

IMPACT OF AGRICULTURAL EDUCATORS' SERVANT LEADERSHIP STYLE
ON STUDENT PARTICIPATION IN SERVICE-LEARNING ACTIVITIES

by

Mary Anne Anderson

A thesis proposal submitted in partial fulfillment
of the requirements for the degree

of

Masters in Science

in

Agricultural Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

May 2008

©COPYRIGHT

by

Mary Anne Anderson

2008

All Rights Reserved

APPROVAL

of a thesis submitted by

Mary Anne Anderson

This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citation, bibliographic style, and consistency, and is ready for submission to the Division of Graduate Education.

Dr. Martin Frick

Approved for the Division of Agricultural Education

Dr. Robert Gough

Approved for the Division of Graduate Education

Dr. Carl A. Fox

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a master's degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library.

If I have indicated my intention to copyright this thesis by including a copyright notice page, copying is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for permission for extended quotation from or reproduction of this thesis in whole or in part may be granted only by the copyright holder.

Mary Anne Anderson

May 2008

ACKNOWLEDGEMENTS

The author wishes to thank the members of her graduate committee, Dr. Martin Frick, Dr. Carl Igo, and Dr. Paul Lachapelle, for their guidance, support, encouragement, and insight. Thank you also to those students, staff, and faculty that provided input and to Steve Siegelin for never allowing me to forget how important it was to finish. A special thanks goes out to my parents, Annie and Perry, for their endless encouragement and continual support of this project. To Levi, thank you for all that you have taught me in this process. I could never have done it without you.

TABLE OF CONTENTS

1. INTRODUCTION	1
Background	1
The Statement of the Problem.....	3
Need for the Study	4
Objectives.....	6
The Delimitations.....	6
Definitions.....	7
Assumptions.....	8
2. REVIEW OF LITERATURE	9
Introduction.....	9
Leadership Overview	9
Servant Leadership.....	11
Service-Learning.....	14
Teacher Leadership	16
Development of Instrumentation.....	18
3. METHODOLOGY	20
Introduction.....	20
Research Design.....	20
Sample Population.	20
Sampling Procedure.	21
Instrumentation	21
Data Collection Procedures.....	22
Data Analysis	24
4. RESULTS OF THE STUDY	25
Introduction.....	25
Demographic Data	25
Servant Leadership Inventory	29
Service-Learning Inventory	32
Correlation of Servant Leadership Variables with the Incorporation of Service-Learning Activities	39
5. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS	46
Introduction.....	46

Conclusions.....	46
Implications.....	48
Recommendations.....	49
Recommendations for Further Study	49
REFERENCES	50
APPENDICES	54
APPENDIX A: IRB Training Completion Form	55
APPENDIX B: Initial Survey Consent Letter.....	57
APPENDIX C: Electronic Cover Letter	59
APPENDIX D: Survey Instrument	61
APPENDIX E: Service-Learning Responses.....	68

LIST OF TABLES

Table	Page
1. Gender of Survey Participants by State.	26
2. Distribution of Total Teaching Experience.....	27
3. Distribution of Teaching Experience at Present School	27
4. Distribution of Educators by State.....	29
5. Mean Scores and Standard Deviation of Servant Leadership Characteristics and Behaviors.....	30
6. Frequency of Courses Taught by Curriculum Category	32
7. Educators' Response to Inquiry about their State's Service Learning High School Graduation Requirements	39
8. Significant Relationships between Servant Leadership Variables and the Incorporation of Service-Learning Activities into Introduction/General Ag Courses.....	40
9. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Ag Business/Ag Economics Courses.....	40
10. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Ag Mechanics Courses.....	41
11. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Animal Science Courses.....	42
12. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Leadership and Personal Development Courses	42
13. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Plant and Soil Science Courses	43

Table	Page
14. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Other Courses	43
15. Servant Leadership Variables Exhibiting Significant Relationships ($p < .05$) with the Incorporation of Service-Learning Activities in Two or More Courses	44
16. Frequency of General/Introductory Agriculture Courses Taught by Educators and the Number of Service-Learning Activities Incorporated.....	69
17. Frequency of Ag Business/Ag Economics Courses Taught by Educators and the Number of Service-Learning Activities Incorporated.....	69
18. Frequency of Ag Mechanics Courses Taught by Educators and the Number of Service-Learning Activities Incorporated	70
19. Frequency of Animal Science Courses Taught by Educators and the Number of Service-Learning Activities Incorporated	70
20. Frequency of Leadership and Personal Development Courses Taught by Educators and the Number of Service-Learning Activities Incorporated.....	71
21. Frequency of Plant and Soil Science Courses Taught by Educators and the Number of Service-Learning Activities Incorporated	71
22. Frequency of Other Courses Taught by Educators and the Number of Service-Learning Activities Incorporated.....	72
23. List of Service-Learning Activities Incorporated in Educators' Courses	72
24. Frequency Servant Leadership Variables Exhibited Significant Relationships with the Incorporation of Service-Learning Activities into All Courses	75

TABLE OF FIGURES

Figure	Page
1. Age Distribution of Educators	26
2. Size of School by Number of Student Enrolled.....	28
3. Frequency of Agricultural Educators Incorporating Service-Learning Activities into Introduction/General Ag Courses	33
4. Frequency of Educators Incorporating Service-Learning Activities into Ag Business/Ag Economics Courses.....	34
5. Frequency of Educators Incorporating Service-Learning Activities into Ag Mechanics Courses	34
6. Frequency of Educators Incorporating Service-Learning Activities into Animal Science Courses	35
7. Frequency of Educators Incorporating Service-Learning Activities into Leadership and Personal Development Courses.....	36
8. Frequency of Educators Incorporating Service-Learning Activities to Plant and Soil Science Courses	37
9. Frequency of Educators Incorporating Service-Learning Activities into Other Courses.....	38

ABSTRACT

The purpose of this study was to determine the relationship of servant leadership characteristics present in agricultural educators' leadership styles to the use of service-learning activities in their curriculum. The study was guided by three questions: (a) which the servant leadership variables do agricultural educators exhibit?, (b) how many service-learning activities do those educators incorporate into their teaching curriculum?, and (c) does a statistically significant relationship exists between servant leadership variables exhibited by agricultural educators and the number of service-learning activities incorporated into their curriculum.

An on-line and written survey was conducted with agricultural educators who were members of the National Association of Agricultural Educators (NAAE) and lived in NAAE Region 1. The survey used Ann Todd Abel's Servant Leadership Inventory to analyze the servant leadership characteristics and behavior exhibited by educators.

The results of the study provide an overview of the most frequently exhibited servant leadership characteristics and behaviors by agricultural educators and quantitatively analyze the number of service-learning activities with-in their curriculum. The results of the study also highlight the types of service-learning activities incorporated into the educators' curriculum.

INTRODUCTION

Background

For the last two decades service-learning became one of the buzzwords for pedagogical and educational policy reform. Supporters of the practice, those who favored student service activities as the product of out-of-classroom learning experiences and community needs, hailed it as the lost connection between schools and the community. They cited research documenting benefits to students. Billig (2000) found students that participated in service-learning activities were more likely to become active community members and became more adept at understanding and meeting community needs. Astin & Sax (1998) and Driscoll, Holland, Gelmon, & Kerrigan (1996) reported service-learning positively affected student personal development, interpersonal development, leadership skills, and communication skills. Billig (2000) concluded successful service-learning experiences were more than one-time community service outreach.

Service-learning experiences that resulted in positive outcomes were crafted carefully by educators. The integration of these experiences into a curriculum involved more than simply including a community service component. Service-learning activities functioned as “critical learning complement[s] to the academic goals of the course” (Howard, 2000, p. 73). To help educators design quality programs, balancing academic goals with service goals, Sigmon (1979) articulated three principles of service-learning:

Principle one: Those being served control the service(s) provided.

Principle two: Those being served become better able to serve and be served by their own actions.

Principle three: Those who serve also are learners and have significant control over what is expected to be learned (Sigmon, 1979, p. 57).

In principle two, Sigmon (1979) borrowed the definition of service from Robert Greenleaf's servant leadership definition. Greenleaf wrote "Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?" (2002, pg. 27).

This definition of service formed the foundation of Greenleaf's servant leadership theory. The theory calls for a desire to serve others first and then a conscious decision to lead (Greenleaf, 2002). Greenleaf saw the application of servant leadership principles in businesses, churches, foundations, and education.

Agricultural education provided one educational arena where servant leadership could be practiced. Agricultural educators were among the few secondary-education teachers who incorporated the science of leadership into their curriculum. Using the three component model of agricultural education, (a) classroom/laboratory learning, (b) supervised agricultural experience (SAE) programs, and (c) the National FFA Organization, these educators exposed middle-school and high school students to all facets of food and fiber sciences. This model incorporated the use of experiential learning experiences (SAEs) and leadership development to further the application of students' classroom learning (National FFA Organization, 1995). Through the model,

educators were encouraged to serve students first formally, as teachers, second informally, as advisors, and thirdly to provide model leadership.

The concepts of service and leadership were strengthened through two professional agricultural education organizations which worked closely with educators and students. Educators were called by their organization, the National Association of Agricultural Educators (NAAE), and their student's group, the National FFA Organization, to demonstrate and continue development of leadership skills. The NAAE mission spoke to educators as "Professionals providing agricultural education for the global community through visionary leadership, advocacy and service" (NAAE, 2008). As FFA advisors, these educators focused student development toward "premier leadership, personal growth, and career success through agricultural education" (National FFA Organization, 1995, p. 22). With their career's natural predisposition toward service and leadership, this study examined agricultural educators' tendency to exhibit a servant-type leadership style in relation to service-learning activities incorporated within their curriculum.

The Statement of the Problem

The purpose of this study was to determine the relationship of servant leadership characteristics present in agricultural educators' leadership styles to the use of service-learning activities in their curriculum.

Need for the Study

Even as technological advancements spanned the globe and enabled world-wide communication in seconds, students still faced the same unique dilemma as students of the past: to become actively engaged in society and universal social problems or to become engrossed in self-development and advancement. Derek Bok, president of Harvard University, echoed this peril in his 1985 commencement address. He spoke “We hear students have lost interest in the welfare of others and the problems of society. They have abandon[ed] their idealism for a consuming preoccupation with themselves, their security, and their careers” (Levison in Kendall, 1990, p. 72). While Bok’s address was given in 1985, the current booming success of online social networking sites to self-preoccupation made this still a relevant fear.

Further reports strengthened Bok’s statements. Frank Newman’s Carnegie Report stated “if there is a crisis in education in the United States today, it is less that test scores have declined than it is that we have failed to provide the education for citizenship” (1985, in Stanton, 1990, p. 341). Newman’s report reiterated the failure to link student’s classroom study and their need for individual achievement with experiences of social problems and issues.

Advocates of mandatory community service in schools argued they have discovered the solution. Service outreach in the community both expanded student horizons beyond themselves and connected them with pressing social issues. However, opponents offered the rebuttal to this argument that community service projects perpetuated and reinforced stereotypes about the weak and under privileged; confirming

the prejudices about those in need of help. In essence, community service without discussion of the deeper social issues which caused the need for service or service without self-reflection caused more harm than good to student's development.

Other groups advocated service-learning as the solution to mandatory community service. Proponents of service-learning argued that student development benefited the most when both those receiving the service and those providing the service became mutual learners. Stanton (in Kendall, 1990) stated

Rather than a discrete type of program service-learning appears to be an approach to experiential learning, and expression of values—service to others, community development and empowerment, reciprocal learning—which determines the purpose, nature, and process of social and educational exchange between the learners (students) and the people they serve, and between experiential education programs and the community organizations with which they work (p. 67).

This study was undertaken to determine whether educators who exhibit high numbers of servant leadership characteristics—those educators who serve students in order to empower them and help them grow as persons—incorporate more service-learning activities into their curriculum than other educators who exhibit few servant leadership characteristics. This study will yield knowledge and insight into the collective leadership characteristics exhibited by agricultural educators. The results will assist educator pre-service and in-service instruction in service-learning activities.

