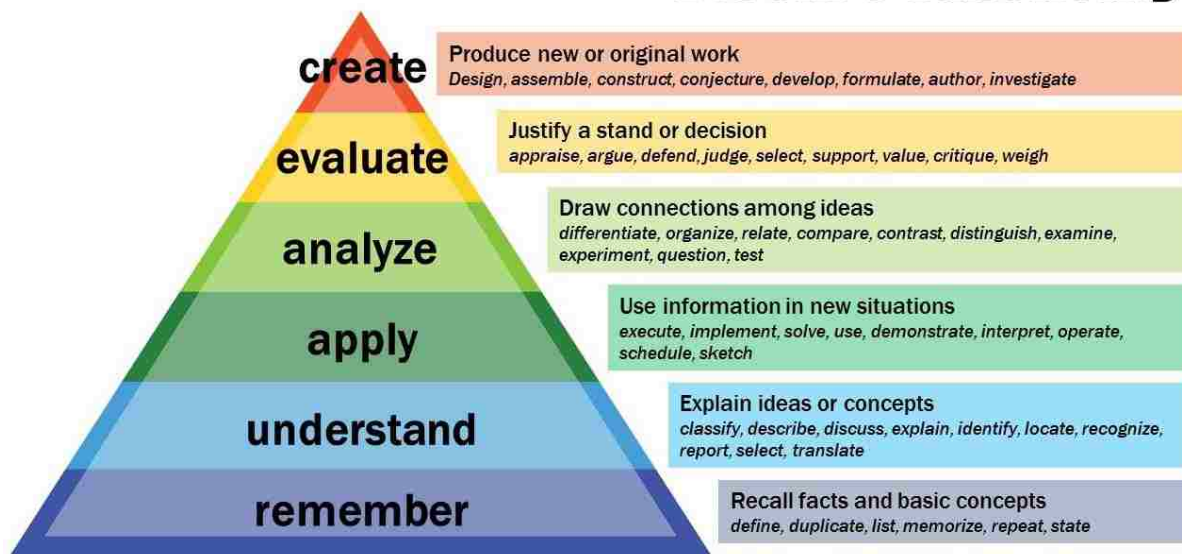
Figure 2. A revised model representation of Bloom's Taxonomy from Vanderbilt University Center for Teaching. (Armstrong, 2015).

The very idea on which Bloom's Taxonomy was developed was to identify and facilitate a means of understanding and measurement of educational objectives and outcomes of students among university faculty members (Krathwohl, 2002). Bloom's Taxonomy is broken into six

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different categories, arranged from simplest to most complex, which represent the process of cognitive learning for individuals (Krathwohl, 2002). As depicted in Figure 2, the model for Bloom's Taxonomy is arranged into a pyramid formation, which allows different components of learning to be built upon each other.

The first and most basic, element of Bloom's is *remembering*, which includes recognition and recollection of information through observation, listening, location and learning. The next building block in the pyramid is *understanding*, which is designed around the interpretation, classification, comparison, explanation, demonstration, translation, and discussion of information. Immediately following understanding is *applying*. This segment of the model includes the implementation and execution of knowledge through the application, manipulation, and experimentation of information. After the application portion of the model comes *analyzing*, which is represented through the differentiation and organization of information through the recognition of patterns, trends, and ideas. The second to last piece of the pyramid is *evaluating*, and this element is defined by the critique of knowledge through composing, inferring, modifying, combining, or predicting information. Last to be depicted on the Bloom's Taxonomy model is *creating*. Creating can be described as the planning, generation or production of information by comparing ideas, assessing theories, or evaluating, solving, rating, judging or recommending outcomes (Syracuse University Whitman School of Management, 2014; Vanderbilt University Center for Teaching, 2015).

Because many of the faculty have a background in, or have knowledge about agricultural and extension programs such as The National FFA Organization and 4-H, Bloom's may more accurately indicate how individuals reach a higher level of thinking regarding academia because of the theory being used in secondary-education models from agricultural and extension

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education. Bloom's Taxonomy can serve as a "comprehensive" model for formal and informal leadership education curriculum and programming, which will add to the arsenal of elements making up a leadership education program (Ricketts & Rudd, 2002). Moreover, Bloom's model aligns with the idea that if leadership education is used as a component of a larger leadership development program, close attention should be paid to how those educational components are used in the larger scale that fits with the goals and objectives of an overarching institution or organization (Lindsay, Foster, Jackson & Hassan, 2009). In these instances, and about a faculty member's background and current situation, leadership education might provide foundational knowledge for experiential, real-world settings and circumstances.

C.   Summary

Agricultural leadership education uniquely adds to the context and the richness of the agricultural education discipline, and there is a paramount need to understand where the discipline has been, and where it is headed into the future (Edgar, 2007). Having a better understanding of agricultural leadership-related programming will be an asset to the discipline regarding restructuring programs to students' needs, creating growth among academic programs, and increasing the knowledge of educators within the field.

Because agricultural leadership-related programming has roots in agricultural education, the premise of teaching, scholarship, serving, and evolving is integral for the discipline to move forward, and these factors contribute to the quantity and quality of research produced (Edgar, 2007). An extensive review of literature revealed, holistically, there is a need to identify each aspect and answer many questions related to the field. Regarding expanding the discipline, it is critical to examine and characterize various elements surrounding agricultural leadership to promote a structured research and teaching agenda for future use.

III.   Methodologies

A.   Introduction

Conger (1998) indicated there is a long-standing assumption of qualitative research being used in the social sciences to play into the exploratory roles of researching a prospective topic or area, and qualitative research is the method of choice for a topic as "contextually rich" as leadership. Designing and carrying out a research study, especially qualitative research, requires precision and detail from the researcher (Cronbach, 1981). This chapter sets the context for the basic qualitative methodologies, which will guide the study regarding research design, data collection, and instrumentation. The purpose of this study was to identify current agricultural leadership academic programs in colleges of agriculture, food, human, life or environmental sciences, and then characterize the perceptions of these programs from faculty members at the undergraduate and graduate levels. The study also encompassed programs which offered certifications, specializations, concentrations, and options focused in agricultural leadership. The following research objectives guided the study:

1. Identify current agricultural leadership programs at 1862 land-grant institutions that offer a major, minor, certification, option, specialization, or graduate degree in agricultural leadership;

2. Describe the need for the development of agricultural leadership programs at land-grant universities;

3. Describe agricultural leadership's discipline-wide evolution in terms of curriculum, training, teaching practices, and courses offered;

4. Describe faculty members' recommendations on what should be developed or changed to holistically advance curriculum and update programming efforts within the field for future improvement and growth of agricultural leadership programs; and

5. Examine why faculty believe agricultural leadership-related programs are relevant by also analyzing their outlooks for the future of the discipline.

B.   Institutional Review Board

By the policies set forth by the University of Arkansas and federal regulators, it is required that all research studies involving human subjects be reviewed and approved by the University's Institutional Review Board (IRB) before any research may take place. In specific compliance with this policy, the study was granted surveillance and permission was granted to continue with the research procedures. The research study was given the approved research policy number 15-05-723 and was approved on May 28, 2015. Copies of the approved IRB documentation are presented as Appendices A, B and C.

C.   Research Design

While qualitative methodologies are common among social science studies, there are five overarching reasons the utilization of qualitative methods are most useful for analyzing leadership-related issues, including: (1) qualitative research allows researchers to have an appropriate amount of time to explore various methodologies related to the complexities of leadership; (2) there is a much higher probability leadership processes can be examined more efficiently and effectively; (3) applications and varying factors can be more readily and widely explored in the context of leadership; (4) changing or emerging research designs can allow for differing concepts to be derived from the data; and (5) qualitative methodologies create an easier

path when studying a more intricate topic such as leadership (Bryman & Burgess, 1994; Conger, 1998).

Methodologies and questions used by researchers should closely align with the examined topic (Babbie, 2007). Creswell (2007) describes five main approaches to the inquiry of qualitative research and those include: narrative research, phenomenology, grounded theory, ethnography, and case study. As the highlighted topic of this study is agricultural leadership-related academic programming, there are two overarching approaches, which clearly stand out to create a guide to this study. First is phenomenology, which highlights the understanding of experiences and descriptions of certain phenomena, draws background and context from psychology and education, uses data analysis and collection methods such as interview and observation, reports results that represent significant statements, descriptions or themes, and focusses on individuals who have shared similar situations or experiences. The second main approach to be used in this study is the idea of ethnography, which proceeds to study, interpret and describe culture-sharing groups, collects data through situations such as interviews and observations, reports study results through the description of themes, outcomes and lessons learned, and draws context from areas such as sociology (Creswell, 2007).

A review of literature revealed that while leadership development studies and research related to leadership programming is often varied, research specifically relevant to academic programming within the agricultural leadership discipline is almost non-existent. Because of the limited amount of research related to this field, qualitative methodologies are integral in collecting data using these methods for developing a more complex understanding of a specific topic rather than a generalized, broad perception (Patton, 2002). Qualitative methods developed the ability for the researcher to conduct research in a natural, "humanized" fashion so both the

data and themes would be more emergent with detail; thus, leading to a richer research experience. Conger (1998) discussed how it is widely assumed in the social science fields that qualitative research plays the greatest role in the exploration of a given research topic such as leadership.

While leadership research is driven by the self-administered questionnaire, a more detail-rich study will include data collection from a variety of qualitative methods, such as evaluation, interview, observation, etc. (Bryman, 2004). Patton (2002) placed qualitative research typologies into three major, basic categories, which include: applied basic formative evaluation, summative evaluation, and action. Because of the generalized use of quantitative research being administered with self-reported surveys, qualitative methods are grossly underutilized in the field of leadership regarding interviews and observations (Conger, 1998). One of the major advantages of using qualitative research for a social science topic, such as leadership programming, is that qualitative designs occur in a more natural state and do not allow for the researcher to make an attempt at manipulating the data in relation to the phenomenon of interest, whereas this action might occur when using quantitatively designed research methodologies (Patton, 2002).

D.   Instrumentation

Researcher as the Instrument

Patton (2002) describes the concept of empathetic neutrality as being able to understand one's position, stance, feelings, perceptions, experiences, and worldviews of those around them, while not working to prove a particular perspective or manipulate data to be skewed for one result or another. One of the overarching qualities, which sets qualitative methodologies apart from other methodologies, is the unique fit qualitative data can take on regarding any given

researcher (Williams, 2007). Because this study is qualitative in nature, the researcher served as the instrument, and, therefore, the researcher must understand the philosophy and literature that will best represent and align with the methodologies used, while maintaining empathetic neutrality throughout the research process. By working to become knowledgeable in the creation of qualitative research means researchers must aim to become more effective when serving as the actual research instrument.

Interview Protocol and Subject Testing

The researcher employed a survey, interviews, and document analysis as the primary methods for collecting data, and highlighted the second method by capturing a semi-structured interview protocol. The researcher developed the interview protocol in the Spring 2015 after identifying the purpose and objectives of the study. The survey and interview questions were then field tested by faculty members within the researcher's academic department at a southern land-grant institution in a similarly related field to follow Patton's (2002) guidance about design flexibility in emergent qualitative research. The revised questions (Appendix D) were approved by the researcher's graduate thesis committee and the University of Arkansas IRB (Appendices A, B, and C).

E.   Data Collection

Huberman and Miles (2002) expressed how data collected for research should be emergent from the research design and should coincide with the overall purpose and objectives being sought in the study. "Once the research problem has been identified, the researcher must decide what information will be needed to address the problem and how best to obtain that information," (Merriam, 1998, p. 71). High-quality qualitative research is built upon a foundation of in-depth, detailed documents, observations, interviews, and quotations (Patton,

2002). Hammersley and Atkinson (1983) suggest the collection and analysis of data from different sources and individuals will inevitably create a more complete picture of the topic being researched.

Identifying and contacting departmental faculty who would serve as the sources for this study was the most integral part in being capable to conduct the research. By utilizing contacts and employing the use of online sources, such as the American Public Land-Grant Universities (APLU) and the United States Department of Agriculture National Institute of Food and Agriculture (USDA NIFA) databases, the researcher was able to reach out to all department heads or deans of agricultural, food, life, human or environmental sciences colleges at 1862 land-grant institutions. More specifically, the researcher made initial contact with the department heads or deans to provide them with a general idea of what the study would be examining and requesting permission to speak with their prospective agricultural leadership faculty member.

After being granted permission from the faculty department heads or college deans and receiving approval from the IRB, the researcher used this newly formed social network of land-grant institutions to communicate with agricultural leadership faculty and commence the interviews. The most critical portion of this study was to gain information from the sample in a timely, proactive manner. The participants who served as sources in this study had the power and influence to assist in completing the sampling process.

Initial contact with faculty members led the researcher to express gratitude to the faculty members for their time, and inquire if faculty members would be willing to participate in a short online survey and a 15- to 30-minute interview on the perceptions surrounding agricultural leadership-related academic programs at land-grant institutions across the United States. If the faculty members did not respond to the initial participation requests sent via email, they were

then sent three follow-up emails spaced two weeks apart and also given one follow-up phone call inviting them to participate two months after initial contact was made. If a response was not given after these attempts were made, the researcher excluded the faculty member as a potential source. As each faculty member agreed to participate, the researcher worked to issue a survey and schedule an interview time to best fit the participant's schedule. Once the surveys were completed and interview times were scheduled, the researcher worked with the faculty member to ensure both parties had the appropriate technology to complete the interview process.

Meeting with participants via audio communications allowed faculty members to be in a surrounding where they felt most comfortable. Ideally, participants were asked to block off approximately one-hour time slots to ensure enough time for introductions to be made and any last-minute business to be taken care of before the interview began. At the beginning of the interview, the researcher asked for consent from the faculty members and sought permission to record the interview with an iPhone and a digital recording device. Once the faculty members agreed, the researcher initiated the recorders to begin the interview process. Before the interview, the participants completed a survey consisting of questions about their personal and professional backgrounds, as well as demographic information about the institution he or she represented. Based on the results from each survey, the researcher was able to ask more in-depth questions, which focused on addressing the objectives of the study.

For the purpose of this study, the researcher employed three methods. First, the lesser document analysis was used to review agricultural leadership program degree sheets and course requirements. Additionally, a survey and an interview session were deemed as two other appropriate methods to capture the perceptions and opinions of faculty members within agricultural leadership-related academic programs at land-grant institutions. The data were

collected during the summer of 2015, which included 22 surveys and 19 interviews. All interviews were conducted via telephone. The audio files containing participant interviews were transcribed by the researcher following the end of each interview. The transcriptions of interviews are a strategic part of measuring validity and understanding instrument analysis.

Interviews

Interviews offer a technique where insights into a given culture, group, or organization can be better understood through the interpretation of qualitative data (Hertz & Imber, 1995). Anderson and Jack (1991) discuss how interview situations will create a crossroads environment where the researcher and participant will be caught in interactions where asking the appropriate questions, displaying emotion, correctly recording data, or knowing when to follow up with questioning can be integral to the success of the interview. Because each interview is linguistic, social, and psychological, each participant's and researcher's experience will be vastly different based on the numerous unforeseen environmental factors, which might occur throughout the research process (Anderson & Jack, 1991; Glesne, 2006).

> "Asking questions and getting answers is a much harder task that it may seem at first. The spoken or written word always has a residue of ambiguity, no matter how carefully we word the questions and how carefully we report or code the answers. Interviewing is one of the most common and powerful ways in which we try to understand our fellow humans. Interviewing includes a wide variety of forms and a multiplicity of uses..." (Denzen & Lincoln, 2005, p. 697-698).

Glesne (2006) indicates a certain level of trust should be established from the researcher to the participant by building rapport and using opening questions that will allow each person to be comfortable communicating in his or her words by implementing the participants' words as collected data, this will provide a more in-depth, personalized, detail-rich imagery to gain insight and understanding of the faculty members and their opinions. The researcher employed a simplistic interview format to keep the question routing straight forward, with each question

building upon the previous to gain background of the participant and a better understanding of their perceptions specifically related to the purpose of this study.

As questions became increasingly more specific regarding agricultural leadership academic programming, participants were able to provide greater detail in expressing their past knowledge, current reality, and future implication surrounding agricultural leadership. The interview guide containing the five questions participants were asked can be found in Appendix D: 1) as an agricultural leadership faculty member, please summarize why you believe the agricultural leadership discipline was created; 2) since the creation of agricultural leadership, what has evolved within the discipline; 3) what do you recommend should be developed or changed to advance the agricultural leadership discipline; 4) where do you foresee the discipline going into the future: and 5) why do you believe the agricultural leadership discipline is relevant?

Glesne (2006) recommended working to develop questions to be used during an interview is an essential piece to providing the researcher with a clear, concise path of action to better understand the psychological process participants' may experience, and how to potentially draw a desired answer from the person being interviewed. Patton (2002) suggest differing types of questions may be related to a participant's past experiences or behavioral questions, opinion or value-based questions, emotion-invoking questions, knowledge-based questions, sensory related questions, or even questions related to one's background or demographic.

For a researcher to establish rapport with a participant, experience or behavior questions are commonly used as a place to begin any interview process, followed by more detailed, though-provoking question to follow (Patton, 2002). By contrast, Griffeth (2013) advised knowledge-based questions often allow participants to build an initial impression that the

researcher is testing the participants, which could lead to the participant withdrawing and becoming unwilling to accurately and fully answer all research questions. Simple techniques such as choosing certain words, altering voice pitch and volume, and modifying the tempo of speaking, phrasing, as well as the directness of question routing is critical to the successful collection of high-quality, detail-rich qualitative data in interview situations (Glesne, 2006; Patton, 2002).

F.   Subject Selection

Population, Sampling, and Procedure

When working with qualitative research, there is typically a focus on a relatively small sample selected purposefully, whereas quantitative research samples are generally much larger in sample size and selected on a random basis (Patton, 2002). In many cases, qualitative inquiry uses purposeful sampling techniques to learn a great deal of information about an issue of importance to the study. By deciding to choose participants who fit into a specific, targeted group, the data collected will create an in-depth analysis of individuals representing the sample population.

The participants in this study were chosen using a simple method. Across the United States, there are fifty 1862 land-grant institutions, each having a college related to agriculture, food, life, human or environmental sciences. Initial research from contact with the college deans and departments head, as well as searching each college's website, indicated there were 26 institutions with a program related to agricultural leadership in the form of an undergraduate or graduate degree, minor, specialization, concentration or option. Each of these universities offered programs where students could receive academic credit for a program related to agricultural leadership. The first means of contact consisted of contacting prospective department heads or

administrative deans in the colleges to gain permission for conducting research with an agricultural leadership faculty member at their institution.

Hertz and Imber (1995) discussed how being granted access to any given target population can be challenging even if the researcher represents an organization similar to the one of the participant being surveyed. The primary goal of this study was to survey as many faculty members across the 26 institutions as possible in accordance with recommendations from Glesne (2006), who stated sample size of 12 to 13 participants created an effective sampling population. Patton (2002) indicated there are no specific rules in determining sample size within qualitative inquiry, and stressed the purpose of such an inquiry is to add usefulness, credibility, and richness within the available time and resources.

The sample for this study encompassed agricultural leadership faculty members in colleges of agriculture who have taught leadership courses, advised graduate and undergraduate students, and created leadership curriculum. When sampling people of an authority figure, such as faculty members in academia, there can be a challenge as a graduate student due to the idea of "studying up," and the preconceived notion that the participant is of higher power or status than the researcher (Williams, 2007, p. 34). The researcher's sample population captured a wide variety of situations and circumstances ranging from longevity of participants as faculty members, types of agricultural leadership programs offered, the number of students and faculty in each academic department, and even the level of knowledge of each faculty member in relation to the agricultural leadership discipline.

Schwandt (2001) indicated determining sample size can be difficult when a researcher is aiming to study complex thoughts and actions of others in a particular situation or location. A total of 22 agricultural leadership faculty members participated in the study with 19 of the 22

completing the interview process. To date, there have been no studies specifically targeted at analyzing perceptions related to agricultural leadership academic programs at 1862 land-grant institutions. Selection of colleges of agriculture, food, life, human or environmental sciences at 1862 land-grant institutions was chosen because of their commitment to educating youth about topics such as agricultural education, communications, leadership or extension education.

G.   Data Analysis Procedures

Content Analysis

Huberman and Miles (2002) provided targeted advice to researchers working with qualitative data by suggesting an obstacle researchers face is the persistent worry that the research design or methodology might not be the best fit for the given study. By keeping in mind the novice of the researcher and employing the constant comparative method of thematic analysis, the following steps were used as outlined by Glaser (1978): 1) begin data collection; 2) identify key issues related to reoccurring events or activities in the data which may become categories of interest; 3) collect information that will provide information pertaining to focus categories; 4) discuss the specific categories being examined; 5) analyze the collected data to identify basic social processes and relationships that could shed light on the study area; and 6) participate in sample selection, data coding, and research writing as the analysis shifts focus to key categories related to the study.

When multiple phenomena are recorded, classified, or compared across multiple categories, data collection must undergo a process of "constant refinement" that should closely follow the final collection and analysis of research data (Griffeth, 2013, p. 68). This process should continuously regenerate itself with each amount of data being collected. When the researcher began the analysis process, recorded interviews were transcribed of each faculty

member that participated in the study. To better assist the researcher in transcribing each interview script, the researcher utilized NVivo 11 for Windows data-recording software, and each interview was stored as an audio file on the researcher's iPhone or digital recorder to ensure a slow playback for transcription accuracy. The Microsoft Word processing program was used on the researcher's office computer and personal laptop to allow for easy typing and transcription of documents.

The researcher first started by transcribing each interview from beginning to end. Each interview was fully transcribed before moving to another interview to remain consistent and work to complete the data collection process for each participant. After each interview was transcribed, the researcher emailed a copy back to each faculty member to check for accuracy and clarity as recommended by Glesne (2006). Upon final approval from each faculty member, formal data analysis was ready to begin. The researcher analyzed all data and used the NVivo 11 software to place words and phrases categorically by themes or topic areas.

Using the NVivo 11 software, the researcher placed words and phrases into categories in order to find patterns, and, as each interview took place, words and phrases were matched with similar themes and phrases to align with excerpts with like meanings and opinions. The researcher employed both open and axial coding in the study. According to Creswell (2007), open coding is the first step in the data analysis process and involves segmenting interview transcriptions into themes or categories of specific information, whereas axial coding is the step that follows open coding where researchers take the identified themes drawn from open coding and create a central phenomenon to better understand what influenced or caused these segmented pieces of information to take place. The researcher added another layer of trustworthiness and credibility by analyzing the transcripts in NVivo 11, as well as ensuring each transcript was peer-

reviewed by the researcher's graduate committee. Furthermore, each respondent was given a coded reference such as F1, F2, F3, etc.

Caulley (1983), Prior (2003), and Owen (2013) described document analysis as a "rarely tapped," complicated process of observing and analyzing literature and information to draw conclusions and form opinions often related to program evaluation. Documents, such as degree or program completion sheets, were printed and compared to measure similarities and differences in agricultural leadership programming areas. From these sheets, the researcher was able to understand what types of courses and requirements were offered to agricultural leadership undergraduate and graduate students at land-grant institutions across the country. When working to identify and compare themes in the research through interviews and supplemental documentation, the researcher employed a triangulation method to understand the results of the study. The triangulation of data analysis is where two or more people work to independently analyze the same qualitative data set in order to compare their findings with one another to add reliability and credibility to the data analysis set in place by the researcher (Patton, 2002).

H.   Trustworthiness

To establish credibility and dependability in this study, the researcher found it necessary to consider internal and external validity as the research was being conducted. Patton (2002) described credibility and dependability in the following manner: credibility involves a variety of rigorous methods, researcher credibility, and the researcher's belief in the value of qualitative research; reliability is described as the qualitative variation of dependability, which is gained by following a systematic approach to data collection and analysis. For the purpose of this study, interviews were conducted and transcripts were the main objects being analyzed. Merriam and Simpson (2000) suggested internal validity challenges researchers to seek out and work to better

understand what they are observing or measuring. External validity refers to the generalizability of the results of the study (McMillan & Schumacher, 2010).