Objectives

Objective 1: To determine the servant leadership variables exhibited by agricultural educators in the National Association of Agricultural Educators Region 1 as measured by the Servant Leadership Inventory.

Objective 2: To determine the number of service-learning activities incorporated into the teaching curriculum by agricultural educators.

Objective 3: To determine if a statistically significant relationship exists between servant leadership variables exhibited by agricultural educators and the number of service-learning activities incorporated into their curriculum.

The Delimitations

This study only evaluated certified agricultural educators who are members of the National Association of Agricultural Educators in Region 1.

The study did not evaluate the academic success of students taught by agricultural educators.

The study did not qualitatively analyze service-learning activities in which students participate.

The study only considered the effect of servant leadership attributes exhibited by agricultural educators; attributes exhibited by other educators, parents, clergy, or mentors will not be considered.

Definitions

Leadership: “Leadership is an intentional change process through which leaders and followers, joined by a shared purpose, initiate action to pursue a common vision” (Laub, 2004, p. 5).

Community Service. For the purpose of this research the term “community service” will be defined using the American Heritage Dictionary’s (2007) definitions: (a) “Services volunteered by individuals or an organization to benefit a community or its institutions” or (b) “Similar work performed by law offenders to serve a sentence in lieu of or in addition to jail time” (1).

Servant Leadership.

Servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader...Servant leadership promotes the valuing and development of people, the building of community, the practice of authenticity, the providing of leadership for the good of those led and the sharing of power and status for the common good of each individual, the total organization and those served by the organization (Laub, 1999, pg. 81).

Service-Learning. For the purpose of this research, the term “service-learning” will be defined using the National Serving-Learning Clearinghouse’s definition:

Service-learning is a form of experiential education where learning occurs through a cycle of action and reflection as students work with others through a process of applying what they are learning to community

problems and, at the same time, reflecting upon their experience as they seek to achieve real objectives for the community and deeper understanding and skills for themselves (2007, pg. 2).

Assumptions

1. The Servant Leadership Inventory accurately reported the servant leadership variables an agricultural educator exhibits.
2. Agricultural educators answered the survey instrument honestly, to the best of their knowledge.
3. Service-learning activities were beneficial in developing students' character, civic responsibility, and community concern and awareness.
4. Presidents of the state's agricultural education professional organization distributed the surveys to only members of their organization.

REVIEW OF LITERATURE

Introduction

The review of literature for this thesis was divided into five major sections. Section one provided an overview of the history of leadership theories and major leadership theories currently acknowledged. Section two included a description of the history and application of servant leadership. Section three focused on service-learning, with an outline of the history of thought as well as research defining the benefits and shortcomings of service-learning. Section four discussed the role of teachers as a source of leadership. Finally, section five gave a summary of the development of a servant leadership instrument.

Leadership Overview

Leadership has been a timeless concept. From ancient kings to modern presidents and prime ministers, groups of people have looked to individuals to provide direction, authority, vision, and motivation. Laub (2004) defined a leader as “a person who sees a vision, takes action toward a vision, and mobilizes others to become partners in pursuing change” (p. 4). He further described leadership as “the intentional change process through which leaders and followers, joined by a shared purpose, initiate action to pursue a common vision” (Laub, 2004, p. 5). Laub’s definitions spoke to the 21st Century need for creative and compelling leadership.

Modern theories, however, differ from earlier theories exhibited. The first appearance of leadership examples was in myths and stories such as Beowulf; they characterized leadership through dominance and followership through submission (Bass, 1995). Written documentation of leadership appeared in Egypt around 3000 B.C. and the ideal Grecian leadership qualities were embodied in Homer's heroes in *The Illiad* and *The Odyssey* (Bass, 1995). Machiavelli's *The Prince* continued to demonstrate a leadership style which was militaristic and authoritative.

The Chinese philosopher Lao-tzu introduced a leadership philosophy remarkably similar to modern theories. Lao-tzu (1995), in *The Tao of Leadership*, wrote on selflessness: "Enlightened leadership is service, not selfishness. The leader grows more and lasts longer by placing the well-being of all above the well-being of self alone" (p. 69). Lao-tzu followed with thoughts on unbiased leadership: "Learn to lead in a nourishing manner. Learn to lead without being possessive. Learn to be helpful without taking credit. Learn to lead without coercion" (Lao-tzu, 1995, p. 69). Lao-tzu stood out among other early leadership theorists. The majority agreed that leadership came through power and authority.

Leadership thought with an emphasis on follower submission to the leader existed virtually unchanged until the Twentieth Century. Chemers (1995) found modern leadership research could be categorized into three periods: traits, behavior, and contingency. Studies during the trait period maintained that effective leadership was the result of a series of traits present in the leader. No traits which consistently produced a leader were ever discovered (Chemers, 1995).

The behavior period also failed to produce the best style of leadership. However, advancements in leadership knowledge were made during this period and the Leader Behavior Description Questionnaire was developed. Following the behavior period, the contingency period focused on leader-oriented approaches (Chemers, 1995).

Current leadership theories focused on follower-leader relationship. Kouzes and Posner (2002) emphasized that “leadership is a relationship between those who aspire to lead and those who choose to follow” (p. 20). Theories which emphasized the importance of follower-leader relationship included attributed charismatic, transformational, servant leadership, and Kouzes and Posner’s (2002) five principles of exemplary leadership.

A common stream of similarities ran through the new theories. Leaders must develop or create an inspiring vision (Burns, 1976, Kouzes & Posner, 2002, De Pree, 1992, Yukl, 2006), proceed toward accomplishment of the vision through innovative and unconventional methods and risk taking (Kouzes & Posner, 2002, Yukl, 2006).

Servant leadership presented a unique thought which other modern leadership theories lacked. Greenleaf (2002) posed that “the great leader is seen as a servant first, and that simple fact is the key to his greatness” (p. 21). This concept continued Hegel’s Philosophy of the Mind where the great leader must first serve as a follower before he or she can understand their own followers (Bass, 1995).

Servant Leadership

While Greenleaf (2002) was credited with the reintroduction of the concept of servant leadership, he was not the first to pioneer the idea. Laub (1999) cited the Biblical

account of Rehoboam who was forced to choose between a servant-style of leadership and an authoritarian style to govern when he became King of Israel. The servants told him “your father put a heavy yoke on us, but now lighten the harsh labor and the heavy yoke he put on us, and we will serve you” (I Kings 12:4 cited in Laub, 1999, 10).

Rehoboam’s advisors explained, “if today you will be a servant to these people and serve them and give them a favorable answer, they will always be your servants” (I Kings 12:7 cited in Laub, 1999, 10). Rehoboam chose to make the yoke heavier—chose the authoritarian style and as a result, the kingdom was divided.

Later in the Bible, Jesus Christ provided a model of servant leadership. In Luke 22:25-27, Jesus spoke:

The kings of the Gentiles lord it over them; and those who exercise authority over them call themselves benefactors. But you are not to be like that. Instead, the greatest among you should be like the youngest, and the one who rules like the one who serves...I am among you as one who serves (cited in Laub, 1999, p. 11).

In the Gospel of John, Christ assumed the role of the household servant. He washed the feet of the disciples. When he finished he said

Do you understand what I have done for you? You call me ‘Teacher’ and ‘Lord,’ and rightly so for that is what I am. Now that I, your Lord and Teacher, have washed your feet, you should also wash one another’s feet. I have set you an example that you should do as I have done for you (NIV Bible, Gospel of John 13:13-15 cited in Sendjaya, 2002, p. 60).

In both spoken word and deed, Christ modeled the servant leadership concept.

While servant leadership theories existed, they remained largely unexpanded until Greenleaf. Greenleaf (2002) credited the re-discovery of the concept to reading Herman Hesse's *Journey to the East*. In his first essay "The Servant as Leader," he published the idea "the great leader is seen as a servant first, and that simple fact is the key to his greatness" (Greenleaf, 2002, pg. 21). The "servant first" was different from the "leader first" in that the leader needed "to assuage an unusual power drive or to acquire material possessions," while the servant desires to help others (Greenleaf, 2002, pg. 27).

Greenleaf, in "The Servant as Leader" and subsequent following essays, went on to describe the fundamental characteristics servant leaders possess. Spears (1998) summarized these characteristics in the following ten attributes: (a) listening, (b) empathy, (c) healing, (d) awareness, (e) persuasion, (f) conceptualization, (g) foresight, (h) stewardship, (i) commitment to the growth of people, and (j) building community (Spears cited in Russell & Stone, 2002). Patterson (2003) provided a similar list of factors based on Greenleaf's work.

Since the publication of "The Servant as Leader," many articles, theses, and dissertations were written on the topic. Spears (1996) identified six areas where servant leadership principles were applied. Those areas included influencing writers, providing the basis for trustee education, contributing to community leadership, supplying the background for personal and spiritual growth and in education. With the application in education, the link reappeared between servant leadership and service-learning.

Service-Learning

Service-learning pioneers used Dewey's writings to create a new form of education-based service outreach. Linking his citizenship writings with those on criteria for experiential education formed the basis of service-learning theory. Dewey expressed that schools train students to members of society and that only by imbuing them with the concepts of service and self-direction can a worthy society be created (in Giles and Eyler, 1994). He continued, "helping others, instead of being a form of charity which impoverishes the recipient, is simply an aid in setting free the powers and furthering the impulse of the one helped (Dewey, 1900, in Giles and Eyler, 1994, pg. 82).

While Dewey articulated the basic principles of experiential education and service in schools to develop student citizenship, the concept of service-learning can be traced back further. Stanton, Giles, & Cruz (1999) found evidence of service-learning activities in the extension education of the 1860 land grant movement, in settlement house activities and progressive education of the 1900s, and in the civil rights movement and immigrant education efforts.

Service-learning theory has been slowly developing since the late 1960s. The Southern Regional Education Board first coined the term service-learning with a definition that stated "the accomplishment of tasks that meet genuine human needs in combination with conscious educational growth" (Stanton, Giles, Cruz, 1999, p. 2). In 1979, Robert Sigmon's three principles of service-learning were linked to the concept of servant leadership.

Pedagogical and political reforms of the 1980s brought service-learning to the forefront. Politicians and educators faced students with “growing egoism and career-centeredness and a corresponding alienation from political and social life” (Speck and Hoppe, 2004, p. 14). Community service initiatives and mandatory service for students was their answer.

In response to these mandates, Kendall and Associates published a three-volume work clarifying the concept and benefits of service-learning. Kendall (1990) found that while a service-learning project may be considered experiential learning, other experiential learning programs that lack the service emphasis are not service-learning. Stanton suggested “the distinguishing characteristic of service-learning is the nature of the social exchange between the service-learner and those who are being served” (in Kendall, 1990, p. 67).

The lack of a central author has contributed to the lack of one concise, accepted definition. Kendall (1990) cited over 140 terms used to describe service and learning. The 1994 definition by the National Society for Experiential Education found service-learning was “any carefully monitored service experience in which a student has intentional learning goals and reflects actively on what he or she is learning throughout the experience” (cited in Furco, 1996, p. 1).

Even though service-learning lacked an accepted definition, research has demonstrated the benefits to both teachers and students who engage in it. Greater social responsibility, higher self-esteem, improved academic performance, and increased career knowledge were just a sample of the benefits students gained from participating (Billig &

Waterman, 2003). Kendall (1990) found faculty experienced a range of new skills and personal fulfillment including “seeing students become less passive, more motivated, and empowered as learners and as members of society” (p. 142).

In a study done by Murphy and the Far West Laboratory for Education Research, faculty were asked if they gained more personal satisfaction from teaching field experience (experiential education) than teaching non-field experience classes (Kendall, 1990). Overwhelmingly, teachers responded the field experiences classes provided greater satisfaction. Teachers described experiencing a real connection between the community and academia while being able to work closely with students and watch them mature (Murphy, 1981 cited in Kendall, 1990).