The researcher ensured internal validity by allowing participants to review their statements for accuracy and clarity after all interview transcripts were completed. More simply, the researcher believed it was imperative to determine if the findings of the research complimented the participant's understanding of the topic area being studied. Holloway and Jefferson (2000) discussed four major questions essential for researchers to ask before working with their data. Each question is linked to trustworthiness about analytical interpretation of data. Furthermore, Holloway and Jefferson (2000) outlined the following research questions related to validity and reliability:

1. What do you notice about the research?

2. Why do you notice these common themes or topics?

3. How can you best interpret what you notice in the data?

4. How can you know that your interpretation is accurate?

In the case of this particular study, a complete analysis of all agricultural leadership-related academic programs at land-grant institutions across the country has never been conducted. Therefore, the knowledge base is limited and the study will be the first of its kind. In relation to faculty and staff who work in agricultural leadership programs nationwide, the data collected from this research will allow future readers to gain insight and perspective into the past implications and future trajectory of the discipline. As readers analyze the data collected, they will have the opportunity to decide for themselves how this research adds value and richness to the field.

Within qualitative research, findings can rarely be generalized across a wide variety of participants or a specific group due to the nature of the in-depth inquiries among a targeted sample population. Through clear, calculated data analysis methods, the data in this study were reliable and valid for the select sample. Work was done to increase research reliability through utilizing descriptive, thoughtful methodologies, which were approved by the researcher's graduate committee and by offering a reflexivity statement.

Throughout the entire research process and data collection, the researcher worked to remain as aware as possible to keep all interview content in a safe, secure environment during and after the study. The researcher's personal and school-issued computers were password protected, and all electronic communication and data files were stored and backed up with a personal external drive. After all data were transferred, data was erased from the digital recorder and stored under a password-protected file on a personal computer. Hand-written and typed notes from the interviews were kept in a secure, locked filing cabinet in the researcher's office. Additionally, all other documents from the universities that were studied, personal information from study participants, and handwritten or electronic correspondence were stored on the same school-issued computer.

Recollections of the interviews with leadership faculty members before, during, and after interviews were kept confidential. The participants, as with any research subjects, exhibited trust in the researcher to keep their thoughts and opinions private. All conversations with faculty members were kept confidential, and the researcher aimed to respect the participant's privacy by making a commitment not to share any names or associate any one person with any data collected during the study. The researcher understood that to earn and keep credibility as a researcher, trustworthiness and maintaining confidentiality was essential.

I.   Reflexivity Statement

As the researcher conducting this study, I acknowledge I began this research project with my unique way of knowing the world and how that might form a certain bias and assumption related to the topic. I was raised on a cattle farm in rural southwest Oklahoma, which allowed me to be exposed to agriculture from an early age and eager to be involved with organizations such as 4-H and FFA. From an early age, I have always held an inborn fondness for the work being done each day to teach others about agriculture both inside and outside leadership programming. By participating in agricultural organizations from a young age, and continuing that involvement throughout my college years by majoring in Agricultural Communications at a land-grant school, I have unabashedly advocated for a rural and agricultural lifestyle, which has promoted and shaped my educational and professional paths.

While employed as a graduate assistant at a different land-grant university college of agriculture, I have gained experience in working with wonderful students and faculty of both genders. By serving as a teaching assistant and researcher through my academic department, I began to understand a more detailed picture how and why faculty members collect data and their experiences throughout collection and analysis process. I must acknowledge I possess a preconceived notion of how colleges of agricultural, environmental, human, life, or food sciences operate due to my personal experiences as a student and graduate employee. These experiences as a student and researcher have built a foundation for a deeper understanding of the research process and how to navigate those challenges. Furthermore, as an undergraduate and graduate, I have taken agricultural leadership courses, which may or may not create a filter or bias regarding the content of this research.

In-depth, thoughtful interviews showcased the history, success, perceptions, and realities surrounding agricultural leadership environments across the country. I understand the importance of this information and recognize many faculty members may not have the time or desire to participate in providing information. The information provided by faculty members is sensitive due to the wide variety of institutions, varying courses offered, inconsistent teaching methods, or differing opinions of faculty members. My goal was to build rapport with the research participants and work to depict each faculty member's opinions uniquely and accurately throughout the results and conclusions drawn from this study.

J.   Summary

By employing qualitative methodologies, the researcher used criteria such as document analysis and interviews to survey a target sample of 26 (N=26) faculty members in agricultural leadership academic programs at land-grant colleges of agricultural, food, life, human, and environmental sciences of natural resources across the United States. During a 30-minute interview via audio telecommunication, the researcher asked questions about critical issues, circumstances, and perceptions surrounding the agricultural leadership academic discipline, and how they (the faculty members) believe the discipline should evolve for future growth and development. Alongside conducting interviews, the researcher completed a minimalistic document analysis of program degree sheets to gain further insight about the agricultural leadership programs at the specific land-grant institutions.

After all data were transcribed, the researcher allowed each participant to verify the document for clarity and accuracy of information. Moreover, all data were stored on the researcher's personal laptop computer and school-issued work computer, which are both password protected. Each piece of data derived from the study remained confidential to protect

the anonymity of the participants. The data collected were analyzed using the constant

comparative method and categorized according to themes and patterns in the NVivo 11 software,

which made themes and patterns easier to identify and record during reporting. By combining

these two qualitative research tools (interview and analysis), this allows for a more descriptive,

detail-rich analysis of the agricultural leadership academic discipline.

IV.   Results

Chapter IV describes the qualitative data collected. This qualitative study analyzed interview transcripts, survey data, and reviewed leadership program documents and materials with a comprehensive sample of agricultural leadership faculty members from across the country representing 1862 land-grant institutions. The purpose of this study was to identify current agricultural leadership academic programs in colleges of agriculture, food, human, life, or environmental sciences, and then characterize the perceptions of these programs from faculty members at the undergraduate and graduate levels. The study also encompassed programs, which offered certifications, specializations, concentrations, and options focused in agricultural leadership. The following research objectives guided the study:

1. Identify current agricultural leadership programs at 1862 land-grant institutions that offer a major, minor, certification, option, specialization, or graduate degree in agricultural leadership;

2. Describe the need for the development of agricultural leadership programs at land-grant universities;

3. Describe agricultural leadership's discipline-wide evolution in terms of curriculum, training, teaching practices, and courses offered;

4. Describe faculty members' recommendations on what should be developed or changed to holistically advance curriculum and update programming efforts within the field for future improvement and growth of agricultural leadership programs; and

1. Examine why faculty believe agricultural leadership-related programs are relevant by also analyzing their outlooks for the future of the discipline.

For the purpose of this study, the researcher used statistical analysis for the survey-related data, document analysis for reviewing program degree sheets, and NVivo version 11 document-coding software for review of the interview transcripts. For methodological purposes, the researcher analyzed all data as one sample because of the participants representing a wide geographic area, various ages, differing academic backgrounds, and a wide range of years involved in the agricultural leadership discipline. To promote credibility and trustworthiness, all documents, survey data and interview data were peer-reviewed by the researcher's graduate committee at the researcher's institution. Included in this sample were faculty members from colleges of agriculture, food, life, human, or environmental sciences at 1862 land-grant institutions.

As previously indicated, there was a possibility of surveying and interviewing 26 (N=26) faculty members from institutions based on prior research and communications with college deans and department heads. The goal of the study was to conduct a census; however, due to scheduling circumstances, not all institutions were represented. Before participating in the study, participants were asked to submit verbal consent regarding their participation, and the researcher recorded the consent. The researcher made observations regarding the participant's ease or difficulty in answering the questions, as well as their level of interest in the study. These observations might offer deeper insight into a respondent's longevity with or knowledge of the discipline.

A.   Participant and Institutional Demographics

The study's first purpose sought to identify current agricultural leadership academic programs at 1862 land-grant institutions. According to the APLU and the USDA NIFA databases, there are 107 land-grant universities, with 50 institutions serving as 1862 status. While

there were 50 institutions contacted, 26 (N=26) schools currently have an agricultural leadership

academic program in a college of agriculture, food, life, human, or environmental sciences.

Twenty-two (n=22) institutions agreed to participate in the study through completion of a

research survey, which created a response rate of 85 percent. Table 1 provides a detailed

depiction of the structures of current agricultural leadership academic programs.

Table 1. Agricultural leadership-related programs at 1862 land-grant institutions.

School	Major	Minor	Graduate Degree	Concentration/ Specialization	Certificate
Auburn University		X			
Mississippi State University				Concentration	
New Mexico State University		X			
North Carolina State University	X	X		Concentration	X
Oklahoma State University	X	X	X		
Oregon State University		X			X
Purdue University					X
South Dakota State University				Specialization	
Texas A&M University	X	X	X		X
The Ohio State University	X			Concentration	
The Pennsylvania State University		X		Concentration	
The University of Georgia			X		X
University of Arizona			X	Specialization	X
University of Florida	X	X	X	Concentration	X
University of Idaho	X				
University of Illinois	X				
University of Kentucky	X			Concentration	X
University of Minnesota				Concentration	
University of Missouri		X		Concentration	
University of Nebraska	X	X	X	Specialization	X
University of Tennessee	X	X	X		
		X		Concentration	X
Total: 22	**10**	**12**	**7**	**12**	**10**

Two institutions (Rutgers – The State University of New Jersey and the University of

California – Davis) declined to participate because administrators believed their programs were

beyond the scope of research. Rutgers offers a leadership-related minor through their School of

Environmental and Biological Sciences, whereas UC – Davis offers a Contemporary Leadership

minor through their College of Agricultural and Environmental Sciences. Clemson University offers a concentration in Agricultural Leadership as part of their Bachelor of Science in Agricultural Education major, while West Virginia University offers an option in Extension, Leadership and Communications as a component of their Bachelor of Science in Agricultural and Extension Education. Neither Clemson nor West Virginia responded to multiple requests for participation in the study. Fifteen (n=15) institutions (or 68%) were housed in departments related to agricultural education, communications, leadership, or extension education, whereas seven programs (32%) were described as interdisciplinary. The interdisciplinary programs drew on expertise from faculty members in programs related to crop and plant sciences, entomology, colleges of education, animal sciences, economics, law, policy and a variety of other programs.

The survey respondents were comprised of faculty members who serve in various roles, such as a program coordinator, a department head, and assistant, associate, and full professors. The spectrum of faculty positions had little variation related to the title, rank, and role of participants. The sample included one (n=1) department head who was also a full professor, two (n=2) program coordinators, eight (n=8) assistant professors, four (n=4) associate professors, and seven (n=7) professors. All respondents had roles in their colleges ranging from teaching, research, curriculum coordination, departmental guidance and oversight, program direction and management, and also student advising. It should be noted that 16 (n=16) respondents were male and six (n=6) were female.

Respondents who participated in this study offered an average of nine years of full-time faculty experience. Two (n=2) respondents had each completed one year of service related to agricultural leadership, whereas the two senior-most respondents had each served 26 and 32 years, respectively. One of the faculty members who had completed one year working in

agricultural leadership programming had previously served in an animal science faculty role for

33 years. Table 2 represents the level of experience (in years), gender, and role each respondent

played at his or her particular institution.

Table 2. Title/rank, gender, and time respondents have served as faculty members.

School	Title/Rank	Gender	Time as Faculty (years)
Auburn University	Program Coordinator	Male	32
Mississippi State University	Assistant Professor	Female	2
New Mexico State University	Professor	Male	20
North Carolina State University	Associate Professor	Male	8
Oklahoma State University	Professor	Male	26
Oregon State University	Associate Professor	Male	5
Purdue University	Department Head	Male	1
South Dakota State University	Program Coordinator	Female	6.5
Texas A&M University	Assistant Professor	Female	8
The Ohio State University	Professor	Male	N/A
The Pennsylvania State University	Professor	Male	10
The University of Georgia	Professor	Male	7
University of Arizona	Assistant Professor	Male	1
University of Florida	Assistant Professor	Male	3
University of Idaho	Assistant Professor	Male	4
University of Illinois	Assistant Professor	Male	4
University of Kentucky	Professor	Male	12
University of Minnesota	Professor	Female	7.5
University of Missouri	Assistant Professor	Male	5
University of Nebraska	Associate Professor	Female	10
University of Tennessee	Professor	Female	13
Virginia Polytechnic Institute and State University	Associate Professor	Male	8

Question five of the survey asked respondents about the longevity of programming at

their institutions. Program longevity varied across the country, with the University of Arizona

indicating their program has existed for three years, and The Pennsylvania State University

indicated their program has surpassed the 40-year mark. On average, agricultural leadership

programs have existed for 17 years at 1862 land-grant schools. The respondents were not asked

to indicate how long their institution provided for-credit programming, but instead, were asked how long agricultural leadership education had taken place at their institution. Table 3 provides explanation of the number of years each institution has offered agricultural leadership academic programming.

Table 3. Longevity of 1862 agricultural leadership academic programs.

School	Program Longevity (Years)
Auburn University	19
Mississippi State University	5
New Mexico State University	30
North Carolina State University	8
Oklahoma State University	23
Oregon State University	15
Purdue University	8
South Dakota State University	6
Texas A&M University	25
The Ohio State University	35
The Pennsylvania State University	40
The University of Georgia	15
University of Arizona	3
University of Florida	30
University of Idaho	20
University of Illinois	5
University of Kentucky	30
University of Minnesota	5
University of Missouri	15
University of Nebraska	15
University of Tennessee	8
Virginia Polytechnic Institute and State University	15
Average	**17**

The researcher also requested degree sheets from each participant to conduct a document analysis to identify common courses in leadership programs. The data were varied as some institutions offered full majors, while others offered minors, concentrations or certificates. After analyzing each degree sheet, four common courses were identified, including an introductory or

general leadership development course (n=19), a personal leadership development and

organizational development course (n=12), team or small group leadership (n=10), and a

community and rural leadership development course. Moreover, almost all (n=20) institutions

required an internship, capstone course or hands-on, experiential learning opportunity for

completion of an undergraduate degree. Table 4 explains each institution's number of required

leadership courses, as well as their internship or capstone experience requirements.

Table 4. Required leadership courses and internship requirements for degree completion.

School	Required Courses	Internship Required
Auburn University	3	Yes
Mississippi State University	3	Yes
New Mexico State University	6	Yes
North Carolina State University	6	No
Oklahoma State University	9	Yes
Oregon State University	1	Yes
Purdue University	6	Yes
South Dakota State University	N/A	Yes
Texas A&M University	7	Yes
The Ohio State University	7	Yes
The Pennsylvania State University	3	Yes
The University of Georgia	4	Yes
University of Arizona	4	Yes
University of Florida	5	Yes
University of Idaho	5	Yes
University of Illinois	9	Yes
University of Kentucky	2	Yes
University of Minnesota	2	Yes
University of Missouri	5	Yes
University of Nebraska	10	Yes
University of Tennessee	8	Yes
Virginia Polytechnic Institute and State University	1	No
Average	**5.0**	**(20/22) 91%**

Program demographics revealed a wide range in the size of programs regarding students

and faculty. The smallest undergraduate program had 15 students, whereas the largest had 700

students. This created an average of 136 undergraduates. Regarding graduate students, the

numbers were smaller because seven (n=7) institutions do not offer graduate degrees. The

smallest program claimed two students, and the largest had 75, which created an average of 18

graduate students. On average, institutions claimed four agricultural leadership faculty members,

with numbers ranging from zero to 16. Respondents were not asked if students and faculty were

from a strictly agricultural leadership department or part of an interdisciplinary program, which

created a number of outliers such as the University of Kentucky's faculty, and Purdue's

graduate-level certification program. Table 5 illustrates student and faculty program numbers.

Table 5. Student and faculty numbers at 1862 land-grant agricultural leadership programs.

School	Undergraduates	Graduates	Faculty
Auburn University	20	2	0
Mississippi State University	39	17	1
New Mexico State University	30	0	4
North Carolina State University	110	0	2.5
Oklahoma State University	40	5	2
Oregon State University	90	10	1
Purdue University	250	75	8
South Dakota State University	38	0	0
Texas A&M University	700	30	5
The Ohio State University	100	5	3
The Pennsylvania State University	150	45	14
The University of Georgia	63	40	3
University of Arizona	20	0	4
University of Florida	325	20	6
University of Idaho	40	0	1.5
University of Illinois	40	5	4
University of Kentucky	150	0	16
University of Minnesota	15	0	4
University of Missouri	100	40	4
University of Nebraska	350	65	4
University of Tennessee	20	20	2
Virginia Polytechnic Institute and State University	300	20	7
Average	**136**	**18**	**4**

Respondents were asked to list three indicators used to measure success in their academic departments, as well as job placement opportunities for graduates. Respondents indicated three main areas where programmatic success was measured; however, the presence of dissonance within the discipline was revealed because no one indicator measured over 50% representation. Eight institutions (36%) listed job placement as one of their measurements of success, while five schools (23%) listed the number of students enrolled as a successful standard. Rounding out the three most frequent success indicators was graduation rates as indicated by four institutions (18%).

Job placement for graduates varied across the nation, ranging from the agricultural industry to academia, farming, or leadership training. Eleven institutions, (50%) said their graduates go into the cooperative extension service, while eight schools (36%) indicated their students pursue careers related to leadership training or development post-graduation. Finally, seven faculty members (32%) responded their students enter a sales position after completion of their degree.

Aligning with objective three of the study, faculty members routinely indicated the idea of community leadership development throughout their surveys. Community and rural leadership development programming presented itself under the realm of the agricultural leadership discipline at a number of institutions. Specifically, four institutions (n=4) indicated their programs, while found in a college or department related to agricultural, food, life, human or environmental sciences, have strong teaching and research foci on community or rural leadership development programming.

The University of Florida offers an undergraduate minor in community and leadership development, whereas the University of Kentucky's interdisciplinary undergraduate program

was specifically titled Community and Leadership Development. Furthermore, Virginia Polytechnic Institute and State University's Bachelor of Science in Agricultural Sciences allows students to specialize in leadership and community development, while The Ohio State University's Department of Agricultural Communications, Education, and Leadership offers a Bachelor of Science in Community Leadership, but their academic college also offers an interdisciplinary minor in Leadership Studies.

Finally, faculty members were given the opportunity to express their perceptions of circumstances in agricultural leadership and were able to rank the top five agricultural leadership programs based on their knowledge of current institutions. These rankings were left to the discretion of the faculty members to identify who they [faculty in the field] believed were the five best agricultural leadership-related academic programs at 1862 land-grant institutions. Faculty members were not given any parameters on how to rank the programs and were instructed to indicate their top five programs by writing in the names of those institutions in a one through five ranking. To evaluate how the institutions would be ranked, the researcher designed a point value and ranking system in collaboration with two faculty members at the researcher's institution.

To begin assessing the rankings, the researcher documented how many times an institution was ranked in the top five based on the faculty member's surveys. The institutions ranked inside the top five most frequently were the University of Florida (17 votes), Texas A&M University (17 votes), Oklahoma State University (11 votes), the University of Nebraska (11 votes), and Virginia Polytechnic Institute and State University (7 votes). Once the top five 1862 institutions were identified, the researcher then implemented the point system based on the particular one-through-five ranking the five previously mentioned institutions received. For

example, for each first, second, third, fourth, and fifth place place vote an institution received, that particular institution would collect five, five, three, two, and one point(s), respectively.

After creating the ranking point scale, the five most frequently ranked institutions were given new points to create a final merit ranking for agricultural leadership programs. Based on rankings assessed from 18 (n=18) faculty members, the top five agricultural leadership programs at 1862 land-grant institutions were: 1. University of Florida; 2. Texas A&M University; 3. University of Nebraska; 4. Oklahoma State University; and finally, 5. Virginia Polytechnic Institute and State University. The University of Florida garnered the most first place rankings with six votes, whereas Texas A&M University and the University of Nebraska each received five first plates votes; Oklahoma State University amassed one first place vote. Table 6 denotes the top five rankings and points amassed by each institution.

Table 6. Top five 1862 agricultural leadership academic programs and faculty votes.

School	Total	1st Place	2nd Place	3rd Place	4th Place	5th Place
University of Florida	65	6	4	6	0	1
Texas A&M University	64	5	6	4	1	1
University of Nebraska	45	5	2	2	3	0
Oklahoma State University	26	1	2	1	3	4
Virginia Polytechnic Institute and State University	13	0	0	1	2	4

B. **Faculty Perceptions of Agricultural Leadership Academic Programs**

Of the four remaining research purpose objectives set forth by the researcher, each of the corresponding research questions yielded varying themes or, "nodes," as they are called in the NVivo 11 software. The researcher's second through fourth objectives were: describe the need for the development of agricultural leadership programs at land-grant universities; describe the development of agricultural leadership curricula that has evolved within the discipline in terms of curriculum, training, teaching practices, and courses offered; describe faculty members'

recommendations on what should be developed or changed to holistically advance curriculum and update programming efforts within the field for future improvement and growth of agricultural leadership programs, and; examine why faculty believe agricultural leadership-related programs are relevant by also analyzing their outlooks for the future of the discipline.

Furthermore, the researcher's qualitative interview specifically asked the following questions as displayed in Appendix D:

1. As an agricultural leadership faculty member, please summarize why you believe the agricultural leadership discipline was created.

2. Since the creation of agricultural leadership, what has evolved within the discipline? This may include things such as curriculum, teaching approaches, and types of courses.

3. What do you recommend should be developed or changed to advance the agricultural leadership discipline? Again, this may include things such as curriculum revision, teaching practices, cohesiveness among institutions, etc.

4. Where do you foresee the discipline going into the future?

5. Why do you believe the agricultural leadership discipline is relevant?

Nineteen (n=19) of the possible 26 (N=26) institutions participated in the qualitative interview, which created a response rate of 73 percent. A thorough analysis of the interview data gleaned five overarching areas directly corresponding with each of the interview questions and objectives of the study. Under the five main areas created, the researcher identified a total of nine main "nodes," or themes, with three of those themes containing a deeper "node," or sub-theme. Table 7 represents the structure of themes identified from the study. The table also highlights the frequency of certain themes such as how many times a theme was specifically referenced and how many respondents discussed that particular theme.

Table 7. Common themes of faculty perceptions of agricultural leadership programming

Themes	Sources	References
Creation of Agricultural Leadership Education		
• Industry Need for Agricultural Leadership	10	16
• Historical Roots from Agricultural and Extension Education	9	13
Evolution of the Discipline		
• Broad Academic Appeal	10	13
• Maturity and Growth	16	32
▪ Community and Rural Leadership Development	5	12
Recommendations for Future Growth		
• Collective Collaboration	12	22
▪ Creation of a Home	5	7
• Unified Vision for the Agricultural Leadership Education	15	26
▪ Experiential and Service-Learning Opportunities	7	10
Outlook of Ag Leadership Education		
• Growth in Varying Capacities	11	20
Relevancy of Agricultural Leadership Programs in Academia		
• Creating Leaders through Human Capital	15	23
• Political, Policy and Public Influence	6	11

By using the NVivo 11 coding software, the researcher was able to create a word cloud diagram (Figure 3) depicting the 15 most frequently used words by agricultural leadership faculty members throughout the interview process. Representing the five most frequently used words were: "leadership" (505 mentions); "think" (200 mentions); "students" (189 mentions); "agricultural" (144 mentions); and "discipline" (139 mentions).

Figure 3. Word-cloud representing the 15 most frequently used words by faculty

Creation of Agricultural Leadership Education

There were two main themes represented under the realm of creating agricultural leadership education: a) industry need for agricultural leadership, and b) historical roots from agricultural and extension education.