Teacher Leadership

Teacher involvement and support played an important role in service-learning. Kendall (1990) listed several reasons why faculty participation was critical to student success. She noted it was the faculty who must integrate service-learning into their curriculum. While administration mandated the use of it, teachers must put it into practice. Faculty were responsible for evaluating the outcomes of student service. Finally, Kendall argued that students view faculty as significant role models and will listen to them.

The idea that teacher leadership affected students (student using teachers as role models) was controversial. Leithwood and Janzi (1999) studied the effects of principals and teachers’ leadership on student engagement. They determined that while principal leadership effects were statistically significant, teacher leadership effects were not.

However, a study done by Marks and Printy (2003) disagreed with Leithwood and Janzi's findings. Marks and Printy (2003) concluded their "findings demonstrate the importance of cultivating teacher leadership for enhanced school performance" (p. 393). They studied the effects of an integrated approach to principal leadership using both instructional and transformational theories.

Theoretical research on the effects of a servant-oriented leadership approach to teaching has been limited. In the article, "Modeling Meaning in Life: The Teacher as a Servant Leader," Herman and Marlowe (2005) suggested the need to shift from traditional classroom leadership—obedience to authority—to community leadership where every one helped each other when working with disturbed children. They noted "We believe that by promoting Greenleaf's idea of leader (teacher) as 'servant first,' we can give direction to both teacher and student as we strive to change from a *classroom of order* to a *community of order*" (Herman & Marlowe, 2005, p. 175).

Bowman (2005) also advocated the use of servant leadership in the classroom. He stated "Teachers, as serving leaders, model in their professional lives the skills and attitudes that they teach. That is, they function as the very leaders of character that they wish to find in the world" (Bowman, 2005, p. 258). This statement echoed Greenleaf's fundamental test of practicing servant leadership: "Do those served grow as persons? Do they, *while being served*, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?" (Greenleaf, 2002, p. 27).

Development of Instrumentation

While the benefits of servant leadership have been acknowledged, how did one go about determining whether or not they were a servant leader? Several dissertations written provided servant leadership assessment instruments. Laub (1999) developed the Servant Organizational Leadership Assessment (SOLA) instrument. Laub used the Delphi technique to determine characteristics of servant leadership to develop the SOLA. He stated, “The SOLA was designed not only for research, but for the purposes of prediction and diagnosis within organizations. An organization that desires to become more servant oriented could assess itself to find weaknesses and strengths to be addressed” (Laub, 1999, p. 88).

Abel (2000) also produced a servant leadership assessment tool. Her Servant Leadership Inventory was developed through a Delphi process and designed to be a self-assessment instrument. Twenty eight panelists, selected from appointed and elected officials, authors in the servant leadership field, business leaders, clergy, educators, association leaders, and volunteer organization leaders, participated in Abel’s three round Delphi study. The panels were selected because they were “identified as servant leaders or those who have written about or trained servant leaders” (Abel, 2000, p. 30). The first round of the Delphi study asked panelists to describe or identify the “characteristics that distinguish servant leaders and the behaviors that distinguish servant leaders” (Abel, 2000, p. 36). Subsequent Delphi rounds ranked the importance of each characteristic or behavior and eliminated low ranking responses. The final Servant Leadership Inventory contained the list of behaviors and characteristics that expert panelists believed

distinguished servant leaders. No tests were conducted to determine reliability or validity of the instrument.

METHODOLOGY

Introduction

The methodology chapter of this proposal was divided into three areas. The first area discussed the research design including the sample population and sampling procedures used. In the second section, the researcher described the data collection procedures. Within the third section, the data analysis procedures were summarized.

Research Design

To determine the relationship of servant leadership variables present in agricultural educators' leadership styles with respect to number of service-learning activities incorporated into their curriculum, a quantitative descriptive research design was used. According to Leedy and Ormrod (2005), descriptive research involved the exploration of possible correlations between phenomena. Specifically, survey research collected the information about the sample population.

Sample Population.

Nonprobability, convenience sampling was used to select the sample population. The sample was chosen from the certified agricultural educators who were members of the National Association of Agricultural Educators (NAAE) and who lived in the NAAE Region 1. This limited the population to agricultural educators living in Alaska, Arizona, California, Idaho, Hawaii, Montana, Nevada, Oregon, Utah, Washington, and Wyoming. No state professional organizations existed in Hawaii or Alaska, and; therefore, exclude

the two states from the sample. There were 1027 members registered in Region 1 and 791 of those members were classified as active during the 2005-2006 year. Only the active members were used because total membership included retired educators and students.

Sampling Procedure.

To obtain a 95% confidence interval, with a 5% error, 384 uncorrected surveys must be obtained (A. Bangert, personal communication, February 21, 2007). From those, there must be 260 correct surveys collected. It was anticipated that only 30% of agricultural educators would respond to the surveys (A. Bangert, personal communication, February 21, 2007). Therefore, the survey was available to all agricultural educators in Region 1.

A pilot study was conducted using agricultural educators who belonged to National Association of Agricultural Educators (NAAE), in North Dakota to test the survey instrument for validity and reliability. A total of 44 teachers participated in the pilot study.

Instrumentation

The research was conducted using a three part survey instrument. The first part, (see Appendix D) the Servant Leadership Inventory: A Self Rating Scale (SLI), was developed by Ann Todd Abel (2000). The survey was a compilation of attributes assembled from panel of experts using the Delphi technique (Abel, 2000). Designed as a self assessment, the educators report on a Likert scale the amount of time they perceive

they exhibit 86 characteristics or behaviors. The researcher chose to use Abel's instrument instead of Laub's SOLA (Servant Organization Leadership Assessment) because the researcher wanted to measure educators self-perceived leadership styles and not the leadership style of the school as an organization.

A second survey, developed by the researcher, was also administered to agricultural educators (see Appendix D). The survey was reviewed by an expert panel of Montana State University faculty members for validity. Educators were then asked to quantify the number of courses they taught within each of the seven categories: introduction/general agriculture, agricultural business/agricultural economics, agricultural mechanics, animal science, leadership and personal development, plant and soil science, and other courses. Finally, educators were asked to, based upon the definition of service-learning used in this study, quantify the number of service-learning activities incorporated into courses taught in each of the previous categories. A demographics section was also included. Throughout the entire instrument educators were allowed a non-response answer.

The servant leadership inventory was pilot tested to determine validity. The Cronbach's Alpha statistics was found to be 0.933. The entire survey was reviewed by the faculty panel for reliability.

Data Collection Procedures

Web-based and paper survey instruments were used to collect data for this study. The following time table was followed:

- 1) September through November 2007 – Initial contact to state presidents of professional agricultural education organizations was made by email;
- 2) November 29, 2007 – Web survey opened, email invitation letter and survey link sent to educators in Arizona, Idaho, Montana, Nevada, Utah, and Washington;
- 3) November 30, 2007 – Email invitation and web survey link sent to Wyoming educators via Wyoming professional agricultural organization member listserve;
- 4) December 12, 2007 – Follow-up email sent to Arizona, Idaho, Montana, Nevada, Utah, Washington, and Wyoming educators;
- 5) January 18, 2008 – email invitation and web survey link sent to California educators via California professional agricultural education organization listserve; and
- 6) February 8, 2008 – Web survey closed.

An initial email was sent to the president of each state's respective agricultural education professional organization requesting email addresses of members or access to their state's professional organization's listserve. Confirmation was received from Oregon indicating that their educators would prefer paper surveys. The president of the Oregon Vocational Agricultural Teachers Association administered the surveys during their annual fall conference and returned them by mail. Email addresses were received from six states. Two states forwarded the survey through their professional organization's listserve.

Survey data was collected until 370 uncorrected surveys were obtained. After the data set was corrected, 351 surveys remained. This yielded a 44% response rate.

Data Analysis

Data, downloaded from the web-based survey, was entered into Microsoft Excel®™ and then transferred into SPSS 15.0 for Windows. Guidance was obtained from a professor of educational statistics at Montana State University during statistical analysis of the data. Descriptive statistics were generated for the instrument results. Nonparametric statistics (Pearson's chi-squared test for independence) was used to compare subgroups since representativeness was not obtained through sampling. Pearson's chi-squared test for independence was used because the data consisted of frequencies and not scores (Gravetter & Wallnau, 2007).

RESULTS OF THE STUDY

Introduction

The study was designed to determine the relationship of servant leadership characteristics present in agricultural educators' leadership styles to the use of service-learning activities in their curriculum for members of the National Association of Agricultural Educators in Region 1. To satisfy the objectives of this study, the results of the survey instrument were divided into four areas: (a) demographic data, (b) servant leadership inventory, (c) service-learning inventory, and (d) correlation of servant leadership variables with the incorporation of service-learning activities.

Demographic Data

To describe the sample population of agricultural educators, seven demographic variables were collected. Educators reported on their gender, age, the number of years spent as an agricultural educator, the number of years spent teaching at their present school, the number of students enrolled in the school where they teach, the number of years students typically spent at their high school, and the state where they teach.

The gender distribution of educators by state is described in Table 1. Over 60% of educators (n=203) were male and just under 40% (n=136) were female. Three educators chose not to report their gender. In Oregon, California, Arizona, and Nevada, the number of female survey respondents outnumbered the number of male respondents. No male educators in Nevada responded to the survey.

Table 1. Gender of Survey Participants by State.

State	Gender	
	Male	Female
Oregon	14	19
California	30	35
Arizona	21	23
Nevada	0	3
Washington	46	23
Montana	29	15
Idaho	31	5
Utah	12	3
Wyoming	20	10
Total	203	136

Figure 1 displays the age distribution of educators. Educators were asked to report their ages by selecting one of four categories: (a) 20 – 34 years of age, (b) 35 – 49 years of age, (c) 50 – 65 years of age, and (d) 65 years and older. No educators reported their age was 65 years or older. Forty-two percent of educators (n=146) indicated they were between 20 – 34 years of age.

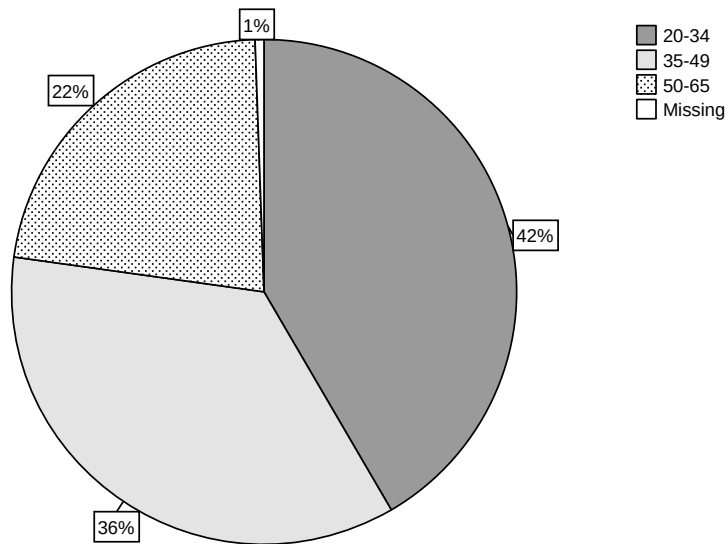


Figure 1. Age Distribution of Educators

Educators reported their total teaching experience (in years) and their teaching experience at their present school (also in years). The researcher predetermined five categories: (a) 0-5 years, (b) 6-10 years, (c) 11-15 years, (d) 15-20 years, and (e) 20 years and over. Table 2 summarized the distribution of total teaching experience among educators. Nearly 30% of educators (n=108), had only zero to five years of teaching experience. However, 24% (n=82) of educators had twenty or more years of experience.

Table 2. Distribution of Total Teaching Experience

Years Teaching	Frequency
0-5	108
6-10	76
11-15	48
15-20	35
20+	82
No Response	2
Total	351

Table 3 reflects the distribution of teaching experience at educators' present school. Most educators, 48% (n=168), were teaching at their current school between zero and five years. Only 8% (n=27) of teachers reported they had been teaching between 15-20 years at their present school.