Regardless of the structure, size or organization of each faculty member's academic department, 10 (n=10) respondents [F1, F3, F10, F11, F12, F13, F14, F18, F19] (53%) indicated agricultural leadership education was created out of a need expressed by leaders in the agricultural industry for graduates to possess a more diverse set of "soft" skills such as leadership, communication, organization, and development. A total of 16 references were directly mentioned by 10 respondents regarding an industry need for agricultural leadership education. For example, F11 stated graduates lacked a set of structured, "soft" skills or understanding of leadership and personal development by stating, "ag leadership, as a discipline,

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was created because we have a need in agriculture to affect the way students learn the theory and practices to effectively interact with others in the context of the agricultural industry" (L13-15). Another respondent (F13) further elaborated on the industry need.

> I know that our university recognized a need for the growing ag industry and recognized the need for leadership skills within the industry. They saw a gap between some of our other programs, so ag leadership was designed to prepare students for roles such as extension agents, working for commodity groups or breed associations, or even being on staff for youth organizations. They really identified a need to build a program that could make strides to meet the needs of a diversifying industry. (F13, L14-19)

Solidifying this was F8, who offered discussion about industry demands.

> The agricultural industry leaders from across [state] came to the dean of the College of Agriculture and Life Sciences here at [university], and specifically told him that [university] was doing an exceptional job of teaching content matter to our graduates, however, industry research found a need for students to have more 21st century leadership type skills. (F8, L12-16)

The idea of agricultural leadership education drawing strong roots from both agricultural and extension education was evident from 13 references from by nine (n=9) respondents [F1, F2, F4, F7, F8, F10, F15, F16, F17]. These faculty members discussed how agricultural leadership was created from the idea of agricultural and extension education because earlier faculty members identified a need to train teacher educators and extension agents for their perspective fields. More specifically, respondent F7 stated "as a land-grant university, obviously, we are a supply stream of extension agents; so, the degree was created, essentially, to create that supply-line for folks who wanted to be agricultural educators, but not in the formal sense of the classroom like agricultural education" (L15-19). Further echoing that sentiment, respondent F15 indicated agricultural leadership education, at that particular institution, was directly initiated because of students who were studying teacher preparatory programs, but later decided they didn't want to teach secondary agricultural education.

Evolution of the Discipline

When analyzing the evolution of the agricultural leadership discipline, two main themes emerged. The idea of agricultural leadership growing and evolving, first, can be attributed to its broad academic appeal to a variety of students. Furthermore, faculty identified a sense of maturity and growth across the field.

Ten (n=10) faculty members [F2, F4, F6, F7, F8, F9, F11, F14, F15, F16], through a series of 13 references, indicated agricultural leadership has evolved by promoting focus areas from other disciplines within the agricultural arena. Respondents noticed that agricultural leadership curriculum not only promotes leadership education, but also the necessity of learning other skills such as communications, economics, law, plant and soil sciences, animal sciences, agricultural policy, and liberal arts.

To further echo the sentiments, respondents F4, F9 and F14 spoke at length of agricultural leadership serving as the closest thing to what was once a general agricultural degree at many universities. Respondent F14 indicated agricultural leadership serves a wide variety of students across various colleges who are pursuing a number of majors or career paths. Respondent F16 said the success of the discipline was directly related to institutions' abilities to be broadly appealing to a wide base of students even outside of agriculture, but, more importantly, agricultural leadership ties together scholarship, leadership skills, and citizenships skills to cultivate credentialed programming that many students enjoy.

Additionally, respondent F9 said, "we won't prepare you [students] narrowly in one area, but we will prepare you [students] more broadly in multiple areas, so they [students] don't have trouble finding jobs because they're [students] prepared for a number of areas" (L158-160). Furthermore, F9 stated agricultural leadership is great for students who know exactly what they

want to do, but also great for a student who has no idea about what he or she might want to do. Respondent F16 articulated the necessity of being broadly appealing to remain competitive with other academic fields.

> …we have to be broadly appealing. We can be broadly appealing. We can be broadly appealing and still be tied to agriculture. As I talk to major coordinators and major advisers, none of them require a leadership or management component from someone else on campus … We could make a course similar that specific to agriculture, and students could chose that so it might better meet their needs. Even within agriculture, we might have students wanting to work for the pork board, or go into production ag, or be an extension agent, or work for the private sector. (F16, L95-101)

Further promoting a sense of discipline-wide growth, the researcher identified a theme related to the field's maturity and growth. Sixteen (n=16) respondents [F1, F2, F5, F6, F7, F8, F10, F11, F12, F13, F14, 15, F16, F17, F18, F19] articulated the discipline has seen growth and increased structure in some capacity. The most notable references came from respondents F2, F5, F6, and F17, who all said they had witnessed an increase in structure nationwide, which directly related to the maturity of the field. For example, respondent F2 said, "…there is more structure than there was 10 years ago, 15 years ago, or 25 years ago" (L37-38).

Complimenting those statements was respondent F5, who discussed the creation of the National Leadership Education Research Agenda, and how the agenda has allowed agricultural leadership to expand beyond the confines of a targeted agricultural audience. Respondent F13 said, "…from what I've seen in few short years, in terms of growth, is getting more awareness out there to our students of what they can do with the major and helping students articulate their skills and talents to employers…" (L28-30).

Under the theme of maturity and growth, the researcher identified a sub-theme related to community and rural leadership development. When discussing the structure and focus of their particular institutions, five (n=5) respondents [F3, F10, F14, F17, F19] made 12 specific

references to topics directly relating to community or rural leadership development programming. For example, F10 said, "… the discipline is closely linked to rural and community development in terms of agricultural settings … I think leadership, in terms of rural and community settings, is extremely important both in the U.S. and internationally" (L95-96). Further solidifying this statement, F3 said, "Our courses and curriculum are really centered around the concept of community, and within that community, various leadership principles are taught" (L19-21). Respondent F19 offered a detailed opinion of how rural and community development is closely tied to agricultural leadership.

> …we should use leadership programs to take opportunities to understand our perceptions of agriculture where we can have a presence to move beyond agribusiness and bench sciences to having a stronger presence in the whole notion of community development. Many communities are reliant on ag enterprises and ag innovation to expand, develop, grow and sustain themselves. I would like to see ag leadership take on a much greater role of how agriculture can be leveraged as a tool for community development. (F19, L68-73)

Recommendations for Future Growth

Two main themes emerged regarding question three, which solicited faculty member's recommendations for future growth and development of the agricultural leadership discipline. These themes centered on two main areas: 1) collective collaboration, and 2) a unified vision for the field. Under the theme of collective collaboration, a sub-theme emerged, which was to create a professional organization for agricultural leadership. Furthermore, another sub-theme was derived under the idea of creating a unified vision for the field, which was to promote experiential and service-learning opportunities to students.

Regarding collaboration, 12 (n=12) respondents [F2, F3, F4, F5, F6, F9, F11, F12, F14, F15, F16, F18] (63%) offered 22 references regarding the need for more collaboration among programs across the country to create cohesiveness throughout the discipline, share ideas for

teaching and research, and to promote and publicize the importance of agricultural leadership. Faculty F4 said, "…if something like this hasn't been done already, nationwide, this sort of discussion is necessary for programs to work closely together and move forward for future growth" (L60-62). F3 echoed those sentiments by recommending that if agricultural leadership was going to continue training leaders for the industry, faculty within the field must work hand-in-hand with one another to grow the discipline as a whole.

Of those twelve respondents, one individual (F5) recommended collaborating outside the discipline to better understand the concepts, ideas, and structures that work alongside the agricultural industry. In fact, respondent F5 gave an in-depth answer regarding the importance of this issue.

> … if we don't look at the varying systems that interact with agriculture such as nutrition, climate change, energy consumption, etc., we cannot be effective. The biggest thing we can do for our discipline, and especially our world, is to collaborate with other disciplines because leadership in itself is an inter-disciplinary discipline… (F5, L40-43)

From the idea of creating collaboration across the discipline, a sub-area was identified when five (n=5) respondents [F2, F7, F9, F11, F15] (26%) advocated the need for a professional "home," or organization, where agricultural leadership educators could meet to discuss ideas and promote their research and teaching agenda. Solidifying this notion were respondents F9, F11, and F15, who all indicated agricultural leadership faculty members exist on their own because of the lack of a designated professional organization. Specifically, F2 and F7 both made comments about the Association of Leadership Educators (ALE) possibly filling this void; however, respondents felt ALE was not currently filling faculty needs for a professional organization. Both faculty members stressed the importance of finding a home, with F7 stressing the need for identifying "where we [agricultural leadership] live."

The second theme regarding recommendations for the discipline had to do with the notion there should be a stricter set of guidelines set forth for the discipline to be more streamlined from one program to another. Specifically, 26 references were given by 15 (n=15) respondents [F1, F2, F3, F4, F5, F6, F10, F11, F13, F14, F15, F16, F17, F18, F19] (79%) who discussed the importance of creating a set of standardized target areas for agricultural leadership in terms of course work, curricula, theory, research and hands-on learning. Respondent F4 explicitly discussed how his institution created a college-wide task force to define key elements deemed critical to the success of an agricultural leadership program.

Furthermore, F4 elaborated the result (of the task force) was the evolution of seven program competencies including leadership and motivation theory, communication skills, change management, conflict management and resolution, team and collaborative leadership development, policy formation, and service/experiential learning opportunities. Respondents F1, F4, F6, F12 and F15 each advocated for program areas focused on capstone courses, internships, international and research experiences, as well as service and experiential learning opportunities. These respondents each, in some way, stressed the integral need for a set of clear guidelines relating to the discipline that would holistically make the agricultural leadership discipline stronger.

Further solidifying the idea of harnessing a unified vision for the discipline, a specific sub-theme emerged. Seven (n=7) respondents [F1, F3, F6, F8, F12, F15, F19] (37%) made 10 specific references that discussed the importance of integrating experiential, capstone, and service-learning opportunities into programs across the nation. Respondent F1 said, "There's such a gap representing what students are learning in the classroom versus what they can apply within the field on a day-to-day basis. I think capstone courses give an opportunity to really

apply all the concepts you've learned, and the internship gives students the chance to go out and practice agricultural leadership" (L68-71). Providing a detailed opinion of the importance of capstone courses, internship experiences, and experiential learning opportunities was respondent F19.

> We have to look closely at holding ourselves accountable to the principles and concepts of experiential and community-based learning. Students really need to be not only be obtaining that knowledge, but also applying those skill sets. We need to challenge students to be thinking about what they want to accomplish in their careers and how they can have an impact through their leadership capacity. The only way we get to that beyond providing students with a technical skill set and a solid knowledge base is actually doing the work in a supervised setting. Not just in internships, but in courses, too. (F19, L46-53)

Outlook of Agricultural Leadership Education

Question four sought to identify faculty perceptions regarding the outlook (or future vision) surrounding agricultural leadership education. Respondents' opinions varied in how the discipline would grow, but 11 (n=11) [F1, F3, F6, F7, F8, F12, F13, F14, F17, F18, F19], (58%) believed agricultural leadership would grow in some capacity, including course offerings, curriculum developed and implemented, and faculty numbers at institutions.

For example, respondents F7, F8, F13, F14 and F17 each indicated agricultural leadership will experience an influx of students at institutions because of an increased awareness from industry professionals regarding the validity and effectiveness of agricultural leadership education. "I think it's really a wide variety of 21st century skills in being able to collaborate, communicate, critically think, and creatively think that our whole industry needs" (F8, L66-68). Respondent F7 echoed that statement by suggesting ag-related knowledge, when coupled with leadership skills and courses, will continue to grow and sustain the discipline due to the wide skillset, which is applicable in any student's education.

While a majority of faculty members envisioned growth, a number of faculty members expressed differing opinions of what that growth might look like within the discipline. Respondent F1 said agricultural leadership education allows students both in the college of agriculture and outside the college to take classes to develop their leadership skills. Respondent F13 provided insight into the conversations that allow her to recruit and retain students.

> I talk to a lot of perspective students who are passionate about the industry and recognize a need to better communicate and educate the population about the importance of the agricultural industry. I think with that taking place, the agricultural leadership major is a great place to really capture that enthusiasm and build that skills set to accomplish the goals being set forth by the industry. (F13, L48-52)

Respondent F8 foresaw growth in public and agricultural policy influence, and F12 expected an increased number of students participating in internships, international experiences, capstone courses, and experiential learning opportunities. Respondent F16 foresaw an increased need in answering the ongoing question "what is agricultural about agricultural leadership?" (L83)

Finally, as articulated by respondent F7, a prediction was made regarding the above-mentioned influx of students to programs, along with the creation of new experiential learning courses at institutions. Respondent F7 predicted the discipline is likely to see more faculty positions being created and filled across the discipline. "As you look at the jobs that are opening up across institutions nationwide, often times, they're in leadership, and I think that it will just continue to grow as people see our graduates making huge impacts in the industry by bringing new skills to the table that they've learned in our classroom(s)" (F7, L70-74).

Relevancy of Agricultural Leadership Programs in Academia

The most notable theme expressed among respondents was the idea of agricultural leadership programming creating leaders through "human capital" (F2) within communities and

rural settings, as well as the agricultural industry. Fifteen (n=15) respondents [F1, F2, F3, F4, F6, F7, F8, F9, F10, F11, F12, F14, F15, F18, F19], (79%) gave justification, which added structure to this theme. Faculty members F2, F10 and F15 described the development of human capital through the wide variety of programming areas that take place in agricultural leadership academic programs. Respondents routinely discussed agricultural leadership's unique ability to harness high-quality, growth and development skills in their students.

A study recently conducted by the American Association of Universities said, "most employers are struggling because the students they're wanting to hire don't have soft skills, such as critical thinking, communications, and leadership, and we've been doing that all along" (F15, L134-136). Further solidifying F15's statements, were F8 and F17, who reported agricultural leadership remains relevant and sustainable by developing leadership capacities in students, such as personal development, team development and organizational development. Agricultural leadership's ability to sustain relevancy through the idea of creating human capital was demonstrated by faculty members F1, F8, F9 and F19, who described agricultural leadership as possessing a unique ability to appealing to a wide variety of individuals.

> We are relevant because we do things that are relevant for students' education. Relevancy could be defined by being substantively helpful to students' success later in life. I think we have the understand growth area for us and in our field is human capital. Where we are relevant is in our growth area of what we are already doing well, which we can focus in on and hone in to do better, as world-class educators, is identifying how we can better develop human capitol within modern organizations? In terms of youth development, professional development, organizational development, etc., how do we build this grand plan to create strong, resilient human organizations? I think we have more expertise in how to do this than we know, and we are ready to tackle it because we already do well in developing this human capital in what we do each day. Students, ag an non-ag, are attracted to these classes because of this, so we can increase and keep our relevancy if we continue to focus on this even more. (F2, L112-129)

The second theme relating to the relevancy of agricultural leadership education focused on faculty members advocating for students and graduates serving as advocates for the

agricultural industry who can positively influence the political arena, as well as public policy and

perception. Six (n=6) respondents [F3, F5, F8, F11, F12, F13] gave 11 direct reference

statements that depicted agricultural leadership as a cornerstone to promoting the agricultural

leaders of tomorrow who will serve as elected officials, industry leaders, and future educators.

Specifically, F3 and F5 discussed the necessity of agricultural leaders being useful in the

political arena by working to influence lawmakers and agency officials to favor agricultural

issues. Mimicking those feelings were faculty members F8, F12 and F13, who articulated

agricultural leaders as being well-versed about agricultural issues, and having the ability to

educate the general public about circumstances and issues facing the industry. Respondent F8

discussed the need for people who can be at the forefront [of issues] and are well-versed on how

to get a group of people moved toward a common goal.

> I would argue, and I think political scientists would agree that a farmer's political
> influence is far less than it was years ago because there is a much smaller population of
> them. I think if we are going to be effective in the public policy arena, you're going to
> have to have more effective leadership to communicate our story to influence our
> lawmakers. In essence, our leaders need to work as lobbyists to influence our elected
> leaders. If you think of the term "kings and king makers," that's often how ag leaders
> work. It's not that all of them are elected or visible, but they're, for various reasons,
> influential and when they have something to say, people listen to them. (F3, L65-72)

Further discussing the idea of promoting influence in the policy and political arenas, as

well as public perception, was F11, who stated:

> When it comes to coupling science with public perception, we have to work hard to make
> the public understand that our industry can have conversations about science and also
> agriculture, because it's becoming such a foreign concept to the general public. I think the
> complexities of the issues that people really care about related to agriculture, food and
> natural resources are more complex than they've ever been. (F11, L107-112)

C.   Summary

Qualitative methodologies, such as document analysis, surveys, and interviews were

employed to analyze a targeted sample of 26 (N=26) faculty members in agricultural leadership

academic programs at 1862 land-grant colleges of agricultural, food, life, human, and environmental sciences or natural resources across the United States. The usage of a research survey, as well as document analysis allowed the researcher to gather institutional and participant demographics related to the first research objective, which was to identify current ag leadership-related programs at land-grant institutions that offer a major, minor, certification, option, specialization, or graduate degree in agricultural leadership. This demographic data included information on program size regarding students and faculty, courses required for graduation, tenure of faculty within the discipline, and structure of the field.

The use of NVivo 11 coding software allowed the researcher to identify specific, targeted themes, which related to the study's second through fourth research objectives. These objectives, along with the corresponding interview questions, sought to identify the need for creating agricultural leadership programs at land-grant universities; described the development of agricultural leadership programs and what has evolved regarding curriculum, training, teaching practices, and courses offered; described faculty members' recommendations on what should be developed or changed to advance programming within the field; and examined why faculty believed agricultural leadership programs are relevant to society.

Through interactions with faculty members, the researcher identified five main overarching areas, which corresponded directly with the researcher's purpose, objectives, and research questions. The five main themes pertaining to the interview portion of the study were: 1) creation of agricultural leadership education; 2) evolution of the discipline; 3) recommendations for future growth; 4) outlook of agricultural leadership education; and 5) relevancy of agricultural leadership programs in academia. The most common results identified from the study are discussed below. Further showcasing the prevalence of those areas, are the

themes and sub-theme related to faculty perceptions of agricultural leadership academic programming.

Faculty identified two main themes corresponding to the creation of agricultural leadership programming, which were an industry need for the field and historical roots from agricultural and extension education. When asked how the field has developed over time, faculty also depicted two themes – agricultural leadership's broad academic appeal and the maturity and growth witnessed within the field. From the notion of maturity and growth, respondents indicated a strong presence of pushing toward community and rural development.

When discussing recommendations to move forward, two themes emerged relating to collective collaboration and unifying a vision for the field. A sub-theme was identified for both collaboration and vision, which were creating a professional agricultural leadership home and increasing experiential learning opportunities, respectively. Faculty members overwhelmingly indicated the agricultural leadership field would grow in varying capacities when they were asked to give their perceptions related to forecasting the discipline. Finally, when faculty members were asked why agricultural leadership is relevant today, their comments gleaned two common themes: a) the idea of creating leaders through the increased promotion of human capital; and b) agricultural leadership students are vital to shaping the agricultural industry regarding political, policy and public influence.

Chapter V will discuss the conclusions and recommendations related to this study.

V.   Conclusions and Recommendations

A.   Conclusions

Identification of Agricultural Leadership Academic Programs

The purpose of this study was to identify and characterize current agricultural leadership academic programs in colleges of agriculture, food, human, life, or environmental sciences at the undergraduate and graduate levels. A thorough web search, coupled with solicitation from academic deans and department heads at 1862 land-grant institutions, identified 26 (N=26) potential institutions with leadership programs hosted in a college of agriculture, food, life, human or environmental sciences. Surveys were gathered from 22 (n=22) respondents, including two program coordinators, eight assistant professors, four associate professors, and eight professors. These demographics were represented by 16 males and six females. Furthermore, 19 of the 22 respondents who participated in the survey took part in the interview portion of the study.

Developing Agricultural Leadership Programs at 1862 Institutions

Based on the findings from this study, it can be concluded the discipline of agricultural leadership has historical connections to the disciplines of agricultural and extension education. Originally, the discipline served as a program for students who did not want to teach agricultural education or become extension educators, but rather wanted to go into other agricultural professions. Respondents compared the discipline to a general agricultural degree, which is representative of a recommendation of Edgar (2007), who indicated agricultural leadership education has grown to embrace and encompass academic programming areas such as teacher education, agricultural communications, international agricultural education, extension education, and leadership education.

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Further evolution of the discipline was driven by industry demands, in which employers indicated students had content knowledge but were lacking in soft skills (Morgan, et al., 2013). Therefore, the demands of the agricultural workforce have deemed the importance of students developing leadership skills (Valez, et al., 2013). Today, agricultural leadership programs can fill the gap by cultivating skilled and knowledgeable agricultural graduates who also possess desired soft skills such as leadership, communication, organizational and team development. Solidifying the idea of harnessing employees with "soft" skills was Crawford, Lang, Fink, Dalton, and Fielitz (2011), who concluded that leadership ranks in the top seven of the most desirable skills among employers and fifth among new employees when promoting a business or organization. The belief of agricultural leadership being derived out of a need from the agricultural industry expressing a desire for employees with 21st century soft skills promotes priority three of AAAE's agenda, "sufficient scientific and professional workforce that addresses the challenges of the 21st century" (Doerfert, 2011, p.18).

Agricultural leadership's roots in agricultural and extension education, as well as roots grown from industry needs, support Ajzen's Theory in a number of ways. Ajzen's Theory is used to predict behaviors and actions based on an individual's beliefs regarding a certain situation. Behavioral beliefs, which focus on likely outcomes related to a person's influence under motivational factors for him or her to perform a certain behavior, can be linked to industry needs for agricultural leadership education. For example, when industry leaders instructed institutions to better prepare students with "soft" skills, there was a motivational pressure given from agricultural industry, so academia worked to create new programming, which represented their intentions and behaviors.

Furthermore, as earlier hypothesized, respondents were more likely to engage in agricultural leadership education if they had a background in or knowledge of agricultural and extension education or programming such as 4-H or FFA. These results promoted Ajzen's normative beliefs, which indicated people are more likely to perform a certain behavior if it is promoted by their normative beliefs, or an action that is part of one's social norm. As faculty expressed detailed knowledge of agricultural leadership programming, their behaviors could be described as "socially normal" because other faculty work to advocate for and improve common areas across the discipline.

Faculty Recommendations for Holistic Improvement and Growth

With respondents placing heavy emphasis on focus areas, such as growth and development, streamlined curriculum, experiential, international and service-learning opportunities, and the cultivation of future leaders for the agricultural industry, many of their concerns and recommendations can be linked to a number of research foci set forth from the AAAE National Research Agenda and the ALE National Leadership Education Research Agenda. By analyzing faculty member's perceptions spanning a variety of issues, the ability to make connections to specific research priorities is imperative in offering suggestions and ideas for future research and teaching practices.

Many respondents cited the lack of a professional home organization, such as AAAE or ALE, for the discipline. Similar results were indicated in a study conducted by Valez, McKim, Moore, and Stephens (2015), which found agricultural leadership faculty felt they had minimal to moderate support from AAAE in regards to professional development and research endeavors. Respondents cited ALE as a professional organization with an emphasis in leadership, but noted the organization did not fulfill the needs of agricultural leadership educators. The lack of a

professional development organization dedicated to agricultural leadership could contribute to the absence of consistency among agricultural leadership programs.

Respondents indicated there has been a lack of efforts to establish discipline-wide standards and competencies. Because of this, agricultural leadership education programs lack consistency in curriculum, teaching, and research from one institution to another. This could be a result of lackluster efforts to establish cohesiveness and foster collaboration among agricultural leadership faculty. Faculty perceptions supported Morgan, King, Rudd, and Kaufman (2013), who said agricultural leadership is enjoying growth, but research is lacking regarding program structure, course requirements, perceptions of the discipline, and needs for continued growth.

Currently, standardized competencies for agricultural leadership programs do not exist, which was viewed negatively by respondents. The development of key competencies would impact courses offered, further cultivate experiential learning opportunities, and explore the theories infused into the leadership curriculum. Respondents cited a need for opportunities to collaborate on curriculum development, course work, and research opportunities to create cohesiveness throughout the discipline. Establishing consistency among programs is important as agricultural leadership faculty work to educate future leaders within the agricultural industry (Velez, et al., 2013).