Table 3. Distribution of Teaching Experience at Present School

Years Teaching	Frequency
0-5	168
6-10	75
11-15	37
15-20	27
20+	43
No Response	1
Total	351

Educators were asked to describe the schools where they presently taught. Nearly 90% (n=310) of educators had taught at schools with a four year curriculum. Six percent reported their schools offered a three year curriculum and 4% indicated their schools offered more than four or less than three. Figure 2 describe high school size by number of students enrolled. Thirty-seven percent of educators indicated they taught at school with over 1000 students enrolled. Conversely, 26% of educators stated their schools had only 0-200 students enrolled.

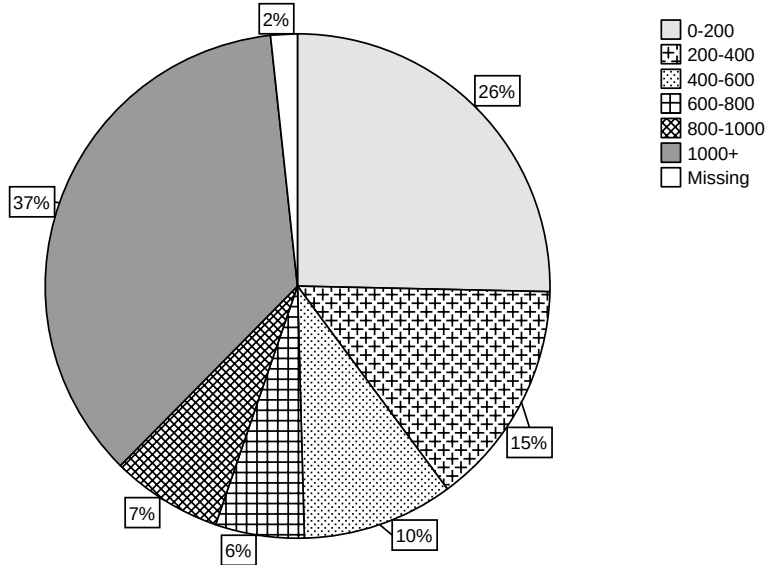


Figure 2. Size of School by Number of Student Enrolled

Table 4 shows the frequency of educators by state. Responses were collected from each state in NAAE Region 1 that had an agricultural education professional development organization. Of the nine states within the region, Washington had the highest survey response rate. Sixty-nine of their educators responded. Only three of Nevada's educators responded.

Table 4. Frequency of Educators by State

<u>State</u>	<u>Frequency</u>
Oregon	33
California	66
Arizona	44
Nevada	3
Washington	69
Montana	44
Idaho	37
Utah	15
Wyoming	30
No Response	10
Total	351

Servant Leadership Inventory

The mean scores and standard deviations of the educators' self-responses to the amount of time (1=never, 2=rarely, 3=sometimes, 4=often, 5=always) they exhibited servant leadership variables is presented in Table 5. The eighty-six servant leadership variables are organized in order of the characteristic or behaviors educators most often collectively exhibited. The scoring for the negatively written servant leadership variables was reversed so that one equaled always, two equaled often, etc. A majority (over 50%) of educators believed they were always: (a) "trustworthy" (70% indicated always), (b) "have a strong work ethic" (61%), (c) "were honest" (57%), (d) "had integrity" (50.7%), (e) "took joy in the success of others" (53.6%), (f) "had a sincere desire to make a difference" (53%), (g) "maintain high ethical standards" (51.9%), and (h) "share recognition with the entire group" (51%).

Table 5. Mean Scores and Standard Deviation of Servant Leadership Characteristics and Behaviors

Servant Leadership Characteristics and Behaviors	<i>M</i>	<i>SD</i>
Trustworthy	4.70	.479
A strong work ethic	4.60	.524
Honest	4.57	.507
Integrity	4.51	.518
Take joy in the success of others	4.50	.575
A sincere desire to make a difference	4.50	.576
Maintaining high ethical standards	4.49	.550
A passion for learning	4.43	.605
Share recognition with the entire group	4.41	.696
Value teamwork and individual initiatives simultaneously	4.41	.630
Treat people with dignity	4.40	.571
Challenge others to do their best	4.38	.611
Courageous enough to tell the truth	4.38	.648
Encourage people	4.35	.575
Lead by example	4.35	.576
An ethic of service	4.33	.613
Value driven	4.32	.613
Promote cooperation	4.31	.553
Caring	4.30	.621
A view of the organization as a part of the larger community	4.30	.646
Recognize the contributions of others	4.30	.590
Listen respectfully	4.26	.618
Compassion	4.26	.621
Teach those being served	4.22	.589
Hold individuals accountable	4.22	.667
Generous	4.21	.615
Admit personal mistakes	4.20	.613
A belief in goodness of individuals	4.19	.632
Model a lifestyle of service	4.18	.662
Look for solutions rather than placing blame	4.18	.578
Authentic	4.18	.640
A passion for goals of organization	4.18	.671
Principle centered	4.17	.643
Value differences	4.17	.676
Build relationships	4.17	.595
Spend time with individuals	4.17	.630

Table 5 (continued)

Steadfast	4.17	.623
Knowledgeable	4.15	.545
An approachable demeanor	4.14	.636
Envision the future	4.14	.622
Respect the uniqueness of those being served	4.13	.624
Go to bat for individuals experiencing difficulties	4.11	.634
Respect the giftedness of those being served	4.10	.621
Seek the advice of experts	4.10	.682
Self confidence	4.08	.705
Provide training to help others succeed	4.07	.724
Motivate people	4.06	.620
Proactive	4.06	.633
Build team spirit	4.05	.615
Emotionally intelligent	4.04	.662
Allow time for growth of individuals	4.04	.615
Optimistic about outcomes	4.04	.712
Allow time for growth of the organization	4.03	.604
Build community	4.03	.602
Humble	4.02	.687
Insight	4.02	.596
Seek opportunities to support others	4.01	.649
Selfless	3.98	.637
Wisely utilize the skills of others	3.96	.648
Create "win-win" scenarios	3.96	.664
Provide mentorship	3.96	.683
Empathy	3.95	.702
Make decisions with participation from others	3.95	.603
Foresight	3.94	.591
Communicate persuasively	3.94	.634
A feeling of being "called" to work	3.94	.887
Effective communicator	3.92	.561
Assist in developing a group mission	3.91	.694
A win-win thinker	3.90	.757
Empower people	3.89	.634
Accept criticism	3.85	.676
Collaborative decision-maker	3.82	.604
Mobilize hope	3.76	.696
Collaborative planner	3.75	.684

Table 5 (continued)

Communicate infrequently	3.72	.692
A negative outlook	3.71	.642
Take risks to get results	3.68	.747
Elevate my own interests over the common good	3.65	.852
Spiritual	3.63	1.07
Liberate people	3.55	.748
View conflict as an opportunity for growth	3.53	.824
Pessimistic about people	3.33	.793
Accountable only to self	3.31	.992
Use coercion rather than persuasion	3.31	.953
A view of self as independent of the organization	2.95	1.048
Avoid conflict	2.65	.725

Service-Learning Inventory

Table 6 displays the frequency agricultural educators teach courses in each of the seven curriculum categories. Educators taught more course in Ag Mechanics (N=507) than in any other curriculum category. Ag Business/Ag Economics (N=153) courses were the least taught by educators.

Table 6. Frequency of Courses Taught by Curriculum Category

Curriculum Categories	Number of Course Taught ^a
Introduction/General Ag	498
Ag Business/Ag Economics	153
Ag Mechanics	507
Animal Science	364
Leadership and Personal Development	270
Plant and Soil Science	354
Other	310

^a Numbers are higher than the number of respondents because educators teach multiple courses each school semester.

Figure 3 depicts the number of service-learning activities incorporated in general/introductory agricultural education courses. Figure 3 indicates that 46 educators

did not incorporate service-learning activities into their curriculum. Most educators (N=131) incorporated one to three activities. Eighty-five educators chose not to respond to the question.

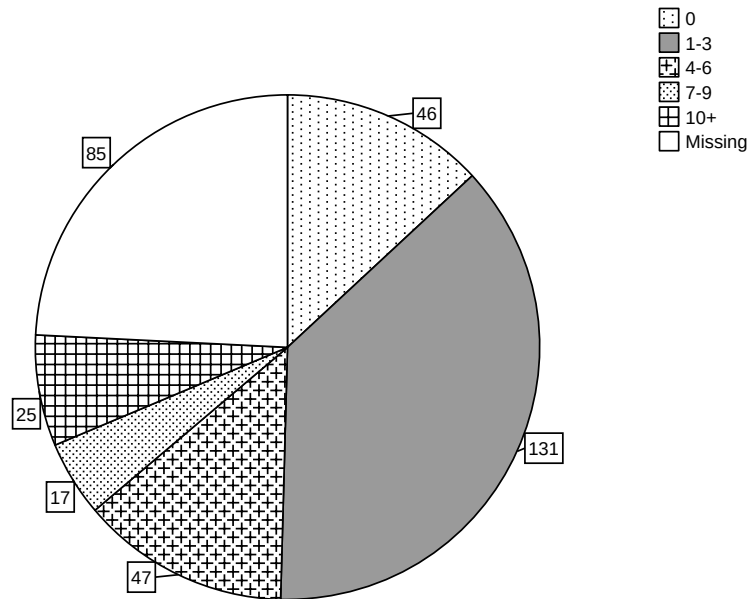


Figure 3. Frequency of Agricultural Educators Incorporating Service-Learning Activities into Introduction/General Ag Courses

Figure 4 continues to describe the number of service-learning activities incorporated in agricultural education curriculum categories. The majority of educators (N=175) chose not to respond to the question of the number of service-learning activities incorporated into their Ag Business/Ag Economics curriculum. Figure 4 indicates that only 56 educators incorporated one to three activities.

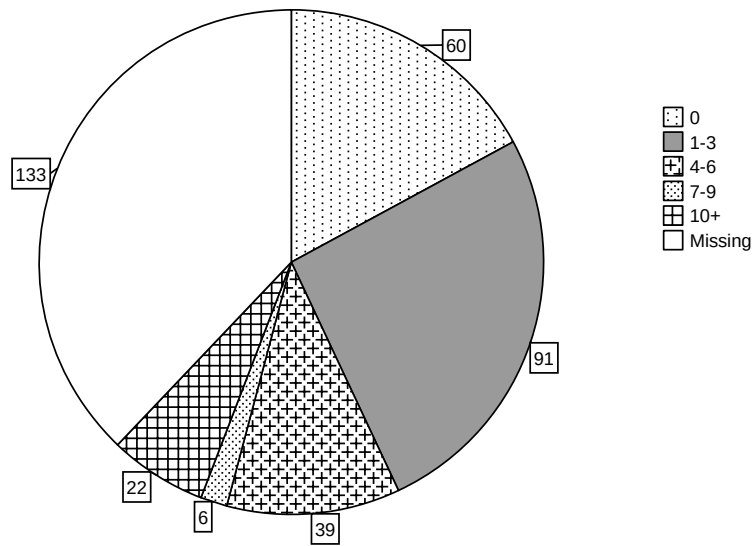


Figure 4. Frequency of Educators Incorporating Service-Learning Activities into Ag Business/Ag Economics Courses

As seen in Figure 5, 91 agricultural educators incorporated between one and three service-learning activities into their agricultural mechanics courses. Sixty-three educators indicated they did not use service-learning activities. Over half of educators (N=191) reported they use service-learning activities in their Ag Mechanics courses.