Further recommendations were offered to suggest students needed to have increased experiential learning and research opportunities both inside and outside the classroom, as well as a heightened awareness of global diversity in the agricultural industry. These ideas coincide with AAAE National Research Agenda Priority Four, which is to have meaningful, engaged learning opportunities in all environments. "The design, development, and assessment of meaningful

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learning environments which produce positive learner outcomes are essential to properly

educating the citizens of the 21st century" (Doerfert, 2011, p. 9).

Moreover, when faculty members raised concerns about defining the purpose and identity

of the discipline, a connection was made back to the National Leadership Education Research

Agenda and can be linked to priority area two. Area two promotes programmatic assessment and

evaluation and says leadership educators and administrators "will need greater understanding of

the differences that exist among leadership programs, the programmatic assessment processes,

and the availability, utility, application, and implementation of programmatic assessment

resources" (Andenoro et al., 2013, p. 9).

While discussing their perceptions of agricultural leadership education across the

country, respondents displayed interests and concerns about what would shape the future of the

discipline based upon their experiences and expertise. Faculty members stressed the importance

of creating a unified vision across the discipline with best practices for teaching, research, and

service, which promotes the mission of land-grant institutions. These findings are in alignment

with past studies which discussed how land-grant schools should create a foundation for

research, teaching, and service through agricultural and extension education programs (Edgar,

2007; Wall, 2003; Williams, 2007; Allen, Ricketts, & Priest, 2007).

Theoretical ties for recommendations to the discipline can be linked to several

components of Bloom's Taxonomy, which, at its core, is used to promote higher levels of

learning in education. First, the *understand* component of Bloom's aligns with recommendations

from faculty who addressed issues in the discipline, such as a lack of professional home or

benchmarks for evaluation. Understanding promotes the explanation of ideas or concepts such as

recognition, identification, discussion, and classification. In order for development to take place among nationwide programs, academic professionals must first understand the issues at hand.

Two elements of Bloom's that are applicable in this situation are the *analyze* and *apply* components. When faculty understand areas of agricultural leadership needing the most attention to detail through analysis, they can work to address those needs through the application of solutions. The analyze component is centered on drawing connections among ideas through focusing on organization, comparison, experimentation, and testing, whereas the apply element focusses on the use of information in new situations promoted through execution, implementation, demonstration, and interpretation. These aspects of the model highlight respondent recommendations regarding the promotion of collaboration among faculty in the discipline, as well as experiential or hands-on learning opportunities for students. Through discipline-wide collaboration, faculty can work to create opportunities that lead students to applying skills from the classroom through execution and implementation, which ascends them higher on the model.

Finally, the last element of Bloom's Taxonomy that is identified is *create*. The creation element of the model highlights the production of new work through investigation, design, construction, and development. Reaching the top level of Bloom's was achieved through respondent recommendations regarding the creation of standardized "benchmarks" to measure varying aspects of the discipline. By designing and creating benchmarks to measure discipline standards for growth, success, education, and advancement, agricultural leadership meets the highest level of measurement for educational objectives and outcomes (Krathwohl, 2002).

Future Outlook of Agricultural Leadership Education

Regardless of geographic area or size of institution they represented, faculty members agreed agricultural leadership has developed the structure necessary to be scholarly focused, but also broadly appealing. This further solidifies a connection to the AAAE priority five area which states, "The work of our discipline and its sub-dimensions occurs within a network of cultural, social, institutional, and psychological forces" (Doerfert, 2011, p. 26). The AAAE focus area, along with the recommendations given by faculty, were solidified by research from Fritz and Brown (1998), who indicated post-secondary institutions are addressing the need for leadership development by offering more diversified courses, specifically in departments of agricultural and extension education.

Overwhelmingly, faculty members believed agricultural leadership will experience growth in some capacity. Based on recommendations from faculty, along with previous research from Riggio, Cuilla, and Sorenson (2003) and Schwartz, Axtman, and Freeman (1998), the growing trend of teaching leadership skills in higher education will continue to expand because of program's dedication to implement innovative learning practices, update curriculum, and create relevant teaching methods. Leadership education programs should foster opportunities to increase self-efficacy through practice, develop the understanding of group situations, grow students' team-building and networking abilities, and harness their developmental skills to increase time management (Eich, 2008).

The respondents understood the necessity of using innovation and collaboration to grow the field and harbor a sustainable outlook for years to come. Respondents solidified previous research from Williams (2007), who concluded departments of agricultural education, leadership and extension must continue to evolve to keep up with changing trends in education. Faculty

perceptions echoed Odom, Boyd, and Williams (2012), who stated agricultural leadership faculty must adapt and foster unique, innovative learning experiences for all students across the discipline. Their [faculty] dedication, passion and knowledge of agricultural leadership education spanned beyond the walls of leadership theory and personal development, encompassing a breadth of knowledge gained from experiences in higher education, agricultural education, agricultural communications, secondary education, agricultural and public policy, family and consumer sciences education, extension education and educational administration.

The growth outlook for the discipline focused on routine collaboration and evaluation through a variety of capacities and standards. These respondent recommendations further promote the idea of meeting Bloom's Taxonomy's *understand, apply, analyze,* and *create* elements, as discussed earlier; however, it also promotes *evaluate*. The evaluate element is promoted through justifying a stand or decision and highlighted by argument, defense, and support. Through recommendations for collaboration, new learning experiences, standardized measurements, and academic sustainability across the discipline, routine discussion and evaluation can lead to higher thinking among faculty in the field.

Finally, respondent recommendations aligned with the normative belief component of Ajzen's Theory in that the overall promotion and growth of agricultural leadership education will be perceived as the social norm among faculty members. This notion is supported by previous research from Moore, Odom, and Moore (2013), who said the growth of leadership education can be linked to normative beliefs, from not only students continuing to enroll in these programs, but also to faculty observing fellow colleagues across the country working to improve and grow the discipline; therefore, creating the social norm.

Relevancy of Agricultural Leadership Programs in Academia

Respondents described part of agricultural leadership's success as being able to serve a broad audience from offering courses in education, communications, law, policy, natural resources, and biological sciences. Connections drawn from this research can be made with the American Association of Agricultural Education's (AAAE) National Research Agenda. Specifically, the agenda's fifth priority is to promote "efficient and effective agricultural education programs" by working to "meet the academic, career and developmental needs of diverse learners" in a variety of settings and situations (Doerfert, 2011, p. 24).

With a common trend of 'community' surfacing related to the idea of how agricultural leadership is relevant to today's student, educators, changing agricultural industry, there is a clear connection to the sixth priority areas of both ALE and AAAE. Area six of ALE and AAAE includes: 1) social change and community development, and 2) vibrant, resilient communities, respectively. Even though ALE's area six discusses the need for leadership educators to help prepare future leaders to positively impact communities on the local, state, national and international scales, AAAE's priority six outlines the positive impacts of local communities in promoting civic organizations, diversified cultural exchanges, increased economic prosperity, and higher levels of educational and career achievement.

Not only do the faculty recommendations align with the priorities of AAAE and ALE, but they also align with previous research and recommendations. Strickland, Carter, Harder, Roberts, and Wysocki (2010) indicated agricultural leadership graduates are proficient in their abilities of connecting with leaders on the local, state, national and international level, as well as building self-confidence and a stronger understanding of agricultural leaders in how they impact public and policy perception (Dhanakumar, Rossing, & Campbell, 1996). Literature from

Kaufman and Carter (2005) and Eich (2008), aligned with faculty assertions that agricultural leadership programs construct sustainable communities, promote experiential learning opportunities, and develop programs grounded in both theory and research through offering a variety of courses and learning experiences that benefit each student from day-to-day.

Students in agricultural leadership programs tend to build leadership capacities measurably proactive against unforeseen circumstances in changing climates or industries (Kaufman, Rateau, Ellis, Kasperbauer, & Stacklin, 2010). Furthermore, faculty members expressed the value of agricultural leadership graduates serving as articulate advocates for agriculture in the public and policy sectors. These perceptions meet the needs of AAAE's research priority one, which is "public and policy maker understanding of agriculture and natural resources" (Doerfert, 2011, p. 8). The success of graduates being articulate and proficient in working with policy makers and government officials aligns closely with previous research from Kaufman and Carter (2005), who said agricultural leadership programs provide students with networking opportunities in the public and private sectors, as well as successfully developing future leaders for rural communities and agricultural organizations.

Respondent's perceptions regarding the relevancy of agricultural leadership can be tied to Ajzen's control beliefs, specifically perceived behavioral controls. For example, when respondents indicated agricultural leadership graduates serve as agricultural industry advocates through the direct influence of political, policy, and public perception, it can be linked to perceived power. This type of power means there is a perceived presence of factors that may or may not cause a person's motivation to perform a given behavior. When faculty addressed the necessity of agricultural leadership students serving as spokespersons for the industry, they're

asserting their perceived power in educating those students, and, in turn, the students will have a perceptive power over industry and community members.

Key Findings

This study sought to gain perspective regarding historical contexts and future recommendations from leaders within the agricultural leadership discipline, which aligned with recommendations set forth in a report by Williams, Townsend, and Linder (2005). The researcher assessed key results derived from responses gathered from 22 respondents who participated in the survey portion and 19 respondents who participated in the interview portion of the study. These respondents represented various agricultural leadership education programs nationwide.

Twenty-six agricultural leadership education programs were identified across the country representing the undergraduate and graduate levels. Fifty-two percent of 1862 land-grant schools have agricultural leadership programs, which is consistent with previous estimates of 29 (58%) 1862 institutions who have agricultural communications academic programs (Large, 2014). Interestingly, although 52 percent of 1862 schools have agricultural leadership programs, there are 44 (88%) agricultural education programs at 1862 land-grants (Coley, 2015). The majority of agricultural leadership programs are part of a larger agricultural education, agricultural communications, or extension education department housed in a college of agricultural, food, life, human or environmental sciences.

Within the parameters of this study, the researcher discovered more men are faculty members than women in agricultural leadership programs. One hypothesis related to this is due to agricultural education being a predominantly male-dominated field. Creating a more interesting question is agricultural leadership being dominated by assistant professors who made

up the largest segment of respondents. Each institution was only to select one representative to participate in this study, which often allowed only young professionals to respond to questions related to the discipline. One result of this is the research might be biased toward a younger perception of field and lack historical contexts provided by the wisdom of seasoned professionals within the field.

The average undergraduate enrollment nationwide was 136 students, while the average graduate enrollment was 18 students. The total number of students reported in this study was 3,389 students, while a study by Velez, Moore, Bruce, and Stephens (2014) examined all agricultural leadership programs across the nation and reported 7,904 students. Results from both studies indicate 43 percent of all agricultural leadership students are being educated at 1862 land-grant institutions. With the disparity in sizes among 1862 programs, it might create a perception among colleagues that institutions with larger enrollment are more powerful and influential among peers within the field.

The majority (91%) of institutions require some type of internship, capstone course or experiential learning opportunity before graduation. This requirement best prepares students for success in their future careers as indicated by respondents who explained how these hands-on, experiential learning opportunities develop students' "soft" skills and give them [students] opportunities for practicing their theory-based knowledge in a real-world situation before they enter careers in agricultural communities or industries.

Respondents suggested the three main areas where they measure programmatic success are post-graduation job placement, student enrollment, and graduation rates. These three standards were the most frequently used indicators used to assess departmental success. A lack of consistency among faculty's departmental success standards created dissonance within the

discipline due to few respondents agreeing on how "success" could be measured. Across the country, respondents believed agricultural leadership programs develop "human capital" while educating the next generation of leaders who will advocate for the agricultural industry through political, policy and public influence.

As indicated earlier, the top five agricultural leadership programs, nationwide, are University of Florida, Texas A&M University, Oklahoma State University, University of Nebraska, and Virginia Polytechnic Institute and State University. Interestingly, the top two agricultural leadership institutions were also ranked numbers one and two, respectively, by Birkenholz and Simonsen (2011), who ranked the top 10 most distinguished agricultural education programs nationwide. Furthermore, Oklahoma State University, who was ranked third in this study, was ranked sixth in the previously mentioned study.

B.   Recommendations

Future Research

The nationwide growth witnessed in agricultural leadership programs has been evident for a number of years (Schwartz, Atman, & Freeman, 1998). Growth and distribution related to programs at 1862 land-grant institutions has been fairly concentrated to one geographic area. Results of this study revealed 15 agricultural leadership programs are located east of the Mississippi River, whereas 11 programs are located to the west. While this may appear relatively even, it's interesting to note of those 15 programs located in the eastern half of the country, 10 schools (38%) are located in the southern region of AAAE. Future research might be conducted in eastern or western regions of the United States to determine if students in certain areas of the country without agricultural leadership education programs might be deficient in leadership related "soft" skills, as opposed to areas where programs are more prevalent. Another interesting

piece of research might analyze the national chasm in agricultural leadership programs regarding the placement of programs in regions where agricultural production remains more prevalent, as opposed to urbanized areas where production agriculture is nearly non-existent. For example, a comparison of agricultural leadership competencies among industry professionals in the southern United States against industry professionals in the northeast section of the country might better explain any dichotomy in regional leadership skills and proficiencies.

The purpose of this study was to describe historical contexts, current perceptions, and future recommendations using faculty-solicited information regarding 1862 land-grant agricultural leadership programs. While this study yielded results that will lay the foundation for improving the discipline nationwide, future research would be well suited to examine current students in agricultural leadership academic programs to assess their perceptions regarding issues related to acquired skills, institutional course loads, etc.

Respondents indicated agricultural leadership graduates are most likely to enter three main career area: extension educators, leadership and development trainers, and sales professionals. Future research includes conducting assessments identifying industry needs in the most frequently hired areas for recent agricultural leadership graduates. While faculty indicated agricultural leadership education is relevant related to supplying professionals who are competent in agriculture leadership for a growing and changing industry, future research could focus on employer's perceptions of agricultural leadership education and the impact agricultural leadership graduates have in various industries. Furthermore, surveying agricultural leadership alumni to understand their career readiness when entering their desired career field. These recommendations correspond with Kaufman, Rateau, Ellis, Kasperbauer, and Stacklin (2010)

who discussed the importance of conducting research that would clarify the understandings related to benefits of agricultural leadership education programming to graduates and employers.

Based on the conclusions of this study, future recommendations should be made to provide further exploration in the discipline of agricultural leadership. Recommendations could include analyzing each program's course structure to understand if programs are more agriculturally focused with a leadership component or leadership focused with agricultural components. As one faculty member stated in her interview, professionals in the field must answer the question "what is agricultural about agricultural leadership?" Perhaps conducting future research related to this notion would better answer that lingering question. These recommendations support researching interdisciplinary faculty within colleges of agriculture to determine their perceptions of agricultural leadership programming.

Recommendations for Practitioners

The findings revealed respondents expect the agricultural leadership discipline to continue to growth in course offerings, student numbers, graduate programs, and creation of faculty positions. The growth of agricultural leadership programs could be related to industry demand for a skilled, educated workforce who possess soft skills (Morgan, et al., 2013). Growth in student numbers could be related to interdisciplinary characteristics of agricultural leadership programs where majors, minors, concentrations, certificates, and specializations pair well with other programs such as business, education, and engineering.

With the expected growth in the discipline, nationwide, respondents placed emphasis on the necessity of creating a professional home to collaborate on academic ideas and also advocated for nationwide guidelines regarding standardizing the discipline. The lack of a professional organization creates a static environment for collaborative efforts in research,

teaching, grant writing, and professional development. Agricultural leadership education, as a discipline, should develop an overarching vision and plan for continued growth to ensure the discipline retains the faculty, infrastructure, and professional development support needed to remain viable within academia (Velez, et al., 2015). One way to promote professional development opportunities for teaching and research is to establish pre/post-conference sessions specifically dedicated to agricultural leadership education at major meetings such as NACTA, AAAE, ILA, or ALE.

While this study sought to identify the historical contexts of the discipline, it also sought to better understand future ramifications and implications related to programmatic growth nationwide. Recommendations of creating an overarching, useful vision for the field promotes previous recommendation given by Connors and Swan (2006), who indicated agricultural leadership education programs must expand beyond the idea of theory development and research should build upon what can be done throughout agricultural leadership education. Under the notion of creating an overarching vision for the field, leaders in the academic discipline should create a set of "benchmarks" or common standards to measure programmatic success due to the dissonance occurring regarding success-measuring indicators.

Conducting research in the previously-mentioned areas might further the understanding of agricultural leadership programs aligning with general agricultural degrees. This notion supports previous recommendations given by Mannebach (1990) and Spotanski and Carter (1993), who said research in agricultural leadership should cast a wide net to encompass a multitude of programs to better understand research priorities focused in teaching, research, training, student development, program size and structure, and programmatic growth. Graham (2001) recommended the entire spectrum of agricultural leadership education should

accommodate new environments and situations to best ensure survival by promoting all aspects of the academic field. If agricultural leadership education is to be successful long-term, future research should be conducted to expand on this study, perhaps go beyond the confines of 1862 land-grant institutions, to better grasp the entire structure and outlook of agricultural leadership programs across the nation.

VI.   References

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VII. Appendices

A. Institutional Review Board Approval

UNIVERSITY OF ARKANSAS

May 28, 2015

MEMORANDUM

TO: Jackson Alexander
                       K. Jill Rucker

FROM: Ro Windwalker
                       IRB Coordinator

RE: New Protocol Approval

IRB Protocol #:   15-05-723

Protocol Title: *A Characterization of Perceptions Surrounding Agricultural
                       Leadership Academic Programs at Land-Grant Universities: What
                       Must Be Done for Future Growth and Development?*

Review Type: ☒ EXEMPT   ☐ EXPEDITED   ☐ FULL IRB

Approved Project Period: Start Date: 05/28/2015 Expiration Date: 05/27/2016

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (https://vpred.uark.edu/units/rscp/index.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 25 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

B.   Initial Program Contact Letter

Department of
**Agricultural Education, Communications
and Technology**

205 Agriculture Building, University of Arkansas, Fayetteville, AR 72701-1201
479-575-2035 • Fax: 479-575-2610 • aect.uark.edu

Institution Name
Street Address
City, State, Zip Code

Date

Salutation;

You have been identified by your college dean/department head as a faculty member within the agricultural leadership discipline. As such, your cooperation in taking part in a nation-wide research study would be sincerely appreciated. If you agree to participate in this study, you will take a short demographic survey to learn more about your department and program. After completion of the demographic survey, I will work with you to set up an interview time, where you will be asked a serious of in-depth questions related to the agricultural leadership discipline. The interview will last approximately 30 minutes.

The study, conducted by the University of Arkansas Department of Agricultural Education, Communications and Technology is titled *A Characterization of Perceptions Surrounding Agricultural Leadership Academic Programs at Land-Grant Universities: What Must be Done for Future Growth and Development?* Focusing solely on land-grant institutions across the country with academic programs related to agricultural leadership, this study will seek to identify current agricultural leadership academic programs and then characterize and understand perceptions of these programs from faculty members at the undergraduate and graduate levels. The study also will encompass programs which offer certifications, specializations, concentrations and options focused in agricultural leadership academic programming.

Some of the objectives which will assist in guiding the study are as follows: (1) summarizing why current faculty members believe the creation and continuation of agricultural leadership was and is necessary, (2) characterize what evolved within the discipline in terms of courses, teaching methods, and curriculum development, and finally, (3) work to determine what must be done to continue in the growth and development of the agricultural discipline nationwide.

The Arkansas AECT faculty and I would appreciate your feedback in regard to this study. You may contact me at any time by email at jalex@uark.edu or by phone at (405)-933-2072 in order to further discuss this study and how we can collaborate on completing this research topic.

Sincerely,

Jackson Cole Alexander

Jackson C. Alexander, Graduate Research and Teaching Assistant
Department of Agricultural Education, Communications, and Technology

The University of Arkansas is an equal opportunity/affirmative action institution.

IRB #15-05-723
Approved: 05/28/2015
Expires: 05/27/2016

C. Participant Consent Form

Consent Form for Agricultural Leadership Perceptions Study

You have been asked to participate in a research project studying the perceptions and circumstances surrounding Agricultural Leadership academic programs at land-grant institutions across the country. The overall purpose of this research project is to identify current agricultural leadership academic programs and then characterize and understand perceptions of these programs from faculty members at the undergraduate and graduate levels. You were selected to be a possible participant because you are a faculty member who serves as an advisor, professor, instructor or program director in an Agricultural Leadership program in a land-grant college of agriculture or related field.

If you agree to participate in this study, you will complete a total of 14 interview questions. The questions will consist of seven demographic-based questions and seven open-ended questions. The total time allotted for participating in this study is approximately one hour and 30 minutes. You are receiving this consent form to insure that you are willing to continue with your participation of this study.

Your participation in these assessments is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with our institution being affected.

This study is confidential to the extent allowed by law and University policy, and all data will be reported as group data. No identifiers linking you to this study will be included in any sort of report that might be published. I will be the only person who knows the identity of each participant, and all participants will be given a unique identifier to keep his or her identity confidential. Research records will be stored securely and only Dr. K. Jill Rucker (University of Arkansas) or Mr. Jackson Alexander will have access to the records.

If you have questions regarding this study, you may contact Dr. K. Jill Rucker at (479)575-3520 or kjrucker@uark.edu.

This research study has been reviewed by the Institutional Review Board at the University of Arkansas. For research-related problems or questions regarding your rights as a research participant, you can contact Ro Windwalker, the University's Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

Please indicate below your consent to participate in this study by checking a box below.

○ Yes

○ No

D.   Interview Protocol

Demographic questions:

*To be administered prior to researcher/participant interview.

6. What is the land-grant institution you represent?

7. What is your title and role in relation to agricultural leadership academic programming?

    a. Title

    b. Role

8. How long have you served as an agricultural leadership faculty member?

9. What is the organizational structure of agricultural leadership at your institution? For

    example, is agricultural leadership considered its own department, part of a particular

    academic department, interdisciplinary program, etc.? Please explain in the following

    fields.

    a. Academic college

    b. Academic department

    c. Interdisciplinary program (multi-college or department)

    d. Other

10. How long has agricultural leadership been offered at your institution?

11. How is the agricultural leadership discipline offered to your students? For example, is

    agricultural leadership offered as a major, minor, certification, specialization,

    concentration, or graduate degree? Please select all that apply.

    a. Major

    b. Minor

   c. Certification

d. Specialization

e. Concentration

f. Graduate degree

g. Only agricultural leadership courses offered

h. Other

12. What is the size of your academic program in terms of faculty members, undergraduate students, and graduate students?

a. Faculty members

b. Undergraduate students

c. Graduate students

13. Please indicate the number of required agricultural leadership courses for your students below.

14. Are experiential learning opportunities, such as internships, encouraged or required for agricultural leadership students?

a. If yes, please indicate.

b. No

15. Please provide types of jobs agricultural leadership students obtain after graduation?

16. Please provide three indicators used to measure success in your agricultural leadership program?

17. In your opinion, what are the top five agricultural leadership academic programs at land-grant institutions? Please rank.

Interview questions

*To be administered during researcher/participant interview

18. As an agricultural leadership faculty member, please summarize why you believe the agricultural leadership discipline was created.

19. Since the creation of agricultural leadership, what has evolved within the discipline? This may include things such as curriculum, teaching approaches, and types of courses.

20. What do you recommend should be developed or changed to advance the agricultural leadership discipline? Again, this may include things such as curriculum revision, teaching practices, cohesiveness among institutions, etc.

21. Where do you foresee the discipline going into the future?

22. Why do you believe the agricultural leadership discipline is relevant?

E.   Map of 1862 Institutions with Agricultural Leadership Programs

Land-Grant Colleges and Universities

United States Department of Agriculture
Cooperative State Research, Education, and Extension Service

● 1862
☆ 1890
■ 1994

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