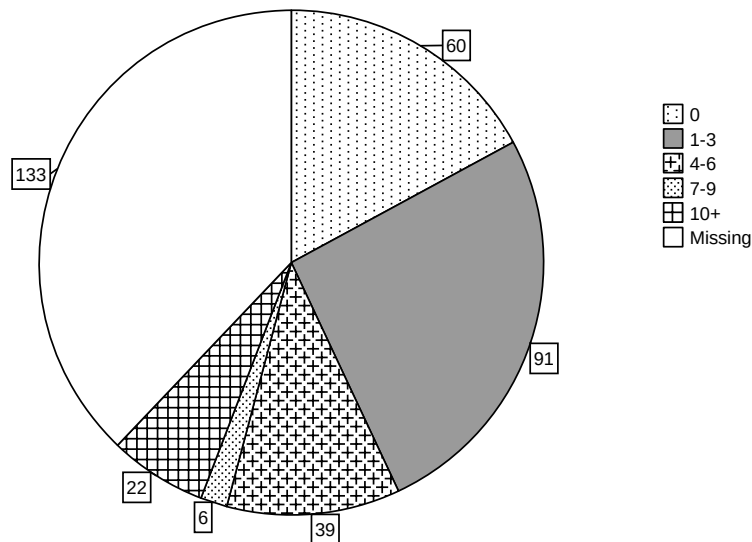


Figure 5. Frequency of Educators Incorporating Service-Learning Activities into Ag Mechanics Courses

Figure 7 reported the frequency of service-learning activities incorporated into animal science courses. Sixty educators expressed they did not incorporate any activities into their courses. One-quarter of educators (N=91) responded that they incorporated 1-3 service learning activities into animal science courses.

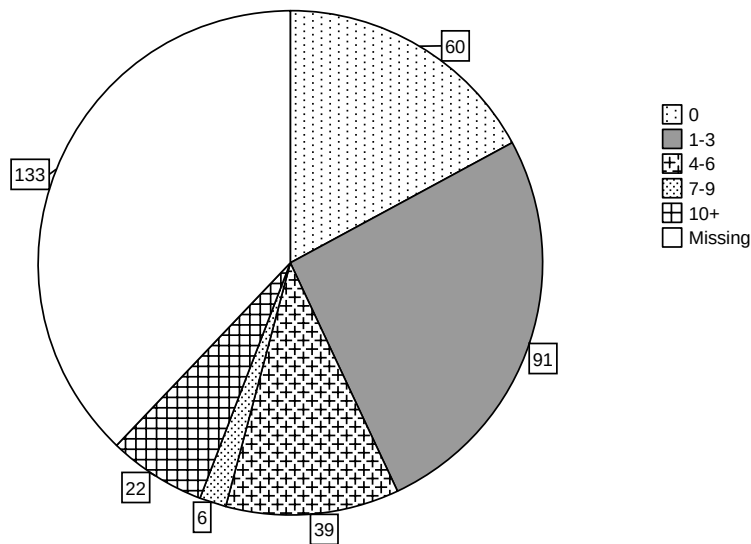


Figure 6. Frequency of Educators Incorporating Service-Learning Activities into Animal Science Courses

In Figure 7, 50 educators reported they did not incorporate service-learning activities into their leadership and personal development classes. The highest frequency of teachers (N=57) responded that they incorporate between one and three activities into their courses. Almost 44% (N=154) of educators chose not to answer the question.

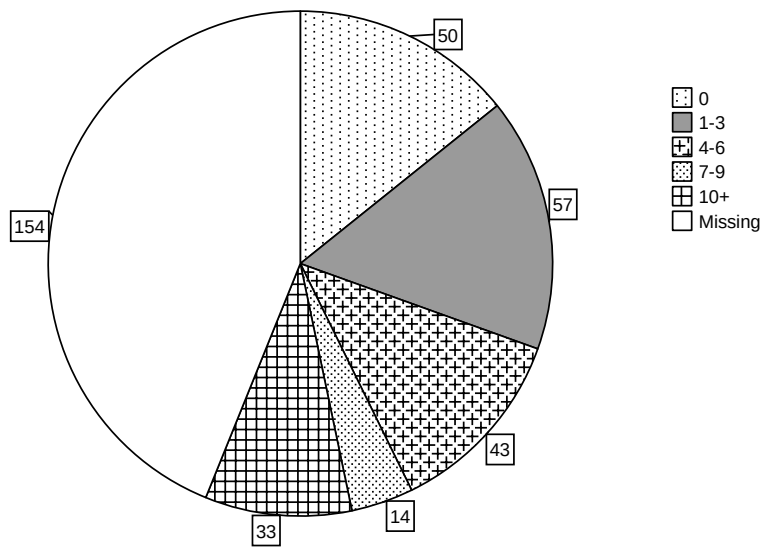


Figure 7. Frequency of Educators Incorporating Service-Learning Activities into Leadership and Personal Development Courses

The frequency of service-learning activities incorporated into plant and soils science courses is discussed in Figure 8. In this category, nearly 16% (N=55) of educators did not incorporate service-learning activities into those classes. Almost 25% of educators stated they use one to three service-learning activities in their plant and soils science courses.

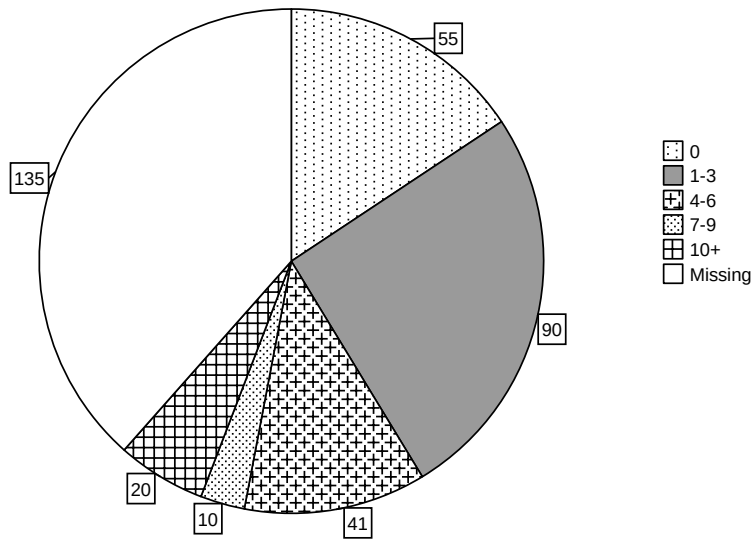


Figure 8. Frequency of Educators Incorporating Service-Learning Activities to Plant and Soil Science Courses

Educators were also asked to indicate the number of courses they taught outside the six traditional categories of course and the number of service-learning activities incorporated. Figure 9 summarized their service-learning responses. Nearly 20% (N=71) educators did not incorporate service-learning activities into other courses they taught. Forty-six percent (N=162) of educators chose not to respond to the question.

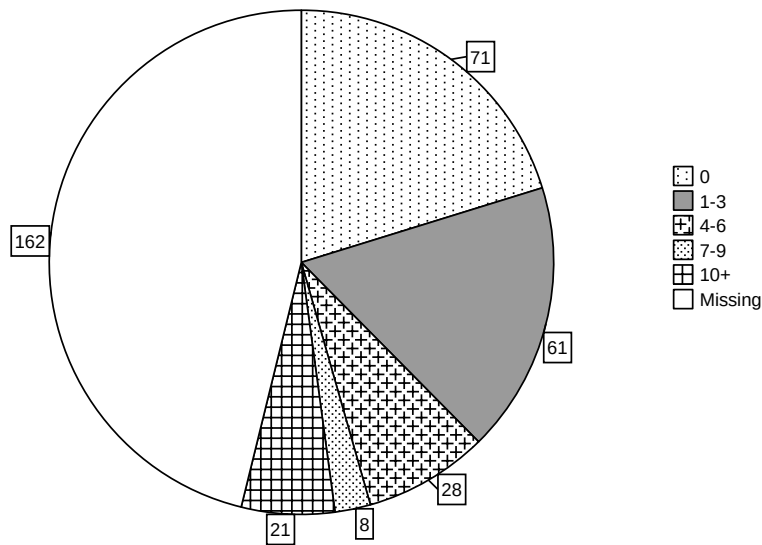


Figure 9. Frequency of Educators Incorporating Service-Learning Activities into Other Courses

Overall, Introduction/General Ag courses offered the greatest opportunity for educators to incorporate service-learning activities. After educators who did not teach introduction/general courses were removed, 220 educators indicated they used at least one service-learning activity in the course. This category showed the highest frequency of educators who incorporated service-learning activities. The fewest number of educators indicated they incorporate at least one service-learning activity into Ag Business/Ag Economics courses. Only 92 educators reported they used at least one service-learning activity in these courses.

Educators were asked to highlight any service-learning activities that their students have participated in during the last four years. Table 23 (see Appendix E) summarized their responses. All duplicate responses were removed. One educator responded, “The FFA does service learning - but not as part of the classes - it is completely separate (sic). We have worked at the food bank, served food at the share

house, cleaned up our school campus.” Another educator responded, “Each year my students do several fund raisers to raise money and supplies for non-profit animal organizations that are dedicated to the care and helping of animals. My students also provide veterinary care to non-profit organizations in the community.”

Table 7 describes the educator’s response when asked if their respective state required students to complete a service-learning activity prior to graduation. Only educators in Nevada responded unanimously; their state does not require the completion of a service-learning activity. Educators in Washington were equally undecided.

Table 7. Educators' Response to Inquiry about their State’s Service Learning High School Graduation Requirements

State	Service-Learning Activities Required		Total
	Yes	No	
Oregon	12	8	20
California	14	48	62
Arizona	6	37	43
Nevada	0	2	2
Washington	33	35	68
Montana	5	37	42
Idaho	4	31	35
Utah	1	14	15
Wyoming	2	27	29
Total	77	239	316

Correlation of Servant Leadership Variables with the Incorporation of Service-Learning Activities

Table 8 depicts the servant leadership variables that had a significant relationship to the incorporation of service-learning activities into introduction/general ag courses.

From the eighty-six servant leadership variables, a significant relationship ($p < .05$) emerged from these.

Table 8. Significant Relationships between Servant Leadership Variables and the Incorporation of Service-Learning Activities into Introduction/General Ag Courses

Servant Leadership Variable ^a	Df	N	Pearson χ^2	Sig. ^b
Allow growth of individual	16	263	30.78	.014
Seek opportunities to support others	12	263	21.50	.043
Steadfast	12	261	23.92	.021
Generous	8	261	19.49	.012
Build team spirit	8	265	19.29	.013
Build community	12	266	21.51	.043
Promote cooperation	8	265	17.77	.023
Compassion	8	264	18.55	.017
Mobilize hope	12	266	22.05	.037

^a Only variables with correlations significant at $p < .05$ are displayed.

^b (2-tailed)

In Table 9, 8 servant leadership variables are displayed which are significantly related to the incorporation of service-learning activities into Ag Business/Ag Economics courses. Five variables—“maintaining ethical standards,” “proactive,” “insight,” “steadfast,” and “use coercion rather than persuasion”—were related to the incorporation of service-learning activities into Ag Business/Ag Economics courses at a significance level of $p < .05$.

Table 9. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Ag Business/Ag Economics Courses

Servant Leadership Variable ^a	Df	N	Pearson χ^2	Sig. ^b
Allow growth of individual	16	176	43.88	.000
Assist in developing a group mission	12	176	21.37	.045
Use coercion rather than persuasion	16	173	42.60	.000
Steadfast	16	173	32.21	.009
Knowledgeable	12	173	22.53	.032
Principle centered	16	173	26.83	.043
Proactive	16	172	40.60	.001
Maintain high ethical standards	8	176	25.39	.001
Insight	12	174	26.77	.008
Integrity	12	172	21.86	.039

^a Only variables with correlations significant at $p < .05$ are displayed.

^b (2-tailed)

When the Pearson Chi-Squared test for independence was used to evaluate the relationship between servant leadership variables and the incorporation of service-learning activities into Ag Mechanics courses, nineteen variables emerged.

Table 10 listed all of the variables which were significant at $p < .05$.

Table 10. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Ag Mechanics Courses

Servant Leadership Variable ^a	Df	N	Pearson χ^2	Sig. ^b
Respect uniqueness of those served	12	234	22.99	.028
Teach those being served	12	233	23.05	.027
Listen respectfully	8	234	16.18	.040
Allow growth of the individual	16	234	50.25	.000
Admit personal mistakes	8	234	15.59	.049
Assist in developing a group mission	12	234	27.09	.008
Foresight	16	229	27.98	.032
Create “win-win” scenarios	16	231	27.99	.032
Build relationships	16	231	28.69	.021
Seek opportunities to support others	16	232	33.28	.007
Knowledgeable	12	230	26.00	.011
Honest	8	228	16.84	.032
Selfless	16	231	26.63	.046
Build team spirit	12	233	25.30	.013
Promote cooperation	12	233	31.58	.002
Insight	12	232	29.59	.003
Compassion	12	232	26.26	.010
Self-confidence	16	233	29.32	.022
Mobilize hope	12	234	23.42	.024

^a Only variables with correlations significant at $p < .05$ are displayed.

^b (2-tailed)

When the relationship between servant leadership variables and the incorporation of service-learning activities in animal science courses was examined, twenty-one variables with a significant level of $p < .05$ appeared. Table 11 listed all the variables which were significant.

Table 11. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Animal Science Courses

Servant Leadership Variable ^a	Df	N	Pearson χ^2	Sig. ^b
Courageous enough to tell the truth	16	215	26.85	.043
Allow growth of the individual	20	216	36.49	.013
Allow growth of organization	16	217	29.17	.023
Respect giftedness of those served	12	217	24.58	.017
Assist in developing a group mission	16	216	31.45	.012
Challenge others to do their best	12	217	34.21	.001
Lead by example	12	216	25.32	.013
Seek opportunities to support others	16	216	31.33	.012
Provide mentorship	16	216	38.30	.001
Accept criticism	16	217	26.65	.046
Look for a solution rather than placing blame	12	217	24.39	.018
Steadfast	16	214	38.62	.001
Honest	12	214	21.57	.043
Promote cooperation	12	217	32.25	.001
Ethic of service	8	218	19.19	.014
Compassion	12	217	24.37	.018
Self-confidence	16	217	26.38	.049
View as organization as part of the larger community	8	218	15.79	.046
Encourage people	12	218	22.68	.031
Take joy in the success of others	12	218	23.80	.022
Value differences	16	217	28.98	.024

^a Only variables with correlations significant at $p < .05$ are displayed.

^b (2-tailed)

Table 12 reported the servant leadership variables with a significant relationship to the incorporation of service-learning activities into leadership and personal development courses. Seven variables were found to be significant at $p < .05$ level.

Table 12. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Leadership and Personal Development Courses

Servant Leadership Variable ^a	df	N	Pearson χ^2	Sig. ^b
Allow growth of the individual	20	196	40.06	.005
Allow growth of the organization	16	196	33.36	.007
Create “win-win” scenarios	16	194	32.05	.010
Use coercion rather than persuasion	16	194	35.45	.003
Look for solutions rather than placing blame	16	196	27.68	.035
Passion for learning	12	196	22.26	.035
Hold individuals accountable	12	197	22.38	.033

^a Only variables with correlations significant at $p < .05$ are displayed.

^b (2-tailed)

As seen in Table 13, 10 servant leadership variables reported a significant relationship ($p < .05$) to the incorporation of service-learning activities into plant and soil science courses. Ten variables were identified as significant.

Table 13. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Plant and Soil Science Courses

Servant Leadership Variable ^a	Df	N	Pearson χ^2	Sig. ^b
Effective communicator	8	214	21.16	.007
Teach those being served	8	215	18.45	.018
Listen respectfully	8	216	16.56	.035
Seek opportunities to support others	12	213	34.42	.001
Steadfast	12	212	31.97	.001
Generous	8	213	17.43	.026
Promote cooperation	8	215	24.88	.002
Insight	12	214	21.43	.044
Ethic of service	8	215	18.93	.015
Compassion	8	214	16.65	.034

^a Only variables with correlations significant at $p < .05$ are displayed.

^b (2-tailed)

Table 14 describes which of the variables were significantly related to the incorporation of service-learning activities into other courses. Other courses were classified as any class which could not be categorized as an Introductory/General Ag, Ag Business/Ag Economics, Ag Mechanics, Animal Science, Leadership and Personal Development, or Plant and Soil Science course.

Table 14. Servant Leadership Variables with a Significant Correlation to the Incorporation of Service-Learning Activities into Other Courses

Servant Leadership Variable ^a	df	N	Pearson χ^2	Sig. ^b
Communicate persuasively	12	189	22.30	.034
Allow the growth of the individual	16	187	32.48	.009
Lead by example	12	186	23.46	.024
Elevate own interests over common good	16	189	29.68	.020
Self-confidence	12	189	42.70	.000
Liberate people	20	188	34.46	.023

^a Only variables with correlations significant at $p < .05$ are displayed.

^b (2-tailed)

In Table 15, the servant leadership variables which resulted in a significant relationship ($p < .05$) with the incorporation of service-learning activities in more than one course are displayed. Four variables appeared in four courses. These variables were “compassion,” “promote cooperation,” “seek opportunities to support others,” and “steadfast.” Table 24 (see Appendix E) includes a complete list of all servant leadership variables which resulted in at least one significant relationship with the incorporation of service-learning activities into the seven categories of courses.

Table 15. Servant Leadership Variables Exhibiting Significant Relationships ($p < .05$) with the Incorporation of Service-Learning Activities in Two or More Courses

Servant Leadership Variable	Courses
Compassion	4
Promote cooperation	4
Seek opportunities to support others	4
Steadfast	4
Allow growth of the individual	3
Assist in developing a group mission	3
Insight	3
Self-confidence	3
Allow growth of individual	2
Build team spirit	2
Create “win-win” scenarios	2
Ethic of service	2
Generous	2
Honest	2
Knowledgeable	2
Lead by example	2
Listen respectfully	2
Mobilize hope	2
Teach those being served	2
Use coercion rather than persuasion	2

Additional tables which give a complete description of the data set can be found in Appendix E.

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to determine the relationship of servant leadership variables present in agricultural educators' leadership styles to the use of service-learning activities in their curriculum. The study included agricultural educators who were members of NAAE and lived in Arizona, California, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

The following objectives were used to complete this study:

1. Determine the servant leadership characteristics exhibited by a random sample of agricultural educators in the National Association of Agricultural Educator's Region 1 as measured by the Servant Leadership Inventory.
2. Determine the number of service-learning activities incorporated into the teaching curriculum by agricultural educators by the Service-Learning Inventory.
3. Determine if a statistically significant relationship existed between servant leadership variables exhibited by agricultural educators and the number of service-learning activities incorporated into the curriculum.

This section will discuss the conclusions, implications, and recommendations for future study that have been gathered from this research.

Conclusions

Based upon an analysis of the data, the following conclusions have been drawn:

- 1) Educators identified servant leadership variables which the majority indicated they always exhibited. Those variables were:
 - a. Trustworthiness;
 - b. Having a strong work ethic;
 - c. Honesty;
 - d. Integrity;
 - e. Taking joy in the success of others;
 - f. Having a sincere desire to make a difference;
 - g. Maintaining high ethical standards; and
 - h. Sharing recognition with the entire group.
- 2) Of those educators who incorporated service-learning activities into their curriculum, the majority used one to three activities in each course.
- 3) Based upon educators' responses, most educators do not understand the difference between community service and service-learning activities. Educators are unsure of their state's service-learning requirements for students.
- 4) No combination of servant leadership variables exhibited by educators emerged which, if possessed, indicated the educator would incorporate more service-learning activities into their curriculum. Four servant leadership variables were identified which exhibited a significant relationship in four courses to the incorporation of service-learning activities. Those variables were:
 - a. Compassion;
 - b. Promoting cooperation;

- c. Seeking opportunities to support others; and
- d. Being steadfast as a leader.

Implications

The data and written comments provided by this research allowed the researcher to make the following statements.

- 1) Educators have indicated they (a) have a strong desire to make a difference and (b) take joy in the success of others. Perhaps, educators who receive instruction about student benefits received from participation in service-learning activities may incorporate more activities into their curriculum.
- 2) Based upon this study, there is need for further education of agricultural educators about the difference between community service and service-learning activities. A responsibility exists with the National FFA Organization, the NAAE, individual state's agricultural education professional organizations, teacher educators, and state agricultural education specialists to ensure that educators understand and can properly create service activities for agricultural education students.
- 3) A responsibility exists for state agricultural education specialists and teacher educators in instructing agricultural educators about their state's student service requirements for graduation. The resulting teacher education may encourage more students to enroll in agricultural education classes, if students know they can fulfill their graduation service requirements.
- 4) Research findings from this study may be pertinent to other areas of secondary education where service-learning activities are incorporated into the curriculum.

Recommendations

Based upon the review of literature, the collection and analysis of data, and conclusions, the research made the following recommendations:

- 1) To increase educator use of service-learning activities, pre-service and in-service training on service-learning, its benefits, and the incorporation of activities into the curriculum should be instituted at the state level.
- 2) Pre-service and in-service instruction regarding respective state's graduation requirements pertaining to service-learning activities should be instituted.

Recommendations for Further Study

The researcher offers the following recommendations for further study:

- 1) The study should be repeated after agricultural educators receive in-service instruction in service-learning and the incorporation of service-learning activities into the curriculum to determine if lack of knowledge was the main cause for limited use of such activities.
- 2) Similar research should be conducted focusing on the qualitative aspects of service-learning activities incorporated into the curriculum to gain a broader perspective of what educators know about service-learning.
- 3) Similar research should be conducted in other areas to determine of secondary education to see if service-learning is widely misinterpreted.
- 4) Further study should be conducted on educators' leadership styles and its effects upon student success to determine if any correlation exists.

REFERENCES

- Abel, A.T. (2000). *The characteristics, behaviors, and effective work environments of servant leaders: A delphi study*. Unpublished doctoral dissertation, Virginia Polytechnic and State University.
- American Heritage Dictionary* (4th ed.) [Electronic version]. (2000). New York: Bartleby.com.
- Astin, A.W. & Sax, L.J. (1998). How undergraduates are affected by service participation [Electronic Version]. *Journal of College Student Development* 39(3), 251-263. Retrieved November 7, 2006 from <http://cshe.berkeley.edu/events/seru21symposium2005/papers/sax2.pdf>.
- Bass, B. M. (1995). Concepts of leadership: The beginnings. In J. T. Wren (Ed.), *The Leader's Companion* (pp. 49-54). New York The Free Press.
- Billig, S.H. (2000). Research on K-12 school-based service-learning [Electronic Version]. *Phi Delta Kappan*, 81(9), 658-664. Retrieved November 7, 2006 from the Academic Premier database.
- Billig, S. H., & Waterman, A. S. (Eds.). (2003). *Studying service learning: Innovations in education research methodology*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Bowman, R.F. (2005). Teacher as servant leader. *The Clearing House*, 78(6), 257-259.
- Burns, J.M. (1995). The crisis of leadership. In J. T. Wren (Ed.), *The Leader's Companion* (pp. 83-99). New York: The Free Press.
- Chemers, M. M. (1995). Contemporary leadership theory. In J. T. Wren (Ed.), *The Leader's Companion* (pp. 83-99). New York: The Free Press.
- De Pree, M. (1992). *Leadership Jazz*. New York: Doubleday.
- Driscoll, A., Holland, B., Gelmon, S., & Kerrigan, S. (1996). An assessment model for service-learning: Comprehensive case studies of impact on faculty, students, community, and institution. *Michigan Journal of Community Service Learning* 3, 66-71.
- Furco, A. (1996). Service-learning: A balanced approach to experiential education. *Expanding Boundaries: Service and Learning*, 1(1), 2-6.

- Giles, D.E. Jr., & Eyler, J. (1994). The theoretical roots of service-learning in John Dewey: Toward a theory of service-learning [Electronic Version]. *Michigan Journal of Community Service Learning*, 1, 77-85.
- Gravetter, F.J. & Wallnau, L.B. (2007). *Statistics for the behavioral science* (7th ed.). Belmont, CA: Thomson Wadsworth.
- Greenleaf, R.K. (2002). *Servant leadership: A journey into the nature of legitimate power and greatness*. Mahwah, NJ: Paulist Press.
- Herman, D.V. & Marlowe, M. (2005). Modeling meaning in life: The teacher as servant leader [Electronic Version]. *Reclaiming Children and Youth*, 14(3), 175-178.
- Howard, J. (2000). Academic service learning: A counternormative pedagogy. In Campus Compact, *Introduction to service-learning toolkit* (pp. 73-78). Providence, Rhode Island: Brown University.
- Kendall, J. C. (1990). *Combining service and learning: A resource book for community and public service* (Vol. 2). Raleigh, NC: National Society for Internships and Experiential Education.
- Kouzes J.M., & Posner, B.Z. (2002). *The leadership challenge* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Lao-tzu. (1995). Tao Te Ching. In J. T. Wren (Ed.), *The Leader's Companion* (pp. 69-71). New York: The Free Press.
- Laub, J.A. (1999). Assessing the servant organization: Development of the Servant Organizational Leadership Assessment (SOLA) instrument (Doctoral dissertation, Florida Atlantic University, 1999). (UMI No. 9921922)
- Laub, J. (2004, August). *Defining servant leadership: A recommended typology for servant leadership studies*. Paper presented at the Servant Leadership Roundtable, Virginia Beach, VA.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8 ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Leithwood, K., & Jantzi, D. (1999). The relative effects of principle and teacher sources of leadership on student engagement with school [Electronic Version]. *Educational Administration Quarterly*, 35(5), 679-706.

- Levison, L. (1990). Choosing engagement over exposure. In J.C. Kendall & Associates (Eds.), *Combining service and learning: Vol. 1. A resource book for community and public service* (pp. 68-75). Raleigh, NC: National Society for Internships and Experiential Education
- Marks, H.M. & Printy, S.M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership [Electronic Version]. *Educational Administration Quarterly*, 39(3), 370-397.
- National FFA Organization. (1995). *FFA student handbook*. Alexandria, Virginia.
- National Association of Agricultural Educators. (n.d.). NAAE Mission. Retrieved February 12, 2008 from the World Wide Web:
<http://www.naae.org/about/memberservices/mission.html>
- National Service-Learning Clearinghouse. (2007). What is service learning?. Retrieved February 23, 2007 from the World Wide Web:
http://www.servicelearning.org/what_is_service-learning/service-learning_is/index.php#def
- Patterson, K.A. (2003). Servant leadership: A theoretical model (Doctoral dissertation, Regent University, 2003). *Dissertation Abstracts International*, (UMI No: 3082719).
- Russell, R. F., & Stone, A. G. (2002). A review of servant leadership attributes: Developing a practical model. *Leadership & Organizational Development Journal* 23(3), 145-157.
- Sendjaya, S., & Sarros, J. C. (2002). Servant leadership: Its origin, development, and application in organizations. *Journal of Leadership & Organizational Studies*, 9(2), 57-68.
- Sigmon, R.L. (1979). Service-learning: Three principles. In J.C. Kendall & Associates (Eds.), *Combining service and learning: Vol. 1. A resource book for community and public service* (pp. 56-64). Raleigh, NC: National Society for Internships and Experiential Education
- Spears, L. (1996). Reflections on Robert K. Greenleaf and servant leadership. *Leadership & Organizational Journal*, 17(7), 33-35.
- Speck, B.W. & Hoppe, S.L. (2004). *Service-learning: History, theory, and issues*. Westport, CT: Praeger Publishers.

- Stanton, T. K., Giles, D.E. Jr., & Cruz, N.I. (1999). *Service-learning: A movement's pioneers reflect on its origins, practice, and future*. San Francisco: Jossey-Bass.
- Stanton, T.K. (1990). Service learning and leadership development: Learning to be effective while learning what to be effective about. In J.C. Kendall & Associates (Eds.), *Combining service and learning: Vol. 1. A resource book for community and public service* (pp. 336-353). Raleigh, NC: National Society for Internships and Experiential Education
- Yukl, G. (2006). *Leadership in organizations*. Upper Saddle River, NJ: Pearson Education Inc.

APPENDICES

APPENDIX A

IRB TRAINING COMPLETION FORM



INSTITUTIONAL REVIEW BOARD
For the Protection of Human Subjects
FWA 00000165

960 Technology Blvd. Room 127
 c/o Veterinary Molecular Biology
 Montana State University
 Bozeman, MT 59718
 Telephone: 406-994-6783
 FAX: 406-994-4303
 E-mail: cherylj@montana.edu

Chair: Mark Quinn
 406-994-5721
 mquinn@montana.edu
Administrator:
 Cheryl Johnson
 406-994-6783
 cherylj@montana.edu

MEMORANDUM

TO: Mary Anne Anderson

FROM: Mark Quinn, Ph.D. Chair *Mark Quinn*
 Institutional Review Board for the Protection of Human Subjects

DATE: June 3, 2007

SUBJECT: Impact of Agricultural Educators' Servant Leadership Style on Students' Participation in Service Learning Activities

The above research, described in your submission of June 1, 2007, is exempt from the requirement of review by the Institutional Review Board in accordance with the Code of Federal Regulations, Part 46, section 101. The specific paragraph which applies to your research is:

- ☐ (b)(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- ☒ (b)(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.
- ☐ (b)(3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.
- ☐ (b)(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available, or if the information is recorded by the investigator in such a manner that the subjects cannot be identified, directly or through identifiers linked to the subjects.
- ☐ (b)(5) Research and demonstration projects, which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.
- ☐ (b)(6) Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed, or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the FDA, or approved by the EPA, or the Food Safety and Inspection Service of the USDA.

Although review by the Institutional Review Board is not required for the above research, the Committee will be glad to review it. If you wish a review and committee approval, please submit 3 copies of the usual application form and it will be processed by expedited review.

APPENDIX B

INITIAL SURVEY CONSENT LETTER



November 28, 2007

Dear Ag Teacher,

Your help is needed. We are undertaking a research project to ascertain the leadership style of agricultural educators and how those leadership styles impact instruction. As a member of your state's professional organization and NAAE, you are committed to professional development and your students' success.

We are surveying teachers about their leadership characteristics and their students' involvement in service-learning activities. Results from this research will help align leadership curriculum with service-learning activities. As the National FFA Organization expands service opportunities for members, we believe this research will provide benchmark documentation of what you and your students are doing in your community.

Your answers are confidential. No personally identifiable information will be included in the results or final report. This survey is voluntary; there will not be any adverse consequences if you do not participate. There are no tangible benefits to participating in this survey. However, we can obtain a more complete description of ag teachers from NAAE region 1 if you choose to help us. If you don't want to participate, please click the link to begin the survey and check the box "I do not wish to participate in this study." This will let us know that you want to be removed from our contact list.

On Friday, you will receive an email from Mary Anne with the subject line MT Leadership Survey. This email will include the survey link. The survey is web-based and will take only fifteen minutes of your time. However, if you should get interrupted, simply close the browser window. Clicking the link in the email will return you to your exact position in the survey.

If you have any questions or comments about this survey, please email Martin Frick (mfrick@montana.edu) or Mary Anne Anderson (mary.anderson@myportal.montana.edu). We will gladly visit with you.

Thank you for helping with this study.

Sincerely,

Mary Anne Anderson
Agricultural Education
Graduate Student

Dr. Martin Frick
Agricultural Education
Professor

Kevin Fochs
NAAE Region 1
Vice President

**Division of Agricultural
Education**

106 Linfield Hall
P.O. Box 172830
Bozeman, MT 59717-2830
www.montana.edu/ageducation

Tel (406) 994-2132
Fax (406) 994-6696

P.S. Analysis of the results is expected by May 2008. The results will be submitted to NAAE for possible publication and presentation. Many thanks!

APPENDIX C

ELECTRONIC COVER LETTER

Below is a preview of your message based on the first recipient in your list ([Email])

To: [Email]

From: mary.anderson@myportal.montana.edu

Subject: Montana State Leadership Survey

Body: Dear [FirstName],

Your help is needed. We are undertaking a research project to ascertain the leadership style of agricultural educators and how those leadership styles impact instruction. As a member of your state's professional organization and NAAE, you are committed to professional development and your students' success.

Please take a few minutes to share your perspective about service-learning and your leadership style with us. The survey results will be presented to NAAE for possible publication and presentation in May 2008.

Here is a link to the survey:

<https://www.surveymonkey.com/s.aspx>

This link is uniquely tied to this survey and your email address, please do not forward this message. Thanks for your participation!

Mary Anne Anderson
MSU Agricultural Education Graduate Student,
Montana FFA State Officer 2002-2003

Kevin Fochs
NAAE Region 1 Vice-President

Dr. Martin Frick
MSU Agricultural Education Professor

P.S. If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

<https://www.surveymonkey.com/optout.aspx>

APPENDIX D

SURVEY INSTRUMENT

Please check the box next to your choice.

☐ I acknowledge that by continuing on with this survey I agree to the researcher using any and all information I submit.

☐ I do not wish to participate in this survey.

Your Leadership Style:

Listed below are attributes of leaders. Rate yourself according to the frequency that you exhibit each characteristic or behavior. The rating scale is:

1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, 5 = always.

Please circle the number of your response.

As a leader, I am...**Never.....Always**

1. An effective communicator	1 2 3 4 5
2. A collaborative decision-maker	1 2 3 4 5
3. A collaborative planner	1 2 3 4 5
4. Trustworthy	1 2 3 4 5
5. Spiritual	1 2 3 4 5
6. Accountable only to self	1 2 3 4 5
7. A win-win thinker	1 2 3 4 5
8. Pessimistic about people	1 2 3 4 5
9. Optimistic about outcomes	1 2 3 4 5
10. Courageous enough to tell the truth	1 2 3 4 5
11. Emotionally intelligent	1 2 3 4 5
12. Authentic	1 2 3 4 5
13. Steadfast	1 2 3 4 5
14. Knowledgeable	1 2 3 4 5
15. Generous	1 2 3 4 5
16. Honest	1 2 3 4 5
17. Selfless	1 2 3 4 5
18. Caring	1 2 3 4 5
19. Value-driven	1 2 3 4 5
20. Principle-centered	1 2 3 4 5
21. Proactive	1 2 3 4 5
22. Humble	1 2 3 4 5

As a leader, I have...**Never.....Always**

23. Empathy	1 2 3 4 5
24. A feeling of being "called" to the work	1 2 3 4 5
25. Foresight	1 2 3 4 5
26. A passion for the goals of the organization	1 2 3 4 5
27. A belief in the goodness of individuals	1 2 3 4 5
28. A sincere desire to make a difference	1 2 3 4 5
29. A view of self as independent of the organization	1 2 3 4 5
30. An approachable demeanor	1 2 3 4 5

Listed below are attributes of leaders. Rate yourself according to the frequency that you exhibit each characteristic or behavior. The rating scale is:

1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, 5 = always.

Please circle the number of your response.

As a leader, I have...

Never.....Always

31. A negative outlook	1 2 3 4 5
32. A strong work ethic	1 2 3 4 5
33. Insight	1 2 3 4 5
34. An ethic of service	1 2 3 4 5
35. Compassion	1 2 3 4 5
36. Integrity	1 2 3 4 5
37. Self-confidence	1 2 3 4 5
38. A passion for learning	1 2 3 4 5
39. A view of the organization as a part of a larger community	1 2 3 4 5

As a leader, I...

Never.....Always

40. Respect the uniqueness of those being served	1 2 3 4 5
41. Motivate people	1 2 3 4 5
42. Teach those being served	1 2 3 4 5
43. Listen respectfully	1 2 3 4 5
44. Allow time for growth of individuals	1 2 3 4 5
45. Allow time for growth of the organization	1 2 3 4 5
46. Admit personal mistakes	1 2 3 4 5
47. Take risks to get results	1 2 3 4 5
48. Respect the giftedness of those being served	1 2 3 4 5
49. Assist in developing a group mission	1 2 3 4 5
50. Challenge others to do their best	1 2 3 4 5
51. Create "win-win" scenarios	1 2 3 4 5
52. Lead by example	1 2 3 4 5
53. Build relationships	1 2 3 4 5
54. Model a lifestyle of service	1 2 3 4 5
55. Seek opportunities to support others	1 2 3 4 5
56. Provide mentorships	1 2 3 4 5
57. Accept criticism	1 2 3 4 5
58. Use coercion rather than persuasion	1 2 3 4 5
59. Look for solutions rather than placing blame	1 2 3 4 5
60. Maintain high ethical standards	1 2 3 4 5
61. View conflict as an opportunity for growth	1 2 3 4 5
62. Build team spirit	1 2 3 4 5

Listed below are attributes of leaders. Rate yourself according to the frequency that you exhibit each characteristic or behavior. The rating scale is:

1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, 5 = always.

Please circle the number of your response.

As a leader, I...

Never.....Always

63. Treat people with dignity	1 2 3 4 5
64. Build community	1 2 3 4 5
65. Elevate my own interests over the common good	1 2 3 4 5
66. Wisely utilize skills of others	1 2 3 4 5
67. Communicate infrequently	1 2 3 4 5
68. Avoid conflict	1 2 3 4 5
69. Promote cooperation	1 2 3 4 5

As a leader, I...

Never.....Always

70. Envision the future	1 2 3 4 5
71. Encourage people	1 2 3 4 5
72. Hold individuals accountable	1 2 3 4 5
73. Take joy in the success of others	1 2 3 4 5
74. Empower people	1 2 3 4 5
75. Value differences	1 2 3 4 5
76. Recognize the contributions of others	1 2 3 4 5
77. Mobilize hope	1 2 3 4 5
78. Spend time with individuals	1 2 3 4 5
79. Liberate people	1 2 3 4 5
80. Go "to bat" for individuals experiencing difficulties	1 2 3 4 5
81. Provide training to help others succeed	1 2 3 4 5
82. Share recognition with the entire group	1 2 3 4 5
83. Communicate persuasively	1 2 3 4 5
84. Value teamwork and individual initiative simultaneously	1 2 3 4 5
85. Seek the advice of experts	1 2 3 4 5
86. Make decisions with participation from others	1 2 3 4 5

Learning Activities within Your Curriculum:

“Service-learning is a form of experiential education where learning occurs through a cycle of action and reflection as students work with others through a process of applying what they are learning to community problems and, at the same time, reflecting upon their experience as they seek to achieve real objectives for the community and deeper understanding and skills for themselves” (National Service-Learning Clearinghouse, 2007, pg 2.)

87. Keeping in mind the definition from above, how many courses from each of the following areas do you teach and how many service learning activities do you incorporate in each course?

Course Area	Number of Courses Taught	Number of Service Learning Activities Incorporated
Introduction/General Ag		
Ag Business/Ag Economics		
Ag Mechanics		
Animal Science		
Leadership and Personal Development		
Plant and Soil Science		
Other		

88. In which course did you incorporate the greatest number of service-learning activities?

89. On average, how many hours did the service-learning activity/activities last?

90. Please, highlight any past service-learning activities that you and your students have participated in during the last four years.

91. Does your state require the use of service-learning activities for students to graduate?

Demographics:

92. Are you: ☐ Male
☐ Female

93. What age bracket do you fit in?

1. 20-34
2. 35-49
3. 50-65
4. 65+

94. How long have you been a teaching agricultural education?

95. How long have you been teaching agricultural education at the school you are currently teaching at?

96. What size of high school do you teach at?

1. 0-200 students
2. 200-400 students
3. 400-600 students
4. 600-800 students
5. 800-1000 students
6. 1000 + students

97. Is your high school:

1. Three Years
2. Four Years
3. Other _____

98. Which state do you teach in?

99. Approximately how many hours do you spend beyond your profession as an ag teacher in service learning activities per week?

APPENDIX E

SERVICE-LEARNING RESPONSES

Table 16. Frequency of General/Introductory Agriculture Courses Taught by Educators and the Number of Service-Learning Activities Incorporated

Courses Taught	Service-Learning Activities Incorporated					Total
	0	1-3	4-6	7-9	10+	
0	19	1	0	0	0	20
1	13	64	17	9	12	115
2	8	47	14	5	4	78
3	4	10	9	2	6	31
4	1	7	4	1	2	15
5	1	2	2	0	0	5
6	0	0	1	0	0	1
7	0	0	0	0	1	1
Total	46	131	47	17	25	266

Table 17. Frequency of Ag Business/Ag Economics Courses Taught by Educators and the Number of Service-Learning Activities Incorporated

Courses Taught	Service-Learning Activities Incorporated					Total
	0	1-3	4-6	7-9	10+	
0	71	2	0	0	0	73
1	11	45	15	5	8	84
2	1	7	2	1	0	11
3	0	0	1	0	0	1
4	1	1	1	0	0	3
6	0	0	1	0	0	1
7	0	0	1	0	1	2
Total	84	55	21	6	9	175

Table 18. Frequency of Ag Mechanics Courses Taught by Educators and the Number of Service-Learning Activities Incorporated

Courses Taught	Service-Learning Activities Incorporated					Total
	0	1-3	4-6	7-9	10+	
0	32	2	1	0	0	35
1	9	43	9	3	9	73
2	13	24	12	2	6	57
3	3	14	6	2	1	26
4	1	13	5	1	2	22
5	2	3	1	2	1	9
6	1	4	2	0	1	8
7	1	1	0	0	1	3
Total	62	104	36	10	21	233

Table 19. Frequency of Animal Science Courses Taught by Educators and the Number of Service-Learning Activities Incorporated

Courses Taught	Service-Learning Activities Incorporated					Total
	0	1-3	4-6	7-9	10+	
0	28	0	0	0	0	28
1	20	59	18	1	10	108
2	6	23	12	5	8	54
3	5	4	3	0	2	14
4	1	2	3	0	0	6
5	0	0	1	0	0	1
6	0	2	1	0	1	4
7	0	1	1	0	1	3
Total	60	91	39	6	22	218

Table 20. Frequency of Leadership and Personal Development Courses Taught by Educators and the Number of Service-Learning Activities Incorporated

Courses Taught	Service-Learning Activities Incorporated					Total
	0	1-3	4-6	7-9	10+	
0	44	0	1	0	0	45
1	5	46	30	10	20	111
2	0	4	6	2	4	16
3	1	3	3	0	2	9
4	0	2	2	0	2	6
5	0	1	1	0	2	4
6	0	1	0	1	2	4
7	0	0	0	0	1	1
Total	50	57	43	13	33	196

Table 21. Frequency of Plant and Soil Science Courses Taught by Educators and the Number of Service-Learning Activities Incorporated

Courses Taught	Service-Learning Activities Incorporated					Total
	0	1-3	4-6	7-9	10+	
0	32	0	0	0	0	32
1	15	67	24	5	7	118
2	5	15	6	3	2	31
3	2	4	6	1	3	16
4	1	1	2	1	2	7
5	0	1	0	0	0	1
6	0	1	2	0	4	7
7	0	0	1	0	2	3
Total	55	89	41	10	20	215

Table 22. Frequency of Other Courses Taught by Educators and the Number of Service-Learning Activities Incorporated

Courses Taught	Service-Learning Activities Incorporated					Total
	0	1-3	4-6	7-9	10+	
0	52	0	0	0	0	52
1	9	31	11	2	8	61
2	5	12	7	4	7	35
3	2	11	0	1	3	17
4	0	3	3	0	3	9
5	1	2	2	1	0	6
6	1	0	2	0	0	3
7	0	0	2	0	0	2
Total	70	59	27	8	21	185

Table 23. List of Service-Learning Activities Incorporated in Educators' Courses

Response
Activities with various community groups
Adopt-a-Family
Adopt-a-Grandparent
Adopt-a-Highway
Ag awareness presentations
Agrotourism
Animal evacuation during fires
Animal welfare presentations
Big Brothers Big Sisters
Blood drives
Built a building for the county
Built a community float trailer
Built a ladder for Cooper's Nest
Built a nature trail
Built handrails and ramps for people with disabilities
Built items
Built panels for the fair
Built salmon racks and message boards
Cancer fundraising
Career days
Castrated calves and sheared sheep
Children's Christmas celebration

Table 30 (continued)

City museum displays
Clothing drive
Collecting money for military
Comcast Community Days
Community corn maze
Community Days
Community development and improvement
Community flower orders and displays
Community gardens and beautification
community tractor restoration
Concessions for basketball games
Convalescent home/assisted living facility activities
Delivery of food and Christmas decorations to low-income families
Developing a historic homestead with the historical society
Disaster relief
East End Providers
Elk relocation project and elk mortality survey
Environmental awareness
Environmental service-learning: removal of non-native species, salmon rearing and releasing, water testing
Equine Extravaganza display for public and youth horse awareness
Family garden plots at the school farm
Farm days for elementary students
Fence building
FFA leadership workshops
Flood preparation
Food and gift sorting
Food drive
Food/gift delivery
Habitate for Humanity landscape and design project
Handicapped horse show for unfortunate kids
Health Fairs
Highway deer kill mitigation project
Horticulture demonstrations
Incorporated with our unit over ag issues
Item construction and donation for non-profit organization fundraiser
Job shadowing
Leading groups of children at the local salmon festival

Table 30 (continued)

Levy and bond promotion on voting days
 Livestock Management
 Locals for Locals Family Crisis Fund
 Mentoring
 National Day of Service
 Native seed production
 Offer a spay and neuter clinic
 Organized an Easter egg hunt
 Outreach at elementary and junior high schools
 Pet food and supply drive
 Petting zoo
 Playground construction
 Pregnancy Checking
 Project PALS
 Public relations at Fair
 Raise and market produce to the community
 Raise hogs for salvation army
 Raising seeing eye puppies
 Recycling project
 Rescue fish and repair duck boxes
 Safety education
 Salmon release
 School beautification and upkeep
 School Pride Days
 Seed drive
 Study-survey for community recreation center
 Sub for Santa
 Toy drives
 Tree cleaning
 Tree planting
 Trick-or-Eat
 Urbanization discussions with local dairymen
 Various community service activities
 Volunteer at fish hatchery and participate in fish recovery efforts
 Volunteer at Salmon Festival
 Volunteer at the soup kitchen
 Volunteer service to help various non-profit organizations
 Waste water management and water quality

Table 30 (continued)

Wildlife habitat rehabilitation planting
Working at a horse rescue facility
Working for the city
Writing to servicemen and women

Table 24. Frequency Servant Leadership Variables Exhibited Significant Relationships with the Incorporation of Service-Learning Activities into All Courses

Servant Leadership Variable	Frequency
Compassion	4
Promote cooperation	4
Seek opportunities to support others	4
Steadfast	4
Allow growth of the individual	3
Assist in developing a group mission	3
Insight	3
Self-confidence	3
Allow growth of individual	2
Build team spirit	2
Create “win-win” scenarios	2
Ethic of service	2
Generous	2
Honest	2
Knowledgeable	2
Lead by example	2
Listen respectfully	2
Mobilize hope	2
Teach those being served	2
Use coercion rather than persuasion	2
Accept criticism	1
Admit personal mistakes	1
Allow growth of organization	1
Allow growth of the organization	1
Allow the growth of the individual	1
Build community	1
Build relationships	1
Challenge others to do their best	1
Communicate persuasively	1

Table 31 (continued)

Courageous enough to tell the truth	1
Effective communicator	1
Elevate own interests over common good	1
Encourage people	1
Foresight	1
Hold individuals accountable	1
Integrity	1
Liberate people	1
Look for a solution rather than placing blame	1
Look for solutions rather than placing blame	1
Maintain high ethical standards	1
Passion for learning	1
Principle centered	1
Proactive	1
Provide mentorship	1
Respect giftedness of those served	1
Respect uniqueness of those served	1
Selfless	1
Take joy in the success of others	1
Value differences	1
View as organization as part of the larger community	1
